Erasmus Country Ranking: Towards Quality Student Mobility

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Abstract—Erasmus is a European Commission program which has been a huge success: more and more higher education students decide to move to one of the 34 countries that belong to the program. This article begins by analysing the reasons behind why students take a semester at another university in another country, and what the motivations for their choices are. The literature review reveals that there are personal, destination and academic reasons. Students who decide to make Erasmus mobility do not know how to choose the higher education institution where they will do said mobility. This article aims to help these students by ranking Erasmus mobility countries following the reasons that are identified in the literature as the most important. To rank Erasmus mobility countries, we use two criteria: destination and academic. The destination was subdivided into 7 items: Adventure, Cultural and Heritage, Safe and Secure, Cost of Living, Geographic Localization, Weather, Language and Sustainable. The academic part was divided into 3 items: research, university quality and sustainable. For each of the items we use the strongest and most reliable indicators. We also compare our ranking with the real number of student mobility for each of the 34 countries.

Index Terms—Erasmus, rankings, academic quality

I. INTRODUCTION

Erasmus is a European Commission program which has been a huge success: more and more higher education students decide to move during one semester to one of the 34 countries that belong to the program. This article begins by analysing the reasons behind why students take a semester at another university in another country, and what the motivations for their choices are. The literature review reveals that there are personal, destination and academic reasons.

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Students who decide to make Erasmus mobility feel lost and do not know how to choose the higher education institution where they will do said mobility. This article aims to help these students by ranking Erasmus mobility countries following the reasons that are identified in the literature as the most important.

To rank Erasmus mobility countries, we use two criteria: destination and academic. The destination was subdivided into 7 items: Adventure, Cultural and Heritage, Safe and Secure, Cost of Living, Geographic Localization, Weather, Language and Sustainable. The academic part was divided into 3 items: research, university quality and sustainable. For each of the items we use the strongest and most reliable indicators. In the end we find the ranking of the 34 Erasmus countries. Just out of curiosity we also compare and analyze our ranking with the number of student mobility for each of the 34 countries.

This article aims to help students in their choice of destination country for their mobility. It is important for students to make a good choice of their Erasmus mobility otherwise they feel their expectations have been defrauded. It is also important that the European money is well spent, and that Erasmus is not seen as a paid holiday in another country.

II. ERASMUS PROGRAM

Erasmus+ is the EU's programme to support education, training, youth and sport in Europe [1]. Its budget of \notin 14.7 billion will provide opportunities for over 4 million Europeans to study, train, and gain experience abroad. Erasmus+ helps organize student and doctoral candidate exchanges within Erasmus+ Programme countries to and from Partner countries (EU28, North Macedonia, Iceland, Liechtenstein, Norway, Serbia and Turkey).

The original objectives of the ERASMUS programme [2] were:

- To achieve a significant increase in the number of students from universities spending an integrated period of study in another Member State;
- To promote broad and intensive cooperation between universities in all Member States;
- To harness the full intellectual potential of the universities in the Community by means of increased mobility of teaching staff, thereby improving the quality of the education and training provided by the universities with a view to securing the competitiveness of the Community in the world market;
- To strengthen the interaction between citizens in different Member States with a view to consolidating the concept of a People's Europe;
- To ensure the development of a pool of graduates with direct experience of intra-Community cooperation.

The European Commission has proposed to increase the European Commission has proposed to increase the

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Erasmus budget to \notin 30 billion for the EU's next long-term budget 2021-2027, allowing up to 12 million people to have a learning experience abroad [3]. The last numbers show that 223484 students participated in Erasmus mobility in the year 2016-2017 [4].

Spain is the country that received the most students in mobility Erasmus (14.8%), followed by Germany (9.9%) and France (9.5%). Germany is the country that "exports" the largest number of students of this program (14.4%) followed by Spain (13.9%) and France (13.4%). Turkey sends far more students than receives, while in the United Kingdom it is exactly the opposite. Serbia had not yet sent or received any students. Liechtenstein only sent 28 students and received 29 in the 2016-2017 school year.

III. LITERATURE REVIEW: ERASMUS MOBILITY WHY AND WHERE

In literature there are some studies that try to understand the reasons that lead students to make ERASMUS mobility and others that try to understand the motivation for choosing the destination of said mobility. The following ten studies reveal this concern:

[5] 377 ERASMUS students from the University of Oviedo during the academic year 2009/2010 revelled as motivational factors: mastering a new language (56%), European experience (53.8%), Academic (51.7%), Cultural (50.4%), A new foreign environment (44.3%), Career planning (27.1%), new educational methodology (14.9%), achieving an independent life (10.2%), Friendships (10.1%), personal development (6.8%), increased job options (4%).

[6] 360 ERASMUS students from 26 European countries identifies their mobility choice motives (decreasing by importance): Experience something new, Grow personally, To learn about different culture, Meet new people, To have a semester away from home, Improve foreign language, Experience European identity, Experience different educational system, To improve my academic knowledge, Enhance employment opportunities, New contacts in field of studies, Academic support for my thesis, Take advantage of ERASMUS grant and It was compulsory. They also identified the destination choice motives (decreasing by importance): Rich natural attractions and sights, Safe and secure, Yet to be discovered by tourists, Rich in culture, arts, history, Offers a lot of events, High living standard, Interesting night life, Easy accessible, Not very expensive to live in, Is sustainable and ecological, Very popular and Familiar language and lifestyle.

[7] quantified Erasmus students' motivations for studying abroad based on the answers of 120 Erasmus students during the 2014-2015 academic year identifying four factors: Factor 1: individual development (Improve CV, Improve my professional future and facilitate my professional development), Factor 2: destination choice facilitators City's tourism attractiveness, Geographical proximity to home university, Ease of admission process, Recommendations and good feedback and Leisure), Factor 3: academic aspects and High quality of studies) and Factor 4: the destination's strong points (Learning Spanish, Good weather and Low cost of living). This paper also has a literature review of the main motives of Erasmus students, and makes a list of articles subdivided into Learning a language, Seeking new experiences/personal development, Professional development, Cultural attractiveness of the destination, Leisure, Personal recommendations (family, level friends. etc.). Economic of the host proximity. country/affordable price, Geographical Experiencing a new education system, Improving academic record, Prestige/academic quality of the host institution, Range of subjects for study, Admission/access requirements and Improving CV.

[8] defined as factors that influence mobility: Professional academic reasons (Learning a language, Improving the curriculum, Improving the academic record, Interest in a specific program), Personal reasons (Search for new experience, Break with the routine, Search for autonomy, Meet people, Know another culture), Influences (Attitude of the family, Socio-economic level, Influence of friends) and Other reasons (Have positive references, Desire to travel, Financial aid, Participation in other programs). With 226 students of different nationalities, the means obtained for the variables of personal motives (in descending order) were: New experiences, Fun and cultural attraction of the destination, Search for autonomy, Break with the routine, meet people, Search for own security, contacts abroad, My friends they also left and family pressure. From the answers obtained it was defined for other reasons for mobility (in descending order): Desire to travel, to have positive references, Geographic localization, possibility of permanence, planned economic aid and Geographic proximity.

[9] from June 2007 to September 2007, 8500 mobile students from all over Europe replied to an online questionnaire with two dimensions: Career - oriented (To improve academic knowledge, To enhance future employment prospects, To practice foreign language) and Experience – oriented (To have new experiences, To learn about different cultures, To have fun, To meet new people, To be independent and To live in a foreign country). The students were asked an open question: What is the most important thing you learned as an exchange student? Their answers were classified into 5 categories: acquiring cultural skills and knowledge (communication and work in international environment knowledge about host country how to survive in the foreign country open-mindedness, tolerance language), maturity and self-development (being independent, determination in solving problems, self-confidence, flexibility and personal growth), social networks (creation of friendships and communication skills), academic enrichment (adaptation to different academic system, planning career path due to exchange) and value of discovery and exploring new possibilities (openness to new grabbing opportunities).

[10] based on the experience of 20 Erasmus students, during the 2007-2008 academic year, gives high importance to factors associated with foreign language learning: "In the open questions, some stated: 'My Spanish, in general, has been much better during my Erasmus stay in Spain. Before, I could only speak, understand the Spanish scribed". [11] 88 students responded to a questionnaire. They said they participated mainly for academic reasons and then for multicultural reasons and in order to gain new experiences. Students aged 18-22 revealed as most important aspects of the Erasmus program their personal independence, training in a foreign language, academic attitude and making friends. The students of the next age group (more than 22 years old) highlighted the academic attitude, personal autonomy / independence and finally stay in a foreign country and the experience gained.

[12] 30 students from 8 countries in 2014/2015 and 2015/2016 concluded that "One of the greatest benefits of studying abroad is a greater understanding of other cultures. "Discovery", "change" and "curiosity" are not cultural concepts per se, but are involved in the cultural dimension of Erasmus experience".

[13] Defines an equation to study the motives of Erasmus student mobility with variables like Erasmus student bilateral flows, Distance between capitals, Comparative price level of final consumption by private households including indirect taxes, host country, Population with tertiary studies of home country: number of graduates, Population of home country, Population of host country, Mediterranean climate of host country (Portugal, Spain, France, Italy, Greece, Malta, Cyprus and Turkey), Major spoken official Language of host country (English, Spanish, Italian, French, German) and Number of universities in the host country included in Shanghai's Top 200 World Ranking. They say that Country size, cost of living, distance, educational background, university quality, host country language and climate are all found to be significant determinants. Results also reveal that there are other determinants, like a country's characteristics and time effects, which can affect mobility flows.

[14] Learning or improving languages is indicated as the most important reason to move to another country by 85% of Hungarian respondents, 70% of Germans and Spanish respondents, 62% of Norwegians, 45% of Romanians and 32% of Luxembourgish respondents of based on the answers of 1,504 individuals aged 18-29 that have used Erasmus+ mobility programme.

IV. METHODOLOGY

After an extensive and careful analysis of the various factors found in the literature, we built our (re) formulation of the problem:

- Personal: Experience, Self-development, Social-networks, Outside pressure, and Grant opportunity
- Destination: Adventure, Cultural and Heritage, Safe and secure, Cost of living, Geographic Localization, Weather, Language and Sustainable
- Academic: University Quality, Research and Sustainable.

The personal factor is what drives students to decide to make mobility. Experience (New experiences, live in a foreign country, experience European identity, break with the routine, have a semester away from home, desire to travel, stay in a foreign country and learn about different culture), Self-development (Grow personally, personal development, autonomy and independence, how to survive in the foreign country, open-mindedness and maturity), Social-networks (Meet new people, making friends, contacts abroad, Friendships), Outside pressure (Attitude of the family, family pressure, it was compulsory, "my friends they also left") and Grant opportunity (Take advantage of ERASMUS grant, planned economic aid).

The destination and academic factors are those that the student will have to decide when to choose the university where mobility will begin. These are the two we will use to rank Erasmus countries.

For each Destination items we used:

- Adventure, Cultural and Heritage: three of the nine sub rankings of USNews Best Countries Overall Rankings 2019 [15].
- Safe and secure: Global Peace Index (GPI) ranking [16].
- Cost of living: Cost of Living Index for Country 2019 Mid-Year by Numbeo [17].
- Geographic localization: We made a table with the distance between each of the capitals with the google maps tool [18].
- Weather: Classification Koppen-Geiger and Peel1, Finlayson and McMahon [19].
- Language: Ethnologue's top 200 [20] for most spoken languages.
- Sustainable: 2018 Environmental Performance Index [21].

For each Academic item we used:

- University quality: World University Rankings 2020 [22]
- Research: Web of Science [23], Scopus [24] [25] and Google Scholar [26].
- Sustainability: Times Higher Education University Impact Rankings [27].

The final ranking is made by joining the two sub-rankings.

V. DESTINATION

A. Adventure, Cultural and Heritage

To orderly list countries that belong to the Erasmus program for adventure, culture, and heritage, we used three of the nine sub rankings of USNews Best Countries Overall Rankings 2019 [15]. These three items are defined as: Adventure: Friendly, fun, pleasant climate, scenic, sexy; Cultural Influence: Culturally significant in terms of entertainment, fashionable, happy, has an influential culture, modern, prestigious, trendy; Heritage: Culturally accessible, has a rich history, has great food, many cultural attractions.

These items had a weight of 2%, 12.96% and 1.13% in USNews Best Countries Overall Rankings. We kept the proportion: 12.43%, 80.55% and 7.02% respectively. Thus our list is headed by Italy (second in World Adventure ranking and first in World Cultural Influence and World Heritage rankings). Italy is followed by Spain, Greece, Portugal and France.

B. Safe and Secure

To rank the 34 Erasmus mobility countries as safe and secure, we used the Global Peace Index (GPI) ranking [16]

which ranks 163 independent states and territories according to their level of peacefulness. Iceland is the best ranked country in the world. Iceland is followed by Portugal, Austria, Denmark and Slovenia, respectively the 3rd, 4th, 5th and 8th GPI. Malta, Liechtenstein and Luxembourg do not appear in this ranking because they have neither the territory dimension nor the minimum population size defined to be included in this ranking. Greece and Macedonia are the worst ranked Erasmus countries by the GPI.

C. Cost of Living

To rank the cost of living for each of the 34 countries we used the Cost of Living Index for Country 2019 Mid-Year by Numbeo [17]: These indices are relative to New York City (NYC). Cost of Living Index is a relative indicator of consumer goods prices, including groceries, restaurants, transportation, and utilities. Cost of Living Index does not include accommodation expenses. If a city has a Cost of Living Index of 120, it means Numbeo estimates it is 20% more expensive than NYC. Rent Index is an estimation of prices of renting apartments in the city compared to NYC. If Rent index is 80, Numbeo estimates that price of rents in that city is on an average 20% less than the price in NYC. Groceries Index is an estimation of grocery prices in the city compared to NYC. To calculate this section, Numbeo uses weights of items in the "Markets" section for each city. Restaurants Index is a comparison of prices of meals and drinks in restaurants and bars compared to NYC. Cost of Living plus Rent Index is an estimation of consumer goods prices including rent compared to NYC. Local Purchasing Power shows relative purchasing power in buying goods and services in each city with the average wage in that city.

Liechtenstein does not have a Cost of Living Index. In this case, we use the cost of living comparator between Vaduz and other cities to verify that Liechtenstein cost of living is higher than the other 33 countries. Macedonia, Turkey, Romania, Serbia and Bulgaria are in the first five places of the ranking, while Ireland, Denmark, Luxembourg, Iceland and Norway are in the worst places of the Cost of living ranking.

D. Geographic Localization

Erasmus students create the expectation of visiting capitals of countries other than their mobility destination. The distance between capitals is an important factor for them. We made a table with the distance between each of the capitals with the google maps tool [18]. To rank this item, as can be seen in the following table, we count the number of capitals less than 500km, the number of capitals less than 1000km and the number of kilometers that must be taken to reach the other 33 capitals. Our list is headed by Budapest in Hungary: it has 5 capitals less than 500km and 7 with distances between 500 and 1000km. lastly is

Reykjavik (Iceland) which has no Erasmus capital within 2500km.

E. Weather

The European continent has a variety of climate types. To distinguish between countries, we use the classification Koppen-Geiger and Peel1, Finlayson and McMahon [19]. Within the same country there may be different types of weather, so we use as reference the capital of each country. For example, in Spain there are cities with Cfb classification, Csa, Csb, BSk and Cfa, respectively Oceanic climate (Oviedo), Hot-summer Mediterranean climate (Madrid), Warm-summer Mediterranean climate (Vigo), Cold semi-arid climates (Valencia) and Humid subtropical climate (Sabadell). In our classification we chose the city of Madrid, the capital of Spain. Greece, Italy, Malta, Portugal, Spain and Turkey with Csa, Temperate, Dry and hot summer are the countries with the best climate. Icelandwith Dfc, Cold, without dry season and Cold Summer is in the 34th position.

F. Language

The EU has 24 official languages [28]. Non EU countries which are part of the Erasmus program bring five new languages for mobility. The countries that belong to the Erasmus program are listed as follows (see table below), in terms of number of most spoken languages. The most widely spoken language in the world today is English. There are some languages that don't appear in Ethnologue's top 200 [20]. United Kingdom is in first place: English is the most spoken language in the world, while Spain is in the second place: Spanish is the 4st most spoken language in the world. Macedonia (Macedonian), Malta (Maltese) and Slovenia (Slovenian) stayed in the last three positions.

G. Sustainable

The 2018 Environmental Performance Index (EPI) ranks 180 countries based on 24 performance indicators across ten issue categories covering environmental health and ecosystem vitality [21]. These metrics provide a gauge on a national scale of how close countries are to meeting established environmental policy goals. The EPI thus offers a scorecard that highlights leaders and laggards in environmental performance, gives insight on best practices, and provides guidance for countries that aspire to be leaders in sustainability. The countries that belong to the Erasmus program are listed as follows. The list is headed by France and ends with Turkey. Liechtenstein does not appear on any EPI list.

H. Rankings Summary Dimension Country Destination

The next Table I shows the ordering of Erasmus countries using equal weight for each of the items set for destination:

TABLE I. ERASMUS DESTINATION RANKING

Destination Rank	Country	Erasmus EPI Rank	Erasmus Language Rank	Erasmus Climate Rank	Erasmus Km Rank	Erasmus Cost of living Rank	Erasmus GPI Rank	Erasmus ACH Rank	Score
1	Portugal	19	6	1	30	13	2	4	10,71
2	Spain	11	2	1	30	16	18	2	11,43

3	France	1	3	9	13	27	29	5	12,43
4	United	5	1	9	19	19	23	15	13,00
	Kingdom								
5	Austria	7	7	18	4	24	3	29	13,14
6	Czech	23	16	18	8	10	6	16	13,86
	Republic								
7	Belgium	14	3	9	6	26	26	14	14,00
7	Italy	15	12	1	26	22	21	1	14,00
9	Hungary	27	19	18	1	7	11	17	14,29
10	Netherlands	16	15	9	17	28	9	7	14,43
11	Croatia	26	23	18	2	12	16	8	15,00
11	Denmark	2	25	9	22	30	4	13	15,00
11	Slovakia	20	22	18	2	8	13	22	15,00
14	Finland	9	24	18	13	25	8	10	15,29
15	Germany	12	7	18	15	21	12	23	15,43
15	Luxembourg	6	3	9	9	31	32	18	15,43
17	Turkey	33	10	1	27	2	25	12	15,71
18	Greece	17	17	1	27	17	30	3	16,00
19	Bulgaria	22	21	18	10	5	15	24	16,43
19	Ireland	8	29	9	27	29	7	6	16,43
21	Sweden	4	18	18	18	23	26	9	16,57
22	Romania	28	14	17	23	3	14	19	16,86
23	Serbia	32	20	7	7	4	24	27	17,29
24	Slovenia	24	34	18	5	15	5	21	17,43
25	Poland	30	13	18	21	6	17	20	17,86
26	Norway	13	26	18	25	33	10	11	19,43
27	Latvia	25	30	18	11	11	19	25	19,86
28	Estonia	29	27	18	11	14	20	26	20,71
29	Macedonia	31	32	7	16	1	31	29	21,00
30	Lithuania	21	31	18	19	9	22	28	21,14
31	Cyprus	18	10	16	30	18	28	29	21,29
32	Malta	3	33	1	33	20	32	29	21,57
33	Iceland	10	28	34	33	32	1	29	23,86
34	Liechtenstein	34	7	18	24	34	32	29	25,43

VI. ACADEMIC

A. University Quality

To orderly list countries that belong to the Erasmus program for University quality, we used the World University Rankings 2020 [22] and the number of universities in the top100, top200 until de 1397 universities ranked. As can be seen from the following table, the UK leads the ranking by university quality of Erasmus-mobility countries with 11 universities in Top100 and 100 in Top1397. The United Kingdom is followed by Germany, Netherlands, France and Sweden. Liechtenstein, Macedonia and Serbia do not have any university in this ranking.

B. Research

To orderly list countries that belong to the Erasmus program for Research, we used the three most internationally known databases: Web of Science [23], Scopus [24], [25] and Google Scholar (GS) [26]. The year used was 2017 for the first two and the current one for GS, in this case using the transparent ranking: Top Universities by Citations in GS profiles [29]. United Kingdom, Germany, Italy, France, Spain and Netherlands are the first countries in this ranking, and also in the Scopus, web of science and Google scholar ranking. Malta, Macedonia, and Liechtenstein are the last in this research ranking.

C. Sustainable

To orderly list countries that belong to the Erasmus program for University sustainability, we used the Times Higher Education University Impact Rankings [27], the only global performance tables that assess universities against the United Nations' Sustainable Development Goals (SDGs). They use carefully calibrated indicators to provide comprehensive and balanced comparisons across three broad areas: research, outreach, and stewardship. The ranking evaluate university performance on 11 of 17 SDG: SDG 3 - Good health and well-being, SDG 4 - Quality education, SDG 5 - Gender equality, SDG 8 - Decent work and economic growth, SDG 9 - Industry, innovation, and infrastructure, SDG 10 - Reduced inequalities, SDG 11 - Sustainable cities and communities, SDG 12 -Responsible consumption and production, SDG 13 -Climate action, SDG 16 – Peace, justice and strong institutions and SDG 17 – Partnerships for the goals. Thus our list is headed by United Kingdom with 29 universities in the Times Higher Education University Impact Ranking, followed by Turkey and Spain (23 and 26 universities, respectively). Croatia, Estonia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta and Serbia do not have a single university in this impact ranking.

D. Rankings Summary Dimension Academics

The next Table II shows the ordering of Erasmus countries using equal weight for each of the items set for academic.

Erasmus academic Rank	Country	Erasmus URank	Erasmus Impact Rank	Erasmus Research Rank	Score academic
1	United Kingdom	1	1	1	3
2	France	4	5	4	13
3	Italy	8	4	3	15
4	Spain	10	3	5	18
5	Netherlands	3	12	6	21
6	Germany	2	19	2	23
7	Finland	7	6	15	28
8	Sweden	5	18	7	30
8	Turkey	20	2	8	30
10	Denmark	9	15	11	35
11	Belgium	6	21	9	36
12	Ireland	12	7	18	37
13	Portugal	17	8	14	39
14	Norway	13	20	12	45
15	Greece	18	12	16	46
16	Czech Republic	21	9	17	47
17	Austria	11	24	13	48
18	Cyprus	16	10	27	53
19	Hungary	22	14	20	56
20	Poland	23	23	10	56
21	Romania	27	11	19	57
22	Iceland	15	15	29	59
23	Estonia	19	27	26	72
23	Luxembourg	14	27	31	72
25	Latvia	28	15	30	73
25	Slovakia	30	22	21	73
27	Slovenia	24	26	23	73
28	Croatia	25	27	24	76
29	Bulgaria	31	24	25	80
30	Serbia	32	27	22	81
31	Lithuania	28	27	28	83
32	Malta	26	27	32	85
33	Macedonia	32	27	33	92
34	Liechtenstein	32	27	34	93

TABLE II. ERASMUS ACADEMIC RANKING

VII. FINAL RESULTS AND DISCUSSION

A. Final Ranking of Erasmus Countries

The next Table III shows the ordering of Erasmus countries using equal weight for ranking Destination and ranking academic.

B. Discussion

At the beginning of this article, we list the latest Erasmus mobility numbers (academic year 2016-2017). For this year, Spain has been the country that has received the largest number of Erasmus mobility students and Germany is the country that "exports" the largest number of students. Turkey sends far more students than it receives, while in the UK it is just the opposite.

It was found that:

- Germany, Spain, France and Italy are the countries that send and receive the largest number of Erasmus students.
- Turkey, Germany, France and Italy send more students than they receive
- Norway, Poland, Portugal, Sweden and the United Kingdom receive more students than they send.
- Macedonia, Malta, Iceland, Liechtenstein and Serbia have few students doing Erasmus mobility.
- Malta, Luxembourg, Macedonia, Liechtenstein and Serbia receive few students.

According to our ranking, Poland and Lithuania rank better in receiving students than in Erasmus; the opposite is true with Turkey and Luxembourg.

TABLE III.	ERASMUS RANKING
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Erasmus	Country	Erasmus Destination	Score destiny	Erasmus	Score academic (%)	Total score
Rank		Rank	(%)	academic Rank		
1	United Kingdom	4	0,023	1	0,002	0,025
2	France	3	0,022	2	0,007	0,029
3	Spain	2	0,020	4	0,010	0,030
4	Italy	7	0,025	3	0,009	0,033
5	Netherlands	10	0,025	5	0,012	0,037
6	Germany	15	0,027	6	0,013	0,040
7	Portugal	1	0,019	13	0,022	0,041
8	Finland	14	0,027	7	0,016	0,043

9	Turkey	17	0,028	8	0,017	0,045
9	Belgium	7	0,025	11	0,021	0,045
11	Sweden	21	0,029	8	0,017	0,046
11	Denmark	11	0,026	10	0,020	0,046
13	Ireland	19	0,029	12	0,021	0,050
14	Austria	5	0,023	17	0,027	0,051
14	Czech Republic	6	0,024	16	0,027	0,051
16	Greece	18	0,028	15	0,026	0,055
17	Hungary	9	0,025	19	0,032	0,057
18	Norway	26	0,034	14	0,026	0,060
19	Romania	22	0,030	21	0,033	0,062
20	Poland	25	0,031	20	0,032	0,064
21	Cyprus	31	0,038	18	0,030	0,068
21	Slovakia	11	0,026	25	0,042	0,068
21	Luxembourg	15	0,027	23	0,041	0,068
24	Croatia	11	0,026	28	0,043	0,070
25	Slovenia	24	0,031	27	0,042	0,072
26	Bulgaria	19	0,029	29	0,046	0,075
27	Iceland	33	0,042	22	0,034	0,076
28	Latvia	27	0,035	25	0,042	0,077
28	Serbia	23	0,030	30	0,046	0,077
30	Estonia	28	0,037	23	0,041	0,078
31	Lithuania	30	0,037	31	0,047	0,085
32	Malta	32	0,038	32	0,049	0,087
33	Macedonia	29	0,037	33	0,053	0,090
34	Liechtenstein	34	0,045	34	0,053	0,098

VIII. CONCLUSION

Many European students do Erasmus for different personal reasons (such as family pressure or because they consider it compulsory) but are not sure which country to choose. This article looks at what are the most important reasons for students and ranks Erasmus countries. For this ranking we use two different dimensions: destination country and academic quality. The destination was subdivided into 7 items: Adventure, Cultural and Heritage, Safe and Secure, Cost of Living, Geographic Localization, Weather, Language and Sustainable. The academic part was divided into 3 items: research, university quality and sustainable.

For each of the items we use the strongest and most reliable indicators. In the end we established a ranking of Erasmus countries. Comparing with the latest numbers of students from and to each country, we find that there are countries that have probably been more fashionable in Erasmus terms: like Poland and Lithuania that receive many students but do not have a very high position in our country ranking. On the contrary, Turkey and Luxembourg do not receive as many students as we would expect from our ranking.

This Erasmus country ranking has been defined according to various criteria, but each case is a different case: as future work we will use this ranking model but using different weights for each item according to the choices of each student who wants to start making mobility.

CONFLICT OF INTEREST

The authors declare no conflict of interest

AUTHOR CONTRIBUTION

The author did a literature review, defined the methodology, research and data treatment, data analysis and conclusions, having written the entire document.

REFERENCES

- [1] European Commission, Erasmus+. (2019). [Online]. Available: https://ec.europa.eu/programmes/erasmus-plus.
- [2] European Commission, Council Decision adopting the European Community Action Scheme for the Mobility of University Students, 1987.
- [3] European Commission, Erasmus, The EU Programme for Education, Training, Youth and Sport (2014-2020), 2018.
- [4] European Commission, Erasmus+ factsheet. (2019). [Online]. Available:
- https://ec.europa.eu/programmes/erasmus-plus/about/factsheets_en [5] J. Fombona, *et al.*, "The motivational factor of erasmus students at
- the university," *International Education Studies*, vol. 6, no. 4, 2013.
 M. J. E. I. E. E. A. Lesjak, "Erasmus student motivation: Why and where to go?" *Higher Education*, pp. 845–865, 2015.
- [7] J. G. P. P. Clemente-Ricolfe, "Erasmus university students motivation and segments: The case of universitat politècnica de valència, spain," *Journal of Educational And Social Research*, vol. 9 nº 2 2019
- [8] E. B. Pons, P. P. Herrero, and M. V. M. Andres, "The participation of university students in mobility programs: factors and reasons that determine it," *Ibero-American Journal of Education*, vol. 42, no. 5, 2007. (Spanish)
- [9] E. Krzaklewska and S. Krupnik, "The role of the erasmus programme in enhancing intercultural dialogue. Presentation of the results from the erasmus student network survey 2007," in *Proc. International Barcelona Conference on Higher Education*, 2008.
- [10] C. P. Vicente and I. Aguaded, "Erasmus students at the Babel Tower. Learning foreign languages based on communication skills and the use of ICT," Electronic Journal Theory of Education. Education and Culture in the Information Society, vol. 10, no. 2, 2009. (Spanish)
- [11] P. Stilianos, A. Georgios, K. Vasilik, and S. Labros, "The erasmus student mobility program and its contribution to multicultural education: The case of tecnological education institute of thessaly," *Journal of Educational and Social Research*, vol. 3, no. 3, 2013.

- [12] R. B. Sova, "Understanding erasmus students' motivation: What directs erasmus students' choice of destination and particular course," *New Educational Review*, vol. 50, no. 4, pp. 26-35, 2017.
- [13] C. R. González, R. B. Mesanza, and P. Mariel, "The determinants of international student mobility flows: An empirical study on the Erasmus programme," *Higher Education*, vol. 62, pp. 413–430 2011.
- [14] Z. Dabasi-Halász, J. Kiss, I. Manafi, D. E. Marinescu, K. Lipták, M. Roman, and J. Lorenzo-Rodriguez, "International youth mobility in eastern and western Europe – the case of the Erasmus+ programme," *Migration Letters*, vol. 16, no. 1, 2019.
- [15] U.S.News, Best Countries 2019: Global Rankings, International News and Data Insights, U.S.News, 2019.
- [16] Institute for Economics & Peace, Global Peace Index 2019, Institute for Economics & Peace, Sidney, 2019.
- [17] Numbeo. Cost of Living Index for Country 2019 Mid-Year. (2019).
 [Online]. Available: https://www.numbeo.com/cost-of-living/rankings_by_country.jsp.
- [18] Google. Google Maps. (2019). [Online]. Available: https://www.google.pt/maps.
- [19] M. C. F. B. L. A. M. T. A. Peel, "Updated world map of the Köppen-Geiger climate classification," *Hydrology and Earth System Sciences*, vol. 11, pp. 1633–1644, 2007.
- [20] Ethnologue. Ethnologue 200. (2019). [Online]. Available: https://www.ethnologue.com/guides/ethnologue200.
- [21] Yale University; Columbia University; World Economic Forum, «Environmental Performance Index. (2019). [Online]. Available: https://epi.envirocenter.yale.edu/.
- [22] THE, Times Higher Education, «World University Rankings 2020. (2019). [Online]. Available: https://www.timeshighereducation.com/world-university-rankings/ 2020/.
- [23] Clarivate. InCites. (2019). [Online]. Available: https://incites.clarivate.com/

- [24] Elsevier, «Document search,» 2019. [Online]. Available: https://www.scopus.com/.
- [25] Scimago Lab. Scimago Instituitions Ranking. (2019). [Online]. Available:
- https://www.scimagoir.com/rankings.php?sector=Higher%20educ [26] Cybermetrics Lab. Webometrics Ranking of World Universities. (2019). [Online]. Available: http://webometrics.info.
- [27] THE, Times Higher Education, University Impact Rankings 2019. (2019). [Online]. Available: https://www.timeshighereducation.com/rankings/impact/2019/
- [28] European Union, EU languages. (2019). [Online]. Available: https://europa.eu/european-union/about-eu/eu-languages_en.
- [29] Cybermetrics Lab, Transparente Ranking: Top Universities by Citations in Top Google Scholar profiles. (2019). [Online]. Available: http://www.webometrics.info/en/transparent

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