This discussion paper reflects the insights from the project "Steeplechase" gained until June 2012. Since then, the paper has been substantially elaborated. The final version has been submitted to the Journal *Higher Education Policy*:

Netz, N.: What deters students from studying abroad? Evidence from five European countries and its implications for higher education policy.

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What deters students from studying abroad?

Evidence from Austria, Switzerland, Germany, The Netherlands and Poland

Discussion Paper

June 2012

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1. Political context and scope of this paper[1]

Facilitating temporary student mobility across national borders is one of the central action lines of the 47 ministers responsible for higher education in the European Higher Education Area (EHEA) and a cornerstone of European Union policy. This is evident in the most recent flagship initiative of the European Union – Youth on the Move (2010) – and the biennial joint communiqués published by the EHEA members since the Bologna Joint Declaration (1999). Renewed attention is paid to the goal of encouraging international student mobility in the Mobility Strategy 2020 (EHEA Ministerial Conference, 2012a), which was endorsed at the Ministerial Conference in Bucharest in April 2012. These documents stress a plethora of (partially yet to be confirmed) benefits arising from learning mobility across borders, ranging from system-level advantages for the realisation of the EHEA and its members states to institutional-level benefits for higher education institutions as well as individual-level gains. Among the highlighted benefits for individuals is the potential of learning mobility to contribute to students' personality development, to enhance their language skills, to allow them to cope with increasingly international living as well as working environments and, thereby, to improve their employment prospects.

Throughout the past years, the attention paid to increasing student mobility has led to the definition of both European and national benchmarks regarding the share of national student populations who should spend a part of their studies abroad. On the European level, the Leuven/Louvain-la-Neuve Communiqué (2009) has set the target that "in 2020, at least 20% of those graduating in the European Higher Education Area should have had a study or training period abroad" (p. 4).2 The tendency to define target marks for temporary outgoing mobility has been echoed, and in some cases even preceded, in a number of national higher education systems. This is also visible with regard to four of the five countries covered in this study. According to Teichler, Ferencz, & Wächter (2011) the highest national target marks can be found in Austria and Germany, where the goal is for around half of all graduates to have had a study-related experience abroad in the next decade. In The Netherlands, 25% of the student cross-section is expected to be realising a study-related experience abroad by the year 2013. Even though not having adopted an official mobility strategy, higher education politics in Switzerland refer to the 20% mobility benchmark put forward in the Leuven/Louvain-la-Neuve Communiqué (2009). Poland, in contrast, has so far not set a concrete target value.

As the awareness has risen that not all types of students have the same odds of realising study-related experiences abroad, these numerical target marks have since the Leuven/Louvain-la-Neuve Communiqué (2009) been supplemented by the more egalitarian "aim for an improved participation rate from diverse student groups" (p. 5). The Mobility Strategy 2020 for the

1 For their support and valuable suggestions in the process of designing the research approach, specifying the statistical models and the drafting of this paper, we owe special thanks to our partners from the national EUROSTUDENT research teams: Jakob Hartl and Martin Unger (AT), Sarah Gerhard Ortega (CH), Elke Middendorff, Kristina Hauschildt and Johannes Wespel (DE), Froukje Wartenbergh-Cras and Bas Kurver (NL) as well as Michał Miszkowski (PL).

2 The new Mobility Strategy 2020 has clarified that the Leuven/Louvain-la-Neuve benchmark refers to "periods spent abroad corresponding to at least 15 ECTS points or three months within any of the degree cycles (credit mobility) as well as stays in which a degree is obtained abroad (degree mobility)" (EHEA Ministerial Conference, 2012a, p. 1).

European Higher Education Area (2012) goes further in announcing that "[the European ministers responsible for higher education] will give extra attention and opportunities to under-represented groups to be mobile and recognise the importance of adequate student support services to this end" (p. 3). Clearly, being able to define concrete measures to overcome the existing obstacles requires in the first place a detailed knowledge of the factors deterring students from gaining foreign study-related experiences.

Previous studies have shown that factors inhibiting students from realising study-related stays abroad comprise the additional financial burden associated with mobility phases, the necessity to separate from the local social context, the lack in the skills deemed necessary to realise a study-related stay abroad, insufficient organisational as well as informational support and, finally, the fact that students do not regard study-related experiences abroad as beneficial (Orr, Gwosć, & Netz, 2011; Orr, Schnitzer, & Frackmann, 2008). The same studies have highlighted that the perception of obstacles to mobility often varies considerably between (i) countries and (ii) types of students within these countries. European-level policies designed to remove a certain obstacle might thus benefit students in certain countries, while being irrelevant or even inadvertently harmful to students in others. Similarly, national measures might help certain – perhaps already privileged – groups of students, while not reaching out to others. It can thus be argued that more differentiated analyses are needed, which point out where factors deterring students from gaining study-related experiences resemble each other and where they differ between countries and types of students within these countries.

In this paper, an attempt is made to perform such analyses. The paper presents the results of a research project named Steeplechase.3 This project examines factors that deter students from realising *temporary enrolment periods outside of the country of their home institution*, that is to say the institution where they intend to graduate. The study thus focuses on a type of student mobility that has so far been at the centre of European and national mobility supporting schemes (Ferencz & Wächter, 2012) and that constitutes the dominant type of outgoing credit mobility in many European higher education systems (Orr et al., 2011). In order to carry out the planned analyses at the desired level of detail, the project concentrates on a selection of countries that have participated in EUROSTUDENT IV. These are the five neighbouring countries Austria, Switzerland, Germany, The Netherlands and Poland. They were chosen for participation in the project as they represent countries where the share of students having realised or planning to realise an enrolment phase abroad is high (The Netherlands, Germany), in the midfield (Switzerland, Austria) and rather low (Poland) in international comparison (Orr et al., 2011, and Figure 3 in this paper). Through this design, differences and similarities regarding the factors that deter students in the five exemplary countries from studying abroad temporarily can be carved out. As is argued in the last section, the findings have implications for higher education policy.

3 The Steeplechase project is a follow-up to EUROSTUDENT IV (for more information see Orr, Gwosć, & Netz, 2011) and a pilot study to investigate the feasibility of using micro data sets from national EUROSTUDENT surveys for in-depth comparative analyses. A detailed documentation of the project – including the manual used to process and analyse the data according to standardised procedures and the descriptive data set prepared throughout the project – is available on the EUROSTUDENT website. A project description in German can be found on the HIS-HF website.

2. Research approach and hypotheses

As explained in the previous section, this paper tries to explore which factors deter students from studying abroad temporarily and – if applicable – how these factors differ between countries and types of students within these countries. Since the data and methods used (see section 3) do not permit the postulation of straightforward causal relationships between the observed attributes of students and the respective dependent variable, it is more precise to speak of factors that are *associated* with students gaining as well as not gaining foreign enrolment experiences.

With a view to determining such factors, the analyses differentiate between two different thresholds students have to pass in the process of becoming temporarily mobile. These are referred to as the **'decision threshold'**, which describes the act of deciding or at least considering seriously to realise a foreign enrolment period, and the **'realisation threshold'**, i. e. the actual execution of plans for an enrolment period abroad. These two thresholds are modelled by distinguishing three types of students or rather stages that students can find themselves in:

(A) Students at the **'post-realisation stage'** have already realised an enrolment period abroad at the time of the survey. They have managed to overcome the obstacles they possibly faced. From a political standpoint, they are therefore less or even not all in need of supportive measures.

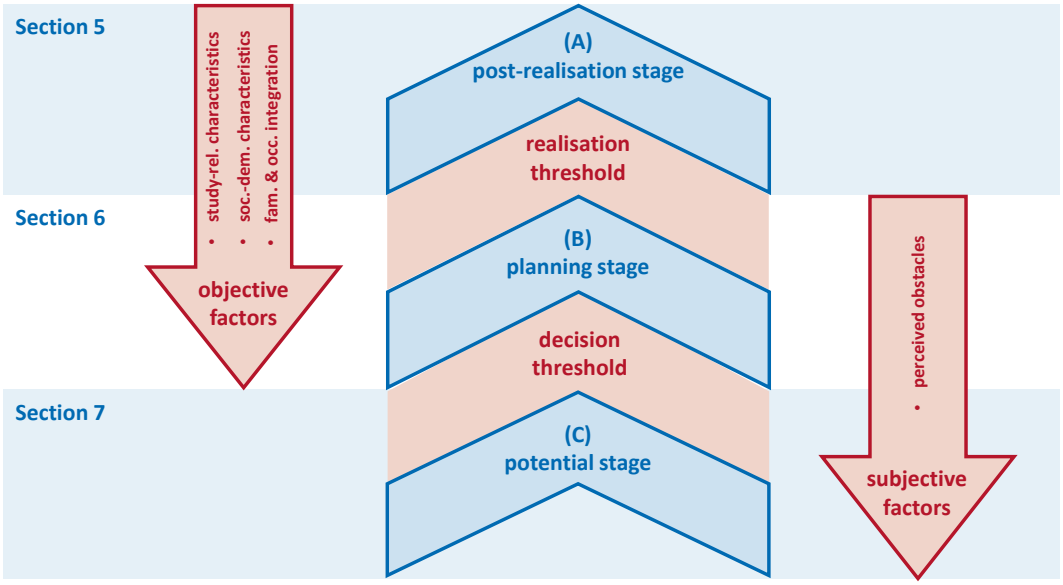
(B) Students at the **'planning stage'** have not yet realised, but are still planning to realise an enrolment abroad during their studies. In that they have developed and expressed an ambition to realise an enrolment period abroad – and in some cases even started to organise the planned foreign enrolment phase – they can arguably appraise well the existing organisational obstacles. Since they have aspirations to realise a foreign enrolment period, they are likely to be responsive to supportive measures tackling financial, organisational or informational obstacles.

(C) Students at the **'potential stage'** have not realised and are not planning to realise a foreign enrolment period. Their perception of obstacles is assumed to differ from that of students who have realised or are planning to realise a foreign enrolment period, because they are not (any more) dealing with the concrete challenge of organising an enrolment period abroad. From a political perspective, this group is arguably the most contentious one. On the one hand, one might argue that students not willing to enrol abroad temporarily should not be pushed to do so. On the other hand, it is often argued in the political sphere that this type of students has first and foremost to be (re)convinced of the benefits of studying abroad. In any case, this group can be assumed to respond to supportive measures in a reserved manner, as they either have already dismissed or never thought about the option of enrolling abroad temporarily.

In the analyses of factors associated with students refraining from enrolling abroad temporarily, a further distinction is made between rather objective obstacles on the one hand and subjectively perceived obstacles on the other hand. **Objective obstacles** are understood as student attributes that are interpersonally comparable and that are not a priori related to the issue of enrolment abroad. As far as the **subjective obstacles** are concerned, students were explicitly asked to rate the degree to which they perceive a certain aspect as a barrier to enrolling abroad temporarily. For methodical reasons, not all thresholds and stages described above are examined considering both objective and subjective obstacles (Figure 1). The analysis of the realisation threshold

merely takes into account objective factors, as the subjectively perceived obstacles were captured retrospectively and not before possible foreign enrolment periods could have been realised. The modelling of the decision threshold, in contrast, includes both objective and subjective factors, as the subjective perception of obstacles has been queried simultaneously with the possible intention to enrol abroad temporarily.

Figure 1 Research approach for the analysis of students' international mobility behaviour



The objective and subjective factors cover different dimensions that are assumed to have an – either positive or negative – influence on the odds of realising or planning to realise a foreign enrolment period. These dimensions have been identified based on the analyses that EUROSTUDENT research teams have performed at national level for Austria (Unger, Grabher, Wejwar, & Zaussinger, 2010), Switzerland (Gerhard, 2011) and Germany (Isserstedt & Kandulla, 2010; Finger, 2011) as well as the internationally comparative analyses based on the EUROSTUDENT IV data set (Orr et al., 2011; Gwosć, Netz, Orr, Middendorff, & Isserstedt, 2011). Subsequently, hypotheses have been formulated on the expected type of association between a certain objective or subjective factor and the dependent variables (i. e. the events of having realised and planning a foreign enrolment period, respectively).

The first dimension of the objective factors that is assumed to be associated with the odds of realising or planning to realise a foreign enrolment period is students' **study-related characteristics**. To begin with, it is expected that the odds of having been enrolled abroad rise with the number of years spent in higher education, as the time during which students had the opportunity to go abroad increases. In contrast, students in higher study years are assumed to have plans for an enrolment period less frequently than students at the beginning of their studies, as the remaining time for realising a foreign enrolment period decreases and the option to finish the studies and (fully re)enter the labour market becomes more attractive. Moreover, it is essential to control for students' field of study. In this respect, it is not possible to formulate hypotheses for each field of study, as there are different disciplinary traditions across countries of students enrolling abroad temporarily. However, it seems plausible to expect students of

humanities and arts, who include students of foreign languages, to have realised or to plan to realise foreign enrolment periods more often than students of other disciplines. As with the fields of study, the type of higher education institution students are enrolled at is controlled for without taking a straightforward cross-national hypothesis as a basis.

Secondly, the above-mentioned studies show that foreign enrolment rates and plans differ according to students' **socio-demographic characteristics**. This dimension comprises students' age, gender as well as their education background. While the propensity to have realised a foreign enrolment period is expected to rise with increasing age, the propensity to still have plans for an enrolment period abroad is expected to decline. Judging by the existing studies, female students are expected to realise and to plan foreign enrolment experiences slightly more often than men. However, it is also assumed that rising age has a more negative impact for female than for male students, as female students face the possibility of becoming pregnant as they grow older, which is assumed to make enrolment abroad more difficult. Finally, having a tertiary education background is assumed to be positively associated with both realised and planned foreign enrolment periods, as parents with tertiary education are not only more affluent in general, but they might also have gained foreign study-related experiences themselves and therefore encourage their children to go abroad temporarily.

Thirdly, it is assumed that a rising degree of **familial and occupational integration** is associated negatively with both the odds of having enrolled abroad and the odds of planning an enrolment period abroad. Indicators for a high degree of familial integration are the responsibility for at least one child who is younger than 18 years and the fact that students are living together with their parents. The degree of occupational integration is measured by the amount of income that a student gains from employment. It is assumed that a higher amount of self-earned income implies a higher opportunity cost of enrolling abroad temporarily. This rests on the assumption that students have to quit or at least suspend their job in order to sojourn abroad. The amount of self-earned income is only considered in the analysis of the decision threshold, as it was captured at the time of the survey and not retrospectively, i. e. before possible foreign enrolment phases could have taken place.

Finally – and again only in the analysis of the decision threshold – the **subjectively perceived obstacles to an enrolment abroad** are taken into account. These obstacles are indicators for six different problems that might be associated negatively with plans for a foreign enrolment period: not recognising the benefit of enrolling abroad temporarily; being reluctant to leave the family and/or social context; being afraid to prolong the duration of the studies; fearing the financial investment necessary to realise a foreign enrolment period; not possessing the necessary language competences to realise a foreign enrolment phase; and not having access to the information needed to realise an enrolment period abroad.4 With regard to all six subjective obstacles, it is assumed that the odds of planning a foreign enrolment period decrease as the intensity with which the obstacles are perceived increases.5

4 In the EUROSTUDENT IV questionnaire, further obstacles that would have proven instructive for the analyses were captured. These were not included in the regression models as they were either not covered in all of the five countries examined or indicators for similar latent constructs. Therefore, they led to multicollinearity between independent variables once included in the models.

5 Students assessed the intensity with which they perceive an obstacle to an enrolment period abroad on a 5-point scale, ranging from 1 "no obstacle" or "not at all" to 5 "big obstacle" or "very strongly". The obstacles are introduced as metric variables in the regression models.

3. Data and methods

The hypotheses are tested using data from countrywide student surveys that research teams in Austria, Switzerland, Germany, The Netherlands and Poland have conducted in either 2009 or 2010. After the application of country-specific weighting procedures, the data sets of all five countries were judged as representative at national level (Figure 2).6

Figure 2 Information on national surveys

	Country				
Information on surveys	**AT**	**CH**	**DE**	**NL**	**PL**
Final sample size	31,640	14,976	15,899	14,422	1,992
Return rate	17%[1]	64%	32%	19%	38%
Reference period	05-06/2009	03-06/2009	05-07/2009	06-08/2010	03-06/2010
Sampling method	no method, all students in AT were invited	stratified random sample (by institution and field of study)	random sample	random sample	random sample
Survey method	online	online	paper and pencil	online	online
Weighting scheme	nationality, type of HEI, field of study, sex, age	nationality, type of programme, sex, age	*Länder*, type of HEI, field of study, sex	type of HEI, type of programme, year of study, field of study, sex	formal status (full-time/part-time), sex

Source: Social Surveys from Austria (2009), Switzerland (2009), Germany (2009), The Netherlands (2010) and Poland (2010)
1) The return rate for Austria is only an estimation. Details on its calculation are provided by Unger, Zaussinger, et al. (2010).

The Polish sample differs somewhat from the other four countries' samples in that it is comparatively small in relation to the size of the total national student population. Also, it does not include all variables that have been considered as relevant for calculating the regression models; this is indicated by the abbreviation "n.d." (no data) in Figures 4 and 5 as well as in Annex 1 and Annex 2. The comparability of the results of the regression models estimated for Poland is thus rather limited.

The data were collected based on the standardised EUROSTUDENT IV questionnaire and according to the EUROSTUDENT IV data collection conventions (Orr et al., 2011).7 Therefore, the national data sets were internationally comparable from the outset. For the purposes of this paper, however, further data cleaning rules were elaborated in collaboration with the national research teams and subsequently applied to the national data sets.8 Firstly, all students were excluded for which either information on their realised foreign enrolment periods or on their

6 It should be noted that Figure 2 contains a general description of the five national student surveys and the resulting samples. A more detailed description of the subsamples used in this paper is provided further below in this section.
7 The most important EUROSTUDENT IV conventions for understanding correctly the results of this paper are: (i) only students at ISCED level 5A are considered; (ii) only resident students (both with national and foreign citizenship) who have gained their prior school education in the country where they were enrolled at the time of the survey are included; (iii) students at specialised institutions – such as universities of the armed forces and pure distance universities – are excluded; (iv) students of which the sex, the age or the programme they follow is not known are excluded.
8 More information is available in the Steeplechase Manual.

plans for foreign enrolment periods or on the number of years they have spent in higher education was missing. Secondly, students enrolled in higher education for more than ten years were excluded, as they are a rather distinct group of students regarding their study behaviour and (mobility) aspirations. Additional specifications were made with respect to individual regression models; these are described in the respective figures where the models are presented.

The empirical part of the paper is structured as follows (see also Figure 1): in section 4, general differences between the five countries covered in terms of the share of students having realised, still planning to realise and not planning to realise a foreign enrolment period are discussed. In line with the research approach described above, each 'mobility threshold' is then dealt with in a separate section. In section 5, obstacles at the 'realisation threshold' – that is to say students' transition from the planning to the post-realisation stage – are examined. To this end, standardised logistic regression models are presented for the five countries in question, with the dependent variable being students' belonging to the group that has realised a temporary enrolment period abroad. Section 6 focuses on the 'decision threshold', i. e. on students' transition from the potential to the planning stage. Excluding those students who have already realised a temporary enrolment period abroad, the dependent variable of the logistic regression models presented in this section is students' belonging to the group planning to realise an enrolment period abroad. Based on descriptive evidence, section 7 elaborates on the subjective perception of obstacles at the potential and planning stages. By pointing out how large the groups of students are who perceive a certain factor as a (big) obstacle to an enrolment period abroad at these two stages, information is gained which facilitates the definition of priority areas for political intervention. Section 8 summarises and interprets the main findings and discusses its implications for higher education policy. Also, it outlines ways forward for further research.

4. Realised and planned foreign enrolment periods in country comparison

Clearly, giving account of the share of a student population that realises a foreign enrolment period in the course of its studies is not the strong suit of a student survey; to this end, a graduate survey is the better suited tool.9 Still, a crude estimation of the eventual foreign enrolment rate can be obtained from student surveys by adding up the share of students having realised and of those still planning to realise a foreign enrolment experience during their studies. This procedure – which is likely to overestimate the ultimate rate of students with foreign enrolment experience, as plans might be hampered by a variety of obstacles – can give an impression of general differences between the five countries regarding their student populations' mobility experiences and ambitions.

The estimated final mobility rate (groups A + B in Figure 3) is highest in Germany and The Netherlands, followed by Switzerland and Austria, and by far lowest in Poland.10 In Poland, about 90% of the student population has not yet had and is not planning to gain foreign enrolment experience during studies (group C). In Austria and Switzerland, this share amounts to more than two thirds, and in Germany and The Netherland, it still lies above 50%.

Figure 3 **Students who have (not) realised and who are (not) planning an enrolment period abroad (in %)**

	Country				
Students by enrolment abroad and plans	**AT**	**CH**	**DE[1]**	**NL**	**PL**
realised enrolment period abroad (A)	10	6	8	12	2
with plans for an enrolment period abroad (B)	15	26	38	29	8
without plans for an enrolment period abroad (C)	75	68	54	59	90

Source: Social Surveys from Austria (2009), Switzerland (2009), Germany (2009), The Netherlands (2010) and Poland (2010)

1) For students in Germany the plans concern not only enrolment abroad, but study-related experience in general.

Merely looking at the share of students who had already realised an enrolment period abroad until the time of the national surveys (group A), the highest value can be observed in The Netherlands, followed by Austria, Germany, Switzerland and – with some distance – Poland. This group of students is dealt with more extensively in the next section.

9 A more elaborated discussion of the strengths and weaknesses of student and graduate surveys for the purpose of analysing student mobility can be found in Orr et al. (2011) and Teichler (2012). Of special interest for this paper is the ability of analyses based on student surveys to probe which objective and subjectively perceived obstacles deter students from planning to enrol abroad temporarily.

10 In Germany, students with plans as well as no plans for an enrolment period had to be defined slightly different than in the remaining four countries. The questionnaire of the 19th German Social Survey captured only plans for study-related experiences in general and not plans for foreign enrolment periods specifically. As more students plan some type of foreign study-related experience than an enrolment period, the plans for an enrolment period – and thus the estimated final enrolment rate – are overestimated in the case of Germany. In turn, the share of students with neither foreign enrolment experience nor plans is underestimated. This shortcoming was judged as tolerable based on the assumption that the factors deterring students from realising a foreign *enrolment* period do not differ drastically from the factors deterring students from realising *study-related experiences in general*. This assumption, however, will have to be tested in future research. The data collected through the questionnaire of the 20th German Social Survey, which will be made available in late 2013, will give the possibility of doing so.

5. Obstacles at the realisation threshold

Which factors are associated with students moving from the planning to the post-realisation stage and which obstacles become manifest at the realisation threshold in the five countries examined? These questions were addressed through logistic regression analyses, in which students' belonging to the group that has already realised an enrolment period abroad served as the dependent variable.11 Instead of reporting the calculated odds ratios directly, a more intuitive manner for illustrating the direction of the association between the independent variables and the dependent variable was chosen: one or more plus signs (+, ++, +++) stand for an odds ratio above the value of 1, while one or more minus signs (–, – –, – – –) stand for an odds ratio below the value of 1. Thus, the plus signs imply that the student group described by the independent variable in question has higher odds of having realised an enrolment period abroad than the respective reference group, while the minus signs imply that the odds of the former group are lower. The level of significance of the coefficients is indicated by the number of plus or minus signs. In case a coefficient is not significant, the corresponding cell is left blank (Figure 4).

This simple way of presenting the regression coefficients – and the fact that odds ratios instead of (average) marginal effects were calculated – also has a downside: odds ratios cannot be used to compare the effect sizes of selected independent variables across groups of individuals within samples or across samples for different countries (Mood, 2010). In other words, it is not possible to determine which independent variable has the strongest effect on the dependent variable within a country, or whether the effect of a certain independent variable is stronger in one country than in another. Tackling these aspects is certainly a promising way forward for future research. For now, however, the comparison across countries intends to provide information on whether there is an association between a certain independent variable and the dependent variable in a certain country and whether the association is positive or negative.

Judging by the criteria describing the goodness of fit of the regressions, the models are of moderate quality. The Pseudo R2 values indicate that the models manage to explain between 15.5% (NL) and 46.5% (CH) of the variance in the dependent variable, which can be considered as decent. For predictive purposes, though, the models are unsuited, as can be seen by looking at the Adjusted Count R2 values. The latter show that through the inclusion of all independent variables, the predictive power of the models is not better than that of a mere null model without independent variables.12 This mainly originates from the skewness of the dependent variable (Figure 3, compare group A to groups B + C / Annex 1) and is not problematic for the purpose of this paper to examine which factors are positively and negatively associated with foreign enrolment periods.

11 Students were assigned the value "1" if they had already realised a foreign enrolment period at the time of the survey and the value "0" if they had not done so – independent of whether they still had plans for an enrolment period abroad.
12 More detailed explanations of the criteria of model fitness used in this paper can be found in Kohler & Kreuter (2009).

Figure 4 **Attributes associated with the odds that a student has realised an enrolment period abroad[1]**

Logistic regressions with dependent variable "realised an enrolment period (yes/no)"

	Country				
Independent Variable	**AT**	**CH**	**DE**	**NL**	**PL[2]**
Study-related characteristics					
Study year 2 (ref.: study year 1)	+++	−−−	+	+	
Study year 3	+++		+++	+++	+
Study year 4	+++	+	+++	+++	
Study year 5	+++	+++	+++	+++	+
Study year 6	+++	+++	+++	+++	+++
Study year 7	+++	++	+++	+++	+++
Study year 8	+++	+++	+++	+++	+
Study year 9	+++		+++	+++	+++
Study year 10	+++		+++	+++	+
Teacher training & education science (ref.: hum. & arts)	−−−	−	−−−	−−−	*n.d.*
Social sciences, business & law	−−−	++			−−
Engineering, manufacturing & construction	−−−		−−−	−−−	−−
Science, mathematics & computing	−−−	−−	−−−		
Health & welfare	−−−	−−	−−−		
Agriculture & veterinary	−−−		−−−	+	
University (ref.: other types of higher education institutions)	−−−				*n.d.*
Socio-demographic characteristics					
Current age (in full years, centred around median)	−−−	−−−	−		
Female (ref.: male)	+		++	++	
Interaction term: current age (in full years, centred around median) **x female**					
Tertiary education background[3] (ref.: without tertiary education background)	+++	++	+++	+++	++
Familial and occupational integration					
Responsibility for child(ren) younger than 18 years (ref.: without responsibility for child(ren) < 18 years)	−−−		−−−	−−−	
Living with parents[4] (ref.: not living with parents)	−−		−−−	−−−	
Log pseudolikelihood	12,911	-22,378.6	-3,236.3	7,804.6	-141.4
Prob > chi2 (Pearson's chi-squared test)	0.000	0.000	0.000	0.000	0.001
Pseudo R2 (Nagelkerke)	0.207	0.465	0.254	0.155	0.212
Adjusted Count R2	-0.001	0.000	0.001	-0.003	0.000
Number of observations	23,230	11,849	13,813	11,985	1,793

Data source: Social Surveys from Austria (2009), Switzerland (2009), Germany (2009), The Netherlands (2010) and Poland (2010)

Interpretation of effects: One or more plus signs (+, ++, +++) stand for an odds ratio above the value of 1, while one or more minus signs (–, ––, –––) stand for an odds ratio below the value of 1. Thus, the plus signs imply that the student group described by the independent variable in question has higher odds of having realised an enrolment period abroad than the respective reference group, while the minus signs imply that the odds of the former group are lower. The level of significance of the coefficients is indicated by the number of plus or minus signs (see below). In case a coefficient is not significant, the corresponding cell is left blank.

Significance level: + − $p < 0.05$ / ++ −− $p < 0.01$ / +++ −−− $p < 0.001$

1) Students in their first semester are excluded from the regression analyses, as it is not possible for them to have been enrolled abroad (students who are enrolled abroad in the first semester are not captured in the national surveys). Similarly, all students above the 20th semester are excluded.

2) The Polish data set does not include information on the type of institution students are enrolled at. Also, students enrolled in the field of study "Teacher training & education science" are not included. Therefore, the possibilities for comparison between the regression models for Poland and the remaining countries are very limited.

3) Students with at least one parent who graduated from ISCED levels 5 or 6 are considered as students with tertiary education background. Students whose parents graduated from ISCED levels 0, 1, 2, 3 or 4 are considered as students without tertiary education background.

4) Students who are not living with parents are those who live a) alone, b) with partner/children, c) with (an)other person/s not mentioned before, d) in a student hall.

In all five countries, students' study-related characteristics seem to have a considerable influence on whether students have realised a foreign enrolment period or not. Not surprisingly, being in higher study years is positively associated with foreign enrolment, as this goes along with more time and opportunities to realise a stay abroad. In Austria, Germany and The Netherlands, students in all considered study years (2 to 10) have significantly higher odds of having been

enrolled abroad than students in the first study year. In Switzerland and Poland, this is not the case. In these countries, the foreign enrolment rates are comparatively low among students in all study years. Therefore, significant differences are visible only after the second study year in Poland and after the third study year in Switzerland. In Switzerland, the odds that students in study years 9 and 10 have studied abroad temporarily do not differ significantly from those of students in the first study year. This can be taken as an indication that students in very high study years constitute a rather distinct group in terms of their (comparatively low) odds of having realised an enrolment period abroad. The regression output for the individual countries (not presented in Figure 4) shows indeed that the odds of having been enrolled abroad do first increase with rising years of study, but then fall again from a certain study year onwards (between the 7th and the 9th study year depending on the country).

Taking into account students' field of study is crucial as well. In Austria and Germany, students in (almost) all of the included fields of study have lower odds than students of humanities and arts of having been enrolled abroad. In the other three countries, the differences between fields of study are less pronounced.13 In Switzerland and The Netherlands, it is not students of humanities and arts with the highest odds of having realised a foreign enrolment stay, but students of social sciences, business and law (CH) and students of agriculture and veterinary (NL). Once the study year and the field of study – as well as the remaining independent variables – are controlled for, the coefficients for the type of higher education institution students are enrolled at are not significant any more. An exception in this respect is Austria, where being enrolled at a university is negatively associated with having realised a foreign enrolment period.

As far as students' socio-demographic characteristics are concerned, it is striking – albeit consistent with the hypothesis – that having a tertiary education background is positively associated with having realised a foreign enrolment period in all five countries. In three countries (AT, DE and NL), female students have higher odds than their male fellows of having studied abroad temporarily.14 Finally, rising age is negatively associated with the odds of having been enrolled abroad in Austria, Switzerland and Germany – even when the study year and the degree of a students' familial integration are controlled for. This negative association of age and foreign enrolment is not visible in The Netherlands and Poland.

Concerning The Netherlands, it is not age itself that is negatively associated with foreign enrolment, but rather the increasing degree of familial integration that goes along with a rising age. Both indicators for the degree of familial integration – the responsibility for at least one child that is younger than 18 years and the fact that students are living in their parents' household – are negatively associated with foreign enrolment. This latter point also holds true for Austria and Germany. Thereby, it can be stated that – if significant – the coefficients reflecting the degree of familial integration are always negative, which is to be elaborated upon in the further analyses.

13 As mentioned in section 3, the comparability of the regression results for Poland is restricted, the main reasons being that the Polish data set does not include information on the type of institution students are enrolled at and that students of teacher training and education science were not included in the regressions due to their extremely low case number.
14 It is noteworthy that the coefficients for the interaction term (current age x female) are not significant in any of the five countries.

6. Obstacles at the decision threshold

Which factors are associated with students moving from the potential to the planning stage and which obstacles become manifest at the decision threshold? With a view to answering this question, logistic regression models for the individual countries were calculated using students' belonging to the group that has not yet realised but is planning to realise an enrolment period abroad as dependent variable. In line with the classification of stages presented in Figure 1, students who have already been enrolled abroad were excluded from the analyses. The coefficients of the regression models are interpreted as described in section 5. However, the following models include additional independent variables: on the one hand the amount of self-earned income is added to the models as an indicator for students' occupational integration in their 'home country'. On the other hand, the variables capturing students' subjective perception of inhibitive factors are now introduced into the models (Figure 5).

In comparison to the models used to examine the realisation threshold, the regressions modelling the decision threshold are of much better quality. The comparatively good fit of the models can be explained by the fact that an essential assumption of the regression models is better met, i. e. that the hypothesised causes either happen before the observed effects or that the independent variables are time-invariant. Moreover, the distributions of the dependent variables are less skewed than in the previous case (Figure 3, compare group B to group C / Annex 2). Also, the fact that more relevant independent variables could be considered lessens the degree of unobserved heterogeneity. The percentage of the explained variance in the dependent variable – as indicated by the Pseudo R2 values – ranges between 21.1% (PL) and 86.9% (CH). Leaving aside the case of Poland, the predictive power of the models is clearly better than that of mere null models without independent variables. This can be derived from the Adjusted Count R2 values, which lie above 16% in all countries besides Poland.

There are strong associations between students' study-related characteristics and the odds that they are planning an enrolment period abroad. These associations are, however, somewhat less expressed than in the models for the realisation threshold. For Poland, hardly any association between the variables describing students' study-related characteristics and their foreign enrolment plans can be observed. In the remaining four countries, it is clearly visible that students in higher study years have lower odds of still planning an enrolment period than students in the first study year. Although not visualised in Figure 5, the regression output for the individual countries shows that the odds of planning an enrolment period abroad decrease with rising age – although not always monotonically. An exception to this tendency can be observed for students in Switzerland, whose odds of planning an enrolment period abroad are higher in the second and third study year than in the first.

Figure 5 **Attributes associated with the odds that a student is planning an enrolment period abroad[1]**

Logistic regressions with dependent variable "planning to realise an enrolment period (yes/no)"

	Country				
Independent Variable	**AT**	**CH**	**DE[2]**	**NL**	**PL[3]**
Study-related characteristics					
Study year 2 (ref.: study year 1)		+ + +	− − −	− −	
Study year 3	−	+	− − −	− − −	
Study year 4	− − −		− − −	− − −	
Study year 5	− − −	− −	− − −	− − −	
Study year 6	− − −	−	− − −	− − −	
Study year 7	− − −	−	− − −	− − −	
Study year 8	− − −	−	− − −	− − −	
Study year 9	− − −		− − −	− − −	
Study year 10	− − −		− − −	− − −	
Teacher training & education science (ref.: hum.& arts)	− − −	− − −	− − −	− − −	*n.d.*
Social sciences, business & law	− −	+ + +		−	
Engineering, manufacturing & construction				− −	−
Science, mathematics & computing	− − −		− − −		
Health & welfare	− − −				
Agriculture & veterinary		−			
University (ref.: other types of higher ed. institutions)	+ + +	+ + +	+ + +	+ + +	*n.d.*
Socio-demographic characteristics					
Current age (in full years, centred around median)	− − −	− − −	− − −	− − −	−
Female (ref.: male)	− − −	−	−		
Interaction term: current age (in full years, centred around median) **x female**			−		
Tertiary education background[4] (ref.: without tertiary education background)	+ + +	+ + +	+ + +	+ + +	+ +
Familial and occupational integration					
Responsibility for child(ren) younger than 18 years (ref.: without resp. for child(ren) < 18 years)	− − −		− − −		
Living with parents[5] (ref.: not living with parents)	− − −	− −	− − −	− − −	
Amount of self-earned income within 1st income tercile (ref.: no self-earned income)	+ + +	+	+	+ +	
Amount of self-earned income within 2nd income tercile		+	+ +		
Amount of self-earned income within 3rd income tercile	− − −			− − −	
Perception of obstacles to an enrolment period abroad					
Low benefit for studies at home (on a 5-point scale from 1 "no obstacle/not at all" to 5 "big obstacle/very strongly")	− − −	− − −	− − −	− − −	− − −
Separation from partner, child(ren), friends	− − −	− − −	− − −	− − −	− − −
Expected delay in progress of studies	− − −		− − −	− − −	
Expected additional financial burden		− − −	− −	+ + +	
Insufficient skills in foreign languages	+ + +	−	−	−	− − −
Difficulty in getting information	+ + +	+ + +	+ + +	+ + +	
Log pseudolikelihood	6,313.3	-37,801	-6,211.2	8,131.3	-350.7
Prob > chi2 (Pearson's chi-squared test)	0.000	0.000	0.000	0.000	0.001
Pseudo R2 (Nagelkerke)	0.510	0.869	0.351	0.342	0.211
Adjusted Count R2	0.424	0.168	0.389	0.299	-0.001
Number of observations	8,051	6,847	11,717	8,276	1,549

Data source: Social Surveys from Austria (2009), Switzerland (2009), Germany (2009), The Netherlands (2010) and Poland (2010)

Interpretation of effects: One or more plus signs (+, ++, +++) stand for an odds ratio above the value of 1, while one or more minus signs (−, − −, − − −) stand for an odds ratio below the value of 1. Thus, the plus signs imply that the student group described by the independent variable in question has higher odds of planning to realise an enrolment period abroad than the respective reference group, while the minus signs imply that the odds of the former group are lower. The level of significance of the coefficients is indicated by the number of plus or minus signs (see below). In case a coefficient is not significant, the corresponding cell is left blank.

Significance level: + − $p < 0.05$ / + + − − $p < 0.01$ / + + + − − − $p < 0.001$

1) Students who have realised an enrolment period abroad (A) are excluded from the regression analyses. Similarly, all students above the 20th semester are excluded.

2) For students in Germany the plans concern not only enrolment abroad, but study-related experience in general.

3) The Polish data set does not include information on the type of institution students are enrolled at. Also, students enrolled in the field of study "Teacher training & education science" are not included. Therefore, the possibilities for comparison between the regression models for Poland and the remaining countries are very limited.

4) Students with at least one parent who graduated from ISCED levels 5 or 6 are considered as students with tertiary education background. Students whose parents graduated from ISCED levels 0, 1, 2, 3 or 4 are considered as students without tertiary education background.

5) Students who are not living with parents are those who live a) alone, b) with partner/children, c) with (an)other person/s not mentioned before, d) in a student hall.

As far as the fields of study are concerned, the differences are less marked than in the case of the models for the realisation threshold. Mostly, students of other fields of study have lower odds of planning an enrolment period abroad than students of humanities and arts. Only students of social sciences, business and law in Switzerland have higher odds of doing so than their peers in humanities and arts; these have already been shown to have *realised* a foreign enrolment period more frequently than their humanistic fellow students. Most striking, however, is that in all four countries for which data are available, students of teacher training and education science have lower odds of having foreign enrolment plans than the reference group. In addition, their odds of having *realised* an enrolment period abroad are lower (Figure 4 / see also Annex 2). Thus even controlling for a variety of student attributes, there seem to be idiosyncrasies of students in teacher training and education science which deter them from studying abroad. Other than at the realisation threshold, the type of higher education institution at which students are enrolled matters at the decision threshold. Being enrolled at university is positively associated with having foreign enrolment plans in all countries for which the respective variable could be included.

Turning to students' socio-demographic characteristics, a negative correlation between students' age and their odds of planning a foreign enrolment phase becomes visible. This holds true for all five countries examined and – to recall – even under control of students' study year and their level of familial as well as occupational integration. As in the models for the realisation threshold, students' education background is of crucial importance. In all five countries, having parents with a tertiary education degree is strongly positively associated with the intention of realising a foreign enrolment period. Students' gender is relevant for the odds of planning an enrolment period abroad only in Austria, Switzerland and Germany. In these countries, a negative effect of being female can be observed. However, it should be noted that in at least two of these countries (AT and DE), being female is positively associated with having *realised* a foreign enrolment period. Thus women's disproportionately low odds of planning a foreign enrolment period can mainly be explained by the fact that they have already had such an experience more frequently (Figure 4 / Annex 1).15

As in the analyses of the realisation threshold, the coefficients reflecting a comparatively strong degree of familial integration are – where significant – negatively associated with the odds of planning a foreign enrolment period. This is the case in Austria and Germany as far as the responsibility for at least one child younger than 18 years is concerned. Living together with the parents is negatively associated with planning a foreign enrolment phase in all countries apart from Poland, where the respective coefficient is not significant. The influence of a rising occupational integration – as measured by the relative position a student has in the job income ladder – is less straightforward than hypothesised. Receiving a job income that lies within the first income tercile is positively associated with planning a foreign enrolment phase in all countries but Poland; the reference group in this respect are students who do not have any self-earned income. In Switzerland and Germany, the respective coefficients are still positive and significant for students in the second job income tercile. However, belonging to the third job income tercile is negatively associated with having foreign enrolment plans, although only in two countries (AT and NL). One might thus modify the initial hypothesis in the sense that the amount of self-earned income only exerts a binding force once it has reached a comparatively high level.

15 Only for students in Germany can a significant coefficient of the interaction term (current age x female) be observed: Here, rising age has a more negative effect on the odds of planning a foreign enrolment period for women than for men.

In terms of their association with the odds of planning a foreign enrolment period, the factors capturing students' obstacle perception can be assigned to four different groups. A first group comprises the items "low benefit for studies at home" and "separation from partner, child(ren), friends". As far as these factors are concerned, an increasing perception as an obstacle is associated with lower odds of having foreign enrolment plans in all five countries. The expected delay in the progress of studies forms the second group. The coefficients for this variable are not significant in all countries, but where they are significant (AT, DE, NL), the odds of having foreign enrolment plans decrease the stronger this factor is perceived as an obstacle. As a third group, the factor "difficulty in getting information" is associated with higher odds of planning a temporary enrolment abroad the more strongly students consider it as an obstacle. The fourth group comprises the expected additional financial burden assigned to temporary foreign enrolment and the (perceived) lack of foreign language skills. These factors are negatively associated with having foreign enrolment plans in the majority of countries – in the case of insufficient language skills even in four of them (CH, DE, NL, PL). Only in two countries, positive associations can be observed. This is the case with regard to language competency deemed as insufficient in Austria and the expected additional financial burden in The Netherlands.

7. Obstacles at the planning and potential stages

A first toehold for deciding which of the identified obstacles higher education policy could focus on might simply be the share of students perceiving a certain factor as a critical or "(big) obstacle".16 As the previous section has shown that the obstacle perception differs significantly between students still planning and those not planning an enrolment period abroad, these two groups of students are differentiated. To better illustrate the 'deterring force' a certain factor has for students across countries, the country average of the respective national values was calculated. The obstacles are ranked in descending order according to the country average values for students not planning a foreign enrolment period (Figure 6, right-hand column).

Figure 6 **Students, who have not realised an enrolment period abroad, considering selected factors as (big) obstacle to an enrolment period abroad (in %)**

Students considering aspect as (big) obstacle[1] (B & C)	Country											
	AT		CH		DE[2]		NL		PL		Country mean	
Plans for enrolment period abroad	yes (B)	no (C)	yes (B)	no (C)	yes (B)	no (C)	yes (B)	no (C)	yes (B)	no (C)	**yes (B)**	**no (C)**
Expected additional financial burden	57	65	43	52	60	70	53	54	68	74	**56**	**63**
Separation from partner, child(ren), friends	22	56	15	27	36	52	22	51	37	60	**26**	**49**
Expected delay in progress of studies	36	56	25	31	36	55	21	32	26	38	**29**	**42**
Low benefit for studies at home	15	32	8	20	21	37	12	31	17	28	**15**	**30**
Insufficient skills in foreign languages	14	13	10	12	23	24	19	23	23	49	**18**	**24**
Difficulty in getting information	37	21	18	15	18	11	33	24	22	27	**25**	**20**

Source: Social Surveys from Austria (2009), Switzerland (2009), Germany (2009), The Netherlands (2010) and Poland (2010)

1) The obstacles for an enrolment abroad are measured on a 5-point scale, which ranges from "no obstacle/not at all" to "big obstacle/very strongly". The classification "(big) obstacle" encompasses the values of the two highest categories.

2) For students in Germany the plans concern not only enrolment abroad, but study-related experience in general.

The list of inhibitive factors considered here is not meant to be comprehensive. Taking into account the six selected obstacles, however, the single most critical obstacle in the perception of students is the additional financial burden linked to foreign enrolment stays. Not only is an intensifying perception of this aspect as an obstacle associated negatively with moving from the potential to the planning stage in two countries (CH and DE). Also, comparatively large shares of students consider this factor as a (big) obstacle at the planning stage, namely between 43% in Switzerland and 68% in Poland.

The factors "separation from partner, child(ren), friends" and "expected delay in progress of studies" range on a somewhat lower level. With relatively strong differences in the obstacle perception between students at the potential and the planning stage, these obstacles were both found to be negatively associated with the odds of passing the decision threshold in the majority of countries. Although less intensely felt than financial concerns, these obstacles, which are referring to the social and the organisational sphere, are thus still to be taken seriously by policy

16 The obstacles for an enrolment abroad are measured on a 5-point scale, which ranges from "no obstacle/not at all" to "big obstacle/very strongly". The classification "(big) obstacle" encompasses the values of the two highest categories.

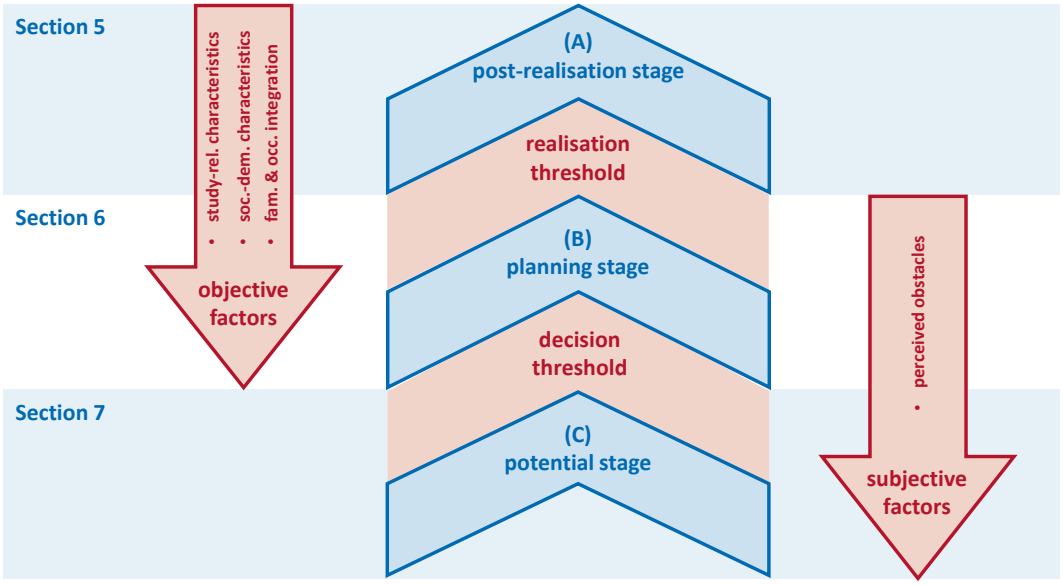
makers. However – as will be argued in the last section – the possibility and need for political intervention might not be given with regard to both obstacles.

The items “low benefit for studies at home”, “insufficient skills in foreign language” and “difficulty in getting information” constitute the lowest level. A presumed low benefit of studying abroad temporarily has been shown to be strongly negatively associated with the odds of having foreign enrolment plans. The share of students for whom this aspect is a (big) obstacle, though, is comparatively small, especially among students with plans for a foreign enrolment period. The share of students regarding insufficient foreign language competency as a (big) obstacle to an enrolment phase abroad is also relatively small. Leaving aside the case of Austria, the odds of having foreign enrolment plans decline in all countries in line with a rise in the extent to which this factor is perceived as an obstacle. Besides Poland, the perception of this obstacle does not differ much between students at the potential and the planning stage. The perception of a difficulty in getting information is positively associated with planning a foreign enrolment period. The share of students considering this aspect as a (big) obstacle is accordingly notably higher among students at the planning than among those at the potential stage. Generally, however, lacking information does not seem to be one of the major concerns deterring students from studying abroad. This holds especially true for students in Germany and Switzerland.

8. Implications for higher education policy

With a view to engendering knowledge that is ultimately serviceable for higher education policy development, this paper has examined the factors that deter students in five exemplary countries from realising temporary enrolment periods abroad. Based on the assumption that deterring factors differ fundamentally depending on whether a foreign enrolment phase is seriously contemplated or not, an analytical framework has been proposed that distinguishes students in three stages, namely the potential stage, the planning stage and the post-realisation stage (Figure 1, shown again here as Figure 7).

Figure 7 Research approach for the analysis of students' international mobility behaviour



Whether students belong to one of these three stages has been the basis for modelling two thresholds they have to pass on their way to a temporary enrolment experience: the decision threshold and the realisation threshold. For both of these transition moments logistic regressions have been calculated to determine factors influencing the odds of overcoming them. In doing so, attributes of students belonging to four dimensions have been taken into account: study-related characteristics, socio-demographic characteristics, characteristics of the familial and occupational integration and – in the case of the models for the decision threshold – information on the subjectively perceived obstacles to an enrolment abroad. The size of the shares of students at the potential and planning stages who perceive various aspects as (big) obstacles to a foreign enrolment phase has been taken into account in order to broaden the interpretation of the regression results. The purpose of this last section is to bring together the findings of the individual analytical steps and depict the implications they have for higher education policy making.

Variables that describe students' **study-related characteristics** have been shown to be associated with the odds of planning and especially with the odds of eventually realising a foreign enrolment phase. Being enrolled in a later study year (semester) goes along with higher odds of having realised an enrolment period abroad, as students in higher semesters have had more time

and opportunities to realise such experiences. It is also associated with lower odds of still planning a foreign enrolment phase. An exception in this respect is Switzerland, where students in the second and third study year have higher odds of still planning an enrolment abroad than students in their first year. This might be an indication that the ambition to realise a foreign enrolment period is less pronounced at higher education entry in Switzerland, but is instead instilled primarily during the first study years.

Further country-specific patterns are visible with regard to the fields of study: In Austria, Germany and Poland, students of humanities and arts are – as hypothesised – among the students with the highest odds of planning and realising a foreign enrolment phase. In Switzerland it is students of social sciences, business and law and in The Netherlands it is students of agriculture and veterinary who have the highest foreign enrolment odds.17 Students of teacher training and education science have very low odds of having realised and of planning enrolment periods abroad in all countries for which data are available. This can be explained – at least for Germany (Netz, unpublished) – by the strong reference of teacher training to the structures of the national education system and the common prospect of also being employed in a nationally-bound occupational context. For higher education policy, this means that a potential multiplier effect is currently not exploited, as future teachers without mobility experience are arguably unlikely to act as role models towards their students in terms of collecting international experience.

Being enrolled at university – instead of being enrolled at another type of higher education institution – is associated with higher odds of planning a foreign enrolment phase in all countries for which data are available. At the realisation threshold, the respective coefficients are mostly not significant. Only for Austria can a negative link between studying at a university and having studied abroad be observed. This can be explained by the fact that Austrian universities of applied sciences frequently include mandatory exchange semesters in the curricula of their study programmes (Unger, Grabher, et al., 2010). The higher odds of students at universities to still plan an enrolment phase abroad, in general, might result from the tendency of university students to extend their studies – either by studying additional semesters or by enrolling in (further) Master or PhD programmes – which gives them more time to (plan to) realise a stay abroad.

Variables related to students' **socio-demographic characteristics** also influence the odds of planning and realising foreign enrolment stays. In three of the five countries (Austria, Germany and Switzerland), rising age is negatively associated with having realised a foreign enrolment period, in all countries it is negatively associated with planning it. Since other crucial characteristics going along with rising age – such as being enrolled in higher semesters and having familial and occupational liabilities – have been controlled for, these findings could be judged as evidence that the changing mind-set possibly associated with rising age leads to a decline in aspirations to study abroad. However, the reason for the declining mobility aspirations could also be that aged students are not eligible to financial and organisational support through mobility programmes and scholarships any more. Further research in this direction would be valuable. For the time being, the awareness should be sharpened at institutional and policy level

17 In this respect, separate analyses for students of different fields of study could facilitate an understanding of the diverse dynamics hindering students in realizing a foreign enrolment phase.

that young students – and especially young students in their early study years – are arguably most likely to respond to additional mobility supporting measures.

The association between gender and the odds of becoming mobile are somewhat ambiguous. In a few countries, being female is positively associated with having realised, but negatively associated with still planning a foreign enrolment phase. However, a recent study for Germany shows that female graduates have indeed realised enrolment periods abroad slightly more often than male graduates at the end of their studies, which is also related to women's choice of the field of study (for Germany see Netz, unpublished). This could imply that also gender-specific incentives are needed in case an equal participation of both sexes in foreign enrolment experiences shall be achieved.

Students without a tertiary education background clearly have lower odds of both having realised and still planning to realise a foreign enrolment phase than their peers with a tertiary education background. This has been observed for all five countries covered. Under the initially cited assumption that foreign enrolment phases prove beneficial for students' personal development and their employment prospects, the disproportionately low odds of students without tertiary education background to make such experiences function as a mechanism transferring educational inequalities into professional inequalities (Bargel, 2007; Kratz, 2011). In this respect, further efforts are needed in order to accomplish the goal of less selective access to temporary enrolment phases abroad.

Students' familial and occupational integration also influence mobility behaviour. Where the respective coefficients are significant, a higher degree of familial integration is associated with lower odds of both planning and realising a foreign enrolment phase. Arguably, such students will be rather less open to efforts encouraging them to realise a foreign enrolment stay, because they are embedded in their family and/or employment settings. It could also be debated in principle whether these students actually have to be encouraged to study abroad temporarily or whether either a focus on shorter stays abroad or initiatives for "internationalisation at home" might not be more conducive.

A high degree of occupational integration is only associated negatively to planning a foreign enrolment phase in two of the five countries (Austria and The Netherlands), and even here only in case the income received is comparatively high. Contrary to the initial hypothesis, students whose job income lies within the first tercile of the income ladder have higher odds of planning an enrolment period abroad than their fellows without any job income. Possibly, students planning a foreign enrolment phase have certain personality characteristics such as intrinsic motivation, which also predispose them to taking up student jobs.

Aspirations for an enrolment period abroad are also influenced by **subjectively perceived obstacles**. The analysis has shown that it is not only objective factors that have an influence on students' odds of planning (and eventually realising) a foreign enrolment period, but that the subjective assessment of their opportunity structures has an effect as well. If this is accepted, then policy makers intending to increase the share of temporarily mobile students will have to pay attention to the extent to which students perceive obstacles to an enrolment period – independent of whether their subjective assessment reflects real, existing barriers or not. If the share of students perceiving certain aspects as critical obstacles at the potential stage can be reduced, more students could be encouraged to surmount the first barrier – the decision threshold – on their way to an enrolment period abroad. Similarly, a lower intensity of the perception of obstacles at the planning stage would be expected to increase the odds of passing

over to the realisation threshold. Political priority areas could be those which are perceived as obstacles by comparatively large shares of students, such as the additional financial burden, the expected delay in the progress of studies and the separation from the partner, child(ren) and friends going along with studying abroad temporarily.18

The subjectively assessed obstacles can be classified into four groups in terms of their association with the odds of planning to realise a foreign enrolment phase:

- aspects negatively associated with planning a foreign enrolment period in all countries covered (low benefit for studies at home, separation from partner, child(ren) and friends)
- aspects negatively associated where the respective coefficients are significant (expected delay in the progress of studies)
- aspects positively associated where the respective coefficients are significant (difficulty in getting information)
- aspects for which the observed effect directions differ across countries (expected additional financial burden, insufficient skills in foreign languages)

The initial hypothesis that the odds of planning a foreign enrolment period decrease as the intensity increases with which an aspect is perceived as an obstacle cannot be confirmed for all six aspects. This finding, which might seem counterintuitive at first glance, can be explained as follows: considering lacking information as an obstacle to an enrolment period abroad requires in the first place that a student is interested – or rather sees the benefit – in foreign enrolment experience. Equally, this student has to be able to realise such an experience against the background of his or her familial commitments and financial resources. One might thus think of different factors deterring students from enrolling abroad temporarily as components of a *hierarchy of obstacles*. Only once fundamental obstacles such as not seeing the benefit in foreign enrolment phases and not being able to realise them due to familial commitments are overcome, do students start to regard lacking resources, insufficient organisational support and missing information as barriers. Such an explanation is less convincing with regard to the expected additional financial burden assigned to temporary foreign enrolment and the (perceived) lack of foreign language skills, where the observed associations point in different directions. With regard to these aspects, the idiosyncrasies of the national higher education systems and the student populations examined seem to play a more decisive role. These features, however, could not be disentangled based on the data used for this paper and remain to be examined in further country-level research.

Besides the level of single parameters influencing whether students pass the decision and realisation thresholds, some **general findings** can be highlighted: As hypothesised it has, *firstly*, turned out that deterring factors differ fundamentally depending on whether a foreign enrolment phase is seriously contemplated or not and depending on the type of student in question.

18 A study juxtaposing a description of the existing mobility supporting schemes with students' assessment of the obstacles to mobility would ease the definition of concrete measures, e. g. in helping to decide whether students actually need more financial support or whether they are just not aware of the financial support they are eligible for and need thus to be targeted by information campaigns.

It is, *secondly*, crucial to note that the process of students enrolling abroad temporarily is multifaceted. In fact, it is not just one or two factors being associated with the odds of planning and eventually realising a foreign enrolment phase, but a whole bundle of factors apparently exerting an individual influence. For these reasons, it seems that one wholesale measure to support students in becoming temporarily mobile is not enough. Rather, an (additional) set of target group specific measures might be needed. Otherwise, it will hardly be possible to reach students facing multiple disadvantages, that is to say exhibiting several characteristics being negatively associated with planning and realising a foreign enrolment phase (such as aged students without a tertiary education background and with familial obligations).

Thirdly, the moment of such hypothetical interventions is a dimension to be aware of. While some of the deterring factors – such as the perceived or factual lack of financial support for temporary mobility phases – might simply be attenuated by making additional scholarships available, other deterring factors are unlikely to be remedied instantaneously because they require students to already aspire to making foreign study-related experiences. This aspiration, in turn, is often related to experiences at an earlier stage in their educational biography. For instance, the disproportionately low odds of students without tertiary education background can partially be attributed (at least in Germany) to the fact that relatively few of them gain international experience – e. g. through student exchanges, au pair years or holidays – during their school years (Lörz & Krawietz, 2011). There are thus deterring factors which are manifest during higher education studies that would, however, have to be addressed by policy makers responsible for earlier educational stages.

Fourthly, the analyses have revealed that there are country-specific profiles of factors deterring students from studying abroad, which must be tackled by country-specific measures. On balance, however, the commonalities between countries prevail, i. e. the observed effect directions of the individual coefficients more often equal each other than they differ. This resemblance across countries of the processes deterring students from studying abroad justifies policies being designed at supranational level. This has already been recognised in recent policy documents, the most recent of which is the Mobility Strategy 2020 (EHEA Ministerial Conference, 2012a). Drawing on discussions within the Bologna Working Group during the period 2009 and 2012 (EHEA Ministerial Conference, 2012b) and on the results of the Bologna Process Implementation Report (Education, Audiovisual and Culture Executive Agency, 2012), the Strategy responds to various barriers in the name of the ministers responsible for higher education. They propose measures related to improving information campaigns on the value of mobility periods abroad, to improving students' foreign language capabilities and to improving funding support. They also emphasise the necessity to take account of the needs of underrepresented groups, such as older students or students with non-tertiary background.

Fifthly and finally, the reachability of some of the goals formulated at national and European levels could be re-discussed. Arguably, any realistic assessment of the possible range of influence of mobility supporting schemes would have to take into account that in all countries examined in this paper – and actually in all of the 17 further EHEA countries for which data are available (Orr et al., 2011) – less than half of the student population has concrete aspirations to realise a foreign enrolment period. Especially as some groups of students with low odds of realising foreign enrolment phases – such as (aged) students with familial and professional obligations or students with non-tertiary background – are increasingly being encouraged to enrol in higher education, it might be a challenge to increase the share of temporarily mobile students for this

new student population and to avoid a schism between extremely mobile students on the one hand and almost immobile students on the other hand. It is for this reason that a recent paper has argued for the acceptance of the fact that mobility is not for all (Orr, 2012). Starting from this assumption more measures need to be taken to ensure that the benefits of the international experience are also provided – albeit in a limited manner – to those who are not able to go abroad during their studies.

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Annex

Annex 1 — Students who have realised an enrolment period abroad by selected attributes (in %)

Students with enrolment abroad by selected attributes (A)	Country				
	AT	CH	DE	NL	PL[1]
total	**10**	**6**	**8**	**12**	**2**
Study-related characteristics					
up to 2nd study year	1	2	1	3	-
between 3rd and 4th study year	8	7	8	14	2
above 4th study year	19	13	18	21	4
students of humanities & arts	16	12	16	16	6
students of teacher training & education science	9	3	6	7	-
students of social sciences, business & law	10	7	13	12	2
students of engineering, manufacturing & construction	10	5	4	9	-
students of science, mathematics & computing	6	3	6	14	-
students of health & welfare	5	3	4	15	-
students of agriculture & veterinary	6	7	5	19	-
students at universities	10	8	10	15	*n.d.*
students at other types of higher education institutions	11	4	5	10	*n.d.*
Socio-demographic characteristics					
up to 24 years	6	4	6	11	2
between 25 and 29 years	16	10	14	21	4
30 years or older	6	4	5	6	-
female	11	6	10	13	2
male	9	6	7	11	2
with tertiary education background[2]	12	7	10	14	4
without tertiary education background	9	5	6	9	1
Familial and occupational integration					
with responsibility for child(ren) younger than 18 years	5	2	4	3	-
without responsibility for child(ren) younger than 18 years	10	6	9	12	2
living with parents	8	4	5	8	2
not living with parents[3]	11	7	10	14	2

Source: Social Surveys from Austria (2009), Switzerland (2009), Germany (2009), The Netherlands (2010) and Poland (2010)

1) A dash signifies that the underlying case numbers were too low for the respective figures to be included.

2) Students with at least one parent who graduated from ISCED levels 5 or 6 are considered as students with tertiary education background. Students whose parents graduated from ISCED levels 0, 1, 2, 3 or 4 are considered as students without tertiary education background.

3) Students who are not living with parents are those who live a) alone, b) with partner/children, c) with (an)other person/s not mentioned before, d) in a student hall.

Annex 2

Students who have not realised and who are (not) planning an enrolment period abroad by selected attributes (in %)

Students without enrolment abroad by selected attributes (B & C)	Country									
	AT		CH		DE[1]		NL		PL[2]	
Plans for enrolment period abroad	yes (B)	no (C)	yes (B)	no (C)	yes (B)	no (C)	yes (B)	no (C)	yes (B)	no (C)
total	**15**	**75**	**26**	**68**	**38**	**54**	**29**	**59**	**8**	**90**
Study-related characteristics										
up to 2nd study year	23	76	35	64	56	43	43	54	11	89
between 3rd and 4th study year	18	73	24	69	36	56	27	59	7	92
above 4th study year	6	75	12	75	16	66	15	64	5	91
students of humanities & arts	19	65	31	57	40	44	34	50	14	80
students of teacher training & education science	11	80	10	87	31	63	18	75	-	-
students of social sciences, business & law	16	74	29	64	40	47	28	61	7	92
students of engineering, manufacturing & construction	15	76	27	68	40	56	30	61	6	93
students of science, mathematics & computing	14	79	27	70	33	61	42	43	13	86
students of health & welfare	7	87	22	75	40	56	32	53	-	91
students of agriculture & veterinary	15	79	17	76	40	55	38	43	-	91
students at universities	17	74	32	61	40	50	35	50	*n.d.*	*n.d.*
students at other types of higher education institutions	9	80	16	80	33	62	26	64	*n.d.*	*n.d.*
Socio-demographic characteristics										
up to 24 years	23	71	35	61	48	46	34	55	9	90
between 25 and 29 years	9	75	14	75	21	65	15	65	4	92
30 years or older	4	90	9	87	13	82	8	86	-	98
female	15	74	25	69	36	54	28	59	8	90
male	16	75	27	67	39	54	30	59	7	91
with tertiary education background[3]	18	70	30	63	40	50	33	53	12	84
without tertiary education background	13	79	21	74	32	62	25	66	6	94
Familial and occupational integration										
with responsibility for child(ren) younger than 18 years	2	93	4	94	11	85	4	93	-	96
without responsibility for child(ren) younger than 18 years	16	74	27	67	39	52	30	57	8	90
living with parents	16	77	29	67	36	59	28	64	7	92
not living with parents[4]	15	74	24	69	38	52	30	56	9	89
no self-earned income	18	73	32	63	41	52	32	56	9	89
Amount of self-earned income within 1st income tercile	20	70	33	60	42	50	38	48	11	88
Amount of self-earned income within 2nd income tercile	15	74	30	63	37	52	29	61	5	94
Amount of self-earned income within 3rd income tercile	6	83	21	73	29	61	19	71	-	95
Perception of obstacles to an enrolment period abroad[5]										
Low benefit for studies at home	14	77	12	84	27	67	*n.d.*	*n.d.*	*n.d.*	*n.d.*
Expected additional financial burden	23	67	23	73	36	57	*n.d.*	*n.d.*	*n.d.*	*n.d.*
Expected delay in progress of studies	18	73	22	72	30	64	*n.d.*	*n.d.*	*n.d.*	*n.d.*
Separation from partner, child(ren), friends	13	82	16	79	32	63	*n.d.*	*n.d.*	*n.d.*	*n.d.*
Insufficient skills in foreign languages	25	63	21	73	38	54	*n.d.*	*n.d.*	*n.d.*	*n.d.*
Difficulty in getting information	36	52	28	61	49	42	*n.d.*	*n.d.*	*n.d.*	*n.d.*

Source: Social Surveys from Austria (2009), Switzerland (2009), Germany (2009), The Netherlands (2010) and Poland (2010)

1) For students in Germany the plans concern not only enrolment abroad, but study-related experience in general.

2) A dash signifies that the underlying case numbers were too low for the respective figures to be included.

3) Students with at least one parent who graduated from ISCED levels 5 or 6 are considered as students with tertiary education background. Students whose parents graduated from ISCED levels 0, 1, 2, 3 or 4 are considered as students without tertiary education background.

4) Students who are not living with parents are those who live a) alone, b) with partner/children, c) with (an)other person/s not mentioned before, d) in a student hall.

5) The obstacles for an enrolment abroad are measured on a 5-point scale, which ranges from “no obstacle/not at all” to "big obstacle/very strongly". The classification "(big) obstacle" encompasses the values of the two highest categories.