

Erasmus Mundus Joint Master Graduate Impact Survey 2019

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In cooperation with the

Erasmus Mundus Students and Alumni Association



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Title

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Executive Summary

Methodology

- 1,947 EMJMD alumni completed the 2019 Graduate Impact Survey (GIS). The 2019 target group included three cohorts of former EMJMD students, namely, those who graduated less than two or four, five, nine and ten years prior to the survey, i.e., (in reverse order) in the calendar years 2009/10, 2014/15 and 2018/19.
- In order to strengthen the longitudinal dimension of the survey, improve the quality of the empirical data and amplify the analysis, the 2019 GIS's **methodology** differed markedly from that of previous GIS in terms of its target group and the issues covered by the questionnaire.
- The 2019 GIS is also the first to engage in **data weighting**. Sample-population-differences were adjusted using iterative proportional fitting (raking). This procedure is designed to compensate for imbalances in the survey data (such as the over- or underrepresentation of specific groups) in order to create a representative sample.

Satisfaction with the EMJMD Programmes

- All in all, the majority of respondents (84%) were (very) satisfied with their EMJMD programme. Their **overall satisfaction** varied slightly by field of study and respondents' region of origin: respondents who graduated in physics, the life sciences and chemistry reported the highest, those who graduated in the social sciences and humanities or mathematics the lowest levels of overall satisfaction. Graduates from East Asia, Africa and European non-EU countries were most satisfied, whereas those from North America/Oceania, Latin America and the EU were slightly less satisfied. There were no significant differences between the cohorts.
- Respondents were also (very) satisfied with the quality of the courses, the internships/work placements and the part of their EMJMD programme devoted to the attainment and application of practical skills. They did feel, however, that a greater measure of exchange with industries and potential employers would be beneficial. Graduates from non-EU countries showed slightly higher levels of satisfaction than their counterparts from EU countries, and respondents in the two more recent cohorts (2014/15 and 2018/19) tended to be more contented with the programme as a whole than their peers in the 2009/10 cohort, although the latter expressed greater satisfaction specifically with the quality of the courses than the two more recent cohorts.
- While respondents were particularly satisfied with the library facilities, the treatment of international students and the provision of special study arrangements across all the EM host universities they felt that the extracurricular activities could be improved further. Many graduates acknowledged that the joint/multiple degree was well integrated and well coordinated by all the host universities but that some room for improvement remains across the board as far as the input of associate partners, the integrated course catalogues for each

partner institution, and teaching methods are concerned. The most recent cohort (2018/19) was generally more critical overall and tended to be satisfied only with *some* of the host universities, while graduates from earlier cohorts were more likely to record their satisfaction with *all* of the EM host institutions.

• In response to an open-ended question, respondents made numerous suggestions for possible improvements to the EMJMD programme. They recommended the introduction of additional practical, work-oriented courses and a stronger focus on in-demand skills such as programming and IT skills more generally as well as soft, entrepreneurial and language skills. Graduates also suggested incorporating internships into the curricula, offering field-specific career counselling, providing training and guidance for students entering the labour market, and building professional networks incorporating potential employers, partner organisations and EM alumni. Respondents also called for more financial support in the form of more substantial and more readily available scholarships. Finally, some respondents identified shortcomings in the collaboration between host universities when it came to matters such as the coordination of the curriculum or the issuing of diplomas and called for better guidance prior to the programme regarding issues such as course registration, visa support and accommodation.

Primary Impact of the EMJMD Programme

• Erasmus Mundus continues to shape the lives of its participants in various ways. Respondents particularly highlighted the programme's impact on their career and intercultural competence, followed by their subject-related expertise and personality. While the order in which they ranked these factors varied depending, inter alia, on their region of origin, field of study and gender, no statistically significant differences emerged between cohorts.

Preparation for the Labour Market

- Respondents generally assessed their level of preparedness for the labour market positively, 64% of them stating that their EMJMD had prepared them (very) well for the labour market. Respondents from Africa and most of Asia and those who graduated in chemistry, the life sciences, economic sciences and environmental and geosciences rated their level of preparedness for the labour market most highly. Overall, only 12% of respondents felt (very) poorly prepared for the labour market. Graduates from North America/Oceania and the EU and those who graduated in the social sciences and humanities were particularly likely to feel ill-prepared for the labour market.
- The proportion of respondents who feel (very) well prepared for the labour market is slightly lower in more recent cohorts and the proportion of respondents who assessed their preparedness more pessimistically slightly larger.
- Respondents often felt that improvements in the **organisational and practical set up** of the EMJMD programme would increase their level of preparedness for the labour market.

Every other alumnus pointed to a lack of contacts to potential employers and career mentoring.
 More than one-third of respondents felt that their EMJMD programme devoted insufficient
 time to career development, entrepreneurial learning and networking activities. Respondents
 were generally more appreciative of the technical skills, soft skills and subject-specific skills they
 acquired and the flexibility of the course content.

Competences

- Respondents are convinced that their EMJMD programme has not only improved their employability but also enriched them personally and in a range of socially relevant ways. The data point to the acquisition, consolidation and amplification of a broad range of skills and competences. The majority of respondents reported a substantial increase in their language skills, their field-specific expertise and proficiency in critical thinking as well as their analytical and problem-solving, communication, reading, writing and team-working skills. Respondents did feel, however, that the Erasmus Mundus programme had been less effective in enhancing their leadership skills and offered them even less in the way of advanced ICT as well as innovation and entrepreneurial skills.
- In terms of their **personal development**, the alumni noted that the EMJMD programme had **greatly enhanced** their openness to new challenges, their tolerance in the face of values and opinions other than their own, their ability to assess their own strengths and weaknesses and their self-confidence and goal orientation.
- Respondents reported that their participation in the EMJMD programme had substantially
 increased their social engagement. Many of them record their increased determination to take
 a stand against discrimination and intolerance, help disadvantaged people, follow social and
 political events/developments and engage in social activities that benefit specific communities
 or society at large.
- Respondents born outside the EU reported a much greater impact in all three areas (employability, personal development and social engagement) than those born in an EU country. Overall, there were only very slight variations between the cohorts, indicating a very high level of consistency in the programme's ability to enhance the aforementioned range of skills and competences. While the most recent cohort (2018/19) was particularly enthusiastic about the programme's impact on their personal development and social engagement, no statistically significant differences emerged between the cohorts in the assessment of their employability.

Career Paths

• In the first six months after graduation, graduates sought professional employment (33%), continued with their studies (21%), applied for further studies (16%) or took up a professional position they had already secured while still completing the EMJMD programme (21%). Of the graduates who sought employment immediately after graduation, 74% found a position within six months. Of these, more than 70% noted that their first professional position after graduation

involved at least some measure of international collaboration with colleagues and/or contact with customers.

- In terms of the countries in which graduates sought employment, the home country tended to be their first preference, followed by Germany, the Netherlands, France, the United Kingdom, Belgium, Spain, Sweden, Denmark and Italy. The choice of location hinged primarily on the quality of the position/career opportunities and the work and living environment as well as family reasons and private considerations. It is noteworthy that of the 26% who sought employment but were unable to find any, 10% reported that their EM degree was not recognised in the country in which they were seeking employment.
- At the time of the survey, most of the respondents were in work (mostly in full-time employment but some were also self-employed or in part-time employment) and/or pursuing further studies. Some 6% of the graduates were neither employed nor studying (5% were actively seeking employment, 0.8% were not).
- Respondents generally felt that both the range and level of their skills closely match the requirements of their current employment. This may indicate that the programme is indeed conveying the appropriate transferrable skills to enhance its graduates' employability.

The EMJMD Programme's Visibility

- As the most important reason for taking up an EMJMD programme respondents named the availability of the scholarship, followed by the opportunity to live and study in a country in or outside the European Union and their academic aspirations. There were, however, notable variations between the cohorts and by region of origin. For example, the availability of the scholarship generally played a more significant role for respondents from non-European countries than it did for their peers from European countries. Graduates from North America and Oceania were particularly enthusiastic about the opportunity to live and study in various EU and non-EU countries and immerse themselves in a multicultural academic setting and social environment.
- Each cohort placed a higher priority on **field-specific knowledge** than the one before while paying less attention to the **academic stature of the Erasmus Mundus universities**.

Places of Residence

- At the time of the survey, 43% of the respondents lived in an EU country, 43% had returned to their home country, and 14% reported living in another region altogether (mostly North America/Oceania).
- Of the graduates who joined the programme from non-EU countries between 30% (in the case of respondents from North America/Oceania) and 56% (in the case of graduates from the Middle East and Central Asia) lived in an EU country at the time of the survey.

• While graduates currently living in an EU country were more likely to explain their decision to live there primarily with reasons pertaining to the **social and work environment**, graduates currently residing outside the EU tended to have been swayed mainly by considerations related to family ties and a sense of attachment to their original home country.

1 Introduction

The international mobility of students, staff and researchers in higher education has been one of the main objectives of the Europe 2020 strategy, 1 the strategic framework for European cooperation in education and training,² as well as the Bologna Process and the European Higher Education Area (EHEA) since their inception.³ As the Yerevan Communiqué of 2015 noted, mobility can contribute substantially to mutual understanding and, by expanding its beneficiaries' range of competences, enhance their employability. 4 Studies consistently show that mobility benefits both students and teaching and research staff as well as the higher education system as a whole. It allows participants to acquire key competences, improve their personal and intercultural skills, think innovatively and be creative and interact and collaborate in global contexts. These are all extremely important factors in facilitating economic growth and social cohesion. For example, the recent Erasmus+ Higher Education Impact Study (2019) has shown that completing an Erasmus+ programme adds value to various aspects of student life.⁵ Not only does it increase participants' technical, interpersonal and intercultural skills and competences, it also helps them identify what they want to do in the future. They learn to assess their strengths and weaknesses more accurately and their self-confidence, their receptiveness for a wide range of social and cultural encounters and their ability to achieve goals increase markedly.

Against the backdrop of the constantly increasing significance of mobility and internationalisation in higher education this research report focuses on the impact of the Erasmus Mundus Joint Master Degree programmes (EMJMD) on its alumni. The EMJMD scheme is one of several Erasmus+ options available to students in higher education who wish to participate in an international mobility programme. The scheme offers a high-level integrated international study programme equivalent to 60, 90 or 120 ECTS credits, delivered jointly by an international consortium of HEIs, where relevant in collaboration with other educational and/or non-educational partners who provide specific expertise in the study areas/professional domains covered by the joint programme in question. Participants study in at least two countries for a minimum of 12 and a maximum of 24 months in total. The EMJMD scheme focuses on graduate students (sometimes still referred to as postgraduate students) in higher education and is open to

European Commission, Europe 2020. A European Strategy for Smart, Sustainable and Inclusive Growth, 3 March 2010, https://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf

² European Commission, European Policy Cooperation (ET 2020 Framework), https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework_en

European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a renewed EU agenda for higher education, 30 May 2017, https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1496304694958&uri=COM:2017:247:FIN

EHEA (European Higher Education Area) Ministerial Conference, Communiqué, Yerevan, 2015, http://www.ehea.info/media.ehea.info/file/2015_Yerevan/70/7/YerevanCommuniqueFinal_613707.pdf

Souto-Otero et al. for the European Commission, *Erasmus+ Higher Education Impact Study*, 2019, https://op.europa.eu/en/publication-detail/-/publication/94d97f5c-7ae2-11e9-9f05-01aa75ed71a1/language-en

Until 2014, the programme was known as the Erasmus Mundus Master Course (EMMC). The various EMJMD programmes are listed on the EMJMD Catalogue page: https://eacea.ec.europa.eu/erasmus-plus/emjmd-catalogue en

applicants qualified to pursue studies at master's level from all over the world (i.e., not only to candidates from within the European Union, indeed, the integration of students from countries outside the EU is a particular priority). In this way, the programme contributes to the global development of human resources and seeks to enhance the potential for international cooperation. EU-funded scholarships are awarded to the best applicants.⁷

The European Commission has set out three main goals for the Erasmus Mundus Joint Master Degree scheme:

- foster quality improvements, innovation, excellence and internationalisation in higher education institutions (HEI);
- 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;
- 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.⁸

The Graduate Impact Survey (GIS), conducted annually online to ascertain how participants in the programme rate the benefits it affords them both in terms of their personal and professional development, analyses quantitative data both in cross-sectional and longitudinal terms.

The 2019 Graduate Impact Survey was carried out by researchers at the Institute for Advanced Studies (IHS⁹) in Vienna with the support of the Erasmus Mundus Students and Alumni Association (EMA¹⁰). Its results are discussed in this report.

The survey was first conducted in 2007. As tends to be the case with long-running data collection tools, it has undergone numerous changes over the years in order to increase the quality of the collected data, broaden their analytical potential and thus increase the accuracy of relevant conclusions.

In cooperation with the Erasmus Mundus Students and Alumni Association (EMA) and the European Commission substantial changes pertaining to the target group and the questionnaire were made to the 2019 GIS. These need to be borne in mind when comparing its results to those of the previous surveys (see chapter 2).

For a list of the Erasmus Mundus Joint Master Degrees, see the website of the European Commission: https://ec.europa.eu/programmes/erasmus-plus/opportunities/individuals/students/erasmus-mundus-joint-master-degrees_en

⁸ See https://ec.europa.eu/programmes/erasmus-plus/programme-guide/part-b/three-key-actions/key-action-1/erasmus-mundus-jmd en

⁹ Higher Education Research Unit on the IHS official website (www.ihs.ac.at/ru/higher-education-research)

¹⁰ EMA official website (www.em-a.eu)

2 Methodology

This section describes key aspects of the survey design and methodology, focusing first on the target group and questionnaire and then on the collection and weighting of the data.

2.1 Target Group

Substantial changes were made to the general concept of the Graduate Impact Survey in terms both of the target group and the topics covered by the questionnaire in order to strengthen the longitudinal dimension of the survey, improve the quality of the empirical data, and amplify the analysis.

Prior to 2019, the GIS included all EMJMD students and graduates. This has obvious advantages and disadvantages. On the plus side, it facilitates a comparison between the assessment of current and former students and offers a broader view on the topics covered by the survey. It does not, however, comply fully with the goal set by the European Commission's Directorate-General for Education, Youth, Sport and Culture, which commissioned the study, namely, to survey graduates immediately, and again at regular intervals, after the completion of their EMJMD programme. Moreover, approaching the same group of respondents with the same questionnaire year after year, rather than at regular intervals, risks reducing the response rate especially among earlier cohorts.

Hence, EMJMD graduates will henceforth be surveyed only in the first and second year after graduation, followed by four more surveys four, five, nine and ten years after graduation. Consequently, the 2019 study has focused only on those participants in EMJMD programmes who graduated in the calendar years 2009/10, 2014/15 and 2018/19.

2.2 Questionnaire

The 2019 Graduate Impact Survey questionnaire is made up of 59 questions, though some were filtered according to respondents' previous answers (for example, large parts of the Career Paths section vary depending on graduates' activities after their EMJMD graduation). It includes a set of new questions designed to gain a better sense of the impact of the EMJMD programme on participants' socially and personally relevant skills and competences, not least, insofar as they contribute to their employability. The new questionnaire also takes a more detailed look at alumni's current professional activities in terms of their overall career development. Given the redefinition of the target group, questions pertaining specifically to current EMJMD students were removed as were some questions about networking (due to their low analytical value), others were merged in order to shorten the time required to complete the survey.

The 2019 GIS questionnaire comprised different types of questions: Likert-type scales, which ask respondents to assess an issue or a statement on a given scale (agree-disagree, satisfied-dissatisfied, good-bad), single and multiple-answer questions and open-ended questions which

ask respondents to elaborate on their answers or allow them to add categories and responses not supplied by the questionnaire or make specific suggestions.

2.3 Data Collection Process

The 2019 GIS questionnaire was available online from 6 December 2019 to 31 January 2020. EMJMD alumni who belonged to the target group were contacted directly via e-mail using the contact information stored for administrative purposes in the Erasmus Mundus Mobility database. An e-mail invitation with a personalised survey link was sent to each of the graduates in question. This invitation e-mail was followed by three reminder e-mails addressed to those invitees who had not yet completed the survey. The Communications Unit of the Erasmus Mundus Students and Alumni Association (EMA) promoted the survey on various social media channels. Survey participants were offered the opportunity to participate in a prize draw for 10 prizes worth € 150 in the form of either 1) a voucher for edX Online Training Courses (www.edx.org), 2) an Amazon egift Voucher (www.amazon.com) or 3) a donation to a charitable organisation (UNICEF, WWF, Doctors without Borders or Amnesty International). Almost half of the survey participants signed up for the raffle.

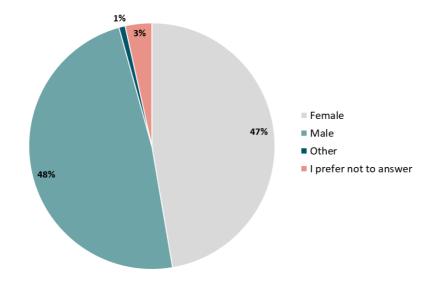
2.4 2019 Sample

Overall, 2,609 survey responses were registered. During data cleaning all respondents who did not complete the questions regarding the start and graduation year of their EMJMD programme and their demographic background (age, sex and country of birth) were excluded from further analysis. Respondents who were not part of the target group (see definition in section 2.1) were also excluded. The final cleaned database comprised 1,947 valid records, giving us a completion rate of 24% (8,107 graduates were successfully contacted, i.e. $1,947 \div 8,107 = 0,24$).

Figure 1 to Figure 3 identify some of the sample's main characteristics: gender, region of origin and year of graduation. The average age of the sample is **31.2 years**. One needs to bear in mind that due to the redefinition of the target group, the composition of the sample cannot be compared directly to the relevant data in the previous surveys. Moreover, for individual questions, the actual sample size can be smaller than indicated in the table below because respondents may have skipped certain questions or opted for responses that have not entered into the analysis, or due to the aforementioned filters that applied to many questions. Throughout this report, when differences observed between groups are described as statistically significant (95% confidence interval), this means that there is a 95% chance that the observed results are substantive and do not reflect random factors of one kind or another.

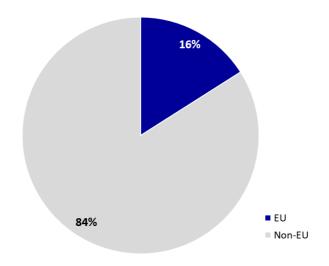
For a more detailed overview of the regions of origin, see Annex, section 7.2

Figure 1: 2019 Graduate Impact Survey sample, Gender



Data source: 2019 Graduate Impact Survey. Unweighted data.

Figure 2: 2019 Graduate Impact Survey sample, Region of origin



Data source: 2019 Graduate Impact Survey. Unweighted data.

28%

15%

2009

2010

2014

2018

2019

Figure 3: 2019 Graduate Impact Survey sample, Year of graduation

Data source: 2019 Graduate Impact Survey. Unweighted data.

Figure 45 and Table 5 in the Annex show how the respondents' age and gender related to a number of other variables. It is worth noting that female respondents were, on average, slightly younger (both at the time of the survey and of their graduation) than their male peers and significantly more likely to have completed an EMJMD in the social sciences and humanities while a significantly higher proportion of male respondents graduated in information science and engineering. A larger proportion of female graduates came from Europe (both EU and non-EU countries), South-East and East Asia, while a larger share of male graduates came from South Asia and Africa. Graduates from Africa are, on average, the oldest while graduates from Europe (both EU and non-EU) are more often represented in the younger age groups.

Our longitudinal analysis of continuity and change over time draws on the observation of variations (or the lack thereof) between the three aforementioned cohorts: those who graduated less than two or four, five, nine and ten years prior to the survey, i.e., (in reverse order) in the calendar years 2009/10, 2014/15 and 2018/19. It should be noted that the most recent cohort (2018/19) makes up 50% of the sample, 35% of the survey participants graduated in 2014/15, and only 15% in 2009/10.

2.5 Data weighting

Data weighting has been applied for the first time to the 2019 Graduate Impact Survey. Comparison of the collected data with the population data revealed discrepancies between the sample and the population distribution. For instance, older graduates (34 or older), graduates of economic sciences and graduates from East Asia were slightly underrepresented in the survey data, while younger graduates (up to the age of 29), graduates from the Middle East and Central

Asia, as well as respondents who had graduated in physics, environmental and geosciences, and the life sciences were slightly overrepresented. Hence, the survey data was weighted in line with characteristics discernible from the population database to improve the match between the sample and the overall population. In general terms, it should be noted 1) that weighting compensates only for imbalances relating to specific characteristics actually registered by the population data, i.e., it cannot compensate for sample-population differences pertaining to unobserved characteristics; 2) that weighting assigns an adjustment to each survey respondent, which, in extreme cases (e.g., when very substantial weight is assigned to specific characteristics), can cause instabilities. The fact that the weighting applied to the 2019 GIS did not lead to major changes in the results suggests that no overweighting transpired.

The weighting method applied to the 2019 survey is iterative proportional fitting, more commonly known as raking. First, a set of variables whose distribution among the population is known — age, sex, region of origin and field of study — is selected. The raking procedure iteratively adjusts the weight for each case until the distribution of these variables within the sample matches that among the population.

Due to the differing categorisations of the variable sex in the population data (a dichotomous variable: female and male) and the survey data (a nominal variable with 4 categories: female, male, other/diverse and "I prefer not to answer"), the raking was undertaken in two steps: 1) by adjusting the distribution of all female and male participants for age, sex, region of origin and field of study; 2) by adjusting the distribution of all participants who selected other/diverse or "I prefer not to answer" for age, region of origin and field of study.

3 Satisfaction with the EMJMD Programme

This chapter examines how EMJMD graduates feel about their study programme in general and its ability to meet their perceived requirements in particular. It also surveys the alumni's assessment of various study-related aspects, such as the quality of the courses, the extent to which they were able to attain and increase various practical skills, and the organisation and structure of the programme. With one exception, this part of the analysis focused only on the 2018/19 cohort in order to avoid possible distortions resulting from way in which memories tend to change over time. The final section of this chapter discusses possible improvements suggested by respondents to boost the quality of the courses and the attractiveness and career impact of the EMJMD programmes.

3.1 Overall Satisfaction

The Graduate Impact Survey covers a broad range of questions designed to measure graduates' satisfaction with the EMJMD programme. This section takes a look at their level of satisfaction with the programme overall. As Figure 4 shows, the overwhelming majority of respondents (84%) were (very) satisfied with their Erasmus Mundus Joint Master Degree programme. Only a very small proportion of survey respondents stated that they had not found their EMJMD experience satisfying (at all). In this respect, there were no statistically significant differences between the cohorts (see Figure 46, Annex, p. 69).

On average, male graduates reported somewhat higher levels of overall satisfaction with the EMJMD programme than their female counterparts but among respondents in the two more recent cohorts (2014/15 and 2018/19) this was not statistically significant.

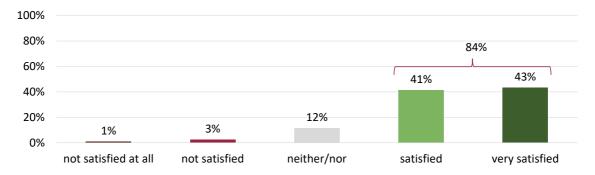


Figure 4: Overall satisfaction with the EMJMD programme (2018/19 cohort)

Respondents in the 2018/19 cohort. n=968.

 $Wording \ of \ the \ question: \ How \ satisfied \ were \ you \ over all \ with \ your \ EMJMD/EMMC \ studies?$

Data source: 2019 Graduate Impact Survey.

The overall level of satisfaction varied slightly by field of study (see Figure 5) and region of origin (see Figure 6). While respondents who graduated in physics, the life sciences and chemistry reported the highest levels of satisfaction, those who graduated in the social sciences and humanities, mathematics and information science and engineering were, on average, not quite as

satisfied. Graduates from East Asia, Africa and European non-EU countries reported the highest levels of satisfaction (up to 97%). Their peers from North America and Oceania, Latin America and the EU placed themselves at the opposite end of the scale (although even their level of satisfaction never fell below 75%).

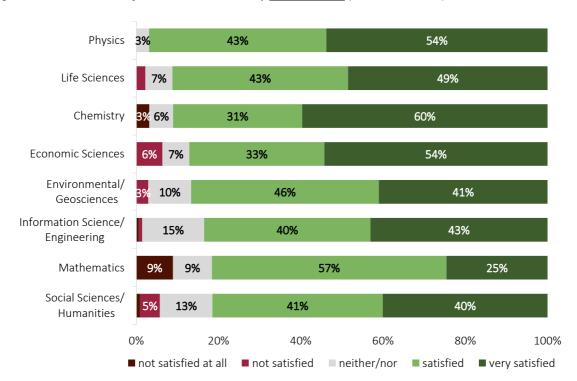


Figure 5: Overall satisfaction with EMJMD by field of study (2018/19 cohort)

Respondents in the 2018/19 cohort. n=968.

Wording of the question: How satisfied were you overall with your EMJMD/EMMC studies? Information in row percent, rounding differences possible. For all shares, see Table 12, Annex. Data source: 2019 Graduate Impact Survey.

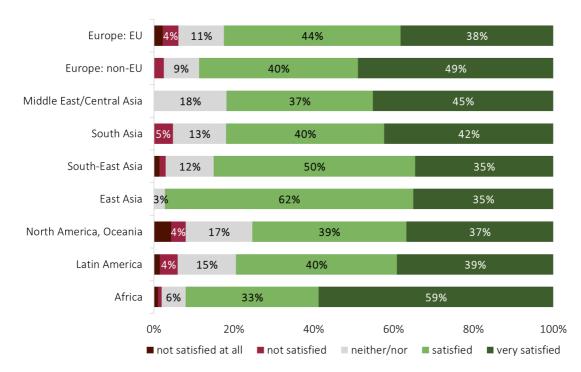


Figure 6: Overall satisfaction with EMJMD by region of origin (2018/19 cohort)

Respondents in the 2018/19 cohort. n=968.

Wording of the question: How satisfied were you overall with your EMJMD/EMMC studies? Information in row percent, rounding differences possible. For all shares, see Table 13, Annex. Data source: 2019 Graduate Impact Survey.

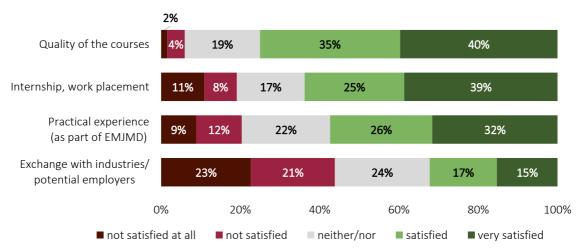
3.2 Satisfaction with Specific Aspects of the EMJMD Programme

Respondents were asked to record their satisfaction not only with their EMJMD programme in general but also in relation to a number of specific aspects of the programme. As Figure 7 shows, the majority of survey participants were (very) satisfied with the quality of the courses at their Erasmus Mundus host universities (75%). Only 6% recorded some level of dissatisfaction. Respondents were asked to assess the course quality separately for each of their host universities, so this figure presents a sum index. The majority of respondents also expressed their satisfaction with the internships/work placements and the opportunities their EMJMD programme offered them to acquire and apply various practical skills. They felt rather more ambivalent, however, about the current level of exchange with industries and potential employers. On this count, almost half of the respondents were dissatisfied.

Across all three cohorts, male graduates and graduates who were 37 or older at the time of the survey were on average marginally more satisfied with the quality of the courses than their female counterparts and younger peers, respectively. Conversely, female graduates were on average slightly more satisfied with the **internships and work placements** than their male counterparts. Yet none of these differences were statistically significant among respondents in the 2018/19 cohort. Graduates from non-EU countries recorded slightly higher levels of satisfaction with most aspects

of their EMJMD programme than their counterparts from EU countries but only in relation to the **quality of the courses** were these differences statistically significant.

Figure 7: Satisfaction with specific aspects of the EMJMD programme (2018/19 cohort)



Respondents in the 2018/19 cohort. From top to bottom: n=971, n=788, n=843, n=686.

Wording of the question: To what extent are you satisfied with the following aspects of your EMJMD/EMMC studies? Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

At cohort level (see Figure 8), there were some notable variations in the graduates' levels of satisfaction with specific aspects of their EMJMD programme. For instance, graduates in the two more recent cohorts (2014/15 and 2018/19) showed higher levels of satisfaction with the **exchange** with industries/potential employers, the internships and work placements, and the opportunities to obtain, hone and apply practical skills than their counterparts in the 2009/10 cohort. On the other hand, the most recent cohort (2018/19) was least satisfied with the quality of the courses.

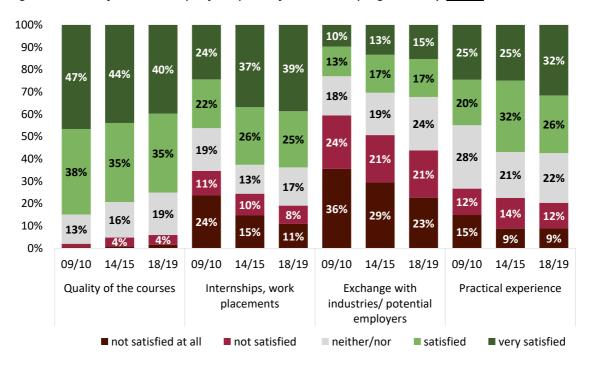


Figure 8: Satisfaction with specific aspects of the EMJMD programme by cohort

Total number of respondents included (from left to right): n=1,938, n=1,418, n=1,291, n=1,577.

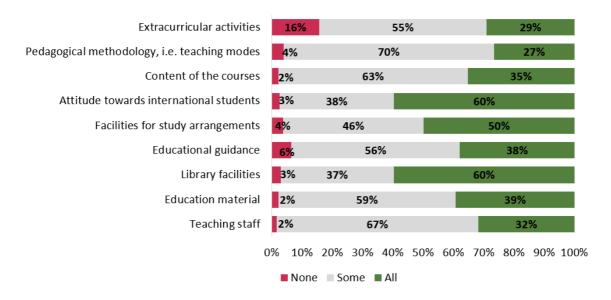
Wording of the question: To what extent are you satisfied with the following aspects of your EMJMD/EMMC studies? Rounding differences possible.

For all shares, see Table 14, Annex.

Data source: 2019 Graduate Impact Survey.

The graduates were also asked to state whether their levels of satisfaction with specific aspects of the EMJMD programme extended to all, some or none of the host universities (see Figure 9). Most respondents expressed significant levels of satisfaction with various aspects of the programme in at least *some* of their host universities. **Library facilities**, the **treatment of international students** and the **facilities for special study arrangements** were most frequently rated as (very) satisfactory in *all* EM host universities. By contrast, 16% of respondents stated that they had not found the **extracurricular activities** satisfactory at *any* of the host universities. While satisfaction with the aforementioned specific aspects of the programme across *all* rather than just some of their EM host institutions was reported more often by male than female graduates, these gender differences were statistically significant only when the relevant data for all cohorts were compared. The respondents in the most recent cohort (2018/19) were generally more critical of the aforementioned specific aspects of the programme than their counterparts in the two earlier cohorts and more inclined to express their satisfaction with only *some* of the host universities (see Table 6, Annex).

Figure 9: Satisfaction with specific aspects of the EMJMD programme at none, some or all of the EM host universities (2018/19 cohort)



Respondents in the 2018/19 cohort.

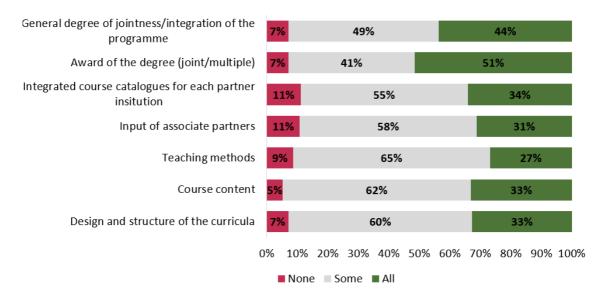
Wording of the question: Were you satisfied with the following aspects of your EMJMD/EMMC studies in none, some or all of your host universities?

Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

Graduates were also asked to assess whether all, some or none of their host institutions were doing a good job of coordinating the various component parts of the EMJMD programme (see Figure 10). It emerged that respondents were relatively satisfied with the award of the degree (joint/multiple) and the general degree of programme integration across all of the host universities. However, they did suggest that the coordination of the input of associate partners, integrated course catalogues for each partner institution and teaching methods left rather more room for improvement in all of the host institutions. While male graduates tended to be more satisfied with the quality of the programme coordination in all of their EM host institutions than their female counterparts, these gender differences were statistically significant only when the relevant data for all three cohorts were compared. In this instance too, respondents in the earlier cohorts were more inclined than their most recent counterparts to express their satisfaction with the level of programme coordination and integration at all of the host institution (see Table 7, Annex).

Figure 10: Satisfaction with the coordination of specific aspects of the EMJMD programme in none, some or all of the EM host universities (2018/19 cohort)



Respondents in the 2018/19 cohort.

Wording of the question: Were the following aspects well-coordinated between none, some or all of your EM host universities? Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

3.3 Suggestions for Improvements

In addition to assessing specific aspects of the EMJMD programme on a five-point scale, graduates were asked to respond to open-ended questions by elaborating on their assessments and to suggest improvements that might help increase the attractiveness and career impact of their programme. These questions allowed respondents to explain their responses and point to issues that they thought were relevant but were not explicitly addressed by the questions. While these data do not contribute to the quantitative analysis they do provide valuable qualitative insights.

The shortcoming referenced most frequently by respondents was a lack of training in practical skills that are in high demand on the labour market. In this context, graduates suggested that the HEIs introduce an element of project work focusing on specific tasks they were likely to face in "real life". In particular, graduates felt that more needed to be on offer in the fields of programming and IT skills, soft skills and entrepreneurial and language skills.

Suggestions designed to enhance the career impact of Erasmus Mundus include: 1) the (possibly even mandatory) integration of internships into the curricula or, at least, enhanced support for students seeking internships; 2) field-specific career counselling including an overview of potential career paths and application training/guidance for those students who are about to enter the labour market; 3) the creation of more opportunities for partnerships with potential employers in order to create professional networks. Respondents also suggested inviting guest lecturers from

the professional sector, extending and intensifying the work of alumni networks, promoting the programme more proactively and increasing its visibility to potential employers.

Asked how one might attract future students, graduates called for more financial support. Not only should the scholarships be more generous, they also needed to be more readily available. The latter was highlighted especially by graduates from economically disadvantaged EU states. Respondents also pointed to the need for better guidance for accepted applicants prior to the programme on issues such as visa applications and how to secure suitable accommodation.

Respondents who expressed some measure of discontent with the **content of the programmes** reported that some of the content was very basic and essentially pitched at bachelor's level while important field-specific content was not covered. Several critical remarks were made with regard to the English language skills of some lecturers.

Finally, many respondents criticised shortcomings in the **collaboration between host universities**: some complained about reduplication in the curricular content due to insufficient coordination between partner institutions. Others pointed to delays in the delivery of their diploma and suggested the award of just one joint diploma rather than four separate diplomas. Some felt the process of transferring from one university to the next and moving between countries could be organised and streamlined more efficiently. Specifically, this might entail the closer coordination of semester dates to avoid overlap, assistance in registering for courses and securing accommodation, and the provision of information about the local environment and culture to help students integrate in their new location.

4 The EMJMD Programmes' Impact

This chapter presents empirical evidence for just some of the ways in which the Erasmus Joint Master Degree programmes shape graduates' lives by allowing them to acquire and enhance a range of competences and skills that increase their employability and foster their future integration in the labour market and by promoting and facilitating their personal development and social engagement. The final section takes a closer look at the professional career path of graduates immediately after graduation and various aspects of their current employment situation.

4.1 General impact

Participants were asked to indicate on which aspects of their life they felt Erasmus Mundus had made a substantial impact (multiple answers were permitted). As Figure 11 shows, 72% of respondents rated the enhancement of their **intercultural competence** as the programme's strongest impact on them, followed by its impact on their **career** (62%), their **personality** (59%) and their **attitude towards Europe and the EU** (56%). Every other graduate felt that Erasmus Mundus had substantially enhanced their **subject-related expertise** (51%). Relatively few graduates reported any substantial impact on their **private life** (32%). On all these issues, the variations between the cohorts were minimal (see Table 8, Annex). For instance, respondents in the 2018/19 and 2009/10 cohorts were slightly more emphatic in their focus on the programme's impact on their **intercultural competence** than their counterparts in the 2014/15 cohort. Those who graduated in 2009/10 placed marginally more emphasis on the programme's impact on their **attitude towards Europe and the EU** than graduates in the 2018/19 cohort and they highlighted its impact on their **career** more often than respondents who graduated in 2014/15.

Intercultural competence Career 62% 59% **Personality** Attitude towards Europe and the EU Subject-related expertise Private life 32% Other 0% 20% 40% 60% 80% 100%

Figure 11: Areas of Erasmus Mundus's greatest impact (multiple answers permitted)

All respondents. n=1,944. Multiple answers permitted.

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

Data source: 2019 Graduate Impact Survey.

It is hardly surprising that the vast majority of respondents (nearly 90%) felt that their EMJMD programme had substantially impacted more than just one aspect of their lives. They were also asked, however, to narrow down their selection to what they thought had been the programme's single most important impact on them. Forced to choose (see Figure 7), they singled out their career (27%) and their intercultural competence (25%) as the areas in which the programme had made the greatest impact, followed by their subject-related expertise (17%) and personality (16%).

It is noteworthy that the priorities emerging from the responses to the single-answer and multiple-answer questions diverge. The top places are now reversed as more respondents rate the programme's impact on their **career** more highly than its effect on their **intercultural competence**, followed by the enhancement of their **subject-related expertise** (previously on place five).

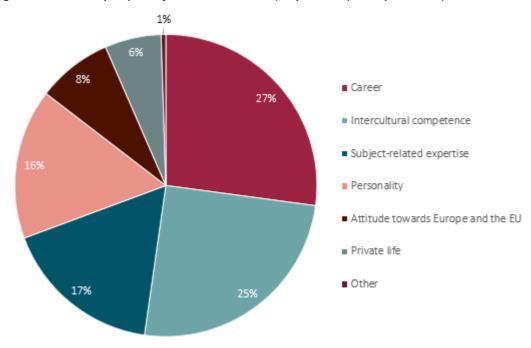


Figure 12: Primary impact of Erasmus Mundus (only one response permitted)

All respondents. n=1,944.

Wording of the question: Which one do you consider the greatest impact of Erasmus Mundus? Data source: 2019 Graduate Impact Survey.

While there were no statistically significant differences between the cohorts on this issue, responses did vary considerably depending on the respondents' region of origin (see Table 1). The respondents from most regions ranked the programme's impact on their **career** and **intercultural competence** most highly. By contrast, 26% of respondents from European non-EU countries (as opposed to 16% on average), while also placing the programme's impact on their **career** first, prioritized the significance of the way in which the programme had benefited their **personality**, thus identifying it as the programme's second most important impact. On a similar note, respondents from the Middle East and Central Asia identified the programme's impact on their **personality** as the joint second most important impact, alongside its enhancement of their **intercultural competence** (both 21%).

For respondents from five of the nine regions, the programme's benefits to their **career** emerged as its single most important impact. This evaluation was particularly pronounced among graduates from Africa and Latin American of whom 37% and 32%, respectively, considered this the programme's most important impact. Respondents from the other four regions of origin most frequently singled out the enhancement of their **intercultural competence** as the programme's single most important impact. The emphasis respondents from South Asia and Africa place on the programme's enhancement of their **subject-related expertise** (24% and 22%, respectively) stands out, as does the very small proportion of graduates from East Asia who singled it out as the programme's most important impact (only 8%). The latter were twice as likely as the average to stress the programme's impact on their **private life** (12%).

Finally, it is hardly surprising that respondents from non-European regions were generally more likely to single out the programme's impact on their **attitude towards Europe and the EU**, as 18% of graduates from East Asia and 13% of their peers from North America and Oceania did. In this respect, the respondents from Latin America and Africa, of whom only 4% and 6%, respectively, prioritized this impact, were the odd ones out.

Table 1: Primary impact of Erasmus Mundus by <u>country of origin</u>, highlighting the two most frequent responses (only one answer permitted)

	Career	Intercultural competencies	Subject-related expertise	Personality	Attitude towards Europe and the EU	Private life	Other	Total
Europe: EU	27%	23%	17%	18%	5%	10%	0.4%	100%
Europe: non-EU	28%	19%	16%	26%	4%	7%	0%	100%
Middle East/Central Asia	23%	21%	19%	21%	7%	8%	1.3%	100%
South Asia	22%	27%	24%	16%	11%	1.2%	0%	100%
South-East Asia	19%	34%	16%	18%	11%	2.8%	0%	100%
East Asia	21%	34%	8%	8%	18%	12%	0%	100%
North America/Oceania	24%	30%	13%	11%	13%	5%	5%	100%
Latin America	32%	29%	14%	13%	4%	7%	0.6%	100%
Africa	37%	20%	22%	12%	6%	2.8%	0%	100%
Total	27%	25%	17%	16%	8%	6%	0.5%	100%

All respondents. n=1,944.

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

Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

There were also variations depending on the respondents' field of study (see Figure 47). An above average share of those who graduated in mathematics, the life sciences and economic sciences singled out the programme's impact on their **careers** as most important, while their peers who graduated in the social sciences and humanities as well as physics placed the top priority on the way in which it enhanced their **intercultural competence**. Respondents who graduated in chemistry most often singled out the way in which the programme had enhanced their **subject-related expertise** as its most important impact.

The assessment of which of the programme's impacts was most significant varied, in part, by gender (as noted earlier, female and male graduates were distributed unevenly across the various fields of study). While female graduates were significantly more likely to place the programme's impact on their **intercultural competence** at the top of their list, their male counterparts were more likely to prioritize the way in which it enriched their **attitude towards Europe and the EU**. In this respect, female graduates in economic sciences were the odd ones out in that they identified the programme's impact on their **attitude towards Europe and the EU** as its most important benefit

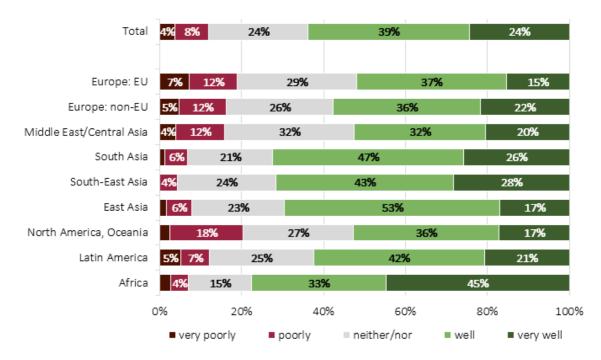
with significantly greater frequency than their male counterparts. Among the respondents who graduated in the social sciences and humanities and in information science and engineering, female graduates were more likely to prioritize the way in which the programme had enhanced their **intercultural competence** while men were more likely to single out the importance of its impact on their **attitude towards Europe and the EU**.

4.2 Preparedness for the Labour Market

The previous section has shown that graduates credit the EMJMD programmes with a major impact on their **careers**. Indeed, respondents named the prospect of better career opportunities and improved employability as a crucial reason for embarking on one of these programmes in the first place (see section 5.1). Against this backdrop, GIS participants were asked how well competences attained in the context of their Erasmus Mundus studies had prepared them to enter the labour market following their graduation.

Figure 13 and Figure 14 show how graduates rated their preparedness for the labour market, differentiated by their region of origin (Figure 8) and field of study (Figure 9). The results are, on the whole, encouraging. On average, 64% of respondents felt (very) well and only 12% of their peers (very) poorly prepared for the labour market. On this score, satisfaction levels were particularly high among respondents from Africa and South, South-East and East Asia (see Figure 13) and among those who graduated in chemistry, the life sciences, economic sciences, and environmental and geosciences (see Figure 14). Respondents from North America/Oceania and the EU and those who graduated in the social sciences and humanities were particularly critical of their preparedness for the labour market. Both overall and across most fields of study, female graduates viewed the programme's contribution to their readiness for the labour market rather more critically than their male counterparts. While, on average, 70% of male respondents felt (very) well prepared, only 58% of the female respondents opted for this assessment (see Table 9, Annex). This gender differences are particularly pronounced among those who graduated in economic sciences, mathematics and environmental and geosciences. In these fields of study, female graduates are much less satisfied than their male peers with the extent to which the programme has prepared them for the labour market.

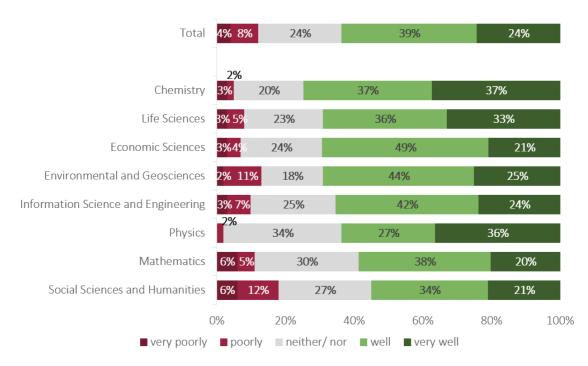
Figure 13: Preparedness for the labour market by region of origin



All respondents. n=1,944.

Wording of the question: How well has your Erasmus Mundus study programme prepared you for the labour market? Information in row percent, rounding differences possible. For all shares, see Table 15, Annex. Data source: 2019 Graduate Impact Survey.

Figure 14: Preparedness for the labour market by field of study



All respondents. n=1,944.

Wording of the question: How well has your Erasmus Mundus study programme prepared you for the labour market? Information in row percent, rounding differences possible. For all shares, see Table 16, Annex. Data source: 2019 Graduate Impact Survey.

Figure 15 shows some measure of variation in how well prepared the respondents from the three cohorts felt for the labour market. While the proportion of respondents who feel (very) well prepared has decreased slightly, the share of those whose assessment is more critical has increased accordingly. A further differentiation by region of origin or field of study rendered no additional significant differences.

It should be noted, however, that, compared to earlier surveys, the overall proportion of respondents who felt that the programme had prepared them (very) well for the labour market has increased from (most recently) 55% in 2018 to 64% in 2019.

2009/10 24% 43% 25% 7% 2014/15 25% 9% 38% 23% 2018/19 9% 25% 24% 38% 0% 30% 70% 10% 20% 40% 50% 60% 80% 90% 100% ■ very poorly poorly neither/nor well ■ very well

Figure 15: Preparedness for the labour market by cohort

All respondents. n=1,940.

Wording of the question: How well has your Erasmus Mundus study programme prepared you for the labour market? Data source: 2019 Graduate Impact Survey.

In order to identify where improvements are needed, graduates were asked in what respects they felt that their study programme could have done more to prepare them for the labour market (see Figure 16). In particular, respondents highlighted the need for more contacts to potential employers (56%) and career mentoring (53%). More than one third of respondents felt that the programme needed to devote more time to career development, entrepreneurial learning, and networking activities (36% each). By contrast, the proportion of respondents who felt their programme had not done enough to equip them with the requisite technical, soft or subject-specific skills (18%, 15% and 10%, respectively) or that the course content was too inflexible (13%) to prepare them well for the labour market, was significantly lower. This suggests that the shortcomings of concern to the respondents, rather than hinging on an actual lack of training in specific relevant skills, are primarily organisational or practical in nature.

A comparison of the three cohorts rendered a number of statistically significant trends (see Table 10, Annex). On the one hand, the emphasis placed on the need for a greater focus on **entrepreneurial learning** and **soft skills** steadily decreases while, on the other hand, the desire for more **flexibility in the course content** and a greater emphasis on **technical and subject-related skills** steadily increases from one cohort to the next.

Contacts to potential employers 56% Career Mentoring Time to dedicate to career development during the EM Networking activities 36% Entrepreneurial learning 36% Practical experiences Adequate labour market and career development knowledge of supervisors and/or course coordinators Integration activities in the host countries Technical skills Soft skills Flexibility in the content of the courses 10% Subject-specific skills 0% 20% 60% 100% 40% 80%

Figure 16: Aspects of the EMJMD programme requiring improvement to enhance graduates' preparedness for the labour market (multiple answers permitted)

All respondents who evaluated their preparedness for the labour market. n=1,936.

Multiple-answer question. "Other" and "Nothing I can think of" responses were excluded.

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

Data source: 2019 Graduate Impact Survey.

4.3 Competences

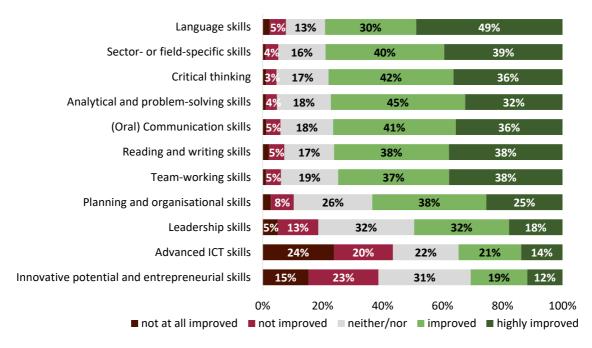
The previous sections have focused on how respondents rank the specific impacts of their EMJMD programme and in which areas they felt room for improvement remained. In addition, they were asked to quantify the extent to which the programme had allowed them to enhance their proficiency in a range of specific skills relevant to their employability, personal development and social engagement. To facilitate this, the Graduate Impact Survey 2019 has, for the most part, adopted the taxonomy developed for the European Commission's *Erasmus+ Higher Education Impact Study* (2019). The following discussion will first focus on the respondents' assessment pertaining to each of the individual items included in the questionnaire and then aggregate those items that are closely related to facilitate a more focused analysis. It is worth pointing out at the outset that the analysis showed no significant differences relative to respondents' gender.

As Figure 17 indicates, more than three-quarters of the respondents reported that their participation in one of EMJMD programmes had (considerably) enhanced their proficiency in most of the listed **employment-related skills** and nearly two-thirds (63%) said the same about their

Souto-Otero et al. for the European Commission, *Erasmus+ Higher Education Impact Study*, 2019, https://op.europa.eu/en/publication-detail/-/publication/94d97f5c-7ae2-11e9-9f05-01aa75ed71a1/language-en

planning and organisational skills. Respondents were rather less optimistic, however, about the extent to which the programme had helped them hone their leadership skills and, especially, their advanced ICT skills and their innovative potential and entrepreneurial skills. That said, respondents in the most recent cohort (2018/19) rated the degree to which the programme had helped them enhance their innovative potential and entrepreneurial skills and leadership skills slightly higher than their predecessors in the earlier cohorts and they also felt more optimistic about the positive impact of the programme on their ICT, planning and organisational, and communication skills than their counterparts in the 2009/10 cohort.

Figure 17: Employability skills



All respondents.

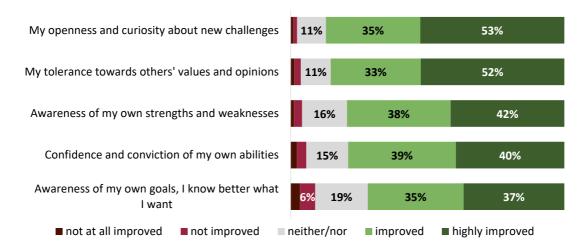
Wording of the question: Looking back at your Erasmus Mundus experience, how did the following skills, competencies and areas of knowledge improve for you personally during your EMJMD/EMMC studies?

For all shares, see Table 17, Annex.

Data source: Graduate Impact Survey 2019.

As Figure 18 shows, the respondents rated the EMJMD programme's positive contribution to their personal development – in terms of their openness to new challenges, their tolerance for values and opinions that differ from their own, their ability to assess their own strengths and weaknesses and their self-confidence and goal orientation – very highly indeed. On three of these counts – their openness to new challenges, their ability to assess their own strengths and weaknesses and their goal orientation – the respondents in the most recent cohort (2018/19) recorded a slightly higher level of improvement than their predecessors.

Figure 18: Personal development



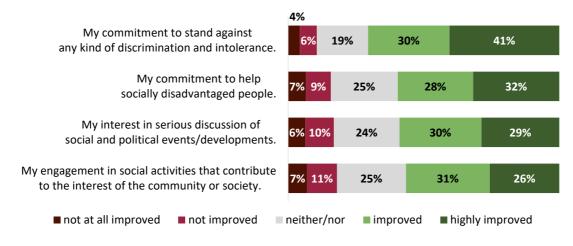
All respondents.

Wording of the question: How did the following aspects improve for you personally during your EMJMD/EMMC studies? For all shares, see Table 18. Annex

Data source: 2019 Graduate Impact Survey.

Respondents also reported that their EMJMD programme had made a substantial impact on their social engagement (see Figure 19). A clear majority suggested that they are now more determined to take a stand against discrimination and intolerance (71%) and help disadvantaged people (60%). Asked to what extent they were now more interested in social and political events/developments as a result of the programme, 59% of respondents confirmed that the programme had raised their level of interest. In addition, 57% claimed that they were now more involved in social activities that contribute to the interest of specific communities or society at large. On all these counts (with the exception of their involvement in social activities), graduates belonging to the most recent cohort (2018/19) registered the highest level of impact.

Figure 19: Social engagement



All respondents.

Wording of the question: How did the following aspects improve for you personally during your EMJMD/EMMC studies? Data source: 2019 Graduate Impact Survey.

In order to reduce the complexity of this relatively complex data set, three overarching indices were created, each combining a set of items that are closely related in substance, to quantify the respondents' assessment of the programme's impact on their **employability**, **personal development** and **social engagement**, respectively, with a single number. Reliability tests (Cronbach's Alpha statistics) confirmed the relatively high internal consistency among the items included in each index.¹³ All of the included variables were recoded to share the same scale (1 = "not improved at all" to 5 = "highly improved") and a mean was then calculated as the index value on a scale of 0 to 100 (high values corresponding to high levels of improvement). As Figure 20 shows, the respondents felt that the programme had enhanced their competence in all three areas (employability, personal development, and social engagement) to a considerable, if slightly varying, degree.

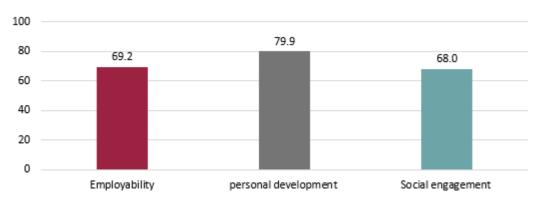


Figure 20: Impact indices

All respondents. From left to right: n=1,702, n=1,856, n=1,811. High values correspond to high levels of additional competence gained. Data source: 2019 Graduate Impact Survey.

Our analysis also revealed a significant positive correlation between all three indices (see Table 2). In other words, the higher respondents rated the extent to which the programme has enhanced their **employability** the more they also felt that they had benefited from the programme in terms of their **personal development** or **social engagement** and vice versa. A similar correlation also exists between their evaluation of their **personal development** and **social engagement**.

Table 2: Correlation between the impact indices

Employability and personal development	Pearson ρ = 0,669**	n=1,653	
Personal development and social engagement	Pearson ρ = 0,653**	n=1,758	
Social engagement and employability	Pearson $\rho = 0.584**$	n=1,616	

Pearson p = correlation coefficient measuring the strength and direction of a linear relationship between two variables. Values can range between -1 (strong negative relationship) and +1 (strong positive relationship). ** statistically significant, i.e., p-value is \leq .05. Data source: 2019 Graduate Impact Survey.

The Cronbach's Alphas ranged from a minimum of 0.83 to a maximum of 0.87. As a rule of thumb, a reliability coefficient of 0.70 or higher is widely considered 'acceptable'.

As Figure 21 shows, respondents from non-EU countries rated the extent to which they had benefited from the programme on all three counts even more positively than their counterparts from EU countries.

100 80.8 74.1 80 70.1 69.0 64.3 61.5 60 40 20 0 Employability personal development Social engagement ■ EU Non-EU

Figure 21: Impact indices by region of origin

All respondents. From left to right: n=1,702, n=1,856, n=1,811. Data source: 2019 Graduate Impact Survey.

The analysis by respondents' field of study (see Figure 22) shows that those who graduated in physics rated the gains they had made in terms of **employability** (79.5) most highly, while those who graduated in mathematics (63.4) and the social sciences and humanities (66.6) were most sceptical in this respect. While respondents who graduated in mathematics and information science and engineering did not rate the strides the programme had allowed them to make in terms of their **personal development** as highly as their peers who graduated in physics and chemistry, these differences were not statistically significant. In terms of their increased **social engagement**, those who graduated in mathematics (56.5) and information science and engineering were more modest in their assessment of the gains they had made thanks to the programme than their peers who graduated in other subject areas in general and those who graduated in the social sciences and humanities in particular (72.9).

100 80.9 81.1 81.4 79. 71.0 69.2 69. 80 60 40 20 0 **Employability** Social engagement personal development ■ Information Science and Engineering ■ Environmental and Geosciences ■ Economic Sciences ■ Life Sciences ■ Mathematics ■ Social Sciences and Humanities ■ Chemistry Physics ■ Total

Figure 22: Impact indices by field of study

All respondents. From left to right: n=1,702, n=1,856, n=1,811. Data source: 2019 Graduate Impact Survey.

On all three counts, there were only slight variations between the three cohorts (see Figure 23). Respondents in the most recent cohort (2018/19) consistently rated their gains in all three areas more highly than their peers in the earlier cohorts (though the differential for the assumed increase in **employability** is not statistically significant). It obviously needs to be borne in mind that perceptions change and memories can be distorted over time. Even so, the fact that the values for all three indices are so similar across all three cohorts indicates a very high level of consistency in the EMJMD programme's ability to facilitate its graduates' growth on all three counts.

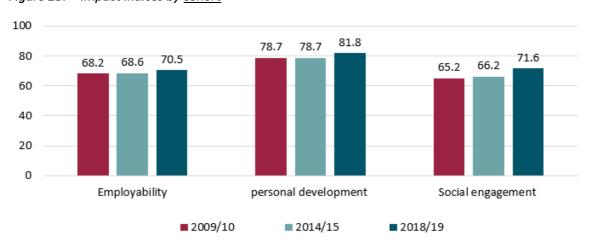


Figure 23: Impact indices by cohort

All respondents. From left to right: n=1,698, n=1,852, n=1,807. Data source: 2019 Graduate Impact Survey.

As indicated at the beginning of this section, the taxonomy used here to measure gains in employability, personal development and social engagement is in large part based on the one

underpinning the *Erasmus+ Higher Education Impact Study*.¹⁴ Although the target group of that study – i.e., students and graduates participating in the Erasmus(+) programme as well as a control group of other mobile and non-mobile learners – was much broader than the target group of the 2019 GIS, similar general tendencies can be observed in terms of the positive impact of mobility programmes on graduates. The Erasmus+ impact study found that the advances participants in Erasmus+ make both in terms of their studies and their **personal development**, **social engagement** and **intercultural competence** significantly outweighed those afforded by other mobility programmes. Erasmus+ graduates were confident that the knowledge, skills and competences acquired in the context of the programme would enhance their **employability** and **careers** as well their ability to contribute to social cohesion.

Like this study, the Erasmus+ impact study too points to a correlation between respondents' region of origin and variations in their evaluation and ranking of the benefits they have reaped from participation in the programme. For example, Erasmus+ participants from countries with a lower per capita GDP consistently felt that they had benefited from the mobility programme in particular measure. Moreover, the further away the Erasmus+ participants' home country was from the EU, the greater the perceived impact of the programme.

In conclusion, respondents expressed high levels of confidence that their EMJMD programme enriched them substantially in their social, personal and professional development and increased their employability. The overwhelming majority (in many cases between 75% and 80%) of respondents reported substantial increases in their proficiency across a whole range of skills and competences — including critical thinking and various communication, language and subject-specific skills — and considerable strides in their personal development as well as an intensification of their interest in political and social developments and social engagement.

4.4 Graduates' Career Paths

As section 4.1 shows, Erasmus Mundus graduates think of their career as the aspect of their life most profoundly affected by their EM master's programme. This section takes a closer look at the employment situation of graduates in the first sic months after graduation as well as their current occupation (see section 4.4.2). To this end, the Graduate Impact Survey relies both on a robust quantitative method focusing on objective factors (such as the type of employment and how and where it was found) and on the respondents' subjective self-assessment of various aspects of their career development (such as their satisfaction with their position and their own assessment of their professional skills and competences).

4.4.1 The First Six Months after Graduation

In this section, the information respondents provided on their professional status six months after graduating is discussed. As Figure 24 shows, in the first six months after completing their EMJMD,

Souto-Otero et al. for the European Commission, *Erasmus+ Higher Education Impact Study*, 2019, https://op.europa.eu/en/publication-detail/-/publication/94d97f5c-7ae2-11e9-9f05-01aa75ed71a1/language-en

the majority of graduates were either seeking employment or already in work or they were pursuing further studies. Some graduates reported that they were in casual employment which, more often than not, was related to their area of study. Others had accepted, or were applying for, traineeships/internships. Only a very small number of respondents were neither employed nor were they – for a variety of reasons including the wish to take a break from studies/employment, travel or look after family members or deal with health problems – looking for a position. A mere 2% of respondents reported that they had set up a business of their own in the first six months after graduation.

There were a number of statistically significant differences between the cohorts in terms of their professional status in the first six months after graduation (see Figure 48, Annex). While respondents who graduated nine or ten years ago (i.e., the 2009/10 cohort) were less likely than their peers in the subsequent cohorts (2014/15 and 2018/19) to have **one or more casual jobs not related to their studies**, they were more likely to **return to the** job they held prior to embarking on an EMJMD programme or **continue their studies**. By contrast, in the first six months following their graduation, respondents in the two more recent cohorts accepted or applied for a **traineeship/internship** or applied for **further studies** more often than their predecessors.

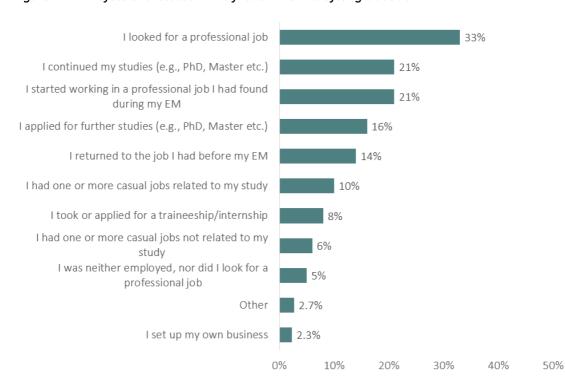


Figure 24: Professional status in the first six months after graduation

All respondents. n=1,946.

Multiple-answer question.

Wording of the question: What did you do in the first six months after your Erasmus Mundus graduation? Data source: 2019 Graduate Impact Survey.

Respondents' professional status immediately after graduation also varied, *inter alia*, by gender, age, field of study and region of origin. Respondents who were older at the time of graduation and,

in many cases, had already worked before embarking on their EMJMD programme were more likely to return to their previous job and less likely go on to further studies. Male graduates were more likely to return to their previous job (m: 17% vs. f: 11%), set up their own business (m: 3% vs. f: 1.6%), or go on to/apply for further studies (m: 37% vs. f: 30%). By contrast, a larger proportion of female respondents reported that they had taken up a traineeship or internship (f: 11% vs. m: 6%) in the first six months after graduation. These variations by gender may result, at least in part, from the age differences between male and female graduates and/or the varying proportions of female and male respondents graduating in the various fields of study.

Female respondents who graduated in information sciences and engineering, a field of study with an above average share of male alumni, were more likely to be seeking employment in the first six months after graduation, while their male peers were more likely either to return to their previous job, take up a position they secured while still completing their EMJMD programme or set up their own business. Graduates in environmental and geosciences were more likely to return to their previous job or go on to further studies if they were male but more likely to take up a traineeship/internship if they were female. A similar pattern can be observed in the social sciences and humanities where an above average share of the graduates is also female.

In terms of variations between fields of study more generally, the proportion of respondents who immediately went on, or sought admission, to **further study programmes** was lowest among those who graduated in economic sciences or the social sciences and humanities and highest among their peers who graduated in chemistry or physics. Here too, age may play a role. For instance, respondents who graduated in mathematics or physics were, on average, both younger and also more likely to continue studying and less likely to be in employment in the first six months after graduation than their peers graduating in other subjects. The picture is much the same for those graduating in chemistry.

The proportion of graduates returning to their previous jobs was particular high among graduates from South Asia (31%) and Africa (27%) while their peers from North America/Oceania (5%) and the EU (6%) were least likely to do so. Nearly half of the graduates from North America and Oceania were seeking employment in the first six months after graduation. Graduates from East Asia reported almost twice as often as their peers on average that they were continuing their studies (41% vs. av. 21%) and they were also twice as likely to be unemployed or not actively seeking employment (10% vs. av. 5%).

Further Studies

One-third of respondents applied for further study programmes and/or continued their studies in the first six months after completing their EMJMD programme. Those applying for further study programmes recorded a success rate of 73%. Figure 25 offers an overview of the types of further study graduates pursued or sought to pursue after completing their EMJMD programme and the relevant distribution by cohort. Across all three cohorts, the vast majority of respondents who continued or sought to continue studying opted for a PhD programme not funded by the EU. Their share has, however, decreased from one cohort to the next. By contrast, interest in the Marie

Skłodowska Curie European Joint Doctorate, the second most common type of further studies pursued by EMJMD programme graduates, has increased markedly from one cohort to the next. Of the respondents in the 2018/2019 cohort who pursued further studies immediately after the completion of their EMJMD programme, 23% opted for a Marie Skłodowska Curie European Joint Doctorate.

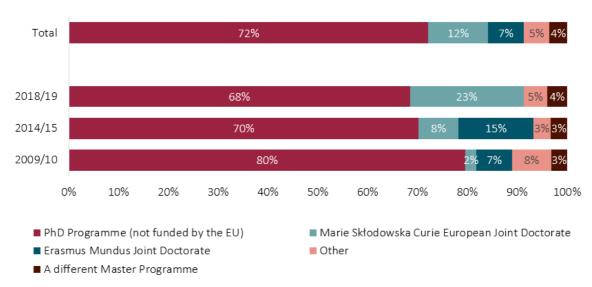


Figure 25: Further studies after Erasmus Mundus by cohort

All respondents pursuing or seeking to pursue further studies in the first six months after graduation. n=677. Wording of the question: What kind of further studies did you (want to) pursue?

Data source: 2019 Graduate Impact Survey.

Seeking Employment

This section focuses on the 33% of respondents seeking employment in the first six months after completing their EMJMD programme (see Figure 24). They were asked whether their search for employment was successful and a number of follow-up questions that varied according to their initial response. In order to avoid the ways in which memories tend to be transformed over time from affecting the data these questions were addressed only to respondents who graduated after 2010.

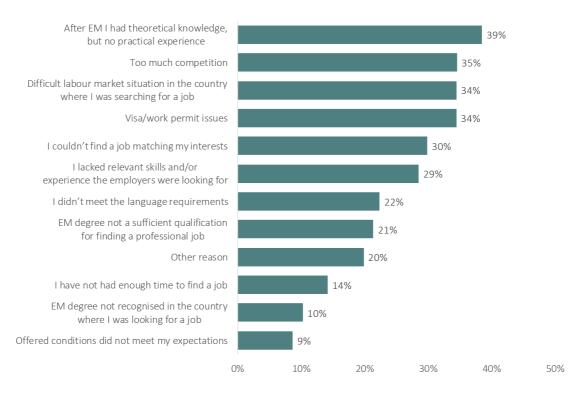
The majority of respondents who sought employment were able to secure a position within six months of graduating (74%). It bears reiterating that these figures refer only to respondents who un/successfully sought employment immediately after graduation and not to the respondents overall. Of all the graduates who responded to the 2019 GIS, 5% were unemployed and seeking employment at the time of the survey (see section 4.4.2).

Reasons for not Finding Employment Within Six Months of Graduating

The single most important reason respondents gave for their failure to find employment within six months of graduating was the **lack of practical experience** (39%, see Figure 26). More than one-third suggested they had been unable to secure a position within six months of graduating because the **competition** was too stiff (35%), because of the **tricky labour market for graduates** in the country

in which they were seeking employment (34%) or due to visa/work permit issues (34%). Nearly one-third of respondents explained that they had been unable to find positions matching their interests (30%) or lacked the skills and/or experience required by employers (29%), and one-fifth of respondents reported that they lacked requisite language skills or their degree did not qualify them sufficiently for professional employment. According to 10% of the respondents who failed to secure a position within six months of graduating, their EM degree was not recognised by the authorities in the country in which they were seeking employment.

Figure 26: Reasons given for not securing a professional position within six months of graduating (multiple responses permitted)



Respondents who graduated in 2014/15 and 2018/2019 and were unable to secure a professional position within six months of graduating. n=197.

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: 2019 Graduate Impact Survey.

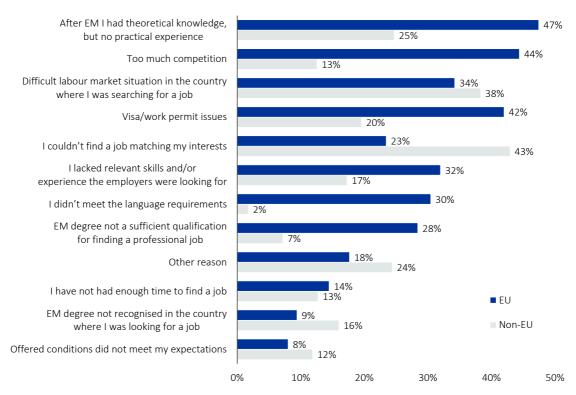
While this particular subsample is rather small (n=197) and there are, therefore, limits to the statistically robust conclusions that can be drawn from the responses, they do give a sense of the relative weight respondents attach to the reasons they think explain why they were unable to secure a professional position within six months of graduating.

The reasons given varied markedly depending on where respondents were seeking employment. Given the size of the sample, the focus is only on respondents' first preferences of work locations (see Figure 27). The proportion of respondents citing a **lack of requisite language skills** was markedly higher among those seeking employment in an EU country than it was among those looking for positions elsewhere (EU: 30% vs. non-EU: 2%). They were also significantly more likely to report

that their EM degree died not qualify them sufficiently to find professional employment (EU: 28% vs. non-EU: 7%) or that the competition was too stiff (EU: 44% vs. non-EU: 13%). They also cited the lack of practical experience and visa/work permit issues more frequently. Conversely, the proportion of those seeking employment in a non-EU country who recorded their inability to find employment matching their interests was significantly higher.

The relative weight of the reasons respondents gave to explain why they had been unable to secure employment within six months of graduating also varied considerably depending on whether graduates were looking for a position in their country of origin or not. Respondents seeking employment in their original home country were significantly more likely to cite the fact that their **EM degree was not recognised** there or that they had been unable to find a position matching their interests. By contrast, those who sought employment elsewhere pointed to **visa/work permit issues**, an **overly competitive environment** and/or the fact that their **EM degree did not suffice** to qualify them for a professional position with much greater frequency.

Figure 27: Reasons given for not securing a professional position within six months of graduating by <u>preferred location</u> (multiple responses permitted)



Respondents who graduated in 2014/15 and 2018/19 and were unable to secure a professional position within six months of graduating. n=181.

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: 2019 Graduate Impact Survey.

Location of First Position After Graduation

A number of research projects – including the **Erasmus+ Higher Education Impact Study**, the **Gone International Report**, and the **ESN Survey 2011** – have demonstrated the positive correlation

between student and labour mobility.¹⁵ Against this backdrop, the GIS asks graduates where they sought or found employment in the first six months after graduation.

As Figure 28 shows, half of the respondents sought employment in a country other than their original home country. Graduates, regardless of whether they originally came from EU or non-EU countries, were particularly keen to work in Germany, the Netherlands, France, the United Kingdom, Belgium, Spain, Sweden, Denmark and Italy. Only some 5% of respondents suggested that they did not particularly care where they would find employment.

Figure 28 also details the distribution of preferences among those who did and did not succeed in securing a position within six months of graduating. Apparently, respondents who had their hearts set on working in Germany, France, Belgium, Denmark and Italy were more likely to face difficulties in finding employment than their peers who sought a position in the UK, Sweden and Spain.

There was some variation between cohorts in the ranking of preferences. While respondents who graduated in 2018/2019 ranked their preferences in the order shown in Figure 28, among graduates in the 2014/15 cohort, Norway rather than Italy took the tenth place. They also rated the UK and Sweden more highly but were less keen on working in Belgium and the Netherlands.

Souto-Otero et al. for the European Commission, *Erasmus+ Higher Education Impact Study*, 2019, https://op.europa.eu/en/publication-detail/-/publication/94d97f5c-7ae2-11e9-9f05-01aa75ed71a1/language-en Universities UK International 2017. *Gone International: mobility works. Report on the 2014–15 graduating cohort*. https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/International/GoneInternational2017_A4.pdf Erasmus Student Network (ESN), *ESNSurvey 2011: Exchange, Employment and Added Value*, https://esn.org/ESNSurvey/2011

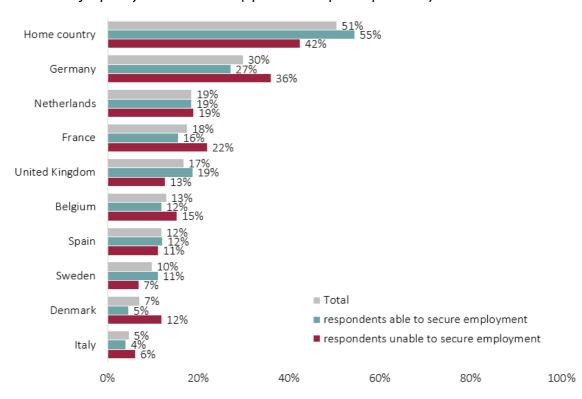


Figure 28: Preferred location for employment within six months of graduating: the ten most frequently named locations (up to three responses permitted)

Respondents graduating in 2014/15 and 2018/2019 who un/successfully sought employment within six months of graduating. n=520. Up to three responses permitted.

Wording of the question: In which country/countries were you mainly looking for a professional job? Data source: 2019 Graduate Impact Survey.

In terms of the factors motivating their choice of country, respondents most frequently pointed to superior employment/career opportunities (55%), a good work and living environment (52%) and family reasons/their private lives (48%, see Figure 29). Familiarity with the locations in question also featured prominently, many respondents explaining that they had opted for a particular location because they had previously lived/studied/worked there (42%) and/or because it was their original home country (34%). One-third of respondents were motivated by the financial and political stability and the level of social security in their preferred countries.

Figure 29 also shows that EMJMD graduates who came from an EU country in the first place cited family reasons/their private lives and opted for their home country with much greater frequency than their peers who joined the programme from outside the EU. Conversely, the latter were more likely to base their choice of country on the possibility of obtaining a work permit or visa and the financial and political stability in the country of their choice.

In terms of their reasons for seeking employment in a particular location, there were no statistically significant differences between those who, in the event, did and did not succeed in securing a position within six months of graduating. Differences between the cohorts too were slight. Respondents who graduated in 2018/2019 were more likely to cite superior employment/career

opportunities than their peers in the 2014/15 cohort and less likely to point to **family reasons/their private lives** or the fact that they had opted for their **original home country** to explain their country preference.

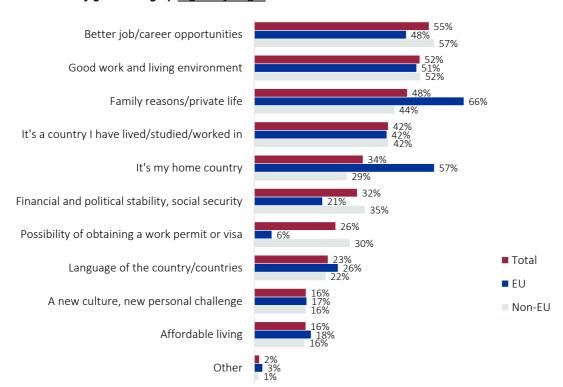


Figure 29: Reasons given for preferences regarding the location of employment within six months of graduating by <u>region of origin</u>

Respondents graduating in 2014/15 and 2018/19 who un/successfully sought employment within six months of graduating. n=436. Wording of the question: Why were you looking for a job in this/these particular country/countries?

Data source: 2019 Graduate Impact Survey.

Turning to variations in the reasons given by respondents who succeeded in securing a position within six months of graduating to explain their decision to seek employment in specific countries (see Figure 49, Annex), it transpires that those who secured a position in the EU particularly stressed the **superior job/career opportunities** and the **good work and living environment** there, while their peers who managed to find employment in a non-EU country were motivated in particular measure by the fact that they had been able to return to their **original home country**.

Slightly fewer than half of the respondents who found employment within six months of graduating secured a position in their **original home country** (49%), slightly more than half found a position in a location other than their original home country (see Figure 30), foremost in Germany and the Netherlands followed by the United Kingdom, France and Spain. While almost two-thirds of respondents who secured a position within six months of graduating were able to find employment in their first-choice country, 16% found a position in their second- and 12% in their third-choice country. Only 10% were eventually employed in a different country altogether. Given how many

respondents in fact take up employment in their **original home countries**, their other preferences would seem, for the most part, to be aspirational rather than practical and pragmatic in nature.

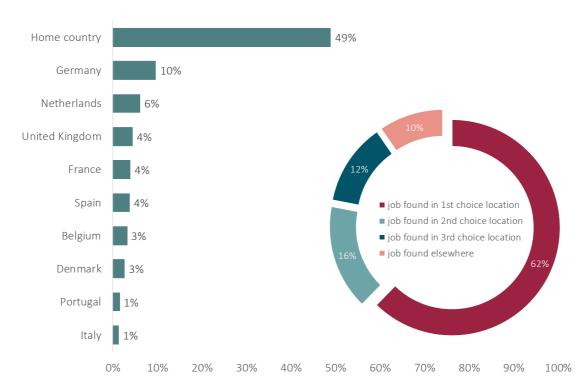


Figure 30: The ten countries in which respondents most frequently found employment within six months of graduating; realisation of country preferences

Respondents graduating in 2014/15 and 2018/19 who were able to secure a position within six months of graduating. From left to right: n=319. n=281.

Wording of the question: In which country did you eventually find your professional job? Data source: 2019 Graduate Impact Survey.

International Dimension of Employment Found Within Six Months of Graduating

Respondents were further asked to assess the extent to which the position they secured within six months of graduating had an international dimension, for example, in the form of collaboration with international colleagues and/or contact with international customers (see Figure 31). More than 70% of respondents reported that the employment they had found within six months of graduating had at least some international dimension, especially in the form of collaboration with international colleagues. These results are in line with the high levels of satisfaction reported with, and importance attached to, the extent to which their EMJMD programmes enhanced respondents' intercultural competence and language skills documented in the previous sections.

Respondents who secured a position in an EU country within six months of graduating were more likely than their peers who had found employment outside the EU to ascribe an international dimension to their position. In this regard, there were no significant differences by gender, field of study or cohort.

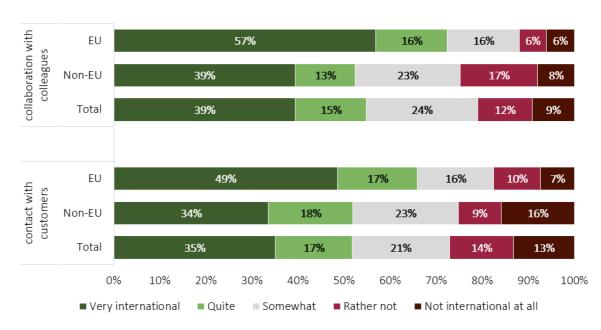


Figure 31: International dimension of positions secured within six months of graduation by location

Respondents graduating in 2014/15 and 2018/2019 who secured a professional position within six months of graduation. Top row: n=266; bottom row: n=297.

Wording of the question: How international is/was the job in terms of contact with customers and colleagues? Data source: 2019 Graduate Impact Survey.

4.4.2 Employment at the Time of the Survey

This section takes a look at the EMJMD graduates' employment at the time of the survey: the type of employment, respondents' satisfaction with their position and the importance of various professional characteristics and skills and competences pertinent to their employment.

Type of Employment

At the time of the survey, the majority of respondents were in work (for the most part, in full-time employment, though some of the graduates were also self-employed or held part-time positions) and/or pursuing further studies. ¹⁶ Some 6% were not employed (5% seeking and 0.8% not seeking employment) at the time of the survey. As Figure 32 shows, the type of employment varied considerably by cohort, i.e., depending on how much time has passed since participants completed their EMJMD programme. Respondents in the most recent cohort (2018/19) were more likely to be pursuing further studies or seeking employment and less likely to be in a full-time employment than those who completed their studies four, five, nine or ten years ago, and respondents in the earliest cohort (2009/10) were much less likely to be in a part-time employment than their peers in the two subsequent cohorts.

Respondents were able to give multiple responses to the question concerning their professional status at the time of the survey. A significant number of respondents who had embarked on a doctorate used the additional space provided to explain that they were both working on their doctoral research and in some form of full- or part-time employment. Consequently, they recorded that they belonged to both categories.

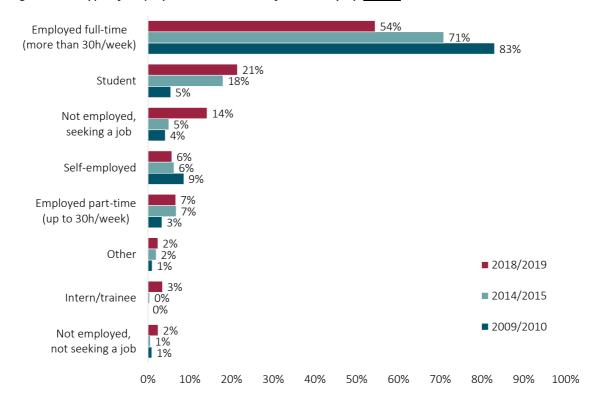


Figure 32: Type of employment at the time of the survey by cohort

All respondents. n=1,942. Multiple-answer question.

Wording of the question: What is your current occupation?

Data source: 2019 Graduate Impact Survey.

On this count, there were no statistically significant differences with respect to the type of occupation depending on the region of origin or field of study. Distinct age and gender distributions across the relevant fields of study explained such marginal differences as there were.

Noteworthy are the following aspects of respondents' employment status at the time of the survey:

- On average, more than half of currently employed graduates still have the same occupation as they did within six months of graduating. Their share ranges from 45% in the case of the earliest cohort (2009/10) to 70% in the case of the most recent cohort (2018/19).
- Of the respondents employed at the time of the survey, 43% had been unemployed at least once since their EMJMD graduation. On average, their periods of unemployment lasted for eight months.
- About 70% of respondents reported that they had some level of professional experience before embarking on their EMJMD programme. Their share increases slightly from cohort to cohort from 67% in the 2009/10 cohort to 70% in the 2014/15 cohort and 74% in the 2018/19 cohort.

Characteristics of, and Respondents' Satisfaction with, their Current Position

The level of satisfaction with one's current position tends to be determined to a considerable degree by how secure it is, the extent to which it matches one's level of education and training and the appropriateness of the workload and pay. Yet subjectively, other aspects — such as the opportunity to learn new things, to do something that is socially worthwhile and/or the work-life balance — can weigh just as or even more heavily. The GIS 2019 looked at these issues in some detail by asking graduates both about their overall satisfaction with their current position and about a number of its specific characteristics.

It turns out that overall, female respondents are significantly less satisfied with their current position than their male counterparts (65% vs. 71%). This may result from the fact that they are more likely to have graduated in mathematics and the social sciences and humanities, while their male peers feature more prominently among those who graduated in information science and engineering, physics or chemistry. Then again, the levels of respondents' overall satisfaction with their positions at the time of the survey did not vary to any statistically significant degree across the various fields of study. There were no significant differences between the cohorts.

More specifically, graduates were asked about the extent to which their current position offered them

- Work autonomy
- Job security
- Opportunity to learn new things
- High earnings
- New challenges

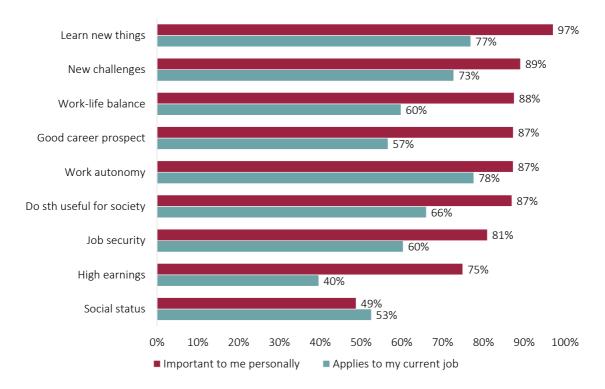
- Career prospects
- Social status
- Chance of doing something useful for society
- Work-life balance

In addition, they were asked how important each of these factors was to them. As Figure 33 shows, respondents rated the **opportunity to learn new things** most highly, and more than three-quarters of respondents reported that their positions at the time of the survey did in fact afford them this opportunity (77%). Given how essential lifelong learning and continuous skill development opportunities now are to long-term employability, this is hardly surprising. Almost three-quarters of respondents (73%) also reported that their current positions met their yearning for **new challenges** which is, of course, closely related to the desire to learn new things.

Respondents were almost as emphatic about the need for a decent work-life balance, good career prospects, an appropriate level of autonomy at work and their desire to engage in work that was useful to society. However, with the exception of the level of autonomy at work, their current positions were much less likely to meet these expectations. Even so, two out of three respondents did report that they were doing something useful to society in their current position and nearly 60% of their peers stated that their current position offers them a decent work-life balance, good career prospects and job security. While three-quarters of respondents did express a strong interest in high earnings, only 40% reported that they were actually highly paid. The issue of social status was the odd one out in that respondents felt that the social status their current position

afforded them actually outstripped (if only slightly) the importance they themselves attached to it. In all other respects, their current position did not (yet) meet their ideal expectations. On all these counts, there were no statistically significant differences between the cohorts.

Figure 33: Aspects of professional life: respondents' priorities and the extent to which these were realised by the position they held at the time of the study



Respondents who were (self-)employed at the time of survey.

Wording of the question: How important are the following job characteristics to you personally and to what extent do they actually apply to your current work situation?

Data source: 2019 Graduate Impact Survey.

In order to measure the usefulness of respondents' relevant skills and identify possible imbalances between the level of actually acquired and required skills, graduates were asked to quantify how well their proficiency in a range of specific skills and competences matched the requirements of their position at the time of the survey. To this end, we relied on the taxonomy developed for the *EUROGRADUATE pilot study* (2020).¹⁷ The picture that emerged from our survey was quite similar to that of the *EUROGRADUATE pilot study* (p. 114). In relation to six of the nine listed skills, between 85% and 95% of respondents recorded (very) high levels of proficiency that consistently exceeded the assumed requirements of their current position by a slight margin (see Figure 31). Respondents were rather less confident when it came to their foreign language, customer handling and advanced ICT skills although even here they assume that

Meng et al. for the European Commission. *EUROGRADUATE pilot study. Key findings*, 2020, https://op.europa.eu/en/publication-detail/-/publication/91fe9c5a-a66d-11ea-bb7a-01aa75ed71a1/language-en

their actual abilities slightly exceed the requirements of their position. On this issue, there were no statistically significant differences between the cohorts.

That respondents consistently record levels of proficiency that exceed the assumed requirements of their current position, however slightly, is encouraging. While the differential generally ranges from two to seven percentage points, there were two notable exceptions. While 95% of respondents rated their **learning skills** highly and 72% recorded substantial **foreign language skills**, only 80% and 55%, respectively, reported that they were putting these to good use in their current role.

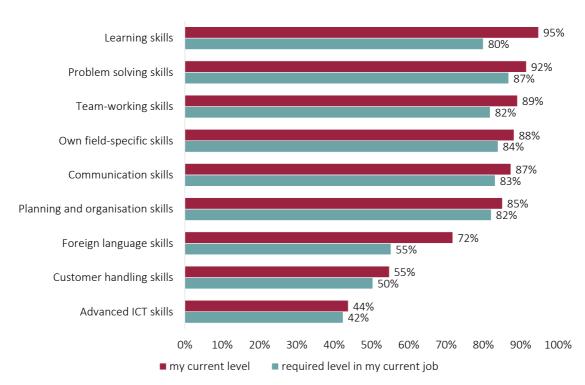


Figure 34: Professional competences: (very) high level of proficiency

Respondents who were (self-)employed at the time of survey.

Wording of the question: Take a look at the list of competencies below. How would you rate your level on each competence? On the same scale, what level of each competence is required in your current job?

Data source: 2019 Graduate Impact Survey.

Encouraging as these results are overall, one may reasonably assume that some level of imbalance might emerge, were one to gather more differentiated data taking specific occupations or respondents' fields of study, age or previous employment history into consideration. In this respect, the GIS 2019 was unable to render any conclusive insights.

Education-Occupation Mismatches

A good match between education and employment is crucial, both during the initial transition from study to work and as graduates pursue their career paths in the long run. Where education and employment are not well matched, not only is the wellbeing and professional satisfaction of the employees likely to suffer, economic growth too is likely to curtail because skills that are

suboptimally allocated are not used as productively as they might. The possible mismatch can be either vertical, i.e., graduates are over- or underqualified, or horizontal in nature, i.e., a position fails to match its incumbent's field of study and their field-specific skills acquired through education are either not required for, or not entirely appropriate, to the position. As we saw, when asked to assess their own skill levels and the importance of those skills to their employment at the time of the survey, respondents diagnosed what was in most cases a slight vertical mismatch, i.e., they felt that they were more qualified across the board than their current positions needed them to be.

In order to explore this issue further currently (self-)employed graduates were asked to assess the extent to which the skills they had acquired specifically in the context of their Erasmus Mundus programme helped them secure their current position and were now proving useful and sufficient in allowing them to perform their current role. To this end, again the taxonomies developed for the *EUROGRADUATE Pilot Study* were adopted and adapted.¹⁸

As Figure 35 shows, more than one-third of respondents (37%) assumed that they would have been able to secure the position they held at the time of the survey without an EMJMD (on this issue there were no statistically significant differences between the cohorts). More than two-thirds of respondents (68%) reported that they utilised the knowledge and skills acquired as EMJMD students in their current role. This rate rose to nearly three-quarters of respondents (73%) in the most recent cohort (2018/19). However, more than one-third of respondents also reported that their current role demanded more of them than they could offer. This figure was particularly high among respondents in the most recent cohort (2018/19). This would seem to contradict their earlier assessment that their skill levels exceeded those actually required of them in their positions at the time of the survey (Figure 34). This discrepancy may indicate that the list of specific skills they were expressly asked about did not cover important areas in which respondents are less sure of themselves, or there may be different factors altogether at play which could not be explored on this occasion.

Meng et al. for the European Commission. *EUROGRADUATE pilot study. Key findings*, 2020, https://op.europa.eu/en/publication-detail/-/publication/91fe9c5a-a66d-11ea-bb7a-01aa75ed71a1/language-en

Likelihood of having current job without EMJMD Total 18% 24% 2018/2019 21% 17% 2014/2015 23% 21% 18% 18% 2009/2010 23% 23% 20% Knowledge and skills obtained during EMJMD are utilised in current job Total 3% 10% 36% 32% 2018/2019 14% 2014/2015 22% 30% 10% 2009/2010 23% 37% 1% Current job demands more knowledge and skills than I can actually offer 31% Total 13% 25% 2018/2019 31% 14% 2014/2015 32% 15% 18% 2009/2010 31% 0% 40% 10% 20% 30% 50% 60% 70% 80% 90% 100% ■ not at all ■ not neither/nor ■ to some extent ■ to a great extent

Figure 35: Match between skills acquired through EM and the requirements of respondents' current position by cohort

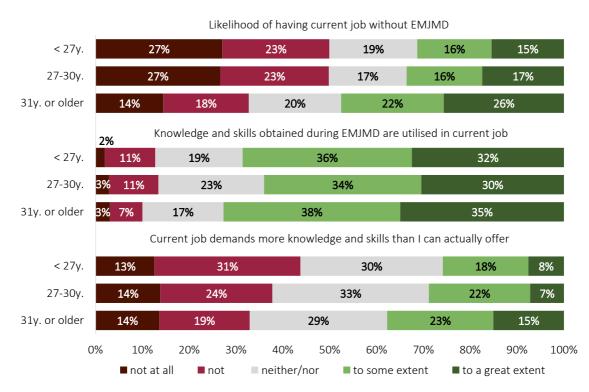
Respondents who were (self-)employed at the time of survey. From top to bottom: n=1,359, n=1,419, n=1,424. Wording of the questions: Do you think you could have your current job without the skills and competences acquired through your EMJMD/EMMC? To what extent do you utilise the knowledge and skills obtained during your EMJMD/EMMC in your current job? To what extent does your current work demand more knowledge and skills than you can actually offer? Data source: 2019 Graduate Impact Survey.

When looking at these results, it should be considered that, at the time of the survey, not all EMJMD graduates were fully integrated into the labour market, because some had just completed their education, others continue to study besides working, or might still have difficulties finding a suitable occupation. Therefore, graduates are to a different extent 'experienced' on the labour market and, thus, might not have enough information about or insight into the skills and competencies in high demand on the labour market.

On this score, there were some marked variations depending on respondents' age at the time of their graduation. Half of respondents who were 30 or younger at the time of their graduation assumed that they would have been unable to secure the position they held at the time of the survey without the skills they acquired as EMJMD students (see Figure 36). The same holds true for only 32% of their peers who were 31 or older at the time of their graduation. Respondents who were 30 or younger, and those who were 27 or younger at the time of their graduation in particular, were also less likely to report that they were putting the skills acquired on the programme to good use in their current role and more likely to assume that they lacked skills required by the position they held at the time of the survey.

Respondents who held a position in their country of origin at the time of the survey were significantly more confident than their peers elsewhere that they would not have needed their EMJMD to secure that position (47%, see Figure 50, Annex) but also more concerned that it demanded more of them than they were able to offer (34%). Among respondents not working in their country of origin at the time of the survey, those living in the EU credited their EMJMD with a more significant role in helping them secure their position than those living elsewhere. The latter are also most likely to utilise the skills they have acquired thanks to the EM programme in their current role.

Figure 36: Match between skills acquired through EM and the requirements of respondents' position at the time of the survey by <u>age at graduation</u>



Respondents who were (self-)employed at the time of survey. Top to bottom: n=1,359, n=1,419, n=1,424. Wording of the questions: Do you think you could have your current job without the skills and competences acquired through your EMJMD/EMMC? To what extent do you utilise the knowledge and skills obtained during your EMJMD/EMMC in your current job? To what extent does your current work demand more knowledge and skills than you can actually offer?

Data source: 2019 Graduate Impact Survey.

5 The EMJMD Programmes' Public Profile

One of the main objectives of the Erasmus Mundus Joint Master Degrees is to "increase the quality and the attractiveness of the European Higher Education Area". ¹⁹ The Graduate Impact Survey asked graduates to explain why they had embarked on an EMJMD programme, how they found out about it and how well known the scheme is in their home country.

5.1 Reasons for Choosing an EMJMD Programme

Asked to explain their decision to pursue their studies at master's level with Erasmus Mundus (multiple responses were permitted), no fewer than 84% of respondents in the 2018/19 cohort cited the availability of the Erasmus Mundus scholarship (see Figure 37), and 30% singled it out as their principal reason for choosing the EMJMD scheme. The opportunity to **live and study in various European countries** (both in or outside the European Union) and experience a multicultural academic and social environment ranked second and third, respectively. When asked to prioritize their reasons, academic aspirations emerged as the third most frequent motivation.

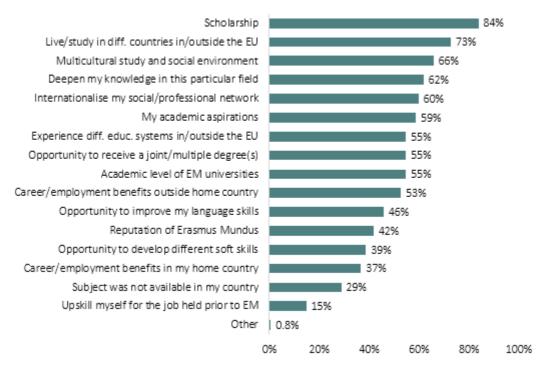


Figure 37: Reasons for choosing Erasmus Mundus (multiple answers permitted)

Respondents in the 2018/19 cohort. n=973.

Multiple-answer question.

Wording of the question: What persuaded you to choose Erasmus Mundus as your Master degree programme? Data source: 2019 Graduate Impact Survey.

Website of the European Commission (https://ec.europa.eu/programmes/erasmus-plus/programme-guide/part-b/three-key-actions/key-action-1/erasmus-mundus-jmd en)

Table 3 focuses on the priorities respondents in the 2018/19 cohort set when asked to identify the principal concern that had motivated their decision. In each instance, the four most frequently cited reasons have been highlighted. The table shows quite significant differences by region of origin. For instance, respondents from Europe (both EU and non-EU) generally placed less emphasis on the availability of the scholarship than their non-European peers. Almost two-thirds of respondents from East Asia named the availability of the scholarship as their principal reason for taking up an EMJMD programme and placed rather less emphasis on other commonly cited considerations (especially academic aspirations, deepening one's knowledge in a particular field, and the potential benefits for career/employment opportunities outside the home country). For respondents from North America and Oceania, the opportunity to live and study in various European countries (both in and outside the EU) and benefit from a multicultural academic and social environment were particularly significant considerations.

Table 3: <u>Primary reason</u> for choosing Erasmus Mundus by <u>region of origin</u>, highlighting the four most frequently cited reasons

	Europe: EU	Europe: non-EU	Middle East/ Central Asia	South Asia	South-East Asia	East Asia	North America, Oceania	Latin America	Africa	Total
Scholarship	18%	20%	35%	26%	40%	62%	32%	34%	24%	30%
Live and study in different countries in and outside the EU	17%	22%	16%	3%	14%	17%	24%	18%	4%	14%
My academic aspirations	13%	10%	10%	13%	10%	0%	6%	10%	19%	11%
Deepen my knowledge in this particular field	13%	8%	9%	13%	6%	2.1%	2.9%	9%	13%	9%
Academic level of Erasmus Mundus universities	2,8%	6%	5%	12%	5%	4%	12%	7%	10%	7%
Benefits for my career/employment opportunities outside my home country	8%	10%	1.2%	2.2%	6%	0%	6%	7%	3.0%	5%
Subject was not available in my country	8%	7%	5,0%	2.2%	3%	0%	2.9%	1.7%	3.0%	4%
Opportunity to internationalise my social and professional network	6%	2.0%	1.2%	4%	6%	0%	2.9%	3.0%	5%	4%
Opportunity to receive a joint/multiple degree(s)	6%	4%	2.5%	5%	1.6%	0%	0%	2.5%	1.1%	3.0%
Reputation of Erasmus Mundus	0%	1.0%	5.0%	7%	0%	0%	0%	0%	7%	2.8%
Experience different educational systems in and outside the EU	1.4%	3.0%	5.0%	2.2%	5%	6%	2.9%	1.7%	1.1%	2.7%
Multicultural study and social environment	2.8%	3.0%	1.2%	3%	0%	6%	12%	2.5%	0%	2.6%
Benefits for my career/employment opportunities in my home country	4%	2.0%	1.2%	5%	0%	0%	0%	0.8%	4%	2.3%
Upskill myself for the job held prior to EMJMD/EMMC	1.4%	0%	0%	2.2%	0%	0%	0%	0%	3.0%	0.7%
Opportunity to develop different soft skills	0%	0%	0%	0%	1.6%	2.1%	0%	0%	1.1%	0.4%
Opportunity to improve my language skills	0%	1.0%	1.2%	0%	0%	0%	0%	0%	0%	0.4%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Respondents in the 2018/19 cohort. n=945.

Wording of the question: Which one was your primary reason to choose Erasmus Mundus as your Master degree programme?

Data source: 2019 Graduate Impact Survey.

Respondents in all three cohorts named the availability of the scholarship as their single most important reason for embarking on an EMJMD programme and the opportunity to study in various European countries (both in and outside the EU) as their second most important consideration (see Table 4). Only among respondents in the 2009/10 cohort did the academic stature of the Erasmus Mundus universities rank among the four most important considerations and weigh just as heavily as the opportunity to study in several European countries (both in and outside the EU). While respondents in the two more recent cohorts ranked the opportunity to enhance their knowledge in their chosen field of study as their third most important consideration in deciding to embark on an EMJMD programme, it did not make it into the top four reasons shaping the choices of respondents in the 2009/10 cohort. Respondents' emphasis on the reputation of the Erasmus Mundus scheme and its potential to enhance their career/employment opportunities in their respective home countries has increased steadily from one cohort to the next.

Table 4: Primary reason for choosing Erasmus Mundus by <u>cohort</u>, highlighting the four most frequently cited reasons

	2009/10	2014/15	2018/19
Scholarship	35%	29%	30%
Live and study in different countries in and outside the EU	13%	18%	14%
Deepen my knowledge in this particular field	9%	14%	9%
My academic aspirations	12%	10%	11%
Academic level of Erasmus Mundus universities	13%	9%	7%
Benefits for my career/employment opportunities outside my home country	2.4%	5%	5%
Opportunity to receive a joint/multiple degree(s)	4%	3%	3%
Subject was not available in my country	2.0%	2.1%	4%
Multicultural study and social environment	4%	1.9%	2.6%
Opportunity to internationalise my social and professional network	1.5%	2.4%	4%
Experience different educational systems in and outside the EU	1.0%	2.3%	2.7%
Reputation of Erasmus Mundus	0.8%	1.1%	2.8%
Benefits for my career/employment opportunities in my home country	1.0%	1.3%	2.3%
Upskill myself for the job held prior to EMJMD/EMMC	0.4%	0.6%	0.8%
Opportunity to improve my language skills	1.2%	0%	0.4%
Opportunity to develop different soft skills	0%	0%	0.5%
Total	100%	100%	100%

All respondents. n=1,880.

Wording of the question: Which one was your primary reason to choose Erasmus Mundus as your Master degree programme?

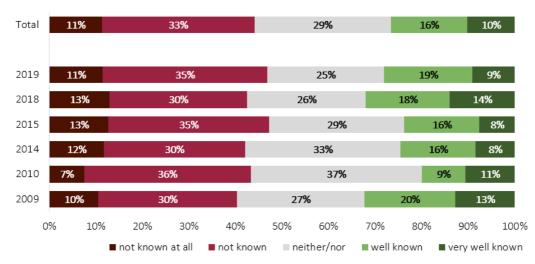
Data source: 2019 Graduate Impact Survey.

5.2 Visibility of the EMJMD Programmes

Survey participants were also asked how well known Erasmus Mundus is in their home country. Their responses point to low levels of visibility. While one-quarter of respondents (26%) implied that the Erasmus Mundus programme was (very) well known in their home country, 44% suggested the exact opposite (see Figure 38).

The respondents who graduated in 2009 and 2018 rated the scheme's visibility most highly (33% and 32%, respectively), while their peers who graduated in 2015 and 2019 noted with particular frequency that the programme was (entirely) unknown in their home country (46% and 48%, respectively). In fact, when one compares the GIS19 to the earlier surveys, it emerges that the share of respondents who suggest that Erasmus Mundus is either fairly or very well known in their respective home countries has decreased steadily from one survey to the next (GIS 2017: 40%; GIS 2018: 30%; GIS 2019: 26%)²⁰.

Figure 38: Awareness of Erasmus Mundus in respondents' home countries by <u>year of</u> <u>graduation</u>



All respondents. n=1,919.

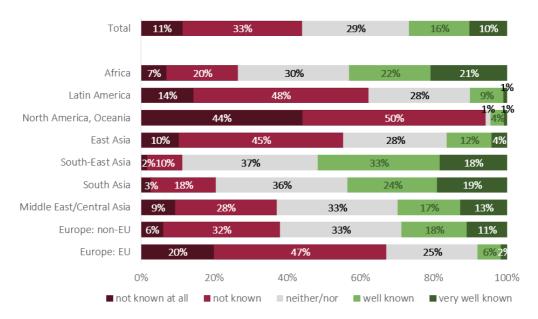
Wording of the question: In your opinion, how well known is Erasmus Mundus in your home country? Data source: 2019 Graduate Impact Survey.

Awareness of Erasmus Mundus would appear to vary considerably by region (see Figure 39). While respondents from South and South-East Asia and Africa tended to be more optimistic in their assessment of the programme's visibility in their regions, their peers

Krüger et al. for ICU.net AG in cooperation with uzbonn GmbH. Erasmus Mundus Graduate Impact Survey 2017. https://www.em-a.eu/fileadmin/content/GIS/GraduateImpactSurvey_2017_final_web.pdf Terzieva/Unger 2019. Erasmus Mundus Joint Master Graduate Impact Survey 2018. https://irihs.ihs.ac.at/id/eprint/5157

from North America and Oceania were particularly adamant that the scheme was largely unknown there. That two-thirds of respondents from EU countries suggested that Erasmus Mundus was largely unknown in their respective home countries may come as a rather unwelcome surprise.

Figure 39: Awareness of Erasmus Mundus in respondents' home countries by <u>region of origin</u>

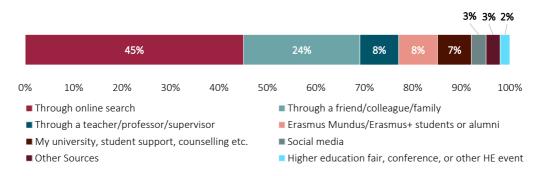


All respondents. n=1,923.

Wording of the question: In your opinion, how well known is Erasmus Mundus in your home country? Information in row percent, rounding differences possible. For all shares, see Table 19, Annex. Data source: 2019 Graduate Impact Survey.

Asked how they had found out about the scheme, respondents pointed most frequently either to online research (45%) or to information from a friend, colleague or relative (24%, see Figure 40). While teachers, Erasmus students, alumni and various university services also played a role (7% or 8%), other sources such as the social media or higher education fairs/events were only rarely cited (3% or less).

Figure 40: Respondents' own source of information about Erasmus Mundus



All respondents. n=1,943.

 $\label{thm:continuous} Wording of the question: How did you find out about the Erasmus Mundus programme?$

Data source: 2019 Graduate Impact Survey.

6 Places of Residence

Erasmus Mundus programmes are open to students from all over the world. This section explores the extent to which EMJMD graduates choose to stay in the European Union, return to their country of origin or choose another place of residence altogether once they have graduated. Figure 41 shows respondents' place of residence at the time of the survey by region of origin.

Of those respondents who originally came from regions other than the EU, between 30% (in the case of graduates from North America and Oceania) and 56% (in the case of graduates from the Middle East and Central Asia) lived in an EU country at the time of the survey. Of the respondents who came from EU countries in the first place, 87% lived in an EU country at the time of the survey. The equivalent figure for respondents who came from European non-EU countries was 52%.

A comparison by cohort (see Table 11, Annex) shows that the share of graduates who lived in an EU country at the time of the survey has steadily and significantly increased with each cohort while the proportion of respondents who lived in a non-EU country other than their original home country has steadily decreased. Respondents in the 2009/10 cohort were most likely to live in their original home country.

Total 43% Europe: EU Europe: non-EU Region of origin Middle East/Central Asia South Asia South-East Asia East Asia North America, Oceania 30% Latin America Africa 0% 20% 60% 80% 40% 100% Region of current residence ■ EU ■ Home country ■ Other

Figure 41: Place of residence at the time of survey by region of origin

Respondents in the 2014/15 and 2018/19 cohorts. n=1,643. Wording of the question: Where do you currently live? Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

Of the respondents who originally came from outside the EU, 14% neither stayed in the EU nor returned to their country of origin. As Figure 42 shows, the majority of these respondents moved either to North America/Oceania (46%) or a European non-EU country 22%). The remaining 31% were fairly evenly distributed across the other regions. This distribution did not differ markedly among respondents who came from an EU country in the first place but were not living in the EU at the time of the survey: 36% were located in a European non-EU country, 28% in North America or Oceania and 36% in the other regions.

0.3%

North America, Oceania

Europe: non-EU

Middle East/Central Asia

Africa

East Asia

South-East Asia

Latin America

South Asia

Figure 42: Place of residence of respondents from non-EU countries who were not living in the EU or their country of origin at the time of the survey

Respondents in the 2014/15 and 2018/19 cohorts from outside the EU who were living neither in the EU nor in their country of origin. n=184.

Wording of the question: Where do you currently live?

Data source: 2019 Graduate Impact Survey.

Focusing only on respondents in the 2014/15 and 2018/19 cohorts who initially came from outside the EU, a comparison by field of study (see Figure 43) shows that more than two-thirds of those who graduated in mathematics, 57% of those who graduated in economic sciences and roughly half of those who graduated in information science and engineering, chemistry or physics lived in the EU at the time of the survey. It should be noted, however, that this analysis is based on a very small sample and even though the weighting applied to the data should correct the sample bias, the data need to be interpreted with caution.

Of the respondents in the 2014/15 and 2018/19 cohorts who joined the programme from outside the EU, those who graduated in the life sciences were most likely to be living in a country other than the EU or their home country (25%). Respondents from the same group who graduated in the social sciences and humanities were most likely to return to their home country (57%) and least likely to stay in the EU (32%).

Mathematics 69% **Economic Sciences** 57% 53% Information Science and Engineering Chemistry 52% **Physics** 52% 10% 44% **Environmental and Geosciences** Life Sciences 37% 25% Social Sciences and Humanities 32%

60%

80%

100%

Figure 43: Respondents who joined the programme from a non-EU country: place of residence at the time of the survey by <u>field of study</u>

Respondents in the 2014/15 and 2018/19 cohorts who joined the programme from outside the EU. n=1,347.

20%

■ Home country ■ Other country

40%

0%

■ EU

Wording of the question: Where do you currently live?

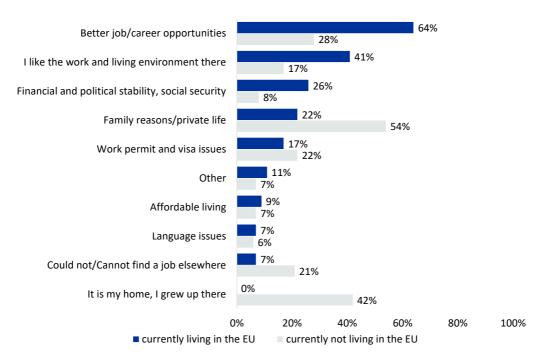
Rounding differences possible.

Data source: 2019 Graduate Impact Survey.

Finally, graduates in the 2014/15 and 2018/19 cohorts who did not originally come from the EU were asked why they had chosen their current place of residence (in this instance, respondents were again allowed to give more than one reason for their choice). Figure 43 shows the specific significance respondents attached to various reasons for deciding to live either in or outside the EU.

Overall, respondents who initially came from outside the EU but were living in an EU country at the time of the survey were more likely to cite considerations pertaining to their social and work environment: superior job/career opportunities (64%), the work and living environment (41%), financial and political stability and social security (26%). By contrast, their peers living outside the EU at the time of the survey placed greater emphasis on their attachment to their family (54%) and original home country (42%). For them, superior job/career opportunities were the third most important motivation (28%).

Figure 44: Respondents who joined the programme from a non-EU country: reasons for choosing their place of residence at the time of the survey



Respondents in the 2014/15 and 2018/19 cohorts who joined the programme from outside the EU. n=1,353. Wording of the question: What are the reasons for your choice of place of residence? Data source: 2019 Graduate Impact Survey.

7 Annex

7.1 Additional Figures and Tables

In this section you can find figures and tables (describing the results in more detail) which were not included in the main parts of the report to optimise readability.

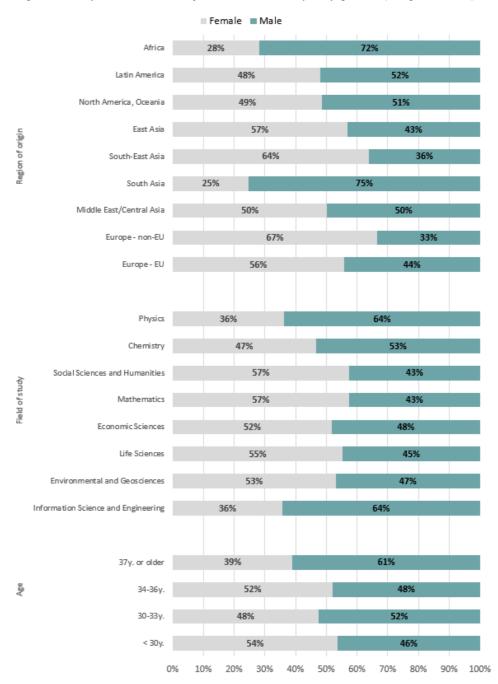
Table 5: Key characteristics of the 2019 GIS sample by age (weighted data)

							Mean	Mean
		< 30y.	30-33y.	34-36y.	>36y.	Total	age at time of survey	age at gradua- tion
<u>_</u>	Female	29%	27%	23%	21%	100%	32.8y.	28.7y.
Gender	Male	23%	28%	19%	30%	100%	33.8y.	29.3y.
<u> </u>	Other/no answer	26%	28%	21%	26%	100%	32.8y.	29.2y.
	Information Science and Engineering	25%	31%	22%	22%	100%	33.1y.	28.5y.
	Environmental and Geosciences	28%	28%	17%	27%	100%	33.0y.	28.8y.
tudy	Life Sciences	30%	27%	15%	28%	100%	33.4y.	30.0y.
Field of study	Economic Sciences	17%	26%	23%	34%	100%	35.1y.	28.9y.
证	Mathematics	34%	25%	27%	15%	100%	31.8y.	27.0y.
	Social Sciences and Humanities	22%	24%	23%	31%	100%	34.0y.	30.0y.
	Chemistry	40%	24%	21%	15%	100%	31.4y.	28.8y.
	Physics	38%	23%	29%	10%	100%	30.8y.	25.9y.
	Europe: EU	32%	45%	13%	9%	100%	31.3y.	27.8y.
	Europe: non-EU	38%	27%	20%	15%	100%	31.4y.	27.7y.
. <u>⊆</u>	Middle East/Central Asia	32%	22%	27%	20%	100%	33.0y.	29.6y.
orig	South Asia	25%	24%	20%	31%	100%	33.9y.	29.2y.
n of	South-East Asia	22%	24%	24%	31%	100%	33.8y.	28.9y.
Region of origin	East Asia	30%	26%	31%	13%	100%	32.1y.	27.6y.
ž	North America, Oceania	24%	23%	25%	28%	100%	33.1y.	28.0y.
	Latin America	20%	26%	20%	33%	100%	34.4y.	29.9y.
	Africa	13%	23%	21%	43%	100%	35.8y.	31.4y.
Tota	l	26%	28%	21%	26%	100%	33.3y.	29.1y.

All respondents. n=1,947.

Data source: 2019 Graduate Impact Survey.

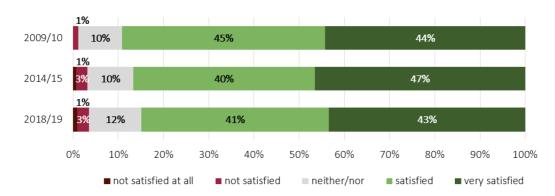
Figure 45: Key characteristics of the 2019 GIS sample by gender (weighted data)



All respondents except those who either did not answer the question about their gender or identified with another gender. n=1,863.

Data source: 2019 Graduate Impact Survey.

Figure 46: Overall satisfaction with EMJMD programme by cohort



All respondents. n=1,947.

Wording of the question: How satisfied were you overall with your EMJMD/EMMC studies? Data source: 2019 Graduate Impact Survey.

Table 6: Satisfaction with specific aspects of the programme in none, some or all of the EM host universities by <u>cohort</u>

		None	Some	All	Total
Teaching staff	2018/2019	2%	67%	32%	100%
	2014/2015	0%	61%	39%	100%
	2009/2010	1%	56%	43%	100%
	2018/2019	2%	59%	39%	100%
Education material	2014/2015	1%	53%	46%	100%
	2009/2010	2%	47%	51%	100%
	2018/2019	3%	37%	60%	100%
Library facilities	2014/2015	3%	35%	62%	100%
	2009/2010	3%	27%	70%	100%
	2018/2019	6%	56%	38%	100%
Educational guidance	2014/2015	6%	59%	36%	100%
	2009/2010	6%	53%	41%	100%
Facilities for study arrangements	2018/2019	4%	46%	50%	100%
	2014/2015	3%	42%	55%	100%
	2009/2010	5%	35%	60%	100%
Attitude towards international students	2018/2019	3%	38%	60%	100%
	2014/2015	2%	32%	67%	100%
	2009/2010	4%	28%	68%	100%
	2018/2019	2%	63%	35%	100%
Content of the courses	2014/2015	1%	58%	42%	100%
	2009/2010	2%	49%	49%	100%
	2018/2019	4%	70%	27%	100%
Pedagogical methodology, i.e. teaching modes	2014/2015	3%	66%	31%	100%
	2009/2010	5%	58%	37%	100%
	2018/2019	16%	55%	29%	100%
Extracurricular activities	2014/2015	15%	53%	32%	100%
	2009/2010	15%	48%	37%	100%

All respondents.

Wording of the question: Were you satisfied with the following aspects of your EMJMD/EMMC studies in none, some or all of your host universities?

Data source: 2019 Graduate Impact Survey.

Table 7: Share of well coordinated aspects of the programme in none, some or all of the EM host universities by <u>cohort</u>

		None	Some	All	Total
Design and structure of the curricula	2018/2019	7%	60%	33%	100%
	2014/2015	6%	51%	43%	100%
	2009/2010	4%	59%	38%	100%
	2018/2019	5%	62%	33%	100%
Course content	2014/2015	5%	54%	41%	100%
	2009/2010	4%	54%	43%	100%
Teaching methods	2018/2019	9%	65%	27%	100%
	2014/2015	6%	60%	34%	100%
	2009/2010	7%	56%	37%	100%
Input of associate partners	2018/2019	11%	58%	31%	100%
	2014/2015	13%	58%	30%	100%
	2009/2010	14%	55%	32%	100%
Integrated course catalogues for each	2018/2019	11%	55%	34%	100%
	2014/2015	13%	53%	34%	100%
partner institution	2009/2010	16%	46%	37%	100%
	2018/2019	7%	41%	51%	100%
Award of the degree	2014/2015	7%	35%	58%	100%
(joint/multiple)	2009/2010	6%	33%	61%	100%
General degree of jointness/integration of the programme	2018/2019	7%	49%	44%	100%
	2014/2015	7%	44%	49%	100%
	2009/2010	5%	46%	49%	100%

All respondents.

Wording of the question: Were the following aspects well-coordinated between none, some or all of your EM host universities?

Data source: 2019 Graduate Impact Survey.

Table 8: Impact areas of Erasmus Mundus by <u>cohort</u> (multiple answers permitted)

	2018/2019	2014/2015	2009/2010	Average
Intercultural competences	74%	68%	74%	72%
Career	62%	58%	69%	62%
Personality	60%	56%	59%	59%
Attitude towards Europe and the EU	54%	54%	61%	56%
Subject-related expertise	53%	50%	52%	51%
Private life	34%	29%	34%	32%
Other	2.3%	1.1%	1.5%	1.6%

All respondents.

Multiple-answer question.

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

Data source: 2019 Graduate Impact Survey.

Information Science and Engineering Environmental and Geosciences Life Sciences 19% **Economic Sciences** Mathematics Social Sciences and Humanities 22% Chemistry Physics 0% 20% 40% 60% 80% 100% ■ Intercultural competencies ■ Career ■ Subject-related expertise Personality ■ Attitude towards Europe and the EU ■ Private life ■ Other

Figure 47: Primary impact of Erasmus Mundus by field of study (single-answer question)

All respondents. n=1,944.

Wording of the question: Where do you personally see the greatest impact of Erasmus Mundus? Data source: 2019 Graduate Impact Survey.

Table 9: Preparedness for the labour market by <u>field of study</u> and <u>gender</u>

		(very) poorly	neither/nor	(very) well	Total
Information Science and	female	12%	29%	60%	100%
Engineering	male	9%	22%	69%	100%
Environmental and	female	17%	19%	64%	100%
Geosciences	male	6%	17%	77%	100%
Life Caianasa	female	4%	29%	67%	100%
Life Sciences	male	9%	16%	75%	100%
Farmania Caianasa	female	10%	32%	58%	100%
Economic Sciences	male	4%	12%	84%	100%
Nathamatica	female	14%	36%	50%	100%
Mathematics	male	8%	21%	71%	100%
Social Sciences and	female	19%	29%	52%	100%
Humanities	male	18%	21%	61%	100%
Chamaiatan.	female	11%	24%	65%	100%
Chemistry	male	0%	18%	82%	100%
Dhysics	female	0%	52%	48%	100%
Physics	male	4%	27%	70%	100%
Tatal	female	14%	28%	58%	100%
Total	male	10%	20%	70%	100%

All respondents except those who either did not answer the question about their gender or identified with another gender. n=1,863.

Multiple-answer question.

Wording of the question: Where do you personally see the greatest impact of Erasmus Mundus? Data source: 2019 Graduate Impact Survey.

Table 10: Aspects of the EMJMD programme requiring improvement to enhance graduates' preparedness for the labour market by <u>cohort</u> (multiple answers permitted)

	2018/2019	2014/2015	2009/2010	Average
Contacts to potential employers	54%	57%	59%	56%
Career Mentoring	52%	55%	55%	53%
Time to dedicate to career development during the EM	39%	35%	34%	36%
Networking activities	35%	36%	37%	36%
Entrepreneurial learning	33%	35%	42%	36%
Practical experiences	30%	34%	36%	33%
Adequate labour market and career development knowledge of supervisors and/or course coordinators	33%	29%	31%	31%
Integration activities in the host countries	28%	31%	27%	29%
Technical skills	23%	17%	13%	18%
Soft skills	14%	14%	20%	15%
Flexibility in the content of the courses	18%	13%	8%	13%
Subject-specific skills	12%	10%	8%	10%
Nothing I can think of	10%	8%	6%	8%
Other	3%	1%	3%	2%

All respondents who evaluated their preparedness for the labour market. n=1,936.

Multiple-answer question.

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

I looked for a professional job I continued my studies (e.g. PhD, Master etc.) I started working in a professional job I had found during my EM 20% I applied for further studies (e.g. PhD, Master etc.) I returned to the job I had before my EM I had one or more casual jobs related to my study I took or applied for a traineeship/internship I had one or more casual jobs not related to my study I was neither employed, nor did I look for a professional job **2**018/19 Other **2**014/15 I set up my own business **2**009/10

Figure 48: Professional status in the first six months after graduation by cohort

All respondents. n=1,946.

Multiple-answer question

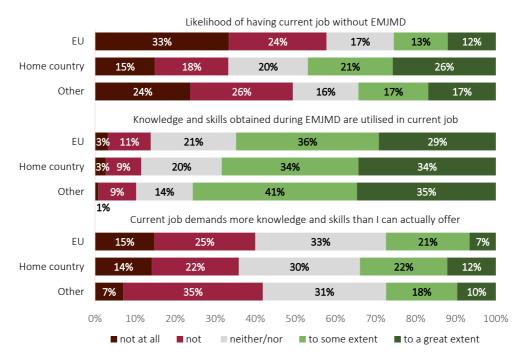
Wording of the question: What did you do in the first six months after your Erasmus Mundus graduation? Data source: 2019 Graduate Impact Survey.

Figure 49: Reasons explaining preference for the location in which respondents secured a position within six months of graduating by location

Respondents in the 2014/15 and 2018/19 cohorts who secured a position within six months of graduation. n=276. Multiple-answer question

Wording of the question: Why were you looking for a job in this/these particular country/countries? Data source: 2019 Graduate Impact Survey.

Figure 50: Match between skills acquired through EM and requirements of current position by <u>place of residence at the time of the survey</u>



Respondents who were (self-)employed at the time of survey. From top to bottom: n=1,359, n=1,419, n=1,424. Wording of the question: Do you think you could have your current job without the skills and competences acquired through your EMJMD/EMMC? To what extent do you utilise the knowledge and skills obtained during your EMJMD/EMMC in your current job? To what extent does your current work demand more knowledge and skills than you can actually offer?

Data source: 2019 Graduate Impact Survey.

Table 11: Place of residence at the time of survey by cohort

	2018/19	2014/15	2009/10	Average
EU	47%	40%	30%	40%
Home country	42%	44%	52%	45%
Other	11%	16%	18%	15%
Total	100%	100%	100%	100%

All respondents.

Multiple-answer question.

Wording of the question: Where do you currently live?

Table 12: Overall satisfaction with EMJMD by <u>field of study</u> (2018/19 cohort)

	not satisfied at all	not satisfied	neither/nor	satisfied	very satisfied	Total
Physics	0%	0%	3%	43%	54%	100%
Life Sciences	0%	2%	7%	43%	49%	100%
Chemistry	3%	0%	6%	31%	60%	100%
Economic Sciences	0%	6%	7%	33%	54%	100%
Environmental/ Geosciences	0%	3%	10%	46%	41%	100%
Information Science/ Engineering	1%	1%	15%	40%	43%	100%
Mathematics	9%	0%	9%	57%	25%	100%
Social Sciences/ Humanities	1%	5%	13%	41%	40%	100%

Respondents in the 2018/19 cohort. n=968.

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

Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

Table 13: Overall satisfaction with EMJMD by region of origin (2018/19 cohort)

	not satisfied at all	not satisfied	neither/nor	satisfied	very satisfied	Total
Europe: EU	2%	4%	11%	44%	38%	100%
Europe: non-EU	0%	2%	9%	40%	49%	100%
Middle East/ Central Asia	0%	0%	18%	37%	45%	100%
South Asia	0%	5%	13%	40%	42%	100%
South-East Asia	1%	2%	12%	50%	35%	100%
East Asia	0%	0%	3%	62%	35%	100%
North America, Oceania	4%	4%	17%	39%	37%	100%
Latin America	2%	4%	15%	40%	39%	100%
Africa	1%	1%	6%	33%	59%	100%

Respondents in the 2018/19 cohort. n=968.

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

Information in row percent, rounding differences possible.

Table 14: Satisfaction with specific aspects of the EMJMD programme by cohort

	year of graduation	not satisfied at all	not satisfied	neither/ nor	satisfied	very satisfied	Total
- 10 6.1	2009/10	0%	2%	13%	38%	47%	100%
Quality of the courses	2014/15	1%	4%	16%	35%	44%	100%
courses	2018/19	2%	4%	19%	35%	40%	100%
	2009/10	24%	11%	19%	22%	24%	100%
Internships, work placements	2014/15	15%	10%	13%	26%	37%	100%
placements	2018/19	11%	8%	17%	25%	39%	100%
Exchange with	2009/10	36%	24%	18%	13%	10%	100%
industries/	2014/15	29%	21%	19%	17%	13%	100%
potential employers	2018/19	23%	21%	24%	17%	15%	100%
	2009/10	15%	12%	28%	20%	25%	100%
Practical experience	2014/15	9%	14%	21%	32%	25%	100%
experience	2018/19	9%	12%	22%	26%	32%	100%

Total number of respondents included: n=1,938, n=1,418, n=1,291, n=1,577.

Wording of the question: To what extent are you satisfied with the following aspects of your EMJMD/EMMC studies? Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

Table 15: Preparedness for the labour market by <u>region of origin</u>

	very poorly	poorly	neither/ nor	well	very well	Total
Europe: EU	7%	12%	29%	37%	15%	100%
Europe: non-EU	5%	12%	26%	36%	22%	100%
Middle East/Central Asia	4%	12%	32%	32%	20%	100%
South Asia	1%	6%	21%	47%	26%	100%
South-East Asia	0%	4%	24%	43%	28%	100%
East Asia	2%	6%	23%	53%	17%	100%
North America/Oceania	3%	18%	27%	36%	17%	100%
Latin America	5%	7%	25%	42%	21%	100%
Africa	3%	4%	15%	33%	45%	100%
Total	4%	8%	24%	39%	24%	100%

All respondents. n=1,944.

Wording of the question: How well has your Erasmus Mundus study programme prepared you for the labour market? Information in row percent, rounding differences possible.

Table 16: Preparedness for the labour market by field of study

	very poorly	poorly	neither/ nor	well	very well	Total
Chemistry	3%	2%	20%	37%	37%	100%
Life Sciences	3%	5%	23%	36%	33%	100%
Economic Sciences	3%	4%	24%	49%	21%	100%
Environmental and Geosciences	2%	11%	18%	44%	25%	100%
Information Science and Engineering	3%	7%	25%	42%	24%	100%
Physics	0%	2%	34%	27%	36%	100%
Mathematics	6%	5%	30%	38%	20%	100%
Social Sciences and Humanities	6%	12%	27%	34%	21%	100%
Total	4%	8%	24%	39%	24%	100%

All respondents. n=1,944.

Wording of the question: How well has your Erasmus Mundus study programme prepared you for the labour market? Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

Table 17: Employability skills

	not at all improved	not improved	neither/nor	improved	highly improved	Total
Language skills	2%	5%	13%	30%	49%	100%
Sector- or field-specific skills	1%	4%	16%	40%	39%	100%
Critical thinking	1%	3%	17%	42%	36%	100%
Analytical and problem-solving skills	1%	4%	18%	45%	32%	100%
(Oral) Communication skills	1%	5%	18%	41%	36%	100%
Reading and writing skills	2%	5%	17%	38%	38%	100%
Team-working skills	1%	5%	19%	37%	38%	100%
Planning and organisational skills	3%	8%	26%	38%	25%	100%
Leadership skills	5%	13%	32%	32%	18%	100%
Advanced ICT skills	24%	20%	22%	21%	14%	100%
Innovative potential and entrepreneurial skills	15%	23%	31%	19%	12%	100%

All respondents.

Wording of the question: Looking back at your Erasmus Mundus experience, how did the following skills, competencies and areas of knowledge improve for you personally during your EMJMD/EMMC studies? Information in row percent, rounding differences possible.

Data source: Graduate Impact Survey 2019.

Table 18: Personal development

	not at all improved	not improved	neither/ nor	improved	highly improved	Total
My openness and curiosity about new challenges	1%	1%	11%	35%	53%	100%
My tolerance towards others' values and opinions	1%	2%	11%	33%	52%	100%
Awareness of my own strengths and weaknesses	1%	3%	16%	38%	42%	100%
Confidence and conviction of my own abilities	2%	3%	15%	39%	40%	100%
Awareness of my own goals, I know better what I want	3%	6%	19%	35%	37%	100%

All respondents

Wording of the question: How did the following aspects improve for you personally during your EMJMD/EMMC studies? Information in row percent, rounding differences possible.

Data source: 2019 Graduate Impact Survey.

Table 19: Awareness of Erasmus Mundus in respondents' home countries by <u>region of origin</u>

	not known at all	not known	neither/nor	well- known	very well- known	Total
Europe - EU	20%	47%	25%	6%	2%	100%
Europe - non-EU	6%	32%	33%	18%	11%	100%
Middle East/ Central Asia	9%	28%	33%	17%	13%	100%
South Asia	3%	18%	36%	24%	19%	100%
South-East Asia	2%	10%	37%	33%	18%	100%
East Asia	10%	45%	28%	12%	4%	100%
North America, Oceania	44%	50%	1%	4%	1%	100%
Latin America	14%	48%	28%	9%	1%	100%
Africa	7%	20%	30%	22%	21%	100%

All graduates. n=1,923.

Question wording: In your opinion, how well known is Erasmus Mundus in your home country?

Information in row percent, rounding differences possible.

7.2 Country grouping

Table 20: Countries and their respective shares of GIS 2019 respondents by region

Europe – EU*		Middle East/ Centra	Asia	South-East Asi	ia
Austria	1.3%	Afghanistan	1.0%	Burma (Myanmar)	1.9%
Belgium	2.2%	Azerbaijan	1.4%	Cambodia	1.4%
Bulgaria	2.6%	Iran	28.2%	Indonesia	26.0%
Croatia	5.3%	Iraq	1.0%	Laos	0.8%
Cyprus	0.2%	Israel	2.9%	Malaysia	3.6%
Czechia	0.8%	Jordan	1.6%	Philippines	27.3%
Estonia	0.2%	Kazakhstan	12.4%	Singapore	2.4%
Finland	0.3%	Kuwait	0.6%	Taiwan	7.0%
France	4.0%	Kyrgyzstan	3.3%	Thailand	9.7%
Germany	12.7%	Lebanon	1.8%	Vietnam	19.9%
Greece	6.6%	Oman	0.4%	Total	100%
Hungary	3.6%	Pakistan	28.6%	East Asia	
Ireland	0.4%	Qatar	0.3%	China, People's Rep.	79.8%
Italy	10.9%	Saudi Arabia	1.2%	Hong Kong	6.1%
Latvia	1.7%	Syria	6.3%	Japan	7.0%
Lithuania	2.1%	Tajikistan	1.8%	Korea, Republic	2.7%
Netherlands	5.0%	United Arab Emirates	0.8%	Mongolia	4.5%
Poland	6.1%	Uzbekistan	4.3%	Total	100%
	2.9%	Yemen	2.0%	South Asia	100%
Portugal Romania	9.3%	Total	100%	Bangladesh	35.5%
Slovakia			100%	Bhutan	
	1.2%	Africa	1.60/		2.4%
Slovenia	2.0%	Algeria	1.6%	India	46.7%
Spain	11.0%	Benin	0.5%	Nepal	13.2%
Sweden	1.4%	Botswana	0.3%	Sri Lanka	2.3%
United Kingdom	5.9%	Cameroon	3.9%	Total	100%
Total	100%	Chad	0.2%	Latin America	
Europe – Non-EU	/	Congo, Dem. Republic	1.8%	Argentina	5.1%
Albania	3.9%	Côte d'Ivoire	0.8%	Belize	1.3%
Armenia	4.8%	Egypt	14.2%	Bolivia	1.2%
Belarus	2.1%	Eritrea	0.5%	Brazil	26.1%
Bosnia and Herzegovina	4.1%	Eswatini/Swaziland	0.2%	Chile	4.8%
Georgia	5.2%	Ethiopia	26.6%	Colombia	14.2%
Iceland	0.8%	Ghana	9.3%	Costa Rica	1.9%
Kosovo	1.3%	Kenya	8.3%	Cuba	2.2%
Moldova	3.5%	Libya	0.5%	Dominican Republic	0.6%
Montenegro	4.1%	Madagascar	0.2%	Ecuador	2.9%
Norway	0.7%	Malawi	0.6%	Guatemala	1.8%
North Macedonia	3.3%	Mauritania	0.5%	Honduras	0.4%
Russian Federation	21.6%	Morocco	0.8%	Jamaica	2.2%
Serbia	16.6%	Mozambique	0.6%	Mexico	21.1%
Switzerland	0.8%	Niger	0.8%	Nicaragua	2.6%
Turkey	9.3%	Nigeria	10.5%	Panama	0.1%
Ukraine	18.0%	Rwanda	1.8%	Paraguay	1.2%
Total	100%	Senegal	1.1%	Peru	3.5%
North America		Somalia	0.3%	Puerto Rico	0.1%
Canada	28.1%	South Africa	1.2%	Saint Lucia	0.6%
United States of America	71.9%	Tanzania	1.7%	Trinidad and Tobago	1.3%
Total	100%	Togo	0.4%	Uruguay	0.1%
Oceania		Tunisia	3.4%	Venezuela	4.6%
	78.7%	Uganda	3.6%	Total	100%
Australia	, 0.7 /0	- During		. Stai	100/0
	21 3%	7ambia	1 4%		
Australia New Zealand Total	21.3% 100%	Zambia Zimbabwe	1.4% 2.4%		

st including the UK which had not officially left the European Union at the time of the survey. Data source: 2019 Graduate Impact Survey

7.3 2019 Graduate Impact Survey Questionnaire

Study period and countries of study

Q1 Are you currently pursuing or have you already pursued an Erasmus Mundus Joint Master Degree (EMJMD)/ Erasmus Mundus Master Course (EMMC)?

- 1. Yes, I have already pursued an EMJMD/EMMC
- 2. Yes, I am currently pursuing an EMJMD/EMMC
- 3. No, I have neither pursued nor am I currently pursuing an EMJMD/EMMC Obligatory question

ONLY GRADUATES FROM HERE ON

Q2 When did you start your EMJMD/EMMC?

2004 > 2019

Obligatory question

Q3 When did you graduate from your EMJMD/EMMC?

Take the date of your last exam or Master thesis submission, whichever was the latest. $2004 \rightarrow 2019$

Obligatory question

Q5 Which field did your EMJMD/EMMC fall into?

- 1. Education (e.g. Teacher training, Education science)
- 2. Arts & Humanities (e.g. Fine and Performing Arts, Media Production; Religion; History; Philosophy; Languages)
- Social Sciences, Journalism & Information (e.g. Economics, Political sciences; Psychology; Sociology)
- 4. Business, Administration & Law (e.g. Accounting; Finance; Banking; Management; Marketing and Advertising)
- Natural Sciences, Mathematics & Statistics (e.g. Biology, Biochemistry; Environmental Sciences; Physical Sciences)
- 6. Information & Communication Technologies (ICTs) (e.g. Database/Network design, Software/Applications development)
- 7. Engineering, Manufacturing & Construction (e.g. Chemical Engineering; Electronics; Mechanics; Architecture)
- 8. Agriculture, Forestry, Fisheries & Veterinary
- 9. Health & Welfare (e.g. Dental Studies, Medicine, Nursing and Midwifery, Pharmacy; Social Work)
- 10. Services (e.g. Domestic Services, Sports, Tourism; Hygiene and Occupational Health; Security; Transportation)

Q6 What was your EMJMD/EMMC programme?

[List of all Master Courses since beginning]

If your EMJMD/EMMC programme does not appear in the drop-down menu above, please enter its name here:

Q7 Which were your EMJMD/EMMC host countries?

1st host country [List of countries]

2nd host country [List of countries]

3rd host country [List of countries] Not applicable 4th host country [List of countries] Not applicable

Q4 How did you cover your expenses (study and living costs) during your Erasmus Mundus?

Please select all that apply.

Erasmus Mundus scholarship

Other scholarship

Income from a (part-time) job

Money I put aside before Erasmus Mundus

Parents or support by other family-members

Student loan

Other sources

Reasons for choosing Erasmus Mundus

Q8 What persuaded you to choose Erasmus Mundus as your Master degree programme?

Please select all that apply.

Academic level of Erasmus Mundus universities

Scholarship

Subject was not available in my country

My academic aspirations

Deepen my knowledge in this particular field

Reputation of Erasmus Mundus

Opportunity to receive a joint/multiple degree(s)

Live and study in different countries in and outside the EU

Experience different educational systems in and outside the EU

Multicultural study and social environment

Opportunity to internationalise my social and professional network

Opportunity to develop different soft skills

Benefits for my career/employment opportunities in my home country

Benefits for my career/employment opportunities outside my home country

Upskill myself for the job held prior to EMJMD/EMMC

Opportunity to improve my language skills

Other reasons (please specify) _____

FILTER: If more than 1 reason.

Q8a Which one was your primary reason to choose Erasmus Mundus as your Master degree programme?

- 1. Academic level of Erasmus Mundus universities
- 2. Scholarship
- 3. Subject was not available in my country
- 4. My academic aspirations
- 5. Deepen my knowledge in this particular field
- 6. Reputation of Erasmus Mundus
- 7. Opportunity to receive a joint/multiple degree(s)
- 8. Live and study in different countries in and outside the EU
- 9. Experience different educational systems in and outside the EU
- 10. Multicultural study and social environment
- 11. Opportunity to internationalise my social and professional network
- 12. Opportunity to develop different soft skills
- 13. Benefits for my career/employment opportunities in my home country
- 14. Benefits for my career/employment opportunities outside my home country
- 15. Upskill myself for the job held prior to EMJMD/EMMC
- 16. Opportunity to improve my language skills
- 17. Other reasons

Country of Residence

Q9 At the end of your EMJMD/EMMC, where did you plan to live after your graduation?

If you had more than one country in mind at the time, please select the one at the top of your list. [List of countries]

I did not have any specific plans

Q10 Where do you currently live?

[List of countries]

Q11 What are the reasons for your choice of current place of residence?

Please select all that apply.
Family reasons/private life
Better job/career opportunities
Could not/Cannot find a job elsewhere
I like the work and living environment there
Affordable living
Financial and political stability, social security
It is my home, I grew up there

Work permit and visa issues

Language issues

Other reason

Perception of Erasmus Mundus

Q12 How did you find out about the Erasmus Mundus programme?

Please select your <u>primary source</u> of information.

- 1. My university, student support, counselling etc.
- 2. Through a teacher/ professor/ supervisor
- 3. Through an online search
- 4. Newspaper or magazine
- 5. Social media
- 6. Through a friend/colleague/family
- 7. Higher education fair, conference, or other higher education event
- 8. Erasmus Mundus/Erasmus+ students or alumni
- 9. Other sources

Q13 In your opinion, how well known is Erasmus Mundus in your home country?

 not known at all
 Very well known

 0
 0
 0
 0
 0

Career Paths

The following section focuses on 1) your employment situation during the first six months after your Erasmus Mundus graduation and 2) your current occupation.

Q14 What did you do in the first six months after your Erasmus Mundus graduation?

Please select all that apply.

I started working in a professional job I had found during my EMJMD/EMMC

I looked for a professional job and found one (within the first 6 months after graduation)

I had one or more casual jobs related to my study

I had one or more casual jobs not related to my study

I returned to the job I had before my EMJMD/EMMC

I set up my own business

I took or applied for a traineeship/internship

I continued my studies (e.g. PhD, Master etc.)

I applied for further studies (e.g. PhD, Master etc.)

I was neither employed, nor did I look for a professional job (e.g. voluntary break from

studies/employment, family care, health reasons)

Other (please specify)

FILTER: NOT I returned to the job I had before my EMJMD/EMMC

Q15 Did you have any professional job experience before starting your EMJMD/EMMC?

- 1. Yes
- 2. No

FILTER: I looked for a professional job AND Graduation Year after 2010

Q14bc Did you find a professional job as a result of your search?

- 1. Yes
- 2. No

FILTER: I looked for a professional job AND Graduation Year after 2010

Q17 In which country/countries were you mainly looking for a professional job?

Please name up to three countries and sort them in the order of time spent on your search, the first country being the one in which you looked most extensively.

Country [List of countries]

Country [List of countries]

Country [List of countries]

Location was not a determining factor

FILTER: A country was named and NOT Location was not a determining factor

Q18 Why were you looking for a job in this/these particular country/countries?

Please select all that apply.

Family reasons/private life

Better job/career opportunities

Good work and living environment

Affordable living

Financial and political stability, social security

It's my home country

It's a country I have lived/studied/worked in

A new culture, new personal challenge

Possibility of obtaining a work permit or visa

Language of the country/countries

Other reason

FILTER: Yes, I looked for a professional job and found one AND Graduation Year after 2010

Q19 In which country did you eventually find your professional job?

[Drop-down list of countries]

FILTER: Yes, I looked for a professional job and found one AND Graduation Year after 2010

Q20 How much time did you spend searching for this job?

- 1. Less than 1 month
- 2. 1-2 months
- 3. 2-4 months
- 4. 4-6 months

FILTER: Yes, I looked for a professional job and found one AND Graduation Year after 2010

Q21 How did you find this job?

- 1. Through an internship/traineeship or a summer job during my Erasmus Mundus
- 2. Through my employer or other professional contacts, I established prior to Erasmus Mundus
- 3. Through personal and professional contacts, I established during my Erasmus Mundus
- 4. Announced vacancy application (e.g. through a job fair, an online job portal or a recruitment agency)
- 5. Speculative vacancy application, i.e. no announced vacancy
- 6. I was approached by my employer
- 7. Through my own personal network (family, friends, etc.)
- 8. Other

FILTER: Yes, I looked for a professional job, but did not find one AND Graduation Year after 2010

Q22 You have stated that you did not find a professional job within the first 6 months after your EM graduation. Did you find a professional job later on?

- 1. Yes, _____ months after my EM graduation
- 2. No

FILTER: Yes, I looked for a professional job, but did not find one AND Graduation Year after 2010

Q23 What do you think are the reasons you didn't find a professional job within the first six months after your Erasmus Mundus graduation?

Please select all that apply.

EM degree not recognised in the country where I was looking for a job

EM degree not a sufficient qualification for finding a professional job

After EM I had theoretical knowledge, but no practical experience

I couldn't find a job matching my interests

Offered conditions did not meet my expectations

I have not had enough time to find a job

Visa / work permit issues

I didn't meet the language requirements

I lacked relevant skills and/or experience the employers were looking for

Too much competition

Difficult labour market situation in the country where I was searching for a job

Other reason

FILTER: I returned to the professional job I had before my EMJMD/EMMC OR Yes, I looked for a professional job and found one AND Graduation Year after 2010

Q24 How international is/was the job in terms of contact with customers and colleagues?

	with international customers	with international colleagues
Very international, very frequent/daily	0	0
contact/collaboration		
Quite international, frequent contact/collaboration	0	0
Somewhat international, occasional contact/collaboration	0	0
Rather not international, rare contact/collaboration	0	0
Not international at all, no contact/collaboration	0	0

FILTER: I applied for further studies

Q26 Was your application for further studies successful?

- 1. Yes
- 2. No

FILTER: I continued my studies/I applied for further studies

Q27 What kind of further studies did you pursue?

- 1. Erasmus Mundus Joint Doctorate
- 2. Marie Skłodowska Curie European Joint Doctorate
- 3. PhD Programme (not funded by EU)
- 4. A different Master Programme
- 5. Other

Q28 What is your current occupation?

Please select all that apply.
Employed full-time (more than 30h/week)
Employed part-time (up to 30h/week)
Self-employed
Student (PhD, Master or other)
Intern/trainee
Not employed, seeking a job
Not employed, not seeking a job (e.g. voluntary break from studies and employment, family care

health reasons, etc.)

Other (please specify) _

FILTER: NOT currently unemployed

Q31 Have you ever been unemployed (that is, not employed and seeking employment) since graduation?

- 1. Yes, for a total of _____ month(s)
- 2. No

FILTER: NOT currently unemployed

Q32 Are you still working in the same occupation as after your EM graduation?

- 1. Yes
- 2. No

FILTER: Currently (self-)employed

Q33 Do you think you could have your current job without the skills and competences acquired through your EMJMD/EMMC?

very unlikely				very likely	I don't know
0	0	0	0	0	0

FILTER: Currently (self-)employed

Q34 Take a look at the list of competencies below. How would you rate your level on each competence? On the same scale, what level of each competence is required in your current job?

	Current own level					Required level in my curre			current	
	Very				Very	Very				Very
	low				high	low				high
Own field-specific skills	0	0	0	0	0	0	0	0	0	0
Communication skills (incl.	0	_	0	0	0	0	_	0	0	0
presenting and teaching)	U	0	U	U	U	0	0	U	U	U
Team-working skills	0	0	0	0	0	О	0	0	0	0
Foreign language skills	0	0	0	О	0	0	0	0	0	0
Learning skills	0	0	0	0	0	0	О	0	0	0
Planning and organisation skills	0	0	0	О	0	0	0	0	0	0
Customer handling skills (incl.	_			_	_	_				
counselling)	0	0	0	0	0	0	0	0	0	0
Problem solving skills	0	0	0	0	0	0	О	0	0	0
Advanced ICT skills (e.g.										
programming, database skills, web	0	0	0	0	0	0	О	0	0	0
design etc.)										

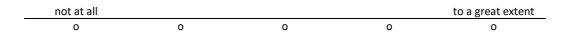
FILTER: Currently (self-)employed

Q35 To what extent do you utilise the knowledge and skills obtained during your EMJMD/EMMC in your current job?

not at all				to a great extent
0	0	0	0	0

FILTER: Currently (self-)employed

Q36 To what extent does your current work demand more knowledge and skills than you can actually offer?



FILTER: Currently (self-)employed

Q37 How important are the following job characteristics to you personally and to what extent do they actually apply to your current work situation?

	Important to me personally				Applies to my current job)	
	not at all				very impo rtant	not at all				to a great extent
Work autonomy	0	0	0	0	0	0	0	0	0	0
Job security	0	О	О	0	0	0	0	0	0	0
Opportunity to learn new things	0	o	0	0	0	О	0	О	0	0
High earnings	0	0	0	0	0	0	0	0	0	0
New challenges	0	0	0	О	0	О	0	0	0	0
Good career prospect	0	o	0	0	0	О	0	О	0	0
Social status	0	О	0	О	0	0	0	0	0	0
Chance of doing something useful for society	o	0	0	o	0	0	0	0	0	0
Work-life balance	0	0	0	0	0	0	0	0	0	0

FILTER: Not Unemployed/seeking a job AND not Unemployed/not seeking a job

Q38 How satisfied are you with your current occupation?										
Not at all				Very satisfied						
0	0	0	0	0						
Q39 How well has your	Erasmus Mundus stu	ıdy programme prepar	red you for the labou	ır market?						
very poorly				very well						
0	0	0	0	0						

FILTER: any evaluation of how EM study programme prepared you for the labour market

Q40 What did your Erasmus Mundus degree programme lack in terms of preparation for the labour market?

Please select all that apply.

Career Mentoring

Adequate labour market and career development knowledge of supervisors and/or course

coordinators

Practical experiences

Contacts to potential employers

Integration activities in the host countries

Networking activities

Soft skills

Technical skills

Subject-specific skills

Entrepreneurial learning

Flexibility in the content of the courses

Time to dedicate to career development during the $\ensuremath{\mathsf{EM}}$

Other

Nothing I can think of

Competences

Q42 Looking back at your Erasmus Mundus experience, how did the following skills, competencies and areas of knowledge improve for you personally during your EMJMD/EMMC studies.

	Not at all				Highly improved	I don't know
Language skills	0	0	0	0	0	0
Team-working skills	0	0	0	0	О	О
Sector- or field-specific skills	0	0	0	0	О	О
Analytical and problem-solving skills	0	0	0	О	О	0
Critical thinking	0	0	0	0	О	0
Planning and organisational skills	0	0	0	0	О	О
(Oral) Communication skills (incl. presenting, negotiating etc.)	0	0	o	0	o	o
Leadership skills	0	0	0	0	О	О
Reading and writing skills	0	0	0	0	О	О
Innovative potential and entrepreneurial skills	0	0	O	0	o	0
Advanced ICT skills (e.g. programming, database skills, web design etc.)	0	0	0	0	0	О

Q43 How did the following aspects improve for you personally during your EMJMD/EMMC studies?

	Not at all				Highly improved	I don't know
Confidence and conviction of my own abilities	0	0	0	0	0	0
My tolerance towards others' values and opinions	0	0	0	0	0	0
My openness and curiosity about new challenges	0	0	0	0	o	О
Awareness of my own strengths and weaknesses	0	0	0	0	0	0
Awareness of my own goals, I know better what I want	0	0	0	0	0	0
My engagement in social activities that contribute to the interest of the community or society.	0	0	0	0	0	0
My interest in serious discussion of social and political events/developments.	0	0	0	0	0	o
My commitment to stand against any kind of discrimination and intolerance.	0	0	0	0	0	o
My commitment to help socially disadvantaged people.	0	0	0	0	0	o

Satisfaction with Erasmus Mundus

Q44 Where do you personally see the greatest impact of Erasmus Mundus? Please select all that apply. My career My subject related expertise My personality My private life My intercultural competencies My attitude towards Europe and the EU Other FILTER: If two or more impact aspects selected. Q44a Which one do you consider the greatest impact of Erasmus Mundus? My career My subject related expertise 2. My personality 3. My private life 4. My intercultural competencies 5. My attitude towards Europe and the EU Q45 How would you assess your Erasmus Mundus time as a networking opportunity for lasting professional relationships? very bad I don't know very good o 0 Q46 Have you ever heard of the Erasmus Mundus Students and Alumni Association (EMA)? Yes, I am active member 2. Yes, I am a rather passive member 3. Yes, but I am not a member 4. No, I have never heard of EMA FILTER: Yes, I am a member of EMA Q48 Has being a member of EMA been advantageous in regards to your social and professional network? Not at all Don't know yet Very much 0 0 0 0 Q49 To what extent are you satisfied with the following aspects of your EMJMD/EMMC studies? Does not apply/ Not at Very not part of my all satisfied **EMJMD** Quality of the courses at my 1st host 0 0 0 0

Quality of the courses at my 2nd host university	0	0	0	0	0
Quality of the courses at my 3rd host					
university	0	0	0	0	0
(if applicable q7c >0 and q7c_na ne 1)					
Quality of the courses at my 4th host			•		
university	0	0	0	U	0

university

(if applicable q7d >0 and q7d na ne 1)							
Internships, work placement (as							
formal part of your EMJMD)	0	0	0	0	0		0
Exchange with Industries/potential	0	•			•		•
employers	0	0	0	0	0		0
Practical experience (as part of your	0	О	0	0	0		0
EMJMD)							
Q50 Were you satisfied with the following	aspects o	f your EN	MJMD/EN	1MC stud	lies in nor	ne, some or	all of your
host universities?		•	•				
			None	Sc	ome	All	
Teaching staff			0		0	0	_
Education material			0		0	0	
Library facilities			0		0	0	
Educational guidance			0		0	0	
Facilities for study arrangements			0		0	0	
Attitude towards international students			0		0	0	
Content of the courses			0		0	0	
Pedagogical methodology, i.e. teaching i	modes		0		0	0	
Extracurricular activities	noucs		0		0	0	
							_
Q51 Were the following aspects well-coord	linated be	etween r	none, som	e or all c	of your Era	smus Mun	dus host
universities?							
			None	So	me	All	
Design and structure of the curricula			0		0	0	_
Course content			0		0	0	
Teaching methods			0		0	0	
Input of associate partners			0		0	0	
Integrated course catalogues for each pa	artner		0		0	0	
institution							
Award of the degree (joint/multiple)			0		0	0	
General degree of jointness/integration	of the		0		0	0	
programme							
							_
Q52 Regarding the quality of the courses, a	re there	other as	pects you	would li	ke to men	ition?	
·							
Q53 All in all, how satisfied were you with y	our EMJI	MD/EMN	//C studie:	s?			
Not at all						Vonce	atisfied
Not at all		_		_		-	atisfied
0 0		0		0		,	0
Q54 What suggestions do you have to incre	ease the a	attractive	eness and	career ii	mpact of y	our EMJM	D?
Q55 Do you have any further suggestions for	or improv	ement c	of your EM	NMD?			

Biographical data

Q56 Year of birth

1920 - 2005

Q57 Country of birth

[Drop-down list of countries]

Q58 Citizenship

If you have more than one citizenship or have changed your citizenship, please indicate the one with which you registered for your EMJMD.

Same as country of birth

[List of countries – 1st citizenship]

[List of countries – 2nd citizenship, for dual citizenship holders, only if applicable]

Q59 Gender

- 1. Male
- 2. Female
- 3. Other/diverse
- 4. I prefer not to answer

Q60 What was the highest academic degree that you held before starting your Erasmus Mundus Programme?

- 1. Bachelor or an equivalent degree
- 2. Master / Diploma or an equivalent degree
- 3. Doctoral/PhD Degree
- 4. Other recognised level of higher education, please specify_____

Q61 In which country did you obtain the above stated academic degree?

[List of countries]

Q62 How long after graduating from your previous study programme did you start your Erasmus Mundus Programme?

- 1. less than one year after graduating
- 2. between one year and two years after graduating

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