



# ERASMUS MUNDUS

Graduate Impact Survey



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## I INTRODUCTION

In a world where international experience grows ever more important, the chance to be mobile during one's higher education degree offers students the unique opportunity to gain this experience in a global context.

The Erasmus Mundus programme is a mobility programme of the European Commission. The joint programme offers full degree scholarships to the best postgraduate students worldwide. It is part of Erasmus+, which is the European Commission's programme for education, training, youth and sport, which combines all former mobility and cooperation programmes for students and staff of the European Union. All integrated programmes are designed to improve participants' competences and employability.

Erasmus Mundus' specific focus is on postgraduate students (e.g. master courses, doctorates) in higher education. Its main objectives is to promote quality and excellence through highly integrated study programmes at masters level. Further, it is designed to enhance the quality of European higher education and to promote the dialogue and understanding between people and cultures. The programme goes beyond the borders of the European Union by involving third party countries to join. By this, the programme enables the development of human resources and international cooperation capacity around the world. It further aims at fostering excellence and internationalisation in higher education institutions, increasing the quality and the attractiveness of the European Higher Education Area (EHEA) and supporting the European Union's external action in the higher education field.

Due to the programme's scope and scholarships, students from all over the world are provided with the opportunity to study their master degree in the European Union and get to know Europe, its culture and its citizens. By offering this opportunity, the programme has the potential to enhance the position of the European Union as a centre of excellence in the world and keep some of the sharpest minds in the Union. At the same time, students are given the chance to learn in an international environment and develop crucial competences for their future career and personal life.

In order to reveal the long-term effects of participating in the Erasmus Mundus programme, not only for career development but also for personal growth, an annual online survey is conducted. The survey is carried out via the alumni association of the programme EMA (Erasmus Mundus Association).

You will find the results of the survey in this report.

## II EXECUTIVE SUMMARY

Erasmus Mundus students and graduates were highly satisfied with their master's programme as a whole as well as with the quality of their courses, although the level of satisfaction with the quality of the courses is slightly lower than with the programme itself.

Graduates experienced the greatest impact on their intercultural competencies. Over the years that pass after graduation the perceived impact on the "attitude towards Europe and the EU"<sup>1</sup> increases significantly, while the impact on other aspects stays stable or decreases. In contrast to the impact perceived by graduates, students expected an even greater impact on their career.

Graduates generally felt that their Erasmus Mundus Masters Course (EMMC) or their Erasmus Mundus Joint Master Degree (EMJMD) had prepared them well enough for the labour market. The picture is the same if the data is sorted by the different fields of study: On average, the graduates in all fields of study thought they had been more than adequately prepared for the job market. When asked what aspects they found to be lacking the most in terms of preparation for the labour market, the graduates most frequently mentioned contacts to future employers and practical experiences.

1) neither in an explicitly positive nor in an explicitly negative sense



Most Erasmus Mundus students take on a job after their graduation. However, the percentage of graduates who pursue further studies is high (28%). Graduates mostly take on jobs with a high level of internationality, and language proficiency is one of the main reasons for employers to hire Erasmus Mundus graduates. Some of the graduates who did not succeed in finding a job after their graduation identified not meeting the language requirements as the most important reason why they had not found a job. Generally, however, the graduates rated the improvement of their language skills as high.

On average, the participants of the survey considered the Erasmus Mundus programme as neither especially well-known nor as especially unknown in their home countries, however, the visibility of the programme in the respective home countries has slightly decreased over the recent years. In certain regions of the world, e.g. in the Americas, Oceania and in the EU, the level of awareness of the Erasmus Mundus programme is low. The level of awareness in Africa and Oceania has decreased more notably than in other regions. The reputation of the programme, however, has increased over the recent years and this should facilitate promotional efforts where needed.

The European Union remains an attractive place to work and to live in for graduates from outside the EU. If graduates return to their home region they do so mostly for personal reasons. The graduates that stay in the EU do so because of better job opportunities and better working and living conditions.

### III METHODOLOGY

The main objective of the Graduate Impact Survey is to find out about the effects of the programme on graduates and students and to detect the factors contributing to the personal and professional development of the Erasmus Mundus graduates – from both a cross-sectional and a longitudinal angle. Therefore, the survey has always adopted a mainly quantitative approach, which was maintained in this year's study. This year's survey was conducted online and carried out from November 7 to November 28, 2016.

#### 1 Questionnaire

The questionnaire consisted of more than 60 different questions. Some of these questions were filtered according to previous answers. This is especially true for students and graduates who often received different questions. For instance, large parts of the chapter "Career" are - for obvious reasons - only addressed at graduates, while students were occasionally asked what they expected after their graduation.

The answering scales varied from rating scales to standardized alternatives, from which the participants could choose up to three answers. Some questions also contained open-ended parts ("others") in order to give the participants the possibility to specify an answer outside the offered scale. In this report, open answers will be mentioned exemplary wherever it seems informative or necessary.

In order to allow observations of developments by longitudinal comparison, the survey is in principle made up of questions that are continuously asked every year. However, this year's questionnaire was revised extensively in that new questions were introduced and changes were made to existing questions, response options and scales. The collected data from these questions can only be analysed from a cross-sectional angle (only data from 2016). However, in future surveys it will be possible to monitor the development of these variables. Nevertheless, the newer samples contain data from graduates who have participated in the programme in the years before, so that it will still be possible to make observations for those years.

## 2 Participants

As was the case in previous years, both students and graduates of the Erasmus Mundus Master programme were invited to participate in the survey. Wherever sensible and possible the report focuses on the longitudinal aspects<sup>2</sup> and developments over the years. Therefore, the information on the participants is twofold: Below you will find a description of the new data (this year's sample), followed by an analysis of the entirety of the existing data (the joined samples of all students and graduates that have participated in the surveys between 2012 and 2016).

Only completed questionnaires and only valid percentages are reported, hence there will be a slightly varying total number of respondents per question due to item non-response to individual questions.

### 2.1 Analysis of the 2016 Sample

In 2016, 1,595 participants completed the questionnaire. 1,332 (83.5%) had already graduated, while 263 (16.5%) participants were still students. This means that the percentage of graduates in the 2016 sample is notably higher than in previous surveys. Socio-demographic information is given in table 1, while detailed information on the region of origin can be obtained from figure 1 (see below).

Table 1: Socio-demographic data of survey participants in 2016

	Average age	Gender		Region of origin	
		Male	Female	EU	Non-EU
<b>Students</b>	27.57	56.5%	43.5%	23.3%	76.7%
<b>Graduates</b>	31.17	52.4%	47.6%	20.8%	79.2%
<b>All participants</b>	30.58	53.1%	46.9%	21.2%	78.8%
N=1,595					

### Nationality of the participants in 2016

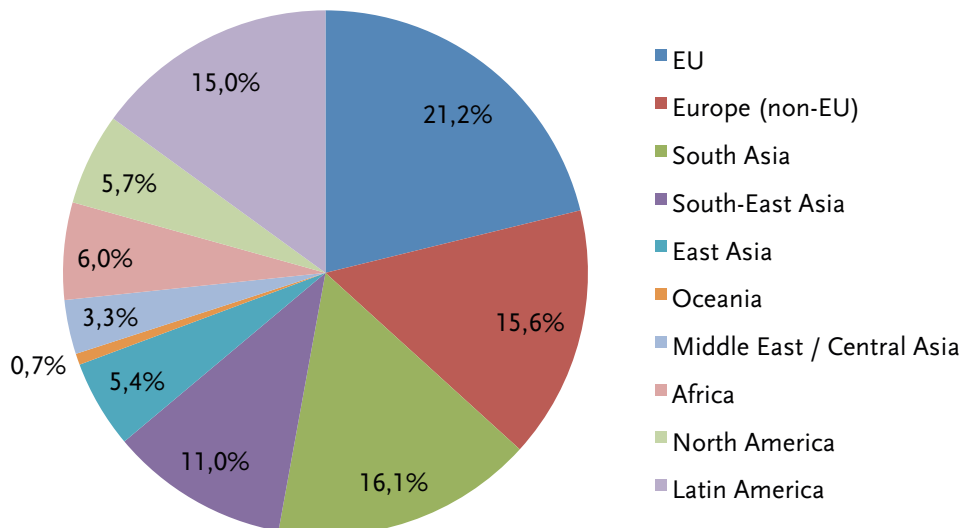


Figure 1: Nationality of the participants in 2016 (N=1,595)

2) Strictly scientifically speaking the survey is not a longitudinal one, as there have not always been the same participants taking part in the study. The terms used for study designs like the present one, however, vary: "Time-lag study" (e.g. Kirk 2013) or "cross-sectional longitudinal design" (Gravetter & Forzano 2012) are used. To keep things simple, this report classifies developments over time as "longitudinal aspects".



## 2.2 Analysis of joined survey samples (2012-2016)

In order to support a longitudinal approach, the following analysis incorporates the data<sup>3</sup> from all surveys between 2012 and 2016. The data is differentiated by years after start, years after graduation, cohorts and by the time the survey was undertaken. Only completed questionnaires are taken into account. In order to outline developments over time for selected questions these will be crossed by one of the aforementioned variables:

- **Years that have passed since starting/graduating from the programme:** The time-lag approach will be used whenever changes in the participating individuals will be analysed (e.g. Will participants have a more favourable opinion on the programme years after their graduation than right after?)
- **Year of starting EMMC / EMJMD:** The cohort approach will be used wherever the posed question refers to a certain point in time (e.g. How did the participants find out about Erasmus Mundus?)
- **Year the survey was conducted:** The cross-sectional approach will be used whenever a development over time is observed and the question is related to the survey year (e.g. How well known is Erasmus Mundus in 2016 compared to 2012?).

3) In order to avoid distortions (e.g. cohort effects), subsamples of the data will be considered wherever appropriate.

Table 2: Frequencies of socio-demographic data among survey participants from 2012-2016

Survey data from 2012–2016					
Time lag approach for selected questions					
	N	Male	Female	EU	Non-EU
Years after start					
0	415	61.7%	38.3%	16.9%	83.1%
1	1408	53.7%	46.3%	26.2%	73.8%
2	1228	51.9%	48.1%	27.5%	72.5%
3	806	51.5%	48.5%	27.4%	72.6%
4	652	54.6%	45.4%	24.1%	75.9%
5	588	57.7%	42.3%	18.5%	81.5%
6	480	54.0%	46.0%	14.9%	85.1%
> 6 years	1090	60.6%	39.4%	11.0%	89.0%
Years after graduation (graduates only)					
0	792	52.3%	47.7%	25.1%	74.9%
1	1000	51.9%	48.1%	23.9%	76.1%
2	804	54.1%	45.9%	21.3%	78.7%
3	713	56.4%	43.6%	16.2%	83.8%
4	571	56.0%	44.0%	14.1%	85.9%
5	420	58.8%	41.2%	10.5%	89.5%
6	334	61.4%	38.6%	9.9%	90.1%
> 6 years	397	62.0%	38.0%	13.9%	86.1%
Cohort approach for selected questions					
	N	Male	Female	EU	Non-EU
Cohorts - Year of starting EMMC / EMJMD					
2016	57	50.9%	49.1%	21.1%	78.9%
2015	259	57.5%	42.5%	22.1%	77.9%
2014	683	53.0%	47.0%	21.3%	78.7%
2013	742	55.7%	44.3%	22.7%	77.3%
2012	1251	50.8%	49.2%	30.9%	69.1%
2011	922	53.7%	46.3%	26.7%	73.3%
2010	834	54.2%	45.8%	28.6%	71.4%
< 2010	1919	59.5%	40.5%	10.4%	89.6%
Cross-sectional approach for selected questions					
	N	Male	Female	EU	Non-EU
Survey years					
2016	1588	53.1%	46.9%	21.2%	78.8%
2015	1458	53.2%	46.8%	22.4%	77.6%
2014	1615	58.2%	41.8%	22.1%	77.9%
2013	1544	55.7%	44.3%	20.6%	79.4%
2012	1311	56.1%	43.9%	17.8%	82.2%

## IV RESULTS

### 1 Satisfaction with Erasmus Mundus

This chapter will focus on the participants' level of satisfaction with the Erasmus Mundus programme on the whole, on the perceived quality of the courses and the participants' suggestions on how to increase the attractiveness of the programme and the impact on the career of Erasmus Mundus students. Since the level of satisfaction with Erasmus Mundus is an important indicator of the programme's quality, the report goes into further detail by sorting data by fields of study.

Figure 2 depicts the overall satisfaction with Erasmus Mundus of this year's participants<sup>4</sup>. The majority of Erasmus Mundus' participants<sup>5</sup> are mostly satisfied (52.7%), and another 25.1% are completely satisfied. A total of 91.9% is at least somewhat satisfied with the programme. In contrast, only 1.0% are completely and 0.9% are mostly dissatisfied.

#### Overall satisfaction with Erasmus Mundus

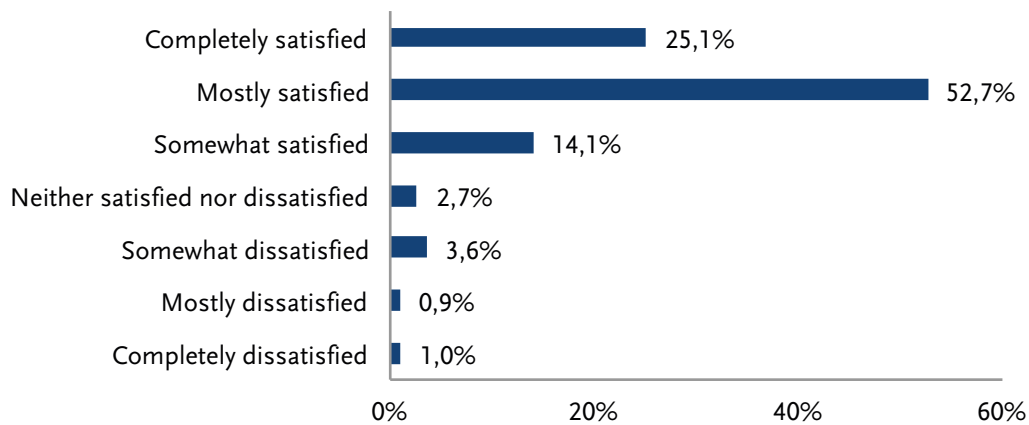


Figure 2: Overall satisfaction with Erasmus Mundus  
Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=676)

4) As the seven-point-scale's wording of the question about overall satisfaction was changed this year to guarantee semantic symmetry, comparison between the different survey years is not possible.

5) To avoid possible distortions through memory effects only current students and recent graduates at the time of the resp. survey (less than two years since graduation) will be taken into account.

Figure 3 shows that the level of overall satisfaction with Erasmus Mundus is similarly high across the different fields of study.

### Overall satisfaction with Erasmus Mundus

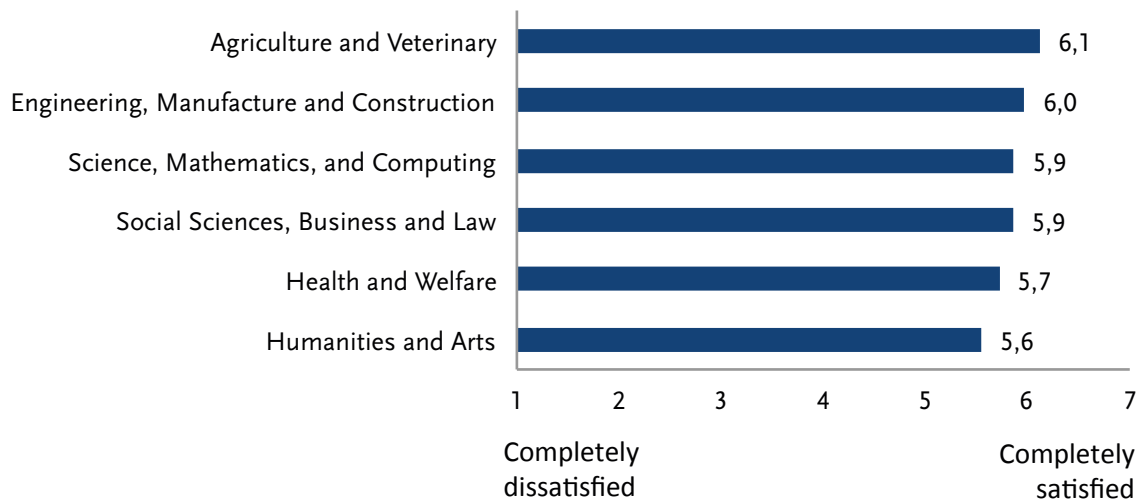


Figure 3: Overall satisfaction with Erasmus Mundus by fields of study  
Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=675)

As figure 4 depicts, the numbers regarding the participant’s overall satisfaction with the quality of the courses show a more differentiated picture: With 73.3% being very or rather satisfied, there is a slightly lower level of satisfaction with the quality of the courses than with the programme itself.

### Satisfaction with quality of the courses

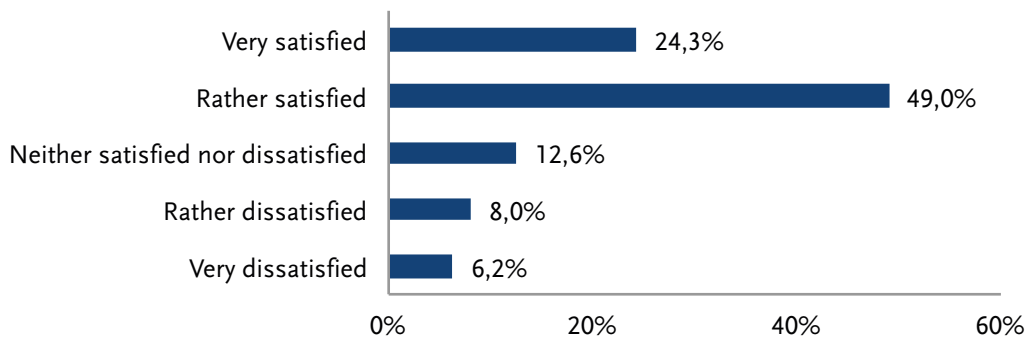


Figure 4: Satisfaction with quality of the courses  
Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=676)

Looking at the average satisfaction with the quality of courses sorted by fields of study in figure 5, slightly varying levels of satisfaction with Agriculture and Veterinary (4.2) on the upper end and Humanities and Arts and Social Sciences, Business and Law on the lower (3.6) can be seen. These differences, however, are not statistically significant<sup>6</sup>.

6) While the overall analysis of variances (ANOVA) is statistically significant (Welch’s F=3.122, df1= 5, df2=181.568, p=0.01), all the post-hoc tests between the individual fields are not significant. Thus no relevant difference can be assumed.

### Satisfaction with quality of the courses

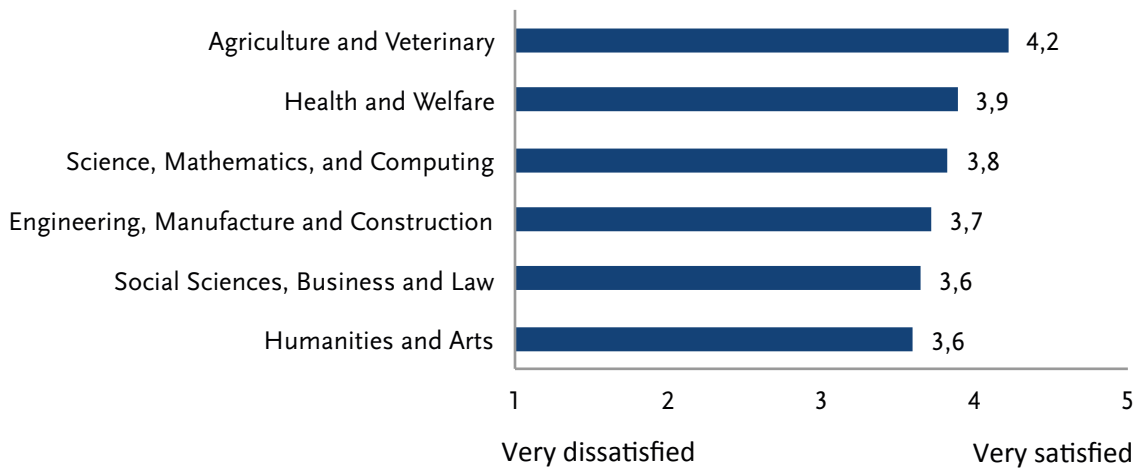


Figure 5: Satisfaction with quality of the courses by fields of study  
Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=675)

Breaking down the overall satisfaction with the courses into different aspects in figure 6, an equally (rather) high level of satisfaction emerges.

### Satisfaction with different aspects of quality of the courses

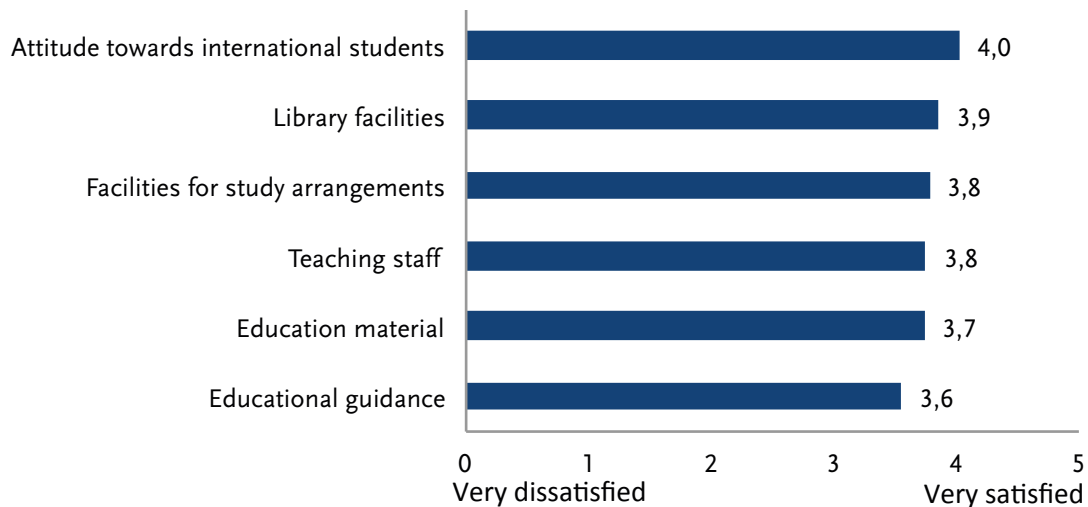


Figure 6: Satisfaction with different aspects of quality of the courses  
Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=676)

Generally speaking, the participants of the survey were highly satisfied with all aspects of their master's programme. Nevertheless, room for improvement can be inferred from the participants' responses. Participants were asked to make suggestions on how to increase the attractiveness and career impact of their EMMC / EMJMD. The most frequently mentioned suggestion was to put stronger emphasis on practical training and further projects with companies (42.4%). 37.9% suggested to improve career advice and 16.8% thought that the overall quality of the courses (including teaching staff, learning materials and other facilities) could be improved.

Table 3: Improvement suggestions  
 Students and graduates; only data from 2016 survey (N=788); multiple answers possible

What improvement suggestions do you have to increase the attractiveness and career impact of your EMMC / EMJMD?		
Improvements	%	Case vignettes
Stronger emphasis on practical training and/or projects with companies (incl. help to find internships)	42.4%	“There can be more collaboration with industries. For instance, there can be mandatory internships for students within partner firms. This will allow to students to establish a great network and provide a chance to find a job after their graduation.”
Better career advice and more labour market orientation; job application training / professional networking	37.9%	“Provide guidance for CV writing and connect the students to the job environment”
General improvement of quality courses (also in terms of learning materials and teachers)	16.8%	“Improvement of the quality of teaching (standards differ heavily depending on the university)”
Better non-professional networking (e.g. alumni, reunions between graduates, interaction with local students)	8.6%	“Mentoring by some experienced people would help. Strong country wise Alumni association & Network would be helpful. Some soft skills training and intercultural activities would help.”
Better awareness/visibility of the programme (both among students and companies)	7.2%	“Increased promotion of the quality of education of an EMJMD around the world will help with corporations recognising the potential talent in the individual in possession of such a degree and perhaps this can give us an edge in the market place.”
Better availability of services (provision of information, accommodation, insurances etc., getting in touch with coordinators)	6.7%	“Help to find housing when the Erasmus students move to new city will be very much appreciated. [...] The chance of finding a good accommodation is fairly low and the university didn't help much.”
Better coordination between partner universities/institutions	4.9%	“The international character of the master is based mainly on the mobility of the students, but not in the real international relations between the universities. Better and more coordination on the work of the students and their projects would be beneficial.”
Less difficulties getting work permits and/or visa; better help with getting work permits and/or visa	2.9%	“I believe EU has to facilitate grant of long term visa (even permanent) to EM graduates. For me, despite my preference, it wasn't an option to stay in Europe because I didn't want to be on work visa for more than 10-15 years before being able to become a permanent resident of EU. Nevertheless, when I think about the two years studies in Europe, very demanding and somewhat difficult especially in the first year, however, I'm very glad to be a successful part of EM community. Thanks for providing us such an opportunity.”
More flexibility in choosing courses / topic of thesis	2.8%	“The flexibility of optional courses which students like to enrol due to their future career preference”
Better mentoring by teachers (e.g. during master's thesis)	2.3%	“There should be more communication between the supervisors and students, especially if they are living in different countries. Because sometimes student don't get much time to interact with them.”
Offer of language courses	2.3%	“Include language courses of the host country as something mandatory with a few credits.”
No changes needed; totally satisfied	1.6%	“It is an amazing programme. I love it and will cherish my time in Europe forever.”
Stricter selection criteria and/or regulations for universities; more commitment of universities	1.4%	“Try to get more prestigious or high ranked universities to engage in the programme.”
Expansion of the programme; more scholarships	1.4%	“Increase the number of scholarships. Include more Europeans. It is useful when they relate to students from third world country and it helps building more bridges. Try to reach more countries. Increase the programme quality.”
Stricter selection criteria for scholarship holders (regarding working experience, language skills, previous knowledge, etc.)	1.0%	“[...] provide scholarships based on a more transparent process. The scholarships can be given, additionally, based on the first semester performance when the person who deserves and needs the scholarship more is not identified properly through the current process. If it is corrected, more people will be motivated to promote the programme. More quality lectures can be prepared and taught. I agree, the time is short but it should be taken as a challenge to provide precise content, instead some professors use it as an excuse and this results in poor lecture quality.”
Overall improvement	0.6%	“More organisation in all aspects.”



## 2 Impact of Erasmus Mundus

The impact of the Erasmus Mundus Masters programme on both the students' personal and professional life is of central importance for this report. Therefore, this section will analyse all relevant aspects where Erasmus Mundus may or may not have taken influence on the students in detail.

### 2.1 General Impact

Figure 7 shows that when asked for the two areas where Erasmus Mundus had the greatest impact the majority of **graduates** name their intercultural competencies (58.6%). Another 41.5% of the graduates believe that studying an Erasmus Mundus Master programme has a great effect on their career and 33.8% thought one of the greatest gains was that of subject related expertise. Still more than a quarter of graduates (28.5%) thought one of the greatest impacts of Erasmus Mundus was on their personality, while about every fifth graduate sees an effect on their attitude towards Europe and the EU (20.2%). Graduates consider their private life the least affected by Erasmus Mundus (10.2%).

#### Where do you personally see the greatest impact of Erasmus Mundus?

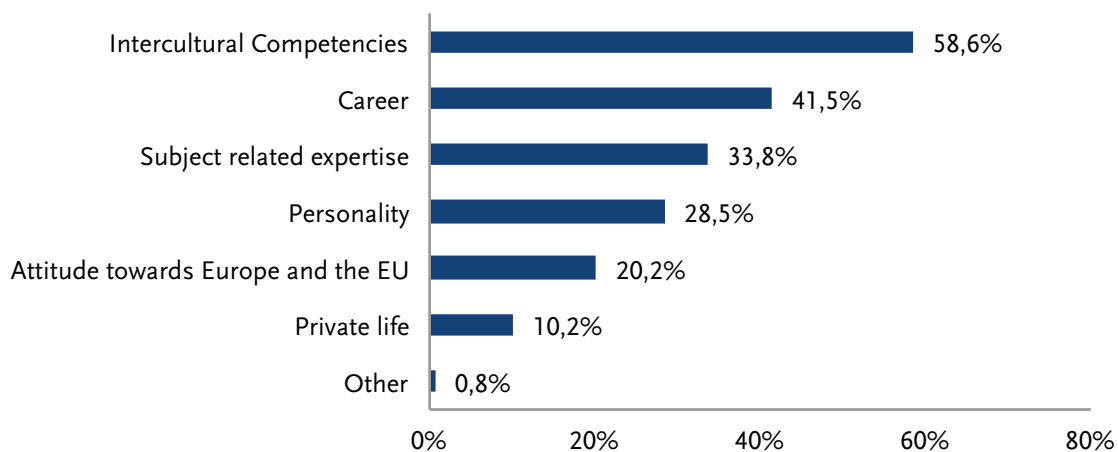


Figure 7: Perceived impact of Erasmus Mundus  
 All graduates (N=5,076); up to two answers possible

If the answers to this question are related to the number of years that have passed between graduation and participation in the survey, observations can be made with regard to how the perception of the graduate's changes over time and intra-individual developments can be extracted. Figure 8 shows how the perceived impact on the different aspects develops after graduating from the programme. Due to the possibility of external effects like general changes in the programme or the courses, minor changes over time regarding the perceived impact must not be over-interpreted, but rather should tendencies be extracted by looking at the big picture. The perceived impacts on "intercultural competencies", "career" and "private life" of the graduates remain more or less stable over time. The perceived impact on subject related expertise fluctuates somewhat over the years with no clear tendency: Graduates evaluate the impact on their expertise similarly high right after graduation as the very veteran graduates. The only aspect that increases in relevance significantly over the years after ending EMMC is the attitude towards Europe and the EU (Spearman's- $\rho = 0.09$ ;  $p < 0.001$ ;  $N = 5,059$ ). Thus, it may be said that Erasmus Mundus has a sustainable impact on the graduates' view of Europe. This is a pleasant development, as it is one of the aims of Erasmus Mundus to increase the quality and attractiveness of the European Higher Education Area (EHEA).

The perceived impact on personality, on the other side, is the only aspect that decreases significantly (Spearman's- $\rho = -0.06$ ;  $p < 0.001$ ;  $N = 5,059$ ). This development might be expected, because the personality of the graduates will change with continuously gathered life experience in other domains.

Where do you personally see the greatest impact of Erasmus Mundus?

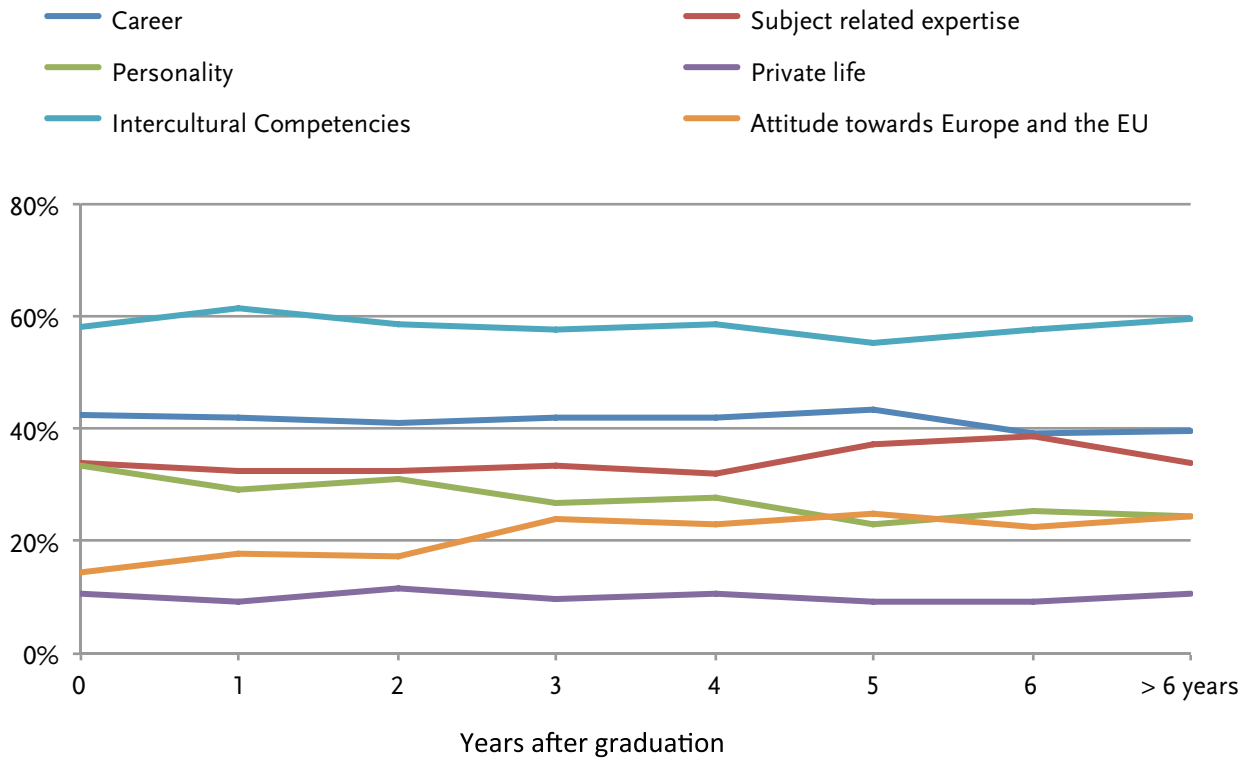


Figure 8: Perceived impact by years after graduation  
All graduates (N=5,076); up to two answers possible

After having analysed the graduates' perception, these results can now be compared to the **students'** expectations: Figure 9 shows where students expect the greatest impact and compares these results to the answers of the graduates.

### Where do you personally [...] the greatest impact of Erasmus Mundus?

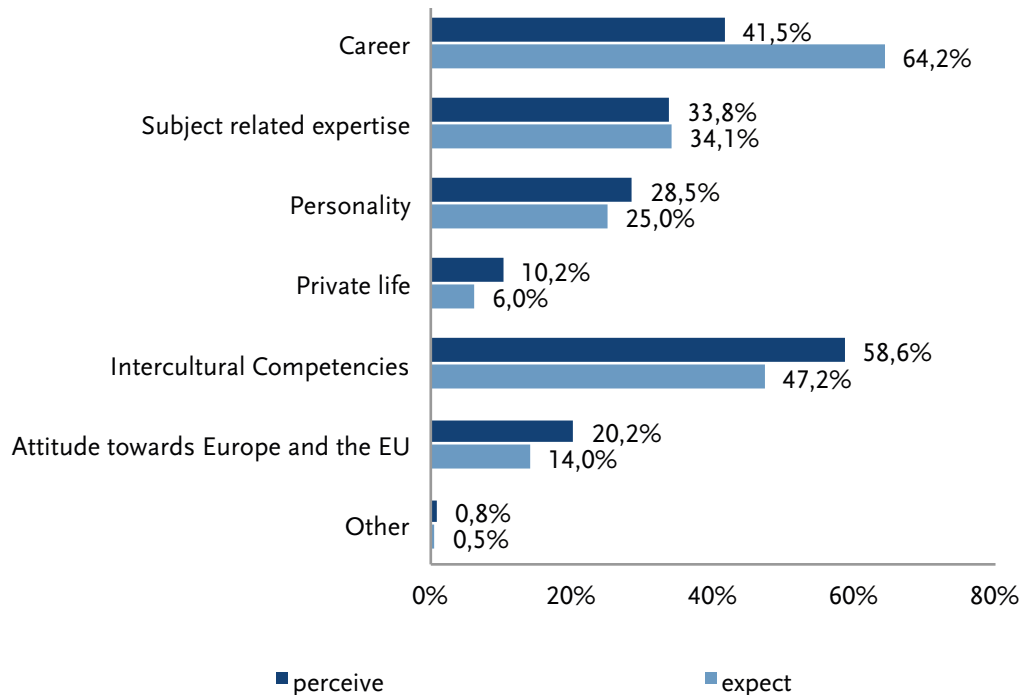


Figure 9: Perceived vs. expected impact  
Students (N=2,474) vs. graduates (N=5,076)

Graduates rate the impact on personality, private life, intercultural competencies and attitude towards Europe higher than students expect it to be. The only category where students' expectations are higher than graduates' experiences is "career". The students' expectations regarding the impact of Erasmus Mundus on their career differ from what students actually experience significantly ( $\chi^2 = 341.0$ ;  $df = 1$ ;  $N = 7,551$ ;  $p < 0.001$ ). Almost two-thirds of the students (64.2%) expect a strong impact on their career, while this is only perceived by 41.5% of the graduates. Students seem to underestimate the impact of EMMC on their personal development, while overestimating the impact on their career. Since advancing their career is such an important aspect for Erasmus Mundus students and since the level of overall satisfaction with the programme among both students and graduates is so high, it should not be concluded that the impact on the career is lower than expected but rather that other aspects are overlooked by students. These findings may help to promote Erasmus Mundus: Students should and can expect more outcomes than they actually do, especially in terms of their personal development.

Without attaching too much importance to the observed differences, it can nevertheless be concluded that the career aspect is most important for the Erasmus Mundus students, which should be kept in mind when looking at the impact on their professional life later in this report.

There is also a significant difference ( $\chi^2 = 87.6$ ;  $df = 1$ ;  $N = 7,551$ ;  $p < 0.001$ ) between the expected and perceived impact on intercultural competencies. While the graduates see this as the most important impact of their master's programme, this is only expected by 47.2% of the students. A possible explanation for this difference may be that students underestimate the intercultural obstacles they come across during their studies abroad and their activities after their graduation and the skills needed to overcome these. In contrast, graduates may have encountered these obstacles and consider themselves more competent in intercultural contexts now.

## 2.2 Preparation for professional life

In the previous chapter it was observed that students of Erasmus Mundus expect the programme to have a big impact on their career. In the following, it will be determined whether their programme has equipped them adequately to overcome the obstacles of the labour market and helped them to start a successful career.

### How well has your Erasmus Mundus study programme prepared you for the labour market?

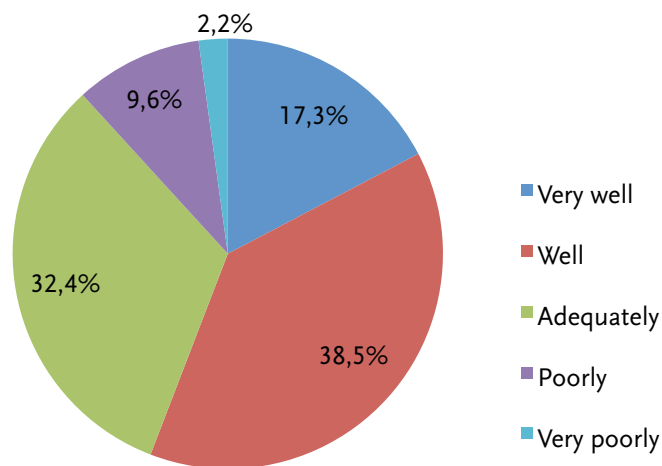


Figure 10: Preparedness for the labour market  
Graduates (graduation dating back less than six years); only data from 2016 survey (N=1,103)

Figure 10 shows that the graduates generally feel that their EMMC has prepared them well for the labour market. More than half (55.8%) were of the opinion they had been prepared well or better and 88.2% said that they had been (at least) adequately prepared for the labour market. When these answers are related to the different fields of study, only slight differences emerge. On average, the graduates in all fields of study thought they had been more than adequately prepared for the job market (figure 11).

### How well has your Erasmus Mundus study programme prepared you for the labour market?

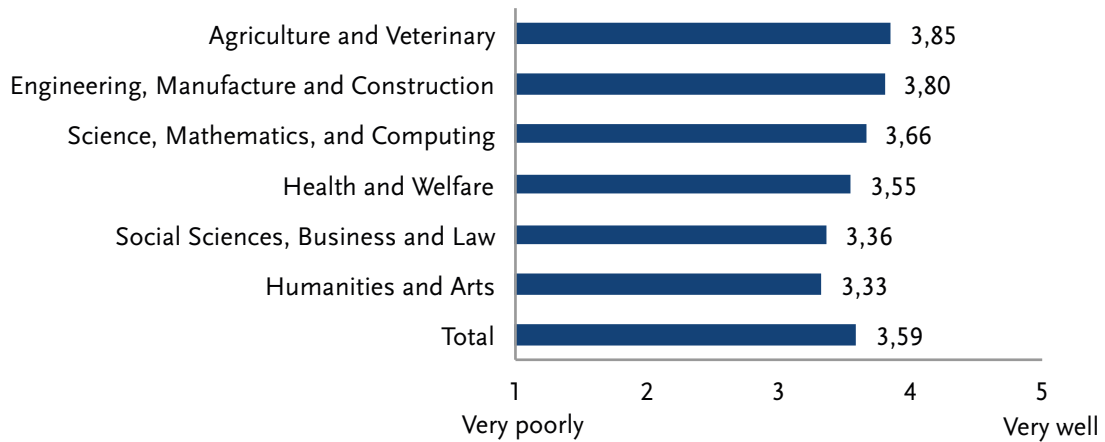


Figure 11: Preparedness for the labour market by fields of study  
Graduates (graduation dating back less than six years); only data from 2016 survey (N=1,103)

In order to determine where further improvements can be made, graduates of Erasmus Mundus were also asked what their study programme had lacked in terms of preparation for the labour market. As can be seen in figure 12, the aspect graduates identified as lacking the most were “contacts to potential employers” (63.1%) followed by “practical experiences” (45.6%) and “networking activities” (33.2%). Other frequent mentions included “mentoring” (31.4%), “entrepreneurial learning” (28.6%) and “integration activities in the host countries” (27.5%).

### What did your study programme lack in terms of preparation for the labour market?

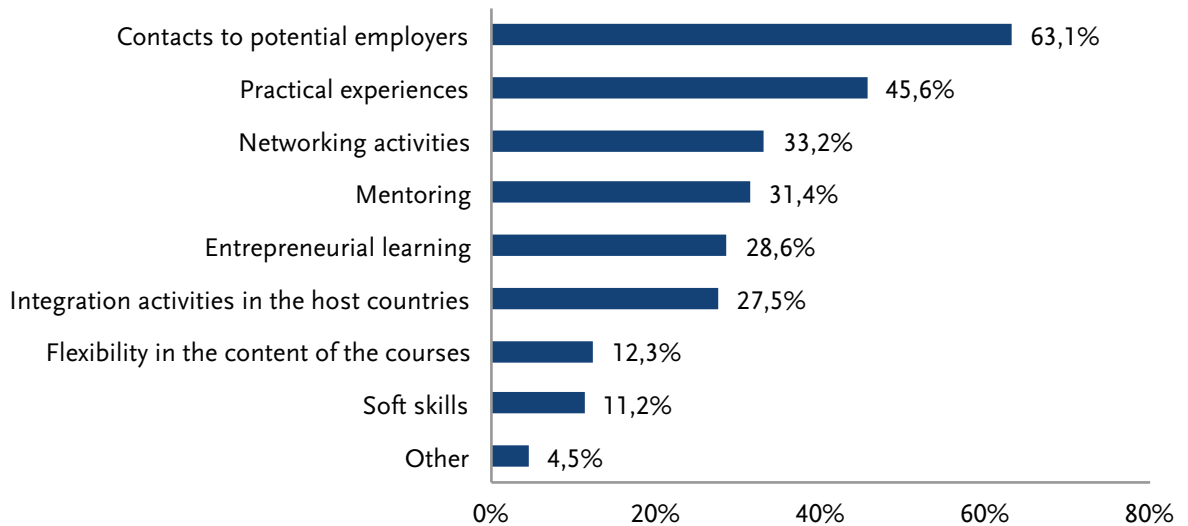


Figure 12: Lacking elements in terms of preparation for the labour market  
Participants (graduation dating back less than six years); only data from 2016 survey (N=1,069); up to three answers possible

## 2.3 First Job and Professional Life

The following section concerns itself with the professional life of the participants after their graduation. It mainly consists of newly designed questions. Therefore, observations will oftentimes be made based only on the data collected in the 2016 survey<sup>7</sup>. The graduates were asked what they had done in the first six months after their graduation. If they had taken on a job<sup>8</sup>, participants were asked further questions regarding this job.

Figure 13 shows what the **graduates** were doing in the first six months after their graduation. All in all, 69.1% entered the labour market in the first six months after graduation in some way (“I looked for a professional job”, “I started working in a professional job, which I had already found during my studies” or “I set up my own business”). Quite a large percentage of 27.2% stated that they had started working in a job they had already found at the time of their graduation.

### In the first six months after your Erasmus Mundus graduation, what did you do?

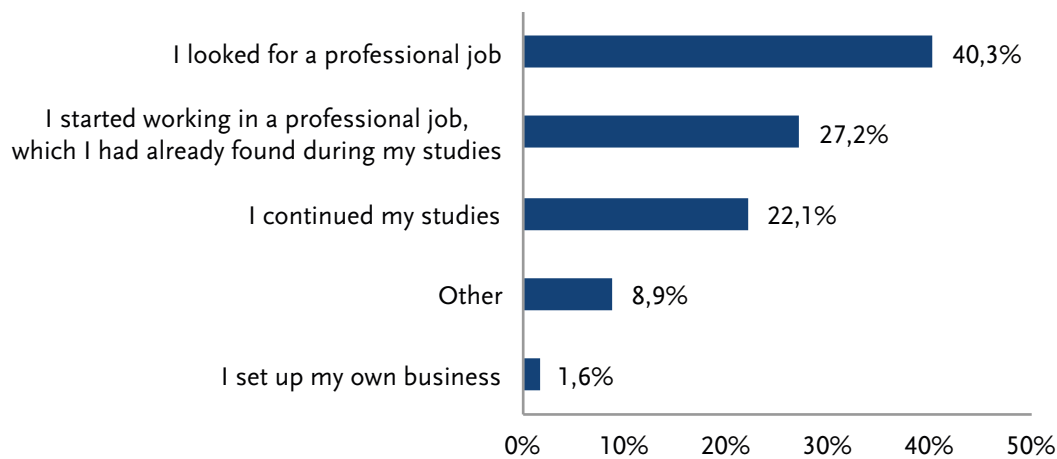


Figure 13: First months after graduation  
Graduates (graduation dating back at least one year); only data from 2016 survey (N=1,095)

Figure 14 shows what **students** plan on doing after their graduation (figure 14), and reveals a similar picture. While 73.8% plan to enter professional life after their graduation, 22.6% intend to continue their studies. Compared to what graduates actually did, these are almost the exact same figures: It can therefore be concluded that students do not (need to) deviate from their plans during their Erasmus Mundus studies.

7) In future reports it will be possible to observe how the answers change over time.

8) In the following, the word “job” always means “a professional job”. In the questionnaire this term was explicitly defined as “a job from which you can make a living”. Therefore, in this context, the phrasing “professional job” comprises both “full-time” and “part-time” jobs, permanent and non-permanent jobs, and jobs which may or may not be in any way related to the field of the graduates’ studies.



### What are your professional plans after graduating with an Erasmus Mundus Joint Master Degree?

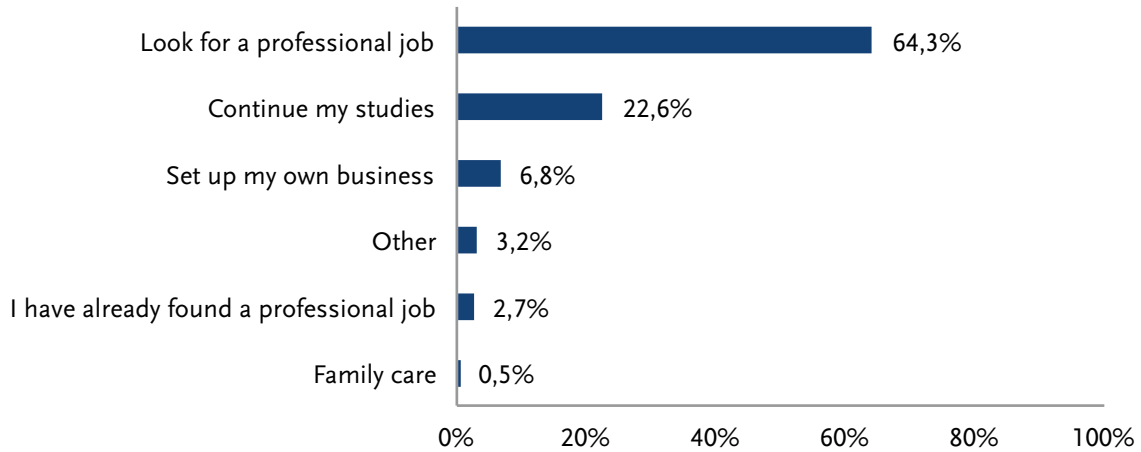


Figure 14: Professional plans after graduating  
All students; only data from 2016 survey (N=221)

Figure 15 shows a statistic of those graduates who planned on starting to work in the first six months after their graduation. While 83.1% became employed and 2.2% set up their own business, 14.7% remained unemployed (figure 15). This figure refers only to the initial job search after graduation and is not the percentage of unemployed graduates as will be presented later in this section.

### Employment status after first job search

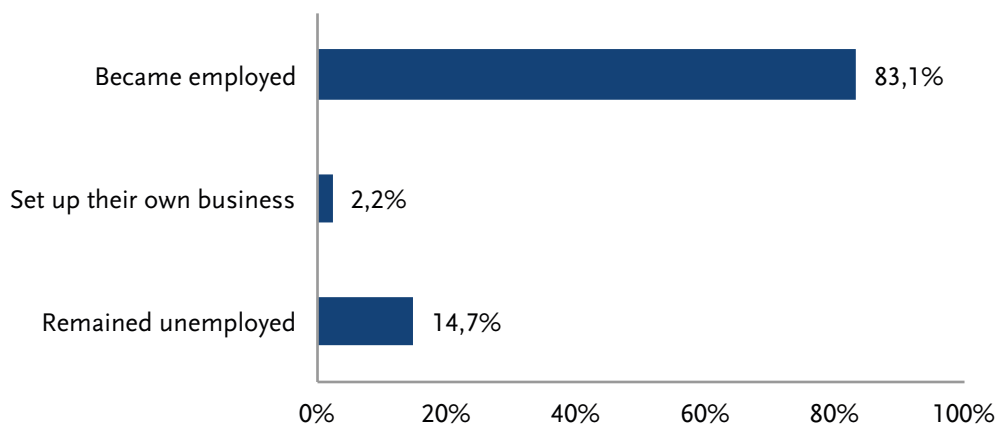


Figure 15: Employment status after first job search  
Graduates (graduation dating back at least one year) entering labour market in the first six months after graduation; only data from 2016 survey (N=756)

Figures 16 and 17 show the percentages of graduates that were unsuccessful in their initial search for a job (i.e. “remained unemployed”, see above) related to nationality and field of study. The sample size is quite small (N=111) and therefore the percentages for the entirety of graduates must not be estimated based on these numbers. Nevertheless, observations can be made on certain tendencies: For instance, while it is not known on which job market (EU or non-EU) job-seekers were looking, it can be seen that graduates from Africa (23.1%) and non-EU Europe (21.1%) had the most trouble finding a job, while this was easier for graduates from Asia and the EU. When looking at the percentages according to the fields of study, it can be seen that former students of the “Humanities and Arts” and of “Health and Welfare” experienced more difficulties than the average graduate whereas former students of “Science, Mathematics, and Computing” and former students of “Engineering, Manufacture and Construction” had less difficulty.

### Unemployed after initial job search

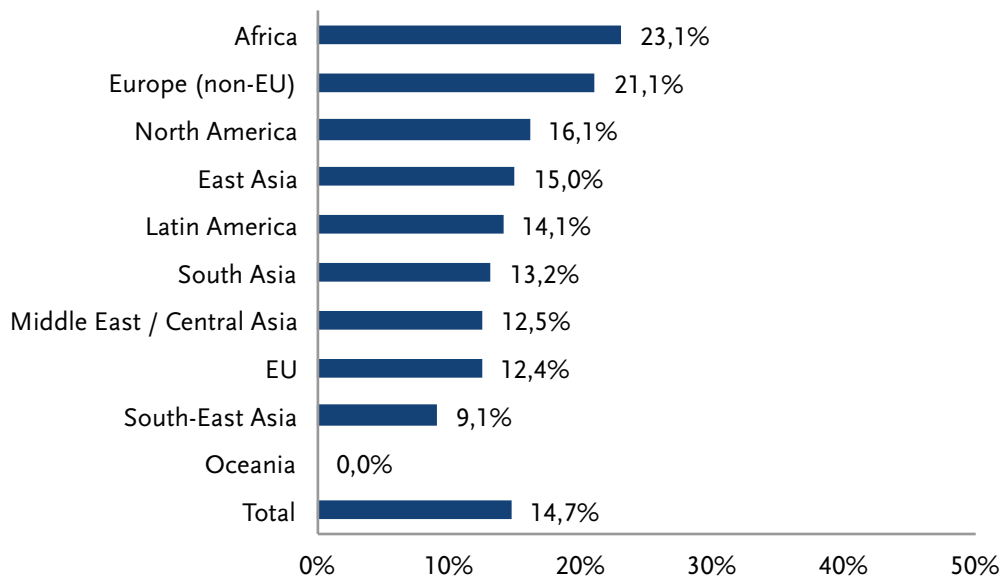


Figure 16: Unsuccessful job-seekers by region of origin  
Graduates (graduation dating back at least one year) who remained unemployed after their initial job search; only data from 2016 survey (N=111)

### Unemployed after initial job search

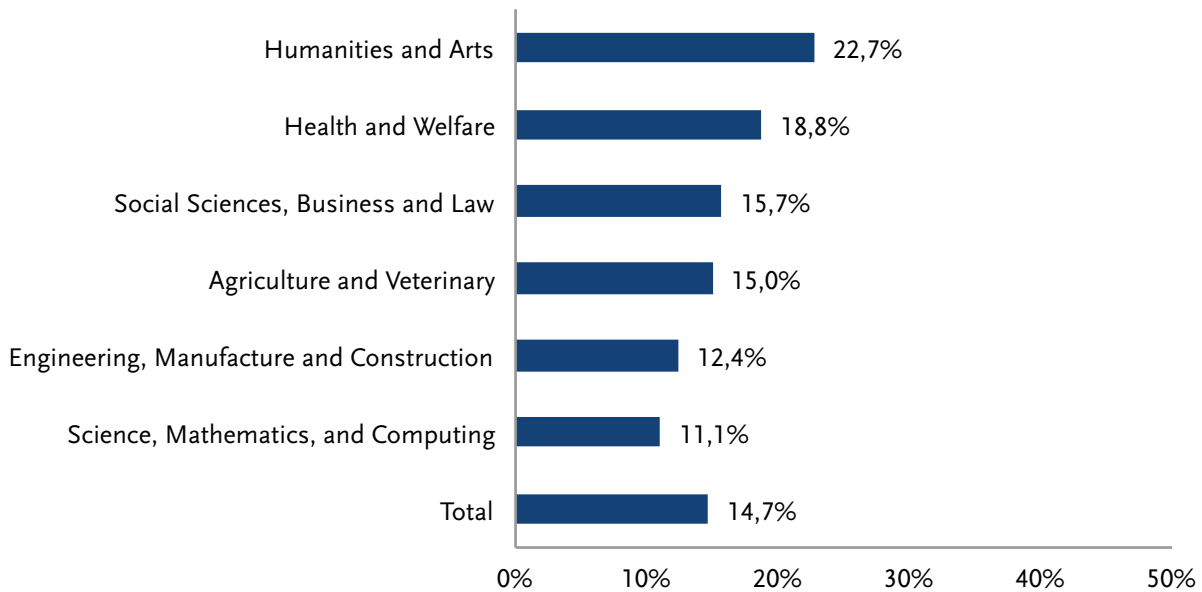


Figure 17: Unsuccessful job-seekers by fields of study  
Graduates (graduation dating back at least one year) who remained unemployed after their initial job search; only data from 2016 survey (N=111)

This small group of unemployed graduates was then asked for the main reason why they had not found a job, as shown in figure 18.

### Main reason for not having found a professional job after graduation



Figure 18: Main reason for not having found a professional job  
Graduates (graduation dating back at least one year) who remained unemployed after their initial job search; only data from 2016 survey (N=111)

The mentioned reasons are diverse with 25.2% naming the “absence of a suitable job” and 18% naming “too much competition” as the most important reason for not having found a professional job. Other important reasons where there may be greater scope for improvement included “Visa / work permit issues” (15.3%) and not meeting the language requirements (10.8%). On the one hand, one would assume that students recently graduated from an internationally focussed master’s programme have less trouble with language requirements on the labour market. On the other hand, the proficiency in the language required on the relevant labour market may not coincide with the teaching language(s) during the Erasmus Mundus studies, so this figure does not allow any conclusions regarding the overall language proficiency of Erasmus Mundus students. Also, visa and work permit issues seem to be a concern among the graduates (15.3% state this as the main reason for not having found a job)<sup>9</sup>. Furthermore, 9% of the unsuccessful job-seekers stated that they could not find a job because their Erasmus Mundus degree was not recognized in the country they were looking for a job. This percentage seems high and points towards the fact that recognition continues to be an issue.

Figure 19 shows how long the unsuccessful job-seekers had looked for a job: More than 70% of them had spent more than six months looking.

### How much time did you spend searching for a professional job following your graduation?

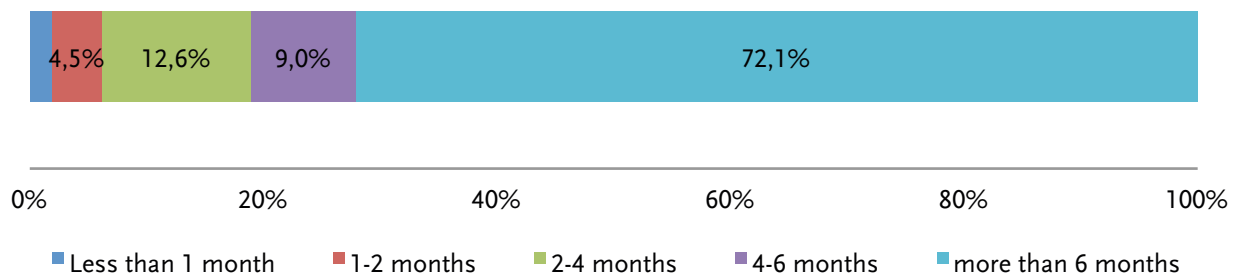


Figure 19: Time spent searching for a job (unsuccessful job-seekers)  
Graduates (graduation dating back at least one year) who remained unemployed after their initial job search; only data from 2016 survey (N=111)

Figure 20 shows how much time **the successful job-seekers** had spent searching for this job. It can be seen that more than half of the graduates (55.2%) had found a job in the first four months while almost 80% had found a job in the first 6 months.

### How much time did you spend searching for this job?

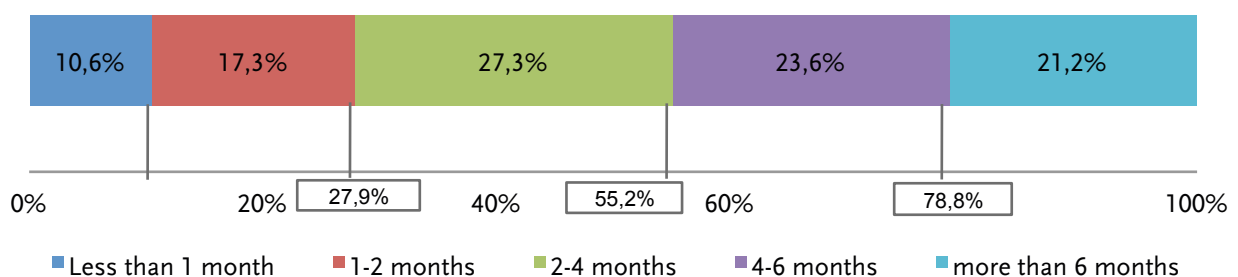


Figure 20: Time spent searching for a job (successful job-seekers)  
Graduates (graduation dating back at least one year) who found a job as a result of their initial job search; only data from 2016 survey (N=330)

Comparing the last two figures, it can be seen that the unsuccessful job-seekers persistently stayed on the job market for a long time: The vast majority (72.1%) spent more than six months looking for a job, which is longer than the amount of time it took most successful job-seekers to find a job.

9) For the time being the analyses of the group of unsuccessful graduates are bound by the limited sample size and thus not very conclusive, but with the coming survey years this sample will increase and it will become possible to make more specific observations. For instance, it will be interesting to examine how the reasons for not having found a job relate to the region of origin or the field of studies.

Those graduates who eventually ended up in a “professional job” after their Erasmus Mundus Masters programme were asked if their job was related to their field of study. Figure 21 shows that the jobs graduates take on after their EMMC are strongly (“highly” or “mostly”) related to the field of study of their EMMC (73.1%).

**To what extent was the field of study of your EMMC / EMJMD related to your first professional job after graduating from Erasmus Mundus?**

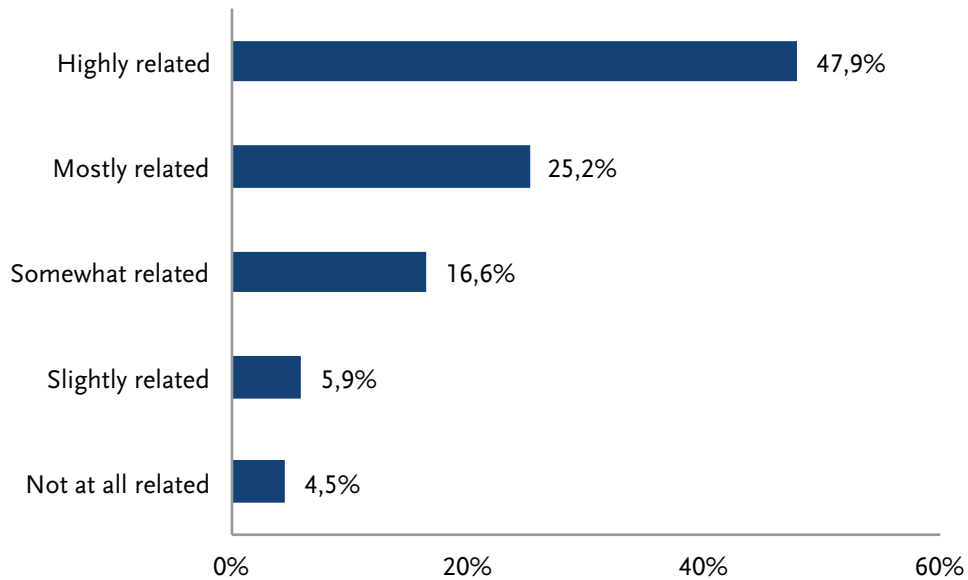


Figure 21: Relatedness of job and Erasmus studies  
Graduates (graduation dating back at least one year) who started a professional job after their graduation; only data from 2016 survey (N=628)

These graduates were also asked what they thought the three most important reasons were for their employer to hire them. The answers are shown in figure 22.

**Which of the following factors do you think were the most important for your first employer when hiring you after your graduation?**

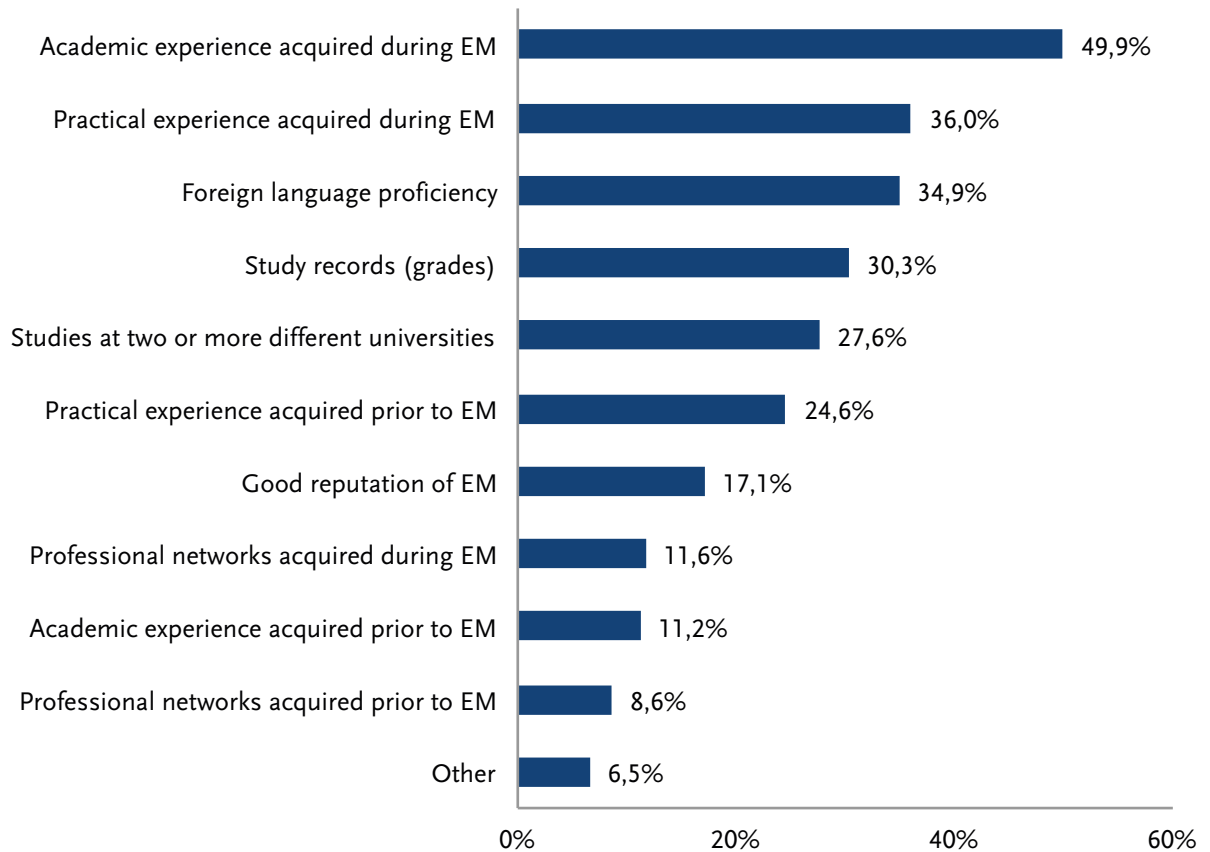


Figure 22: Employability factors  
 Graduates (graduation dating back at least one year) who started a professional job after their graduation; only data from 2016 survey (N=628); up to three answers possible

49.9% thought the academic experience acquired during the Erasmus Mundus studies was one of the three most important reasons to be hired and 36% thought this to be the case for the practical experience they had acquired during their EM. A large percentage of graduates also stated that “foreign language proficiency” was an important employment criterion (34.9%). Along with the share of unsuccessful job-seekers (see above 10.8%) who thought not meeting the language requirements had impeded their search for a job, this emphasises the importance of foreign language skills in the professional environment of the Erasmus Mundus graduates.



This statement is further supported by the following figure 23 depicting the level of internationalisation of the professional job which the graduates had taken on. As can be seen, the level of internationalisation regarding both contacts with customers as well as the collaboration with colleagues is considered high. 78.8% of the graduates who had taken on a professional job following their graduation stated their job had been (or was) at least somewhat international when it came (or comes) to dealing with customers. The collaboration with colleagues was evaluated similarly: 80.5% of the graduates said that the job was at least somewhat international in this regard.

**How international is / was the job in terms of contact / collaboration with... ?**

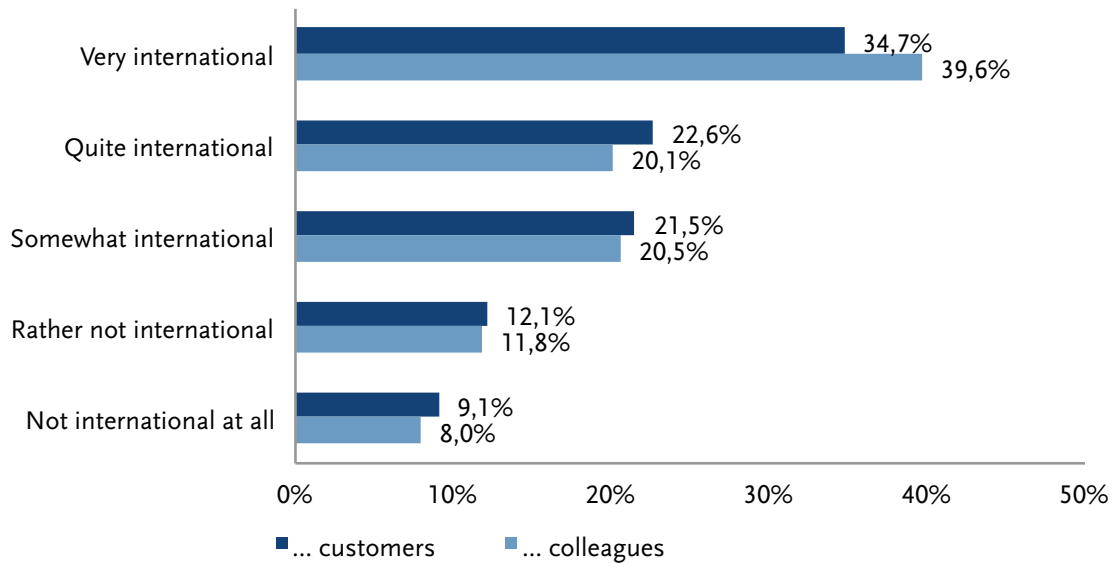


Figure 23: Internationality of the job  
Graduates (graduation dating back at least one year) who started a professional job after their graduation; only data from 2016 survey (N=628)

Figure 24 shows the occupation of EMMC graduates at the time of the survey. Answers from participants who had recently graduated and who were possibly looking for an occupation are excluded in this statistic in order to receive a clearer picture. As can be seen, the actual rate of unemployment among EMMC / EMJMD graduates (who had not recently graduated) is low (5.4%). Furthermore, as was already observed, many graduates of Erasmus Mundus chose to pursue further studies after their graduation (28%).

### What is your current occupation?

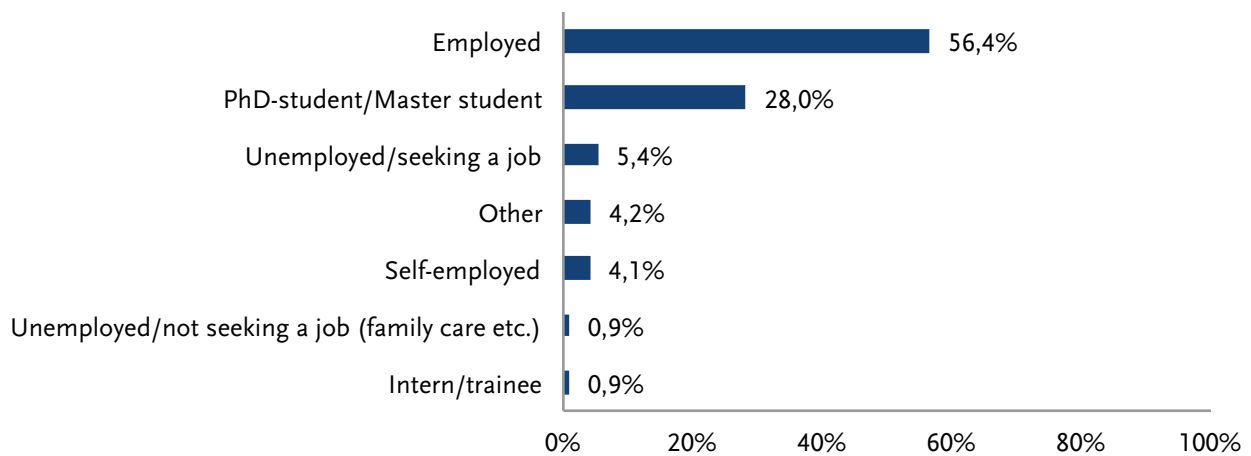
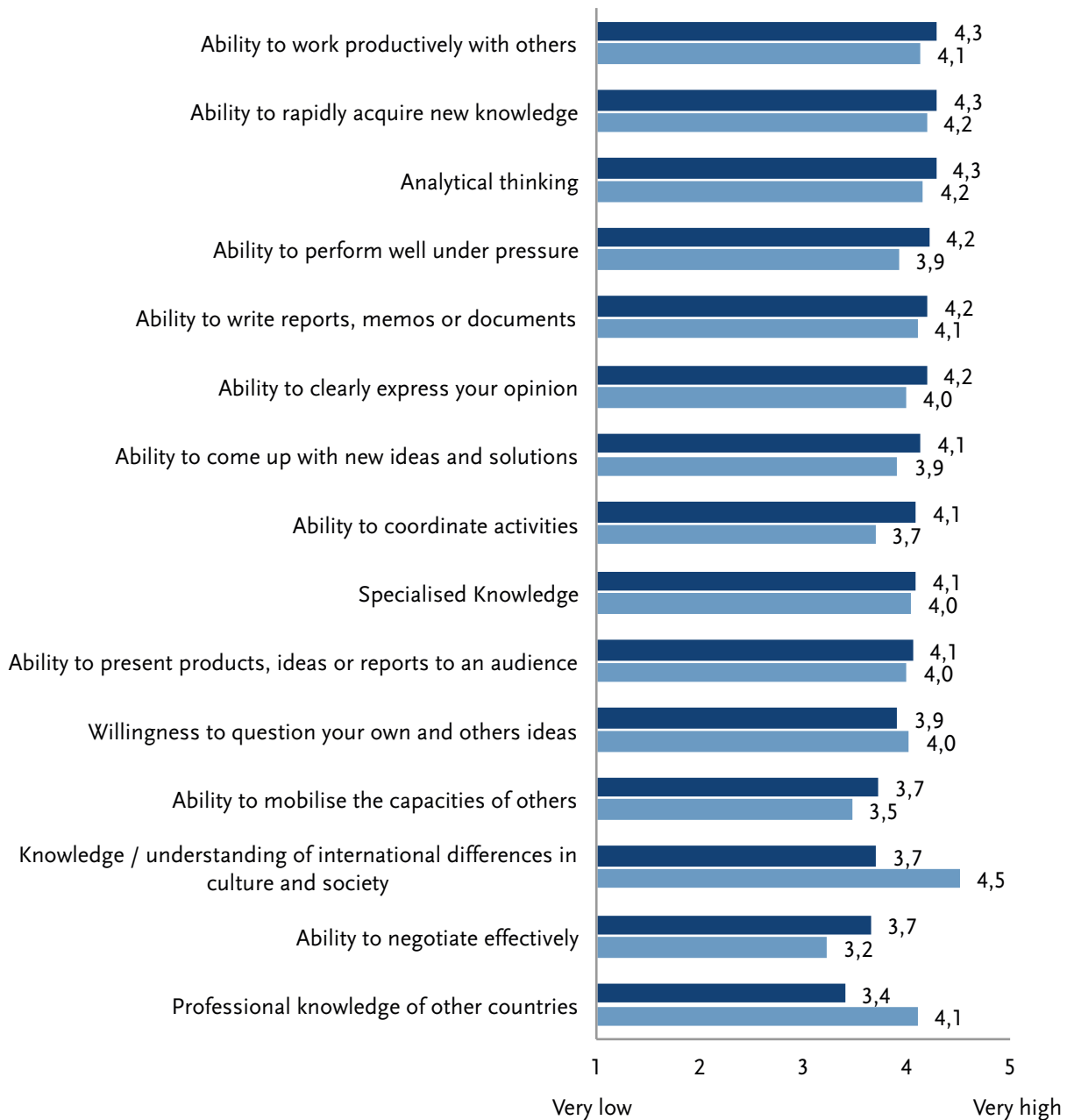


Figure 24: Current occupation  
Graduates (graduation dating back at least one year); only data from 2016 survey (N=1,095)

## 2.4 Competences

Figure 25 shows how important the graduates deemed certain competences in their first professional job after their graduation and compares these results with the perceived contribution of their Erasmus Mundus Masters programme regarding these aspects. All in all, the differences are not remarkable and the graduates mostly rated the requirements as slightly higher than the contribution. If the differences of the mean values of the respective aspects are weighted with their importance, slightly bigger discrepancies become apparent regarding the “ability to perform well under pressure”, the “ability to coordinate activities” and the “ability to negotiate effectively” than regarding other competences. Nevertheless, the students considered the contribution to all competences more than fair (1=very low, 3=fair, 5=very high). Hence, there is no pressing need for improvement. Additionally, the graduates saw a rather high contribution to their “knowledge/understanding of international differences in culture and society” and their “professional knowledge of other countries” but deemed these rather less important for their job than other competences. This result is in line with the high impact the graduates had perceived on their intercultural competences presented above.

Required competences vs. contribution by EMMC



- To what extent are/were the following competences required for your professional job(s) after the graduation from your EMMC ?
- To what extent do you think your EMMC has contributed to the development of these competences?

Figure 25: Required competences vs. contribution by Erasmus Mundus  
 Graduates (graduation dating back at least one year) who started a professional job after their graduation; only data from 2016 survey (N=628)

Figure 26 clarifies whether the Erasmus Mundus students perceived any shortcomings in the area of language acquisition during their programme. All in all, 91.7% of the students and the more recent graduates rated the increase in their foreign language skills due to their Masters Course as at least fair. Previously it was observed that foreign language skills are an important factor for the employability of the Erasmus Mundus graduates. As long as the foreign language skills which students improve during their Masters programme are the same as those needed on the respective labour market, it can be concluded that Erasmus Mundus prepares the majority of graduates adequately in this domain. However, as stated above, the language(s) of teaching and the language of the labour market do not necessarily coincide.

**How do you rate the improvement in your non-native language skills due to your EMMC / EMJMD?**

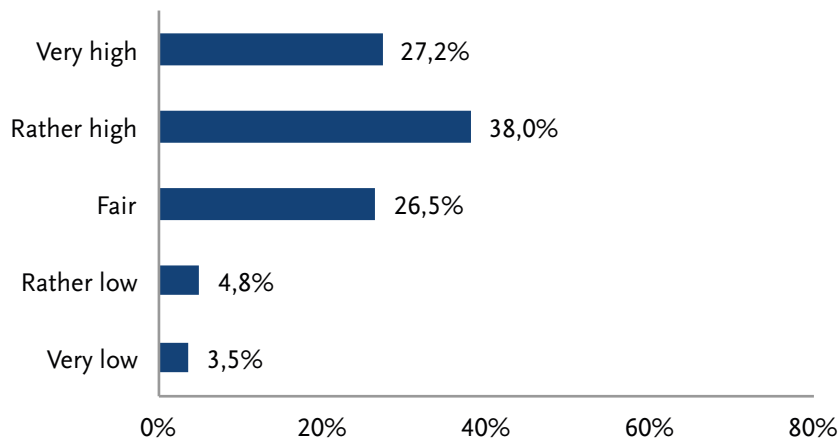


Figure 26: Improvement in non-native language skills  
Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=665)

**2.5 Professional Life before Erasmus Mundus**

The survey also examined the participants' situation prior to studying an Erasmus Mundus Masters programme, especially with regards to their employment status. As figure 27 shows, 60.9% of the participants of the survey had already had a job which was suitable to make a living from before they entered the Erasmus Mundus Masters programme.

**Did you have a professional job before starting your EMMC / EMJMD?**

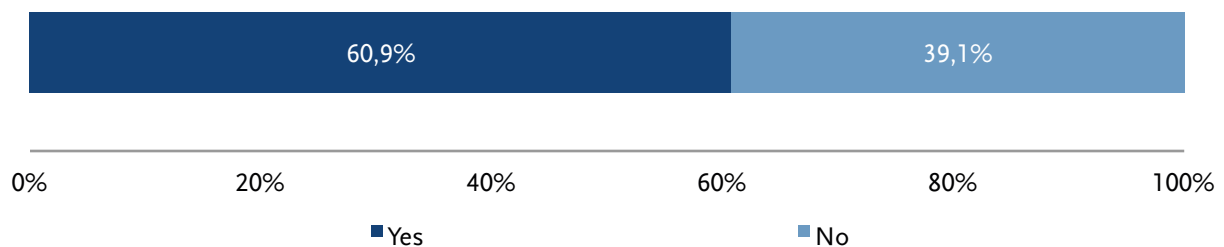


Figure 27: Professional life before Erasmus Mundus  
Students and graduates; only data from 2016 survey (N=1,594)

## 2.6 Personal Life

The previous chapters mostly focused on the impact of Erasmus Mundus on the participants' professional life. The following section concentrates on its impact on the personal life of the graduates. The graduates were asked if they had engaged in a "serious romantic relationship" during their Erasmus Mundus time. While only about a quarter (23.4%) of the graduates answered in the affirmative, a great deal (65.2%) of those that did engage in a romantic relationship stated that the relationship was ongoing. 64.2% said that their partner was not an Erasmus Mundus student.

### Romantic relationships

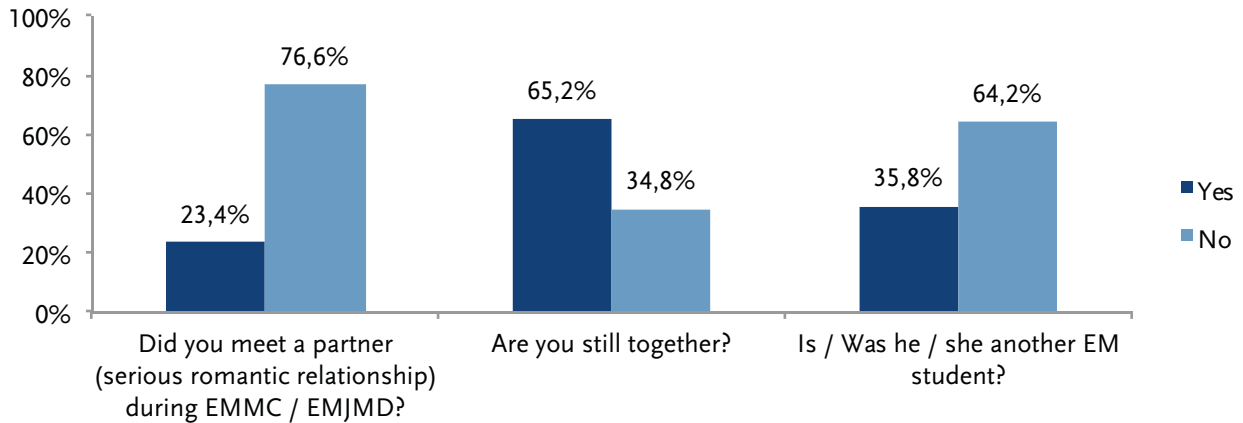


Figure 28: Romantic relationships  
Students and graduates (N=6,364)

Figure 29 shows how the percentage of lasting romantic relationships changes over time. It can be seen that the percentage of lasting relationships established during the Erasmus Mundus Masters programme decreases constantly but remains on a high level even after 6 years. 50.8% of Erasmus Mundus graduates who had met their partner during their EMMC were still in a relationship with this partner six years after their graduation.

### Are you still together?

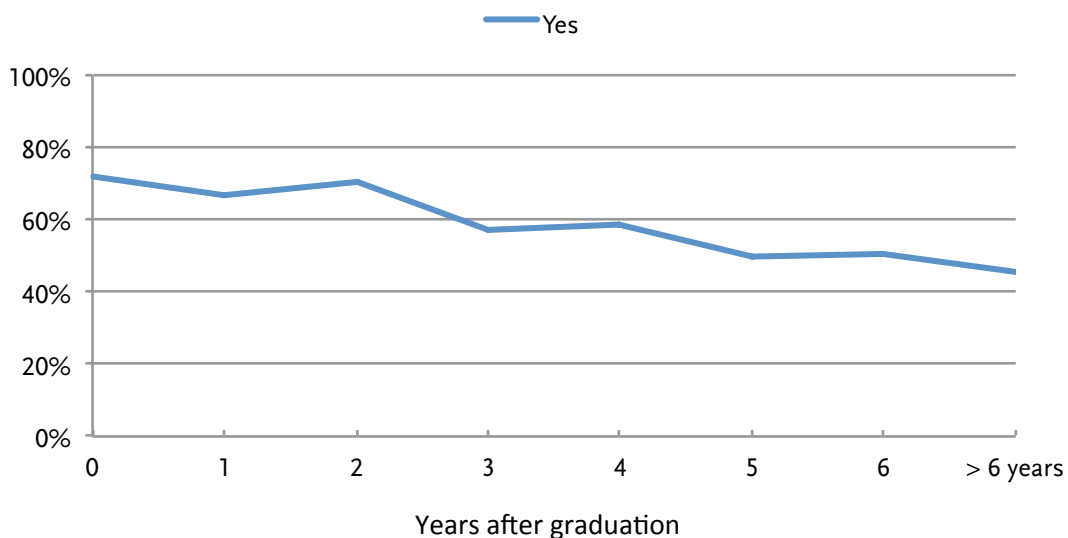


Figure 29: Romantic relationships by years after graduation  
Graduates who said they had met a partner during their programme (N=1,207)

### 3 Profile and Visibility of Erasmus Mundus

One of the three objectives of the Erasmus Mundus programme is “the promotion of the European Union as a centre of excellence in learning around the world” (Erasmus Mundus programme, 2013). In order to verify whether this objective can be achieved, the following chapter will analyse the answers to questions revolving around two main issues: The reasons for students to choose Erasmus Mundus as a Masters Course and the visibility of Erasmus Mundus.

#### 3.1 Reasons for taking an EMJMD / EMMC

Students and graduates that had recently graduated were asked what had convinced them to choose Erasmus Mundus as a Masters Course. The participants were allowed up to three answers to this question in order to provide a more precise view on this issue. As can be seen in Figure 30, the strongest argument for the participants in 2016 was the Erasmus Mundus scholarship. Almost two-thirds of all participants (64.8%) named the scholarship as one of the three most important reasons for beginning an EMMC / EMJMD. The second and third most frequently mentioned aspects nevertheless underline that the opportunity to study in Europe (51.3%) and the academic level of Erasmus Mundus universities (40.4%) are also relevant reasons for students to choose the programme.

#### What convinced you to choose Erasmus Mundus as a Masters course?

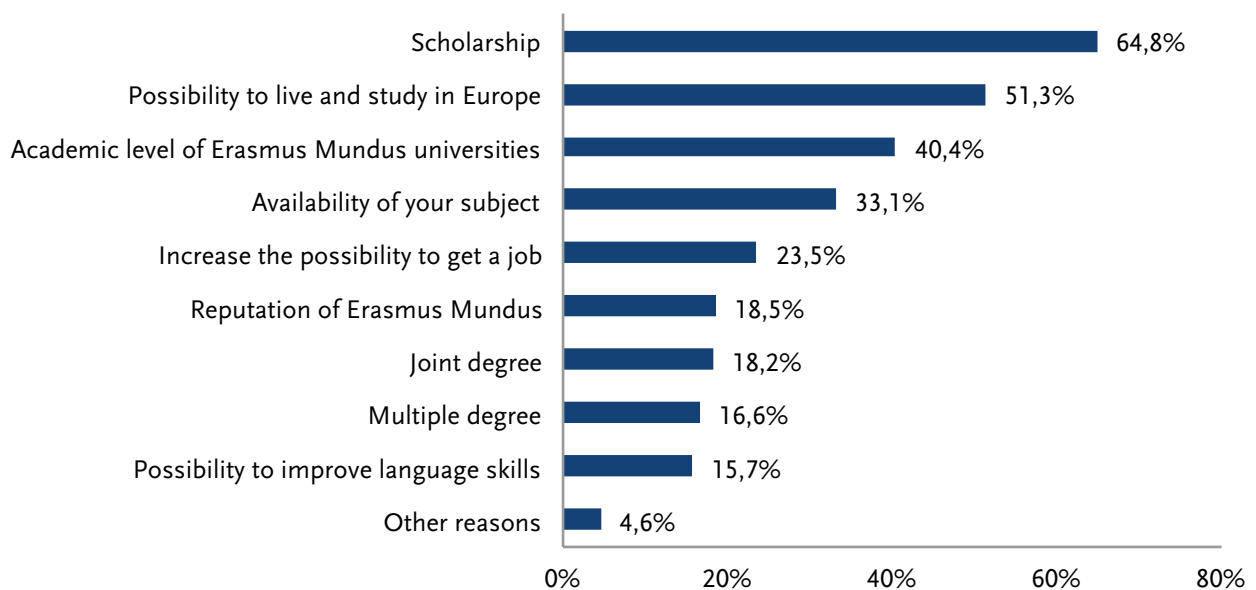


Figure 30: Reasons for choosing Erasmus Mundus

Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=676); up to three answers possible

Figure 31 depicts the reasons for choosing an EMJMD/ EMMC sorted by cohorts. This time the more veteran graduates are included in the analysis in order to determine if any developments in the motivation of the students have taken place. In order to provide a better overview, the motivational aspects that did not show any noteworthy developments were omitted in favour of those aspects that did change. The data from students who began their EMJMD in 2016 (N=57) is limited and one must be careful to deduct substantial conclusions from the distribution of the mentions. Nevertheless, observations on certain tendencies can be made.

### What convinced you to choose Erasmus Mundus as a Masters course?

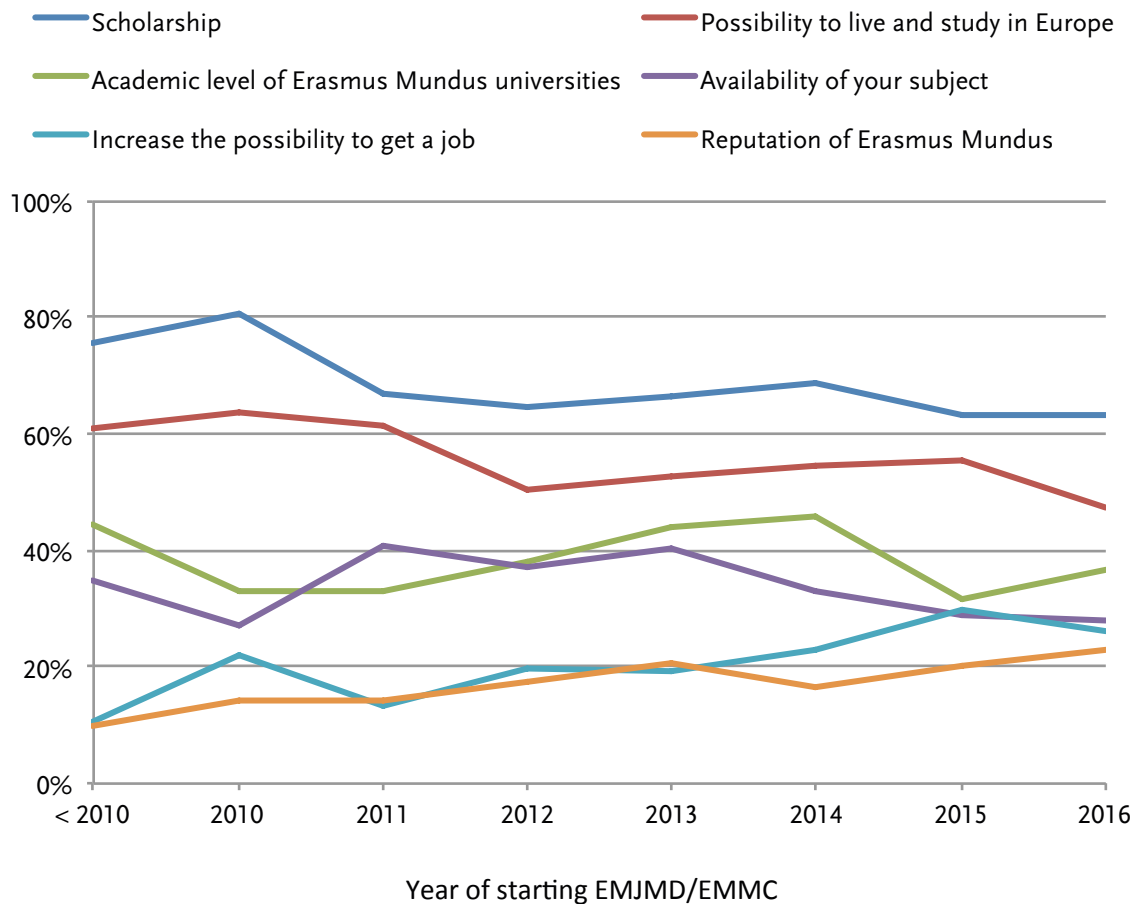


Figure 31: Reasons for choosing Erasmus Mundus by cohorts Students and graduates; only data from 2016 survey (N=1,594)

Comparing the statements of the participants who started the programme in its earlier years to the statements of the participants who have only recently enrolled, it can be seen that although the order of relevance of the different motivational aspects has only slightly changed there are remarkable differences in the percentages. Figure 31 offers important findings: While the scholarship has been the single most relevant reason for studying an EMMC over the entire period of observation, the percentage of students mentioning it as one of the reasons why they chose Erasmus Mundus has decreased significantly (Spearman’s- $\rho$  = -0.09;  $p$  < 0.001;  $N$  = 6,680). The possibility of living and studying in Europe has also become a significantly less important reason to choose Erasmus Mundus (Spearman’s- $\rho$  = -0.07;  $p$  < 0.001;  $N$  = 6,680).

Other motivational aspects that have become less important (although not significantly) are the “Academic level of Erasmus Mundus universities” and the “availability of your subject”.

With regards to which reasons were rated as more important by the students to study an Erasmus Mundus Master programme, there has been a significant increase concerning the importance of the reputation of the programme (Spearman's- $\rho = 0.10$ ;  $p < 0.001$ ;  $N = 6,680$ ). This suggests that the reputation of the Erasmus Mundus programme has risen over the last years, which is a positive development. Furthermore, improved job opportunities have become more important over the years as a reason to start an Erasmus Mundus Masters.

### 3.2 Visibility of Erasmus Mundus

In order to assess the visibility of the Erasmus Mundus programme, this chapter will investigate how well Erasmus Mundus was known in the respective home countries and how the participants found out about the programme.

#### How well known is Erasmus Mundus in your home country?

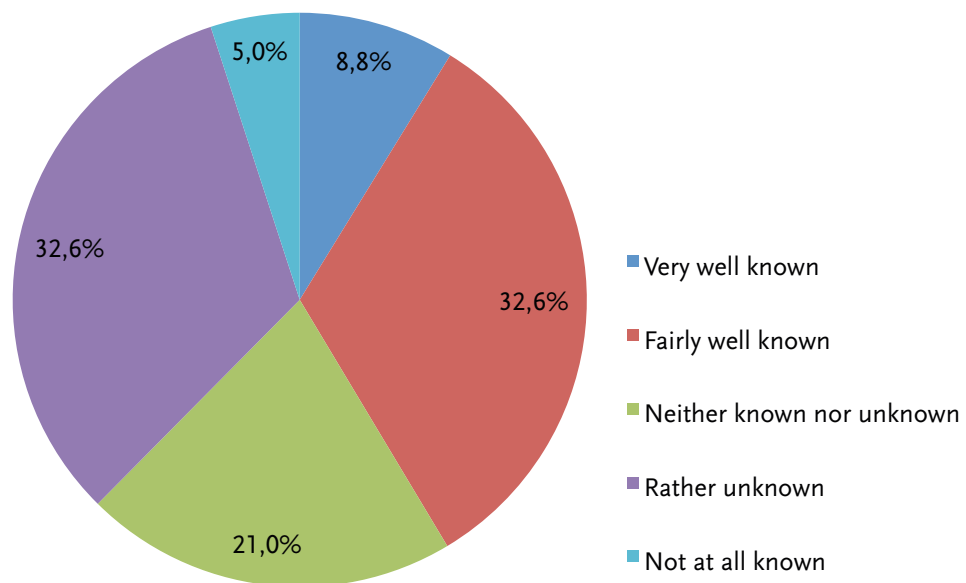


Figure 32: Visibility in 2016  
Students and graduates; only data from 2016 survey (N=1,594)

Figure 33 shows how well-known<sup>10</sup> Erasmus Mundus was according to the participants in their home countries. All in all, more participants rated the programme as well-known than as unknown. However, the distribution of mentions is very even, so that it can neither be concluded that the visibility of the programme is especially high nor especially low. More interestingly, the visibility in the home countries has decreased slightly (but constantly and significantly: Spearman's- $\rho = 0.04$ ;  $p = 0.002$ ;  $N=6,186$ ) over the years. Further monitoring of this development and – if necessary – further efforts to promote Erasmus Mundus abroad are recommended.

10) The participants of the survey were asked for their subjective judgement and the visibility of the programme should be understood as the level of awareness among all relevant groups of persons in the home countries (students, universities, employers etc.).



How well known is Erasmus Mundus in your home country?

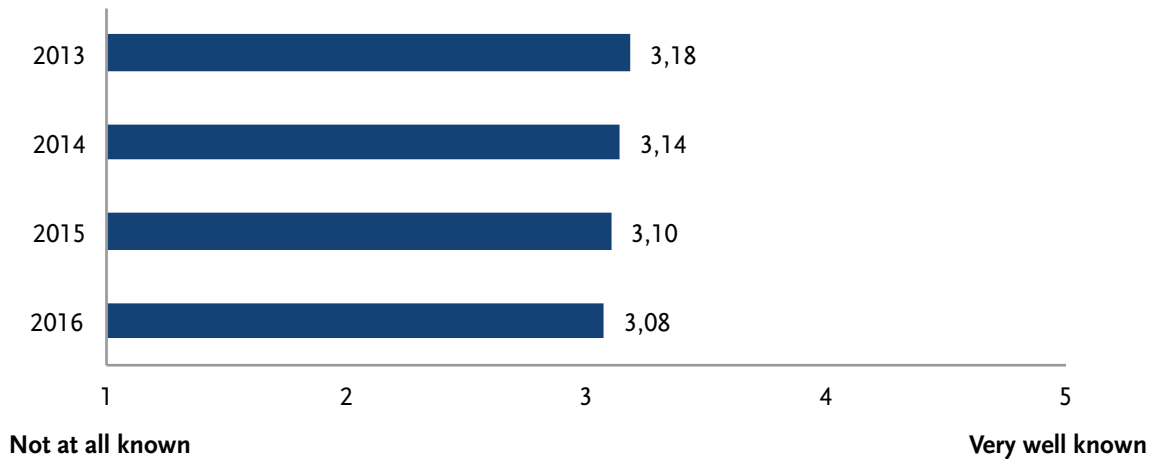


Figure 33: Visibility by survey years  
Students and graduates; survey years 2013 - 2016 (N=6,186)

Figure 34 shows how well known the Erasmus Mundus programme was in the different home regions according to the participants of the 2016 survey. As can be seen, there are regions where Erasmus Mundus is considered rather well known (foremost in southern and eastern Asia and in Africa), and regions where Erasmus Mundus is considered rather unknown (the Americas, Oceania and the EU). In non-EU European countries Erasmus Mundus has an average level of awareness compared to other regions.

How well known is Erasmus Mundus in your home country?

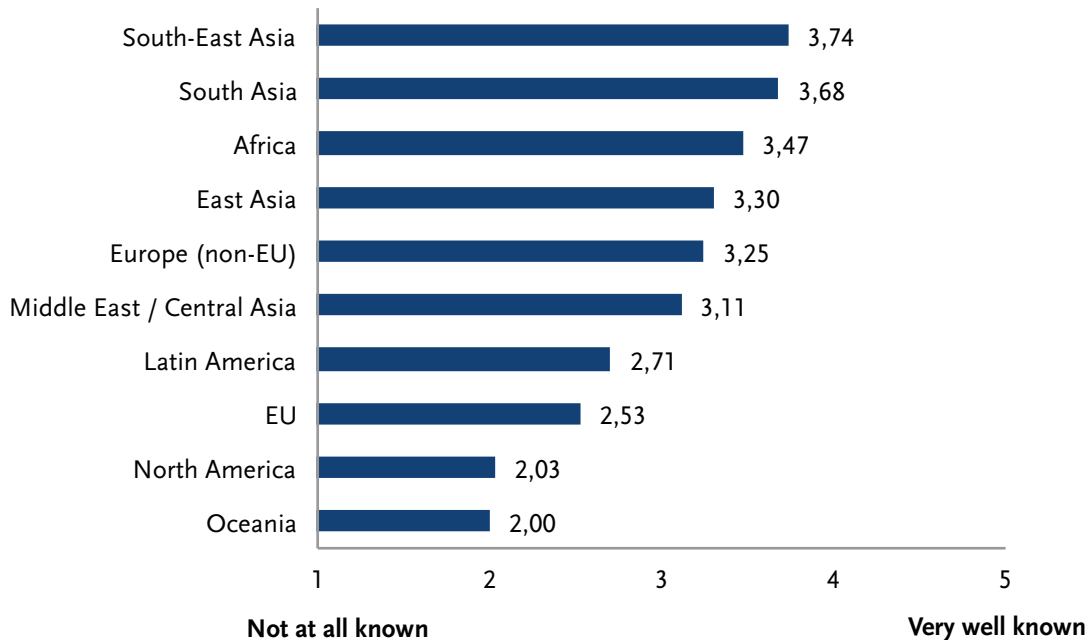


Figure 34: Visibility by region of origin  
Students and graduates; only data from 2016 survey (N=1,587)

It has already been observed that the level of awareness of Erasmus Mundus is slightly decreasing. The development of the visibility in the respective regions is similar: The level of awareness is slightly decreasing in all regions. The decrease is especially noticeable<sup>11</sup> in the regions Africa and Oceania<sup>12</sup>. Figure 35 shows how the visibility of Erasmus Mundus has changed over the survey years in these two regions.

### How well known is Erasmus Mundus in your home country?

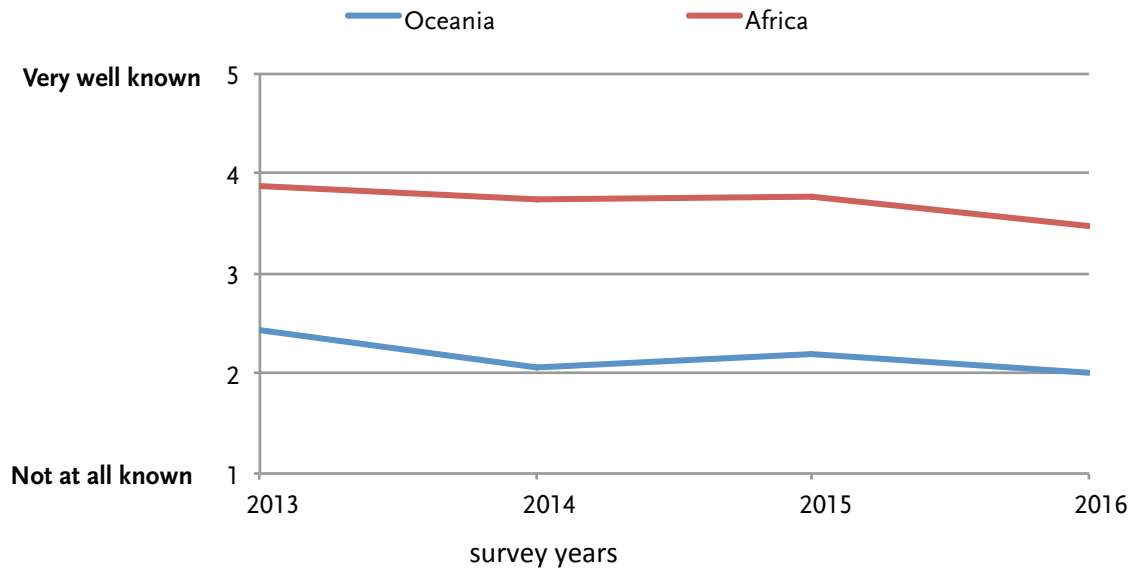


Figure 35: Visibility in Africa and Oceania by survey years  
Students and graduates from Africa (523) and Oceania (88); survey years 2013 - 2016

Figure 36 shows how participants found out about the Erasmus Mundus programme. Most students (51.2%) found out about Erasmus Mundus on the internet. Their friends (19.4%) were the second most important source of information, followed by their university (10.9%) and other Erasmus Mundus students or alumni (10.5%) on ranks three and four. The internet appears to be the single most important source of information, while word of mouth in the university environment is of somewhat lower but still remarkable importance.

11) The sample size is too small to solidly calculate a statistical significance.

12) The number of participants from Oceania taken into account in this question is low, because the overall number of students from Oceania is low, thus conclusions have to be drawn with care.

### How did you find out about the Erasmus Mundus Programme?

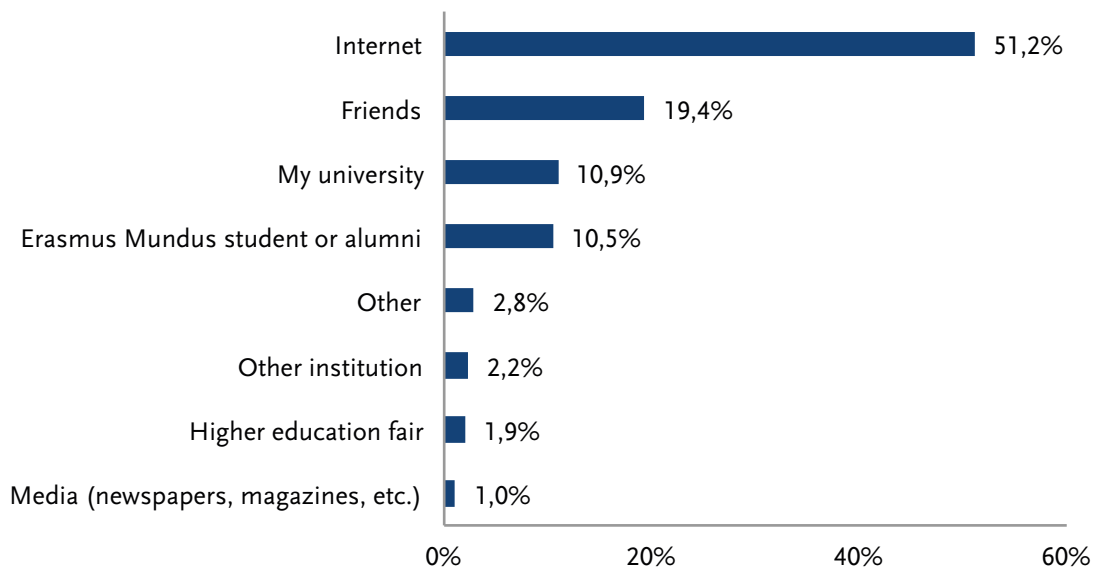


Figure 36: Sources of information  
Students and graduates (graduation dating back less than two years); only data from 2016 survey (N=676)

In summary, the visibility of Erasmus Mundus, as it was assessed by the participants of the survey in 2016, must be considered rather moderate (neither especially well-known nor especially unknown). Furthermore, in certain regions of the world, especially in the Americas, Oceania and the EU there is the room and the necessity to further the visibility of Erasmus Mundus. The level of awareness in Africa (and Oceania, but here the sample size is too small to draw any conclusions) has decreased notably and the negative development of the visibility in these regions calls for attention. Students mostly find out about the Erasmus Mundus programme on the internet, but also quite often by word of mouth and/or in the university context. It has also been observed that the reputation of the programme is increasing, thus any efforts made to further the awareness of Erasmus Mundus, especially in the university environment, will most likely be fruitful.

#### 4 Places of residence and mobility

As students from all over the world apply for Erasmus Mundus, it is of great interest to explore how many graduates stay in the EU after graduation, as this might be an indicator for the EU's attractiveness as a place to work. Figure 37 depicts where graduates from outside the EU were living after their graduation. It can be seen that at least 30.7% (North America) to at most 54.8% (East Asia) of graduates originally not from the EU stayed in the EU after graduation. Overall, 45% of graduates originally not from the EU stayed in the EU after graduation while 43% returned to their region of origin.

Residence of graduates (not from EU) by nationality

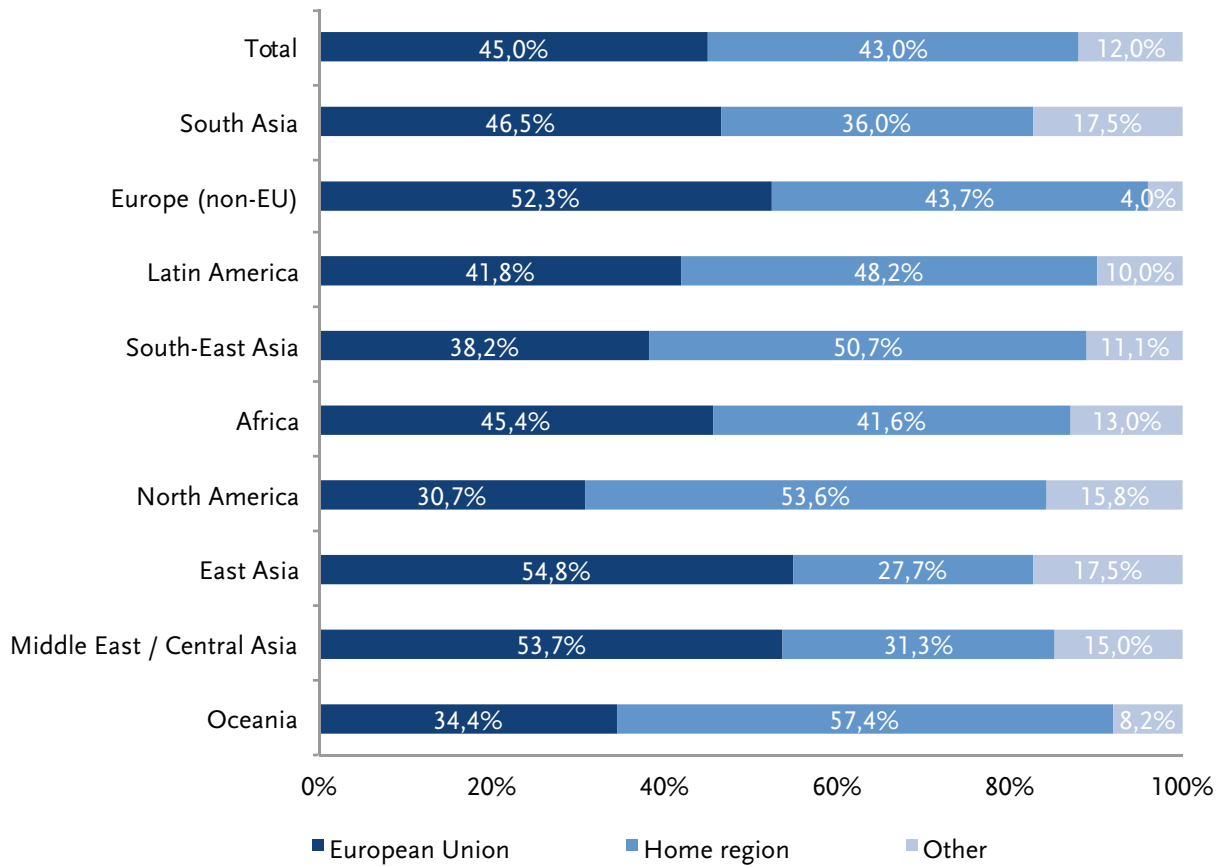


Figure 37: Residence of graduates (not from EU) by region of origin  
Graduates from outside the EU (N=4,126)

When asked about the reasons for their choice of place of residence the following picture emerges (Figure 38): Graduates living outside the EU mostly named reasons regarding family and attachment to home as main motives, while graduates living inside the EU mainly named job-related reasons.

### Reasons for choice of place of residence

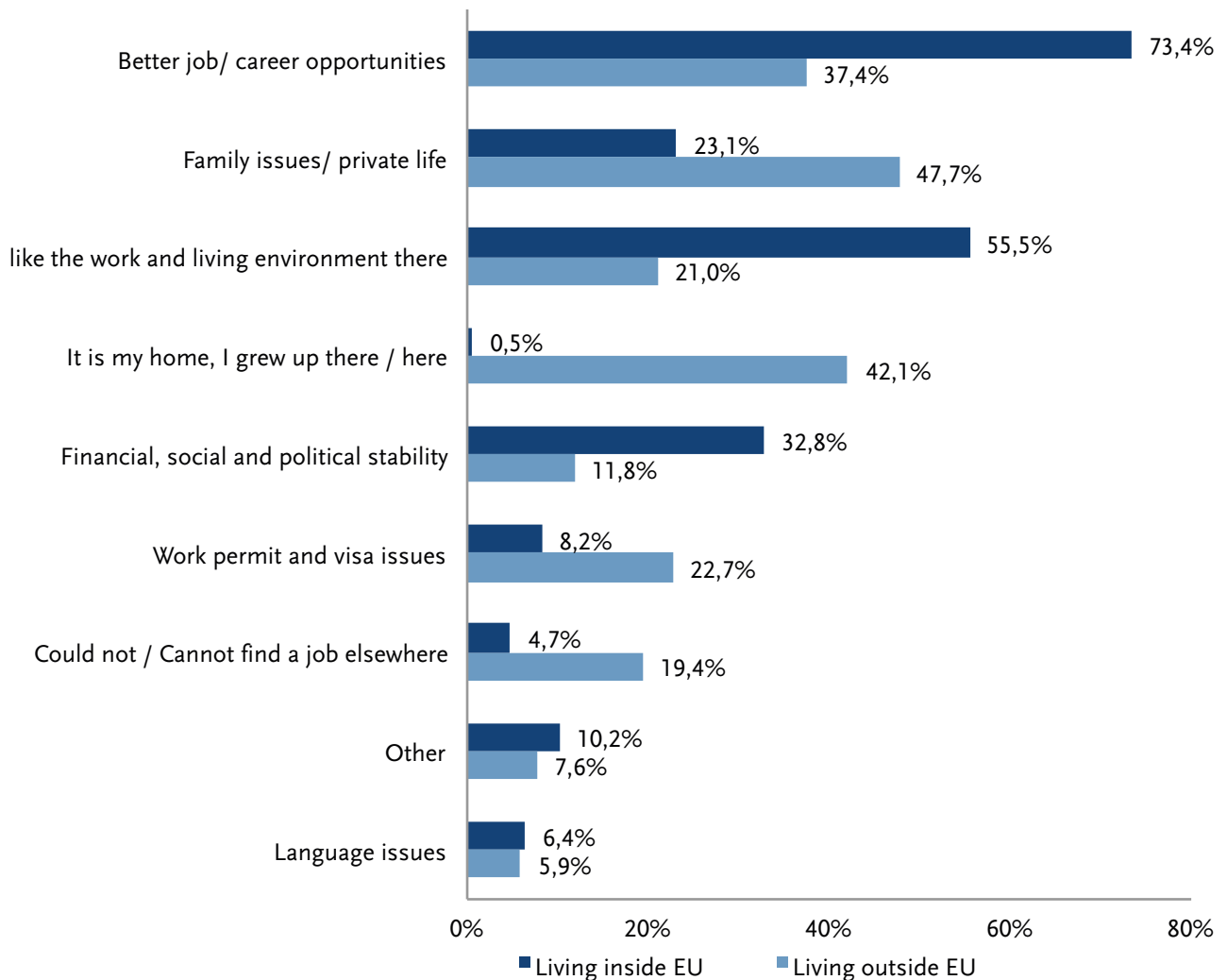


Figure 38: Reasons for choice of place of residence  
Graduates from outside the EU (N=4,126); up to three answers possible

In more detail, the graduates living in the EU stated the better job/career opportunities (73.4%), the work and living environment (55.5%) and financial, social and political stability (32.8%) as the three major reasons for living in the EU, whereas the graduates living outside the EU named family issues/private life (47.7%) and attachment to their home (It is my home, I grew up there/here; 42.1%) as the two major reasons, the better job/career opportunities being the third most important reason (37.4%).

In order to further differentiate, the place of residence (living inside or outside EU) was analysed by fields of study. The ratios of living inside or outside the EU significantly differ between the different fields of study ( $\chi^2 = 201.7$ ;  $p < .001$ ;  $N = 4,125$ ). While 57.2% of the graduates in Science, Mathematics, Computing master courses and the slim majority (50.1%) of graduates in Engineering, Manufacture and Construction master courses stayed in the EU after graduation, the vast majority (55% - 73.9%) of the graduates in the remaining master courses live outside the EU.

### Residence by fields of study

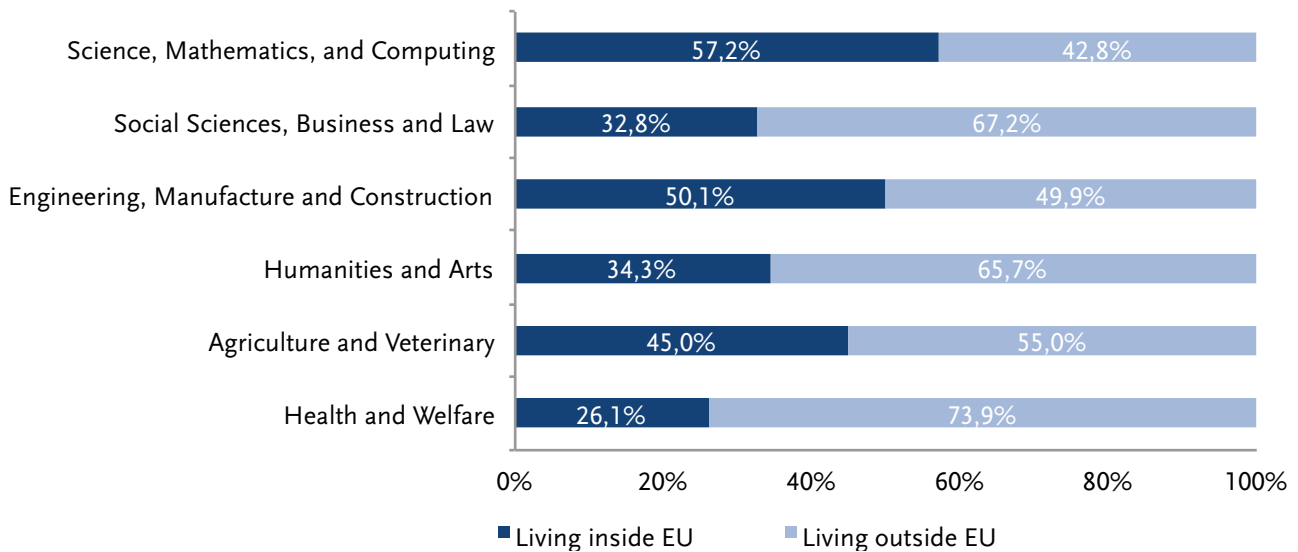


Figure 39: Residence by fields of study  
Graduates from outside the EU (N=4,125)

These numbers show that the EU certainly is an attractive place to work and to live in for the non-EU graduates. If graduates return to their home region they do so mostly because of family reasons.

## V RECOMMENDATIONS

The findings in 2016 are similar to the findings of last year's report.

While the level of satisfaction with Erasmus Mundus throughout students and graduates is still very high, there is room for improvement.

Contacts to future employers, practical experiences, and professional networking possibilities were the most important aspects the participants of the survey found to be lacking in terms of preparation for their professional life. Furthermore, when the participants were asked for their suggestions to improve the programme, they most frequently suggested to put stronger emphasis on practical training and projects with companies and also to better support students in finding a job. These demands and suggestions could be met by arranging (more and perhaps mandatory) internships in (partner) companies. Internships will allow the students to gain practical, on-the-job experiences while at the same time establishing ties to future employers thereby expanding their professional network and enhancing their employability.

The reputation of the programme is high and increasing, while the level of awareness is slightly decreasing. Furthermore, 9% of the unsuccessful job-seekers stated that they could not find a job because their Erasmus Mundus degree was not recognized in the respective country and this indicates that degree recognition remains an issue. A better promotion of the programme addressing countries (especially in the Americas, Oceania and the EU) and companies could improve this issue. Considering that the reputation of the programme is high, putting more effort into the promotion of the programme should yield positive results.

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Among the few unsuccessful job-seekers there were some participants who mentioned not meeting the language requirements as the most important reason for not finding a job. It should be examined whether the current offer of language courses sufficiently includes courses that teach the language relevant to the local labour market.

## VI LITERATURE

Gravetter, Frederick J. & Forzano, Lori-Ann B. (2012). *Research Methods for the Behavioral Sciences*. (4th ed.). Wadsworth: Cengage Learning.

Kirk, Roger E. (2013). *Experimental Design. Procedures for the Behavioral Sciences*. (4th ed.). Los Angeles: SAGE Publications.