

Research Report

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Erasmus Mundus Joint Master Graduate Impact Survey 2018

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Key Results

Methodology

- 1.238 persons participated in the GIS 2018, 93% of them have already completed their Erasmus Mundus (EM) studies and 7% are still studying. The 2018 cohort could not yet be surveyed, so participants are slightly older than in previous surveys (Ø 33y). In addition, students from Latin America are somewhat more strongly represented. Due to lack of access to the population data of EM, it was not possible to adjust the responses (e.g. by region of origin).

Satisfaction with Erasmus Mundus

- Overall satisfaction with EM stays constant at 77%, but more graduates are nowadays *very* satisfied. Engineering graduates in particular are more satisfied than before. However, satisfaction with quality of the course decreased slightly to 75%. Especially EU citizens are hereby less satisfied.
- Graduates are quite satisfied with the *attitude towards international students, facilities* and *teaching staff*, but *educational guidance, pedagogical methodology* and *extracurricular activities* could be improved further.
- Moreover, in an open question, graduates suggested a) to improve support and guidance during the programme, b) to offer more language, cultural, business and entrepreneurial courses, c) to enhance student networks and most of all d) to improve the links between the theoretical content of the study courses and the “reality” on the labour market.

Impact of Erasmus Mundus

- Graduates perceive *intercultural competencies* gained as the greatest impact of EM – an assessment that has been stable for many years. 39% perceived an impact of EM on their *career*, a proportion that is slightly (and statistically significant) decreasing over the years. This may also be due to a somewhat different composition of graduates (other fields of study, other regions of origin). The *attitude towards Europe and the EU*, on the other hand, is the only impact that graduates rate more positively from year to year.
- Every second alumni (55%) felt well or very well about the way EM had prepared them for the labour market – which is quite stable over time. On the other hand, the share of students who feel (very) poorly prepared for the labour market has increased – an impression expressed above all by graduates of the humanities and social sciences.

- To improve preparedness for the labour market even further, graduates recommend more contacts to potential employers (49%), career mentoring (49%) and practical experiences (31%) in the EM programmes. In contrast, technical skills (13%), soft skills (11%), subject specific skills (8%) were less often seen to be lacking.
- During the first six month after graduation, graduates looked for a professional job (36%), continued their studies or applied for further studies (25%) or started a job they had found already during their studies (18%).
- Among those looking for a job immediately after graduation, 85% found one within six months. They mostly searched in their home country (61%) followed by larger EU countries. Interestingly, 19% of the 15% unsuccessful jobseekers report that their EM degree was not recognised in the country where they were looking for a job.¹
- 86% of the graduates report that their first professional job after graduation was at least somewhat related to their studies. Moreover, more than 70% describe their first job as at least somewhat international regarding collaboration with colleagues and contact with customers. However, this share decreased from 80% in the GIS 2017.
- Currently, only 4% of the graduates are unemployed and seeking for a job. 65% are employed and 20% are still continuing their studies. 95% are at least somewhat satisfied with their occupation.
- The four competencies most frequently required in graduates' jobs are the abilities to *question own and others' ideas; rapidly acquiring new knowledge; present products, ideas or reports in a timely manner; coming up with new ideas and solutions*. And exactly to these four abilities is the contribution of EM still expandable – from the point of view of the graduates. For most of the other competences surveyed, EM's contribution roughly corresponds to the requirements.

Profile of Erasmus Mundus

- The most important reason for students and recent graduates taking up an EM programme is the *scholarship* (61%), followed by *the possibility to live and study in Europe* (50%) and *the academic level of EM universities* (38%). However, this result differs greatly according to the region of origin. This could also be

¹ This corresponds to 2% of all graduates (20% of the 15% unsuccessful job seekers of 65% who looked for a job).

one reason why the importance of the scholarship decreases significantly over time.

- 40% of students and graduates stated in the study that EM was largely unknown in their home country. Moreover, this perception has recently declined slightly. Students and graduates from South Asia and South-East Asia report above average levels of awareness, opposed to Oceania and North America where the EM programmes seem to be rather widely unknown. Surprisingly, according to the survey participants, the awareness levels in EU countries are comparably low.

Places of residence and mobility

- In total, 42% of graduates (only Non-EU citizens) remained in an EU country after graduating from EM. This share varies between 23% (North America) and 56% Europe (non-EU). 39% returned to their region of origin. Almost 20% have neither stayed in the EU nor returned to their home country. They currently live mainly in North America.
- On average, around half of science and engineering graduates have remained in the EU, but only 30% of the graduates of social and humanities studies. Graduates in engineering have recently also remained more frequently in the EU, while graduates in all other fields of study have stayed less frequently.
- The main reasons cited for remaining in the EU are *better employment and career opportunities* (78%), main reasons for returning home are *family reasons* (52%) and attachment to home (41%).

General conclusion

- Graduates are highly positive about the EM programme: They are very satisfied with both the programme and the courses and attest EM a high impact on their career and personality development. Most of them find a job relatively quickly, which is usually also study-related and has a strong international orientation. And a positive attitude towards Europe and the EU is constantly on the increase. About the same number of graduates remains in the EU as returns in their home country, whereby the EU is attractive above all because of the good job opportunities.
- However, there are also points that can still be improved from the graduates' point of view. This concerns the quality of the courses, the preparation for the labour market, the skills needed in the job and the perception of EM in the world. To most of the points, the graduates also contribute constructive suggestions.

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1. Introduction

Mobility and internationalisation of higher education institutions (HEI) are a key topic in the European Higher Education Policy. Mobility programmes can offer students a unique opportunity to gain valuable experience of academic, cultural and social diversity in a global context. The Erasmus Mundus Joint Master Degree (EMJMD),² for instance, is a high-level integrated international study programme of 60, 90 or 120 ECTS credits, jointly delivered by an international consortium of HEIs and, where relevant, other educational and/or non-educational partners with specific expertise and interest in the study areas/professional domains covered by the joint programme. The programme takes place in at least three different countries and lasts from 12 to 24 months. It focuses on postgraduate students in higher education and is open for applicants at Master's level worldwide (i.e. not only within borders of the European Union, but especially students from third party countries). By this, the programme enables the development of human resources and international cooperation capacity around the world. EU-funded scholarships are awarded to the best student candidates.³

Three **main goals of Erasmus Mundus Joint Master Degree Programme** have been formulated by the European Commission as follows:

- to “foster quality improvements, innovation, excellence and internationalisation in higher education institutions (HEI)”;
- to “increase the quality and the attractiveness of the European Higher Education Area (EHEA) and supporting the EU's external action in the higher education field, by offering full degree scholarships to the best Master students worldwide”;
- to “improve the level of competences and skills of Master graduates, and in particular the relevance of the Joint Masters for the labour market, through an increased involvement of employers”⁴

In order to analyse the long-term effects of participating in the Erasmus Mundus programme for career development as well as for personal growth, an annual online survey – Graduate Impact Survey (GIS) – is conducted. The survey wave 2018 has been carried out by researchers at the Institute for Advanced Studies (IHS) in Vienna with

² Until 2014: EMMC (Erasmus Mundus Masters Course); since 2014: EMJMD (Erasmus Mundus Joint Master Degree)

³ https://ec.europa.eu/programmes/erasmus-plus/opportunities/individuals/students/erasmus-mundus-joint-master-degrees_en

⁴ https://ec.europa.eu/programmes/erasmus-plus/programme-guide/part-b/three-key-actions/key-action-1/erasmus-mundus-jmd_en

the support of the Erasmus Mundus Students and Alumni Association (EMA), which promoted the survey.

The results of the Erasmus Mundus Joint Master Graduate Impact Survey 2018 will be discussed in this report. For better comparison, the survey and the report have been conducted and structured according to the previous rounds (cf. ICU.net 2017⁵), but the report was supplemented by time comparisons and differences by regional origin,⁶ where the data allow.

⁵ The GIS 2017 is available at:

http://www.em-a.eu/fileadmin/content/GIS/GraduateImpactSurvey_2017_final_web.pdf

⁶ The composition of the regional clusters is shown in the Annex on page 56.

2. Methodology

The main objective of this Impact Survey is to examine the effects of the Erasmus Mundus Joint Master Degree Programme on graduates and students and to identify aspects contributing to their personal and professional development by using a quantitative approach – from both a cross-sectional and a longitudinal angle. The most recent Impact Survey was carried out from December 18, 2018 until January 31, 2019.

2.1. Questionnaire

The Graduate Impact Survey 2018 consisted of more than 70 questions, though some were filtered according to respondents' previous answers. For instance, the two main target groups – students and graduates – often received different questions, e.g. large parts of the chapter "Career" focused on graduates' experience on the labour market, whereas students were rather asked about their professional plans and expectations. All questions have remained unchanged in form compared to the previous survey in 2017 (ICU.net 2017).

The survey included different types of questions: Likert-type scales, which ask the respondents to assess an issue or a statement on a given dimension (agree-disagree, satisfied-dissatisfied, good-bad),⁷ multiple choice questions with two or more answer options (yes/no or multiple alternatives) or open-ended questions, which ask respondents to either specify their answers, add a category if outside the offered scale, supply their own answer or make suggestions.

2.2. Participants

As was the case in previous years, both Erasmus Mundus students and graduates were invited to participate in the survey. In total, 10.242 students and graduates were invited via e-mail to participate in the online-survey. Additionally, two reminder e-mails were sent out approximately two and four weeks after launching the survey on December 18, 2018. Wherever sensible and possible, the report focuses on the longitudinal aspects 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 all existing data (joined samples of all Graduate Impact Surveys between 2012 and 2018).

⁷ It should be noted that opposed to the previous surveys in the GIS 2018 all Likert-type scales have been turned around, e.g., high values now correspond to lower levels of satisfaction.

The data collection was followed by a data cleaning process which aims to transform the raw data into reliable, high quality data and, at the same time, keep as many cases as possible. Since the Erasmus Mundus population data was not available to the Institute for Advanced Studies (IHS), no data weighting was applied to the collected data (like in previous GIS-Reports).

The participants' e-mails were provided by our consortium partner wiminno, the IT agency hosting EMA's membership database. However, it should be noted that the e-mail list has not been updated since the beginning of 2018. As a result, the GIS 2018 has reached a similar number of graduates as the previous studies, but relatively few current Erasmus Mundus students (n=82). The change in service providers also delayed GIS 2018 by two months, which is why the comparison periods (e.g. "1 year after graduation") are slightly different from the previous GIS-Reports.

Only completed questionnaires and valid percentages have been reported. Due to item non-response there will be a slightly varying number of respondents per question. Due to rounding errors, percentages may not always add up to 100%.

2.3. Analysis of the 2018 sample

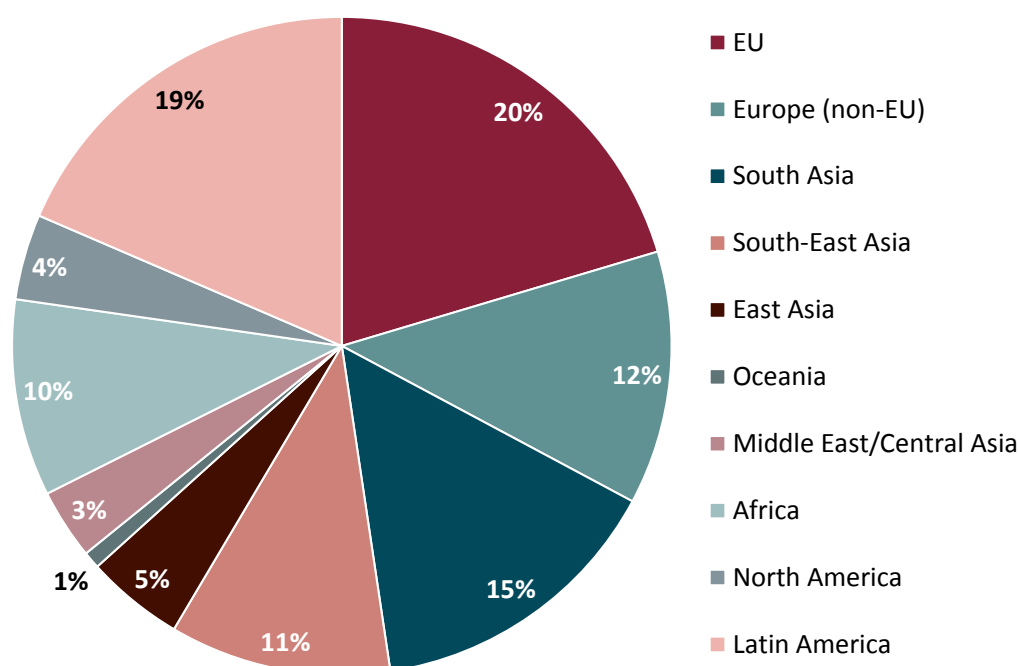
In 2018, 1.238 participants completed the survey: 1.156 (93,4%) participants had already completed an EMMC/EMJMD, while 82 (6,6%) participants were still pursuing it. EMMC/EMJMD students and graduates were invited to participate in the survey via e-mail. Apart from the e-mail invitations, an open-access link was distributed via the Erasmus Mundus Association's social media channels – Facebook page, website, newsletter etc. Interested students were able to participate in a prize draw if they had completed their questionnaire.

A brief overview of the socio-demographics of the 2018 sample is given in Table 1, while information on the nationality of the participants can be obtained from Figure 1. Compared to the last GIS 2017, the graduates are about 1,5 years older, which is due to the fact that the 2018 cohort could not be contacted and the survey period took place somewhat later. Otherwise, the differences to the previous survey are small, only students from Latin America are slightly more strongly represented.

Table 1: Socio-demographic data of survey participants in 2018

	N	Average age	Gender		Region of origin	
			Male	Female	EU	Non-EU
Graduates	1.156	33,1 y.	54,4%	45,6%	20,5%	79,5%
Students	82	27,0 y.	48,8%	51,2%	16,0%	84,0%
All participants	1.238	32,7 y.	54,0%	46,0%	20,2%	79,8%

Data Source: Graduate Impact Survey 2018.

Figure 1: Nationality of the participants in 2018

Data Source: Graduate Impact Survey 2018.

2.4. Analysis of the joint samples 2012 – 2018

In order to support a longitudinal approach, the following analysis incorporates the data⁸ from all surveys between 2012 and 2018. The data is differentiated by years after graduation, cohorts (year of start) and by the time the survey was carried out. Only completed questionnaires are part of the analysed data. In order to outline developments over time for selected questions, these will be crossed by one of the aforementioned variables (see Table 2 to Table 4).

- *Years after graduation*: The time-lag approach will be used whenever changes in the participating individuals are analysed (e.g. *Will participants have a more favourable opinion on the programme years after their graduation than immediately after?*).
- *Year of starting EMJMD/EMMC*: 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 of survey*: The cross-sectional approach will be used whenever the answers to the question are dependent upon the time in which the survey took place (e.g. *How well known is Erasmus Mundus in 2018 compared to the years before?*).

⁸ In order to avoid distortions (e.g. cohort effects), subsamples of the data will be considered wherever appropriate.

Table 2: Survey data from 2012-2018: Time lag approach

Years after graduation	N	Gender		Region of origin	
		Male	Female	EU	Non-EU
0	671	54,7%	45,3%	19,4%	80,6%
1	1.694	53,7%	46,3%	27,2%	72,8%
2	1.502	51,7%	48,3%	27,8%	72,2%
3	1.066	50,9%	49,1%	27,0%	73,0%
4	928	53,2%	46,8%	23,3%	76,7%
5	852	55,8%	44,2%	22,1%	77,9%
6	749	54,1%	45,9%	18,3%	81,7%
> 6 years	2.196	60,2%	39,8%	12,9%	87,1%

Data Source: Graduate Impact Survey 2012-2018.

Table 3: Survey data from 2012-2018: Cohort approach

Year of start	N	Gender		Region of origin	
		Male	Female	EU	Non-EU
2018	37	48,6%	51,4%	18,9%	81,1%
2017	259	42,6%	57,4%	22,4%	77,6%
2016	341	54,1%	45,9%	26,4%	73,6%
2015	567	54,2%	45,8%	22,8%	77,2%
2014	999	51,4%	48,6%	22,3%	77,7%
2013	1.022	54,9%	45,1%	24,2%	75,8%
2012	1.543	50,8%	49,2%	31,1%	68,9%
2011	1.132	54,0%	46,0%	27,0%	73,0%
< 2011	3.758	58,6%	41,4%	15,6%	84,4%

Data Source: Graduate Impact Survey 2012-2018.

Table 4: Survey data from 2012-2018: Cross-sectional approach

Survey year	N	Gender		Region of origin	
		Male	Female	EU	Non-EU
2018	1.238	54,0%	46,0%	20,2%	79,8%
2017	1.740	53,9%	46,1%	21,4%	78,6%
2016	1.595	53,1%	46,9%	21,2%	78,8%
2015	1.458	53,2%	46,8%	23,0%	77,0%
2014	1.615	58,2%	41,8%	22,7%	77,3%
2013	1.544	55,7%	44,3%	22,2%	77,8%
2012	1.340	56,1%	43,9%	18,8%	81,2%

Data Source: Graduate Impact Survey 2012-2018.

3. Results

3.1. Satisfaction with Erasmus Mundus

This section focuses on the overall satisfaction with the Erasmus Mundus Joint Master Degree Programme, as well as participants' satisfaction with the quality of the courses and with some specific aspects of Erasmus Mundus. Since the level of satisfaction is an important indicator for the programme's quality, additional characteristics such as field of study will also be analysed.

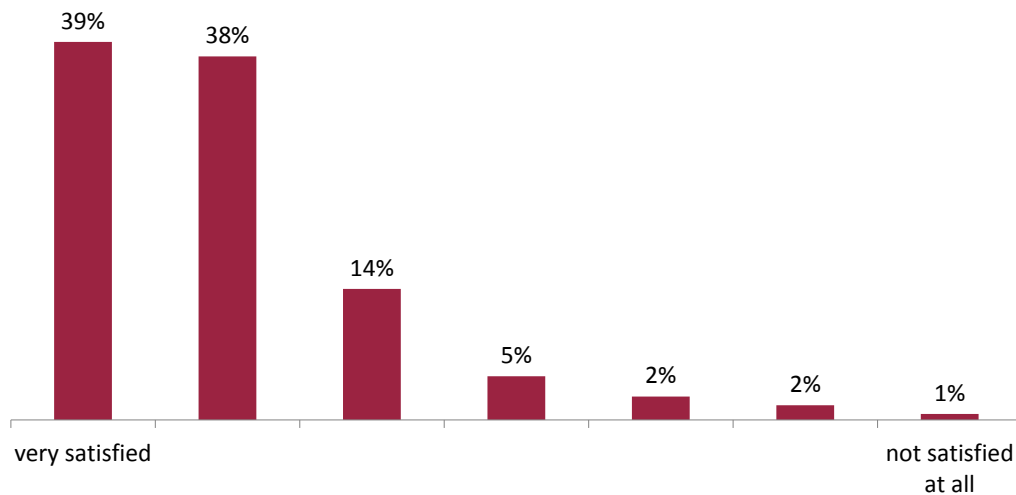
3.1.1. Overall satisfaction with Erasmus Mundus

Figure 2 depicts this year's participants' overall satisfaction with Erasmus Mundus. To avoid possible distortions through memory effects, only students and graduates of recent graduation years (2016-2018) will be taken into account.⁹ The figure shows clearly that the majority of participants were very (39%) or mostly satisfied (38%) with the programme (77% in total). Only a very small share of survey respondents was rather dissatisfied with Erasmus Mundus. While the proportion of the overall satisfied has not changed in comparison to the GIS 2017 (77%), a shift in the degree of satisfaction can be observed: in 2017, 52% were predominantly satisfied and 25% completely satisfied. This means that among the satisfied graduates more are now *very* satisfied.¹⁰

⁹ Due to the low number of cases in the Impact Survey 2018 students and graduates who have completed their EMJMD in the past *three* years (i.e. not earlier than 2016), have been analysed. In previous survey reports, students and graduates who have completed their Erasmus Mundus in the past *two* years were considered in the analysis.

¹⁰ However, this could also be related to the change in labelling and direction of the Likert scale: 2017: completely dissatisfied – completely satisfied; 2018: very satisfied – not satisfied at all.

Figure 2: Overall satisfaction with Erasmus Mundus (GIS 2018)



Students and graduates (less than three years after graduation), n=330.

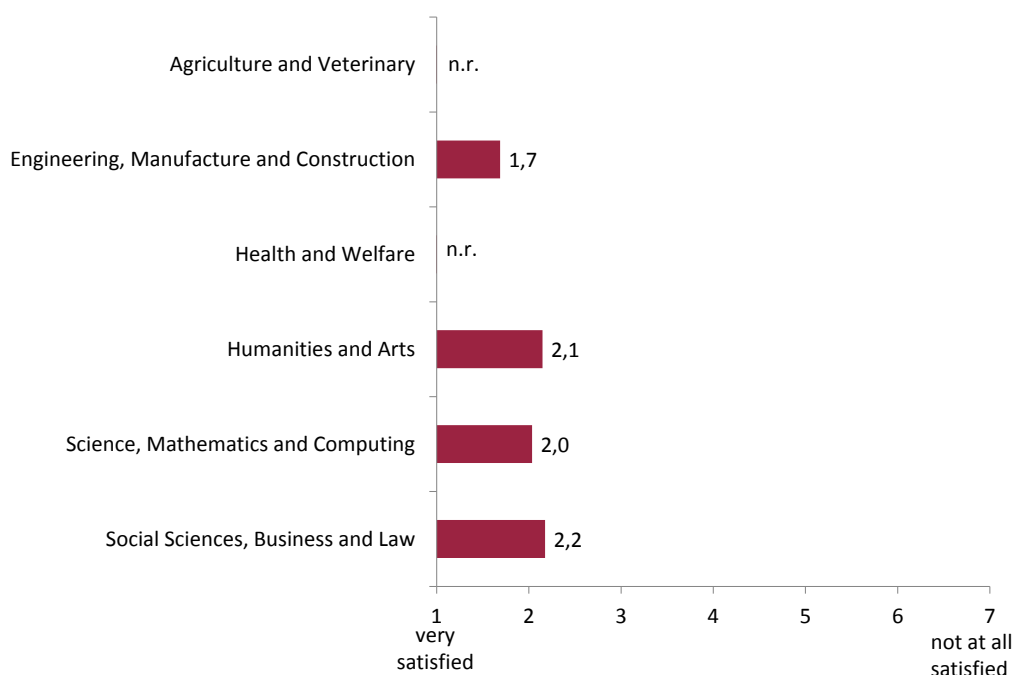
Wording of the question: "How satisfied were you overall with your EMJMD/EMMC studies?"

Data Source: Graduate Impact Survey 2018.

The level of overall satisfaction with Erasmus Mundus differs slightly across the different fields of study (see Figure 3, high values correspond to lower levels of satisfaction). Students and graduates of *Social Sciences, Business and Law* ($\bar{x}=2,2$) as well as those of *Humanities and Arts* ($\bar{x}=2,1$) are slightly less satisfied, whereas the average satisfaction is highest in *Engineering, Manufacture and Construction* ($\bar{x}=1,7$). Due to the low number of valid cases (less than 30 cases) in the study fields *Agriculture and Veterinary* and *Health and Welfare*, no results regarding the overall satisfaction with Erasmus Mundus can be reported. The existing differences of overall satisfaction between the different fields of study are, however, not statistically significant.

Compared to the last GIS from 2017, satisfaction rose remarkably in the field of *Engineering, Manufacture and Construction*, but decreased slightly in *Social Sciences, Business and Law*.

There is virtually no difference in satisfaction by nationality, only graduates from the EU and North America are slightly less satisfied with ERASMUS Mundus.

Figure 3: Overall satisfaction with Erasmus Mundus by field of study (GIS 2018)

Note: High values correspond to low levels of satisfaction.

n.r. = Data are not reported because there are too few cases.

Students and graduates (less than three years after graduation), n=330.

Wording of the question: "How satisfied were you overall with your EMJMD/EMMC studies?"

Data Source: Graduate Impact Survey 2018.

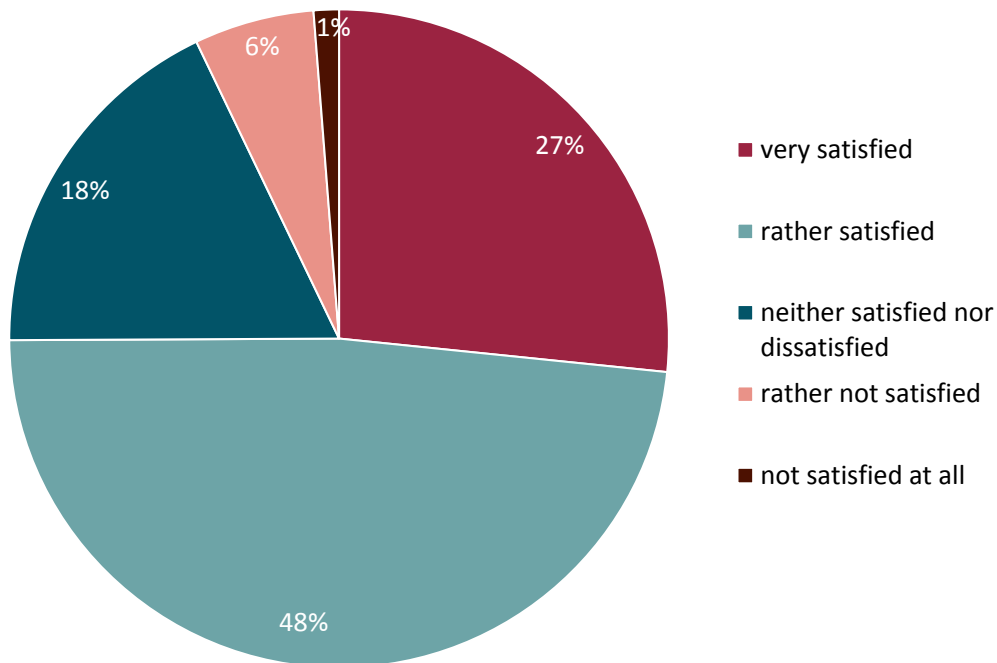
3.1.2. Satisfaction with quality of the course

As Figure 4 shows, the majority of survey participants assess the course quality at their Erasmus Mundus host universities as very (27%) or rather (48%) satisfactory (75% in total). Only a small share of survey participants has reported being rather not (6%) or not at all (1%) satisfied with the quality of their courses.¹¹ Compared to the GIS 2017, overall satisfaction decreased slightly from 81% very or rather satisfied graduates to 75%.

Nevertheless, more than 90% of the graduates from South-Asia are very or rather satisfied with the quality of the course, this only applies to 65% of the graduates from EU countries. Graduates from the other regions are (very) satisfied with 70-80%.

¹¹ However, it should be noted that the Likert-type scales used to assess the overall satisfaction and the satisfaction with the quality of the courses are not identical (7-point vs. 5-point scale) and are, therefore, not perfectly suitable for a one-to-one comparison.

Figure 4: Satisfaction with quality of the courses at the Erasmus Mundus host universities (GIS 2018)

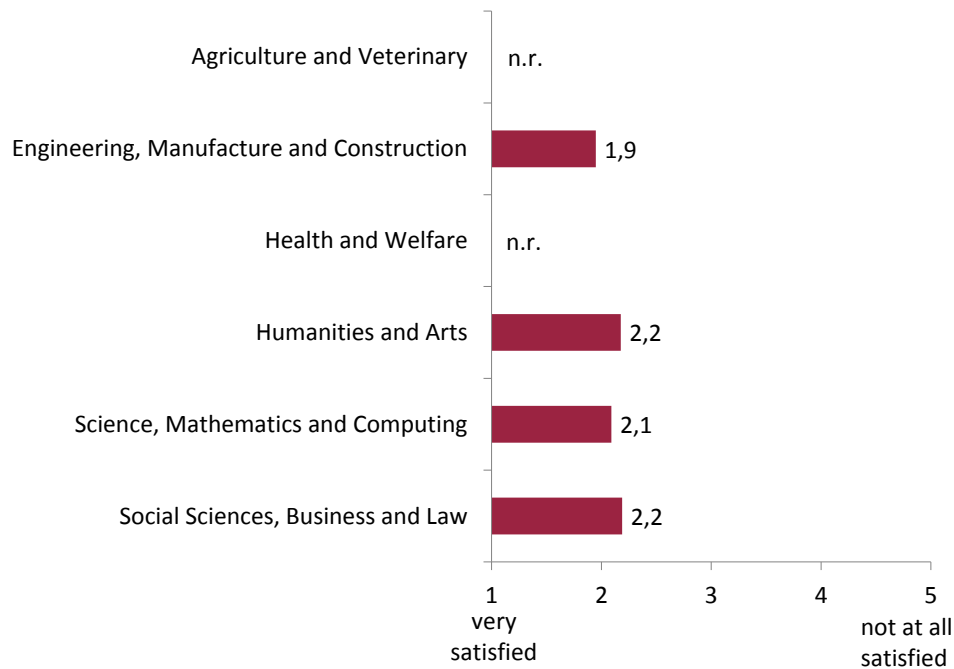


Students and graduates (less than three years after graduation), n=323.

Wording of the question: "How satisfied are you with the quality of courses at your EM host universities?"

Data Source: Graduate Impact Survey 2018.

Taking the study field into consideration (see Figure 5), trends, similar to the overall satisfaction with Erasmus Mundus, can be observed. Students and graduates of *Social Sciences, Business and Law* as well as of *Humanities and Arts* show to be, on average, a bit less satisfied with the quality of courses at their Erasmus Mundus host universities. Due to the low number of valid cases, no data regarding the study fields *Agriculture and Veterinary* and *Health and Welfare* can be reported. These differences are, however, not statistically significant. As with the overall satisfaction, the satisfaction with the course decreased marginally compared to the GIS 2017 in Social Sciences/ Business/ Law, but also in Science/ Mathematics/ Computing, whereas it increased in Engineering/ Manufacture/ Construction. The result is that students of all fields are now more or less equally satisfied with their courses (see Figure 5).

Figure 5: Satisfaction with quality of the courses by field of study (GIS 2018)

Note: High values correspond to low levels of satisfaction.

n.r. = Data are not reported because there are too few cases.

Students and graduates (less than three years after graduation), n=323.

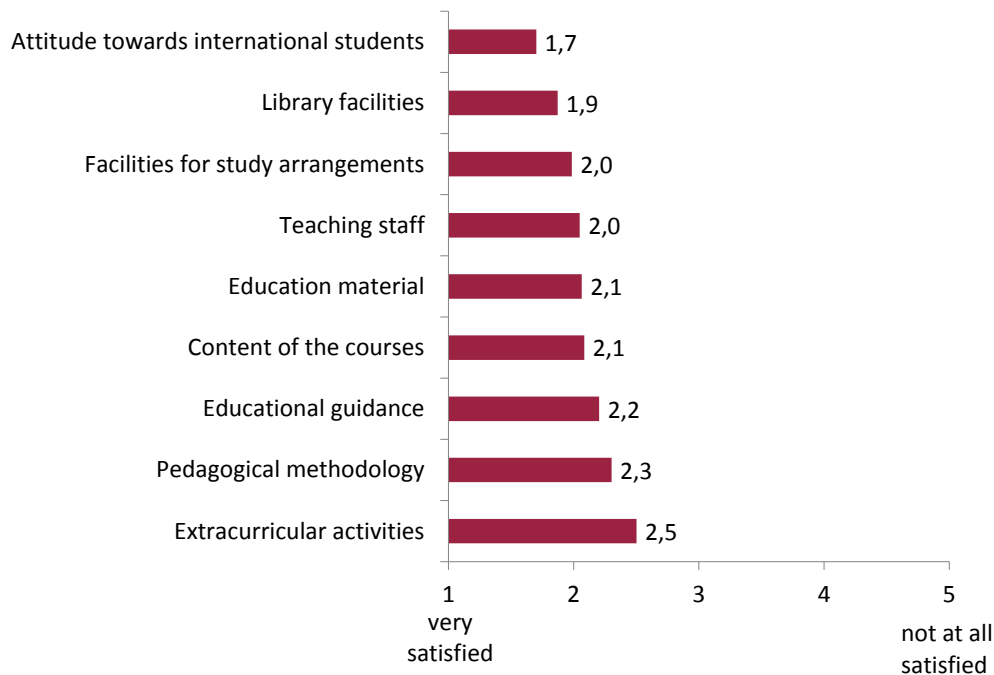
Wording of the question: "How satisfied are you with the quality of courses at your EM host universities?"

Data Source: Graduate Impact Survey 2018.

Besides quality of the courses, participants were asked to report their satisfaction with different aspects of their Erasmus Mundus programme – comparably high levels of satisfaction emerge (see Figure 6). The respondents of 2018 were especially satisfied with the programmes *attitude towards international students* ($\bar{X}=1,7$) and the *library facilities* ($\bar{X}=1,9$), whereas *extracurricular activities* ($\bar{X}=2,5$) and *pedagogical methodology* ($\bar{X}=2,3$) were ranked least satisfying aspects.

All aspects were rated better in 2018 than they were in 2017. The biggest improvement is in *attitude towards international students*, which was rated best in 2017 as well. In general, the ranking of aspects remained virtually unchanged.

Figure 6: Satisfaction with different aspects of Erasmus Mundus (GIS 2018)



Note: High values correspond to low levels of satisfaction.

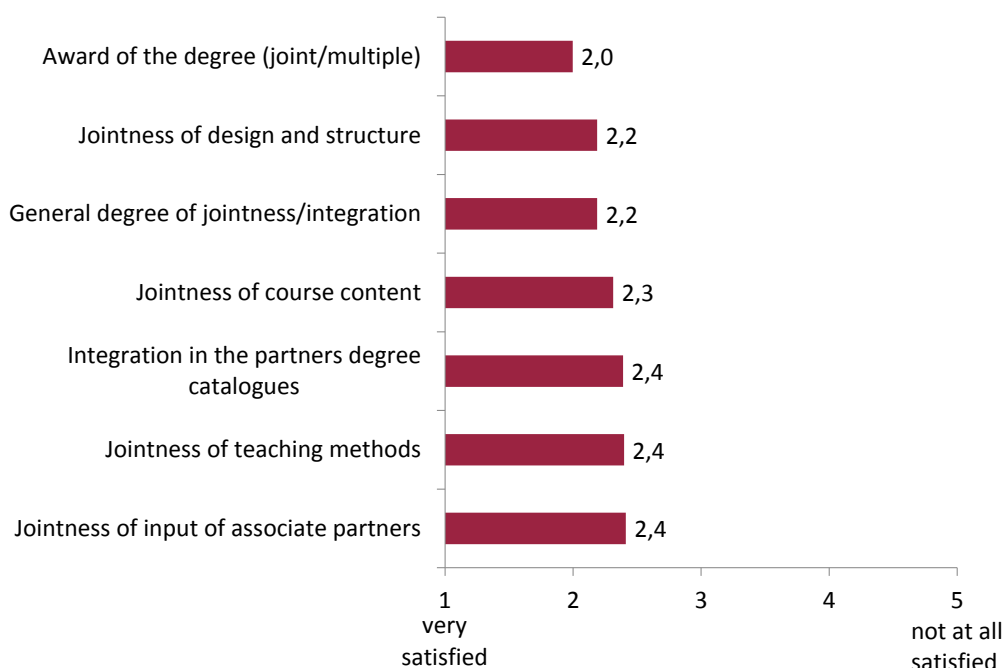
Students and graduates (less than three years after graduation), n=330.

Wording of the question: "Please rate your satisfaction with the following aspects of your EMJMD/EMMC studies."

Data Source: Graduate Impact Survey 2018.

Furthermore, participants were asked about their satisfaction with the joint aspects of Erasmus Mundus (see Figure 7). Graduates and students were, on average, most satisfied with the award of the degree ($\bar{x}=2,0$), followed by the general degree of jointness and of design and structure. In contrast, participants were a bit less satisfied with the integration of partners' degree catalogues, the teaching methods and the input of associate partners.

Compared to 2017, all ratings have improved slightly, most notably the jointness of design and structure. Also differences by regional origin are very small. Graduates from non-EU Europe rate the jointness of design and structure slightly worse, whereas graduates from South Asia rate it particularly good. Graduates from all over Europe also rate the jointness of course content slightly worse (those from Africa especially well) and the graduates from EU countries also rate integration in the partners degree catalogues a bit worse. Graduates from Africa on the other hand rate the jointness of teaching methods above average.

Figure 7: Satisfaction with joint aspects of Erasmus Mundus (GIS 2018)

Note: High values correspond to low levels of satisfaction.

Students and graduates, data 2018, n=1,222.

Wording of the question: "Please rate your satisfaction with the joint aspects of your EMJMD/EMMC studies."

Data Source: Graduate Impact Survey 2018.

3.1.3. Suggestions for improvement

In addition to the satisfaction with different aspects of Erasmus Mundus, survey participants were asked to make improvement suggestions regarding the attractiveness and career impact of Erasmus Mundus. These open-ended questions aimed to give respondents the opportunity to define their own central issues and provide room for ideas how to improve the Erasmus Mundus experience.

Many survey participants wished for **more support and guidance during the programme**, especially in regard to organisational and financial issues in student life. For instance, acquiring a visa or finding a suitable and affordable accommodation were reported as major challenges, especially for non-EU students and those obtaining scholarships. Assistance finding accommodation, on the one hand, and adjustment of scholarships to the living costs of a host country, on the other hand, could improve the Erasmus Mundus study experience. Furthermore, some participants suggested (better) introductions to each host university (e.g. library, faculty staff, and cafeteria).

The **organisation of Erasmus Mundus** was assessed differently depending on the particular programme as well as the host university. While some respondents brought out the good coordination and cooperation between the partner universities, others saw

room for improvement in these very same aspects. The latter suggested re-assessments and harmonization of the partnerships and curricula on a regular basis.

Regarding the **content of the programmes**, respondents suggested more language, cultural, business and entrepreneurial courses. Also, more flexibility regarding the choice of courses was proposed, in order to allow specialisation and to adjust the curriculum to the diverse student backgrounds.

Another frequently mentioned aspect concerned **enhancing student networks** – not only within a particular study programme but also between different EMJMD programmes. Furthermore, initiatives improving exchange with local students and prospective employers were suggested.

A lot of the respondents brought up the issue of **improving the links between the theoretical content of the study courses and the “reality” on the labour market**. They suggested more practice-oriented courses, more projects and collaborations with companies, as well as support in finding internships and jobs (e.g. via job fairs or career mentoring). Moreover, according to respondents **better marketing strategies** for each EMJMD programme and the EMJMD, in general, could improve its visibility and reputation and facilitate the studies-to-job transition. Easier recognitions of degrees in various countries, as well as help with acquiring a visa after graduation were also mentioned as potentially helpful.

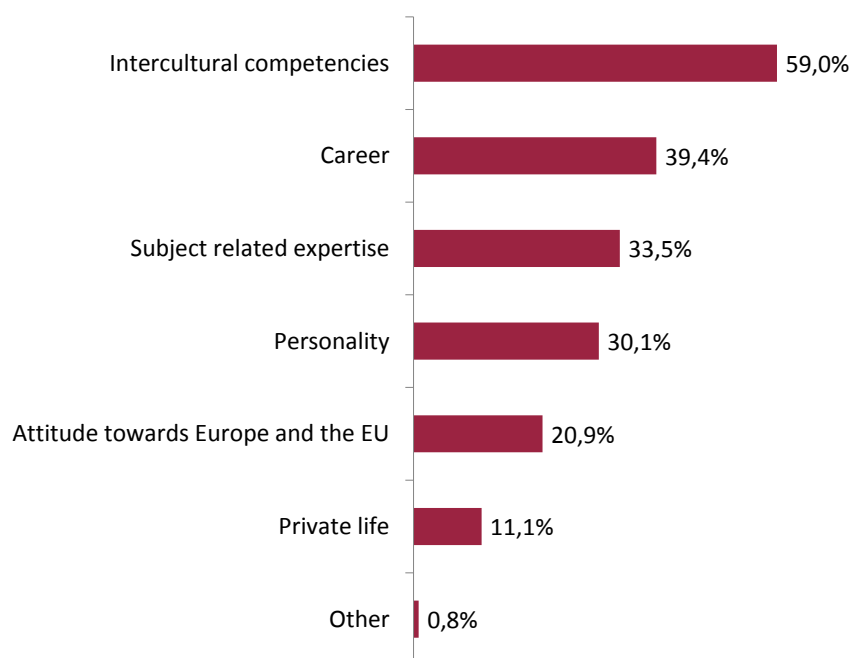
3.2. Impact of Erasmus Mundus

The Graduate Impact Survey, as its name indicates, aims at identifying aspects of the EMJMD/EMMC programmes that have the greatest impact on both personal and professional life of students and alumni. The following section takes an in-depth look at relevant aspects and impacts of the Erasmus Mundus Joint Master Programmes.

3.2.1. General impact

As can be seen in Figure 8, the majority of graduates (59%) perceive *intercultural competencies* gained during their studies as the greatest impact of Erasmus Mundus. Furthermore, 39% see the greatest impact of the programme on their *career*, followed by the impact on *subject related expertise* (34%) and *personality* (30%). Every fifth graduate considers his/her *attitude towards Europe and the EU* (21%) to be affected by Erasmus Mundus. Comparably few report an impact on their private life (11%). In comparison to GIS 2017, these trends have remained virtually unchanged.

Figure 8: Percentage of graduates who have perceived the respective impact of Erasmus Mundus (GIS 2012-2018)



Multiple answers were possible.

All Graduates, up to two answers, n=7,475.

Wording of the question: "Where do you personally see the greatest impact of Erasmus Mundus?"

Data Source: Graduate Impact Survey 2012-2018.

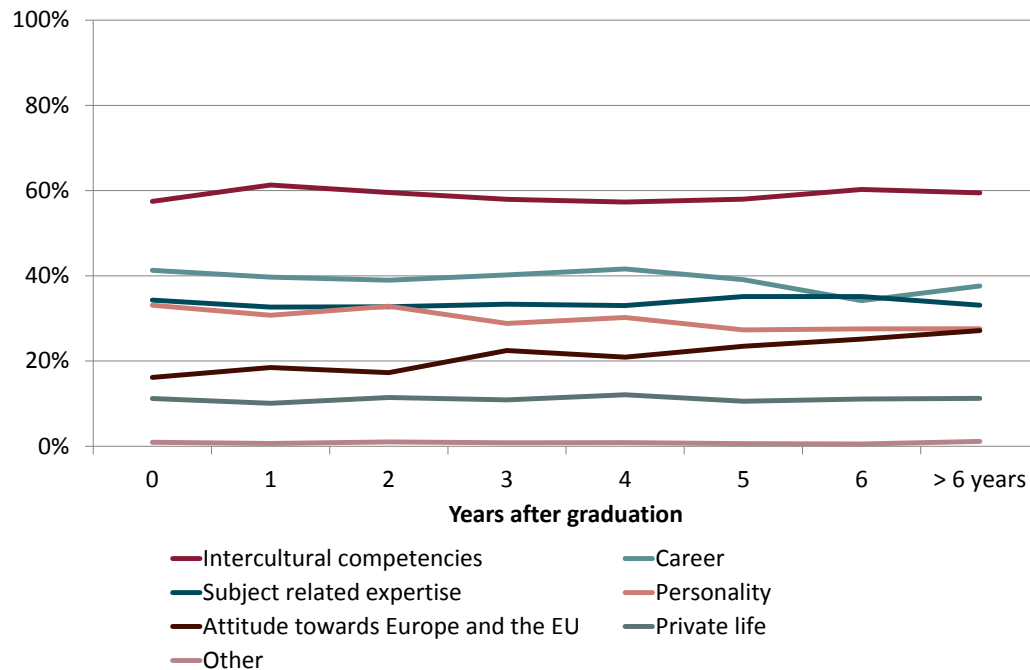
Taking into account the number of years that have passed between graduation and participation in the survey, perception has remained rather stable over time. Figure 9 shows how the perceived impact on different aspects develops after graduating from Erasmus Mundus. Since external effects such as changes of the programme structure and courses or general political and social developments can occur over time, minor changes in the perceived impact as shown in Figure 9 should not be over-interpreted. It is rather the general trend that needs to be observed: The perceived impacts on *inter-cultural competencies*, *private life* and *subject-related expertise* remain more or less stable over time (i.e. no statistically significant change). The only aspect that increases in relevance over the years after graduation is the *attitude towards Europe and the EU*.¹² On the contrary, the perceived impact on *personality*¹³ and *career*¹⁴ decreases slightly over time.

¹² Spearman's- ρ = 0,086; $p < 0,001$; $n = 7.456$.

¹³ Spearman's- ρ = -0,041; $p < 0,001$; $n = 7.456$.

¹⁴ Spearman's- ρ = -0,023; $p < 0,05$; $n = 7.456$.

Figure 9: Percentage of graduates who have perceived the respective impact of Erasmus Mundus by years after graduation (GIS 2012-2018)



Multiple answers were possible.

All Graduates, n=7,456.

Wording of the question: "Where do you personally see the greatest impact of Erasmus Mundus?"

Data Source: Graduate Impact Survey 2012-2018.

In regard to the impact of Erasmus Mundus, there are considerable differences by region of origin (see Table 5): For example, graduates from Latin America consider the impact on their *career* as one of the two most relevant aspects of their EM, much less frequently reported by graduates from East Asia and North America. Furthermore, the perceived relevance of *subject related expertise* is far above average among graduates from Africa, and rather "uncommon" among those from Latin America. In contrast to graduates from Europe (EU and non-EU) and Middle East/Central Asia, graduates from North America and Oceania only rarely consider their *personality* to be affected by Erasmus Mundus. The latter see an effect on their *private life*, unlike graduates from South Asia and Africa. As mentioned above, *intercultural competencies* seem to be the most important impact of Erasmus Mundus, very frequently indicated by students from North America. Finally, the *attitude towards the EU* seems to be a relevant impact for alumni from outside of Europe, especially among those from East Asia, South Asia and Oceania (see Table 5).

Table 5: Percentage of graduates who have perceived the respective impact of Erasmus Mundus, by region of origin (GIS 2012-2018)

	Career	Subject related expertise	Personality	Private life	Intercultural competencies	Attitude towards Europe and the EU	Other
EU	32,4%	31,3%	37,0%	15,9%	62,7%	13,1%	1,3%
Europe (non-EU)	42,3%	30,4%	37,4%	9,7%	58,1%	16,2%	0,8%
South Asia	44,3%	40,2%	29,2%	3,7%	47,1%	28,9%	0,6%
South-East Asia	41,0%	38,0%	28,5%	7,9%	55,9%	24,1%	0,6%
East Asia	24,9%	32,5%	28,1%	11,3%	62,1%	33,5%	1,0%
Oceania	39,2%	32,4%	9,5%	24,3%	58,1%	28,4%	2,7%
Middle East/Central Asia	29,5%	28,7%	38,4%	6,7%	61,2%	27,2%	0,0%
Africa	44,2%	43,0%	21,5%	3,8%	60,0%	21,8%	0,0%
North America	24,3%	33,9%	18,4%	24,6%	68,6%	24,1%	2,0%
Latin America	50,1%	25,0%	24,3%	15,5%	65,2%	15,9%	0,7%
Total	39,4%	33,5%	30,1%	11,1%	59,0%	20,9%	0,8%

Multiple answers were possible.

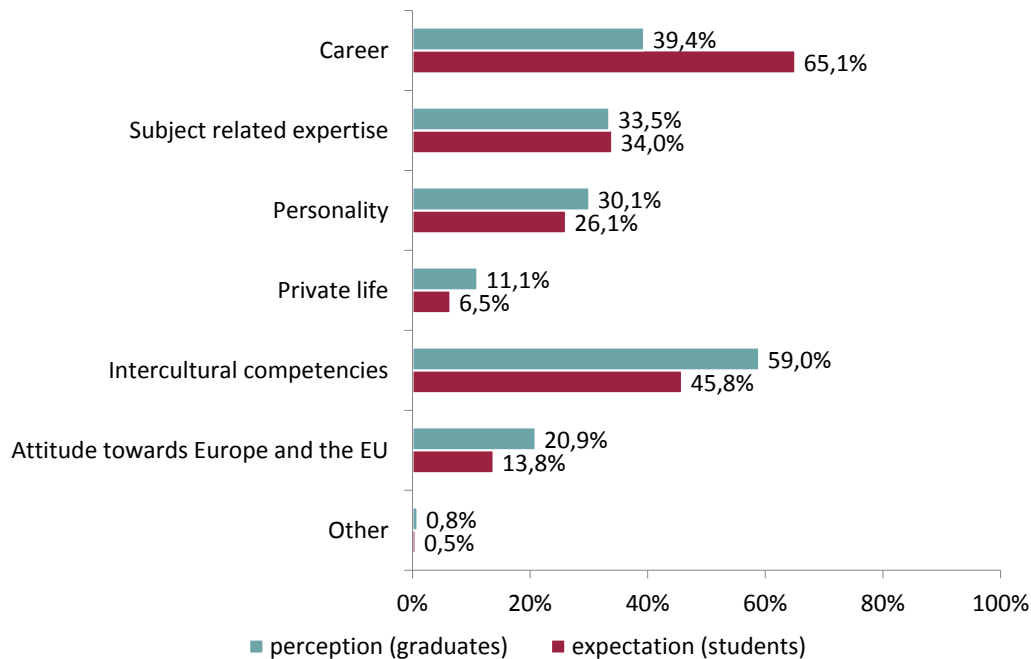
All Graduates, n=7,456.

Wording of the question: "Where do you personally see the greatest impact of Erasmus Mundus?"

Data Source: Graduate Impact Survey 2012-2018.

Figure 10 compares aspects of Erasmus Mundus which current students expect, and graduates perceive to have the greatest impact. While graduates most frequently refer to the *intercultural competencies* as one of the two most important aspects of Erasmus Mundus (59%), "only" 46% of students expect such competencies to be affected by their study programme. As discussed in the GIS 2017 report, a possible explanation may be that students underestimate or misjudge the importance of intercultural skills during their studies and after graduation. Graduates, who have probably already encountered different intercultural obstacles, consider these competencies as a more relevant aspect of Erasmus Mundus study programme. Students' expectations also differ from graduates' perception with regards to Erasmus Mundus impact on their *career*: Nearly two thirds of students (65%) expect their *career* to be affected by the programme, while this was perceived by "only" 39% of graduates. Furthermore, students seem to underestimate the impact of Erasmus Mundus on their *personality*, *personal life* as well as the *attitude towards Europe and the EU*.

Figure 10: Percentage of graduates who have perceived the respective impact of Erasmus Mundus vs. percentage of current Erasmus Mundus students who expect the respective impact from EM (GIS 2012-2018)



Multiple answers were possible.

Students (n=3,048) and Graduates (n=7,475).

Wording of the question: "Where do you personally see the greatest impact of Erasmus Mundus?"

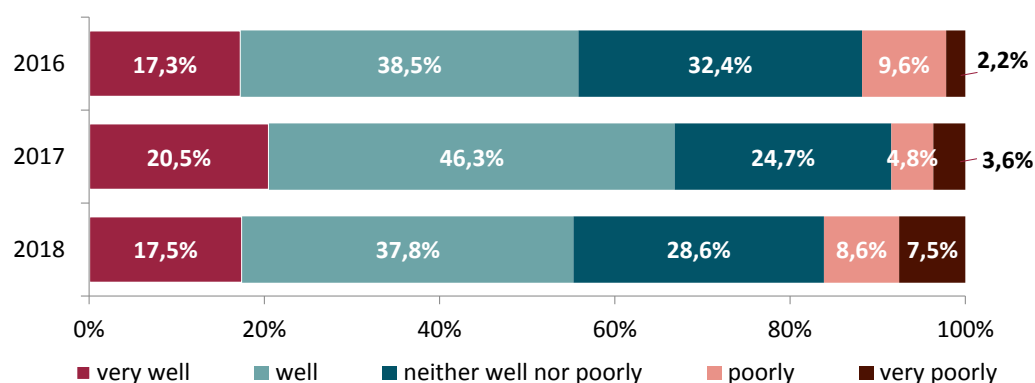
Data Source: Graduate Impact Survey 2012-2018.

3.2.2. Perceived preparedness for the labour market

In the previous section, it was observed that *career* is often perceived and even more often expected to be an important impact of Erasmus Mundus. The following section investigates whether the Erasmus Mundus programme has equipped graduates (according to their self-assessment) adequately to overcome potential obstacles on the labour market and helped them begin their professional life.

Figure 11 shows that graduates feel rather positive about the way Erasmus Mundus had prepared them for the labour market. Every second alumni (55%) felt well or very well prepared, while only 16% assessed their level of preparedness as poor or very poor. However, in comparison with the previous two survey rounds,¹⁵ it is noteworthy that the share of students who feel (very) poorly prepared for the labour market has increased from 2,2% in 2016 to 7,5% in 2018.

¹⁵ GIS 2017: http://www.em-a.eu/fileadmin/content/GIS/GraduateImpactSurvey_2017_final_web.pdf
GIS 2016: https://www.em-a.eu/fileadmin/content/GIS/Summary_GIS-2016.pdf

Figure 11: Preparedness for the labour market (GIS 2016-2018)

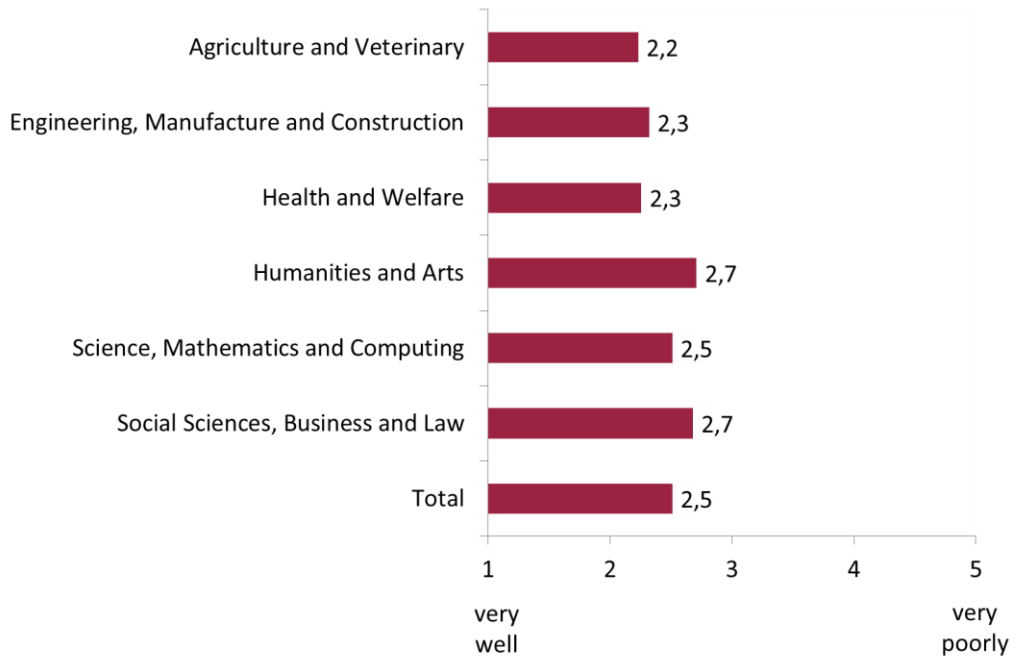
Graduates (less than seven years after graduation), n (2016)=1,103; n (2017)=935; n (2018)=756.

Wording of the question: "How well has your Erasmus Mundus study programme prepared you for the labour market?"

Data Source: Graduate Impact Survey 2016-2018.

Furthermore, graduates in different study fields assess their preparedness for the labour market differently. As Figure 12 shows, graduates of Health and Welfare estimate their preparation for the labour market most often as good while graduates in Humanities and Arts as well as Social Sciences tend to be less satisfied with how Erasmus Mundus prepared them for the labour market. In general, the rating in all fields of study fell somewhat equally since 2017.

Figure 12: Preparedness for the labour market by field of study (GIS 2018; average on a scale from 1 (“very well”) to 5 (“very poorly”))



Graduates (less than seven years after graduation), n=756.

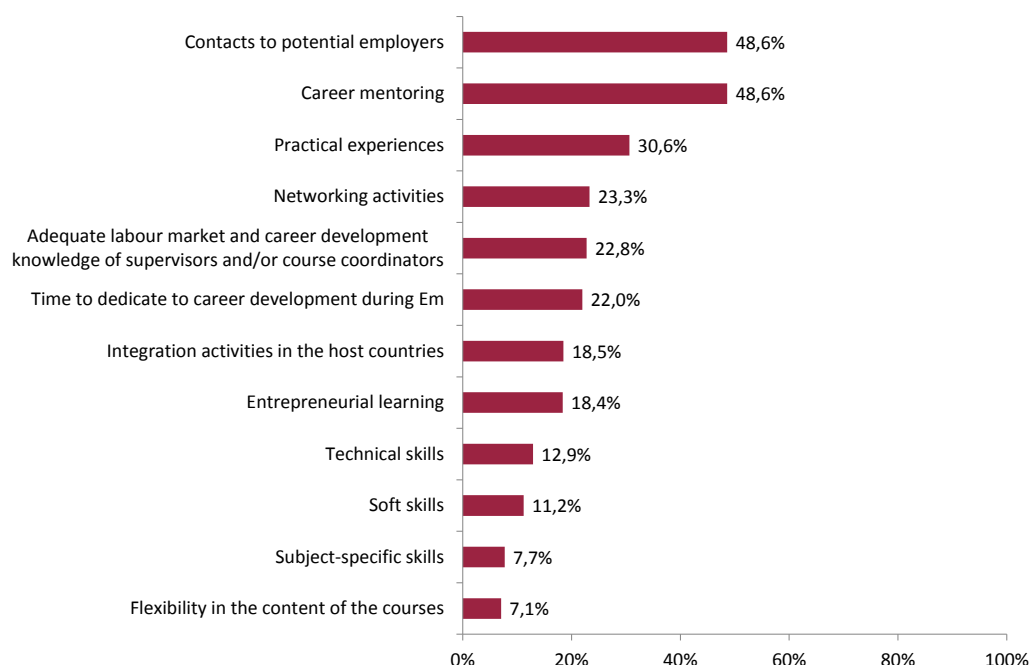
Wording of the question: “How well has your Erasmus Mundus study programme prepared you for the labour market?”

Data Source: Graduate Impact Survey 2018.

In order to determine where further improvements can be achieved, graduates were asked what their study programme had lacked in terms of preparation for the labour market. According to graduates, their programme lacked mostly *contacts to potential employers* (49%), *career mentoring* (49%) and *practical experiences* (31%), as Figure 13 shows. Other frequently named elements were *networking activities* (23%), *adequate labour market and career development knowledge of supervisors and/ or course coordinators* (23%) and *time to dedicate to career development* (22%). In contrast, *technical skills* (13%), *soft skills* (11%), *subject specific skills* (8%) or the *flexibility in the content of the courses* (7%) were less often seen to be lacking. Hence, it can be summarised that graduates rather observed they had shortcomings in organisational or practical aspects than lacking relevant skills. Moreover, nearly every second graduate stated that his/her programme provided no (or not sufficient) career mentoring.

Values have barely changed since 2017, with two exceptions: The element *Adequate Labour Market and Career Development Knowledge of Supervisors and / or Course Coordinators* was approved by significantly more graduates in 2018, while *Contacts to Potential Employers* lost about the same amount of approval.

Figure 13: Percentage of graduates indicating that the respective elements were lacking in their Erasmus Mundus programme in order to be better prepared for the labour market (GIS 2018)



Graduates (less than seven years after graduation), n=751; up to three answers.

Wording of the question: "What did your Erasmus Mundus degree programme lack in terms of preparation for the labour market?"

Data Source: Graduate Impact Survey 2018.

Interesting are also some special features according to regional origin. Graduates from Non-EU-Europe emphasise the lack of *Integration activities in the host countries* much more frequently than all others, graduates from South-Asia particularly often miss the *Adequate labour market and career development knowledge of supervisors and/or course coordinators*, graduates from East-Asia particularly often emphasise the lack of *Networking activities* and the lack of *technical skills*, while graduates from North-America particularly often criticise the lack of *Contacts to potential employers* and the lack of *Flexibility in the content of the courses*.

3.2.3. First six months after graduation

The following section analyses what graduates did during the first six months after their graduation. Answers from participants who had recently graduated (i.e. who graduated in 2018) are excluded in these statistics in order to receive an unaltered picture. In the survey, whenever a question referred to the job of the participants, the term *professional job* was used and this was explicitly defined as *a job from which you can make a living*. Therefore, in this context, a *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 graduates' fields of study.

As can be seen in Figure 14, the majority of graduates looked for a professional job (36%), continued their studies or applied for further studies (25%). 18% started a job they had found during their studies, while 10% returned to the job they had before starting their EMJMD. 2% set up their own business during the first six months after graduating.

Compared to the GIS 2017, more graduates are looking for a job and a little less returned to their previous job or continue their studies. However, the regional differences are remarkable: 30% of graduates from East Asia have started working in a job they already found during their studies, compared to just 11% from Africa. Almost a quarter of Africans returned to the job they had before their EMJMD/EMMC, but virtually none of East/Central Asia, just 3% of EU citizens, 5% of non-EU Europeans and Latin Americans and 6% of North Americans. By contrast, almost half of those from East/Central Asia have continued their studies, which only applies to 13% of North Americans.

Figure 14: Percentage of graduates who have carried out the following activity during the first six months after graduation (GIS 2018)



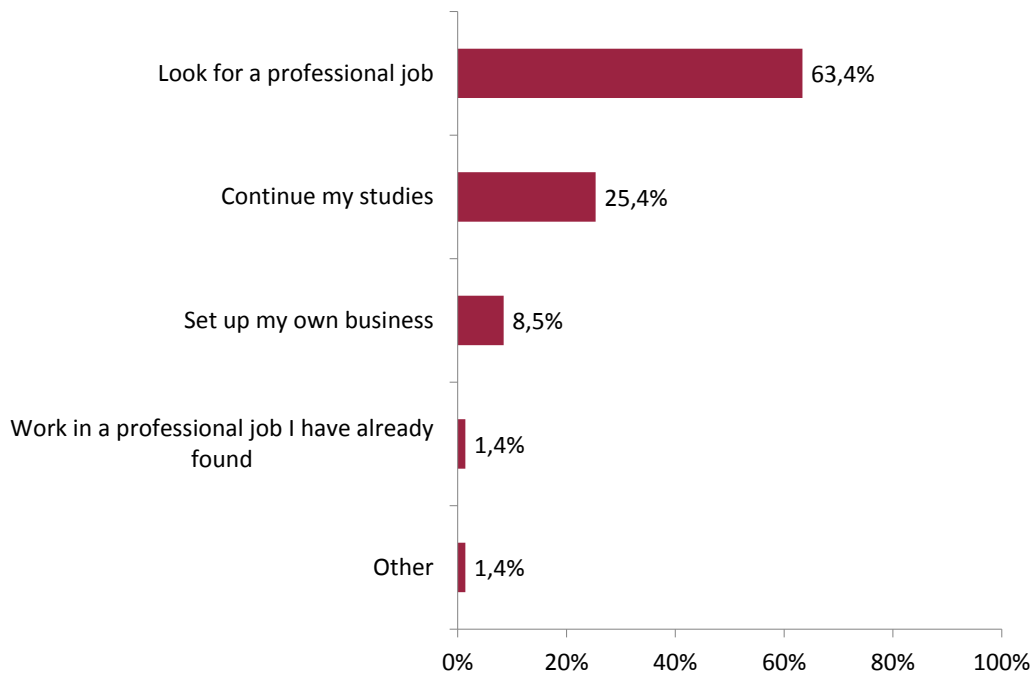
Graduates (at least one year after graduation), n=1,109

Wording of the question: "In the first six months after your Erasmus Mundus graduation, what did you do?"

Data Source: Graduate Impact Survey 2018.

Graduates' experiences during the first six months after graduation differ clearly from the plans of current Erasmus Mundus students (see Figure 15). Students plan much more often to look for a job (63%) or set up their own business (9%) than graduates report to have done. A quarter of the students plan to continue their studies – just as many as have continued among the graduates.

Figure 15: Students: Plans after graduation (GIS 2018)

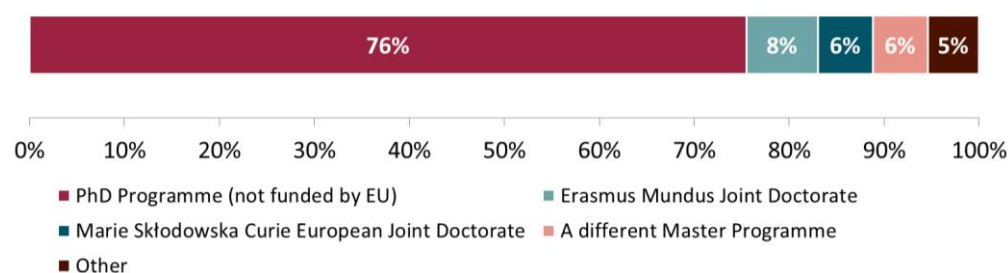


Students, n=72

Wording of the question: "What are your plans after graduating with an Erasmus Mundus Joint Master Degree?"

Data Source: Graduate Impact Survey 2018.

Figure 16 shows the types of further studies that graduates had pursued after graduating from Erasmus Mundus. The great majority chose a PhD programme not funded by the EU (76%). 13% pursued an Erasmus Mundus Joint Doctorate or a Marie Skłodowska Curie European Joint Doctorate, while 6% started (or applied for) another Master's programme.

Figure 16: Further studies after Erasmus Mundus (GIS 2016-2018)

Graduates (at least one year after graduation), n=796

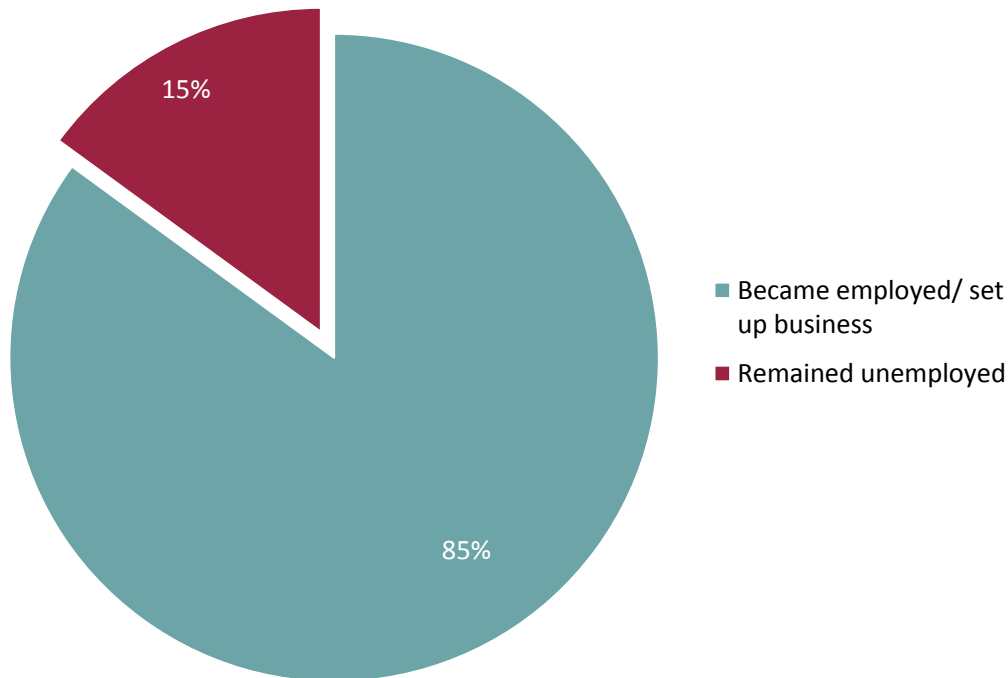
Wording of the question: "What type of further studies are you considering?"

Data Source: Graduate Impact Survey 2016-2018.

The following Figure 17 only looks at those graduates who have been seeking or taking up a job in the first six months after graduation (i.e. 65% of all graduates).¹⁶ Of this group, 85% actually took up employment in the first few months after graduation and 15% did not find a job (GIS 2017: 13%). In the subsequent analyses, the latter group (i.e. graduates who remained unemployed during the first six months after graduation) will be referred to as "unsuccessful job-seekers". Please note that these numbers refer only to unsuccessful job-seekers immediately after graduation and do not represent the share of currently unemployed Erasmus Mundus graduates. Among all graduates who participated in the survey 2018, 4% were currently unemployed and looking for a job (see section 3.2.5).

¹⁶ Graduates that had stated one of the following (see Figure 14): *I looked for a professional job, I started working in a professional job [...], I returned to the professional job I had before my EMJMD/EMMC or I set up my own business.*

Figure 17: Only graduates who have been looking for a job: Employment status six month after first job search (GIS 2018)



Only graduates who have been seeking or taking up a job in the first six months after graduation (65% of all graduates).

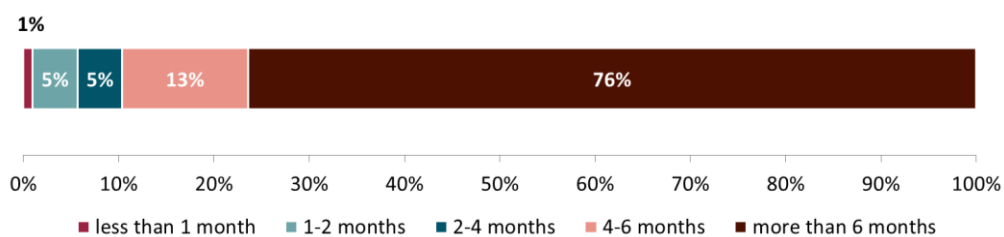
Graduates (at least one year after graduation) looking for a job after graduation, n=709

Wording of the questions: "In the first six months after your Erasmus Mundus graduation, what did you do?" If "I looked for a professional job": "Did you find a professional job as a result of your search?"

Data Source: Graduate Impact Survey 2018.

The vast majority (76%) of graduates who remained unemployed after their initial job search (unsuccessful job-seekers) spent more than six months searching for a job (see Figure 18).

Figure 18: Unsuccessful job-seekers: Time spent searching for first job (GIS 2018)



Unsuccessful job-seekers: Graduates who remained unemployed in the first six months after graduation even though they were looking for a job.

Graduates (at least one year after graduation) who remained unemployed after their initial job search, n=106

Wording of the question: "How much time did you spend searching for a professional job?"

Data Source: Graduate Impact Survey 2018.

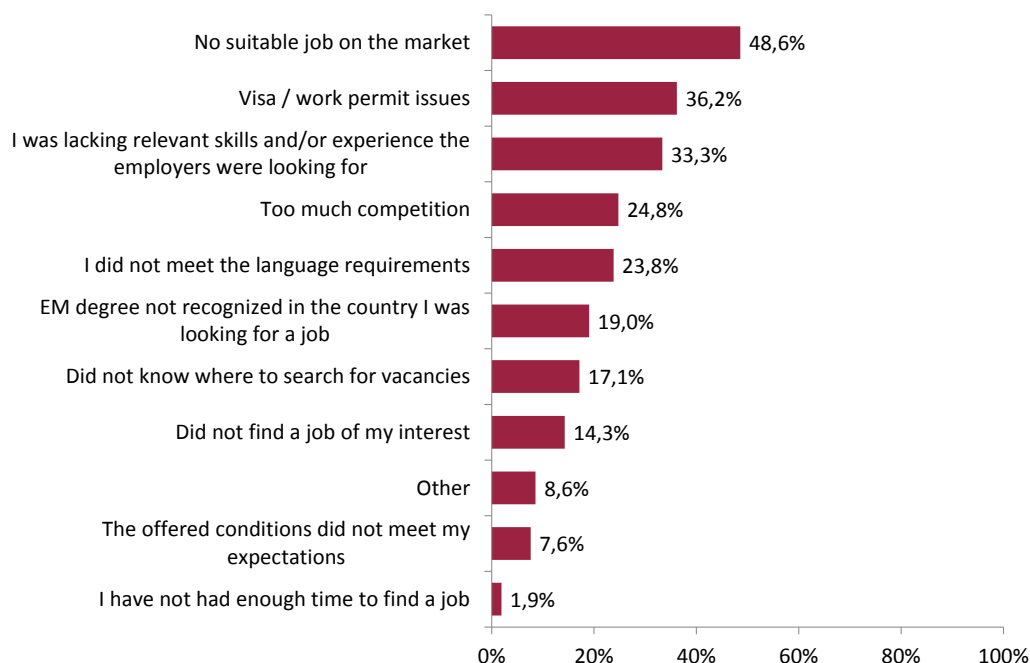
Asked about the three main reasons for not having found a job during their initial search, "unsuccessful job-seekers" reported not being able to find a *suitable job on the*

market (49%), having *visa/ work permit issues* (36%) and *lacking relevant skills and/or experience employers were looking for* (33%). One in four unsuccessful job-seekers indicated the *competition* (25%) or the *language requirements* (24%) as having been detrimental in their search for a job (see Figure 19). Interestingly, 19% of unsuccessful jobseekers report that their EM degree was not recognised in the country where they were looking for a job.¹⁷

It should be noted that the examined subsample (graduates (at least one year after graduation) who remained unemployed after their initial job search) is rather small (n=105) and their responses therefore not perfectly conclusive. However, it is statistically permissible to distinguish the more frequently mentioned reasons from the less frequently mentioned ones. Nevertheless, the low number of cases makes it impossible to distinguish between the regions where the job was sought. Even time comparisons (in the GIS 2017 there were only 82 answers) are only possible to a limited extent. However, *no suitable job on the market*, *lacking relevant skills* and *not meeting language requirements* were mentioned much more often than in 2017, while *visa/work permit issues* were much less common.

¹⁷ This corresponds to 2% of all graduates (20% of the 15% unsuccessful job seekers of 65% who looked for a job).

Figure 19: Unsuccessful job-seekers: Reasons for not having found a professional job within the first six month (GIS 2018)



Unsuccessful job-seekers: Graduates who remained unemployed in the first six months after graduation even though they were looking for a job.

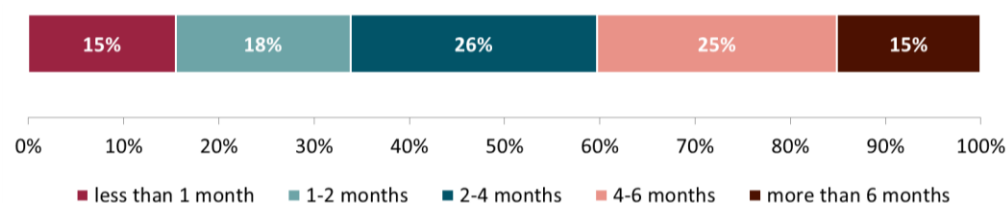
Graduates (at least one year after graduation) who remained unemployed after their initial job search, n=105 up to three answers

Wording of the question: "What do you think are the reasons for not having found a professional job after your Erasmus Mundus graduation?"

Data Source: Graduate Impact Survey 2018.

The majority of graduates (60%) who found a job as a result of their initial search after graduation (successful job-seekers) did so in the first four months of their search. A quarter of the successful job-seekers needed between four and six months to find a job and 15% indicated searching for more than six months (see Figure 20).

Figure 20: Successful job-seekers: Time spent searching for first job (GIS 2018)



Successful job-seekers: Graduates who found a job in the first six months after graduation.

Graduates (at least one year after graduation), who found a job as a result of their initial job search, n=278

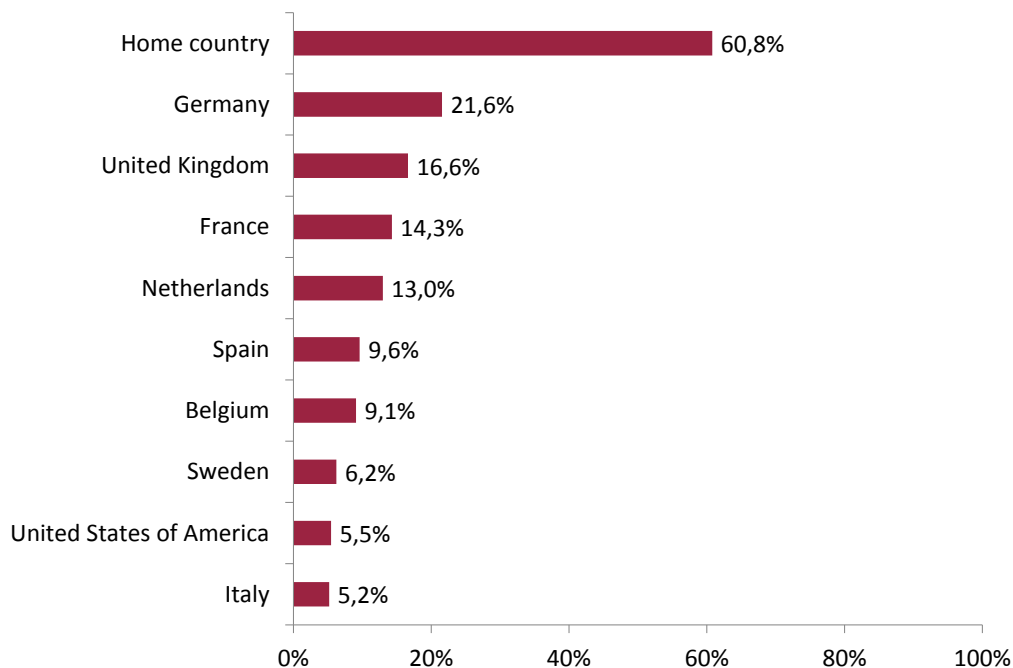
Wording of the question: "How much time did you spend searching for this job?"

Data Source: Graduate Impact Survey 2018.

Graduates who looked for a job directly after their graduation (whether successful or not) were also asked to name up to three countries in which they had searched. As shown in Figure 21, most of the participants (61%) named their home country, while Germany, the United Kingdom, France, the Netherlands, Spain, Belgium, Sweden, the United States of America and Italy were also among the top ten preferred job locations. By the way, this list remains almost unchanged if you do not take into account EU citizens.

This list of top ten countries has remained unchanged compared to the GIS 2017, it is the order that has changed slightly – Spain and Sweden have switched positions with Belgium and Italy respectively. In general, it can be said that apart from the home country it is EU countries that are the most preferred locations for the first job after graduation.

Figure 21: Preferred location of first job, top ten (GIS 2018)



Graduates (at least one year after graduation) who looked for a job after their graduation, n=385 up to three answers

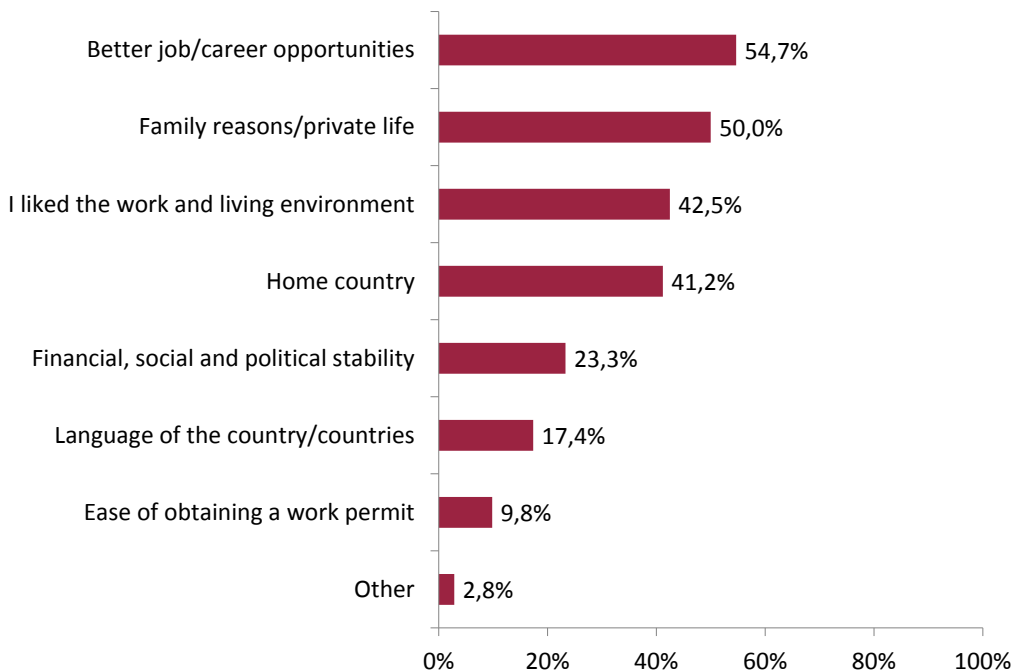
Wording of the question: "In which country/countries were you mainly looking for a professional job?"

Data Source: Graduate Impact Survey 2018.

Regarding the reasons for seeking a job in a particular country, *better job/ career opportunities* (55%) followed by *family reasons/ private life* (50%) and *work and living environment* (43%) are the three most relevant reasons (see Figure 22). In accordance to the preferred location it is of little surprise that *home country* (41%) is also a very

often named reason when selecting the location of first job. Similar reasoning can be observed in regard to the place of residence (see chapter 3.4).

Figure 22: Reasons for preferred location of first job (GIS 2018)



Graduates (at least one year after graduation) who looked for a job after their graduation, n=386

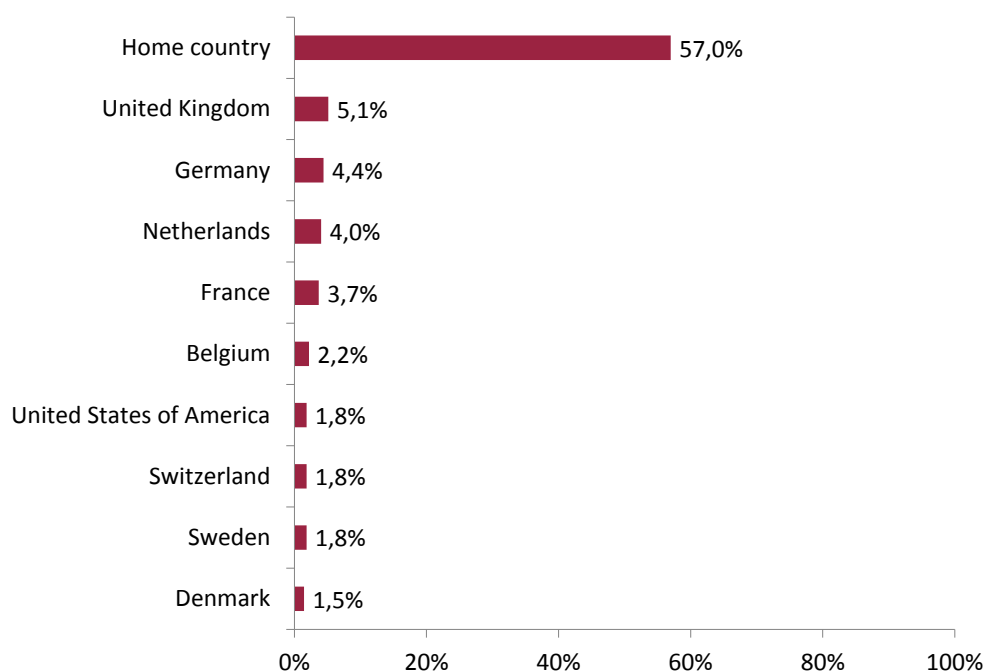
Wording of the question: "Why were you looking in this/these country/countries specifically?"

Data Source: Graduate Impact Survey 2018.

3.2.4. First job after graduation

Graduates who became employed immediately after completing their Erasmus Mundus degree programme were asked a series of follow-up questions about their first job after graduation. For instance, Figure 23 shows the top ten countries in which graduates found their first professional job: In more than half of the cases (57%) this was their home country. Among those graduates who found a job outside their home country, the United Kingdom, Germany and the Netherlands were the three most frequently named countries.

Figure 23: Location of first professional job (GIS 2018)



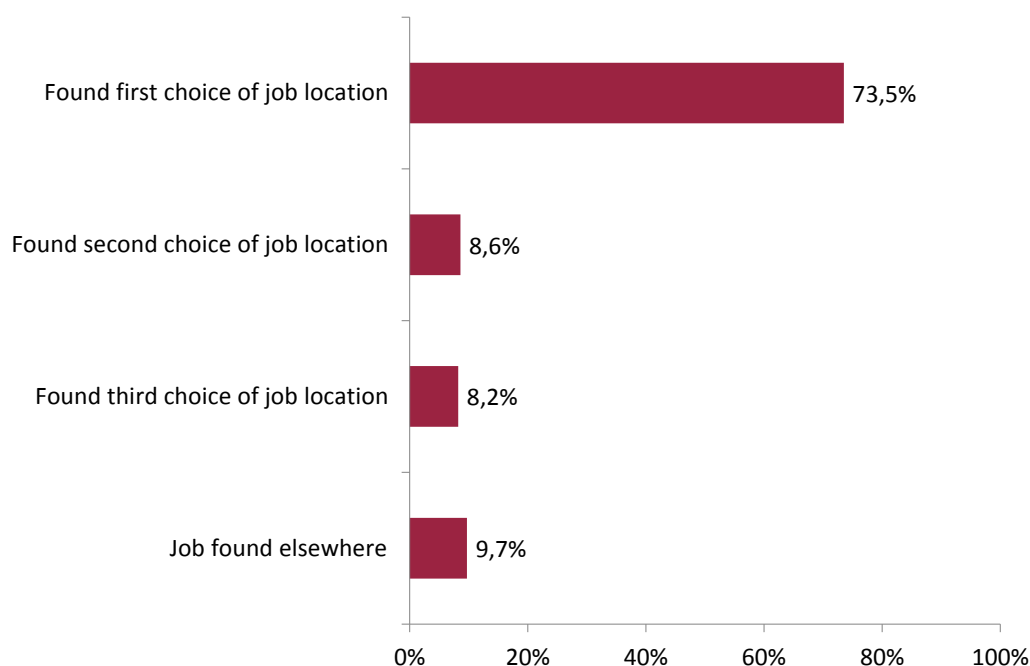
Only top ten shown.

Graduates (at least one year after graduation) who looked for a job after their graduation, n=272

Wording of the question: "In which country did you eventually find your professional job?"

Data Source: Graduate Impact Survey 2018.

Furthermore, the majority of graduates (74%) found a professional job at their most preferred job location – that is a clear increase compared to the GIS 2017 where there were 60%. 17% of graduates found a job in their second or third choice of job location while 10% found a job elsewhere (see Figure 24).

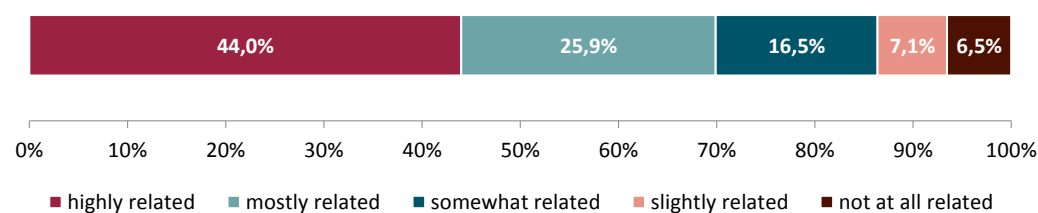
Figure 24: Location of first professional job (preferences met) (GIS 2018)

Graduates (at least one year after graduation) who looked for a job after their graduation, n=268

Wording of the question: "In which country/countries were you mainly looking for a professional job? In which country did you eventually find your professional job?"

Data Source: Graduate Impact Survey 2018.

In regard to the extent to which the first professional job was related to the Erasmus Mundus studies, graduates report a rather high level of relatedness: As can be observed in Figure 25, 44% consider their first job to be *highly related* and 26% to be *mostly related* to their field of study (70% in total, unchanged since GIS 2017). 14% described their first professional job as *slightly* or *not at all related* to their studies.

Figure 25: Relatedness of job and Erasmus studies (GIS 2018)

Graduates (at least one year after graduation) who started a professional job after their graduation, n=382.

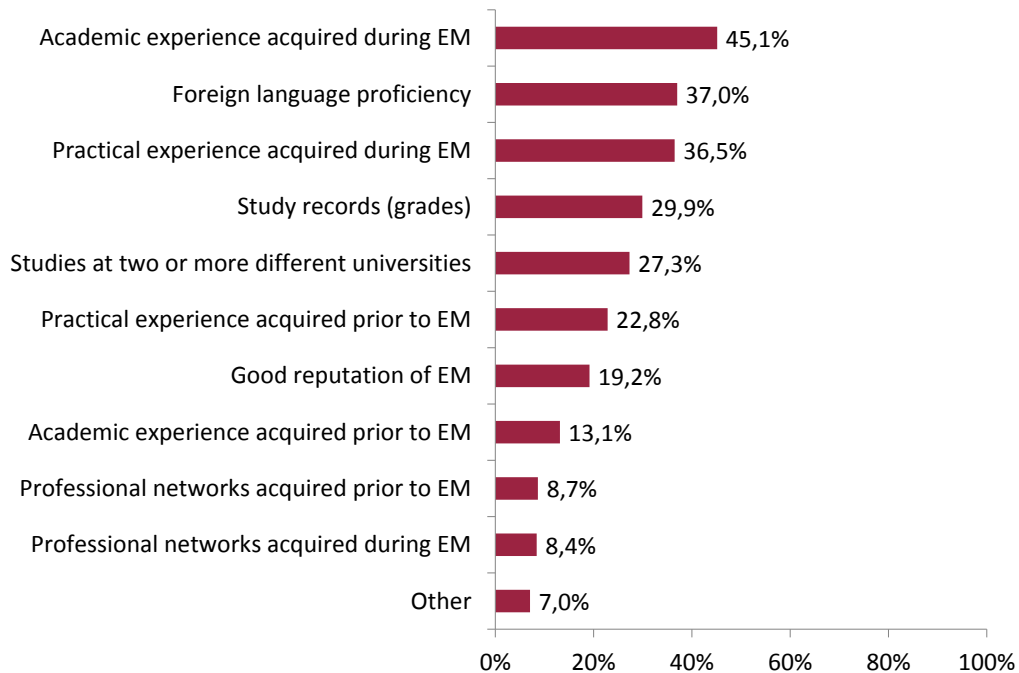
Wording of the question: "To what extent was the field of study of your EMJMD/EMMC related to your first professional job after graduating with an Erasmus Mundus degree?"

Data Source: Graduate Impact Survey 2018.

Graduates who started a professional job directly after graduation were asked which factors regarding the Erasmus Mundus programme they would consider most im-

portant for their first employer (after graduation). As shown in Figure 26, graduates consider the academic experience (45%), the language proficiency (37%) and practical experience (37%) acquired during the Erasmus Mundus programme as the three most important employment criteria. The order of the factors is unchanged compared to GIS 2017 and the values differ only slightly.

Figure 26: Employability factors (GIS 2018)

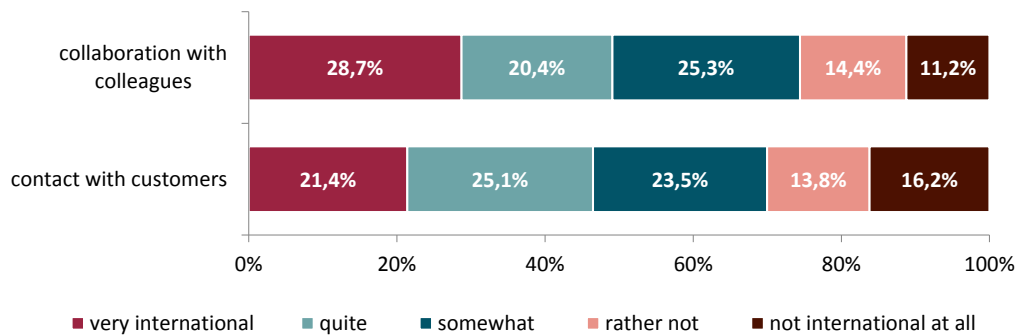


Graduates (at least one year after graduation) who started a professional job after their graduation, n=381.

Wording of the question: "Which of the following factors do you think were most important for your first employer (after your EMJMD/EMMC graduation) when hiring you?"

Data Source: Graduate Impact Survey 2018.

The importance of foreign language skills is further supported by the fact that the professional jobs of graduates are often highly international – in terms of collaboration with colleagues as well as contact with customers (see Figure 27). More than 70% of graduates described their first professional job after graduation as at least somewhat international (regarding both aspects). However, internationality was even more pronounced at GIS 2017 a year ago: around 80% reported at least *somewhat* and nearly 40% mentioned *very*.

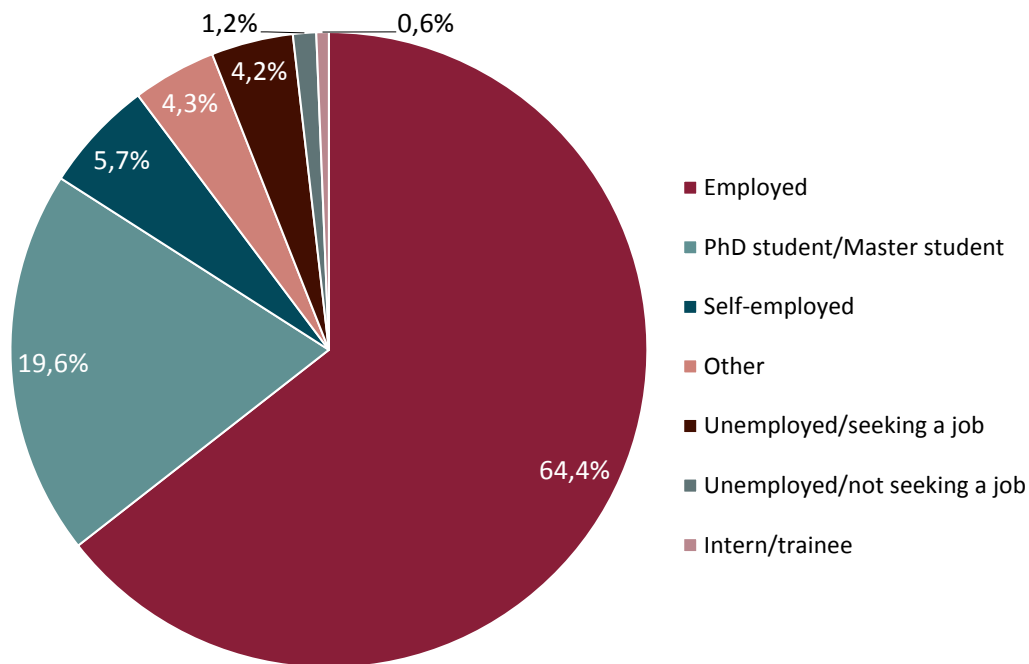
Figure 27: Internationality of the job (GIS 2018)

Graduates (at least one year after graduation) who started or returned to a professional job after graduation, n=383
Wording of the question: "How international is/was the job in terms of contact with customers? How international is/was the job in terms of collaboration with colleagues?"
Data Source: Graduate Impact Survey 2018.

3.2.5. Current occupation

At the time of the survey, nearly two thirds of graduates were employed (64%, see Figure 28). As discussed in the section 3.2.3, many Erasmus Mundus graduates choose to pursue further studies after their graduation. In accordance with this observation, 20% of graduates, who participated in the GIS 2018, stated they were pursuing a PhD or Master's degree at the time of the survey. The number of EMJMD/EMMC graduates who were unemployed and looking for a job is low (4%). In the last GIS 2017, 4%-points less were employed and still studying.

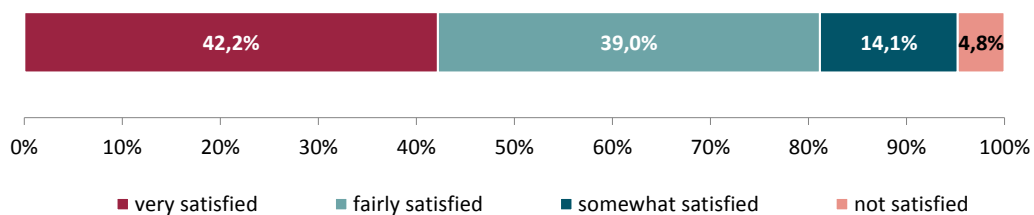
Figure 28: Current activity (GIS 2018)



Graduates (at least one year after graduation), n=1,105
Wording of the question: "What is your current occupation?"
Data Source: Graduate Impact Survey 2018.

Nearly all employed or self-employed graduates (95%) reported to be at least *some-what satisfied* with their current occupation, as can be seen in Figure 29. Only 5% were *not satisfied* with their current occupation. There are no changes compared to the GIS 2017.

Figure 29: Satisfaction with current occupation (GIS 2018)



Graduates (at least one year after graduation) who were employed or self-employed, n=775
Wording of the question: "How satisfied are you with your current occupation?"
Data Source: Graduate Impact Survey 2018.

3.2.6. Competencies

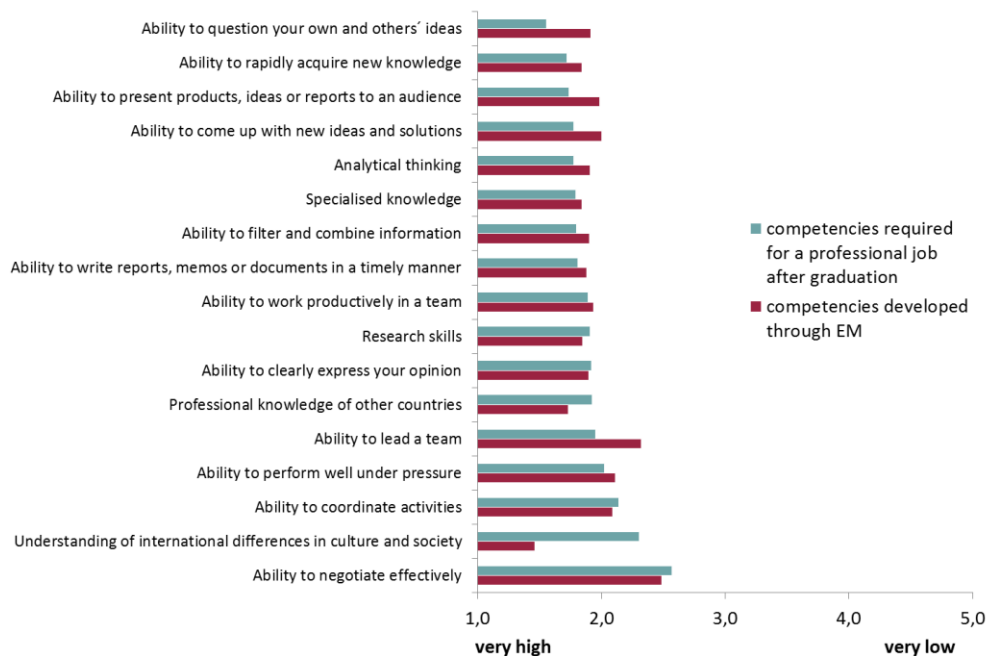
In order to evaluate whether the Erasmus Mundus programmes support students develop practically relevant competencies, graduates were asked to assess a wide-ranging array of competencies – whether any of them were required in their first pro-

fessional job after graduation and to what extent their Erasmus Mundus programme contributed to the development of this competency. Figure 30 compares the mean assessment of each required and developed competency. The list is sorted by requirements for a professional job; low values correspond to a high requirement or contribution.

The four most requested competencies are the abilities to *question own and others' ideas; rapidly acquiring new knowledge; present products, ideas or reports in a timely manner; coming up with new ideas and solutions*. And exactly to these four abilities is the contribution of EM still expandable. This also applies to the less highly rated ability to *lead a team*. For most of the other competences, EM's contribution is roughly in line with the requirements. For both internationalization competencies (*professional knowledge of other cultures; knowledge/understanding of international differences in culture and society*), EM's contribution is rated higher than the requirement.

Compared to GIS 2017, the *understanding of international differences in culture and society* is markedly lower (which fits the decline in the internationality of jobs, see Figure 27), but the contribution of EM is rated much better. *Question your own and others' ideas* and *team leading* are considered more important. The contribution of EM is also measured higher than in 2017 for *professional knowledge of other countries* and *ability to write reports, memos or documents in a timely manner*, but lower for *perform well under pressure*.

Figure 30: Average rating of required competencies vs. contribution by Erasmus Mundus (GIS 2018)



Graduates (at least one year after graduation) who were employed or self-employed, n=775

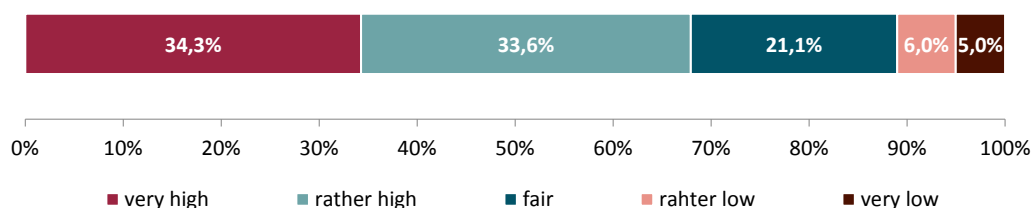
Sorted by competencies required for a professional job.

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

Data Source: Graduate Impact Survey 2018.

In regard to the language acquisition during the Erasmus Mundus studies, the majority of the survey participants reported a very or rather high (34% each) improvement of their non-native language skills – which together is 10 percentage points higher than in the GIS 2017. Additional 21% indicated a fair improvement of their language skills (see Figure 31).

As discussed in section 3.2.4, Erasmus Mundus graduates, who started a professional job within six months of graduation, consider foreign language proficiency as the second most important employability factor. Given the rather high improvement in language skills, Erasmus Mundus contributes to the higher employability of its alumni.

Figure 31: Improvement in non-native language skills (GIS 2018)

Students and graduates (less than three years after graduation), n=330

Wording of the question: "How would you rate the improvement in your non-native language skills due to your EMJMD/EMMC?"

Data Source: Graduate Impact Survey 2018.

3.3. Profile of Erasmus Mundus

As one of the main objectives of Erasmus Mundus Joint Master Degrees is to "increase the quality and the attractiveness of the European Higher Education Area",¹⁸ the following section takes a closer look at the reasons for choosing this Master's programme and the visibility of Erasmus Mundus in general.

3.3.1. Reasons for taking up an EMJMD/EMMC

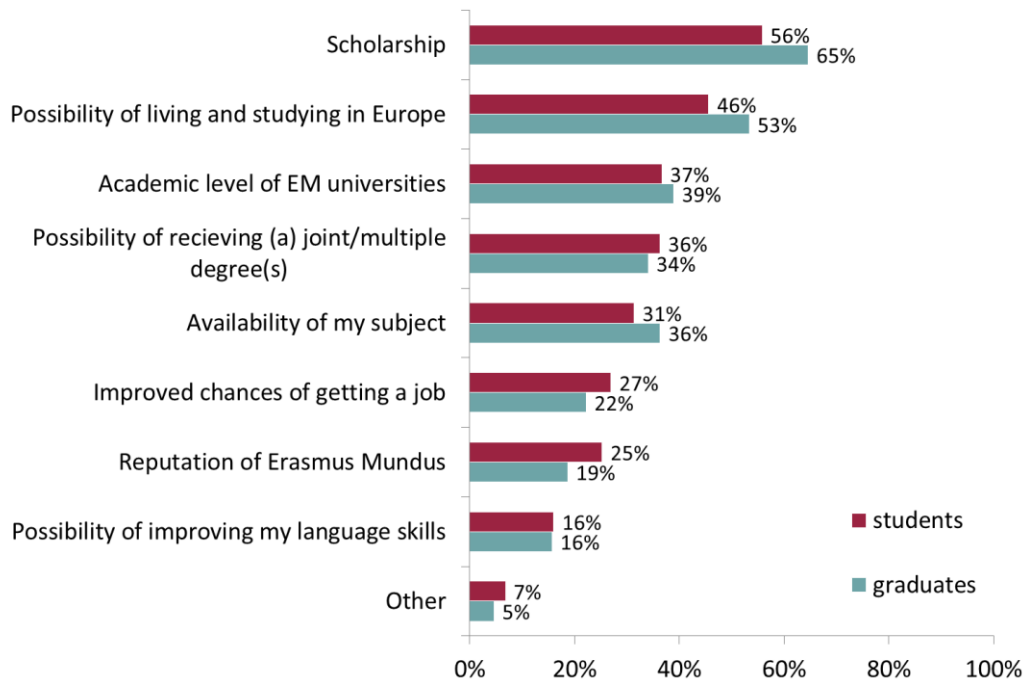
Students and recent graduates (less than three years after graduation) were asked about the main reasons for choosing Erasmus Mundus as a Master's programme.¹⁹ As Figure 32 shows, the strongest argument for the participants in the surveys between 2016 and 2018 was the *Erasmus Mundus scholarship*. Nearly two thirds of the participants (61%) named the *scholarship* as one of the three most important reasons for taking up an Erasmus Mundus Programme. The second and third most frequently named reasons were *the possibility to live and study in Europe* (50%) and *the academic level of Erasmus Mundus universities* (38%).

Furthermore, current students and graduates differ significantly in their evaluation of the reasons for choosing Erasmus Mundus. Noteworthy is that graduates emphasise more often than students reasons like *scholarship*, *possibility to live and study in Europe*, or the availability of the subject, whereas students put more weight on *reputation of Erasmus Mundus* and the *improved professional chances*.

¹⁸ https://ec.europa.eu/programmes/erasmus-plus/programme-guide/part-b/three-key-actions/key-action-1/erasmus-mundus-jmd_en

¹⁹ To gain a more differentiated view, the participants could choose up to three answers to this question.

Figure 32: Percentage of graduates who gave the respective reason for choosing Erasmus Mundus as a Master's programme vs. percentage of current Erasmus Mundus students who gave that reason (GIS 2016-2018)



Multiple answers were possible.

Students and graduates (less than three years after graduation), n=1,370

Wording of the question: "What convinced you to choose Erasmus Mundus as a Master degree programme?"

Data Source: Graduate Impact Survey 2016-2018.

Even clearer, however, are the differences by region of origin (see Table 6). Depending on the region, different reasons for choosing an Erasmus Mundus Master program are crucial. However, except for EU citizens and North Americans, the scholarship is most often mentioned. The *academic level of EM universities* is particularly important for African graduates and students (47%), the *scholarship* for graduates from the Middle East/ Central Asia (79%), the *availability of my subject* for graduates from North America (43%) and the *reputation of EM* for graduates from South Asia (39%). The *possibility of living and studying in Europe* is emphasized in particular by graduates from North America (76%) and the *improvement of job opportunities* by graduates from non-EU Europe (32%). EU citizens, on the other hand, emphasize the *possibility of receiving a joint/multiple degree* (47%), the *possibility of improving my language skills* (31%) and other reasons.

Table 6: Percentage of graduates who gave the respective reason for choosing Erasmus Mundus as a Master's programme by region of origin (GIS 2016-2018)

	Academic level of EM universities	Scholarship	Availability of my subject	Reputation of Erasmus Mundus	Possibility of receiving (a) joint/multiple degree(s)	Possibility of living and studying in Europe	Improved chances of getting a job	Possibility of improving my language skills	Other
EU	35%	35%	36%	15%	47%	42%	31%	31%	10%
Europe (non-EU)	42%	70%	32%	10%	37%	53%	32%	9%	2%
South Asia	44%	64%	38%	39%	33%	44%	14%	4%	4%
South-East Asia	36%	77%	38%	31%	21%	59%	15%	9%	4%
East Asia	28%	64%	42%	17%	29%	65%	16%	18%	2%
Oceania	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Middle East/ Central Asia	41%	79%	26%	17%	38%	51%	27%	9%	7%
Africa	47%	72%	25%	30%	31%	39%	29%	7%	5%
North America	18%	59%	43%	7%	33%	76%	18%	24%	5%
Latin America	38%	71%	30%	19%	29%	56%	22%	19%	5%
Total	38%	61%	34%	21%	35%	51%	24%	16%	6%

n.r. = Data are not reported because there are too few cases.

Multiple answers were possible.

Students and graduates (less than three years after graduation), n=1,370

Wording of the question: "What convinced you to choose Erasmus Mundus as a Master degree programme?"

Data Source: Graduate Impact Survey 2016-2018.

Figure 33 depicts the reasons for choosing an EMJMD/EMMC sorted by cohorts (starting year). In order to identify any changes over time; older cohorts have been included. This comparison of earlier and more recent cohorts shows that although the order of relevance of the different motivational aspects has only slightly changed, some differences in the percentages are noteworthy:²⁰

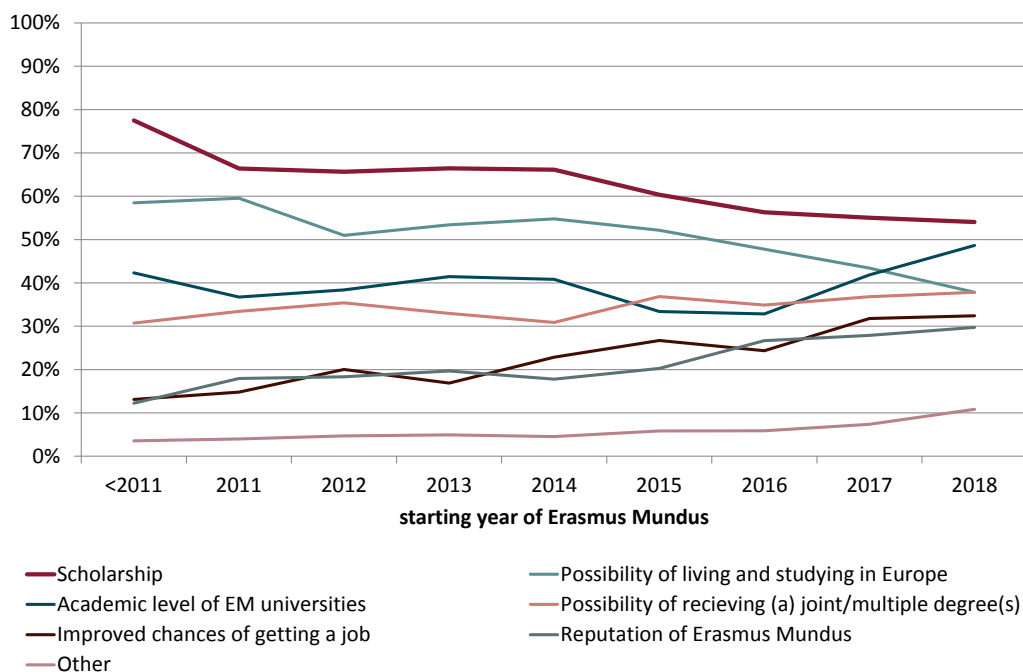
While the *Erasmus Mundus scholarship* has been the single most relevant reason for taking up an EMJMD/EMMC among graduates from all cohorts, the percentage of stu-

²⁰ Motivational aspects that did not show any statistically significant change over time – *availability of my subject* and *possibility to receive a joint/multiple degree(s)* – were omitted in Figure 33 in favour of those aspects that did show a significant development.

dents selecting it has decreased significantly.²¹ The *possibility of living and studying in Europe*²² as well as the *academic level of Erasmus Mundus universities*²³ have also become significantly less important reasons for choosing an Erasmus Mundus Joint Master Programme. However, the importance of the *academic level of Erasmus Mundus universities* has increased strongly again in recent years.

Furthermore, the *improved chances of getting a job*²⁴ and the *reputation of Erasmus Mundus*²⁵ have significantly gained importance as reasons to take up an Erasmus Mundus programme.

Figure 33: Percentage of graduates who gave the respective reason for choosing Erasmus Mundus as a Master's programme by cohort (GIS 2016-2018)



Multiple answers were possible.

Students and graduates, n=4,570

Wording of the question: "What convinced you to choose Erasmus Mundus as a Master degree programme?"

Data Source: Graduate Impact Survey 2016-2018.

²¹ Spearman's- ρ = -0,161; p <0,001; n=4.570.

²² Spearman's- ρ = -0,080; p <0,001; n=4.570.

²³ Spearman's- ρ = -0,039; p <0,01; n=4.570.

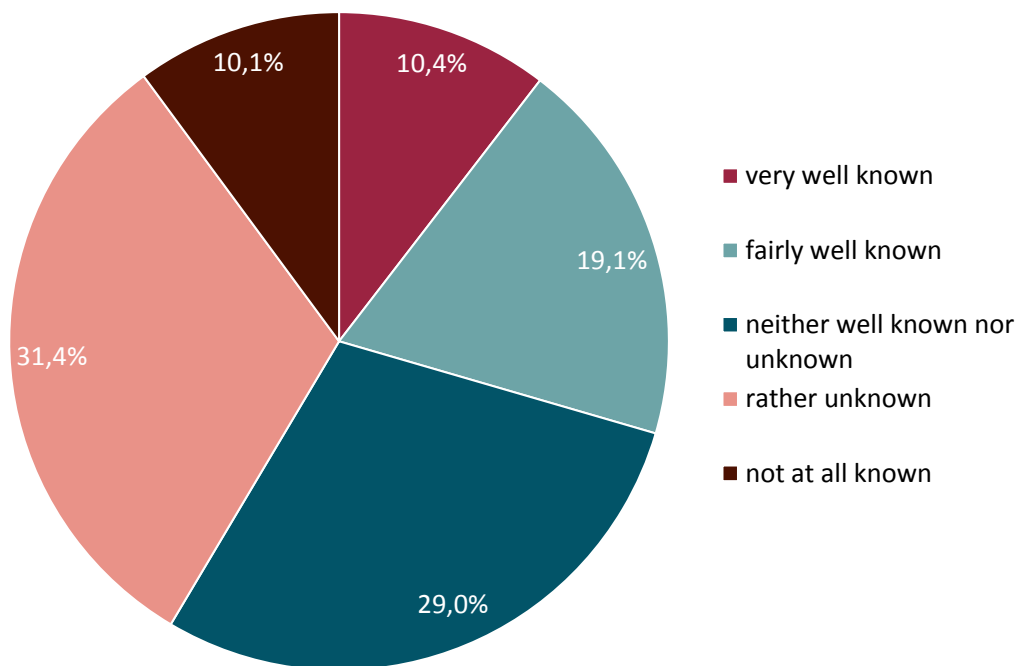
²⁴ Spearman's- ρ = -0,142; p <0,001; n=4.570.

²⁵ Spearman's- ρ = -0,121; p <0,001; n=4.570.

3.3.2. Visibility of Erasmus Mundus

Students and graduates who participated in the GIS 2018 were asked how well known Erasmus Mundus is in their home country. As Figure 34 shows, nearly 30% of the survey participants rated the Erasmus Mundus programme as at least fairly well-known in their home country, opposed to more than 40% who assess it as rather unknown or not known at all (this proportion was 35% in GIS 2017).

Figure 34: Awareness of Erasmus Mundus (GIS 2018)



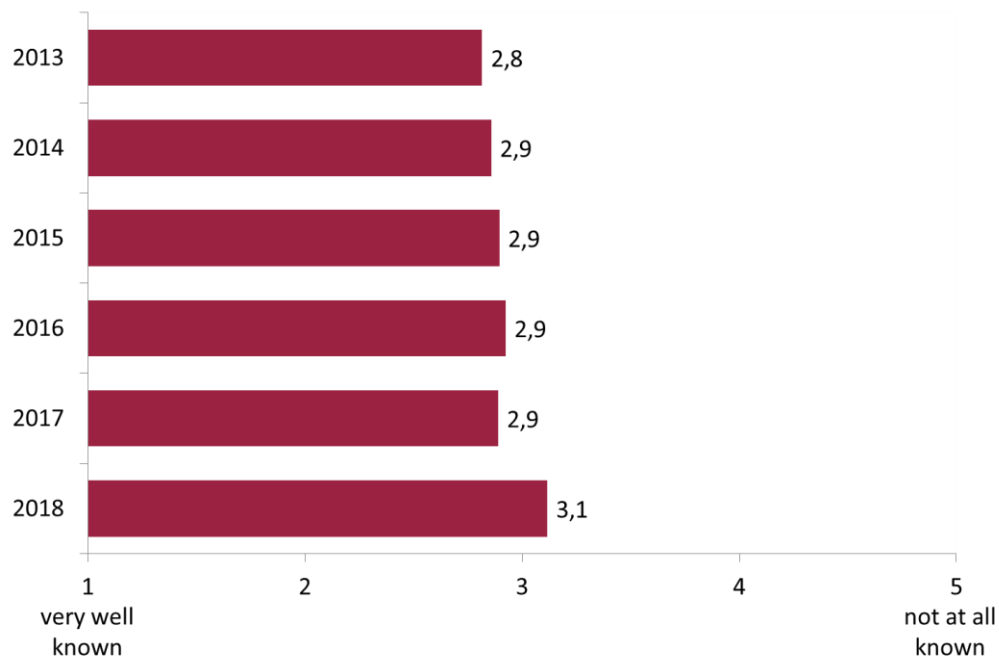
Students and graduates, n=1,179

Wording of the question: "How well known is Erasmus Mundus in your home country?"

Data Source: Graduate Impact Survey 2018.

In addition to this general trend, Figure 35 shows how the level of awareness has changed over the survey years. The level of awareness of Erasmus Mundus in 2018 has slightly decreased compared to the previous years.

Figure 35: Awareness of Erasmus Mundus by survey years (GIS 2013-2018)

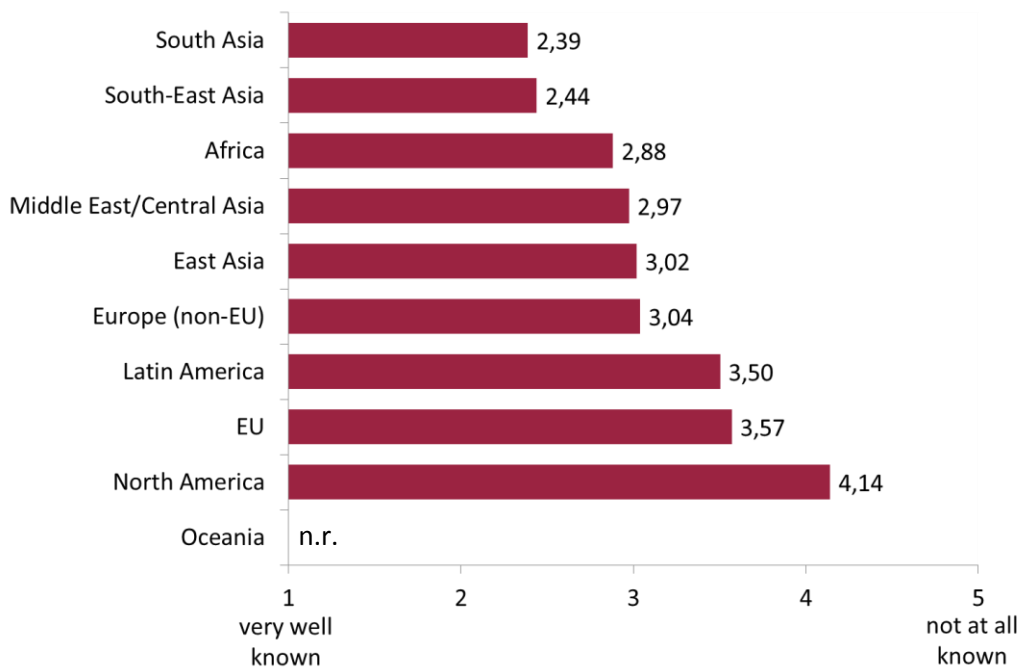


Students and graduates, n = 9,105

Wording of the question: "How well known is Erasmus Mundus in your home country?"

Data Source: Graduate Impact Survey 2013-2018.

As can be seen in Figure 36, the average awareness of Erasmus Mundus programmes differs greatly by region of origin: students and graduates from South Asia and South-East Asia report above average levels of awareness, opposed to Oceania and North America where the Erasmus Mundus programmes seem to be rather widely unknown. Surprisingly, according to the survey participants, the awareness levels in EU countries are comparably low.

Figure 36: Awareness of Erasmus Mundus by region of origin (GIS 2018)

n.r.: not reported due small number of cases.

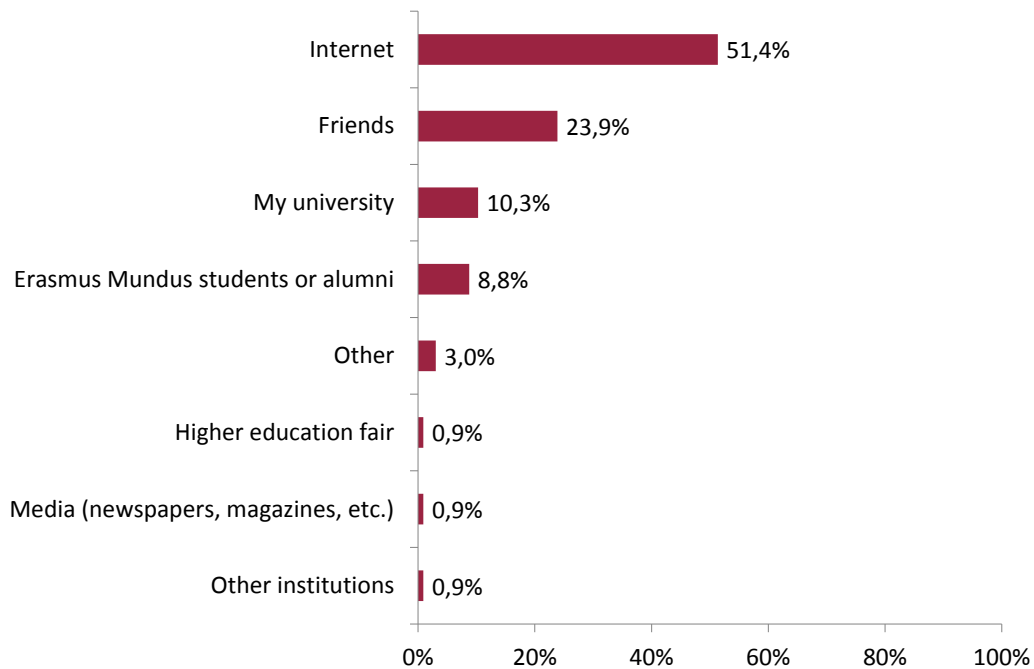
Students and graduates, n=1,133

Wording of the question: "How well known is Erasmus Mundus in your home country?"

Data Source: Graduate Impact Survey 2018.

The internet appears to be the single most important information channel used to find out about the Erasmus Mundus programmes (51%, see Figure 37). The second most important source of information was friends (24%), followed by participants' home university (10%) and Erasmus Mundus alumni and students (9%). This has not changed since the GIS 2017.

Figure 37: Initial source of information (GIS 2018)



Students and graduates (less than three years after graduation), single choice, n=331

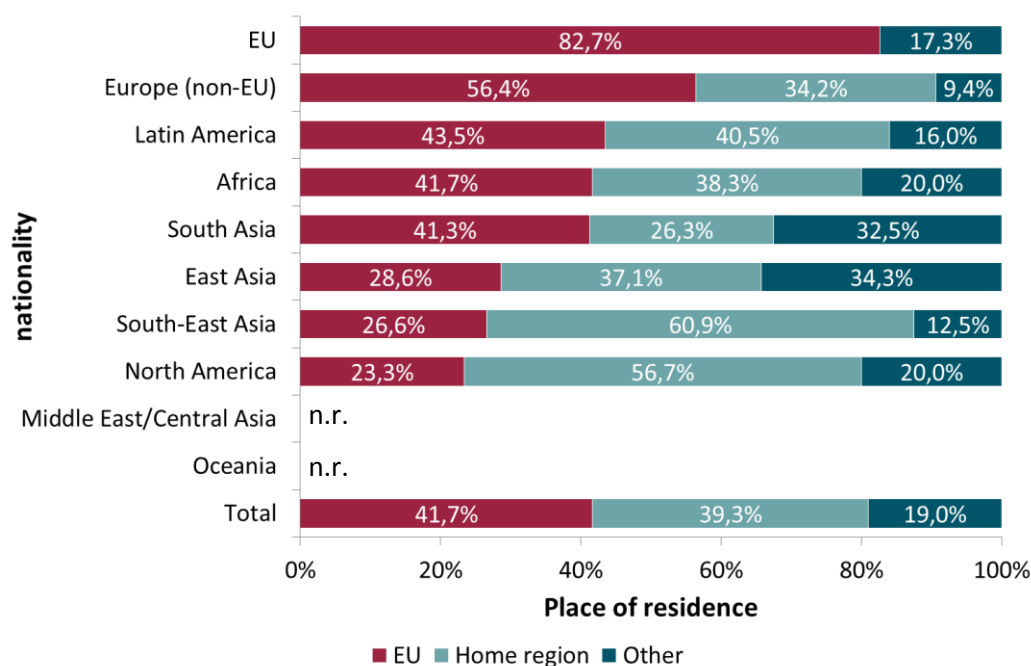
Wording of the question: "How did you find out about the Erasmus Mundus programme?"

Data Source: Graduate Impact Survey 2018.

3.4. Places of residence and mobility

Erasmus Mundus Programmes are open for students from all over the world. The following analysis explores whether graduates remain in the European Union after their graduation. These numbers may serve as an indicator for the EU's attractiveness as a place to work and study.

Figure 38 shows where Erasmus Mundus graduates lived at the time of the survey. It is structured by nationality, which can serve as an approximation for the region of origin and shows that among graduates, who are not originally from an EU country, at least 23% (originally from North America) to at most 56% (originally from a Non-EU country in Europe) of graduates stayed in the EU after their graduation. In total, 42% of graduates, who are not originally from an EU country, remained in an EU country after graduating from Erasmus Mundus, 39% returned to their region of origin. However, 83% of graduates originally from an EU country stayed in the EU, 17% currently live in another region.

Figure 38: Place of residence of graduates by nationality (GIS 2018)

n.r.: not reported due small number of cases.

Graduates (less than seven years after graduation) from outside the EU, n=547

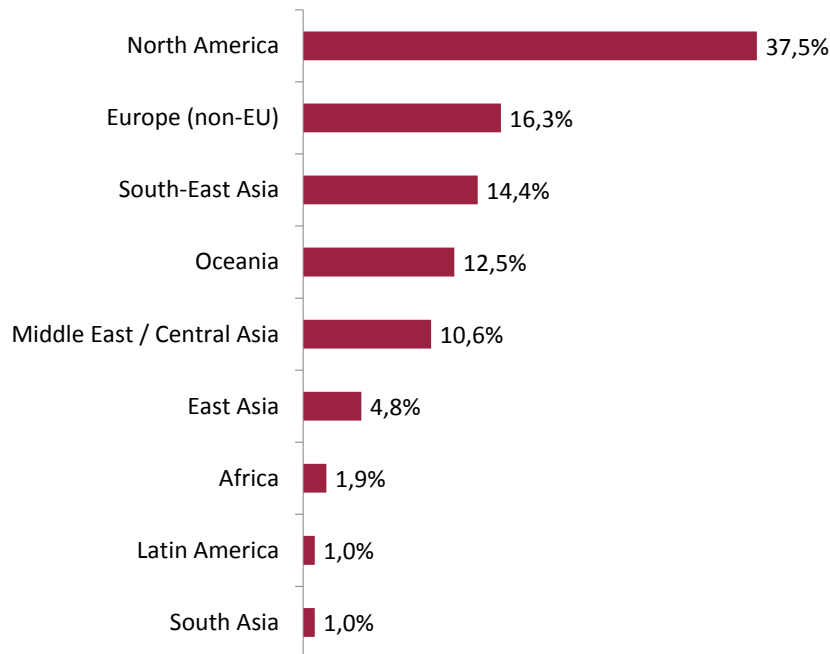
Wording of the question: "Nationality (if you are a holder of multiple nationalities, please choose the one under which you applied for Erasmus Mundus). Where do you currently live?"

Data Source: Graduate Impact Survey 2018.

Nearly one out of five graduates from outside the EU did neither stay in the EU nor did they return to their region of origin. As Figure 39 shows, the majority of these graduates have chosen North America (38%), Non-EU Europe (16%) or South-East Asia (14%) and 32% live in other regions.

The distribution does not differ strongly for graduates who are EU citizens but currently do not live in the EU: 32% live in Non-EU-Europe, 29% in North America, 9% in South-East Asia and 30% in other regions.

Figure 39: Place of residence of graduates (Non-EU citizens) outside EU and home region (GIS 2018)



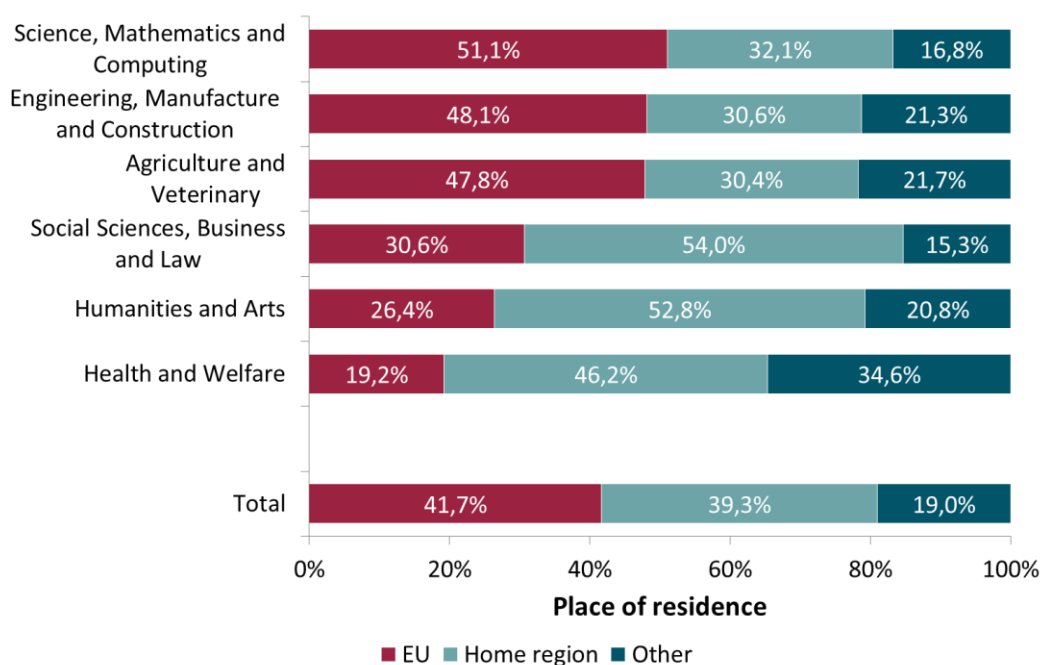
Graduates (less than seven years after graduation) from outside the EU, n=104

Wording of the question: "Where do you currently live?"

Data Source: Graduate Impact Survey 2018.

It is also interesting to see graduates of which fields of study remain in the EU and which are not if they do not come from the EU (see Figure 40). On average, around half of science and engineering graduates (science/mathematics/computing, engineering/manufacture/ construction and agriculture/veterinary) have remained in the EU. This only applies to nearly 30% of the graduates of social and humanities studies and even only to 20% of the graduates of health and welfare (however, the case numbers in health are very low and therefore the data should be interpreted with caution).

Figure 40: Place of residence of graduates (Non-EU citizens) by field of study (GIS 2018)



Note: Health and Welfare only based on 26 cases.

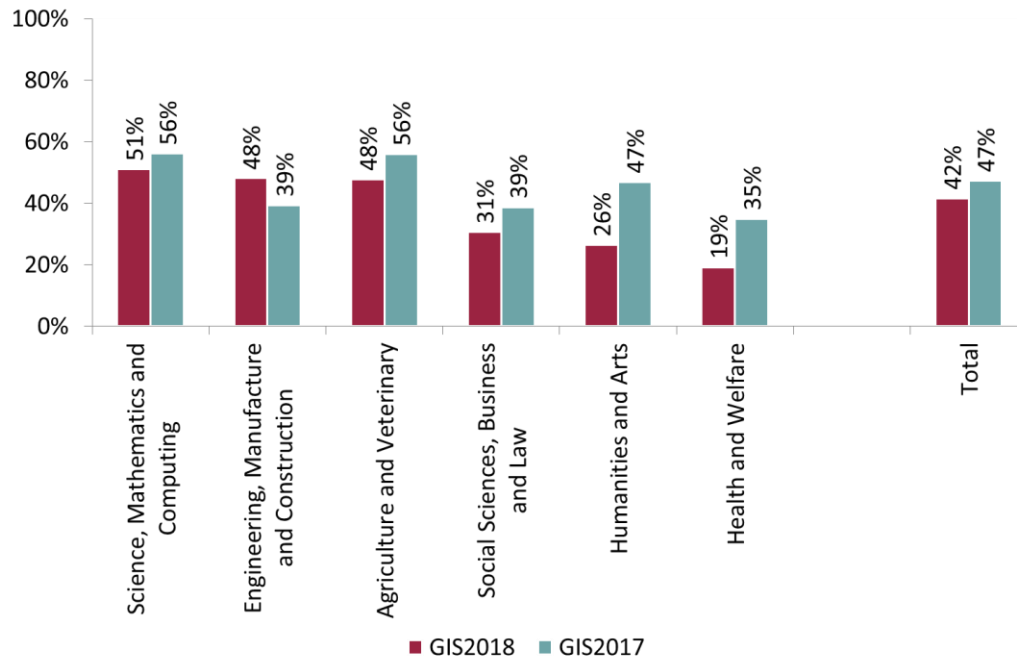
Graduates (less than seven years after graduation) from outside the EU, n=547

Wording of the question: "Where do you currently live?"

Data Source: Graduate Impact Survey 2018.

The proportion of graduates from outside the EU remaining in the EU has developed differently since the last GIS, depending on the field of study. This applies on the one hand to engineering, where according to GIS 2018 around 10% more graduates remained in the EU than in the previous survey (see Figure 41). In all other fields of study, on the other hand, the proportion remaining in the EU fell, most sharply in humanities.

Figure 41: Proportion of graduates (Non-EU citizens) remaining in the EU by field of study: GIS 2018 vs. GIS 2017



Note: Health and Welfare only based on 26 cases.

Graduates (less than seven years after graduation) from outside the EU (GIS 2018: n=547; GIS 2017: n=730).

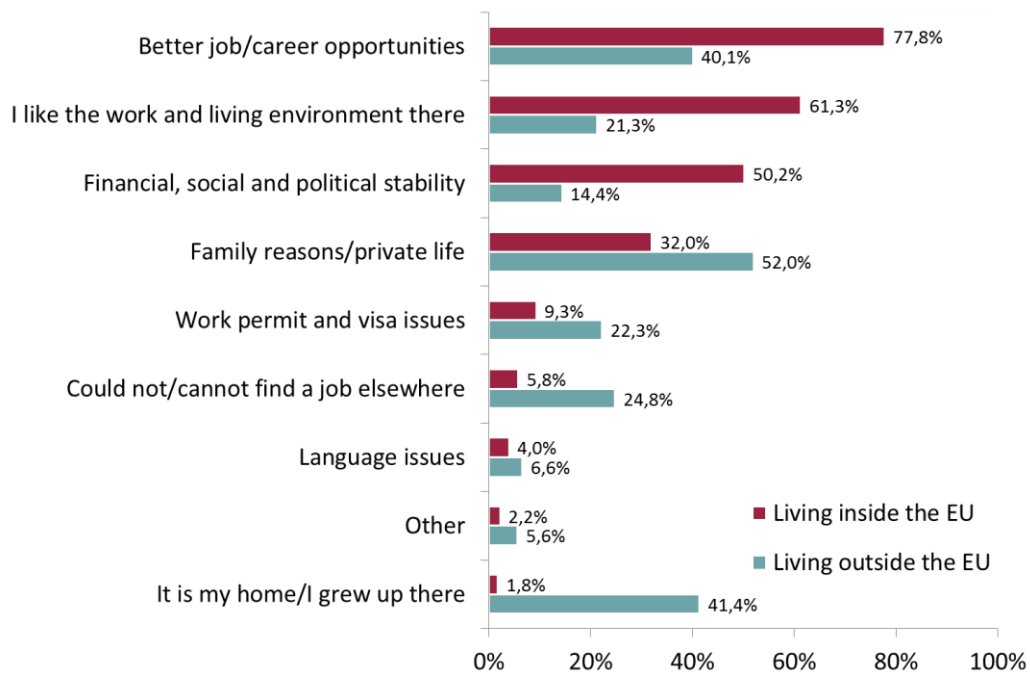
Wording of the question: "Where do you currently live?"

Data Source: Graduate Impact Survey 2018 and 2017 (ICU.net 2017).

Figure 42 depicts the reasons of Erasmus Mundus graduates (non-EU citizens) for choosing their place of residence and compares those living inside with those living outside the European Union: The main reasons for graduates living inside the EU are rather related to their social and work environment – *better job/ career opportunities* (78%), *work and living environment* (61%) and *financial, social and political stability* (50%). In contrast, graduates living outside the EU tended to name reasons related to family and attachment to home as main motives – *family reasons/ private life* (52%), *it is my home/ I grew up there* (41%), though the third most common reason was related to *better job/ career opportunities* (78%).

Compared to the last GIS 2017, the top reasons to live in the EU have gained in approval, especially financial, social and political stability increased from 36% to 50%. In contrast, the reasons for not living in the EU have hardly changed.

Figure 42: Reasons for choice of place of residence (Non-EU citizens only) (GIS 2018)



Graduates (less than seven years after graduation) from outside the EU, n=546

Wording of the question: "What are the reasons for your choice of place of residence?"

Data Source: Graduate Impact Survey 2018.

4. Annex: Clustering of countries

As in previous GIS, participants were grouped according to nationality in different country groups. In GIS 2018 these groups were composed as follows:

EU		EUROPE (non-EU)		South-East Asia	
Germany	14%	Russia	21%	Indonesia	34%
Italy	13%	Ukraine	19%	Philippines	26%
Spain	12%	Serbia	14%	Vietnam	13%
France	11%	Turkey	12%	Thailand	12%
Romania	6%	Albania	5%	Malaysia	8%
Netherlands	6%	Moldova	5%	Singapore	4%
Poland	5%	Armenia	4%	Myanmar	2%
Portugal	5%	Bosnia and Herzegovina	4%	Brunei Darussalam	1%
Bulgaria	4%	Kazakhstan	3%	Cambodia	1%
UK	4%	Macedonia, Republic	3%	Total	100%
Greece	3%	Kosovo	2%	East-Asia	
Belgium	3%	Azerbaijan	1%	China	65%
Ireland	3%	Belarus	1%	Taiwan	21%
Croatia	2%	Georgia	1%	Korea, Republic of	7%
Austria	2%	Montenegro	1%	Hongkong	4%
Slovenia	2%	Norway	1%	Mongolia	4%
Cyprus	1%	Switzerland	1%	Total	100%
Latvia	1%	Iceland	1%	Oceania	
Lithuania	1%	Total	100%	Australia	70%
Slovakia	1%	South Asia		New Zealand	30%
Czech Republic	1%	India	50%	Total	100%
Denmark	0,4%	Bangladesh	20%	Africa	
Estonia	0,4%	Pakistan	18%	Ethiopia	24%
Hungary	0,4%	Nepal	9%	Egypt	13%
Total	100%	Sri Lanka	3%	Kenya	10%
Latin America		Total	100%	Ghana	8%
Mexico	29%	Middle East/ Central Asia		Nigeria	8%
Brazil	22%	Iran	44%	Cameroon	5%
Colombia	13%	Lebanon	12%	Rwanda	3%
Argentina	9%	Syria	10%	South Africa	3%
Bolivia	4%	Uzbekistan	7%	Tunisia	3%
Ecuador	4%	Jordan	5%	Uganda	3%
Peru	3%	Kyrgyzstan	5%	Zambia	3%
Trinidad and Tobago	2%	Palestine	5%	Algeria	2%
Chile	2%	Yemen	5%	Lesotho	2%
Costa Rica	2%	Iraq	2%	Morocco	2%
Venezuela	2%	Israel	2%	Zimbabwe	2%
Guatemala	1%	Tajikistan	2%	Chad	1%
Jamaica	1%	Total	100%	Congo, Dem. Rep.	1%
Cuba	1%	North-America		Eritrea	1%
El Salvador	1%	USA	64%	Gambia	1%
Haiti	1%	Canada	36%	Malawi	1%
Nicaragua	1%	Total	100%	Mauritius	1%
Paraguay	1%			Mozambique	1%
Belize	0,5%			Niger	1%
Dominican Republic	0,5%			Tanzania	1%
Honduras	0,5%			Togo	1%
Uruguay	0,5%			Total	100%
Total	100%				

