

**MASTER DEGREE
ECONOMICS**

**Socioeconomic comparison between
Erasmus and non-Erasmus students: a
study case of University of Porto
students**

Sérgio Augusto Quelho Costa

M

2018



FACULDADE DE ECONOMIA



U. PORTO

FEP FACULDADE DE ECONOMIA
UNIVERSIDADE DO PORTO

Socioeconomic comparison between Erasmus and non-Erasmus students: a study case of University of Porto students

Sérgio Augusto Quelho Costa

Dissertation

Master in Economics

Supervised by

Professor Ana Paula Africano

2017/2018

Biographical note

Sérgio Quelho was born on 7th October 1994, in Porto, Portugal. When he was 3 years old he moved to Brazil, for family reasons, and 2 years later he came back to Porto, Portugal. He graduated from University of Minho in 2015. Obtaining the Bachelor degree in Economics. During the third year of studies of his bachelor degree, he participated in the Erasmus programme, at the Corvinus University of Budapest for two semesters. In 2016, he enrolled in the Master degree in Economics at the Faculty of Economics, University of Porto, Portugal.

Showing his appreciation for mobility actions, after his mobility experience, he became the President of Erasmus Student Network Minho (ESN Minho) during the academic year 2016/2017. More recently, during the academic year of 2017/2018, his knowledge about the Erasmus+ programme was raised to national level assuming the role of Education Officer of Erasmus Student Network Portugal (ESN Portugal).

In July of 2017, he started his professional activity at adidas Business Service as assistant accountant on the accounts payable department, where he stayed until the date of the delivery of this document.

Acknowledgments

I would like to express my sincere gratitude and support to the following people, who directly or indirectly, made the completion of this dissertation possible.

To my supervisor, Professor Ana Paula Africano, for her extreme support, meticulous attention to detail and, above all, for her patience with me throughout the completion of this dissertation. Many thanks for all the professionalism and total availability always demonstrated during this entire year.

To my grandparents, José Louro and Irene Louro, my biggest supporters and encouragers throughout my whole academic period. Their motivation and life experience deeply influenced my academic and professional paths.

To all my friends from my company, faculty or even high school, for their friendship demonstrated over these years and the tremendous support in keeping me motivated and challenging me for new projects and initiatives.

To my mother, who, although living in another country, Brazil, has always supported me unconditionally. She always accepted and supported all my academic choices, providing everything to make them possible.

To all the people who spent part of their time in filling in the questionnaire. Without these contributions, none of the finding results would have been possible.

Abstract

This dissertation explores the most recent literature review on the effects of the Erasmus programme through the identification of the different phases of the programme, as well as the analysis of the contribution on human capital and youth unemployment. Thus, this study seeks to understand the socioeconomic benefits from the participation in the Erasmus programme, particularly, for students from University of Porto, in four dimensions: in academic, personal, professional and intercultural developments. Moreover, this study also identifies the main barriers and reasons for student participation in this mobility programme. For this purpose, this study compares students who participated in the Erasmus programme with those who did not. A quantitative methodology was used through a self-designed questionnaire. In total, 237 valid responses were obtained.

The results suggest that in terms of academic developments, students who participate in the Erasmus programme were highly satisfied with their study period abroad. Personal developments were the most notable achievements from going abroad. Students who participate in the Erasmus programme identify in their professional experiences some distinctive characteristics, such as autonomy in decision making or the opportunity to take leadership positions, more than students who did not go abroad. In terms of international dimension, students enrolled in the Erasmus programme show a greater willingness to work in an international environment, as well as to work abroad than non-enrolling students.

This study emphasizes important reflections about the Erasmus programme, taking the students from University of Porto as a study case. The results provide a better understanding about the gains from this experience, as well as about the barriers that students face. Thus, it provides evidence that may help to improve the promotion and increase the participation of U.Porto students in this European exchange programme, in particular for the next Erasmus programme phase 2021-2027.

JEL codes: I23, J62, O52

Keywords: Mobility European programmes; Erasmus programme; Higher Education internationalization; European identity

Resumo

Esta dissertação explora a revisão de literatura mais recente sobre os efeitos do programa Erasmus através da identificação das diferentes fases do programa, bem como a análise do contributo do capital humano e no desemprego juvenil. Desta forma, este estudo procura compreender os benefícios socioeconómicos da participação no programa Erasmus, em particular, para estudantes da Universidade do Porto, em quatro dimensões distintas: desenvolvimentos académicos, pessoais, profissionais e interculturais. Além disso, este estudo também identifica as principais barreiras e razões para a participação dos estudantes neste programa de mobilidade. Para este propósito, este estudo compara os alunos que participaram do programa Erasmus com aqueles que não participaram. Uma metodologia quantitativa foi utilizada por meio de um questionário de elaboração própria. No total, 237 respostas válidas foram obtidas.

Os resultados sugerem que, em termos de desenvolvimento académico, os alunos que participam do programa Erasmus estavam muito satisfeitos com seu período de estudo no exterior. Desenvolvimentos pessoais foram as melhorias mais notáveis da experiência de estudos no estrangeiro. Os alunos que participam no programa Erasmus identificam nas suas experiências profissionais algumas características distintivas, como a autonomia na tomada de decisões ou a oportunidade de assumir posições de liderança, mais do que os estudantes que não estudaram no estrangeiro. Em termos de desenvolvimento internacional, os estudantes que participaram no programa Erasmus demonstram uma maior disponibilidade para trabalhar num ambiente internacional, bem como para trabalhar no estrangeiro.

Este estudo enfatiza importantes reflexões sobre o programa Erasmus, tendo como caso de estudo os alunos da Universidade do Porto. Os resultados contribuem para uma melhor compreensão sobre os benefícios dessa experiência, bem como sobre as barreiras enfrentadas pelos alunos. Assim sendo, fornece evidências que podem ajudar a melhorar a promoção e incentivo na participação dos estudantes da U.Porto neste programa de intercâmbio europeu, em particular para a próxima fase do programa Erasmus 2021-2027.

Códigos JEL: I23, J62, O52

Palavras-chave: Programas de mobilidade Europeu; Programa Erasmus; Internacionalização do ensino superior; Identidade europeia

Table of contents

Chapter I – Introduction.....	1
Chapter II - Literature review.....	3
Main concepts and milestones of the Erasmus programme.....	3
Internationalization of higher education and Europeanisation concept.....	6
Obstacles versus reasons to go abroad	8
Benefits of mobility.....	10
Academic outcomes	10
Personal and professional developments	11
Intercultural competences.....	13
Portugal: Facts & figures.....	13
Trends: proposal for the Erasmus programme for 2021-2027	16
Chapter III – Methodology & Procedures	17
Instrumentation/Survey and Data collection	17
Sample characteristics	19
Data Analysis.....	20
Chapter IV – Findings	22
Hypothesis testing	22
Main barriers and reasons to go abroad	25
Reasons to go abroad.....	25
Reasons not to go abroad.....	26
Financial restrictions as the main barrier not to go abroad	30
Academic development	31
Development of personality traits versus employability gains.....	32
Personality traits gains: memo© factors approach	32
Development of soft skills: the five most appreciated by employers.....	34
Professional development.....	35
Job characteristics and current professional situation.....	37
Soft skills applied to job experiences.....	38

Intercultural development	40
Job characteristics as differentiating factors for professional career choices.....	40
European identity development	42
Respondents overview about the Erasmus program	43
Chapter V – Conclusions	45
Main conclusions.....	45
Limitations of the study and further recommendations	47
References	48
Apendix.....	51
Appendix 1 – General: figures, tables and graphs	51
Appendix 2 – Questionnaire for Erasmus participants	57
Appendix 3 – Questionnaire for non-Erasmus participants.....	64

List of figures:

Figure 1 - Unemployment in Portugal (%) - 1st quarter 2011 -2nd quarter 2014. Source: Instituto Nacional de Estatística (INE 2014). Reprinted from *Exploring student mobility and graduate migration: undergraduate mobility propensities in two economic crisis contexts*, by Cairns, D. (2017). *Social & Cultural Geography*.....51

List of graphs:

Graph 1 - Reasons to go abroad: Erasmus participants perspectives	25
Graph 2 - Reasons not to go abroad	27
Graph 3 - Additional reasons not to go abroad only from the perspective of non-Erasmus participants.....	29
Graph 4 - The relevance of the Erasmus grant in the Erasmus participants main decisions	31
Graph 5 – Students’ choices and academic enrichment	32
Graph 6 - memo© factor approach, by groups	33
Graph 7 - The development of the five most appreciated soft-skills by recruiters, by groups	34
Graph 8 - Job characteristics related to respondent’s working experience, by group	37
Graph 9 - Five most important soft-skills for recruiters, applied to respondent’s professional experiences, by group	39
Graph 10 - Differentiating factors in professional career choices, by group.....	40
Graph 11 - Measurements of relationship towards European values, by group.....	43
Graph 12 - Respondents overview about the Erasmus program, by group	44
Graph 13 - Ages distribution of respondents	51
Graph 14 - Degree level distribution of Erasmus participants while the period abroad.....	54
Graph 15 - Distribution of country destination of Erasmus participants	54
Graph 16 - Distribution of Erasmus participants by their financial status.....	54
Graph 17 - Erasmus participants perspective about the sufficiency of the Erasmus grant to cover their additional costs	55
Graph 18 - Employment status, by group.....	55
Graph 19 - Working field comparing to the study field, respondents with working experience, by group.....	55

List of tables:

Table 1 - Results obtained from the Man-Whitney test for the reasons not to go abroad..	27
Table 2 - Results obtained from the Man-Whitney test for personality traits development, by group.....	33
Table 3 - Results obtained from the Man-Whitney test for salary classification, by group	36
Table 4 - Results obtained from the Man-Whitney test for job characteristics related to respondent's working experience, by group	38
Table 5 - Results obtained from the Man-Whitney test for soft-skills applied to respondent's professional experience, by group	39
Table 6 - Results obtained from the Man-Whitney test for differentiating factors in professional career choices, by group	41
Table 7 - Results obtained from the Man-Whitney test for the measurements of relationship towards European values, by group	43
Table 8 - Results obtained from the Man-Whitney test for the respondents overview about the Erasmus program, by group	44
Table 9 - Gender distribution of respondents.....	51
Table 10 - Nationality distribution of respondents.....	52
Table 11 - Faculties where respondents finished their last higher education degree (alumni) or where they (current students) were enrolled when answered the questionnaire	52
Table 12 - Respondents studying status.....	53
Table 13 - Academic year of last graduation finished for Alumni.....	53
Table 14 - Degree level distribution of respondents	53
Table 15 - Duration of the period abroad for Erasmus participants	54
Table 16 - Distribution of Erasmus participants by HEI, while enrolled in the Erasmus programme.....	56

List of abbreviations

Abbreviation	Meaning
EC	European Commission
ECTS	European Credit Transfer System
EHEA	European Higher Education Area
ERA	European Research Area
ERASMUS	European Region Action Scheme for the Mobility of University Students
EU	European Union
GDPR	General Data Protection Regulation
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institution
LLP	Lifelong Learning Programme
M	Mean
SD	Standard Deviation
U.Porto	University of Porto

Chapter I – Introduction

In the last decades, the problem of youth unemployment has become one of the highest priorities for European governments. At country level, mobility is associated with increase of international competitiveness, stimulation of labour markets, and encouragement of interaction between citizens of different countries (Institute of International Education, 2011). The European interest in strengthening education among partner countries was reinforced during the financial crisis, in particular, higher education assumed a special importance as a powerful area of cross-border cooperation and intercultural learning to overcome the financial crisis (Cairns, 2017). For that reason, the Erasmus programme gained the mission of contributing to the empowering of European undergraduates in facing social and economic challenges that the European Union (EU) has been facing over the last decade. As a general objective, in 2000, in Lisbon, the European Council defined an ambitious and competitive set of goals for 2010, focused on transforming the European concept into the most dynamic and knowledge-based economy in the world. Its main goal was to create a European Union capable to enhance the competitive power on the global market, remaining the social valued of each member state (Stec et al., 2018).

High education through the Erasmus programme is by now one of EU's flagship projects for two major reasons. Firstly, the economic approach, with mobility offering a worldwide range of opportunities for students to enhance their future careers, by promoting cross-border competition, hence strengthening economic ties between partner countries. Secondly, the idea of creating European citizens is in place since the initial strategy of the Erasmus programme. In the previous year of 2017, the Erasmus (European Action Scheme for the Mobility of University Students) programme celebrated its 30th anniversary. From 2014 until 2020, the European Commission set €14.7 billion of European budget to this programme (European Commission, 2015).

From the individual point of view, the Erasmus programme largely contributes to the acquisition and development of capabilities and skills of participants. In addition, an experience abroad for studies results in faster personal growth, which contributes to a positive impact on increasing employability and better careers. It is, therefore, extremely important to analyse and quantify the contribution that this exchange programme might have on an individual and national level. This dissertation aims to carry out a comprehensive analysis for students of University of Porto (U.Porto) about the Erasmus programme in four different dimensions:

academic, personal, professional and intercultural developments.

The Portuguese participation in this programme is a particular and interesting case of study, mainly after the effects left by the financial crisis. According to the most recent European Commission research – Erasmus Impact Study (2014) - employability is the main driver for students to go abroad and financial circumstances is found to be the major barrier. Although, mobility among the Portuguese students has been rising, Portugal is seen as an importer country. Moreover, being Portugal within the top 10 on the most sending countries, the development of a research that could contribute for better understanding the impact that this European exchange programme may have in the Portuguese economy would be the significant contribution of this dissertation, in order to provide further information about the programme and, therefore, improve its quality in Portugal.

This study proposes to answer the major question on how the participation of U.Porto students in the Erasmus programme from can be beneficial, both on socioeconomic development in terms of individual growth, and explore the factors that may motivate or hinder students to participate in such beneficial mobility programme. For this purpose, firstly, we are interested in understanding how socioeconomic backgrounds of students can influence their willingness to integrate such mobility programme. Secondly, we will analyse the effects of studying abroad on the individual's life and career planning for the students from the U.Porto and how these effects are related with employers' evaluations already addressed in the Erasmus Impact Study - research conducted by the European Commission in 2014, for all the Erasmus programme partner countries. In order to answer these questions, a comparison between participants and non-participants on the Erasmus programme will be developed in order to analyse whether their period abroad improved their future expectations in terms of better job opportunities, individual skills enhancements and the possibility of a brighter future.

This dissertation presents the following structure: first, an overview of the Erasmus programme, its goals and achievements, as well as the Portuguese socioeconomic profile among youth populations. Second, a brief explanation of the methodology and procedures applied to this research. The third part includes findings and interpretation of the results. Lastly, we will present the main conclusions and some recommendations regarding the benefits and effects of the participation in the Erasmus programme, taking the students from the U. Porto as a study case.

Chapter II - Literature review

For a better understanding of the topic, the literature review will be divided into three parts. The first one will give some insights on the key definitions and the important stages of the Erasmus programme since its inception. The second part will demonstrate the socio-economic impact that this European exchange programme may have on the development of its participants. The last part will provide some evidence of the Portuguese trends and challenges for the next year.

Main concepts and milestones of the Erasmus programme

As suggested by Kelo et al. 2006, mobility can be distinguished by two different types: degree (or diploma) mobility and credit (or temporary) mobility. Degree mobility is characterized by a vertical mobility as it is associated to students with insufficient higher education provision in their home country seeking for a better higher education provision in another country, having a full degree abroad. By contrast, credit mobility is motivated by the expectation of experiencing difference (Sin et al., 2016). In this form of mobility, students rather than look for a better university, they seek for difference and contrast. This last is characterized by a horizontal mobility because, at least in the EU, higher education is under the assumption that all universities are of at least decent quality (Wächter, 2014). Therefore, the Erasmus programme assumes the shape of credit mobility, whereby students spend a period (generally, between 3 and 12 months) of their studies in another partner country and after this period they transfer the earned credits to their home institution degree. During this research, we will focus mainly on the horizontal, as the Erasmus programme is characterized by this type of mobility.

Historically, since its establishment in 1987, the Erasmus programme underwent several changes throughout its implementation, allowing more than three million students, trainees and academic staff members to experience a period abroad, strengthening an example of cross-border cooperation and inter-cultural learning (European Commission, 2015). In 1987, 3,244 students from 11 Member States, including Portugal, had the chance to be the first European students spending part of their studies in a foreign, away from their home country. Although education has not played a central role in EU policy, mainly because there is a continuous hesitation among partner countries to transfer any education resource to the

European level, the interest in education has assumed an important role in the last few decades. Traditionally, the main goal of EU policy has been to achieve economic cooperation. Through education, the idea is to go further and shape a sustainable peace in Europe, and also a more specific goal, foster trade among European countries. Moreover, another desired education-related policy is associated to the promotion of a sense of European identity among participants of the programme (Sigalas, 2010). These facts are seen as root reasons for creating the most notorious and successful cross-border educational programme ever launched by the European Commission.

The Bologna Process, signed in 1999 by education ministers from 29 European countries, consists in a series of ministerial meetings and agreements between European countries to ensure compatible structures, transferable credits, and equal academic qualifications across European universities. Some of the main goals of Bologna are the encouragement of intra-European mobility and the harmonization and implementation of the European Credit Transfer System (ECTS) – a standardized system of recognition of courses among partner universities engaged in the Erasmus programme. According to Teichler (2009), the Bologna Process contributes positively to increasing intra-Europe mobility among students and to the worldwide attractiveness of European higher education.

In March of 2000, at the Lisbon European Council, heads of state and EU government partners set out an ambitious objective for the next ten years: to become the EU the “most competitive and dynamic knowledge-based economy in the world” providing for its citizens the opportunity of more and better jobs, and greater social cohesion combined with a sustainable economic growth (Lisbon European Council: Presidency conclusions, paragraph 5). This goal was mainly stated in response to technological challenges resulting from globalization and to confront its main two competitors, the USA and Japan. These new challenges require a continuous improvement and knowledge acquisition, making lifelong learning one of the key achievements for European higher education (Doğan, 2015). Under these purposes, for the first time in the history of EU policies, education and training through the Erasmus programme, assumed an important tool for social and economic objectives set for 2010 (Pepin, 2007).

In March 2010, at the Budapest-Vienna Declaration, 48 European countries joined their political will to implement reforms on higher education based on common values. This gives rise to the European Higher Education Area (EHEA) which, continuously over the last eighteen years, built an area through common tools – such as freedom of expression, higher

education institutions with more autonomy, independent students unions, and the encouragement of free movement of academic members. On the basis of this practices is the common goal for all the member countries to increase the academic mobility and facilitating employability. The Erasmus programme runs under the main framework of the EHEA (Doğan, 2015).

From 2007 to 2013, new actions were introduced to the Erasmus programme through the Lifelong Learning Programme (LLP) such as student traineeship and staff exchange. The main objective of this programme was to contribute to the empowerment of the EU through sustainable economic growth provided with better and wider job opportunities, while ensuring to the next generations a sustainable environment (European Commission, 2017). Following the drafting of the programme in 2007, the Erasmus programme has become more socially aware with a tendency to respond to the high rate of European unemployment as a consequence of the financial crisis, therefore, the economic recovery of the European Member states is one of the contributions of this programme (Cairns, 2017). In its 25th anniversary, the programme attained up to three million students taking a period of their studies in a foreign university. By 2014, the number of country members enlarged, from 11 since its inception, to 33, including non-EU members such as Iceland, Liechtenstein, Norway, Turkey and Switzerland, making it the largest cross-border education programme in the world (Doğan, 2015).

In 2009, in the Leuven ministerial conference for graduates, it was proposed a target of 20% of students, in the whole European Higher Education Area (EHEA), that should be reached by each member state to take part of the programme by the year of 2020, the so-called Leuven 20/2020 commitment.

In 2014, the programme suffered a deep review and became the EU's new umbrella programme for education, training, youth, and sport. The proposal by the European Commission for a new “Erasmus for all”, the so-called Erasmus+, defined new targets and expanded its scope, with the mission of overcoming social and economic challenges that affected the EU for the past decade. Between 2014 and 2020 its budget of €14.7 billion is expected to provide opportunities for more 4 million students to study, train, gain experience, and volunteer abroad. The Erasmus+ programme results from the integration of seven¹ European

¹ The Lifelong Learning Programme, The Youth in Action Programme, The Erasmus Mundus Programme, Tempus, Alfa, Edulink, Programmes of cooperation with industrialised countries in the field of higher education

programmes implemented by the European Commission between 2007-2013. Currently, it is considered the largest mobility student exchange programme for higher education in Europe, with more than 4,000 higher education institutions from 33 countries fully integrated into the programme (Otero et al., 2013).

Internationalization of higher education and Europeanisation concept

With the objective to become the most competitive and knowledge-based economy in the world, Europe has manifested serious interests at incentivizing academic mobility, cooperation with quality assurance, promotion of partnerships between the European Research Area (ERA) and the world's top universities (Halangescu, 2015). In his research, Halangescu (2015), identifies key elements that are related with internationalization of higher education in the context of emerging European economies. These elements are called the domino effect between the Bologna Process and the triumph of values. Such elements are the process of globalization towards the creation of a united Europe, the knowledge society, the increased dynamic of labour markets and capital flows, human resources and information, visible gaps between regional educational systems in the different Europe institutions, leading to increase the global competition among the universities. Given that, during the last two decades, internationalization of the higher education played an important role in terms of its expansion, scope and complexity.

Stated by Teichler (2009), there are terms such as internationalization, Europeanization and globalization used in European higher education to suggest the transfer of knowledge between distances as well as to describe the enormous changes faced in education. Internationalization of higher education followed by exchange study programmes includes a range of activities which allow students to have contact and learn about other cultures providing cross-cultural understanding, to provide access to courses or subjects for students whose local institution cannot meet demand, to enhance the curriculum of students with international content through knowledge and foreign language acquisition (Altbach, 2007). Internationalization and globalization of higher education, although many times mixed up, are different concepts. Globalization might be seen as the political, economic and social forces to which higher education institutions are responding towards a greater international environment, while internationalization is the understanding of how higher education institutions accomplish and act in this process. More generally, globalization is the movement of technology,

people, ideas and education activities across borders, which affects each nation in a different way depending on its historical, cultural, political, economic, social and state of development (Harman, 2005). On the other hand, Teichler (2009) suggests the growing number of cross borders activities amidst persistence of borders as a description for internationalization. In the context of education, internationalization is described as the international mobility of students and academic staff and, most importantly, academic cooperation between institutions. Marginsons (2000) goes further and argues that universities are the most globalized institutions.

As part of the EU's policy over the past two decades, the internationalization of higher education played a vital role as part of the move to economic and political integration. Indeed, the Erasmus program is considered to be the largest temporary mobility scheme, triggering a growing conception of international strategies and policies towards cooperation and strategic internationalisation measures between institutions. The ambition is to prepare 21st century university graduates to live in and contribute in a responsible manner to a globally interconnected society (Sweeney 2012).

This understanding, leads us to a very important concept defended by the European Commission since the foundation of the Erasmus programme – the European identity. Many efforts have been employed to foster a sense of European identity amongst Europeans, hence enhancing the political, cultural, educational and economic ties between European countries (Petit, 2007). By getting European students living together involved in the same purpose, the European Commission hopes that Europe will fulfil the objective of self-sustainability integration consciousness and, therefore, the dissemination of a common European identity and culture. In addition, it is expected that graduates who have experienced a period of studies in another European country would not hesitate to cooperate in the future with their colleagues overseas, boosting the intra-Community cooperation as an implicit action (Commission of the European Communities, 1987).

Some existing literature supports the evidence that the Erasmus programme fosters the European identity and promotes cooperation among country partners. Mažeikien et al., (2008), suggested that higher education provided by international programmes and attracting international students prepares students to perform more efficiently in a global society, being characterized as a global and multicultural society profile. In the same way, citizens that are provided with greater international competence highly benefits the society, being able to faster responding to the increasing challenges of internationalisation and globalisation

(Jacobone et al., 2015). This reflects directly in the perception of a European identity, as well as in the recognition of common European values, demonstrating the existence of supra-national identity and awareness opportunities for the EU countries (Sigalas, 2010).

Jacobone et al. (2015) evaluate the Erasmus programme impact as a gain for participants in recognizing the European identity after their period of studies. The deletion of barriers across European countries has changed the way of living, working and travelling. European citizens have an easier chance to interact with each other and therefore to develop a common identity leading to a wide range of opportunities. According to the European Commission study (2014), 71% of students who spent a period of their studies abroad expressed a higher European identify sense, compared to 61% of students who remained in their home university and expressed more national identities. However, a period abroad does not mean that students feel less their national identity less.

Obstacles versus reasons to go abroad

It is notoriously that the Erasmus programme is far from reaching the commitment of 20% target of mobility participants among all higher education institutions by 2020, established in 2009 at the Leuven Ministerial Meeting. Currently, the European Commission estimates that approximately only five per cent of all EU students participate in its Erasmus schemes (Cairns, 2017). Therefore, a large number of critiques have been raised regarding the barriers that higher education institutions students face in relation to studying abroad (Souto-Otero et al., 2013).

In terms of barriers, five types of barriers have been identified: barriers related to educational structure and recognition, barriers due to the lack of awareness and information, personal and social barriers motivated by different backgrounds, and financial barriers.

Bracht et al., (2006) suggest that students find academic problems most commonly in bureaucratic matters, credit transfers and recognition, differences in teaching or learning methods, teacher support to students, taking courses in a foreign language, and a too-high academic level abroad, in that order. The quality and reputation of the host university play a significant role in student's decision making. The content of the programme and its differences, as well as the flexibility of the schedule, are key aspects to consider when deciding the country to study abroad, in order to better adapt student's needs (González et al., 2011; Teichler 2011).

Souto-Otero et al. (2013) report that students need to be more aware, and receive more

information about the programme, as well as the appropriated institution to their needs. Also, students need to familiarize themselves with the funding conditions of the programme and the application procedures. Personal and social barriers are associated with lack of integration of programmes at home and abroad, language aspects as main individual obstacles to mobility, separation from family and/or their partners. Indeed, parental educational background appears to be more relevant than parental occupation (Findlay et al. 2006; Salisbury et al., 2009).

The most important barriers for our research are the financial ones identified by researchers such as Sin et al., (2016); Souto-Otero et al., (2013) and Prazeres (2013). Financial issues are related to the cost coverage related to the difference of cost of living to study abroad. Going abroad involves a commitment by the student in covering additional costs. The overwhelming majority of Erasmus students receive an institutional financial support, (approximately only 3% do not), which aims to cover (partly) the additional costs of temporary (3 to 12 months) study abroad. However, this grant is considered too low by half of its participants and pointed as the major barrier for students who did not go abroad (Souto-Otero, 2013). Financial and personal circumstances are consistently identified as having an impact on students' decisions to participate in Erasmus programme (Sweeney 2012).

Given all these considerations, in the European Commission's research in 2014, financial issues such as the low-value grants, uncertainty about the grant and real costs or lack of other financial resources were pointed out by 44% of interviewees as the major reason for not going abroad. Not surprisingly, 53% students from Southern countries ranked financial issues as most common reason to remain at home. This leads to a very controversial concern that the Erasmus programme contradicts its goal of social inclusion and may even reinforce social inequality, since socially privileged students have a greater possibility to study abroad and, therefore, increase their chances to achieve better careers in the future.

On the other hand, the Erasmus program brings together many reasons for students to integrate it during their academic experience. Prazeres (2013) developed a research that identifies the trends and motivations for the participation in an exchange student programme. According to these findings, the main drivers to participate in international studies are based on cultural reasons, such as cultural enrichment. Additionally, this study also identifies the social network, heritage and acquiring cultural and symbolic capital.

A deep analysis of the main motivations to go abroad is developed by the Erasmus Impact Study (2014), funded by the European Commission. In this study, many reasons were

identified to be relevant by more than 80% of Erasmus students. Those motivations are academically related, such as the opportunity to improve/learn a foreign language, experience different learning practices and teaching methods or even the quality of the host higher education institution. Individually, students also showed a high level of interest to go abroad, mainly through the opportunity to develop soft-skills. Professional development is shown to be the most important driver for students to go abroad. According to this European research, students are looking in the Erasmus programme for an opportunity to boost their career prospects in the future and enhance employability, either abroad or in their own country. Lastly, intercultural competencies are a strong motivator to drive students abroad for academic studies. In this matter, the opportunity to live abroad, meet people from overseas and become more aware about other cultures are the most common reasons for participating in the Erasmus programme.

The following section analyses in more detail the benefits from participation on the Erasmus programme, mainly based in these most common reasons to go abroad previously enumerated.

Benefits of mobility

European and other academic researchers have pointed out that high-quality academic mobility develops knowledge, abilities and skills, encourages and improves academic cooperation, in particular, disseminates innovation and knowledge in the EHEA, fosters internationalization in high education institutions, reduces unemployment rates, boosts personal development and strengthens a common identity for Europeans. Hence, through the existing literature, we can identify four main outcomes that can be raised in terms of individuals when participating in an exchange programme: academic outcomes, personal and professional development, and intercultural competences gains.

Academic outcomes

As an expected academic outcome from a study period abroad is the opportunity to learn or improve a new language, being considered by far as the most highlighted benefit when participating in the Erasmus programme (Sweeney 2012; Prazeres 2013; Albatch et al 2007). However, there are other effects resulting from the participation in the Erasmus programme. Sweeney (2012), developed a research which aimed to raise debate about the internationalisation strategies of United Kingdom universities, developed an analysis about barriers to go

abroad and highlights the benefits that the participation in an exchange programme would bring to the student's experience, to institution reputation, to research, to the enhancement of the student's employability and intercultural awareness. According to this study, the Higher Education Funding Council for England (HEFCE) reported, for students from England, that those who had carried out a mobility experience achieved better academic performance. However, the author suggests that these conclusions are not easy to draw because there are other factors including demographic and social circumstances that may play an important role in the students' performance. However, the author also suggests that the participation in the Erasmus programme is self-selected based in students with high level of motivation and, therefore, more conducive to achieve better performance.

At the country level, it is not only a gain in terms of individuals. Higher education institutions in Portugal have been encouraged to increase their competitiveness as well as the cooperation with other institutions internationally (European Commission, 2009).

Personal and professional developments

In terms of personal development, Jacobone et al. (2015), showed evidence for the impact that the mobility experience may have on human capital. This study compares data from two different stages of an exchange student, pre-Erasmus and post-Erasmus. The results of this study are consistent with some previous studies confirming that a period abroad enables to acquire more, or a different quality of human capital, than students who remain in their home university. In this case, personal development is measured in terms of human capital and "sense of self-efficiency" – the student's confidence in their own capability in facing new challenges as well as the expectation of students to achieve their future goals. Besides affecting the control of an action, these beliefs also affect the self-regulation through the processes, motivation and effectiveness, and psychological states. This study confirms a significant impact on personal development resulting from a period of studies in another university. Most students recognize the acquisition of a foreign language as the greatest benefit (95.35%, N=190) drawn from a period abroad. However, this study identifies many other dimensions as the most appreciated ones by students in terms of personal development, such as the European experience (75.3%), the acquisition of new cultural skills (74.2%) or even the achievement of academic results (38.4%).

The second study, the Erasmus Impact Study – Effects of mobility on the skills and the internationalization of higher education institutions (EC 2014) demonstrates the impact in

terms of robust measurement of the direct outcomes, both in the short and the long term, resulting from mobility. This study is a large-scale and substantial analysis of the impact of the Erasmus, developed by the European Commission, with focus on skills development and employability over 34 countries, including data from students, alumni, staff, institutions and employers. In this study, personal growth is measured in terms of self-confidence; resilience; communication; problem-solving; organizational; language and presentation skills; intercultural competency; and critical thinking. As with the personal growth identified by Jacobone et al. (2015), this study suggests that students who are exposed to different realities have a higher probability of achieving their future success, allowing them to better understand themselves, as well as their interests, capabilities and aspirations for the market labour. In terms of employability, the Erasmus Impact Study recognizes gains in personality traits, which include curiosity, problem-solving, tolerance and confidence, as the most appreciated ones by 92% of employers when recruiting graduates and for their career development. The same study concludes that 62% of international employers consider a period of studies abroad as important. Thus, as a result of an exchange period, participants develop capacities faster than students who do not opt to study in another country. This European research identified the five most appreciated skills by recruiters - ability to work in teams, communication skills, planning and organisational skills, ability to adapt to and act in new situations, analytical and problem-solving skills – which were very present in the Erasmus participants. This quantitative analysis concludes that in the short-term, 50% of graduated students that undertake a period abroad find their first job more quickly comparing with those who did not take part of any exchange programme for studies. In the medium and long-term, the risk of unemployment is also reduced by 50% for participants of exchange programmes. In terms of career progressions, mobile students take an advantage in enhancing their career expectations. Results also show that mobility students are 20% more likely in occupying positions of managements ten years after the end of their graduation compared to students who remain in their home country. This research gets a clear picture of the relationship mobility and employability, assuming that students who participate in an exchange programme strongly benefits in terms of employability.

Thereby, employability is across many studies a key underlying reason for mobility, especially in Europe. A large number of students believe that from the point of view of recruiters, their period abroad will benefit their potential skills to face the challenges of the current marketplace (Bridger, 2015). The opportunity to go abroad and get in contact with different

cultures, different academic methods with different geopolitical and economic context, better prepare participants to develop their own careers and reduce the provision on unemployment, especially after graduation.

Intercultural competences

As mentioned above, the Erasmus programme was meant to foster supra-national identity and awareness opportunities within the European Union. In a global context, mobility does not only reduce the length of unemployment after graduation, but also increases the attractiveness to successfully compete for jobs in a global market (Bridger, 2015). This evidence is also addressed by Behrnd et al., (2012) who suggest that a period studying abroad largely affects intercultural competencies of students positively, which are highly valued by many employers. Moreover, multicultural skills are associated with faster-growth competencies.

In accordance with the planned achievements of the Lisbon Treaty: “encourage the participation of young people in democratic life in Europe”, there is an urgent necessity for European countries to become more cohesive and inclusive, with citizens who play a more active role in society and mostly in the democratic life. It relays to the youth empowerment that has been faded over the last decades. As pointed out by the European Commission (2017), education is the key promoter of common European values. Practices such as improving new languages and knowledge acquisition of sociocultural behaviours in the context of different political and economic realities through an exchange experience, encourage students to participate on political life in a more democratic way, as well as to promote the modern European consciousness (European Commission, 2009). This was the basis for the creation of such a programme in which the concept of Europe as a place of quality reference for education plays a special role.

As pointed out by the European Commission (2017), education is the key promoter of common European values. Hence, the Erasmus programme is, so far, the most effective sponsor for enhancing intercultural understanding, social integration – including newly arrived migration - and particularly, the inclusion of people with different backgrounds.

Portugal: Facts & figures

The Erasmus programme has become popular among Portuguese students, which has directly affected its labour market and higher education institutions system. The efforts by higher education institutions in promoting and attracting mobility students are remarkable.

From 2007 to 2016, the growth rate was 37% for incoming students and 87% for outgoing students, ranked as the second with higher growth rate, only surpassed by Poland. As a result of this growth, 3.75% of all higher education students in Portugal are Erasmus, occupying the fifth position, which is far from reaching the target of 20%, as established by the Minister of Education of the Bologna signature in 2009. In absolute number, Portugal was the eighth most popular destination among Erasmus students during the academic year 2015/2016, receiving 12,662 and sending 8,647 students to study abroad, being the tenth country where students come from. Portugal has become a receiver country with approximately 62% of incoming and 38% of outgoing Erasmus students during the academic year 2015/2016². According to Sin et al., (2016), until 2006 the number of incoming and outgoing in Portugal was roughly equivalent. After 2007/2008, it was no longer registered a balance between outgoing and incoming, with incoming students surpassing outgoing students. For Portugal, economic aspects appear to be the key underlying reason for the imbalance registered between incoming and outgoing students, particularly during the financial crisis period. Sin et al., (2016) point out the insufficiency of mobility grants and lack of national financial support as a major cause for the slow growth of outgoing mobility students in Portugal.

For most countries, the national support is the major source for financing mobility, whereas in Portugal, national support is not seen as significant (Orr et al. 2011). The same authors affirm that students have to cover their basic expenses through its households' income, which in Portugal is low and became even lower during recession times.

For Portugal, a country that has experienced high levels of youth unemployment, one of the implications of the financial crisis is that students lost their capability to make plans to go abroad during their studies. Instead, youth people became more willing to live and look for better life conditions abroad.

According to national data (Instituto Nacional de Estatística 2014), (Figure 1 in appendix), reprinted by Cairns (2017), the breakdowns for Portuguese unemployment rates from 2011 confirms a new wave of unemployment among the 15-24 year old population with tertiary education, becoming prevalent and sometimes even more predominant than non-educated people. At its peak, during the first quarter of 2013, the unemployment rate among 15-24 year old age group with tertiary level of education reached 44.9%, compared to youth

² Data provided by the National Agency Erasmus+. This institution is the official organism, recognised by the European Commission, responsible for the Erasmus+ programme in Portugal. Its objective is to make sure the Erasmus+ programme works well across countries.

unemployment rate without tertiary education level with 42.5%. This very high unemployment rate compared to the rest of European countries may be explained by the arrival of troika in the spring of 2011. However, official statistics do not indicate any reason for this joblessness. These results have led to a serious dilemma for higher education institutions and authorities. On the one hand, the promotion of the Erasmus programme could be a lever to reduce the youth unemployment rate, since this experience works as a driver of job creation. On the other hand, Portuguese students who are largely household's dependent may face difficulties in accessing this programme, leading to a scenario of greater socio-demographic inequality.

Evidence of the financial crisis is more alarming when looking at outgoing students and concluding that there is a potential danger of losing the most educated people that Portugal has seen. In fact, academic mobility has an extremely importance in terms of talent circulation between sending and receiving institutions. However, for countries that are less attractive economically, there is a strong tendency for students and researchers to leave their country in order to find better opportunities (Giousmpasoglou et al., 2017).

Countries such as Spain, Portugal, Italy and Greece, in which the re-establishment from the financial crisis was not easy, seem to have suffered from a significant waste of highly educated people, a phenomenon called "Brain Drain" (Giousmpasoglou et al., 2017). For the Portuguese case, where in June of 2014 the youth unemployment rate was 35.20%, Germany was the topmost destination to migrate (Vena, 2014). Even three years earlier, in 2012, the German Federal Statistical Office announced that migrants from Portugal to Germany increased by 41.1% comparing with the previous year (Düll 2013). Students and researchers are migrating for necessity rather than their own choice.

Giousmpasoglou et al. (2017) raise awareness to the importance of EU's governments building a new vision for higher education that goes beyond internationalisation. Although they assume that it is a complex topic, their suggestions are based on a redrafting of the brain circulation among Europe in order to restore the comfort and confidence of graduates in higher education professionals. Therefore, decision-makers should strive to create as close as possible a win-win harmony between sending and receiving countries.

Looking at the last official number provided by the European Commission, on the academic year of 2015/2016, Portugal was one of the countries with the highest gap between sending and receiving students. With a gap of 19% between outgoing and incoming, Portugal is in the ninth position of most imbalanced partners countries of the Erasmus programme.

However, these results are not so alarming from my perspective. Comparing the number of outgoing students to the total national students enrolled in tertiary education, Portugal shows one of the highest participation rates in the programme, comparing with other partner countries. The Portuguese participation in the Erasmus programme is approximately 3%, however, very far from achieving the 20% target, at least, set in 2009, in the Leuven ministerial conference (Leuven Communiqué, 2009).

Trends: proposal for the Erasmus programme for 2021-2027

On May30, the European Commission set a new proposal³ for the 2021-2027 period, proposing to double the Erasmus programme budget to €30 billion⁴. In comparison to the current Erasmus+ programme, which aims to provide the opportunity of learning and mobility to 4 million people, the next programme proposes to provide possible support up to 12 million people between 2021-2027. (European Commission, 2018)

The focus will be on “evolution, not revolution”, meaning that the Erasmus programme will keep its focus on schools, vocational education and training, higher education and adult learning, youth and sport, but in a more simplified way. This proposal carries out the goal to make the Erasmus programme substantially strengthened, extended and more inclusive. For this purpose, it aims to take action to foster knowledge and awareness of the EU, promote a better knowledge in forward-looking sectors such as climate change and robotics. Moreover, this proposal for the Erasmus programme presents more awareness and inclusion of people from disadvantaged backgrounds.

The core of the programme aims to be extended in its dimension to the international level, to investigation in people, their skills and their knowledge, which will benefit to address global challenges, provide social equality and drive competitiveness of European countries.

³ “Proposal for A Regulation of The European Parliament and of The Council on The European Social Fund Plus (Esf+)” From: Secretary-General of the European Commission, signed by Mr Jordi Ayet Puigarnau, Director in May 30, 2018.

⁴ The Commission proposal to increase the Erasmus budget to 30 billion for 2021-2027 is divided by the following sectors: €25.9 billion for education and training, €3.1 billion for youth and €550 million for sport.

Chapter III – Methodology & Procedures

This chapter provides an explanation of the methodology applied in this research, the instrumentation and the sampling procedures, as well as the method used to analyse and interpret the collected data.

The present study aims to analyse the socioeconomic effect that participation in the Erasmus programme provides to students from U.Porto who decided to take a period of their studies abroad under this programme, comparing with those who remain in their home university. For that purpose, we developed a survey to test some hypothesis based in the literature review, as well as testing the significance of differentiating factors from a period of study abroad. This was done by collecting data through a questionnaire designed for this study. After organizing and validating the data collected, we proceed with a descriptive analysis of the sample, interpreting and connecting it to other existing researches.

The data collection was obtained by a cross-sectional survey, a type of observational research that collects data from a population or a respective subset, at one point in time. As the study aims to go through capabilities and expectations of students from U.Porto who either participated or did not participate in the Erasmus programme, we used a web-based survey that was disseminated among current students and alumni. The questionnaire was structured in order to be applicable to each target group of this research – Erasmus participants and non-participants.

The results were analysed by using descriptive statistics through the non-parametric tests Mann–Whitney U test for Likert scale or ordinal data and chi-squared test for statistical inference between nominal data, to find out the statistical group differences. The data collected was statistically treated using programmes Microsoft Excel and Stata version 13.0.

Instrumentation/Survey and Data collection

To investigate the population of interest, a quantitative research methodology was used, specifically a survey research. A questionnaire⁵ was designed based on the academic and personal experience of the researchers. This includes a predefined series of questions used to collect information of current students or alumni from U.Porto. The questionnaire was prepared based on the study developed by the European Commission “The Erasmus Impact Study”

⁵ The online version (a Portuguese version) of the questionnaire is available from: https://docs.google.com/forms/d/e/1FAIpQLSeuMQVmlkyUO1MACxz3Wv9uTER_hQq4Wc1owVcapaThZADDvA/viewform

(European Commission, 2014) and the Doğan (2015) study “The Erasmus Programme in the internationalization of Turkish Higher Education”. The final version of the questionnaire can be found in the appendix section. For better understanding, in the appendix section, the questionnaire was divided in two, for Erasmus students (appendix 3) and for non-Erasmus students (appendix 3).

As the results from the data collection took place in a specific time, between June 10 and July 16, a cross-sectional survey research was applied and a web-based survey was used. The questionnaire was sent electronically through the institutional dynamic webmail of some faculties that constitute U.Porto, such as the Faculty of Economics and Faculty of Law. In order to obtain as many responses as possible, several institutional organizations were approached to disseminate the survey among their current students or alumni. Mainly, the Rectory of U.Porto, the International Office and the Department of Communication, Image and Public Relations were approached to spread the link among the community of students from U.Porto. However, due to the General Data Protection Regulation (GDPR)⁶, this request could not be granted, which made the collection of data harder to achieve. Other tools to disseminate the questionnaire were the social networks (e.g. Facebook, LinkedIn).

The survey starts by questioning if the respondents participated or not in the Erasmus programme. The remaining of the questionnaire was adapted to these two groups. For respondents who participated in the programme, the questions were about their Erasmus experience and how this has influenced the student in certain circumstances and experiences, or not. On the other hand, respondents who did not participate in the Erasmus programme were faced with the same questions, however, these were based on the period in which they remained in the university. Additional questions were asked to Erasmus participants, specifically related to their period abroad, such as the destination country, the main motivations to decide to study abroad, on their funding in moving abroad and academic achievements from the participation in such mobile programme.

The questionnaire was divided into seven themes. Firstly, we collected the sociodemographic and background characteristics of this sample, followed by the obstacles and main motivations to go abroad. The following four sections were related to the distinct dimensions approached in this research: academic, personal, professional and intercultural developments.

⁶ For further information, consult the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 – “The European Data Protection Regulation is applicable as of May 25th, 2018 in all member states to harmonize data privacy laws across Europe.” – Consulted online on 11 of August. Retriggered by: <https://gdpr-info.eu/>

Finally, respondents were challenged to give their overview about the Erasmus programme according to personal experience, both Erasmus participants and non-Erasmus participants. They were asked to give their perspective on the effect that the Erasmus programme might have on some dimensions mentioned previously.

Sample characteristics

In total, 297 responses were obtained, of which 237 were considered valid for this study. The ones not considered valid were because the respondents showed interested in still going abroad under the Erasmus programme and, therefore, were not relevant for this study, or because the respondents did not belong to any faculty of U.Porto, not being considered valid for this research. Regarding the 237 valid responses, 129 (54%) were from respondents who participated in the Erasmus programme and 108 (46%) were from respondents who did not. The age range goes from 20 to 55 years old, as is shown in graph 13 (appendix 1). The majority of respondents (58.65%) was aged between 20 to 24-year-old. Approximately, 90% of the participants were aged between 20 to 29 years old. The population aged over 35 is unrepresented in the present study sample (2,1%), which was probably due to the fact that the questionnaire was disseminated through electronic mail and the researchers' contacts, which means that population over 35-year-old might be out of scope. Overall, the Erasmus participants in this study were aged, on average, 25-year-old, whereas for non-Erasmus participants the average age is 26-years-old.

Regarding the gender distribution of the respondents (table 9, appendix 1), 54% were female and 46% male. Looking at the two groups, the Erasmus students were equally divided by each gender, however, the same balance was not found for the non-Erasmus participants with 41% respondents being male and 59% female.

Regarding nationalities of the participants (table 10, appendix 1), as expected, the vast majority of the participants are Portuguese, with all non-Erasmus participants being Portuguese and only 2% of Erasmus participants with a different nationality, in this case, Brazilian.

This research aimed to reach students from all faculties of U.Porto, with thirteen faculties from a total of fifteen represented in this research (table 11, appendix 1). The Faculty of Economics is the most represented, with 52% of respondents, followed by the Faculty of Engineering (15%) and the Faculty of Arts and Humanities (7%).

The table 12 (appendix 1), shows the study status of respondents – current students or alumni from the U.Porto. Of all participants in this study, 60% were still studying at the time

they answered the questionnaire and 40% had finished their high education studies. When looking at the two sample groups, the share of students among Erasmus participants is 64%, whereas among non-Erasmus participants is 56%.

Analysing first the respondents who had finished their studies (table 13, appendix 1), the majority of them (35%) obtained their last graduation in the academic year of 2016/2017. Half of the respondents who are no longer studying finished their studies in the two previous academic years at the time of this study. It might be due to the researchers' network and the close institutional relationship that students maintain during some years after graduation, which may have led some alumni to fill out the questionnaire disseminated through the institutional webmail.

Table 14 (appendix 1) shows the respondents distribution according to their degree and their status - alumni or current students - at the time they answered the questionnaire. In both cases, the master degree was the most common answer. Among alumni, 52% of the respondents had finished a master programme as their last higher education degree. As for the current-student, 83% were attending a master program. Both groups, Erasmus and non-Erasmus participants, have a similar share across different degree levels among current students- 12% were attending a bachelor's degree, 83% a master degree and 5% a Doctoral degree. Among alumni respondents, no Doctoral has been registered, whereas 48% of them had achieved the Bachelor's degree as their last higher education degree level.

Looking in more detail to the respondents who attended the Erasmus programme (graph 14, appendix 1)), 67% of them decided to study abroad while they were attending the Bachelor's degree, whereas 33% participated in the Erasmus programme during the Master's degree.

The graph 15 (appendix 1) represents the distribution of destination countries of Erasmus participants of this sample. From the 33 available countries to go abroad under the Erasmus programme, the respondents in this research went to 23 different countries. Among the 129 respondents that participated in the Erasmus programme, the most popular destination countries were Poland and Spain.

Regarding the duration of the participants in the Erasmus mobility programme (table 15, appendix 1), 88% of the respondents stayed for a period between 4 to 6 months, corresponding to an academic semester of most university regimes as in the case of U.Porto.

Data Analysis

The next chapter presents and discusses the findings obtained from the data collected

through the questionnaire. As in most cases, the possibility to observe the entire population is practically impossible. An alternative is hypothesis testing, an inferential statistical approach that allows researchers to draw conclusions about an entire population based on a representative sample. A hypothesis testing assesses the statistical significance for a random sample, and if rejected the null hypothesis, the evidence is statistically significant – meaning that the evidence validates the theoretical proposals at the population level. Throughout this empirical work, we will use the hypothesis testing to make conclusions about this sample and support the descriptive analysis (Verbeek, 2004)

The first part of this analysis is related to the first part of the questionnaire, in which we will conduct hypothesis testing based on sociodemographic and backgrounds data between the two groups. Hypothesis testing is a form of inferential statistics which allows testing the entire population based on a random sample and draw conclusions from that. The main goal is to observe if there is a significant relationship between the categorical variables and the sample in terms of students' motivation to participate in the Erasmus programme or not. For this purpose, we will conduct a chi-square test for independence. This is the most appropriated test to determine whether there is a significant difference across groups, where χ^2 is equal to the sum of the squared difference between the observed frequency divided by the expected frequency (Mangiafico, 2016).

The second part of the next chapter will be focused on the remaining parts of the questionnaire. The Likert scale was used for the majority of the questions in which the respondents had to specify their level of agreement, importance or relevance to a certain phenomenon. In order to analyse the significance of the data, a nonparametric test was used to analyse the Likert data. Although a parametric test was used, the t-test for two independent samples would have been most appropriate, as Linkert data are ordinal, discrete and has limited range. Thus, the assumptions for most parametric tests are violated by the Linkert data properties. Nonparametric tests are the most appropriate for ordinal data and a normal distribution is not assumed for these tests. Throughout this analysis in which the Linkert scale is used, we will test the significance of the data using the Mann Whitney U test. This nonparametric is used to infer significance difference in a scale or ordinal dependent variable by a single dichotomous independent variable. Any property about the normal distribution is not hold for this test. This makes the Mann-Whitney *U*-test the appropriate test when analysing dependent variables on an ordinal scale, such as the Likert scale (Mangiafico, 2016).

Chapter IV – Findings

This chapter presents a descriptive and quantitative analysis of the results obtained from the dissemination of the questionnaire among alumni and current students from U.Porto. It is organized into the themes of this study, which are the obstacles and motivations to go abroad, academic, personal, professional and intercultural developments, followed by the final evaluation of each group in regards to the Erasmus programme. Before presenting the analysis of the different themes, we will provide an empirical application of some hypothesis we want to test about the different sociodemographic and backgrounds between the two groups in terms of students' motivation to participate in the Erasmus programme.

For most questions of the questionnaire, we will provide a descriptive analysis comparing the two different groups, Erasmus participants and non-Erasmus participants, and, when applicable, a significance test will be performed in order to determine whether the two groups differ significantly from each other in relation to a given characteristic or behaviour.

Hypothesis testing

Hypothesis 1: Students with dual nationality are more likely to participate in the Erasmus programme:

Respondent's nationality	Only one	Dual	M	SD	N	P value
	%	%				
Erasmus	94	6	0.062	0.242	129	0.098*
Non-Erasmus	98	2	0.019	0.135	108	

Note: *statistically significant at 10%; dummy variables: only one – 0, dual – 1

According to the results, 6% of the respondents who participated in the Erasmus programme have dual nationality, whereas 2% of the non-Erasmus participated have another nationality. Since the P-value (0.098) is less than a significance level (0.1), we cannot accept the null hypothesis, which states that the respondents' number of nationalities and the participation in the Erasmus programme are independent. Thus, statistically significant at the 10% level, we can conclude that the results support Hypothesis 1. Therefore, students who have more than one nationality are more likely to participate in the Erasmus programme.

Hypothesis 2: Students whose parents (father or mother) have a different nationality than their own are more likely to participate in the Erasmus programme.

Nationality of respondents' parents	Same	Different	M	SD	N	P-value
	%	%				
Erasmus	92	8	0.078	0.268	129	0.87
Non-Erasmus	92	8	0.083	0.278	108	

Note: data not statistically significant; dummy variables: same – 0, different – 1

Regarding the nationality of the respondents' parents, 8% of the respondents, for both Erasmus participants and non-Erasmus participants, mentioned at least one of their parents, either father or mother, share a different nationality from their own. The significance test shows that the results are not statistically significant. Thus, the results do not support Hypothesis 2. Therefore, we cannot conclude there is a relationship between the willingness to study abroad and the nationality of the respondents' parents.

Some existing literature states there is a relationship between the willingness to participate in a study exchange and the parentage of their families. Matz (1997) suggests students from developed countries with one parent with another nationality or family ancestry from another country are more likely to seek to participate in a study exchange in the country linked to their family heritage.

Hypothesis 3: Students whose parents (father or mother) have a higher education are more likely to participate in the Erasmus programme.

Respondents' parents with higher education	Yes	No	M	SD	N	P-value
	%	%				
Erasmus	52	48	0.519	0.502	129	0.031**
Non-Erasmus	40	60	0.398	0.492	108	

Note: **statistically significant at 5%; dummy variable: no – 0, yes -1

Respondents were asked about the academic qualifications of their parents, either father or mother. As we can see on the table above, 52% of respondents who participated in the Erasmus programme have at least one of their parents with a higher education degree. As for students who did not engage in the Erasmus programme, only 40% of at least one of their parents has a higher education degree. The findings from the significance tests suggest that this data is statistically significant at the 5% level. Thus, we can affirm that these results corroborate Hypothesis 3.

Therefore, this study reveals that students whose parents have a higher education degree are more likely to participate in the Erasmus programme. In fact, the most recent studies on international student mobility have demonstrated that parents' socioeconomic status is a common determinant among study abroad participants. Salisbury et al.'s (2009) findings on American students' intent to study abroad indicate that there is a positive relationship between parents' level of education and students' intent to study abroad. The higher a parents' educational attainment, the more probable the student was planning to study abroad. These distinctions between the academic family background can also be found on the Erasmus Impact Study (European Commission, 2014), which identifies that 38% of non-Erasmus students have at least one of their parents with a higher education degree, whereas for Erasmus students, the share of academic family background is 54%. In opposition to these two previous results, Stroud (2010), who study the intention of American students to study overseas, found that the parents' level of education is not statistically significant with the likelihood of students to participate in an exchange study programme.

Hypothesis 4: Students whose parents (father or mother) participated in an international mobility programme are more likely to participate in the Erasmus programme.

Respondents' parents with an exchange study programme experience	Yes	No	M	SD	N	P-value
	%	%				
Erasmus	9	91	0.093	0.292	129	0.005***
Non-Erasmus	1	99	0.009	0.097	108	

Note: ***statistically significant at 1%; dummy variable: no - 0, yes - 1

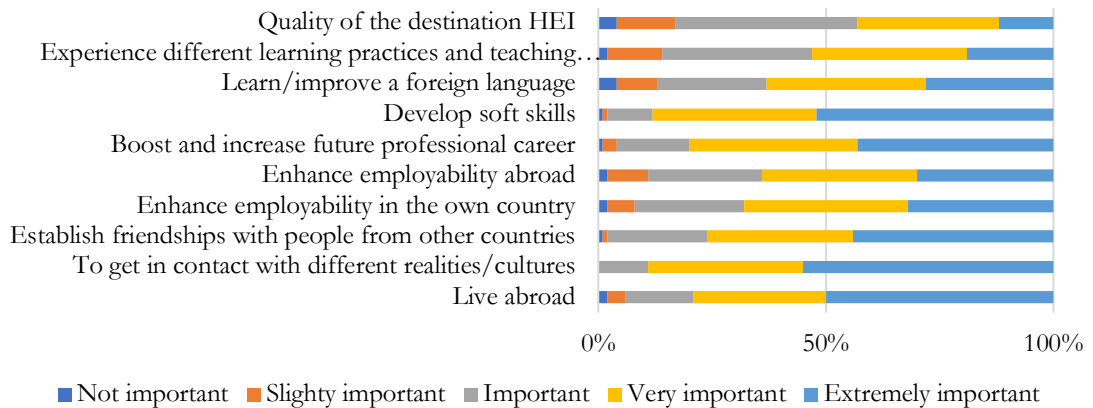
This time the respondents were asked whether at least one of their parents had participated in a mobility programme. There is a striking and highly relevant difference between respondents who engaged and did not engage in the Erasmus programme. As for students who participated in the Erasmus programme, 9% of them revealed at least one of their parents had engaged in an exchange study programme. For students who never experienced a period of studies abroad, only 1% of them revealed at least one of their parents engaged in a mobility programme. In terms of significance, the test shows that this difference is statistically significant with a significance level of 1%. Thus, the results of this study support Hypothesis 4, stating that students whose parents engaged in any exchange study programme are more likely to participate in the Erasmus programme.

Main barriers and reasons to go abroad

Reasons to go abroad

In this section we are interested in identifying the main reasons and motivation that drive students to go abroad in a mobility program. These reasons are divided according to the four dimensions that this study analyses. First, academically in terms of the quality of the destination higher education institution, the opportunity to experience different learning practices and teaching methods, and the chance to learn or improve a foreign language. Second, at a personal level, the study assesses the development of new soft-skills. The professional dimension aims to identify whether the expectation to boost the future professional career and enhancement of employability either at the home country or abroad could be a significant reason for students to go abroad. Finally, the internationalization experience includes establishing friendship with people from other countries, learning from the contact with different realities and cultures, as well as the experience of living abroad.

Graph 1 - Reasons to go abroad: Erasmus participants perspectives



On average, 70% of Erasmus students consider all the reasons above from very to extremely important to go abroad. The development of soft-skills seems to play a special role for students to go abroad, being rated from very to extremely important by 88% of respondents. Besides the personal development, which contains only one reason, the other dimension that has a particular attention from students is the intercultural development the Erasmus programme might provide. Considering only the responses from very to extremely important, 89% of students consider the opportunity to get in contact with a different reality and cultures as the main driver to go abroad.

In terms of professional development, the possibility to boost and increase students' future careers is a reason for students to go abroad, rated by 80% from very to extremely important. For both cases, enhancing employability abroad or on their own country, respondents showed this is an important reason to go abroad. However, they did not show a significant difference in terms of where they want to achieve it, abroad or on their own country. Academic development is shown as the less relevant dimension that students considered important in their decision-making of going abroad. Nevertheless, this does not mean students are not concerned about the quality of the academic achievements resulting from the Erasmus programme. About 53% of Erasmus students considered from very to extremely important the opportunity to experience new learning practices and teaching methods, whereas 63% rated from very to extremely important the significance of the Erasmus program to learn or develop a foreign language.

All these findings are consistent with the existing literature, as most studies indicate cultural reasons as the most prevalent ones which motivate students to go abroad during their studies. An earlier research by Altbach et al. (1985) evidenced linguistic training, cultural enrichment and the opportunity to live in a different country as the main drivers to go study overseas. Other five motivations are highlighted by Matz (1997), such as the heritage interest, adventure, second language acquisition, career goals and personal growth. We can conclude that many years later, the most common reasons to go abroad remain roughly the same.

Reasons not to go abroad

This section compares the two groups in terms of main barriers students most face when deciding to participate in the Erasmus programme. In order to do so, we asked the Erasmus participants to indicate the relevance of each of the factors listed below when deciding to go abroad. For comparison reasons, we asked the non-Erasmus participants to indicate the relevance of each of the same factors in their decision of not going abroad.

Graph 2 - Reasons not to go abroad

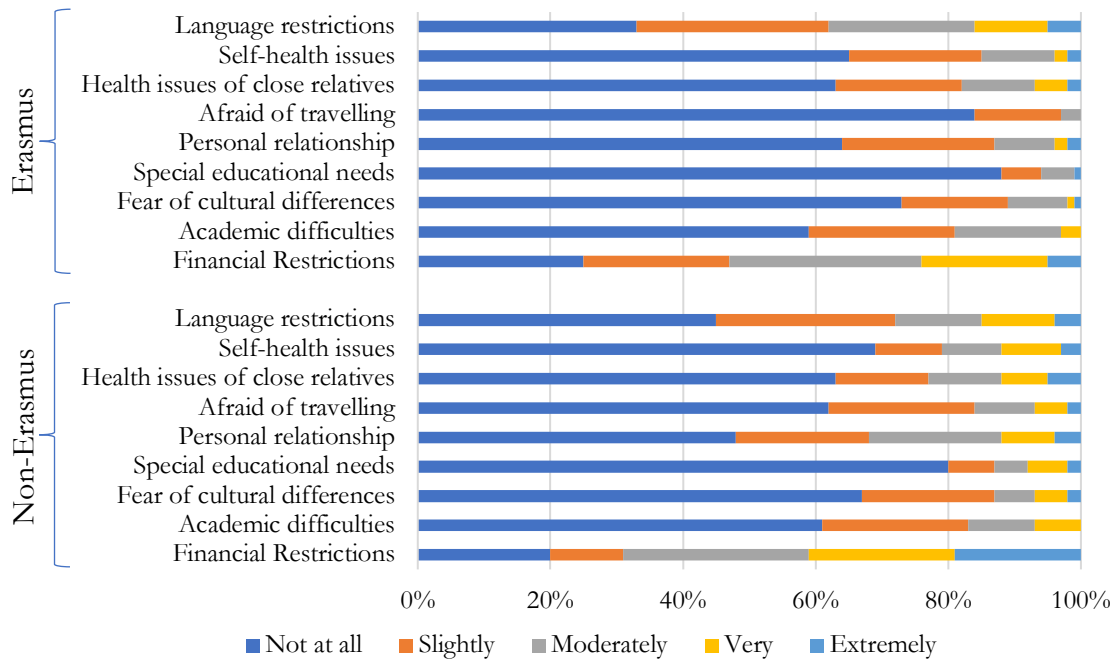


Table 1 - Results obtained from the Man-Whitney test for the reasons not to go abroad

Reasons not to go abroad	Erasmus				Non-Erasmus				P-value
	M	Percentiles			M	Percentiles			
		25	50	75		25	50	75	
Language restrictions	1.96	1	1	3	1.74	1	1	3	0.152
Self-health issues	1.35	1	1	1	1.57	1	1	1	0.138
Health issues of close relatives	1.47	1	1	1	1.63	1	1	1	0.328
Afraid of travelling	1.06	1	1	1	1.4	1	1	3	0.000***
Personal relationship	1.31	1	1	1	1.81	1	1	3	0.000***
Special educational needs	1.14	1	1	1	1.36	1	1	1	0.06**
Fear of cultural differences	1.24	1	1	1	1.35	1	1	1	0.525
Academic difficulties	1.43	1	1	1	1.4	1	1	1	0.678
Financial Restrictions	2.35	1	3	3	3	1	3	4	0.000***

Note: *** significant at 1%; **significant at 5%

Language and financial restrictions were shown to be the most concerned reasons when deciding to go abroad, both for Erasmus' participants and non-participants. For both groups, more than 75% of respondents considered the language restrictions from not at all to moderate relevant as a deciding factor to go abroad. By contrast, the respondents who reported this factor from very to extremely relevant were 16% and 15% for Erasmus and non-Erasmus participants, respectively. The statistical tests do not consider this result significant. Thus, we do not have enough evidence to conclude that the difference between the two groups is statistically significant in terms of language restrictions. For the financial

restrictions, which is shown as the greatest concern, 53% of Erasmus participants consider this factor from moderate to extremely relevant, whereas, for the same range, this relevance is shared by 69% of non-Erasmus respondents. Statistical tests corroborate this evidence, significant at 1% level, that the financial restrictions are a deciding factor more likely to be found in students who did not engage in the Erasmus programme than in students who did. This is consistent with other existing results that highlight the importance of financial support for the Erasmus mobility. Souto-Otero et al (2015), developed a research about the main obstacles for international mobility, with special evidence on the Erasmus programme, which identified the financial issues, in the perspective of cost-covering, as one of the main barriers for students not going abroad, affirming that a period abroad often implies a financial commitment on the part of Erasmus participants. Not surprisingly, the Erasmus Impact Study by regions (European Commission, 2016) reported financial issues is one of the most important reasons preventing students to go abroad, and especially in Southern and Eastern European countries (Bracht et al., 2006)

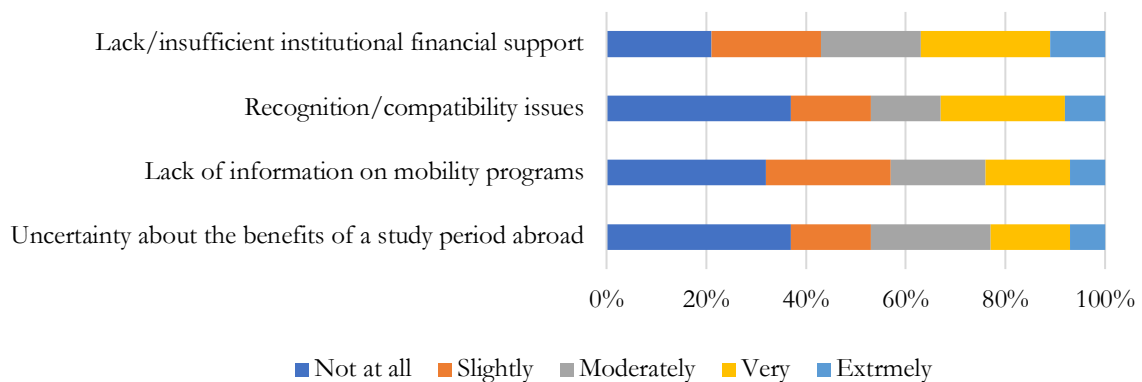
Other barriers that were highly identified by the non-Erasmus participants in contrast with Erasmus participants were the involvement in a personal relationship and the fear of travelling. Regarding the involvement in a personal relationship, 32% of non-Erasmus consider this factor from moderate to extremely relevant in deciding not to go abroad, whereas, only 13% of Erasmus participants considered it relevant for the same range. This data is significant at 1% level and, therefore, students who did not participate in the programme are more likely to consider this factor relevant than students who participated. In terms of fear of travelling, we can identify that only 3% of Erasmus participants consider this factor from moderate to extremely relevant, whereas 16% of non-participants selected the same range. For this sample, the fear of travelling is considered relevant at 1% of significance. Thus, the statistical tests validate the evidence that students who did not participate in the Erasmus programme are more likely to consider the fear of travelling relevant in their decision to not go abroad than Erasmus participants. This result corroborates with Sweeney (2012) who addresses in his study that students who participate in exchange programmes, due to the absence of financial restrictions, are from higher socioeconomic backgrounds, who are more familiar with travelling abroad and therefore it does not represent a barrier for them.

Moreover, the significance tests also show that students with special educational needs are less likely to go on Erasmus. These last evidences are consistent with other researches which

underline the social and personal factors as differentiators between Erasmus and non-Erasmus participants (Souto-Otero et al, 2013).

Additionally, besides the reasons tested previously to both groups, there are additional reasons identified by students for not going abroad. However, these are only applicable to non-Erasmus students, as they are directly related to the condition of not going abroad.

Graph 3 - Additional reasons not to go abroad only from the perspective of non-Erasmus participants



All reasons above were considered relevant for the non-Erasmus participants as deciding factors for not going abroad.

Comparing with the previous reasons, besides the financial restrictions, these four factors report the highest importance score from moderate to extreme relevant. Lack/insufficient institutional financial support is scored from moderate to extremely relevant by 57% of the respondents. This factor differs from the financial restrictions in terms of where the restrictions come from. Financial restrictions are related with individual efforts that students might have to do in affording to participate in such a mobility programme. Insufficiency of institutional financial support refers to the low-value of grants or to the uncertainty about the grants (European Commission, 2014). Results still show that there is a long effort to be done in terms of awareness-raising campaigns to better inform students about the Erasmus programme as well as the benefits of a study period abroad. On this matter, 43% of respondents considered the lack of information on mobility programs from moderate to extremely relevant for not deciding to go abroad, whereas 47% considered for the same range the uncertainty about the benefits of a study period abroad. These results meet the evidences found by the European Commission regional analysis (2016) that more than 40% of non-Erasmus participants identified the reason lack of information and support as a prevalent reason of the non-Erasmus student from going abroad.

There is also a risk factor that many students are not willing to take regarding their academic experience. Overall, 47% of non-Erasmus respondents consider between moderate to extremely relevant the factor recognition and compatibility issues of their study plan as a barrier to go abroad.

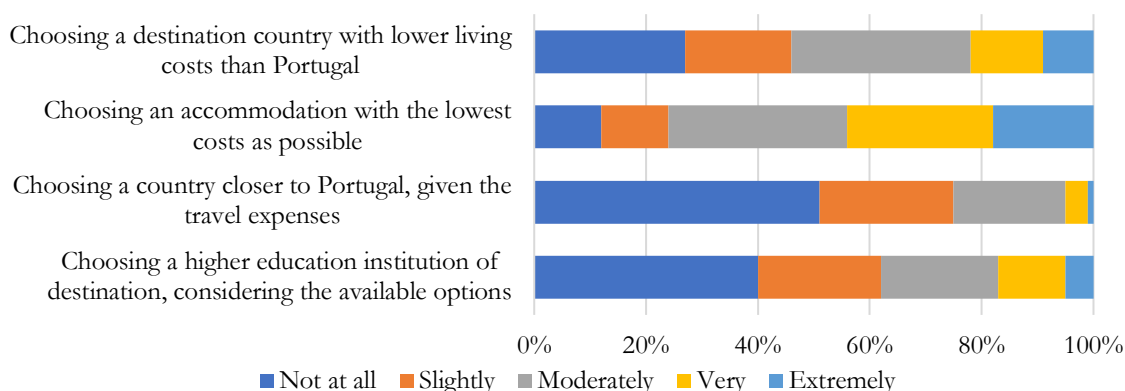
Financial restrictions as the main barrier not to go abroad

At this section, we are interested in understanding how the financial grants provided by the Erasmus programme might influence major decisions associated with going abroad: namely, choosing the destination country, accommodation, higher education destination institution. First of all, we need to identify the funding resources of most of the Erasmus students at the time they participated in this mobility programme. The respondents were questioned whether during the period abroad they were financially dependent of their parents or close relatives. with 74% reporting to be financially dependent on their families and 26% not being (graph 16, appendix 1).

Before asking about how the Erasmus grant influenced the decisions of its participants, we must confirm whether they considered the financial support (Erasmus grant) provided by their home higher education institution sufficient to cover their additional expenses during the mobility period. In accordance with previous conclusions, financial issues were identified as the main reason for students not going abroad or the greatest concern when participating. Thus, as expected, a large majority (79%) considers the Erasmus grants were not sufficient to cover their additional costs during their period abroad, whereas only 15% considered sufficient. The remaining respondents (6%) did not receive any financial support from their home higher education institution (graph 17, appendix 1).

The following graph illustrates the four main decisions that can be influenced by the Erasmus grants in the decision-making process for Erasmus participants to go abroad. These decisions are mainly related to the country of destination, particularly how the living costs or the distance from Portugal may influence the country chosen to study abroad; the destination of the higher education institution and how it can be influenced by financial factors, rather than academic interests. Finally, respondents were asked to report on the relevance of Erasmus grants by choosing their accommodation to live during their period abroad.

Graph 4 - The relevance of the Erasmus grant in the Erasmus participants main decisions



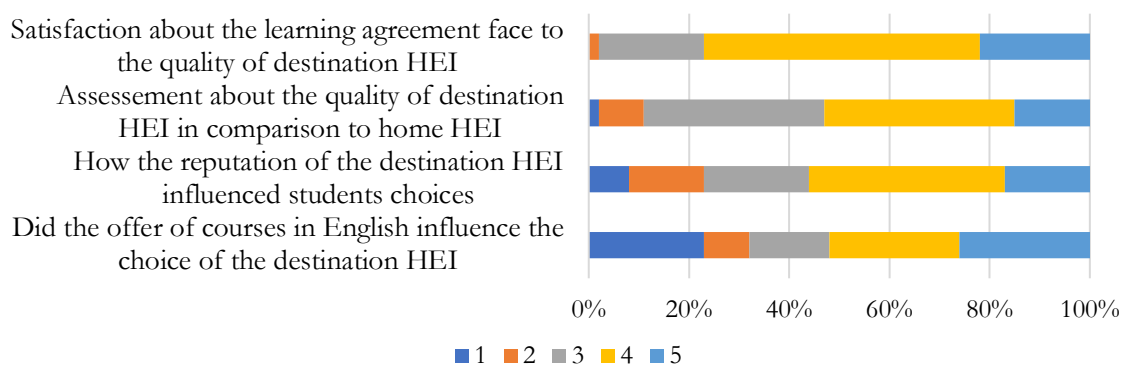
Looking at the results, we can observe that the decision that is mainly affected by the Erasmus grants is the choice of an accommodation with the lowest possible costs, with 44% of Erasmus participants considering this from very to extremely conditioning. Secondly, with 22% of respondents considering from very to extremely conditioning, is the choice of destination country with lower living costs than Portugal. The proximity to Portugal, given the travel expenses, and the choice of the destination higher education institution do not appear to be much conditioned by the Erasmus grants.

Academic development

This dimension analyses the academic development provided by the Erasmus programme for its participants. This aims to analyse the satisfaction of the Erasmus students in relation to their learning agreement and the courses taken during the mobility period. Respondents were also asked to assess the quality of the destination institution in relation to their home institutions. Additionally, respondents answered whether the reputation of the destination institution and the supply of English courses influenced their choice of destination institution. From the list below, respondents scored their evaluations according to the following scale: 1- not at all, 2 – slightly, 3 – moderate, 4 – very, 5 – extremely. Only for the second question, in respect to their assessment about the quality of the destination HEI in comparison to the home HEI⁷, respondents had to score it from 1 to 5, with 1 being considered much worse and 5 much better.

⁷ Although this study is applied to UPorto students (current or alumni), Erasmus participants might be enrolled in a different higher education institution while participating in the Erasmus programme. (see table 16, appendix 1 for Erasmus distribution by HEI)

Graph 5 – Students’ choices and academic enrichment



Overall, Erasmus students reported a high level of satisfaction about their learning agreement according to the quality of the destination higher education institution, with 77% scoring from very to extremely satisfied. In terms of the quality of the destination HEI in comparison to their home institution, 53% of respondents scored the quality of the destination HEI from 4 to 5, meaning that, on average, more than half of the students considered their period abroad as having a better-quality teaching. Regarding the reputation of the destination HEI, 56% of respondents demonstrated from very to extremely relevant for the decision of HEI, whereas the offer of English courses was reported from very to extremely relevant by 52% of respondents.

Development of personality traits versus employability gains

Personality traits gains: memo© factors approach

A psychometrical methodology, called memo©, used in the Erasmus Impact Study (EC, 2014) is methodology recently created to support universities in stimulating students’ personal growth, to measure the effects of interventions and experience such as international mobility. The memo© methodology was applied in the Erasmus Impact Study (2014) and in its recent follow-up regional analysis (2016), which reported that, on average, 92% of European employers consider memo© factors important for recruitment. Among the ten memo© factors that are analysed by this tool, for this study we decided to consider the six that are mostly related to employability: problem-solving, curiosity, self-assessment, decisiveness, tolerance and confidence. The idea of using such tool is to compare whether these personality traits are more likely to observe in students who participated in the Erasmus program compared with those that did not participate.

Graph 6 - memo© factor approach, by groups

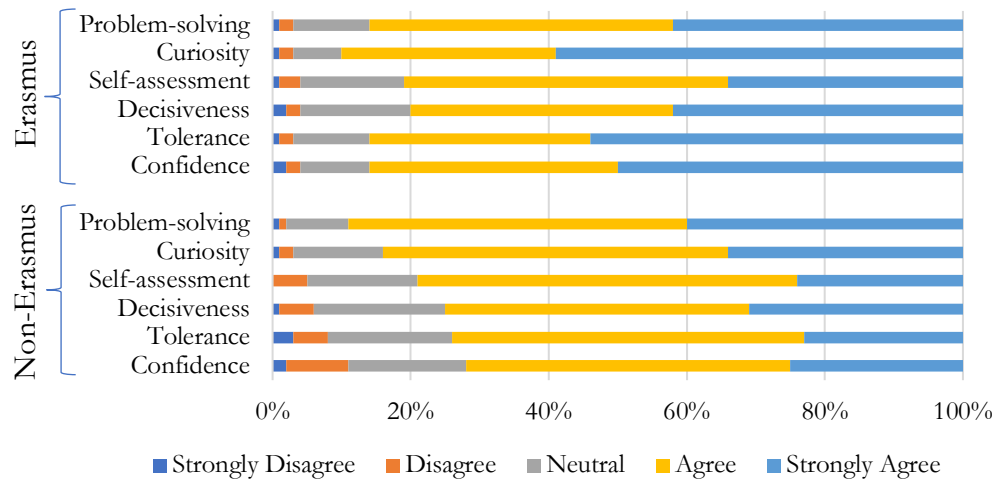


Table 2 - Results obtained from the Man-Whitney test for personality traits development, by group

Personality traits	Erasmus				Non-Erasmus				P-value
	M	Percentiles			M	Percentiles			
		25	50	75		25	50	75	
Problem-solving	4.26	4	4	5	4.26	4	4	5	0.855
Curiosity	4.44	4	5	5	4.15	4	4	5	0.000***
Self-assessment	4.11	4	4	5	3.97	4	4	5	0.144
Decisiveness	4.16	4	4	5	4	4	4	5	0.113
Tolerance	4.36	4	5	5	3.86	3	4	5	0.000***
Confidence	4.31	4	4	5	3.84	3	4	5	0.000***

Note: ***statistically significant at 1%;

In fact, 86% of student who participated in the Erasmus programme agree or totally agree that their period abroad led them to become more confident, whereas 72% of the non-Erasmus participants agree or totally agree that higher education studies improved them to develop this factor. For the same rating range, the same happens regarding tolerance with 86% of Erasmus participants against only 74% for non-Erasmus participants. These results are significant at the 1% level. Thus, the significance tests support these evidences, that students who participated in the Erasmus programme are more likely to feel a higher level of trust in one's own competence and accept the other person's culture, attitudes and adaptability than those who did not. The factor curiosity is also statistically significant at 1%, concluding that students who participated in the Erasmus programme are more likely to be more open to new experiences than those who did not engage in this programme.

Very satisfactorily, these results meet the most relevant personality traits emphasized by employers across all European regions identified in the Erasmus Impact Study, Regional Analysis (European Commission, 2016). According to this study, tolerance is, on average,

considered by 96% of employers as the most relevant personality trait. This study also suggests that is extremely important for universities to equip their students towards these personal values. On the other hand, the same study approaches students before and after their experience abroad and concludes that among all regions, confidence and curiosity were one of the most developed ones after the experience abroad.

Development of soft skills: the five most appreciated by employers

In addition to personality traits, measured by memo©, there are other factors, not directly related to personality, that employers consider relevant when recruiting new employees. The Erasmus Impact Study (EC, 2014), identifies the five most important skills for recruiters: team working skills, planning and organisational skills, ability to adapt to and act in new situations, communication skills, and analytical and problem-solving skills. In this section, we want to determine whether Erasmus participants felt that their period abroad was relevant in terms of improving the skills most appreciated by recruiters, comparing to non-Erasmus students who remained in the same institutions during their higher education studies.

Graph 7 - The development of the five most appreciated soft-skills by recruiters, by groups

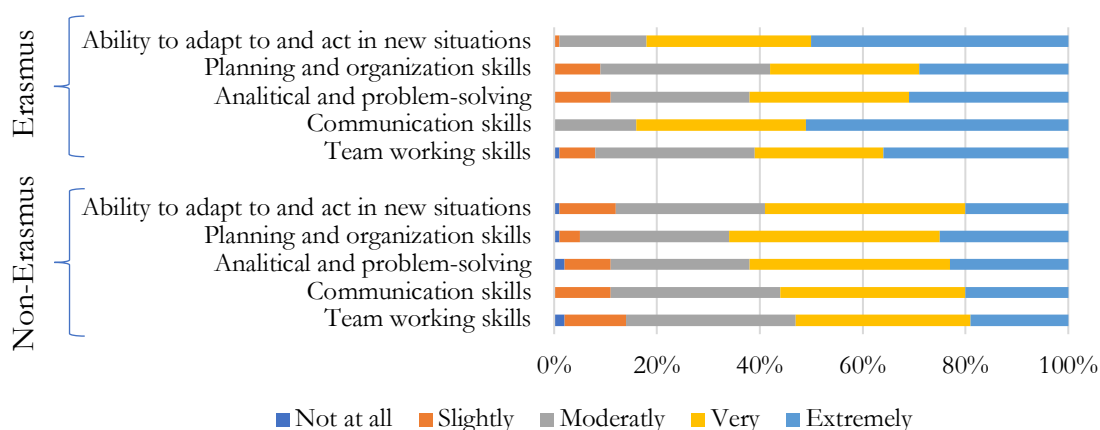


Table 3 - Results obtained from the Man-Whitney test for soft-skills development, by group

Soft-skills	Erasmus				Non-Erasmus				P-value
	M	Percentiles			M	Percentiles			
		25	50	75		25	50	75	
Adapt to and act in new situations	4.29	4	4	5	3.67	3	4	4	0.000***
Planning and organization skills	3.79	3	4	5	3.86	3	4	4	0.554
Analytical and problem-solving skills	3.82	3	4	5	3.72	3	4	4	0.475
Communication skills	4.35	4	5	5	3.66	3	4	4	0.000***
Team working skills	3.86	3	4	5	3.55	3	4	4	0.021**

Note: ***statistically significant at 1%; **statistically significant at 5%

Overall, Erasmus participants reported considerably better gains in terms of skills from their period abroad comparing to those who did not participate. On average, approximately all Erasmus participants consider their period abroad very important for improving their skills. The improvement of communication skills is the soft-skill most reported by Erasmus students as better enhanced during their period abroad. Actually, 84% considered their period abroad from very to extremely important for the development of this soft-skill, whereas only 56% considered this in the same range in relation to their entire study period during higher education. The same happens with the ability to adapt to and act in new situations, and team working skills with a higher share of students reporting their period abroad from very to extremely relevant for the improvement of these skills, in comparison with non-Erasmus students, who evaluate the improvement of these skills in relation to their entire period of higher education. Statistically, only planning and organizational skills, and critical thinking were not considered statistically significant. For the other competencies, the significance tests, at a 1% level, endorse that students who participated in the Erasmus programme felt more of these skills being developed than non-Erasmus participants. Therefore, we can conclude that, on average, Erasmus students are more likely to develop their, at 1% level, ability to adapt to and act in new situations, communication skills, and, at 5% level, team working skills, farther than students who remain in their higher education institution during their studies.

Professional development

In addition to academic and personal development, showed previously to be the most important reason for students to go abroad, the professional development and enhancement of employability that the Erasmus programme may root on its participants are also very important reasons that lead students to study in a foreign higher education institution, which this research also assesses.

Before answering about their professional experiences, the questionnaire asked about the current employment status of each respondent, in order to filter to the next set of questions only those who were currently employed, and those who although not currently employed, had had a professional experience in the past. From this sample, approximately 82% were able to answer the following questions - 77% among Erasmus participants and 87% among non-Erasmus students (graph 18, appendix 1).

According to the European Commission (2014) on average, 75% of non-Erasmus participants found employment in the first three months after graduation compared to 72% of Erasmus students. However, this study highlights the Southern region, where the share of Erasmus participants (66%) who find a job in three months after graduation is greater than non-Erasmus participants (62%) and for both cases, lower than the European average. At the country level, for Portugal, Poland and Hungary, Erasmus participants were significantly more likely to find the first job in three months after graduation than non-Erasmus students. Although the previous research does not consider the possibility of respondents start working even before they finish their studies, this possibility is applied in this research taking into account the Portuguese reality, where many students start working during their studies⁸. Considering this possibility, results are consistent with European Commission findings, with 84% of Erasmus students finding employment in the three months following graduation or even during their graduation, whereas the share is 77% among non-Erasmus participants (table 3).

Table 3 - Results obtained from the Man-Whitney test for salary classification, by group

Salary classification	Below average	Average	Above average	M	SD	N	P-value
	%	%	%				
Erasmus	22	57	21	1.99	0.66	100	0.142
Non-Erasmus	30	55	15	1.85	0.66	94	

Note: data not statistically significant; dummy variables: below average – 1, average – 2, above average - 3

In the graph 19 (appendix 1) it is possible to observe for both groups, more than 80% of respondents reported that their professional experience is related to their study field, meaning that there is no relevant difference found in the experience of studying broad with the chance to work in a different field than the study field.

Based on the EC research (2014), on average, 20% of European employers who hire both Erasmus and non-Erasmus participants claimed to pay a higher salary to Erasmus than those who did not take part of their studies abroad. The expectation to achieve higher salaries is also shown as a motivation for students to engage in the Erasmus programme. Thus, it is relevant to understand the respondent's perspective about their salary and compare both groups. In table 3, we can observe that 21% of Erasmus participants considered to receive

⁸ According to the Eurostat, the proportion of young people in education and employment in Portugal increased from 4.8 in 2006 to 8.5 in 2015. Comparing to the EU average, Portugal is quite far to be close to the average European countries with 15.4 in 2006 and 16.9 in 2015 of young people studying and working at the same time. (source: Eurostat. (2016) Participation rate of young people in education and training by sex, age and labour status. [Data file]. Retrieved from <https://ec.europa.eu/eurostat>. Accessed on 1 September 2018).

above average, whereas for non-Erasmus 15% did. The proportion was more similar for the average answer, in which 57% of Erasmus and 55% of non-Erasmus participants consider their salaries on average. More unsatisfied are the non-Erasmus students with 30% claiming to receive below average, compared to 22% of Erasmus participants. Although Erasmus students are better positioned in terms of their own salary perspective than non-Erasmus, these results are not statistically significant and, therefore, we cannot conclude that there is a significant relationship between going abroad and average salaries.

Job characteristics and current professional situation

After looking at this sample in terms of their current employment status, professional field and salary classification, it becomes more important to analyse whether there is a statistical difference between the two groups in terms of job characteristics into the labour market considering their current jobs, or previous professional experience for those who are no longer working. As such, respondents were asked to assess the job characteristic related to their professional experience, for example, whether they perform challenging tasks, whether they act with autonomy in their decision-making, whether they have the opportunity to take leadership positions, among other characteristics as listed in the graph below.

Graph 8 - Job characteristics related to respondent's working experience, by group

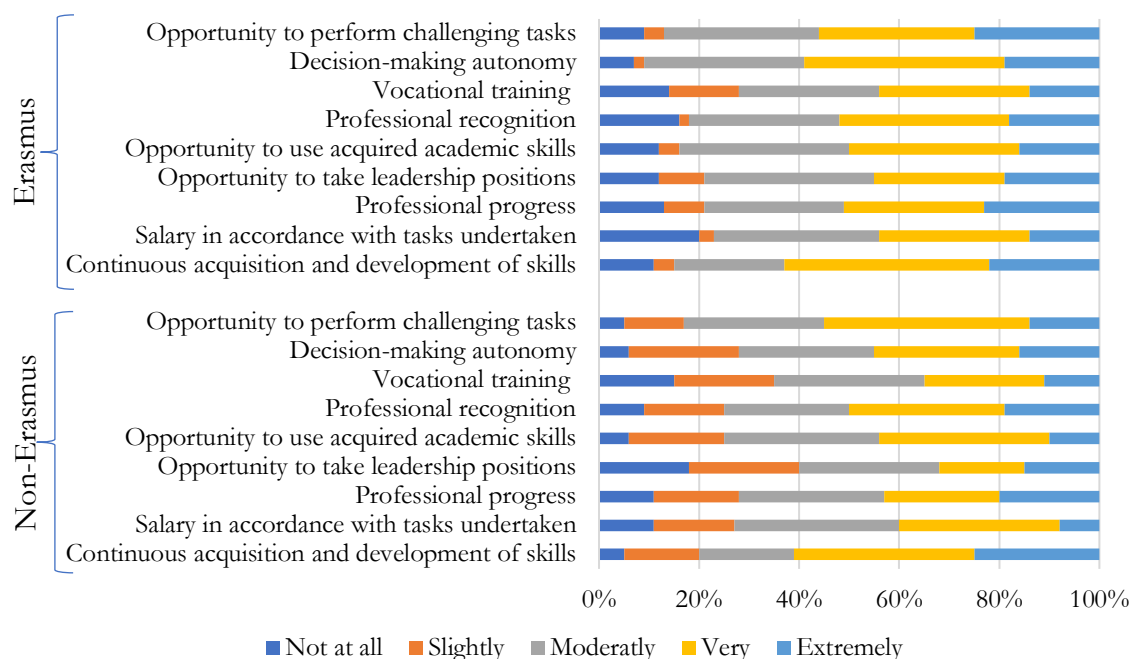


Table 4 - Results obtained from the Man-Whitney test for job characteristics related to respondent's working experience, by group

Current professional situation	Erasmus			Non-Erasmus			P-value		
	M	Percentiles		M	Percentiles				
		25	50		75	25		50	75
Opportunity to perform challenging tasks	3.64	3	4	4	3.47	3	4	4	0.289
Decision-making autonomy	3.67	3	4	4	3.26	2	3	4	0.012***
Vocational training	3.16	2	3	4	2.96	2	3	4	0.222
Professional recognition	3.5	3	4	4	3.36	3	4	4	0.548
Opportunity to use acquired academic skills	3.46	3	4	4	3.21	2	3	4	0.123
Opportunity to take leadership positions	3.34	3	3	4	2.88	2	3	4	0.011***
Professional progress	3.45	3	4	4	3.26	2	3	4	0.274
Salary in accordant to tasks undertaken	3.32	3	3	4	3.12	2	3	4	0.298
Continuous acquisition and development of skills	3.66	3	3	4	3.6	3	4	4	0.816

Note: ***significant at 1%; **significant at 5%; *significant at 10%

In table 4, except for vocational training by the firm, on average, 50% of students who participated in the Erasmus programme consider all the remaining characteristics from moderate to very much related to their current professional responsibilities. The same is not reported for non-Erasmus participants who, on average, 50% consider the majority of the characteristic from a little to very much related to their current professional responsibilities. The most notable differences between the two groups are reported for the decision-making autonomy and the opportunity to take leadership positions. On average, 59% of Erasmus participants characterized their jobs as very or extremely linked to decision-making autonomy, compared to 45% of non-Erasmus participants. Additionally, 45% of Erasmus students consider their jobs have very to extremely high opportunity to take leadership positions, while this characteristic is shared by 32% of non-participants. The significance tests corroborate with these evidences. At a significance level of 1%, students who participated in the Erasmus programme are more likely to classify their current jobs as having decision-making autonomy and having the opportunity to take leadership positions.

Soft skills applied to job experiences

At this point, respondents were asked to assess the importance of the five most valued skills from the perspective of recruiters, identified previously, for the achievement of the success of their current or previous professional experience. We are now interested in confirming

whether the significant results obtained previously are also considerably reported by the respondents in relation to achieving their professional success.

Graph 9 - Five most important soft-skills for recruiters, applied to respondent's professional experiences, by group

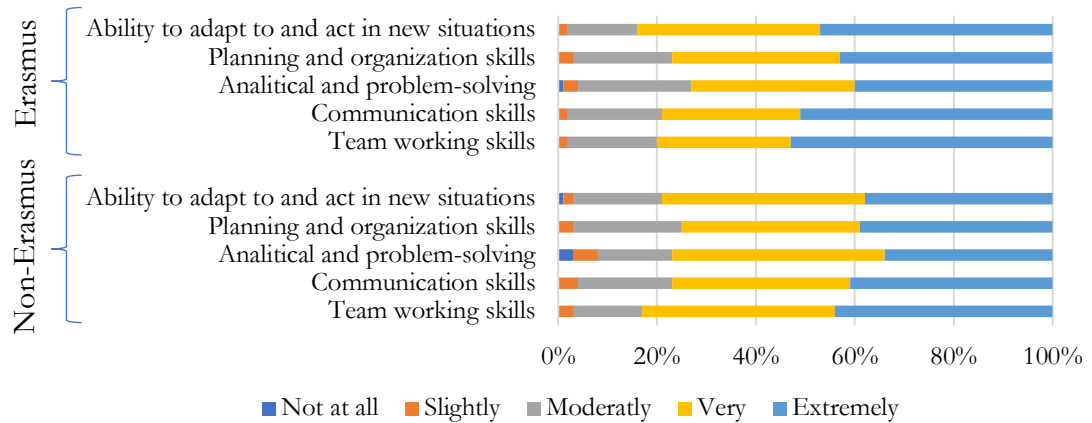


Table 5 - Results obtained from the Man-Whitney test for soft-skills applied to respondent's professional experience, by group

Soft-skill applied to job experiences	Erasmus				Non-Erasmus				P-value
	M	Percentiles			M	Percentiles			
		25	50	75		25	50	75	
Adapt to and act in new situations	4.3	4	4	5	4.13	4	4	5	0.114
Planning and organization skills	4.16	4	4	5	4.11	4	4	5	0.596
Analytical and problem-solving skills	4.09	3	4	5	4.01	4	4	5	0.608
Communication skills	4.28	4	5	5	4.14	4	4	5	0.172
Team working skills	4.33	4	5	5	4.25	4	4	5	0.362

Note: data not statistically significant

Observing table 5, we can see there is no significant difference between the two groups and the skill most appreciated by recruiters identified on the EC research in 2014, in terms of their perception to achieve success in their professional field. Although no conclusion can be taken from the difference between the two groups, we can assume the Erasmus programme better prepares its participants to face the challenges in their professional fields. Previously, we concluded that, on average, Erasmus students are more likely to develop their ability to adapt to and act in new situations, communication skills, and team working skills, more than students who remained in their higher education institution during their studies. Thus, as Erasmus students most commonly assess all these skills as extremely important for the success in their professional field, it is expected that the Erasmus programme better prepares students for their professional success, superior than those who remain at home and did not experience a period of studies abroad.

Intercultural development

In this subchapter, the focus is to analyse the differentiating factors that affect Erasmus and non-Erasmus participants in their professional career choices. Particularly, whether intercultural aspects play a more important role for Erasmus participants than non-Erasmus participants when setting their professional career choices. Secondly, the level of European-identity is analysed and assessed if there is a significant difference between the two groups.

Job characteristics as differentiating factors for professional career choices

This section looks at some key job features which play as differentiating factors that affect Erasmus and non-Erasmus participants in their professional career choices. This approach looks particularly to internationalization aspects, such as the possibility to work abroad versus only in Portugal, and the prospect of working in an intercultural environment. On the other hand, we were also interested in understanding how the expectations of higher salaries or career advancement opportunities would be rated in comparison to internationalization aspects.

Graph 10 - Differentiating factors in professional career choices, by group

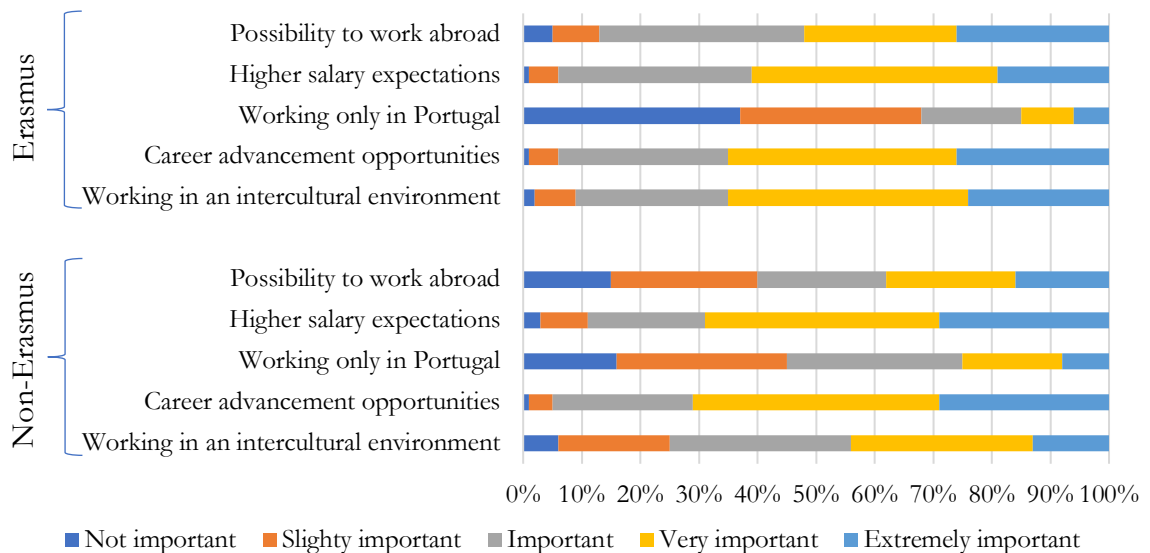


Table 6 - Results obtained from the Man-Whitney test for differentiating factors in professional career choices, by group

Differentiating factors in professional career choices	Erasmus				Non-Erasmus				P-value
	M	Percentiles			M	Percentiles			
		25	50	75		25	50	75	
Possibility to work abroad	3.59	3	4	5	2.99	2	3	4	0.003***
Higher salary expectations	3.73	3	4	4	3.83	3	4	5	0.197
Working only in Portugal	2.16	1	2	3	2.74	2	3	4	0.000***
Career advancement opportunities	3.84	3	4	5	3.93	3	4	5	0.432
Working in an intercultural Environment	3.79	3	4	4	3.25	3	3	4	0.000***

Note: ***significant at 1%; **significant at 5%; *significant at 10%

Overall, higher salary expectations, career advancement opportunities and opportunity to work in an intercultural environment are the factors most commonly reported as very important by Erasmus participants, while for non-Erasmus participants, the most rated options were the expectations for higher salaries and career advancement opportunities.

Focusing mainly on international factors, we can observe that Erasmus students are very willing to choose their professional career, considering an international environment or even working abroad than the non-Erasmus participants. The opportunity to work in an international environment is scored by 65% of Erasmus participants from very to extremely important, whereas non-Erasmus students rated it by 44%. Regarding the possibility to work abroad, on average, 52% of Erasmus students consider from very important to extremely important the possibility to work abroad in their professional career choice, whereas for non-Erasmus participants the same considerations are only mentioned by 38% of the respondents. At a significance level of 1%, these evidences are supported by the significance tests, which confirm that those who participated in the Erasmus programme are more likely to consider the possibility to work in an international environment or even work abroad more important than students who did not engage in the Erasmus programme.

The opportunity to boost career progression is scored by 65% of Erasmus participants from very to extremely important, while for non-Erasmus it is considered by 71% of respondents from very to extremely relevant. For higher salary expectations, 69% of non-Erasmus participants consider it from very to extremely relevant for their professional career choices, whereas 61% of Erasmus participants did so. Although, for these two factors non-Erasmus considered, on average, more relevant than Erasmus participants, these data are not statistically significant. Therefore, it is not possible to conclude that there is a meaningful difference between the two groups in relation to career advancement opportunities or higher salary expectations as differentiating factors in their professional career choices.

Another interesting result is the importance that both groups give to the possibility of only working in Portugal when choosing their professional career. On average, 68% of Erasmus students disregard this importance, scoring from not at all to slightly important, against 45% of non-Erasmus students that score the same range. At 1% level, this data is statistically significant, supported by significance tests. This corroborates with the evidence that Erasmus students are less likely to consider important the possibility of only working in Portugal when choosing their professional career than non-Erasmus participants.

Regarding these findings, it becomes clear that intercultural aspects, such as the possibility to work in an intercultural environment or the possibility to work abroad are less valued by non-Erasmus participants than aspects directly related to higher salary expectations or opportunity of career progressions in terms of importance given for the professional career choices. By contrast, Erasmus participants give higher importance to intercultural aspects than factors linked to career progression or salary expectations.

These results are in line with those of Jacobone et al. (2015), which in their findings conclude that society is changing towards an intercultural community, as well as that exchange study programmes do not only promote human capital but also their multicultural orientation. They suggest that exchange study programmes develop in its participants individual employability and skills oriented to the new European labour market. The European Commission research does also support these suggestions, concluding there is a significant difference in finding that Erasmus participants are more likely to work in an environment with international characteristics. These findings drive us to the next section, which will analyse the internationalization effect in participation in such a mobility programme.

European identity development

Employability gains are not the only effect of mobility. European identity is also an aspect that deserves analysis. As stated by Jacobone et al. (2015), citizens with higher perception about the European dimension and recognition of its common values are more capable to respond to the increased challenges of internationalization and globalization. In this section we want to evaluate whether the European values are more present in the respondents that participated in the Erasmus program compared to those who did not.

Graph 11 - Measurements of relationship towards European values, by group

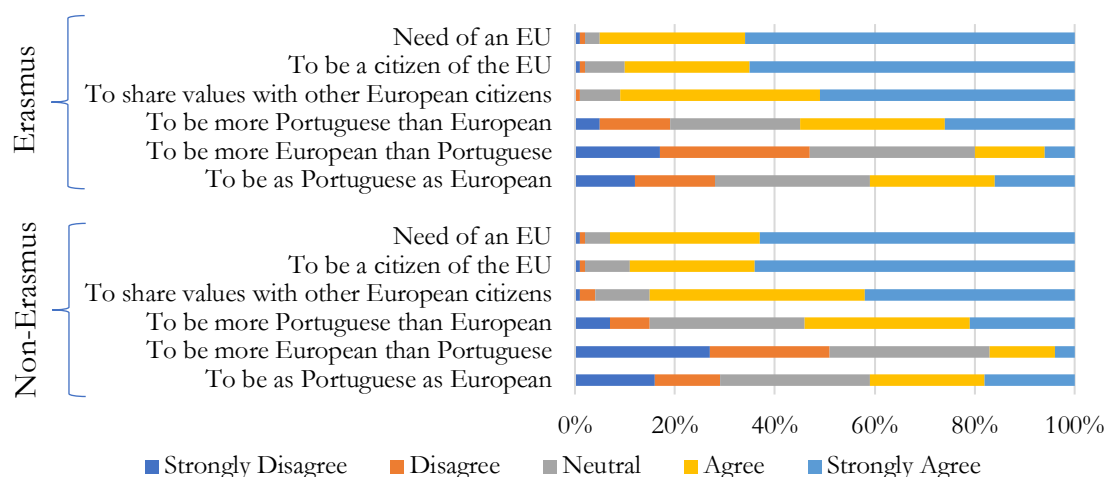


Table 7 - Results obtained from the Man-Whitney test for the measurements of relationship towards European values, by group

Europeanization values	Erasmus			Non-Erasmus			P-value		
	M	Percentiles		M	Percentiles				
		25	50	75		25	50	75	
Need of an EU	4.59	4	5	5	4.53	4	5	5	0.559
To be a citizen of the EU	4.53	4	5	5	4.5	4	4	5	0.785
To share values with other European citizens	4.41	4	5	5	4.23	4	4	5	0.118
To be more Portuguese than European	3.55	3	4	5	3.52	3	4	4	0.832
To be more European than Portuguese	2.6	2	3	3	2.43	1	2	3	0.24
To be as Portuguese as European	3.17	2	3	4	3.14	2	3	4	0.897

Note: data not statistically significant

As it is possible to see in the above table, overall, all students share practically the same range of opinions. In both groups most students extremely agreed that a European Union is needed, as well as feel themselves to be EU citizens sharing values with other European citizens. Surprising, the nationalism feelings are not as intense as expected. Students reported a moderate agreement to be more Portuguese than European, however, when asked whether they agree to be as Portuguese as Europeans the most common answer was the option “neutral”, 31% for Erasmus and 30% for non-Erasmus participants.

Respondents overview about the Erasmus program

To conclude the questionnaire, respondents were asked to give their overview about the Erasmus program in terms of their perception about the benefits for academic and personal improvement, better career prospects, opportunities in accessing better jobs, access to higher salaries and lastly in acquiring international competences.

Graph 12 - Respondents overview about the Erasmus program, by group

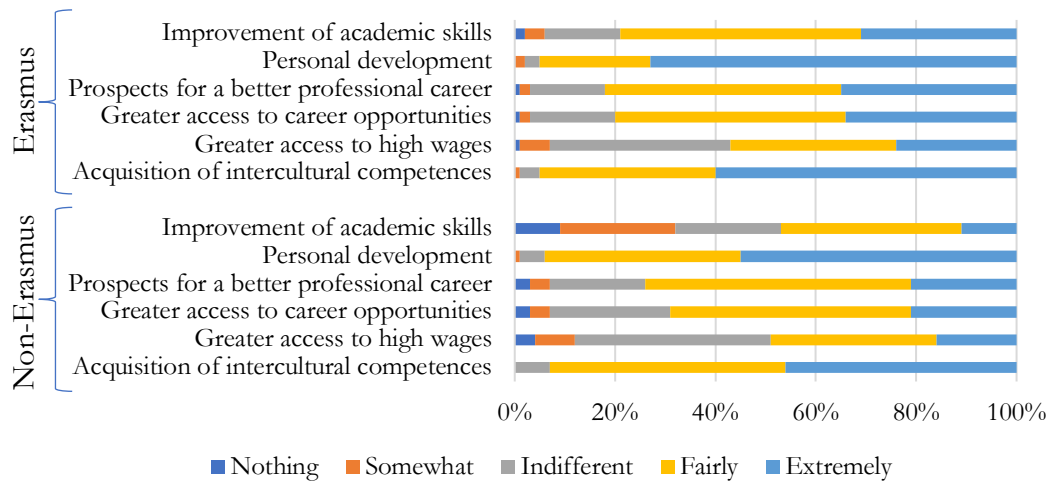


Table 8 - Results obtained from the Man-Whitney test for the respondents overview about the Erasmus program, by group

Erasmus programme possible gains	Erasmus			Non-Erasmus			P-value		
	M	Percentiles			M	Percentiles			
		25	50	75		25	50	75	
Improvement of academic knowledge	4.03	4	4	5	3.17	2	3	4	0.000***
Personal development	4.67	4	5	5	4.47	4	5	5	0.005***
Better professional career prospects	4.14	4	4	5	3.86	3	4	4	0.014***
Better access to job opportunities	4.1	4	4	5	3.81	3	4	4	0.013***
Better access to higher salaries	3.73	3	4	4	3.49	3	3	4	0.088*
Acquisition of intercultural competences	4.53	4	5	5	4.4	4	4	5	0.050**

Note: ***significant at 1%; **significant at 5%; *significant at 10%

Regarding Erasmus participants, more than 50% of respondents consider the Erasmus programme is fairly or extremely beneficial to all the situations. However, results show that non-Erasmus participants' group is more sceptic about the benefits the Erasmus programme might have on the improvement of academic knowledge, with 53% of non-Erasmus considering between nothing to indifferent, whereas only 21% of Erasmus participants considered it academic improvements. In terms of statistical significance, at 1% level for all cases except better access to higher salaries, which is at 5% of significance level, results support the evidences that, on average, students who participate in the Erasmus programme consider more beneficial the participation in such a programme for all cases, than non-Erasmus participants, which would be already expected that students who have experienced the programme have better impressions about it, as well as its benefits for their future careers. However, the conclusions we can take from this analysis is that the Erasmus programme, in fact, improves the expectations of better futures on those who took part in it.

Chapter V – Conclusions

Main conclusions

European mobility has become a priority for European policies, and the most recent evidence is the proposal by the European Commission to double the Erasmus programme budget from €14.7 billion to €30 billion, in order to broaden its scope of 4 to 12 million people. This dissertation addresses some important socioeconomic topics regarding the current Erasmus programme – the so-called Erasmus+ programme. The results were obtained through the dissemination of a questionnaire among the current students and alumni of U.Porto, as a particular case study. For this purpose, both Erasmus and non-Erasmus were approached for comparison reasons and, therefore, draw conclusions on the socioeconomic benefits from the participation in the Erasmus programme. In total, 237 valid answers were obtained to develop this analysis.

First, this analysis aimed to identify how some sociodemographic backgrounds from the respondents may influence their participation in the Erasmus programme. We conclude that students who have dual nationality are more likely to participate in the Erasmus programme. Additionally, students, who have at least one of the parents with higher education or who participated in an international mobility program, are more likely to participate in a mobility program such as the Erasmus programme.

Second, we analysed the obstacles and reasons that lead students to participate in the Erasmus programme. From the point of view of Erasmus participants, the development of soft-skills, intercultural gains and the possibility to boost and increase their future careers were the main reasons why they took a step forward and participated in the Erasmus programme. Individual and social concerns such as the involvement in a personal relationship, fear of travel or special education needs were significant obstacles considered relevant by non-Erasmus participants when compared with those who participated in the programme. Personal financial restrictions is a relevant barrier for students not to get involved in this European exchange programme. In addition, non-Erasmus students highly mention the insufficient institutional financial support and the uncertainty about the benefits of a study period abroad as other important obstacles for not participating in the Erasmus programme.

Throughout this study, we developed an analysis to find the benefits of the Erasmus experience in four distinct dimensions: academic, personal, professional and intercultural

developments. Academically, in general, students are very satisfied with their learning agreement during their period abroad and more than 50% consider the quality of the host institution better than their home higher education institution. Analysing personal developments through the memo© factors approach - a psychometrical methodology considered by 92% of European recruiters as important -, we concluded that Erasmus participants considered a greater development in their personality traits after the Erasmus period, particularly curiosity, tolerance and confidence, more than non-Erasmus participants, compared with their entire period of higher education. In regards to the development of soft skills, a significant comparison can be observed between Erasmus and non-Erasmus participants. Erasmus students considered their period abroad as a reinforcement of their communication and team working skills, as well as their capacity to adapt to and act in new situations greater than students who remained in their home institution. Professionally, these skills were not considered statistically significant comparing the two groups in terms of relevance in achieving the success in the professional experience of the respondents. However, the findings of this study suggest the Erasmus participants are more likely to classify their current employment as having autonomy in decision-making and the opportunity to take leadership positions compared to non-Erasmus participants. In addition, the length of time to find employment shows that 84% of Erasmus participants found employment within 3 months, compared to 77% of non-Erasmus participants on the same period. Although not statistically significant, we observed in our sample that 30% of Erasmus participants assess their salary above average, against 22% of non-participants.

Finally, with regard to the intercultural developments, the possibility of working abroad or in an international environment are significantly different factors for Erasmus participants, when choosing their career paths. In terms of European identity, overall, there is no significant difference between the two groups. Both groups are highly aware of the importance of the European Union and displayed sharing common values with other European citizens.

To conclude this study, the Erasmus programme generally better provides to its participants an opportunity to develop several competencies which allow them to become more capable and enhance their future perspective about their professional career and become citizens better prepared to face the new challenges of globalization. Although there has been a huge effort to increase the number of Portuguese students participating in the Erasmus programme, this number remains far from the European target, which is to achieve a 20% share of participation.

This study shows that students still face many obstacles to participate in this program. Firstly, and foremost are the financial constraints, but the lack of information and awareness about the benefits of this programme in the future professional careers of its participants is also relevant. Further efforts should, therefore, be made to strengthen the Erasmus participation, namely by enabling students from different backgrounds to have the same opportunity to participate in this European mobility programme. The new phase of the Erasmus program, scheduled for 2021-2027, should be seen by Portuguese institutions as a turning point to explore new promotion practices and, essentially, to make it accessible to all students regardless of their economic status.

Limitations of the study and further recommendations

For this type of research, empirical studies, the collection of a representative sample of the population is extremely relevant for a good interpretation of results. In order to obtain the largest number of possible answers, covering all faculties, an e-mail was sent to the Rectorate of University of Porto, the International Office and the Department of Communication, Image and Public Relations requesting the disclosure of the questionnaire. However, due to the entry into force of the General Data Protection Regulation (GDPR) applicable from May 25 of 2018, barriers were imposed in terms of data collection. Thus, the data of this study could be stronger with more respondents from all faculties.

Contrary to what was initially intended, there is an imbalance between the number of current students and alumni with 60% of respondents studying at the time they filled in the questionnaire and 40% who had already finished their studies. Surprisingly, although the majority of the respondents were still studying, the share of respondents who were employed or who already had work experience was approximately 82%. Although not so significant, there is also an imbalance between the Erasmus and non-Erasmus participants, with 46% of respondents who said not having participated in the Erasmus programme, whereas 54% did so.

The results of this study can be used for a broader analysis of the benefits of the Erasmus programme applicable to other higher education institutions or even at the national level. In addition, the same analysis can be done for students who choose Portugal as a destination country, existing a lack of information on how these students might influence the Portuguese economy.

References

- Altbach, P., Knight, J. (2007). The Internationalization of Higher Education: Motivations and Realities. *Journal of Studies in International Education*.
- Altbach, P. G., Kelly, D. H. and Lulat, Y. G.-M. (1985). Research on foreign students and international study. *New York, NY: Praeger Publishers*.
- Behrnd, V., & Porzelt, S. (2012). Intercultural competence and training outcomes of students with experiences abroad. *International Journal of Intercultural Relations*, 36(2), 213-223.
- Bracht, O., Engel, C., Janson, K., Over, A., Schomburg, H., & Teichler, U. (2006). The professional value of ERASMUS mobility. *International Centre for Higher Education Research, University of Kassel*.
- Bridger, K. (2015). Academic perspectives on the outcomes of outward student mobility. *BSV Associates Ltd*
- Cairns, D. (2017). The Erasmus undergraduate exchange programme: a highly qualified success story? *Children's Geographies*, (pp 728-740)
- Cairns, D. (2018). Researching social inclusion in student mobility: methodological strategies in studying the Erasmus programme. *International Journal of Research & Method in Education*
- Calvo, D (2017). Understanding international students beyond studentification: A new class of transnational urban consumers. The example of Erasmus students in Lisbon (Portugal). *Urban Studies Journal*.
- Doğan, D. (2015). The Erasmus Programme in the Internationalization of Turkish Higher Education. *Bowling Green State University*.
- Düll, Nicola. (2013). Geographical labour mobility in the context of the crisis: Germany. *European Employment Observatory*.
- European Commission (2009). Lifelong Learning Programme: Erasmus Statistics for the Academic Year 2007-08. Brussels: *European Commission Director General for Education and Culture*.
- European Commission (2014). The Erasmus Impact Study. Luxembourg: *Publications Office of the European Union*.
- European Commission (2015). Erasmus – Facts, Figures and Trends. The European Support for Student and Staff Exchanges and University Cooperation in 2013-14. Luxembourg: *Publications Office of the European Union*.
- European Commission (2016). The Erasmus Impact Study: Regional Analysis. Luxembourg: *Publications Office of the European Union*.
- European Commission (2017). Erasmus+ Programme Annual Report 2015. Luxembourg: *Publications Office of the European Union*.

European Commission (2018). Proposal for A Regulation of The European Parliament and of The Council on The European Social Fund Plus (Esf+). Brussels: *Council of the European Union Brussels*

Findlay, A. M., King, R., Stam, A., & Ruiz-Gelices, E. (2006). Ever Reluctant Europeans: The Changing Geographies of UK Students Studying and Working Abroad. *European Urban and Regional Studies*, 13(4), 291-318.

Giousmpasoglou, C. and Koniordos, S.K., (2017). Brain drain in higher education in Europe: current trends and future perspectives. New York: *Nova Science Publishers*, (pp. 229-262).

González, C. R., R. B. Mesanza, and P. Mariel. (2011). The Determinants of International Student Mobility Flows: An Empirical Study on the Erasmus Programme. *Higher Education* 62: 413–430.

Halangescu, C. (2015). Internationalization of Higher Education in Emerging Europe. A Diachronic Perspective. CES Working Papers, *Centre for European Studies, Alexandru Ioan Cuza University*, 7(1), 80-97

Harman, G. (2005). Internationalization of Australian Higher Education: A Critical Review of Literature and Research. In P. Ninnes & M. Hellsten (Eds.), *Internationalizing Higher Education: Critical Explorations of Pedagogy and Policy* (pp. 119-140). Hong Kong: *Comparative Education Research Centre*.

Institute of International Education (2011). Open doors 2011: Report on international educational exchange. New York, NY: *Author*.

Jacobone, V. and Moro, G. (2015). Evaluating the impact of the Erasmus programme: skills and European identity. *Assessment and Evaluation in Higher Education*, 40(2), 309-328

Kelo, M., Teichler, U., & Wächter, B. (Eds.) (2006). Eurodata: Student mobility in European higher education. Bonn: *Lemmens Verlags*. (pp. 7-11)

Mangiafico, S.S. (2016). Summary and Analysis of Extension Program Evaluation in R, (version 1.13.5.). *Rutgers Cooperative Extension, New Brunswick, NJ*.

Marginson, S. (2000). Rethinking academic work in the global era. *Journal of higher education policy and management*, 22(1), 18-37.

Matz, C. (1997). Study abroad in higher education today. In L. B. Welch, B. J. Cleckley, & M. McClure (Eds.), *Strategies for promoting pluralism in education and the workplace* (pp. 115-124). Westport, CT: Praeger.

Mažeikiene, N., & Loher, D. (2008). Competence of University Teachers and Graduate Students for International Cooperation. *Social Sciences*, 2 (60), 48-65

Orr, D., C. Gwosć, and N. Netz. (2011). “Social and Economic Conditions of Student Life in Europe (Final Report, Eurostudent IV 2008-2011). Bielefeld: *W. Bertelsmann Verlag*.

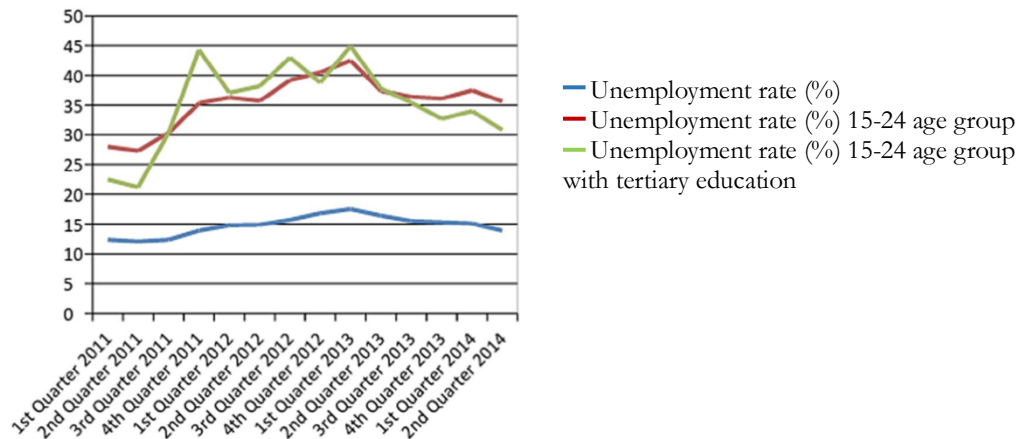
Pepin, L. (2007). The History of EU Cooperation in the Field of Education and Training:

- How lifelong learning became a strategic objective. *European Journal of Education*, 42 (1): 121-132
- Petit, I. (2007). Mimicking history: The European Commission and its education policy. *World Political Science Review* 3(1), 1–24.
- Prazeres, L. (2013). International and Intra-national Student Mobility: Trends, Motivations and Identity. *Geography Compass* 7 (11), 804–820.
- Salisbury, M. H., Umbach, P. D., Paulsen, M. B., & Pascarella, E. T. (2009). Going global: Understanding the choice process of the intent to study abroad. *Research in Higher Education*, 50, 119-143.
- Sigalas, E. (2010). Cross-border Mobility and European Identity: The Effectiveness of Intergroup Contact During the ERASMUS Year Abroad. *European Union Politics* 11 (2): 241–265.
- Sin, C., O. Tavares, and G. Neave. (2016). Student Mobility in Portugal: Grappling with Adversity. *Journal of Studies in International Education*.
- Souto-Otero, M., J. Huisman, D. de Beerrens, H. deWit, and S. Vujic. (2013). Barriers to International Student Mobility: Evidence from the Erasmus Program. *Educational Researcher*, Vol. 42 No. 2, (pp. 70–77)
- Stec, M., & Grzebyk, M. (2018). The implementation of the Strategy Europe 2020 objectives in European Union countries: the concept analysis and statistical evaluation. *Quality & quantity*.
- Stroud, A. H. (2010). Who plans (not) to study abroad? An examination of U.S. student intent. *Journal of Studies in International Education*, 20(10): 1–18.
- Sweeney, S (2012). Going Mobile: Internationalisation, mobility and the EHEA. *British Council Higher Education Academy*
- Teichler, U. (2009). Internationalization of higher education: European experiences. *Asia Pacific Education Review*, 10(1), 93-106.
- Teichler, U., I. Ferencz, and B. Wächter (2011). Mapping Mobility in European Higher Education. *Directorate General for Education and Culture (DG EAC), of the European Commission*
- Van Mol, C. (2013). Intra-European Student Mobility and European Identity: A Successful Marriage? *Population, Space and Place* 19(2), 209–222
- Vena, N. (2014). Brain Drain in the European Union: Facts and Figures. *Rethink Education Working Paper*, No. 4.
- Verbeek, M. (2004). A Guide to Modern Econometrics. (2nd Ed.). *West Sussex, John Wiley & Sons Ltd.*
- Wächter, B. (2014). Recent trends in student mobility in Europe. In Streitwieser, B. (Ed.) *Internationalisation of higher education and global mobility* (pp. 87-98). *Oxford: Symposium books*.

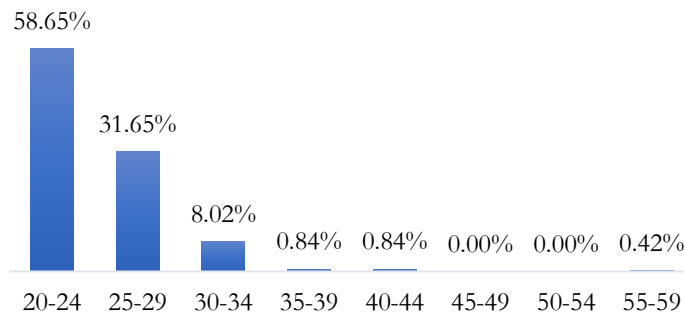
Appendix

Appendix 1 – General: figures, tables and graphs

Figure 1 - Unemployment in Portugal (%) - 1st quarter 2011 -2nd quarter 2014. Source: Instituto Nacional de Estatística (INE 2014). Reprinted from Exploring student mobility and graduate migration: undergraduate mobility propensities in two economic crisis contexts, by Cairns, D. (2017). Social & Cultural Geography



Graph 13 - Ages distribution of respondents



Source: Own elaboration

Table 9 - Gender distribution of respondents

Gender	Erasmus		Non-Erasmus		N	
	%	(n)	%	(n)	%	(n)
Male	50	(65)	41	(44)	46	(109)
Female	50	(64)	59	(64)	54	(128)
Total	100	(129)	100	(108)	100	(237)

Source: Own elaboration

Table 10 - Nationality distribution of respondents

Nationality	Erasmus		Non-Erasmus		N	
	%	(n)	%	(n)	%	(n)
Portuguese	98	(127)	0	(108)	99	(235)
Brazilian	2	(2)	0	(0)	1	(2)
Total	100	(129)	100	(108)	100	(237)

Source: Own elaboratio

Table 11 - Faculties of the U.Porto where respondents finished their last higher education degree (alumni) or where they (current students) were enrolled when answered the questionnaire

Degrees	Erasmus		Non-Erasmus		N		
	%	(n)	%	(n)	%	(n)	
Alumni	Architecture	2	(1)	4	(2)	3	(3)
	Sciences	7	(3)	9	(4)	7	(7)
	Sports	2	(1)	-	-	1	(1)
	Law	2	(1)	4	(2)	3	(3)
	Economics	35	(16)	54	(26)	45	(42)
	Engineering	28	(13)	2	(1)	15	(14)
	Pharmacy	-	-	6	(3)	3	(3)
	Arts and Humanities	13	(6)	9	(4)	11	(10)
	Medicine	2	(1)	-	-	1	(1)
	Dental Medicine	-	-	4	(2)	2	(2)
	Psychology and Education Science	2	(1)	4	(2)	3	(3)
	Porto Business School	7	(3)	4	(2)	6	(5)
Total	100	46	100	48	100	94)	
Current students	Architecture	1	(1)	3	(2)	2	(3)
	Fine arts	2	(2)	2	(1)	2	(3)
	Sciences	1	(1)	5	(3)	3	(4)
	Sports	2	(2)	3	(2)	3	(4)
	Law	2	(2)	7	(4)	4	(6)
	Economics	55	(45)	60	(36)	56	(81)
	Engineering	19	(15)	10	(6)	15	(21)
	Arts and Humanities	6	(5)	3	(2)	5	(7)
	Medicine	5	(4)	2	(1)	3	(5)
	Psychology and Education Science	1	(1)	0	0	1	(1)
	Biomedical Sciences	1	(1)	0	0	1	(1)
	Porto Business School	5	(4)	5	(3)	5	(7)
Total	100	(83)	100	(60)	100	(143)	

Source: Own elaboration

Table 12 - Respondents studying status

Students status	Erasmus		Non-Erasmus		N	
	%	(n)	%	(n)	%	(n)
Alumni	36	(46)	44	(48)	40	(94)
Current students	64	(83)	56	(60)	60	(143)
Total	100	(129)	100	(108)	100	(237)

Source: Own elaboration

Table 13 - Academic year of last graduation finished for Alumni

Academic years	Erasmus		Non-Erasmus		N	
	%	(n)	%	(n)	%	(n)
2007/2008	0	(0)	6	(3)	3	(3)
2008/2009	7	(3)	4	(2)	5	(5)
2010/2011	4	(2)	6	(3)	5	(5)
2012/2013	7	(3)	10	(5)	9	(8)
2013/2014	11	(5)	13	(6)	12	(11)
2014/2015	15	(7)	10	(5)	13	(12)
2015/2016	9	(4)	10	(5)	10	(9)
2016/2017	39	(18)	31	(15)	35	(33)
2017/2018	9	(4)	8	(4)	9	(8)
Total	100	(46)	100	(48)	100	(94)

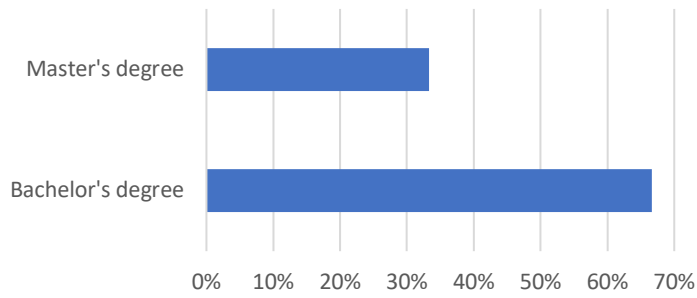
Source: Own elaboration

Table 14 - Degree level distribution of respondents

Degree levels		Erasmus	Non-Erasmus	N
		%	%	
Alumni	Bachelor's degree	50	46	48
	Master's degree	50	54	52
Total		100	100	100
Current students	Bachelor's degree	12	12	12
	Master's degree	83	83	83
	Doctoral degree	5	5	5
Total		100	100	100

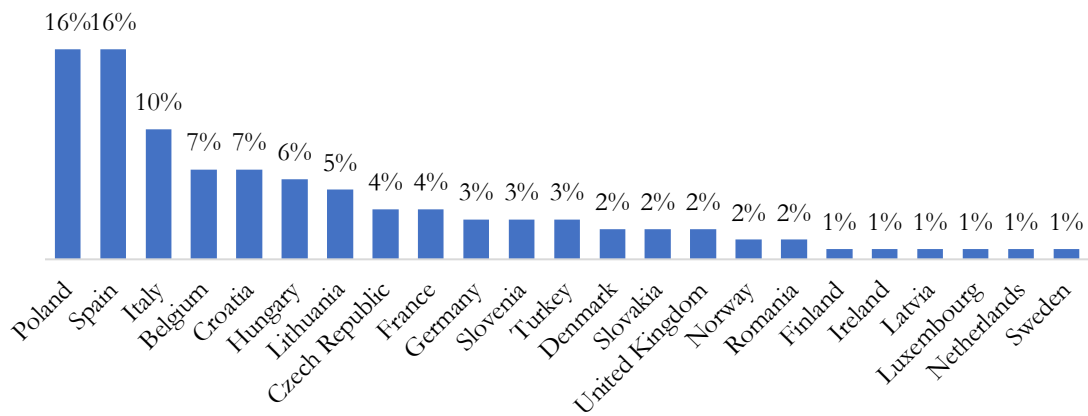
Source: Own elaboration

Graph 14 - Degree level distribution of Erasmus participants while the period abroad



Source: Own elaboration

Graph 15 - Distribution of country destination of Erasmus participants



Source: Own elaboration

Table 15 - Duration of the period abroad for Erasmus participants

Periods	1-3 months		4-6months		7-12 months	
	%	(n)	%	(n)	%	(n)
Total	5	(6)	88	(144)	7	(9)

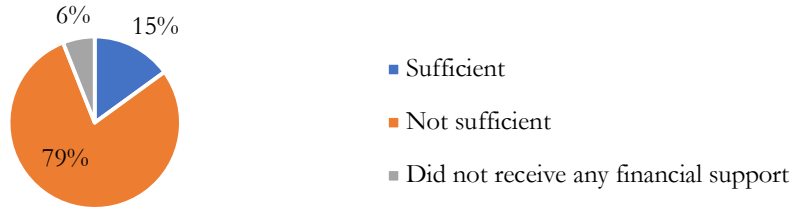
Source: Own elaboration

Graph 16 - Distribution of Erasmus participants by their financial dependence



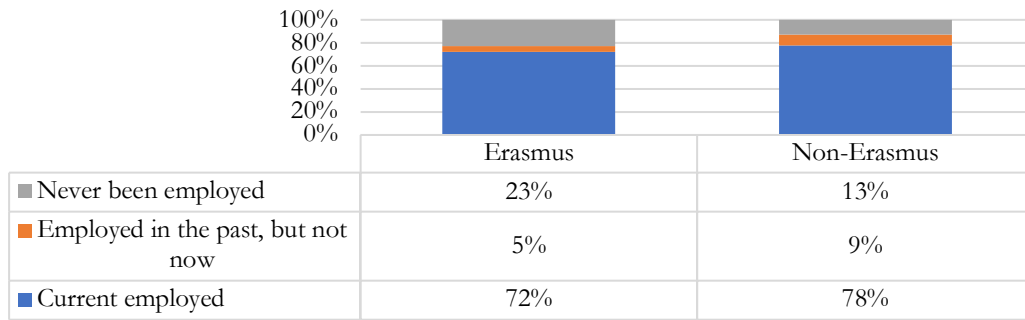
Source: Own elaboration

Graph 17 - Erasmus participants perspective about the sufficiency of the Erasmus grant to cover their additional costs



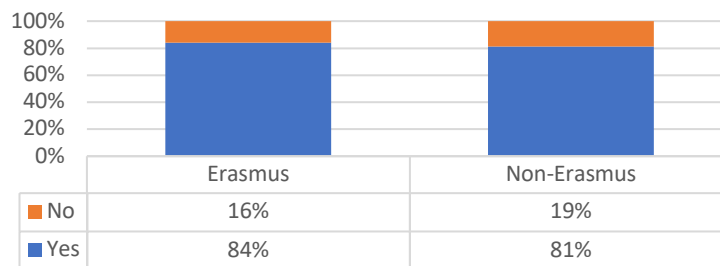
Source: Own elaboration

Graph 18 - Employment status, by group



Source: Own elaboration

Graph 19 - Working field comparing to the study field, respondents with working experience, by group



Source: Own elaboration

Table 16 - Distribution of Erasmus participants by HEI, while enrolled in the Erasmus programme

Higher Education Institutions	Distribution of Erasmus respondents	
	%	(n)
Escola Naval	1	1
Escola Superior de Artes e Design	2	2
Escola Superior de Tecnologias de Fafe	1	1
Instituto Politécnico de Beja - Escola Superior de Tecnologia e de Gestão	1	1
Instituto Politécnico de Bragança - Escola Superior de Educação de Bragança	1	1
Instituto Politécnico de Coimbra	2	2
Instituto Politécnico do Porto - Instituto Superior de Contabilidade e Administração do Porto	1	1
Instituto Politécnico do Porto - Instituto Superior de Engenharia do Porto	1	1
Instituto Universitário da Maia	1	1
Universidade da Beira Interior	1	1
Universidade da Madeira	2	3
Universidade de Aveiro	5	7
Universidade de Coimbra	3	4
Universidade de Lisboa - Instituto Superior de Ciências Sociais e Políticas	1	1
Universidade do Minho	14	18
Universidade do Porto	64	83
Universidade Lusíada - Norte - Porto	1	1
Total	100	129

Source: Own elaboration

Appendix 2 – Questionnaire for Erasmus participants

1. During your graduation (Bachelor, master or doctoral degree), did you participate in any study period abroad under the Erasmus programme?
 Yes
 No
2. Are you currently attending any higher education course?
 Yes
 No (Go to question 5)
3. Higher education institution that you are attending currently?
4. Higher degree you are attending currently?
 Bachelor degree (Go to question 8)
 Master degree (Go to question 8)
 Doctoral degree (Go to question 8)
5. Higher education institution where you finished your last higher education degree:
6. In which academic year did you finish your last academic degree?
7. Last higher education degree obtained:
 Bachelor degree (Go to question 8)
 Master degree (Go to question 8)
 Doctoral degree (Go to question 8)
8. Age
9. Gender
 Male
 Female
10. Nationality
 Portuguese
 Other: _____
11. Do you have dual nationality?
 Yes
 No
12. Any of your parents (mother or father) has a different nationality from you?
 Yes
 No

13. In which high education degree were you when you participated in the Erasmus programme?

- Bachelor degree
- Master degree
- Doctoral degree

14. Higher education institution (home University) were you enrolled when you participated in the Erasmus programme?

15. Country where you did your Erasmus programme:

16. Duration of your Erasmus period?

- 1-3 months
- 4-6 months
- 7-12 months

17. Any of your parents (mother or father) participated in an international exchange programme?

- Yes
- No

18. During your Erasmus period were you financial dependent from your relatives?

- Yes
- No

19. Please indicate the relevance of each of the following factors in your decision to participate in the Erasmus program:

	Not at all relevant	Slightly relevant	Relevant	Very relevant	Extremely relevant
Financial Restrictions					
Academic difficulties					
Fear of cultural differences					
Special educational needs					
Personal relationship					
Afraid of travelling					
Health issues of close relatives					
Self-health issues					
Language restrictions					

20. Please indicate the importance of each of the following factors in your decision to participate in the Erasmus program?

	Not at all	Slightly	Important	Very	Extremely
Experience different learning practices and teaching methods					
Learn/improve a foreign language					
Develop soft skills (e.g. Adaptability, proactivity, autonomy, etc)					
Boost and increase future professional career					
Enhance employability in my own country					
Enhance employability abroad					
Opportunity to live abroad					
Establish friendships with people from other countries					
To get in contact with different realities/cultures					

21. Do you consider the financial support provided (Erasmus grant) by your home institution was sufficient to cover your additional living expenses during your Erasmus period?

- Yes
 No
 Did not receive any financial support (Go to question 24)

22. Indicate how the Erasmus financial support you received conditioned in the following decision-making choices:

	Not at all	Slightly	Moderately	Very	Extremely
Choosing a destination country with lower living costs than Portugal					
Choosing an accommodation with the lowest costs as possible					
Choosing a country closer to Portugal, given the travel costs					
Choosing a higher education institution of destination, considering the available options					

23. How do you assess the satisfaction of your learning agreement in respect to the quality of the destination higher education institution?

Not at all satisfied 1 2 3 4 5 Extremely satisfied

24. How do you assess the quality of the destination higher education institution in relation to your home institution?

Much worse 1 2 3 4 5 Much better

25. Did the reputation of the destination higher education institution influenced your decision in choosing the institution for your period of studies abroad?

Not at all 1 2 3 4 5 Extremely

26. Did the offer of English courses influenced in choosing the destination institution for your period of studies abroad?

Not at all 1 2 3 4 5 Extremely

27. Indicate how do you agree that your Erasmus period has boosted the development of the following personality:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Problem-solving					
Curiosity					
Self-assessment					
Decisiveness					
Tolerance					
Confidence					

28. Indicate the importance of your Erasmus period to improve the following competences of "soft skills"?

	Not at all	Slightly	Moderately	Very	Extremely
Ability to adapt to and act in new situations					
Planning and organization skills					
Analytical and problem-solving					
Communication skills					
Team working skills					

29. Are you currently employed?

- Yes
- No, I have been employed in the past but not now.
- No, I have never been employed (Go to question 36)

NOTE: if you are not currently unemployed, but you had been employed in the past, please answer the following questions considering your last employment.

30. How long did it take you to find your first job (fulltime)?

- Before finishing my studies
- Up to 3 months
- 4 to 6 months
- 7 to 12 months
- Over a year

31. Does your working field correspond to your study field?

- Yes
- No

32. How do you assess your salary compared to other professionals with the degree level and field of studies identical to yours, and working in the same country?

- Above average
- Average
- Below average

33. Assess the importance of the following skills for professional success in the working field of your current employment.

Not at all Slightly Moderately Very Extremely

Ability to adapt to and act
in new situations

Planning and organization
skills

Analytical and problem-
solving

Communication skills

Team working skills

34. Indicate how the following characteristics are associated with your current professional activity:

	Not at all	Slightly	Moderately	Very	Extremely
Opportunity to perform challenging tasks					
Decision-making autonomy					
Vocational training					
Professional recognition					
Opportunity to use acquired academic skills					
Opportunity to take leadership positions					
Professional progress					
Remuneration according to performed tasks					
Continuous acquisition and development of skills					
Decision-making autonomy					

35. Do you rate the importance of the following factors in your decision to choose a professional career?

	Not at all	Slightly	Important	Very	Extremely
Possibility to work abroad					
Higher salary expectations					
Expectation to work only in Portugal					
Career advancement opportunities					
Working in an intercultural environment					

36. What is your agreement with the following statements

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Consider that an EU is needed					
Consider myself to be a citizen of the EU					
I share values with other European citizens					
Feel to be more Portuguese than European					
Feel to be more European than Portuguese					
Feel to more Portuguese as European					

37. How do you assess the benefit your Erasmus experience has had in relation to the following situations?

	Nothing	Somewhat	Indifferent	Fairly	Extremely
Improvement of academic skills					
Personal development					
Prospects for a better professional career					
Greater access to career opportunities					
Greater access to high wages					
Acquisition of intercultural competences					

End of the questionnaire

Thank you for your participation!

Appendix 3 – Questionnaire for non-Erasmus participants

1. During your graduation (Bachelor, master or doctoral degree), did you participate in any study period abroad under the Erasmus programme?
 Yes
 No
2. Are you interested in still participated in the Erasmus programme?
 Yes (End of the questionnaire)
 Maybe (End of the questionnaire)
 No
3. Are you currently attending any higher education course?
 Yes
 No (Go to question 5)
4. Higher education institution that you are attending currently?
5. Higher degree you are attending currently?
 Bachelor degree (Go to question 8)
 Master degree (Go to question 8)
 Doctoral degree (Go to question 8)
6. Higher education institution where you finished your last higher education degree:
7. In which academic year did you finish your last academic degree?
8. Last higher education degree obtained:
 Bachelor degree (Go to question 8)
 Master degree (Go to question 8)
 Doctoral degree (Go to question 8)
9. Age
10. Gender
 Male
 Female
11. Nationality
 Portuguese
 Other: _____

12. Do you have dual nationality?

- Yes
 No

13. Any of your parents (mother or father) has a different nationality from you?

- Yes
 No

14. Any of your parents (mother or father) participated in an international exchange programme?

- Yes
 No

15. Please indicate the relevance of each of the following factors in your decision to do not participate in the Erasmus program:

	Not at all relevant	Slightly relevant	Relevant	Very relevant	Extremely relevant
Financial Restrictions					
Academic difficulties					
Fear of cultural differences					
Special educational needs					
Personal relationship					
Afraid of travelling					
Health issues of close relatives					
Self-health issues					
Language restrictions					
Uncertainty about the benefits of a study period abroad					
Lack of information on mobility programs					
Recognition/compatibility issues					
Lack/insufficient institutional financial support					

16. Indicate how do you agree that your period of studies in the higher education has boosted the development of the following personality:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Problem-solving					
Curiosity					
Self-assessment					
Decisiveness					
Tolerance					
Confidence					

17. Indicate the importance of your period of studies in the higher education to improve the following competences of "soft skills"?

	Not at all	Slightly	Moderately	Very	Extremely
Ability to adapt to and act in new situations					
Planning and organization skills					
Analytical and problem-solving					
Communication skills					
Team working skills					

18. Are you currently employed?

- Yes
 No, I have been employed in the past but not now.
 No, I have never been employed (Go to question 24)

NOTE: if you are not currently unemployed, but you had been employed in the past, please answer the following questions considering your last employment.

19. How long did you take you to find your first job (fulltime)?

- Before finishing my studies
 Up to 3 months
 4 to 6 months
 7 to 12 months
 Over a year

20. Does your working field correspond to your study field?

Yes

No

21. How do you assess your salary compared to other professionals with the degree level and field of studies identical to yours, and working in the same country?

Above average

Average

Below average

22. Assess the importance of the following skills for professional success in the working field of your current employment.

Not at all Slightly Moderately Very Extremely

Ability to adapt to and act
in new situations

Planning and organization
skills

Analytical and problem-
solving

Communication skills

Team working skills

23. Indicate how the following characteristics are associated with your current professional activity:

Not at all Slightly Moderately Very Extremely

Opportunity to perform
challenging tasks

Decision-making autonomy

Vocational training

Professional recognition

Opportunity to use ac-
quired academic skills

Opportunity to take leader-
ship positions

Professional progress

Remuneration according to
performed tasks

Continuous acquisition and
development of skills

Decision-making autonomy

24. Do you rate the importance of the following factors in your decision to choose a professional career?

	Not at all	Slightly	Important	Very	Extremely
Possibility to work abroad					
Higher salary expectations					
Expectation to work only in Portugal					
Career advancement opportunities					
Working in an intercultural environment					

25. What is your agreement with the following statements

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Consider that an EU is needed					
Consider myself to be a citizen of the EU					
I share values with other European citizens					
Feel to be more Portuguese than European					
Feel to be more European than Portuguese					
Feel to more Portuguese as European					

26. How do you assess the benefit that the Erasmus experience might have in relation to the following situations?

	Nothing	Somewhat	Indifferent	Fairly	Extremely
Improvement of academic skills					
Personal development					
Prospects for a better professional career					
Greater access to career opportunities					
Greater access to high wages					
Acquisition of intercultural competences					

End of the questionnaire

Thank you for your participation!