Version 29/02/2012

The ESPON 2013 Programme

TIGER
Territorial Impact of Globalization for Europe and its Regions

Applied Research Project 2013/1/1

Draft Final Scientific Report

Working paper 14
"International student flows"

Clarisse Didelon, Yann Richard, Sophie de Ruffray, CNRS
Armando Montanari, Barbara Staniscia, Sapienza University of Rome
With the collaboration of Filippo Belloc for DB elaboration and management, Sapienza University of Rome
Maps by Florent Baldini

EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

Globalization has become a leading paradigm of human and social sciences over the last decades. In the bulk of the huge amount of scientific productions related to that topic, many social scientists have put a fundamental idea forward: the globalization is a step-by-step process of integration of all parts of the world into a vast entity called the global space. This process is at work in a variety of domains such as politics, economy, migrations, culture and other social practices. Many authors have tried to demonstrate that globalization means the end or the progressive erasure of States boundaries in order to facilitate all kinds of movements and exchanges (trade flows, financial flows, tourism, etc.) (Lechner and Boli, 2003).
According to the main stream social sciences and economics literature, several patterns of the globalization coexist. All of them have been analysed by scholars. They are referred to as "visions" in the ESPON 3.4.1 Report "Europe in World": a continental vision, a centre/periphery vision (Amin, 1970; Arghiri, 1972; Prebisch, 1963; Reynaud, 1981; Wallerstein, 1974) and a global and networking or "archipelago vision" (Castells, 1996; Dollfus, 1997; Sassen, 1991; Veltz, 1997). These visions are not necessarily exclusive and can get along together to a certain extent, especially the centre periphery and the archipelago vision. A fourth vision is the regional or macroregional one.

One important aspect of the globalization is the progressive regionalization of the world economy which means the rapid increase of all kinds of exchanges at the macroregional level. A macroregion is a group of contiguous states which all belong to the same part of the world, linked by strong and deep interrelations. This topic has been dramatically less studies than globalization up to now, except by economists and specialists of international relations. All this literature usually makes some confusion between regionalization, regionalism and regional integration. Regionalism designate a proactive way of doing things by which several countries try to better regulate their relations at the political level in various domains such as regional development, culture, trade, economy, etc., based on state cooperation and the signature of regional agreements and treaties. R*egionalization* is a concentration of international exchanges at the regional level, i.e. more or less large geographical ensembles composed by contiguous countries.
Beside this traditional definition of regionalism, some scholars have developed the "new regionalism approach". They pay less attention at regional agreements, treaties and state led regionalisms. Their approach is more focused on a not official regionalism by analysing sets of multilevel interstate and interregional relations and various forms of social contacts and interactions in geographical ensembles. The limits of these ensembles are actually defined by the geographical extension of such relations and social practises (Hettne & Söderbaum, 1998; Söderbaum, 2008; Vaÿrinen, 2008) and not by the rigid spatial coverage of any international agreement and treaty. This method must be explored further, especially when it comes to the nature and intensity of existing functional relations between the EU – and various European actors – and the rest of the world.
Since the 1990s, some analysts have been studying the development of this "new regionalism" (Wallis, 2002). The regions of many counties are encouraged by various political evolutions to develop networks of horizontal relations with other regions in the world in various domains (education and training, spatial planning and regional development, development cooperation and assistance). In some cases, this regionalism takes advantage of "decentralisation" implemented by many countries and from the formation of macroregional integrated ensembles such as the European Union (cross border, transnational and interregional cooperation) in which barrier effects of the borders are wiped away step by step. This regionalism may help some regions maintain their competitiveness by developing fruitful and more direct cooperation with other ones. This regionalism has nothing to do with the old regionalism (intra state divisions), although it is not contradictory with it: it encourages horizontal relations more than hierarchical ones; it involves many kinds of actors from private and public institutions in complex networks of relations and interactions; it stands for a more flexible territorial basis, accepting for example fuzzy borders

(Christiansen, Petito, Tonra, 2000). The regions of EU member states are fully involved in this new horizontal and networking regionalism.

This study is at the crossroads of globalization and regionalization. It addresses the place and role of Espon area in the globalization of higher education. This issue directly relates to the internationalisation of higher education institutions and it is of particular importance for at least four reasons:

- The economic growth is more and more based on knowledge activities.
- The European Union pays a special attention to the knowledge economy since the Lisbon strategy was launched. The strategy aims to make European Union "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion". The expression better jobs obviously relates at highly skilled labour force.
- The growth of firms is more and more based on their capacity to develop their activities in many countries. Consequently, the students who have an international experience in their curriculum are attractive.
- EU is now engaged in a world competition for the attraction of brains. Great power are engaged in a competition to train their elites and the elites (cultural, political and economic independence) or of other countries (influence).
- In this context, we can put the following hypothesis forward: the more EU is able to attract international students, the more it will be able to exert its influence in various parts of the world.

This working paper aims at studying two things: the world geographical distribution of international students flows over a several years period; the internationalization of various European higher education and research institutions with their counterparts located in non Espon countries. More precisely, we will try to: measure the attractiveness of European countries on an individual basis and that of Espon space on international students flows; compare the attractiveness of Espon with that of two other regions: Nafta and Eastern Asia; to identify the causes of Espon attractiveness; to map the influence of Espon in the globalisation of higher education at global and regional level; to check the hypothesis of the regionalisation of international students flows. The mobility of researchers and academics is not taken into consideration by this paper.

⇨ We will then propose two hypothesis: 1. EU is a global actor which looms large in the globalization and is able to attract many overseas students; 2. EU is a major regional actor, as it was shown in Espon 3.4.1 project, and it exerts a strong influence in neighbour countries in two domains: attraction of international students, scientific cooperation and research. The second hypothesis supposes that Espon countries have developed strong scientific cooperation with higher education and scientific institution of neighbour countries in order to facilitate the mobility of students and researchers.

<u>Some remarks about the methodology</u>:
All along the research process, we faced a major data lack problem. We used three main sources for the statistics: the statistics provided by Unesco Institute of Statistics and, to a lesser extent, the statistics released by the OECD and by Eurostat. The more useful are the Unesco ones but they suffer from several drawbacks:

- they essentially depend from the good will of the States themselves, and many of them do not provide their national data (Mexico Luxembourg, for example) or give them to Unesco irregularly (Greece for instance) which means that there are many holes in historical series, even for recent years (no data yet for the Canada for 2008);

- it proved impossible to build reliable time series going back to the 1990s because two many data are lacking especially in developing countries;
- the data provided by the OECD and Eurostat are more or less complete but they concern only the member countries of the European Union.
- only the Unesco data allowed us to build two world O/D matrixes of international student (209 x 209 countries). For these matrixes, we initially chose two period separated by at least 10 years but it was impossible because of the holes in the database for the 1990s and 1980s: the two periods are 2001-2003 and 2006-2008.

The collection of data was made on country by country basis. In a second step, the data were compiled in order to compare Espon with other geographical ensembles such as Nafta and Asean+3. However, it was impossible to build as real Nafta ensemble because of a total lack of data concerning Mexico. Consequently, Nafta is reduced to Northern America (Canada + USA). As for eastern Asia, the region Asean alone was not considered comparable to Espon and Nafta: its economic size and its level of internal integration (low share of intraregional trade for instance) are much lower and it is not a member of the Triad as such. It was then compiled with the three major economic powers: China (including Hong Kong and Macao), Japan and South Korea. This method is quite advantageous because it permits to compare the importance of these ensembles with or without consideration to internal flows of international students.

I. Espon and other world regions: comparative attractiveness

Several tendencies are observed in the global space regarding higher education and research. The higher education is getting more internationalized and the competition between universities and research institutions is growing. In this domain, globalization is a multifaceted process: growing mobility of researchers and students in geographical terms (more possible destinations thanks to the development of transport means at affordable costs and thanks to the end of the Cold War), internationalization of many institutions.

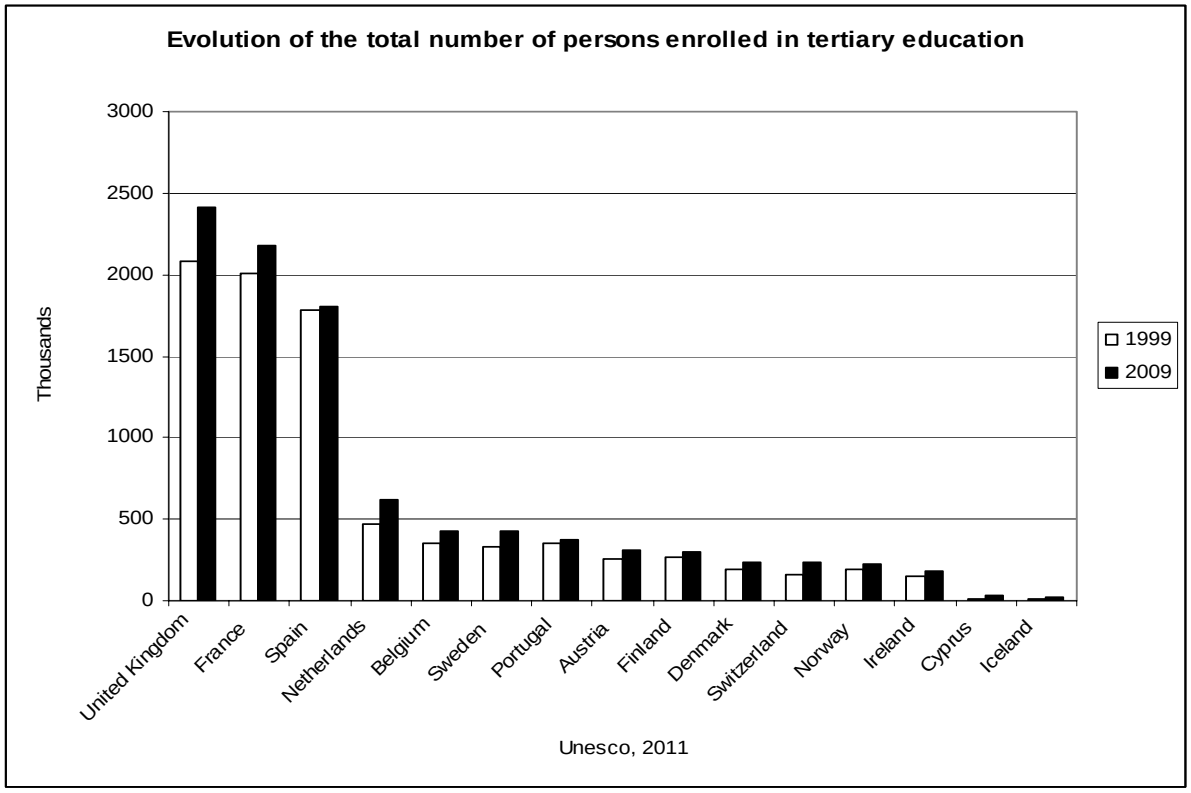
As it was underlined by many specialists, higher education becomes a market driven activity, sometimes profitable (increase of tuition fees for foreign students in some countries), whose development is based on the growing demand of households in many countries. Public and private bodies are involved in the process in order to respond to this demand. This trend is included in a more general one: the commercialization of cultural activities (Yang, 2005; Varghese 2009). In this context, one can observe the growing number international students in absolute and relative terms, the steadily development of higher education in many countries (more students enrolled in tertiary education) (Varghese, 2009).

Besides, states encourage the mobility of brains and try to attract highly skilled workers in order to cope with the rapid development of the knowledge economy. According to the world bank, “an expanded higher education sector has become a necessary condition for a country’s growth in the present environment; it is important in promoting faster technological catch-up and in improving a country’s ability to maximize economic output” (World Bank, 2002). The developed economies have to face one major problem: they are not able to produce enough highly skilled workers every year even when their higher education system is well developed. They are no more able to respond to the internal demand. They must attract this labour force from abroad. Otherwise, they will not be able to maintain their competitiveness in a highly technological economy at global level (Chanda, 2000; Kapur and McHale, 2005; Varghese, 2009). But the economic and political situation has changed at global level: the flows of international students are no more exclusively south to north oriented (OECD, 2010). The economic value of international students is now fully acknowledged

and many states have modified their legislation in order to attract and keep them on their territory (SOPEMI, 2009, Varghese, 2009). This trend meets another one: more international students try to stay and work in the country where the graduated.

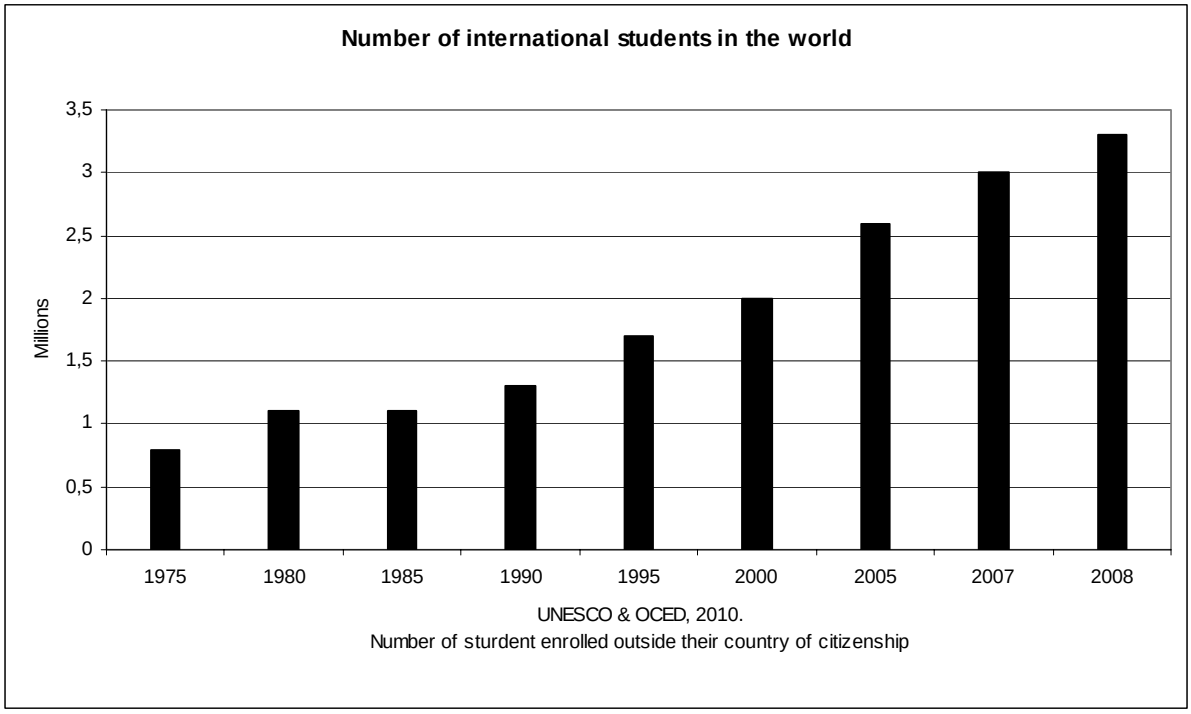
Recent evolutions

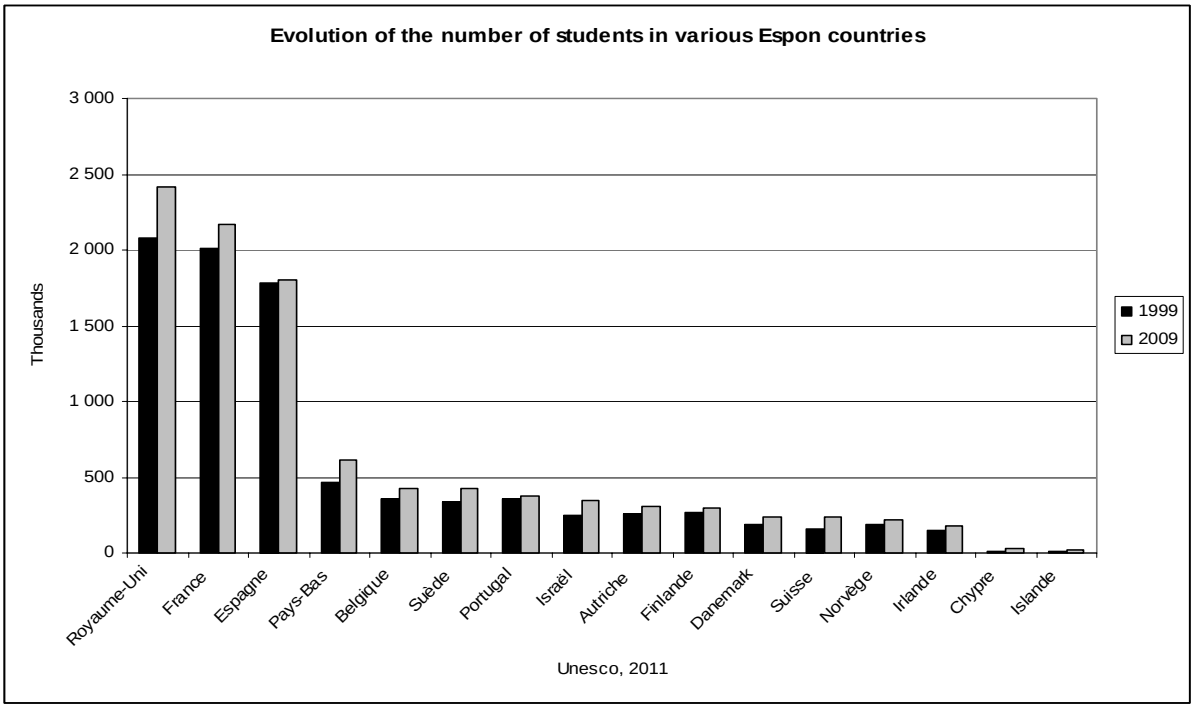
The total number of students has been continuously growing for decades, not only in absolute (total number) but also in relative terms (enrolment rate). The gross enrolment ratio[1] has jumped from 17 % in 1999 to 27 % in 2009, from 47% to 64% in Western Europe, from 37% to 65% in Central and Eastern Europe (including former USSR), etc.



According to the OECD, over the last three decades, the number of international students has also dramatically grown in absolute terms. They were 0.8 million in 1975 and roughly 3 millions in 2007 and 3.3 million in 2008. As the graph below shows, this tendency accelerated in the beginning of the 1990s and even more in the 2000s (OECD, *Education at a Glance 2009*). The figures provided by the UNESCO are slightly different (2.96 million in 2008 according to the Global Education Digest). As it was underlined, these figures must be cautiously used (discrepancies between data, no complete historical series over the long run).

[1] Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year. For the tertiary level, the population used is that of the five-year age group following on from the secondary school leaving.





Developed countries are still the most wanted destinations of international students, whatever their origins. According to the OECD statistics, 45 % of the students who study outside their country of residence are in OECD countries.[2] Alongside the traditional strong attractiveness of western countries, Asia attracts more and more international students. Besides, Asia sends more students to the rest of the world (47% of international students in OECD countries in 2007).

The factors of these evolutions have been thoroughly studied by various authors (OCDE, *Migration Outlook 2010*, page 334):

[2] See tableau C2.3 dans *Education at a glance 2009* de l'OCDE, pages 330-331

- Political strategies carried out by States in order to preserve and reinforce political, social, academic and cultural links with other countries. This is the case in Europe where many ties have been developed so far in order to support the European integration (Erasmus).
- Economic factors: the growing mobility of persons and information, the dissemination of new technologies, the development of rapid and less expensive transport and communication means, the deeper interdependence of economies and societies especially since the 1980s and 1990s in the framework of the globalization.
- The evolution of the labour market: nowadays, in many economic sectors, one can observe the internationalization of firms (more transnational firms and increase of foreign direct investments) and then highly skilled labour force. Consequently, students are more eager to study abroad in order to have an international experience and match this general evolution (more students do not hesitate to build their curriculum in several countries.
- New technologies of information and communication have dramatically cut down the cost (namely the transaction costs) of studies in foreign country.
- The growing internationalization of higher education institutions, with different forms: creation subsidiary universities in foreign countries (offshore mobility), transfer of complete curricula to foreign universities (franchising), alliances and partnerships of universities and institutions.

However, in this rapidly evolving context, the openness of countries and world regions (Nafta, Espon and pacific Asia) is unequal. Most of the time, the external mobility rates of countries are low. It means that in a large majority of countries, the relative number of students sent abroad is low when related to the number of residing students in the country. Except for Cyprus (33%), Luxembourg (26%) and Iceland (11%), all the European countries are under 6%. The mobility of their students is not that high. The larger the country is the lower is the external mobility rate. Espon is more opened than North America with an average of 7.3% against 3.9%. This rate should not be overestimated. Espon is composed by 31 contiguous countries, whereas North America is composed by only 2. The numerous the countries are, the higher are the opportunities to exchange students. Besides, many European countries are small and tend to send more students outside their territory (the rate for Luxembourg is 81%).

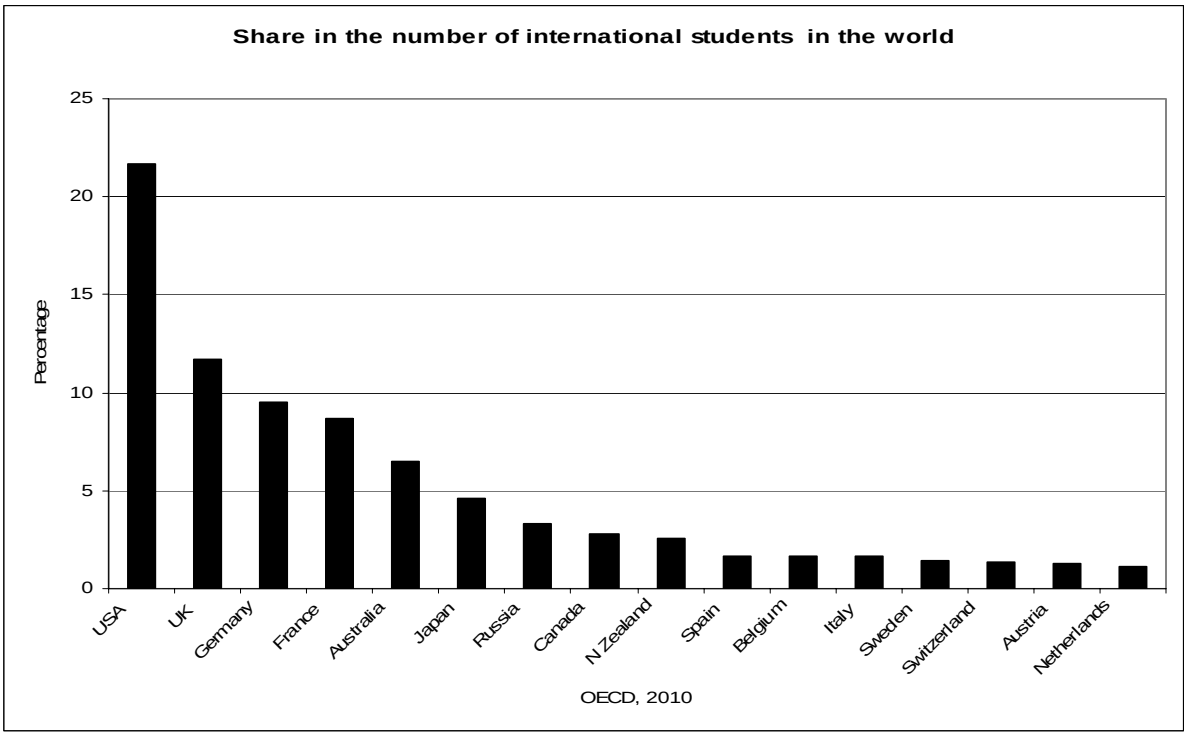
When it comes to the internal mobility rate, which is a first evidence of the attractiveness of a country, things are a bit different. Several European countries have more than 20% (Liechtenstein, Luxembourg, Cyprus) or 10 % (Austria, United Kingdom, Switzerland, France) of international students. A few countries in the world reach such rates (Australia 21% and New Zealand 13% in 2006-2008). Once more, Espon countries seem more opened than USA and Canada. The average rate for Espon is 4.5% in 2006-2008 and 1.6% in North America. In pacific Asia (Asean+3), the mobility of international students is low (0.7%), certainly because of the enormous demographic size of China (112 million students in 2006-2006).

At the global level, the Espon countries are not placed in the top list of countries of origin of international students. In this list, China and India come first (16.5% and 6.4% of total emissions of international students) because of their demographic size, followed by South Korea. Other Asian countries are in this list (Japan, Malaysia, Kazakhstan, Vietnam, Uzbekistan, Indonesia, Pakistan). Only 5 Espon countries are in this list (Germany 4th position, France 6th, Greece 14th, Poland 15th and Italy 17th).

As a single geographical bloc, Espon is the origin of 19% of outward international students (taking into consideration intra Espon flows which represent pore than 50% of the total) and 10% if one takes account only of the extra Espon flows. This ensemble is more a region of destination (1.2

million students per year in 2006-2008) than a region of origin (507 000). North America makes less than 4% of outward flows and Pacific Asia more than 27% (including intra regional flows). As a first conclusion, although the mobility rates of Espon countries are generally medium or low, Espon students are more internationalized (in relative terms) than their American and Asiatic counterparts. Europe looms relatively large in the geography of student flows at the global level.

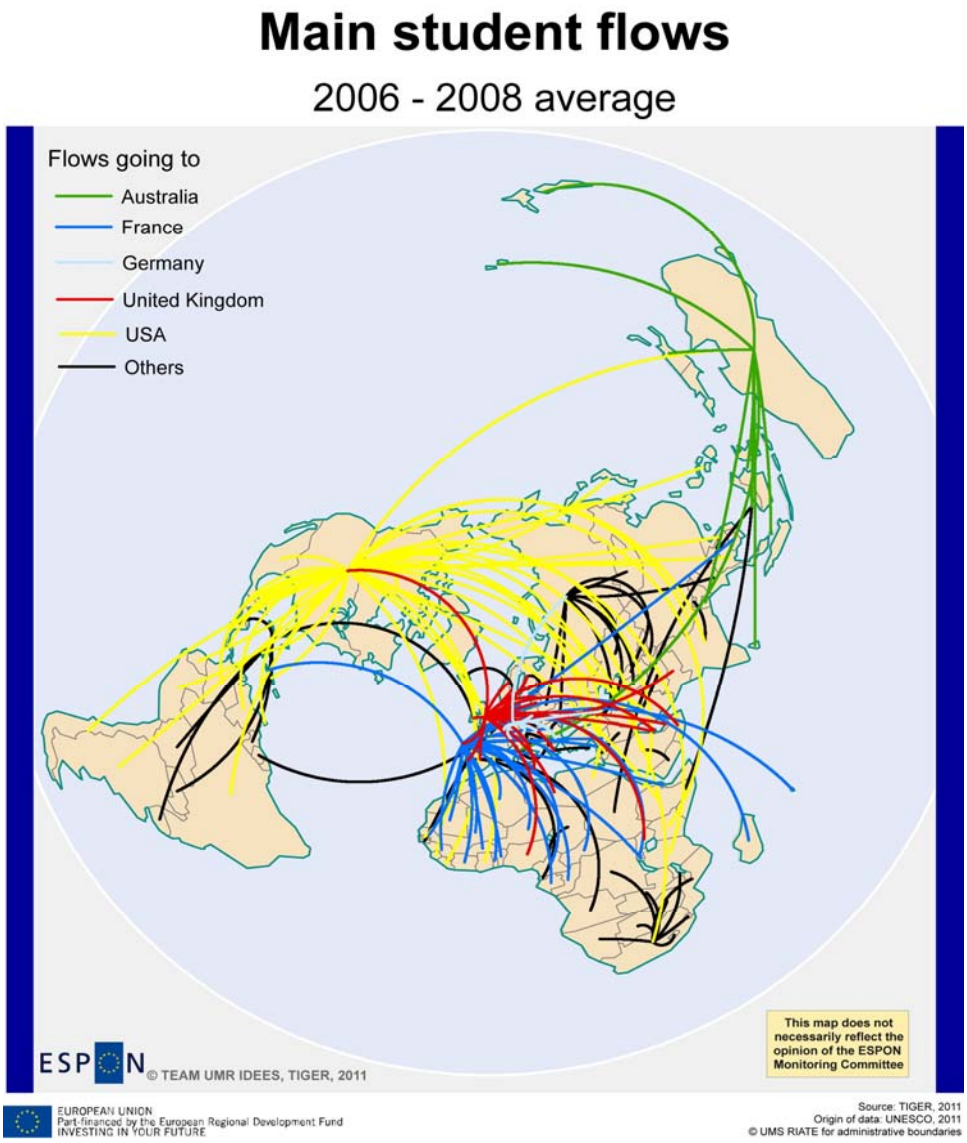
On the contrary, there are many Espon countries in the top list of destinations. Germany, France and the United Kingdom received together roughly 30% on the international students in 2006-2008 and there 10 Espon countries in the top 20 world list of main destinations.



As a whole, Espon received 46% of all international students in the world (including intra Espon flows), where as USA received 23% and Pacific Asia 9 % (but 18 % when one includes Australia and New Zealand). Besides, the share of many Espon countries in the world total has grown in the 2000s. It jumped from 30 % in 2001-2003 to 40 % in 2006-2008[3], whereas the United States fell from 26% down to 23%.[4] The fall down of the United States is not cause by a lack of attractiveness but by harder visa conditions for the student of many countries after the terrorist attacks of September 2011 and by the growing marketing efficiency of really competitive Asian universities (OECD, *Migration Outlook 2010*).

[3] Because of many data lack in the beginning of the 2000s, this is a small Espon considered here, without Greece, Italy, Liechtenstein, Luxembourg, Malta, Czech Republic, Slovakia and Sweden. Because of significant data gaps, it is not possible to compare Espon with Pacific Asia.

[4] And even from 25% to 20% according to OECD statistics between 2000 and 2007. The share of other developed countries such as Canada, Belgium and Germany has decreased.



Besides, as shown on the map above, several Espon countries are the first destinations for the international students who come from many countries of the world, alongside USA, Russia, Australia and secondarily Cuba or South Africa.

According to UIS data, the figures of the attractiveness of the three triadic ensembles are a bit different but the hierarchy is the same. Without consideration to the intraregional flows, Espon as a whole attracted 35% on international students in 2006-2008, North America[5] 21.9 % and Asean+3 only 2.9 %. These figures have changed significantly in the 2000s. In 2001-2003, they were as follows for the same geographic ensembles: 34.1% for Espon, 27.2% for North America and 1.6% for Asean+3. We then must conclude that the relative and attractiveness of Espon has increased (+0.9), that of North America has dramatically decreased (- 5.3) and that of Asean+3 has slightly increased (+1.3).

As for the outward flows of international students, the hierarchy is different: 4.1% from Espon (without the intra Espon flows), 2.1% from the USA, 27.5% for Asean+3. Il confirms that EU and North America are more destinations than origins of international students. This is totally consistent with the status of these world regions as major centres in the global economy.

[5] It was impossible to make such computations for Nafta as a whole because of a serious lack of data for Mexico in the most recent years.

II. Compared origins of international students

In this second part, we try to answer several questions: where do the international students present in the three considered geographic ensemble come from? What are the situations of various European countries with respect to the origins of these students? What are the determinants of the destinations of international students?

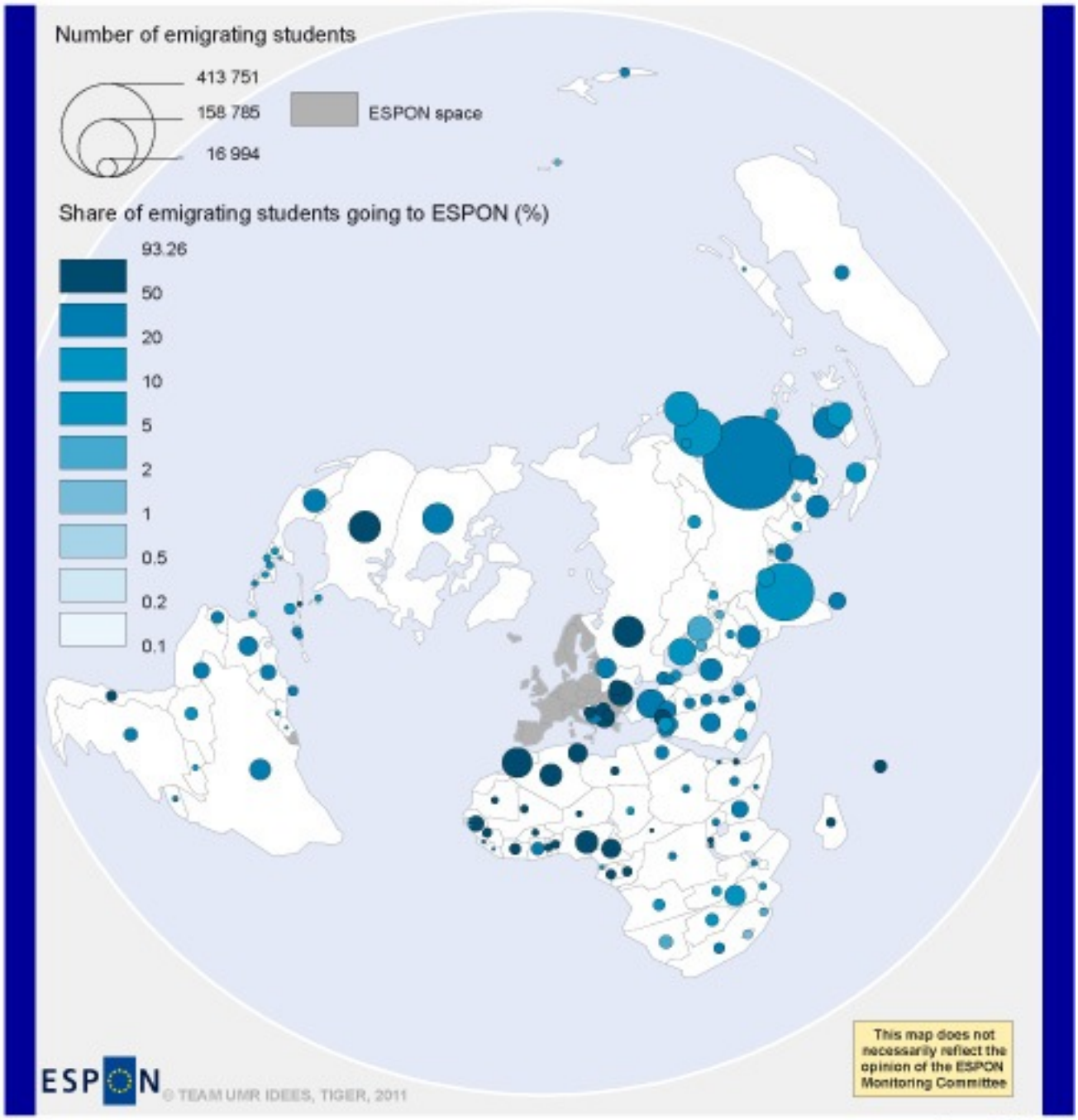
The origins of international students in Espon, North America and Asean+3

The evaluation of the attractiveness of Espon has been based on two variables: the number of international students sent by all the countries to the rest of the world; the share of Espon, North Africa and Pacific Asia (Asean+3) in the total emissions of all the countries (except intra regional flows). On the maps, the first variable is represented by the varying size of the circles (the circles have the same size on the three maps below) and the second by the colour in the circles.

According to the map representing the share of international students entering Espon, the geographical pattern of attractiveness is clear. For instance, China is a major provider of international students in absolute terms but less that 40 % of international students leaving China go to Espon (and less than 20% for India). The attractiveness of Espon is stronger in the USA, Northern and Western Africa, around the Black Sea and the Mediterranean basin, in Russia, etc. On the contrary, the attractiveness of Espon is low in Central, Eastern and Southern Africa, in many countries in Central, Southern and Pacific Asia and in some Latin American countries.

Attractiveness upon foreign students

2006-2008 average - ESPON space

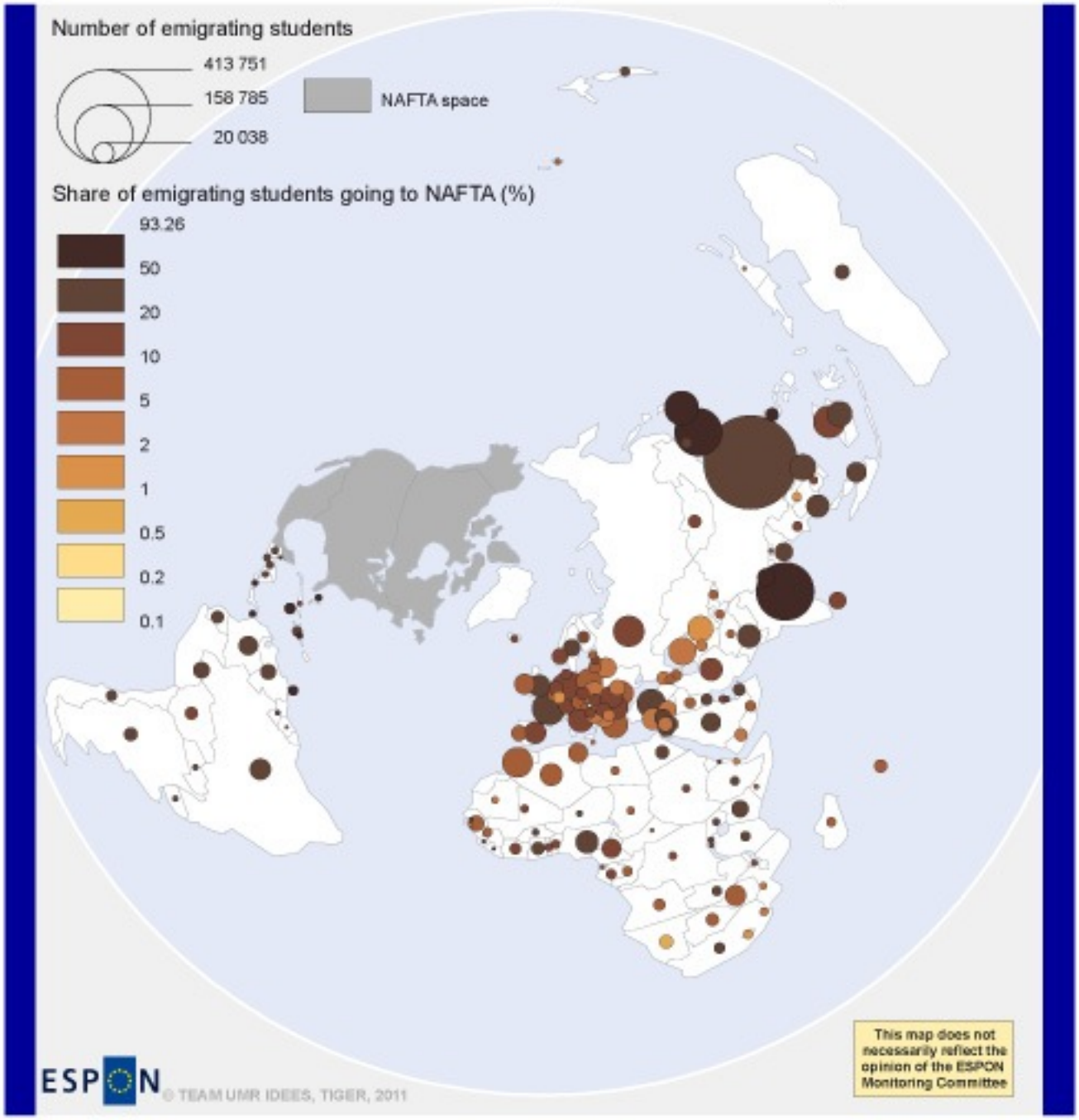


EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

Source: UNESCO, 2011
Origin of data: UNESCO, 2011
© UMS RIATE for administrative boundaries

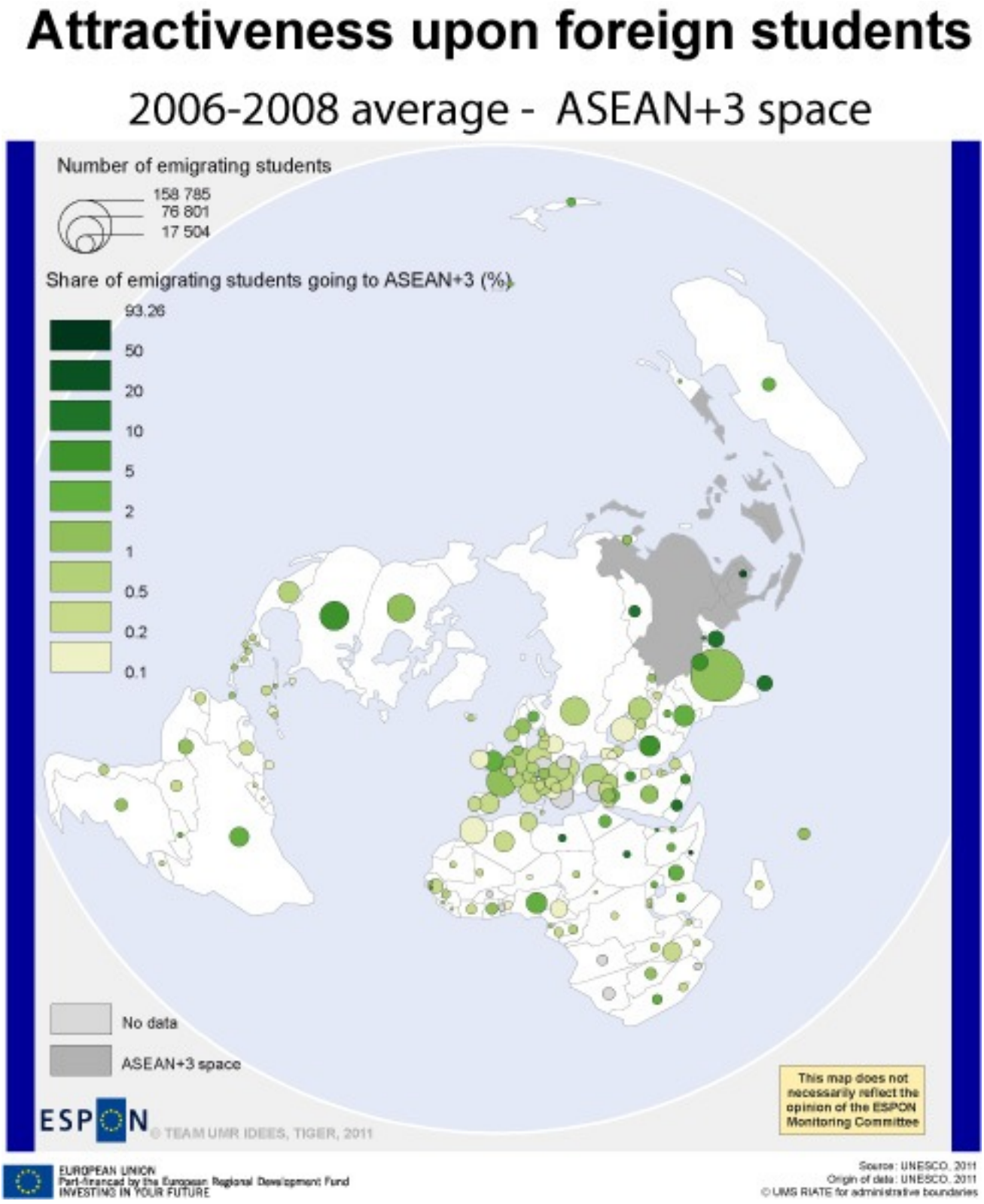
Attractiveness upon foreign students

2006-2008 average - NAFTA space



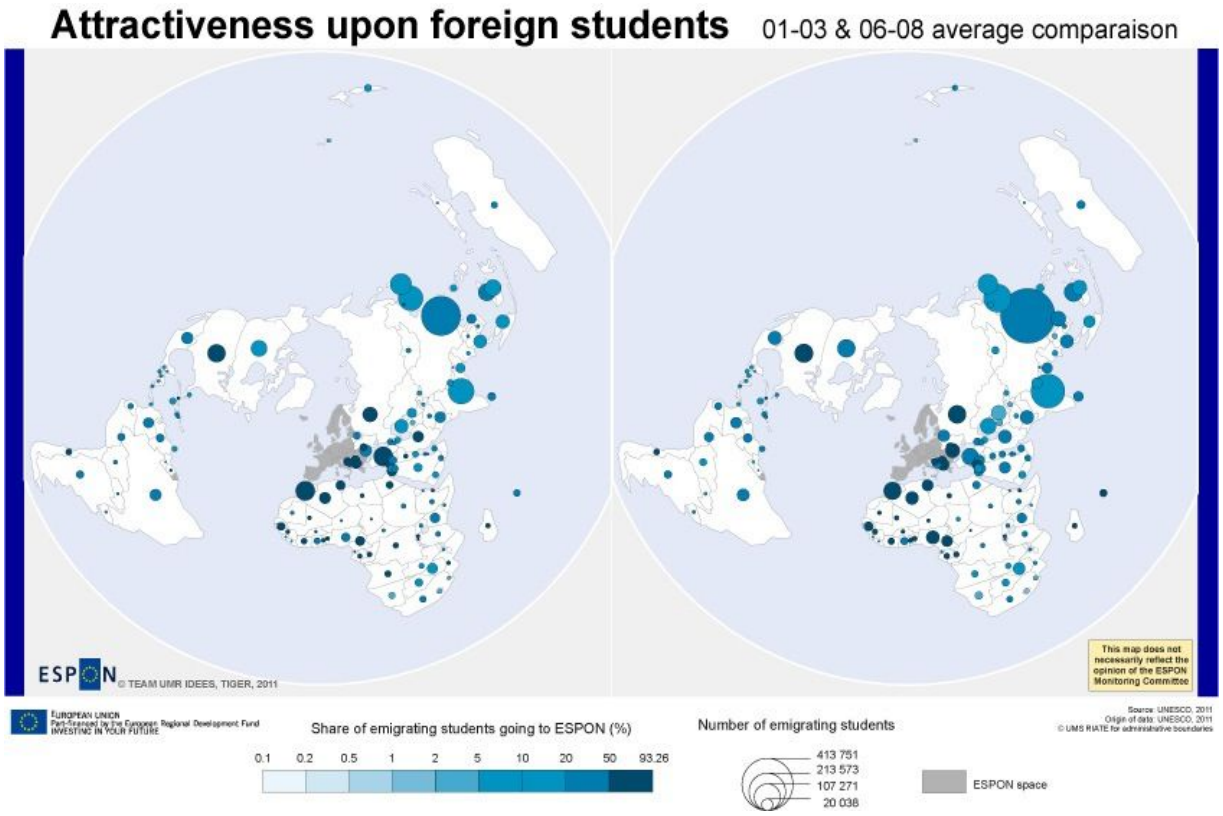
EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

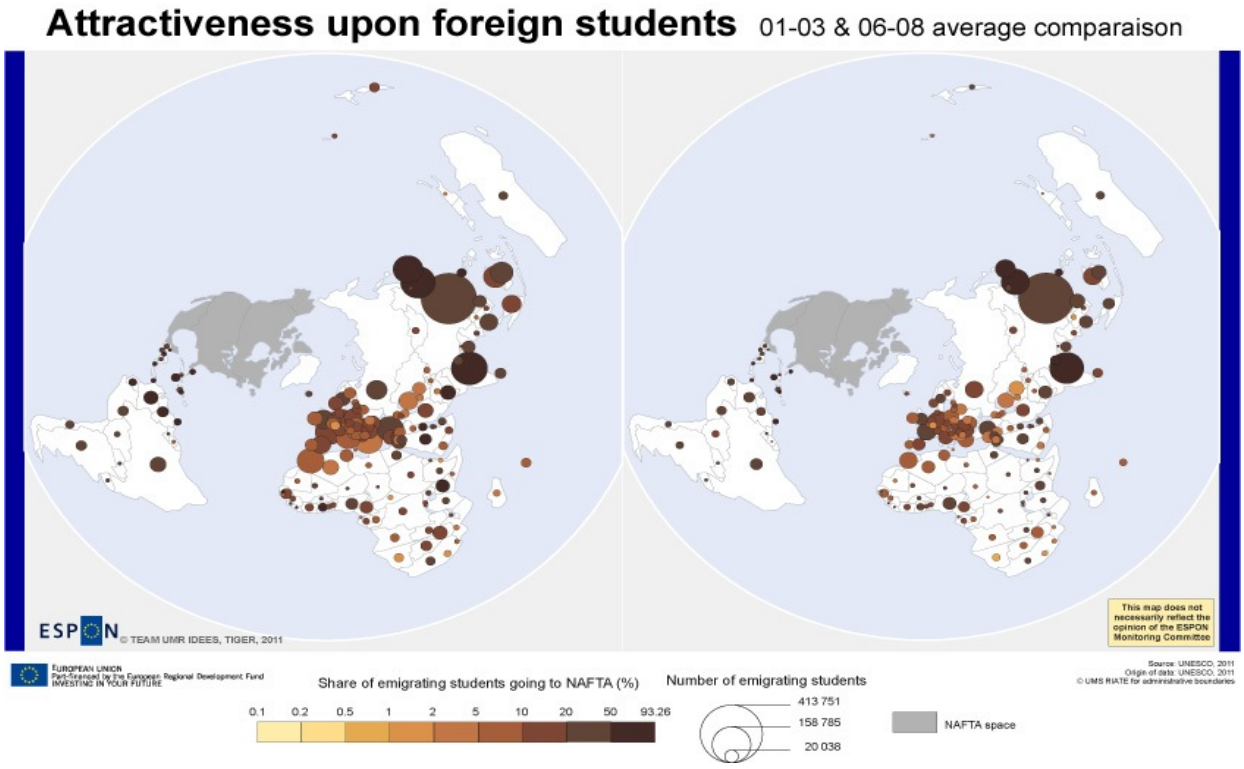
Source: UNESCO, 2011
Origin of data: UNESCO, 2011
© UMS RIATE for administrative boundaries



The geography of North America's attractiveness is quite different. On the map, it is obvious that the Nafta oriented countries are not regionally concentrated, except for Central America and the Caribbean. They are scattered in various parts of the world: Korea and Japan, India, Saudi Arabia, UK, Kenya. Surprisingly, the attractiveness of North America is low in many countries of Africa, Europe, Asia and Latin America. This does not necessarily mean that North America has lost is

power of attraction. The possible factors will be studied below. The third map concerns Pacific Asia. It shows that the attractiveness of Asean+3 is low in all parts of the world.



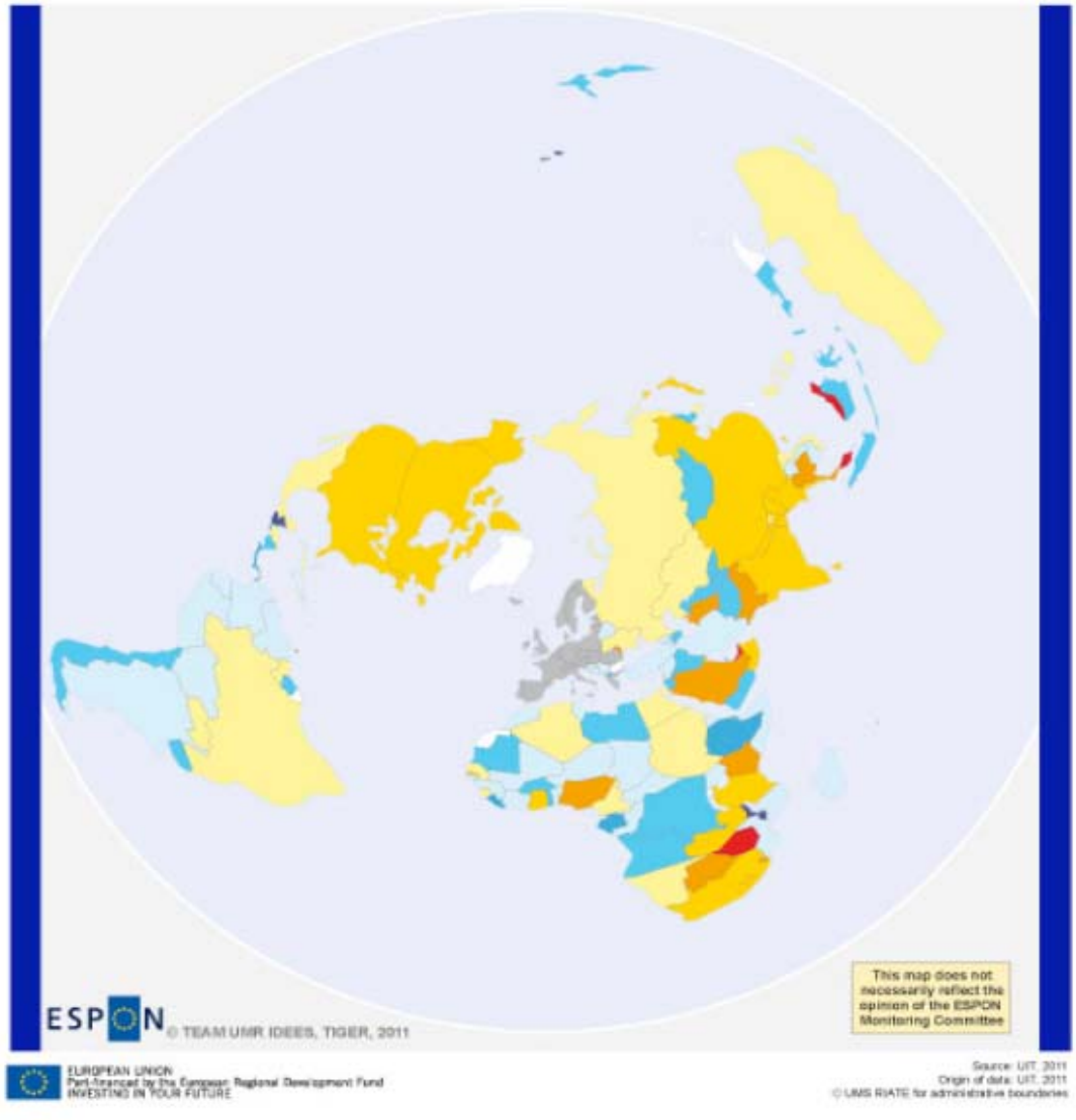


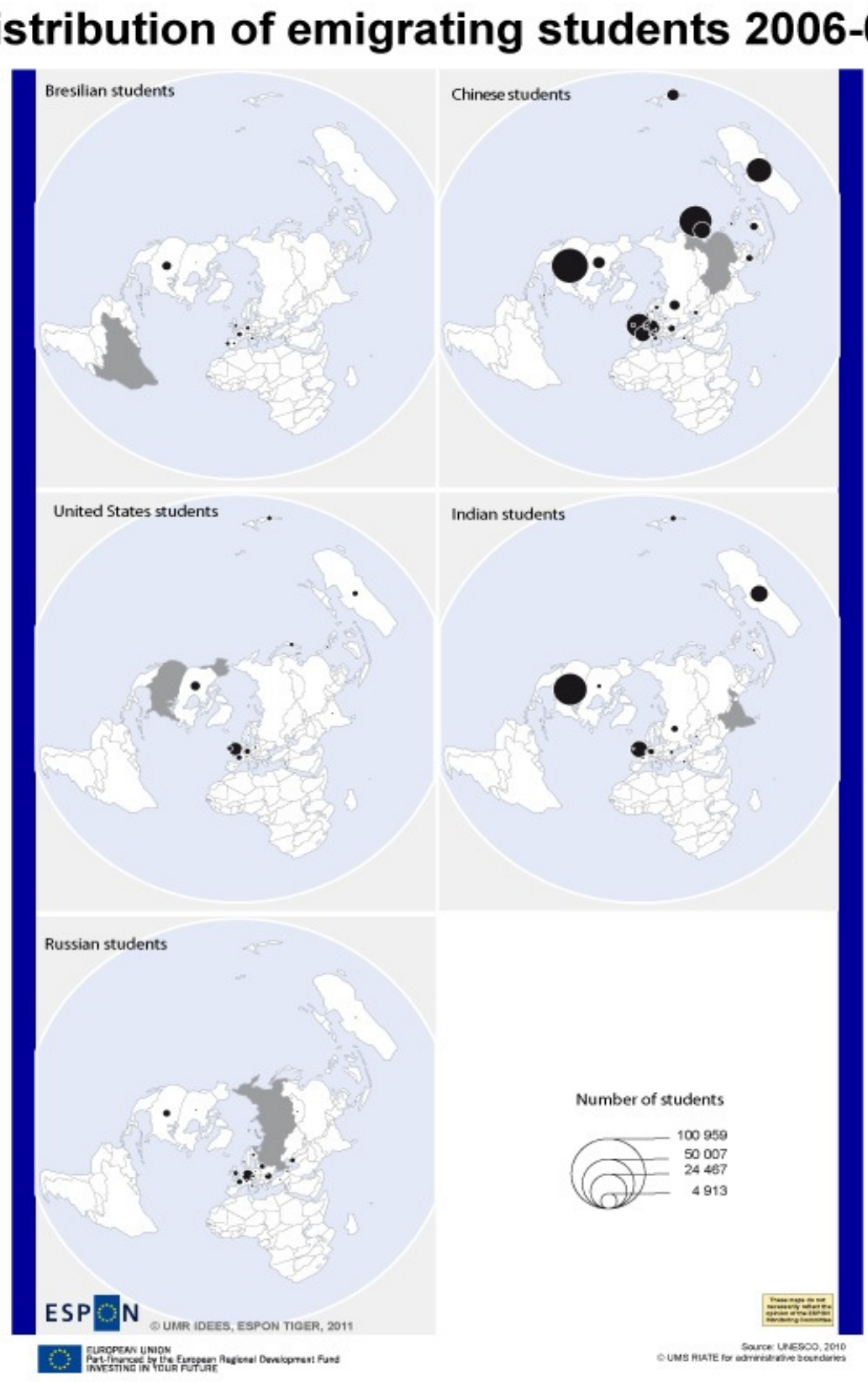
The level of attractiveness in relative terms has not significantly evolved since the beginning of the 2000s. We give here insights in the evolution. Nevertheless, the following figures and facts should

not be overestimated because we have not been able to build long historical time series. Consequently, what appears has a decrease between 2001-2003 can in fact be an increase ever a longer period (since the 1990s for example). North America's attractiveness has slightly increased in the Korea Republic and in Indonesia, but it has decreased in various countries of Pacific Asia and Oceania (Australia, Thailand), in India and Pakistan, Nigeria, in Brazil, etc. The attractiveness of Asean+3 is stable whatever the country. Last, the attractiveness of the Espon area as a whole is also apparently stable at the global level, except for some countries of the Near and Middle East. When we go down into further details, it appears that some countries are less Espon oriented than before mainly in Central and Western Africa and, to a lesser extent, in Latin America, in Near and Middle East and in South East Asia (namely ASEAN). This is clear on the map below which represents the yearly average evolution of the number of international students sent to Espon by all the countries between 2002 and 2007. On the contrary, Espon's attractiveness has been growing up in North America, in South African countries and in South and Eastern Asia, but the starting level was very low and the current number of concerned students is low also. Beyond the contrasted picture diplayed by the map, the most striking fact is the significant loss of attractiveness of Europe in a large part of Africa.

Students going to ESPON

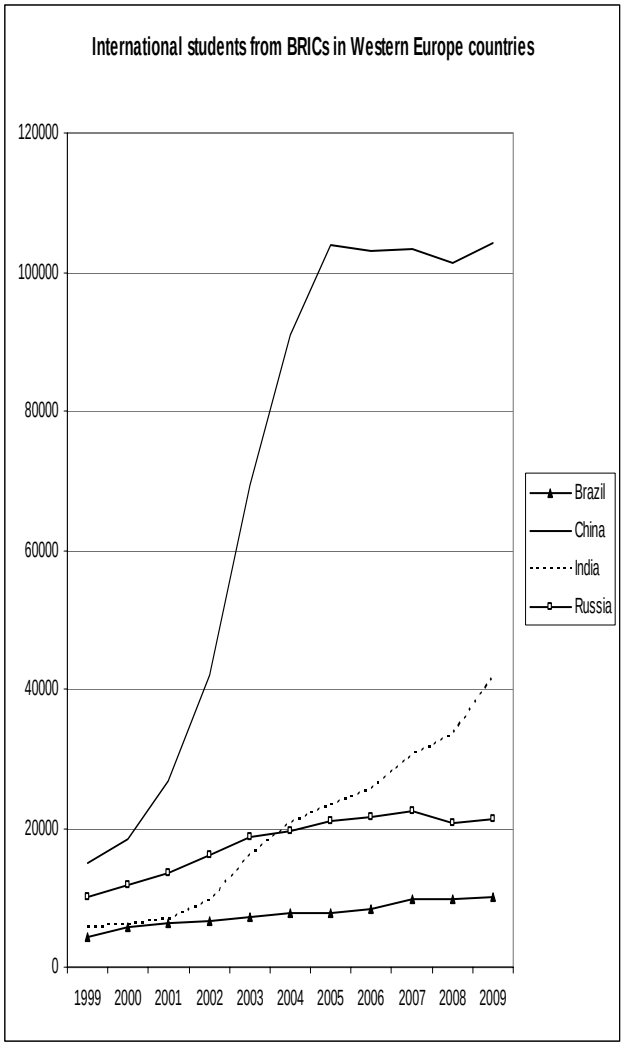
Annual average evolution 02-07

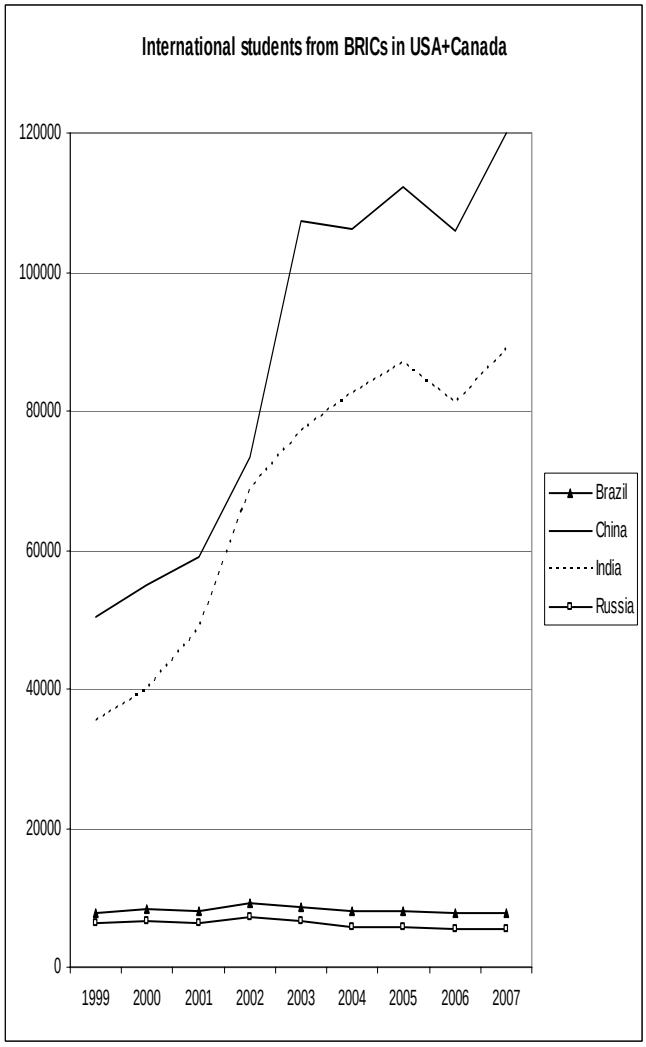




A special attention must be paid to the BRIC. When it comes to them, the picture is also contrasted. Because of their steady economic growth over the last decades, the BRIC countries have gained an important role at world level and have become important politic and economic partners of the European Union. On the official web site of the EU, China is presented as one of the biggest trading partner of EU and the two partners have recently decided to deepen their political relations in

several fields. Although their foreign relation doctrines are different, when it comes to the issue of global governance in many domains, the choices and positions of these countries must now be taken into consideration by EU. In this context, intense exchanges of students could become a source of better mutual understanding and it could become a vector of European influence in these countries. However, it seems that the attractiveness of Espon is still low. The distribution of international students coming from China is very triadic, the bulk of them going to Pacific (Australia, Japan, Korea), Northern America (mainly USA) and Europe. The position of Espon is not dominant. As for Brazil, the number of international students going to Espon countries is very low and the relative attractiveness of the USA is stronger. The situation is the same in the Indian case with intense flows going to USA; the attractiveness of Espon (mainly UK) lags far behind (graphs).

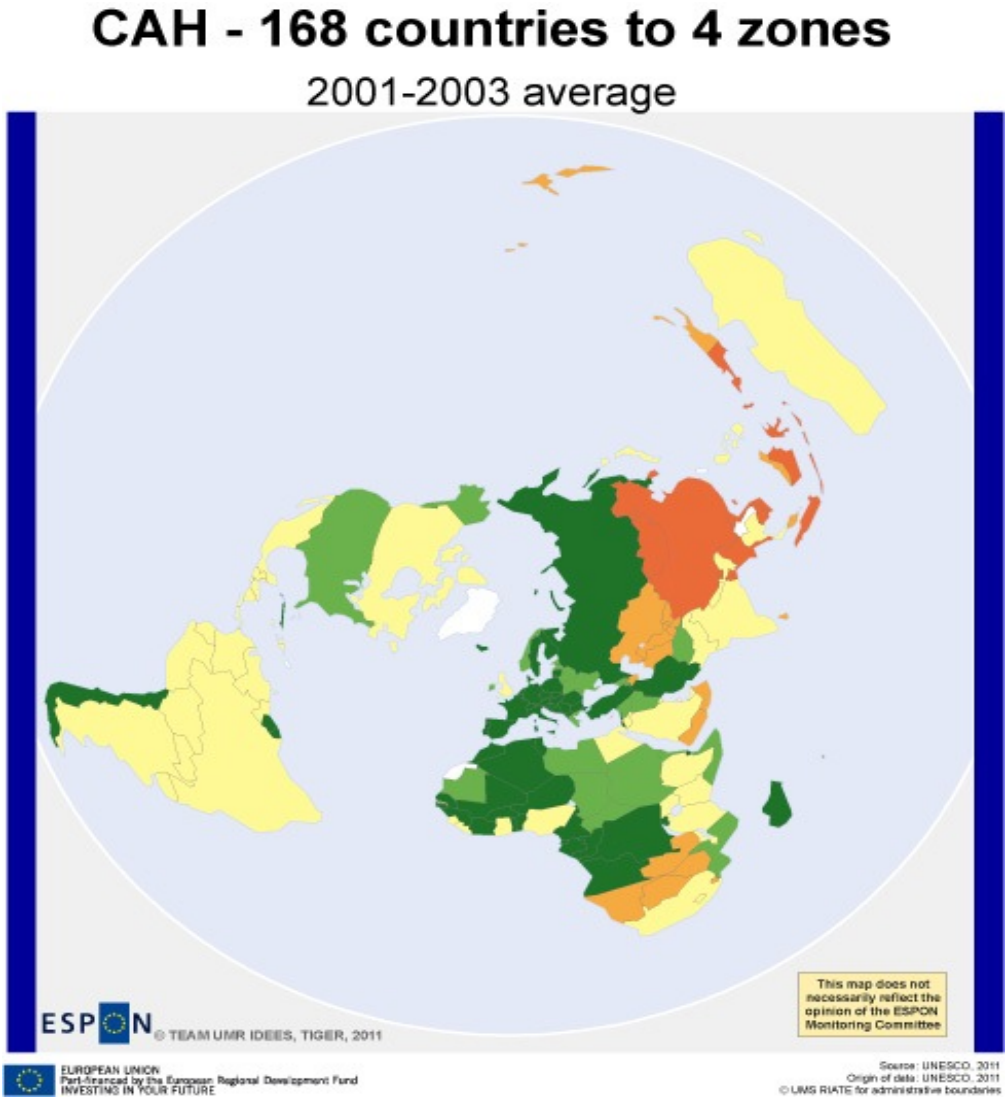




A cluster analysis permits to reveal on the same map groups of countries according to the preferential destinations of their international students. The following map show groups countries distributed in 6 classes:

- Class 1 (in red colour): Asean + 3 oriented countries, with exports of international students less oriented to Espon than average.
- Class 2 (in orange colour): the international students go in majority to the rest of world and less than average to Nafta and Espon.
- Class 3 (in yellow colour): a majority of international students sent to the rest of the world, attraction of Espon, Nafta and Asean + 3 close to the average level.

- Class 4 (in purple colour): average attraction of Espon, rest of the world and Asean + 3, with a slight preference for Nafta.
- Class 5 (in pink colour): a strong preference for Nafta and a very wek attractiveness of Espon.
- Class 6 (in green colour): strong attraction of Espon; the attraction of Nafta, Asean+3 and rest of the world is clearly under the average level.

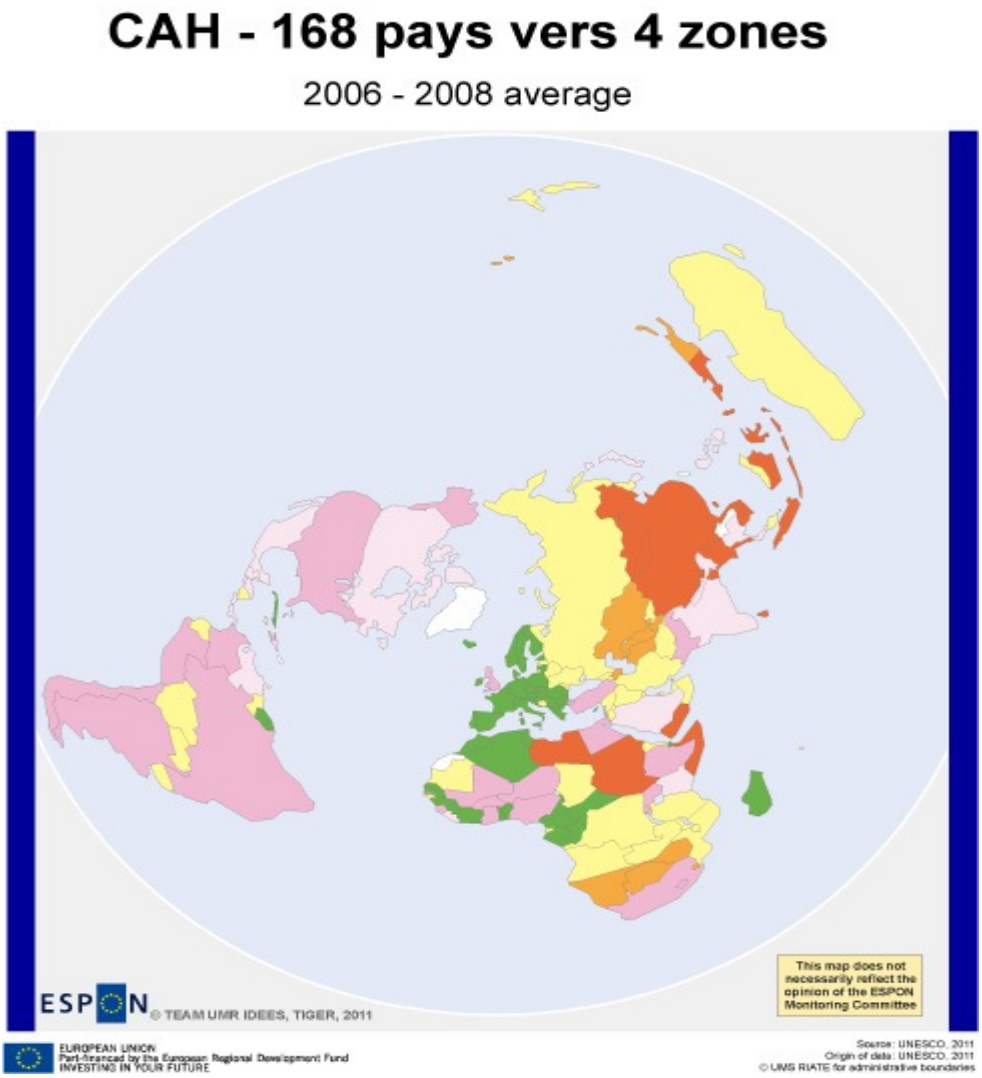


Main conclusions drawn form this map:

- The existence a large region polarised by North America (mainly USA). This region includes almost all the American continent and more distant countries where the political and economic influence of the USA is traditionally high (Turkey, Israel, Egypt, Pakistan, UK), plus countries such as India.
- The existence of a large Pacific Asia region, which roughly matches the process of regional economic integration in the framework of the Asean+3 trade agreement.
- The strong attractiveness of Europe on the international students coming from European countries with a clear limit at the western border of the former USSR.
- The relatively weak influence of Europe in the rest of the world, except in various countries of Northern and Sub-Saharan Africa.

- The division of Africa in several areas of influence because of the centrifugal influence of USA, China and Europe. Nowadays, the traditional influence of Europe is clearly contested by China in eastern Africa.

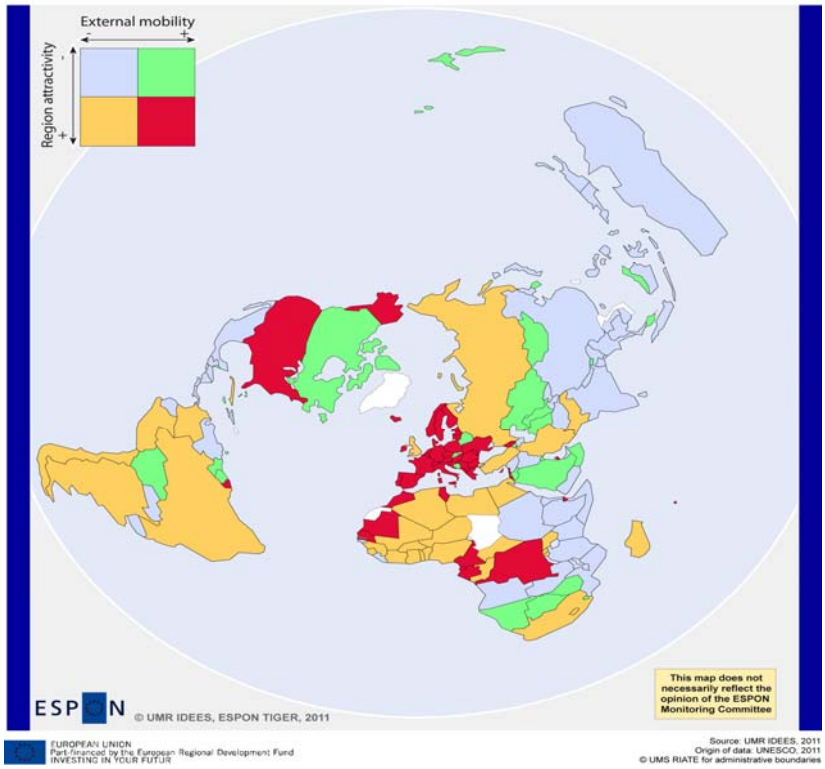
More importantly, a second map based on the same method for the period 2006-2008 shows that the influence of Espon has decreased, mainly in Subsaharan Africa where the influence of China has grown significantly in terms of attractiveness.



Compared attractiveness of Espon and North America

To measure the level of attractiveness with only one variable is not enough. The maps displayed in the previous subsection show the percentage of emitted international students who go to Espon, North America or Pacific Asia. However, the same percentage may have different meanings. If we consider two countries that send 20% of their outward international students to Espon, one can imagine that the influence of Espon is the same in both of them. However, we make the hypothesis take their outward mobility rates are different: in the first case, the students emitted abroad represent 20% of the total number of residing students; in the second case, they represent 40%. We can conclude that Espon's influence is higher in the second.

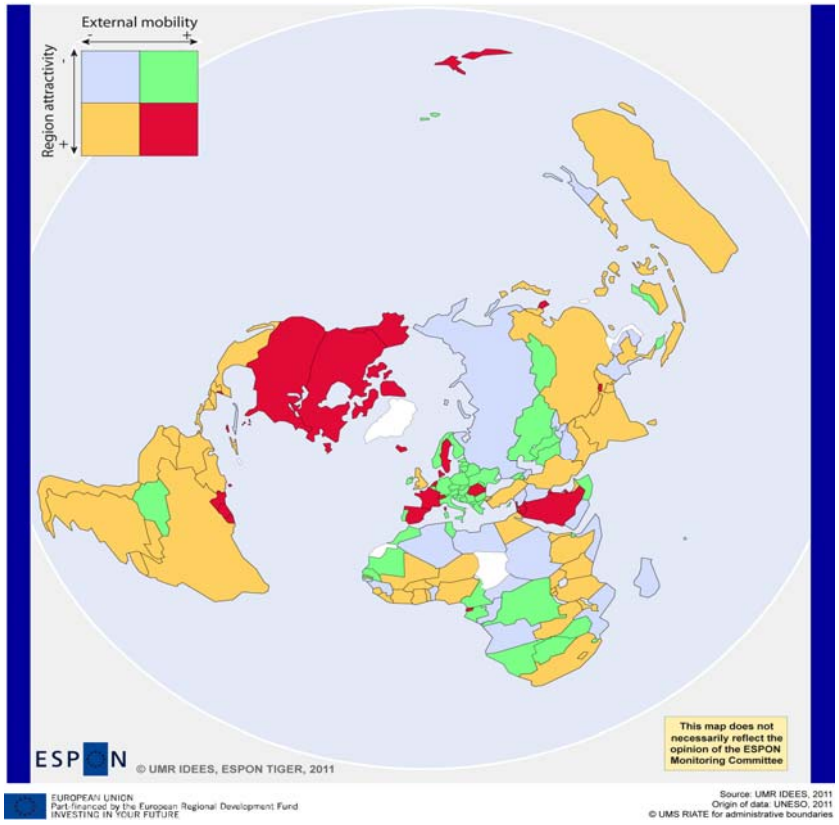
ESPON attractivity on student flows



The relation between the share of international students going to Espon and the outward mobility rate is represented on the three maps of this subsection. The first one represents the relative attractiveness of Espon:

- The countries coloured in yellow are those where the influence of Espon reaches the highest level (relatively high outward mobility rate when compared to other countries and relatively high share of emitted students going to Espon).
- The countries coloured in blue are those where the influence of Espon is the lowest: low attractiveness as regards the share of Espon in emitted students and low outward mobility rate.
- The countries in red and green are in intermediate situations.
- On this map, the area of influence of Espon is relatively small: Europe (except Russia and Turkey), Georgia, USA, Equatorial African countries, Senegal, Mauritania, Morocco, Tunisia.
- More importantly, its influence is at its lowest in rapidly growing economies of Pacific and South Asia and it is low in countries whose outward mobility rate is relatively high (countries in green).

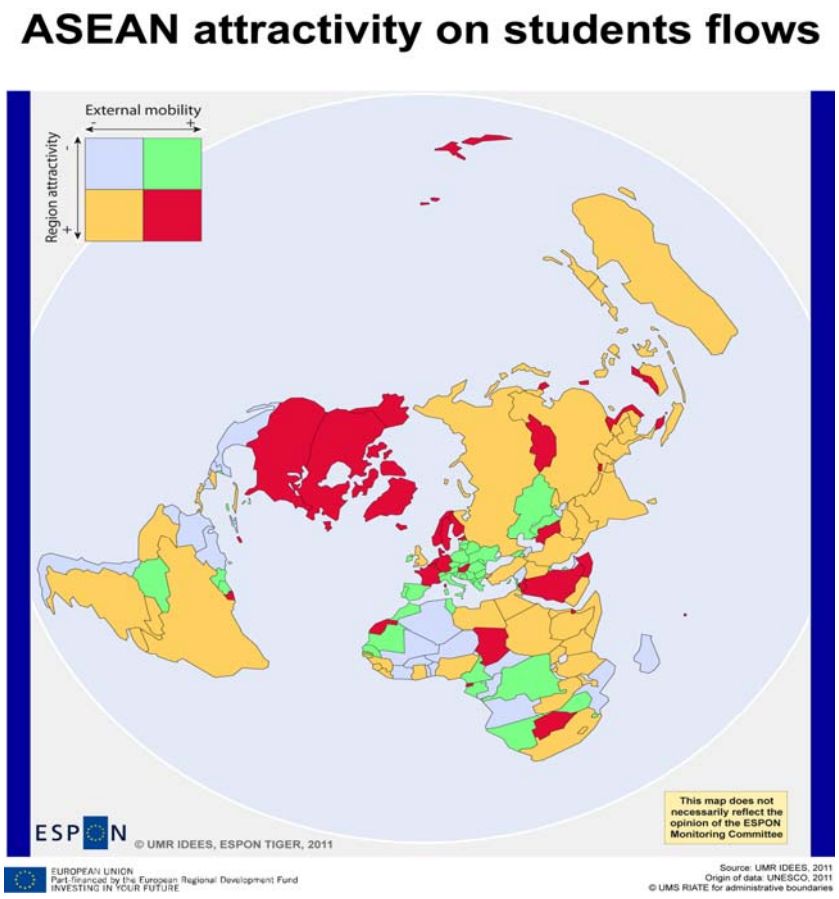
NAFTA attractivity on student flows



The levels of attractiveness or unattractiveness of Nafta (above) and Asean+3 (below) do not show the same geographical patterns:

- The attractiveness of Nafta is high in Canada, various European countries and in the Near East, plus South Korea. It is very low in Russia and various African and Asian countries.
- The attractiveness of Asean+3 is high in North America and in various parts of Asia: not surprisingly in several Asean countries, in Mongolia, in New Zealand. All this confirms the regionalization trend of international students flows. The high level of attractiveness in several African countries certainly pertains to the growing influence of China in this part of the World. It is at its lowest in Latin America and Western Africa, two regions where the influence of the USA and Europe is high.

To sum up, one can assume that the areas of influence of these three world regions are roughly complementary. But the influence if China is likely to grow rapidly in the near future.

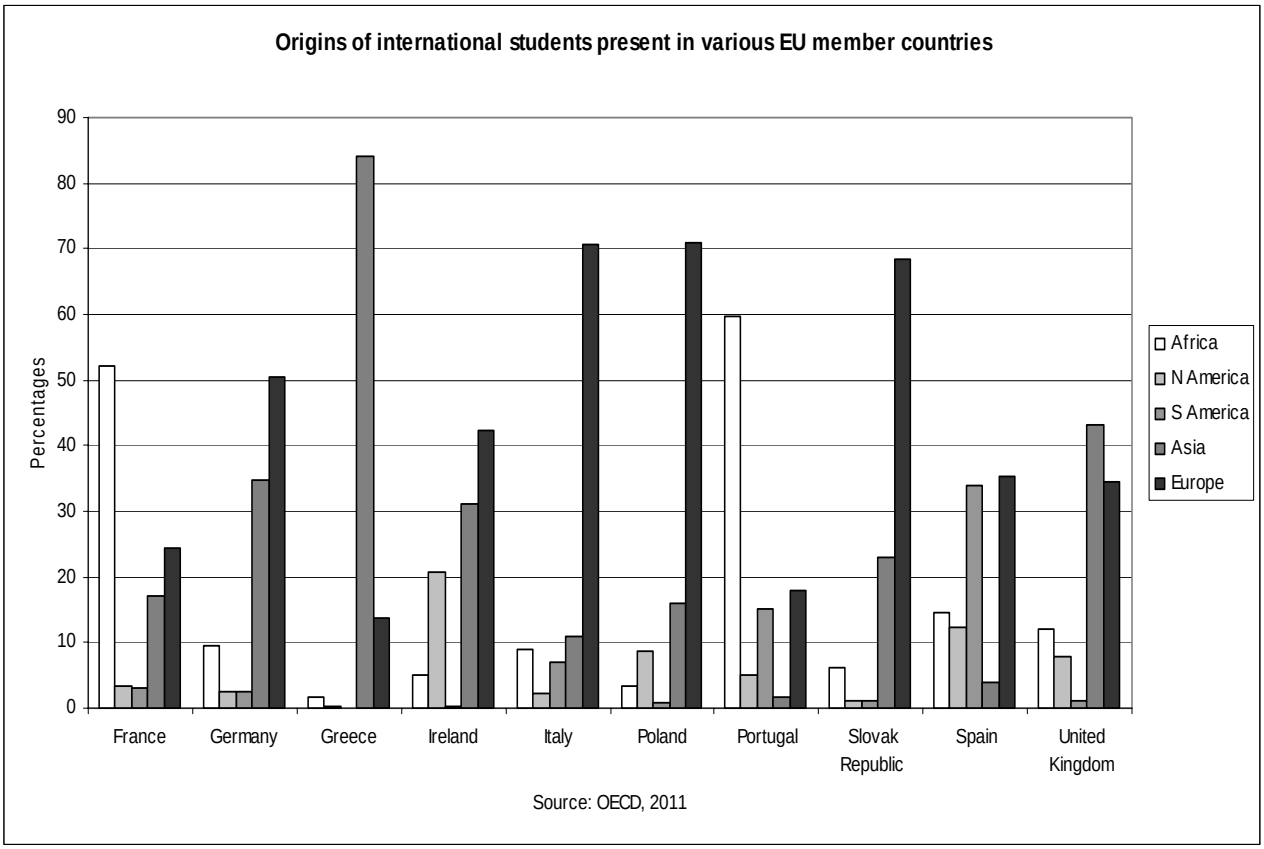


Typology of European countries according the origins of international students

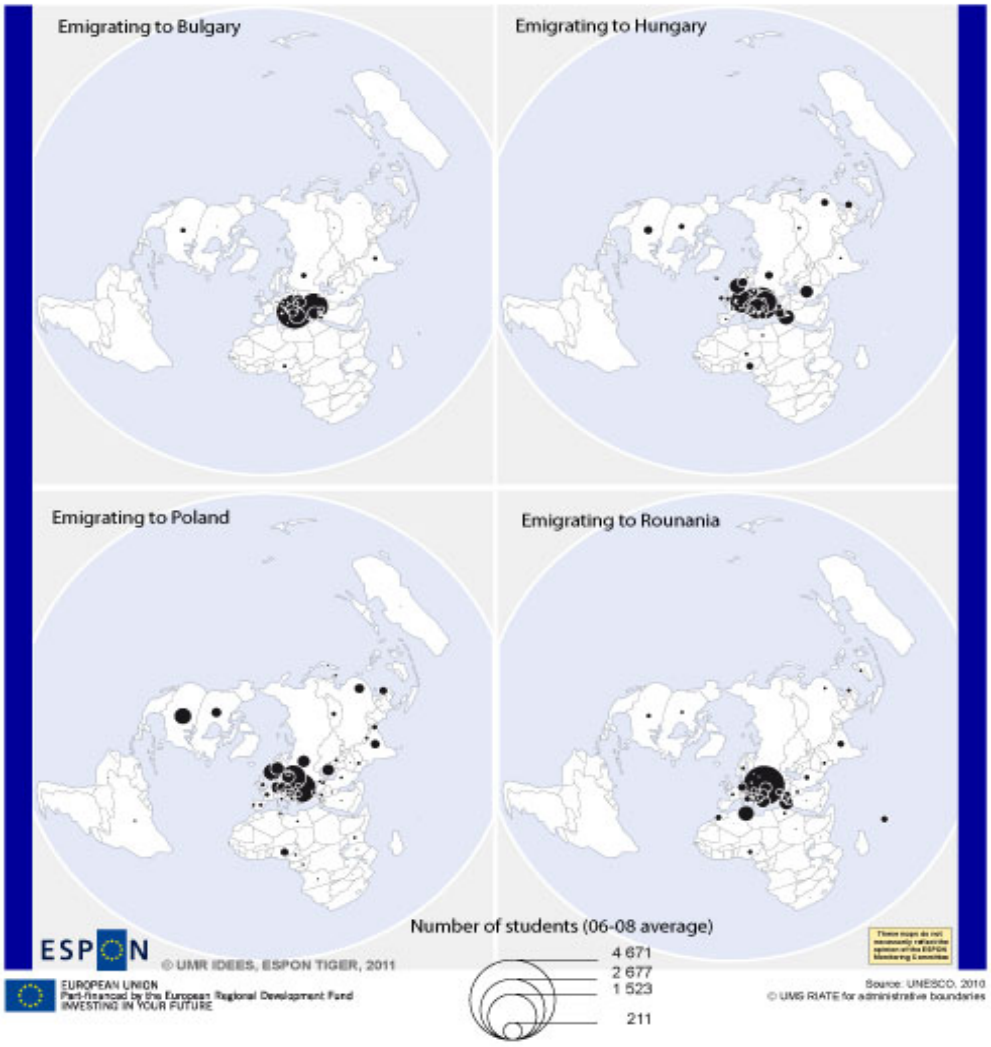
As a whole, Espon attracts many international students from all parts the world. But a detailed analysis shows that the geography of attraction varies a lot according to European countries considered. The origins are not the same in France, Poland, Germany, Sweden of Italia:

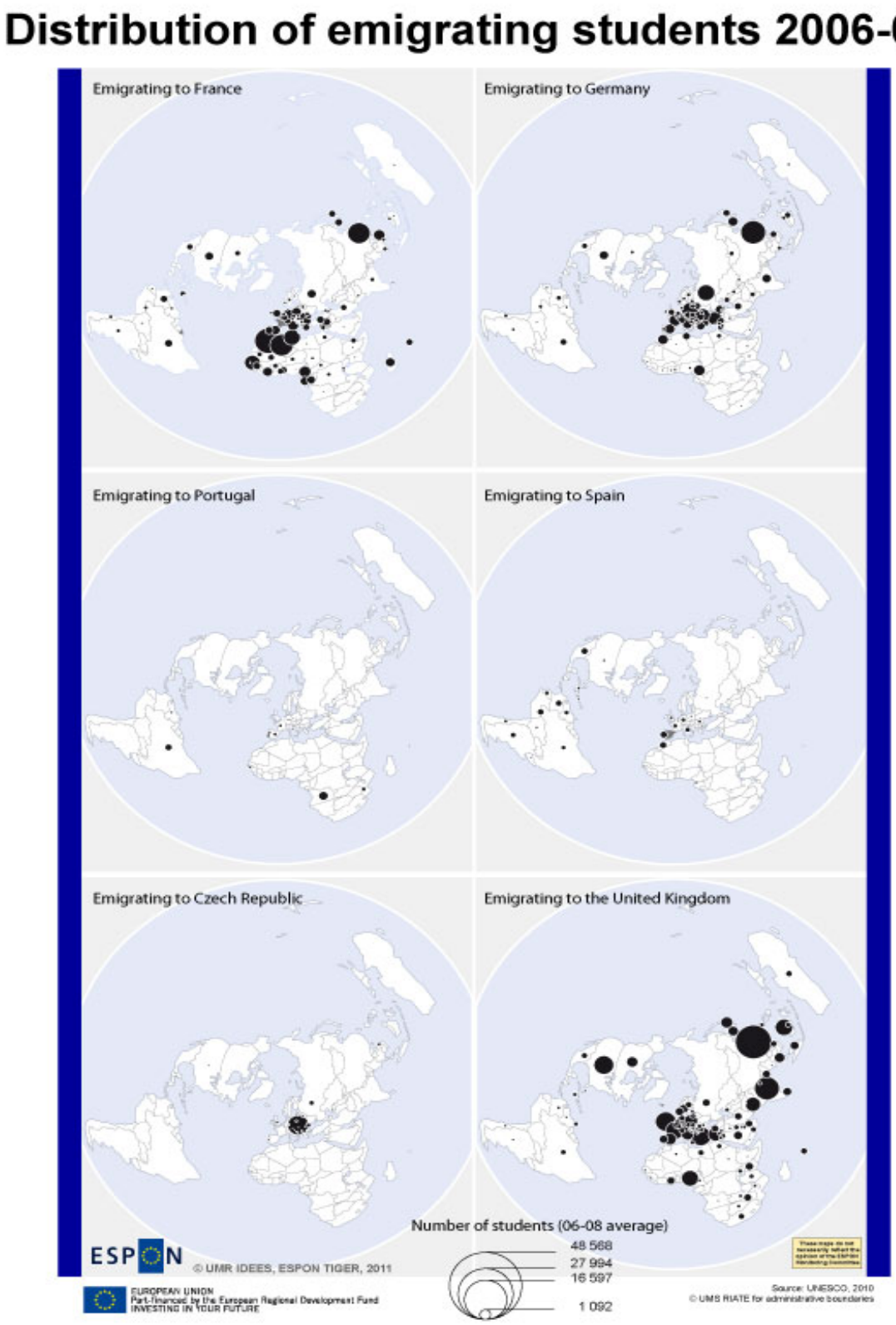
- The number of students coming from Africa is high in France, but very low in Portugal (except for Angola) and Spain for instance. Countries such as UK and Germany are in a medium position regarding with a lower although significant number of students coming from various African countries.
- In Pacific Asia, the attraction of France and Germany in Pacific Asian countries is not that low but it is much higher in UK.
- The attraction of Spain is the strongest in Latin America.
- Last, the attraction of the EU new member states is often strong at the regional level and very low at the global level. It seems that the intensity of flows is based on geographical proximity, especially in the case of Bulgary.

In several cases, the geography of flows is determined by form colonial relations (students from Africa and Portugal in Portugal, from Africa in France, from South America in Spain).


Origins of international students present in various EU member countries
Percentages
90
80
70
60
50
40
30
20
10
0
France
Germany
Greece
Ireland
Italy
Poland
Portugal
Slovak Republic
Spain
United Kingdom
Africa
N America
S America
Asia
Europe
Source: OECD, 2011

Distribution of emigrating students 2006-08

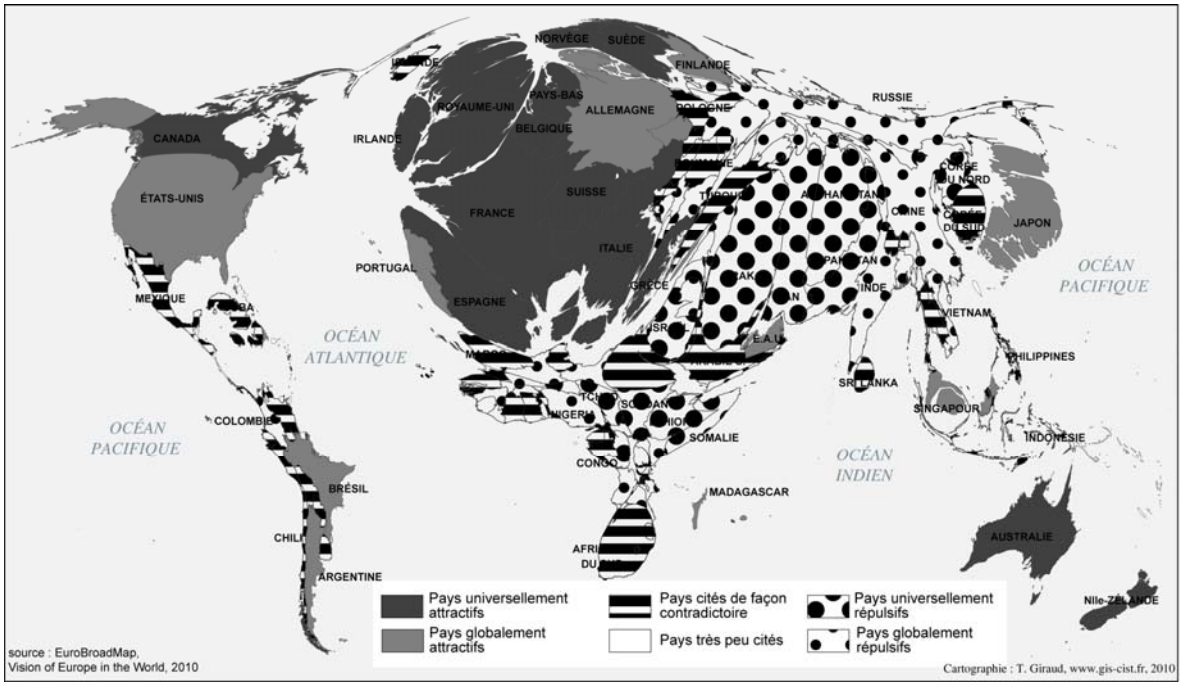




What about the image of European countries? Western Europe, the place to live in?

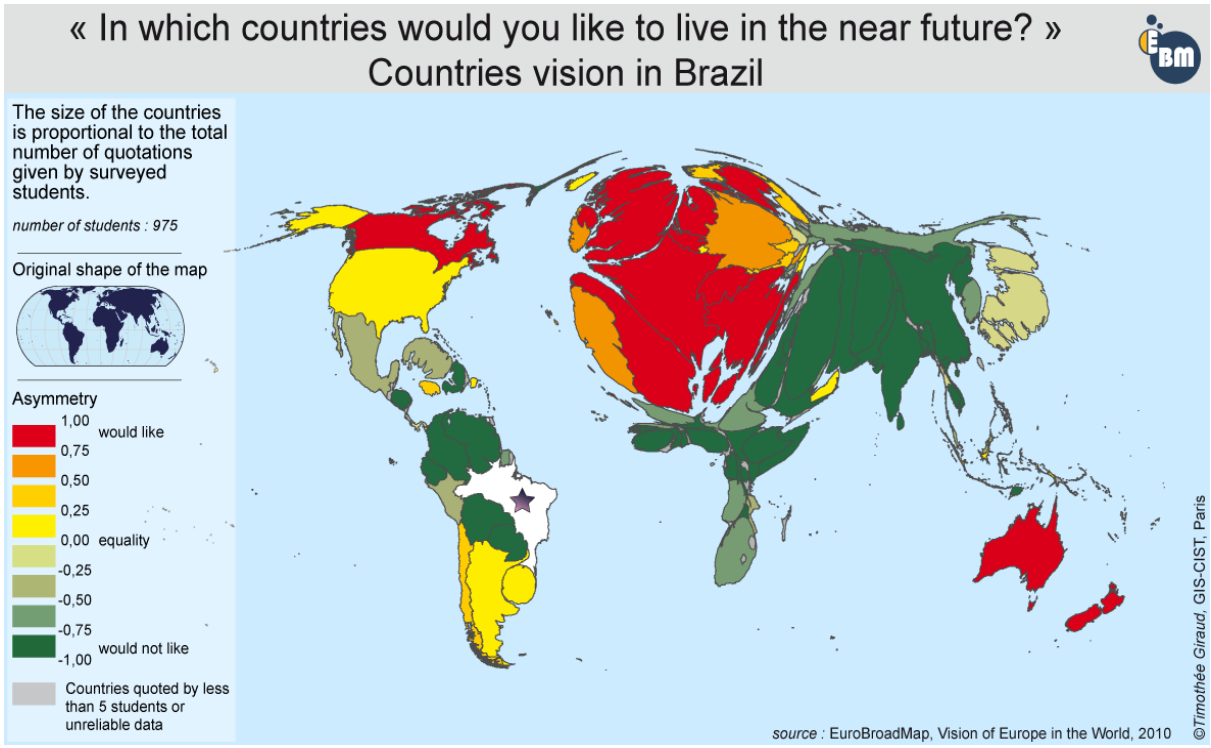
In the framework of the FP7 project eurobroadmap, an international research team has carried out a survey of more than 9 000 students in 18 countries (12 non EU member countries). These undergraduate students distributed in 5 academic domains have been interviewed with a questionnaire in order to analyse their representations of Europe and their vision of the world. This

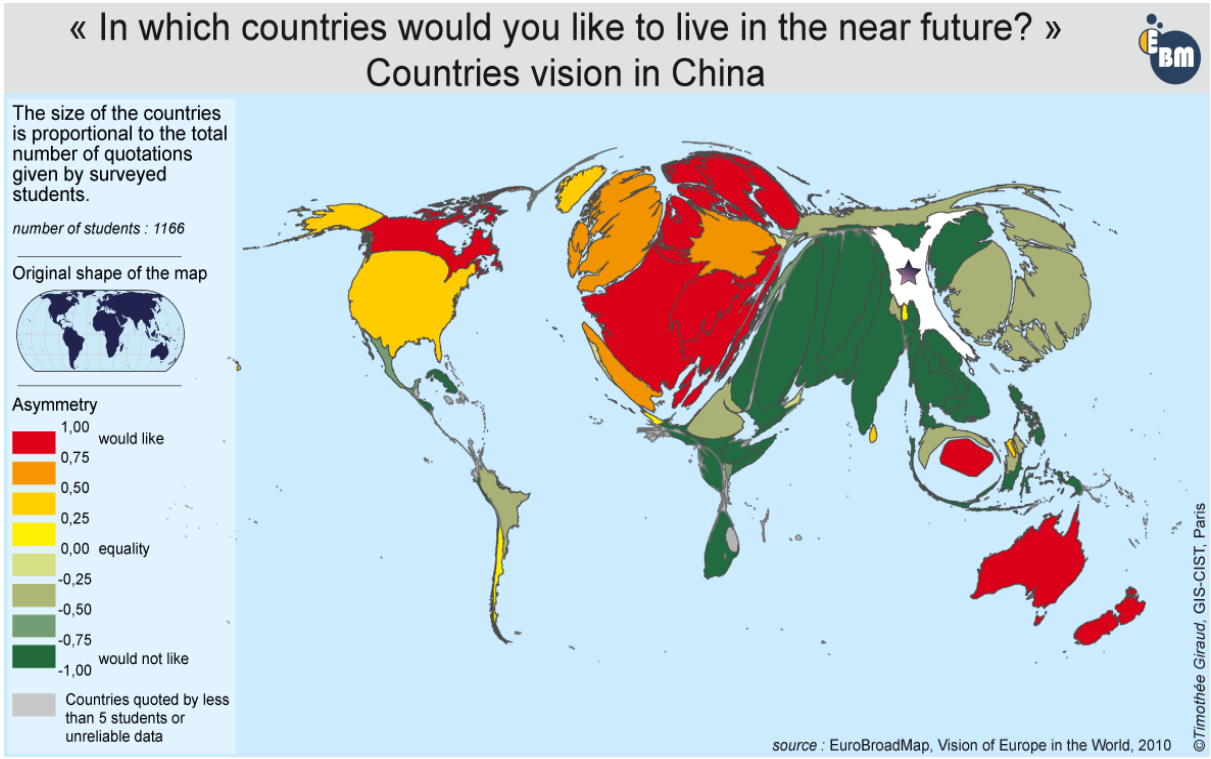
survey gives an insight on the possible relationships between the attractiveness of EU and its image because the students were asked a simple question: in which country would you like to live in the near future? Two variables were drawn form their answers: how many times a country is cited? Is it more or less positively of negatively cited?



The cartographic result of the survey (synthetic cartography of all the answers) shows a bipolar world. Europe has a particular place in the minds of a large majority of students: Western European countries are very much present that is they are often cited; they have a generally positive image. Surprisingly, countries such as France, UK, Spain, Germany are as big as the USA and sometimes bigger and their image is often more positive. On the contrary, the Central and East European countries are less often quoted by the surveyed students and their image is general negative. In a few cases, the image of certain Western Europe countries is not that good (Senegal and Cameroon, essentially because of the absence of visa facilitation).

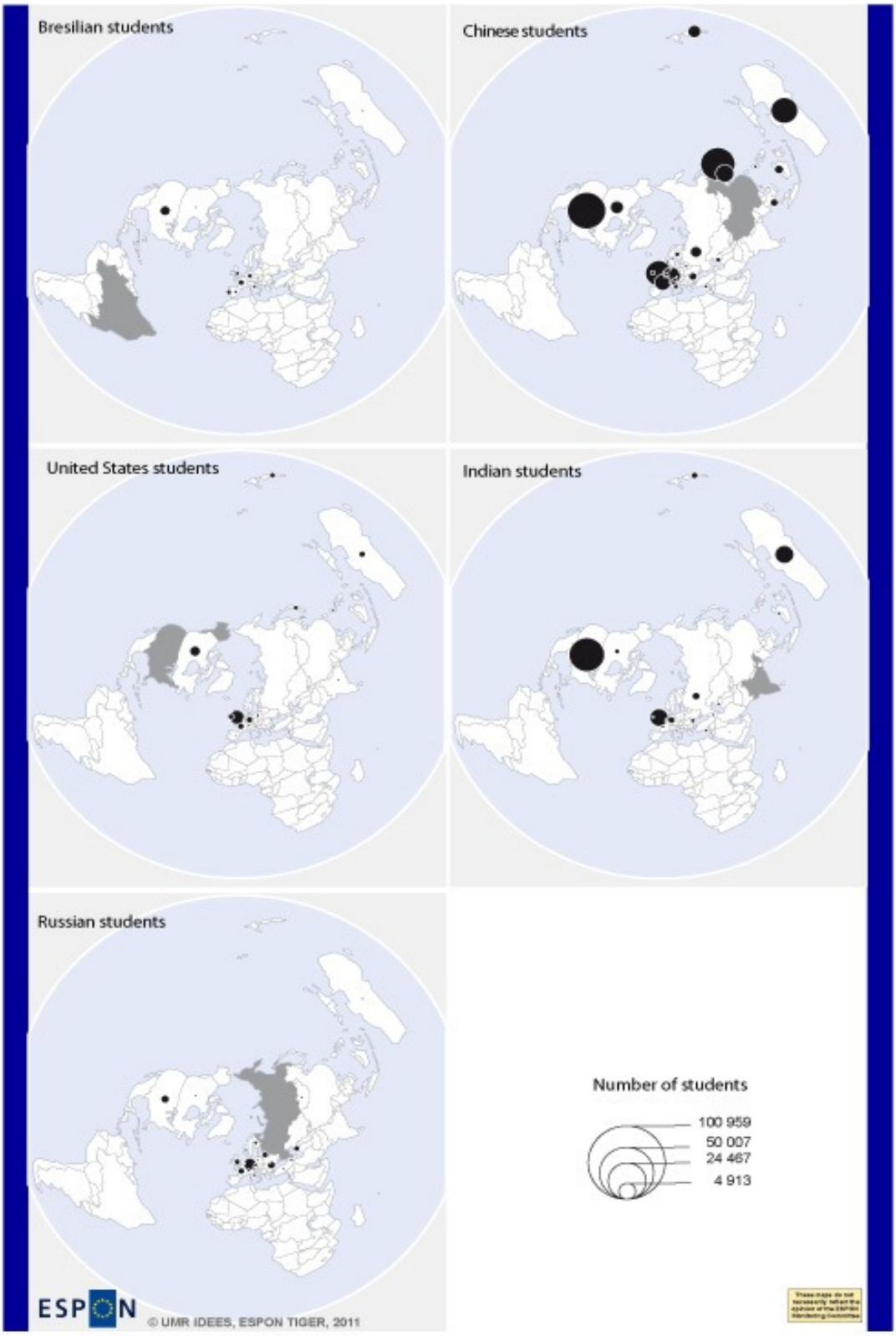
It is difficult, if not impossible, to find a direct relation between the attractiveness of European countries, the intensity of their presence in the minds of students and their positive image, because relatively few students were interviewed. Besides, the survey was not dedicated to the issue of international students' mobility. Nevertheless, their answers reveal the high level of attractiveness of Western European countries. Although it is not possible to find clear relationships between geographic representations (visions of the world) and practices (mobility), it is interesting to confront the maps for a small sample of countries, in this case the BRIC countries. The maps below show the representation of the world of Brazilian, and Chinese students in terms of attractiveness and the observed flows of international students emitted by these four countries.





The maps reveal that the place of Western Europe in the observed flows is very important (very attractive place), but it does not match the importance in the representations of the surveyed students.

Distribution of emigrating students 2006-08



There is no clear correlation between this popularity and the choice of Europe as a region of destination by international students. The observed flow do not match the positive image. They are lower than expected. International flows are determined by other variables.

What are the factors of Espon's attractiveness? A patchwork of varied national situations

The factors of the attractiveness of various countries have been already thoroughly studies by many authors: cost of education, ideological affinities, language proficiency, linguistic and cultural ties, perceived academic quality of education system (Varghese, 2008), governmental policies, etc. For instance, the OECD yearly publication *Education at a glance* states that "language considerations, geographic proximity and similarity of education systems are important determinants of the choice of destination" (*Education at a glance 2009*). According to this publication, the concentration of students is most of the time caused by geographic considerations and differences in entry requirements, language issues, academic traditions, belonging of a considered ensemble (propensity for Anglophone students to concentrate in other countries of the Commonwealth or in the United States), migration networks, attractiveness of specific education systems, etc.

Several factors will be presented in this subpart with a comparative approach, in order to check whether the choice of European countries by international students is based on the same factors as the choice of destinations such as Canada and the USA. This approach also aims at making distinction between types of European countries according to the main factors of their attractiveness. In fact, it appears that there is not one single European type. Several factors have been chosen and tested in order to find possible correlations with the intensity of international student flows: the existence of migration networks, the perception of Europe in the representations of the world of international students[6], the distanced between origin and destination countries, the existence of prior colonial relations, the institutional belonging, the political choices made by destination countries, the international rankings of universities,… The importance of factors varies a lot according to the considered country. Each one is presented bellowed and tested with different methods.

When it comes to all types of international exchanges, the importance of distance is often underlined. Many economists have been working for decades on the influence of geographical proximity on the intensity of international exchanges of goods. Most of the time, their analysis are based on gravity models which assume that the intensity of exchanges is a function of the geographical distance between commercial partners and of the size of these partners. Another definition of the distance refers to the cultural differences between origin and destination countries: one can make the hypothesis that the distance is smaller between two countries when the official language is the same. One can also consider that the distance is smaller between countries which have had a long traditional relationship (prior colonial ties for instance). Last, we have tested the influence of the institutional distance: the world has been dived in several ensembles according to the decreasing importance of institutional relationships with the considered country. For example, for France and UK, the world is divided as follows: the European space (in fact European Economic Area + Switzerland) and the rest of the world. This test is based on the following hypothesis: the stronger and the deeper the institutional relationship is, the more intense the flows of international students are.

[6] Taking account of the results of the FP7 project Eurobroadmap coordinated by Clarisse Didelon and Claude Grasland.

Factors[7] influencing the student flows intensity can varies according the country considered. We chose to analyse 8 countries that embodyies the different national situations encountrered in EU. Three are rencent members (Sweden, Czech Republic and Poland); some are traditional destination countries for international migrants (UK, France), others recently became destination countries (Italy, Spain, Sweden); some are former colonial powers (France, Spain, UK). The Chi2 test carried out provides the following results:

Table XXX: Chi2 values of the explanative factor to student flows toward some selected European countries

	Common language	Colonial link	Institutional distance	Distance between capitals	Wealth difference
Czech Rep	-	-	+++	ns	ns
Spain	++	+++	ns	+	+++
France	+++	+++	+	ns	+++
United Kingdom	ns	+	+	++	+++
Italy	-	-	ns	+++	++
Poland	-	-	ns	++	++
Germany	-	-	+	+++	+++
Sweden	-	-	+	+	+++

- : non relevant
ns : non significant
+++ : very muchsignificant (0,001)
++ : very significant (0,01)
+ : significant (0,05)

The results show that the influence of the considered factors varies according to the country. Of course it is somehow due to the existence or not of former colonial links, but it seems that the difference level of wealth has the strongest influence, before the distance between the countries. It is strinking that the existence of a common language is very much significant for Spain and France and not at all for UK. More, the influence of former colonial links is very much significant for the same two countries and, once again, not very much for UK. A first explanation is that the use of the English language has become more or less universal. It is an official or an ethnical language in many countries (mainly in the Commonwealth). More, it is one of the most broadly taught in schools and colloges in the world. Consequently, even if a student is not a native English speaker, he may have learnt it at school. This fact certainly explains the relative weakness of the colonial ties. On the contrary, French ans Spanish languages are less universal. Consequently, the influence of language seems more correlated to that of colonial links.

Other factors of attractiveness not related to distance can be tested. Three of them will be shortly mentioned bellows. For instance, there are often similarities between the origins of international students and the origins of international migrants. This confirms that the overall process of international migration have in some countries a influence on the geography of international student flows. The existence of transnational migration networks helps many international students to settle in the destination countries (especially for the housing), especially when there are strong and ancient political and cultural relations with the country of origin (colonial ties and common language for example). We have systematically compared the main origins of international migrants

[7] The same factors as those used in the previous analysis have been tested. Only one change has been made in the definition of the "institutional cobelonging" variable: there is a cobelonging only if the destination country and the countries of origin belong to the European Union or to the European Free trade Agreement.

(foreign persons residing in European countries in 2006, according to the OECD statistics) with the top 20 lists of origins in international students order to highlight their likenesses: 13 countries in Spain, 12 in the Netherlands, Hungary and Romania, 11 in France, Belgium, Czech Republic, 10 in Hungary, 9 in UK, 8 in Italy.

The policies carried out by central governments in order to attract international students (brain drain) and to encourage them to settle and work in the country of destination also have an influence of the level of attractiveness of the countries of destination. Several European countries have made efforts in that domain over the recent years. These initiatives are regularly monitored by the yearly publication of OECD dedicated to education (*Education at a glance*). The governmental decisions in this domain are motivated by the growing importance of the concept of competitiveness in public policies, i.e. a kind of competition between nations and between higher education institutions, as Alain Juppé (French Minister of Foreign Affairs) said in a recent speech (May 10 2011).[8]

We do not totally agree with N. V. Varghese who assumes that there is "a positive association between the global ranking of universities and the preferred destination of students". He states that the "universities in the USA occupy top positions in global ranking, which encourages many to apply to North American universities" (Varghese 4). The influence of the perceived prestige of various national higher education systems is not clear, for several reasons. First, it is difficult to have a clear image of such as representation. It would be necessary to carry out a large survey in many counties and in many universities. Secondly, the most convenient sources to have a view upon the prestige of national systems are the international rankings. However, these ranking are far from being perfect and are often seriously criticized. It is difficult to know at which level the international rankings influence the choices made by students. Do they influence them for the choice of a country (whatever the university) or for the choice of a particular higher education institution? Besides, a ranking as famous as the Shanghai one does not take into account the quality of teaching, but only the quality of research in terms on publications in impact factor journal and of international awards (Field medal, Nobel prize and so on). The *Times Higher Education Supplement Magazine* takes account of the quality of teaching. But nothing proves that potential international students read this publication before to choose their destination. Thirdly, the results drawn from various test of correlation between the rankings and the attractiveness of destination countries are not clear. Only one thing is clear. Most of the time, international students move to countries where they think or know that the education system is more developed (Varghese 4, Li and Bray, 2006) than in their country of origin.

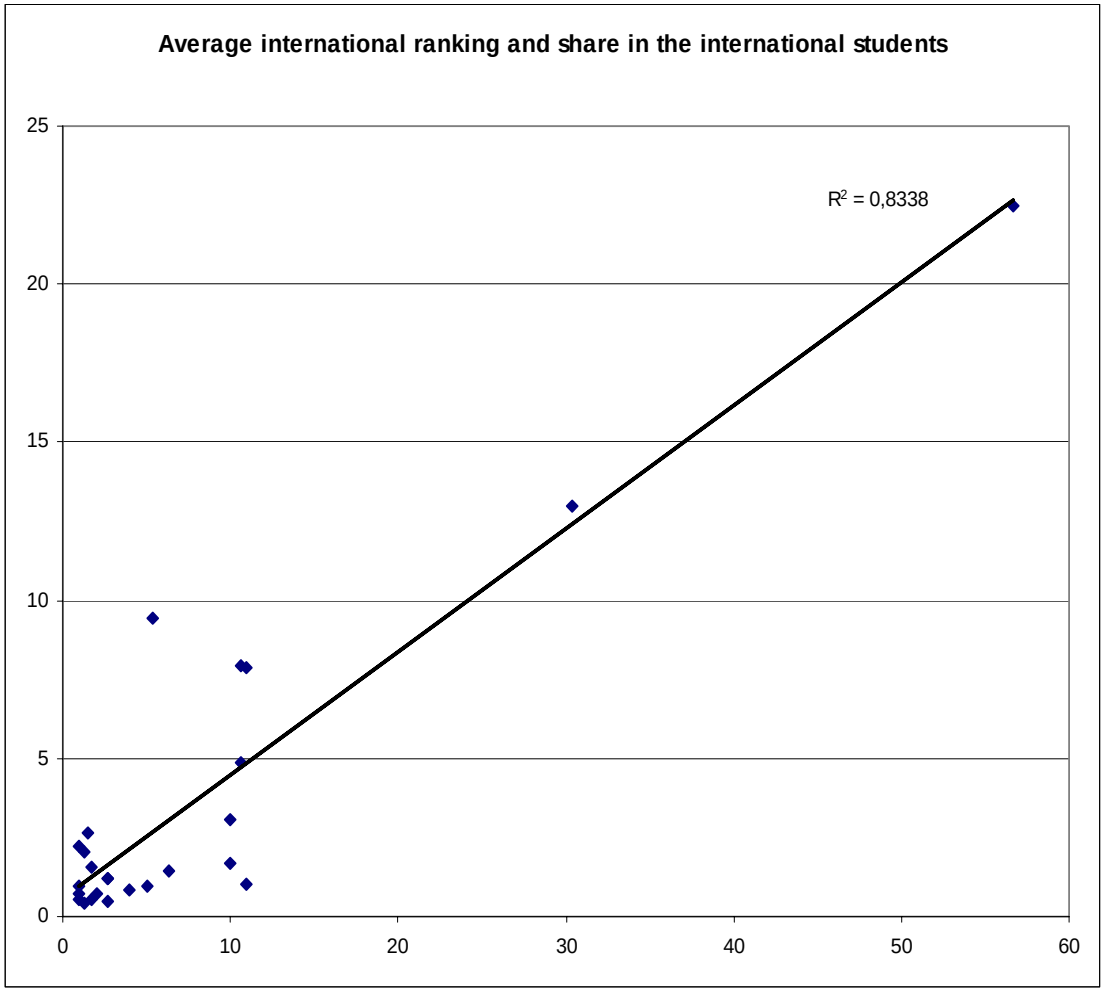
Apparently, there is a strong correlation between the rankings and the presence of international students. The first test is based on relationship between two variables: the average number of universities in the top world 200 of the Times Magazine in 2006-2008 and the average share of a considered country in the total world number of international students. For example, 57 higher education institutions of the USA were in the top 200 in 2006-2008 and the share of the USA in the total inward flows of international students was 22.5% during the same period. It appears of the graph that the determination coefficient is high ($R^2 = 0.83$).

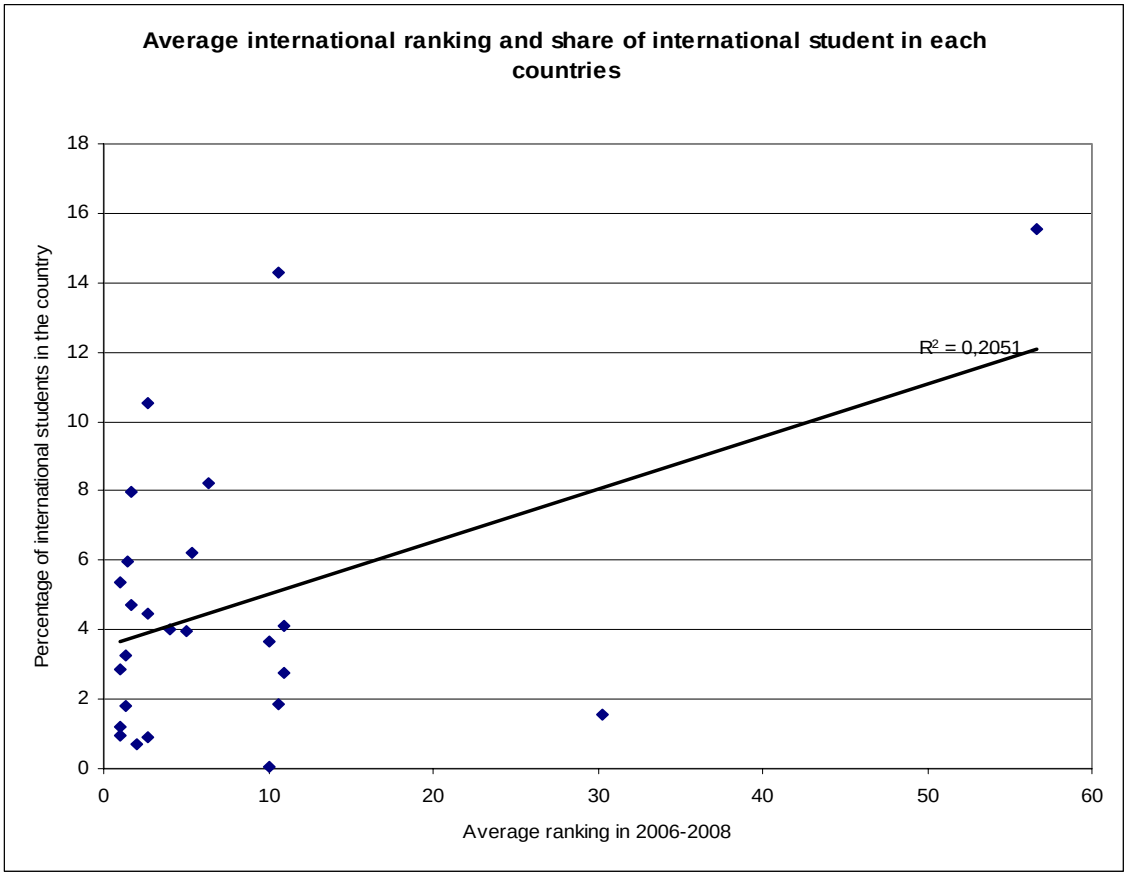
Besides, even in the first test, some countries show a weak relationship between the two variables. The average ranking of the Netherlands is high (11 universities in the top 200) but their share is low

[8] https://pastel.diplomatie.gouv.fr/editorial/actual/ael2/bulletin.asp?liste=20110510.html. See also a recent article about former French Minister for Research and Higher Education who want to attract more the best foreign students in the French universities : http://www.lefigaro.fr/actualite-france/2011/05/10/01016-20110510ARTFIG00716-pecresse-souhaite-attirer-les-meilleurs-etudiants-etrangers.php

(only 1% of the total number of international students in the world). On the contrary, countries such as France and Austria are relatively badly ranked but attract many students. It is particularly clear in the case of France's whose average ranking is relatively bad (only 5 universities in the top 200). It attracted more than 9 % of international students in 2006-2008. In this case, the relationship is biased by other factors such as the demographic size of destination countries, the number of universities, former colonial ties, linguistic influence, etc.

But a second test brings different results. The correlation between the average national ranking and the share of international students in the total number of students residing in a given countries (national and non national students) seems very lows ($R^2 = 0.2$; graph below).





III. Europe and its neighbourhood: asymmetrical regionalization and regionalism

In this third part, we aim at answering a series of questions:

- Is European Union an actor of major importance in the flows of international students in its regional context?
- To which extent, European scientific institutions (universities and other higher education or scientific institutions) contribute to the intensification of relations between EU and the neighbour countries?
- Are there any evidence of European initiatives taken at various levels in order to develop in a more regulated way the scientific relations with neighbour countries?

To loom large at the global level, the European Union must better organise its relations with the countries of its neighbourhood. It should better regulate its relations with them (Didelon, Richard, 2008) and pave the way to a non asymmetric regionalism. This "mutually beneficial" regionalism should not be based only on top down initiative. Many other actors of the civil society and economic sphere can take part to the emergence of a wider Europe by developing horizontal networks of relations. Scientific and higher education institutions play a role in this process because of their growing internationalization. For years, the European Commission has been paying attention to that fact which was several times highlighted in the strategic documents of the neighbourhood policy. In its recently released communication, the Commission puts the stress on this idea and propose to sign mobility partnerships with various neighbour countries in order to foster to mobility of various categories of citizens, among which the students and academics in various frameworks (Erasmus Mundus, Youth in Action, cultural initiatives, etc.):

> This partnership with our neighbours is mutually beneficial. The EU is the main trading partner for most of its neighbours. Sustainable economic development and job creation in partner countries benefits the EU as well. Likewise, managed movement of people is positive for the entire neighbourhood, facilitating the mobility of students, workers and tourists, while discouraging irregular migration and human trafficking. Active engagement between the EU and its neighbours in areas such as education, strengthening and modernising social protection systems and advancing women's rights will do much to support our shared objectives of inclusive growth and job creation.
>
> The EU will propose to neighbouring partners to work towards the development of a Common Knowledge and Innovation Space. This would pull together several existing strands of cooperation: policy dialogue, national and regional capacity-building, co-operation in research and innovation, and increased mobility opportunities for students, researchers and academics. In parallel co-operation in the area of higher education will be expanded through increased support for student and academic staff mobility within university partnerships (under Erasmus Mundus) and structured cooperation for university modernisation (through Tempus).[9]

This communication is in line with previous ones. In 2004, the Commission proposed to open the European Research Area to partner countries beyond their implication in the 6th Framework Program, by supporting "structural and institutional capacity building activities", by implementing such activities through the Action Plans.[10] In 2007, the Commission repeated its will to better integrate ENP partners in the European Research Area, especially by taking more account of their research priorities (such as health, agriculture and socio-economic and governance issues) and by a more frequent use of the ENPI budget.[11]

In this part, we address this important issue by confronting the official discourse of the European Union and the practises of actors at various levels, especially higher education and research institutions located in European and in neighbour countries. Several examples are developed: flows of international students between the neighbourhood and EU member countries, inter university cooperation (bilateral inter university partnerships and agreements), international university associations, scientific networks of cooperation (7th FP and Unitwin networks).

The regional pattern of international student flows

The specialists of international migrations and mobility have pointed out a process of globalization of migration flows. The traditional regional migration systems, mainly based on the geographical proximity of origin and destination countries, are step by step replaced by a new situation in which the long distance movements are growing and the destinations and origins are more diversified. Besides, the traditional system combining an origin and a destination country is replaced by complex systems in which some origin countries have become destination and transit countries. In this context, one can make the hypothesis that the flows of international students are getting more global and less regional.

In fact, this hypothesis reveals partly wrong. Europe is one of the most regionalized region in the world in terms of international students flows. This situation has very much to do, among other causes, with an old tradition of international intra-European exchanges of students and academics, reinforced by the implementation of the Erasmus program and of the Bologna convention.[12]

[9] Brussels, 25/05/2011, COM(2011) 303, JOINT COMMUNICATION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, A new response to a changing Neighbourhood

[10] Brussels, 12.5.2004, COM(2004) 373 final, COMMUNICATION FROM THE COMMISSION, European Neighbourhood Policy, STRATEGY PAPER

[11] Brussels, 05/12/2007, COM(2007) 774 final, COMMUNICATION FROM THE COMMISSION, A Strong European Neighbourhood Policy

[12] However, the importance of Erasmus and Bologna convention should not be over estimated; the Erasmus students represented less than 1% of the all the students in the European Union in 2006.

According to the Global Education Digest[13], more than 77 % of the international students who leave Western Europe to study abroad usually stayed in their region of origin in 2007. The flows are less regionalized in other parts of the world: almost 42% in Pacific Asia, 39% in North America, 35% in Central Asia, 28% in Central and Eastern Europe, 23% in sub-Saharan Africa. The process of regionalization has been growing in various regions since 1999 to 2007, especially in Latin America, Central Asia and Pacific Asia, and to a lesser extent in the Arab States and in Central and Eastern Europe.

In this respect, the Espon region is very different from other world regions. The 2006-2008 O/D matrix shows that the situations are contrasted with different patterns of regionalization in various world regions. The Espon area is much more regionalized in terms of outward flows than inward flows, contrarily to Pacific Asia (see Asean + 3 in the table below). Espon countries tend to receive a majority of non Espon students but they tend to send a majority of their student to other Espon countries. The share of intraregional inward and outward flows is much higher in the Espon area than in Northern America. The latter looks more internationalized than the former.

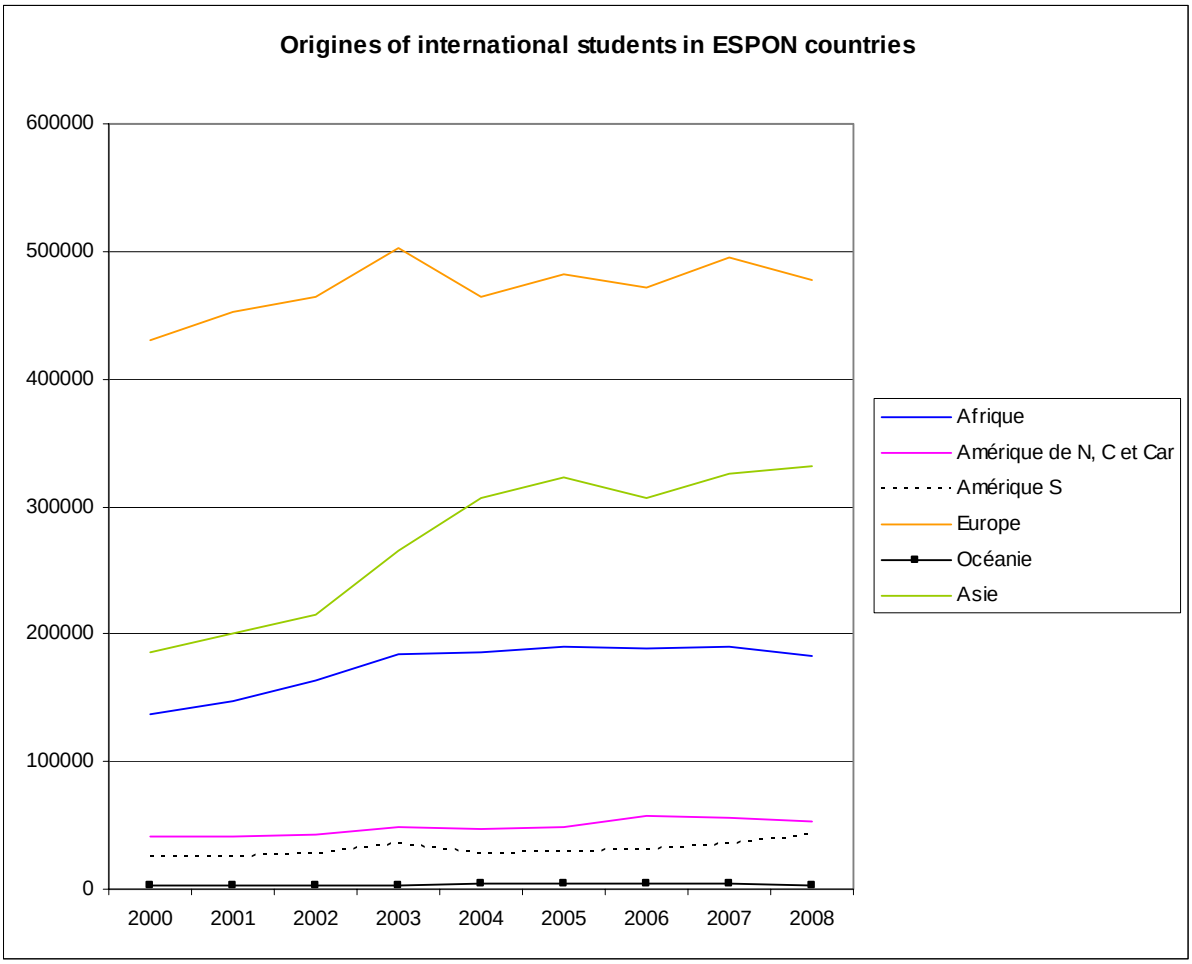
Table: Compared level of regionalization in three world regions

Regions	Share of intraregional inward flows	Share of intraregional outward flows
Espon	36.7	83.1
USA + Canada	5.2	46.3
Asean + 3	83.6	22.8

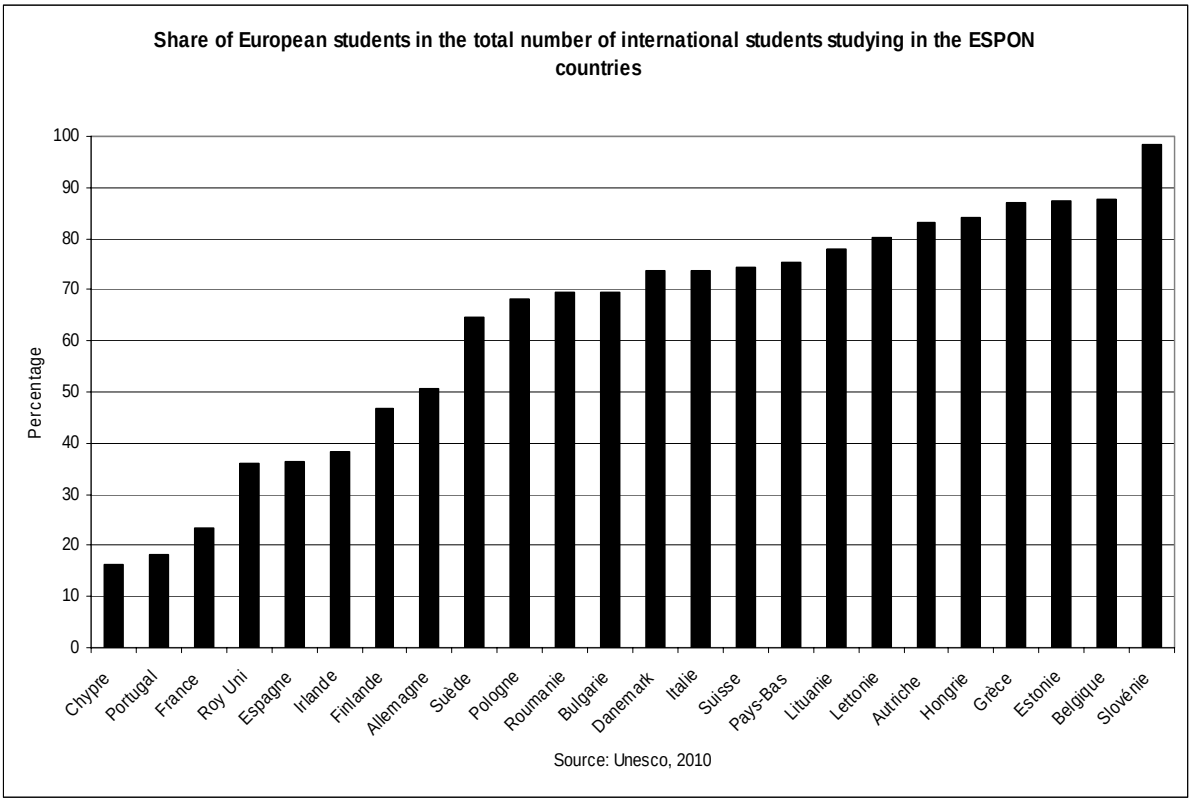
Source of the data: Unesco, UIS, 2010; computation by the authors

Recent evolutions show the increase of the number of students coming from Europe since 2000. Nevertheless, the level of europeanization of inward flows has dramatically decreased since the 1990 because of the rapid increase of the number of students coming from Asian countries: 53% in 2000, 44% in 2008.

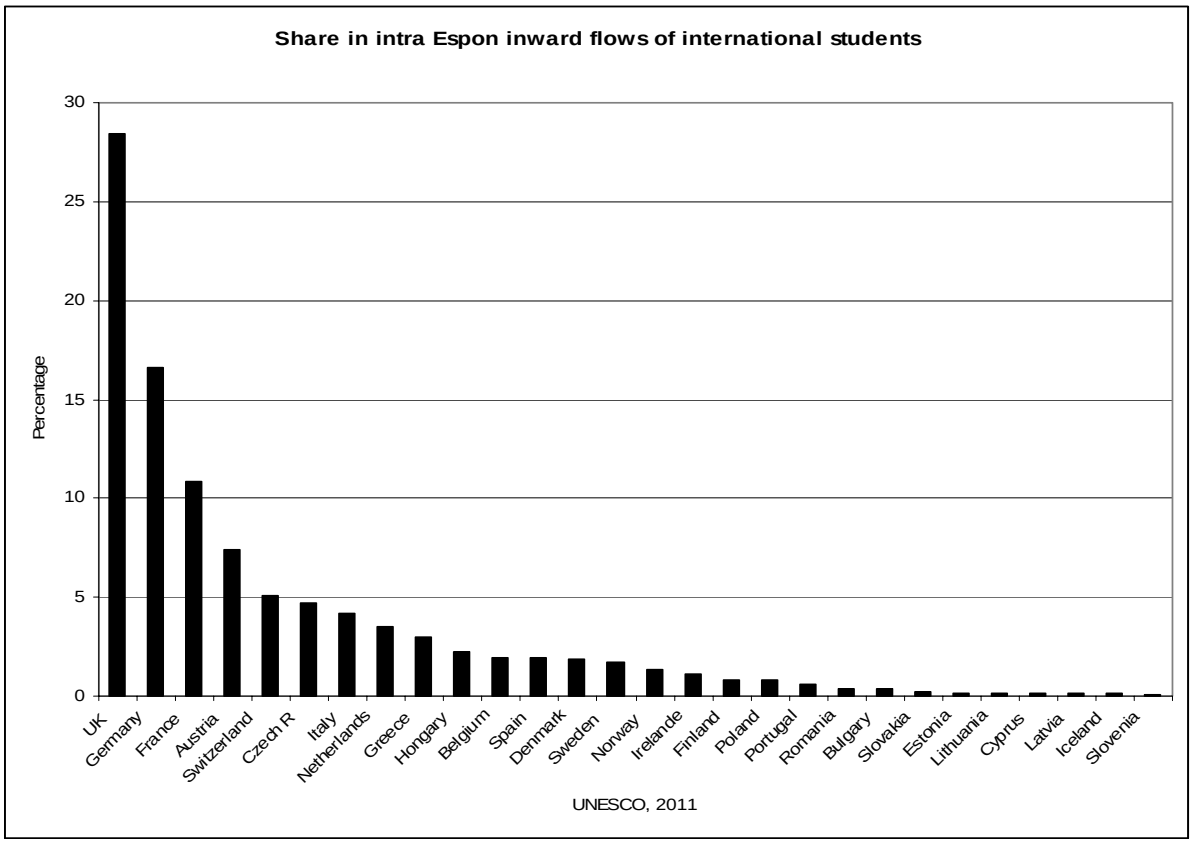
[13] Table 2, page 39.



The situation varies a lot among Espon countries. Some are more europeanized than others (graph below). In Cyprus, Portugal, France, UK, Spain and Ireland (some of them being former colonial powers), the share of international students coming from Espon countries is lower than 40 % and sometimes lower than 20%. On the contrary, the share exceeds 80% in small countries such as Hungary, Greece, Belgium and Slovenia.



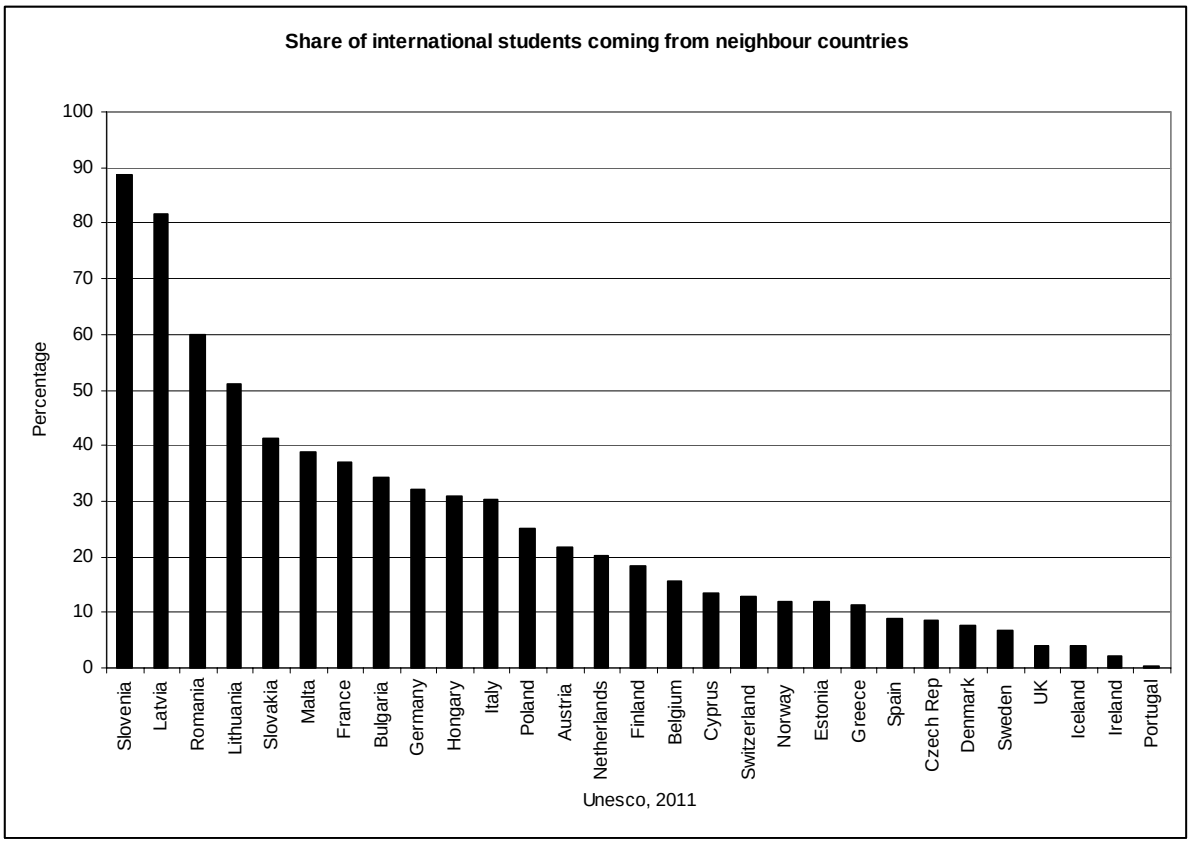
In the Espon area, UK is the most attractive country before Germany and France (graph below).



What about the regionalization of flows in the wider Europe? Asymmetrical regionalization

Many studies have demonstrated the importance and intensity of relations between Espon and its neighbourhood (see in particular the Europe in the world Espon project), especially in the economic field (international trade). Most of the time, these relations are not symmetric: Espon (the European Union) is generally a very important economic partner of neighbour countries (absorbing the bulk of their exports) but the contrary is not true. Neighbours, especially Mediterranean neighbours, are secondary if not marginal partners of the European Union, far behind the United States. This is particularly clear for international migrations: EU is very attractive for the migrants who leave neighbour countries but the contrary is not true. What about the mobility of international students?

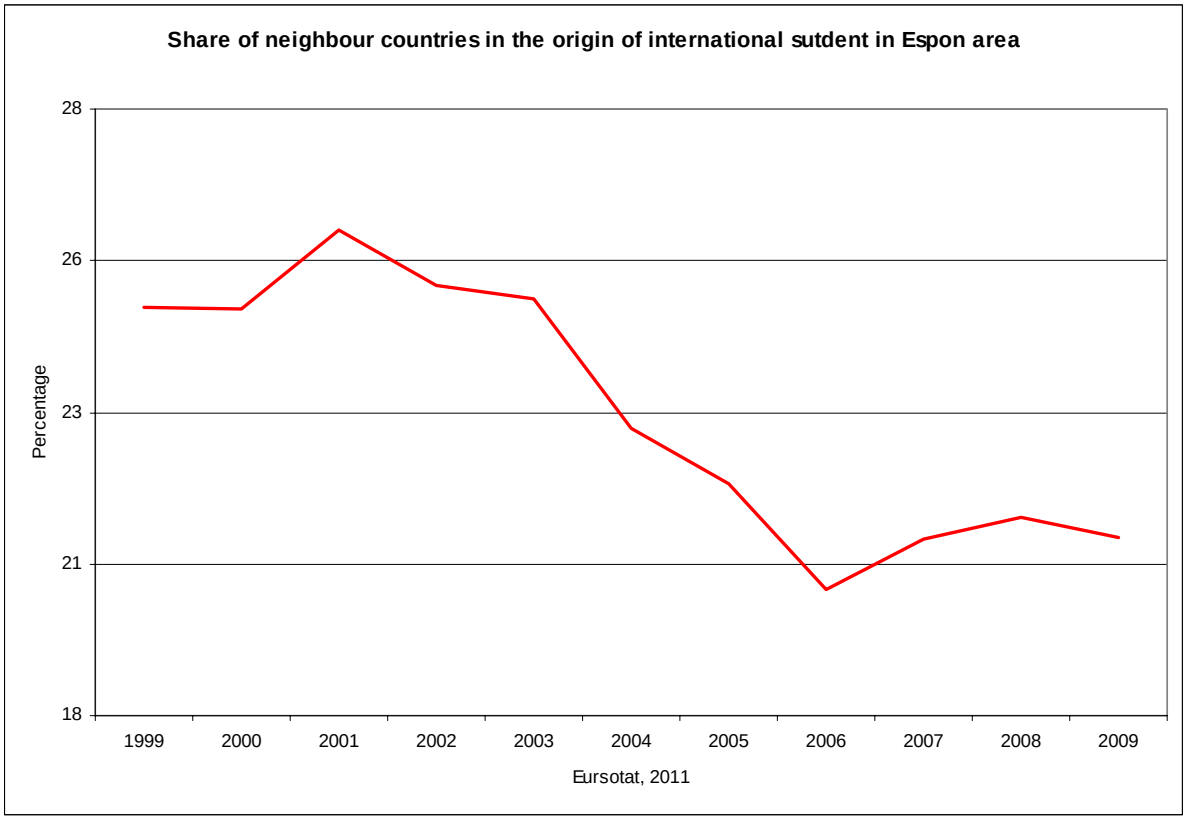
First, the share of international students coming from the neighbourhood is generally low (graph below). It does not exceed 30% of the total in 16 Espon countries. It exceeds 50% in four countries: Lithuania and Latvia attract students coming from former USSR (Belarus for example), Romania from Moldova (mainly because of ancient relation and a cultural proximity) and Slovenia from former Yugoslavia.



This graph shows that ancient and intense social relations which emerged in disappeared political construction (USSR and Yugoslavia) still play an important role in the distribution of international student flows. These relations have been cut off neither by the collapse of these States nor by the enlargements of EU (membership of Baltic States and Slovenia). The European space (including the Western CIS) remains bipolarized to a certain extent. Russia keeps a certain power of attraction on former Soviet Republics: in 2006-2008, 66% of international students emitted by Belarus studied in Russia, 20% of those emitted by Moldova (41% were in Romania), 56% emitted by Armenia and 43% by Azerbaijan.

The share of neighbourhood is relatively high in France, whose former colonial relations with Northern Africa still have an influence on student flows. Such an influence is visible in the case of Portugal, Spain and UK but the consequence are reverse: the colonial empire of these countries did

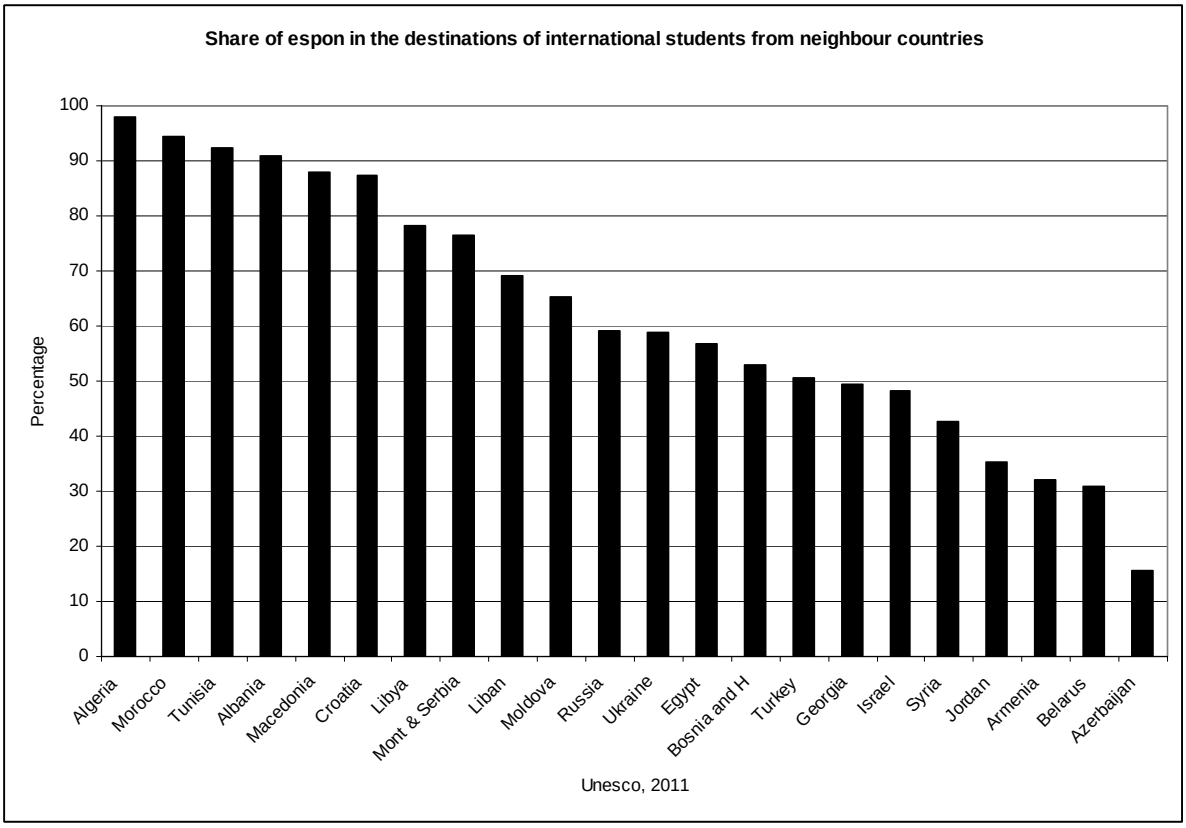
not include neighbour countries; this explains the low share of the neighbourhood in the international students residing on their territory.



In the mean, the share of neighbour countries in the Espon is slightly higher than 21% in 2009, but it was roughly 25 % in 1999. Besides, these figures look very low when compared to other regions. In Northern America (Canada + USA), the share of international students coming from Caribbean and Latin America was higher than 60% in 2006-2008. That reveals the existence of a mobility gap between Espon and the nearest countries.

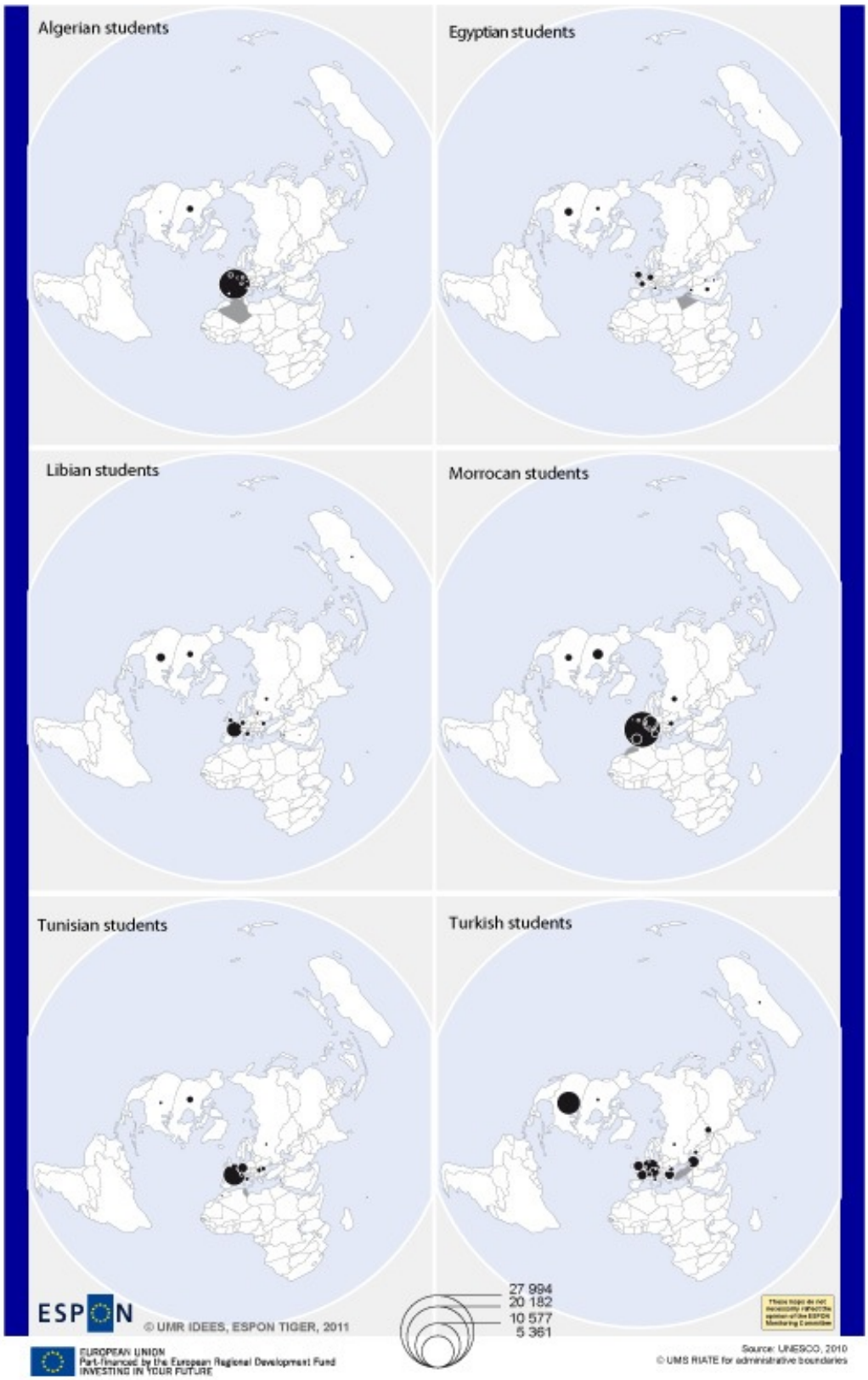
The mobility of international students emitted by neighbour countries is very much oriented toward the Espon area. This reveals a non symmetric relations or centre periphery relation. In the mean, the countries of neighbourhood sent 62 % of their international students to Espon in 2006-2008. But the situations vary from 16% for Azerbaijan to 98% for Algeria.[14]

[14] This very high percentage for Algeria may be due to missing data and errors in the statistics provided by the UNESCO.

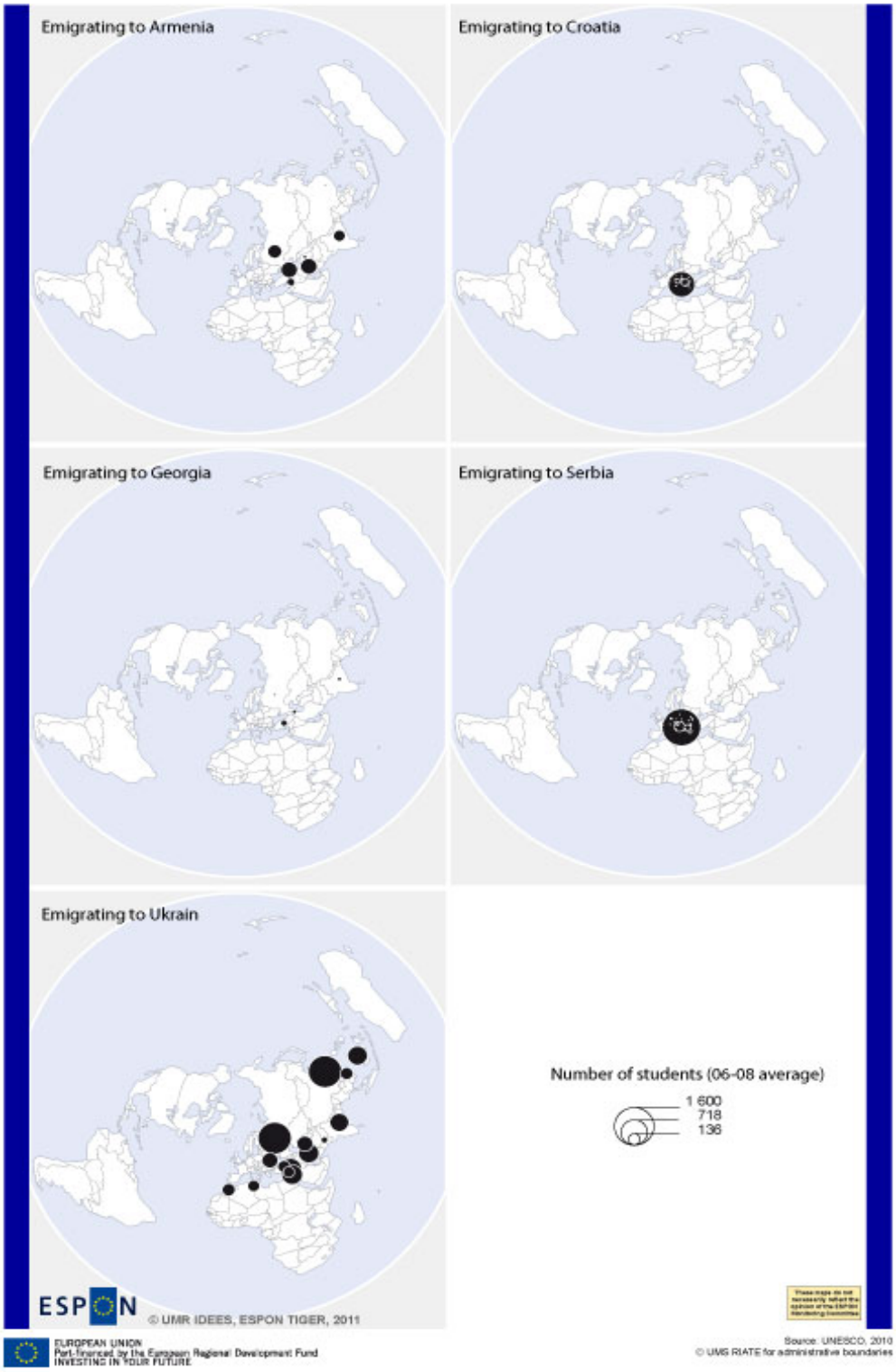


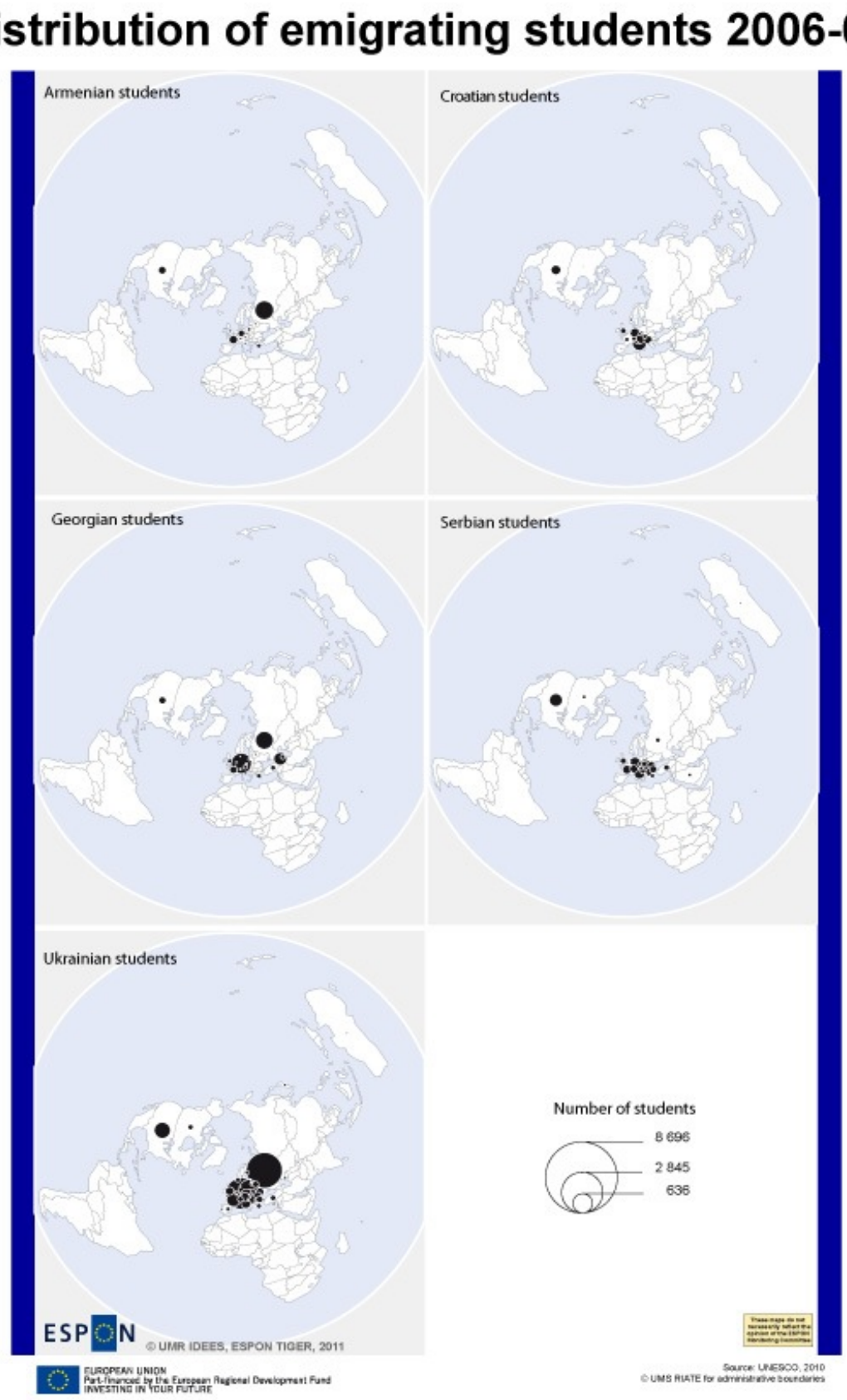
This non symmetrical relation is confirmed by the maps showing the destinations of neighbour countries' international students. Most of the time, Espon is by far the main destination of these students, in spite of the attraction of the USA for students emitted those by Turkey and Serbia and in spite of the growing attraction of Canada in Northern Africa.

Distribution of emigrating students 2006-08



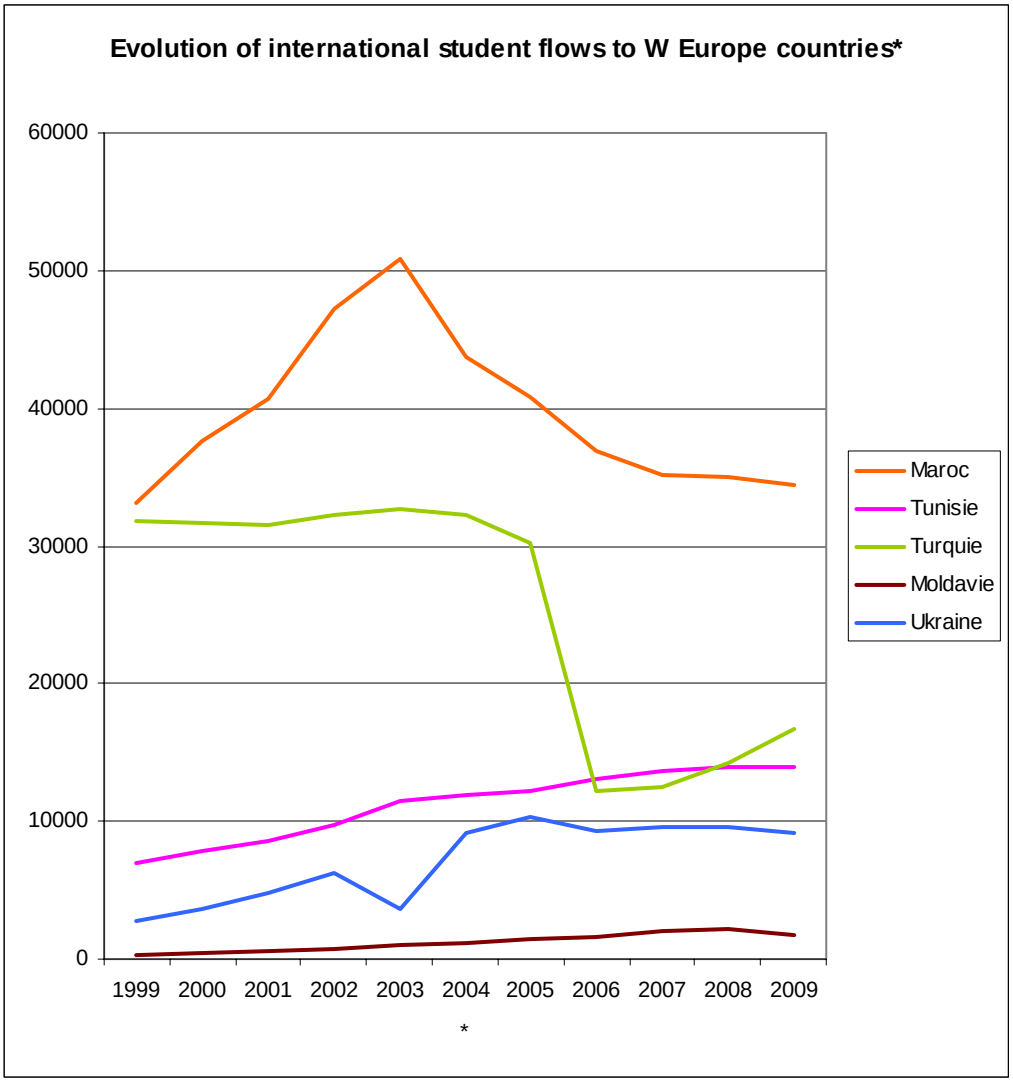
Distribution of emigrating students 2006-08





Recent evolutions reveal a relative decline of Europe's attractiveness. The graph below shows a dramatic decline of international student flows from Morocco and Turkey. Meanwhile, the number of student emitted by Turkey to the USA has dramatically increased (8,770 in 1999 and 12,276 in 2007). The declining of attractiveness may have been caused by the European procrastination

regarding Turkey's accession. The popularity of the European Union has certainly decreased over the recent years. In addition, the flows from Morocco to the USA have increased. Unmistakably, what was traditionally a preserved area for Europe has become an area of competition to attract highly skilled young persons who think that they will have more opportunities in North America than in Europe.



The regionalization of international students mobility can be mapped in another way. On the following map we have determined large geographic ensemble based on the intensity of international flows. In a first step, we made a evaluation of predicted flows according to the weight of countries in the matrixes of international student flows. We built a model of spatial interaction based on a simple hypothesis: two countries which send many students abroad are supposed to exchange a lot. In a second step, we compared the observed and the predicted flows. When the observed flows were superior to the prediction of the model, they were included in the same ensemble.

We start from a matrix of origin/destination of students at the country level. In a first step, the matrix is made symmetric, meaning that the flows have no more directions and that we only consider the intensity of relations between two countries. In a second step, on this symmetric matrix, we calculate chi² in order to identify the most intense relations between countries:

(Observed flows – expected flows)/ (expected flows)$^{1/2}$

Expected flows are calculated according to the importance of the countries in the exchange of flows. In other words, if two countries send or receive many students, they are supposed to have many exchanges between them. Compared to other indicators, Chi² has the advantage not to highlight first exceptional figures on low volume of exchange. In a third step, after having calculated all chi², we group together the two countries that have the more intense relations (the highest chi²). We have now N countries minus 1 and we begin the process again and again until the highest Chi² is nil, meaning that we find no relations more intense than expected. In the case of the matrix of student's flows, the process is stopped with 8 groups among which it is possible to analyse the flows.

The map shows a split Europe and a world divided into large regions composed by countries with preferential relations. Not surprisingly, some Espon countries have more intense relations with the neighbourhood than with other Espon countries (France with Western and Northern Africa). Germany has preferential relations with the majority of European countries and also with a large European space spanning from the Rhine to the Pacific Ocean. Nordic countries form a small region and the UK + Ireland are isolated from the rest of Europe. Spain and Portugal has preferential relations with its former Latin American colonies. Last, a large Near and Middle East includes Arab Countries and Eastern Africa, revealing the relative weakness of European attraction (same situation as for the international migrations).

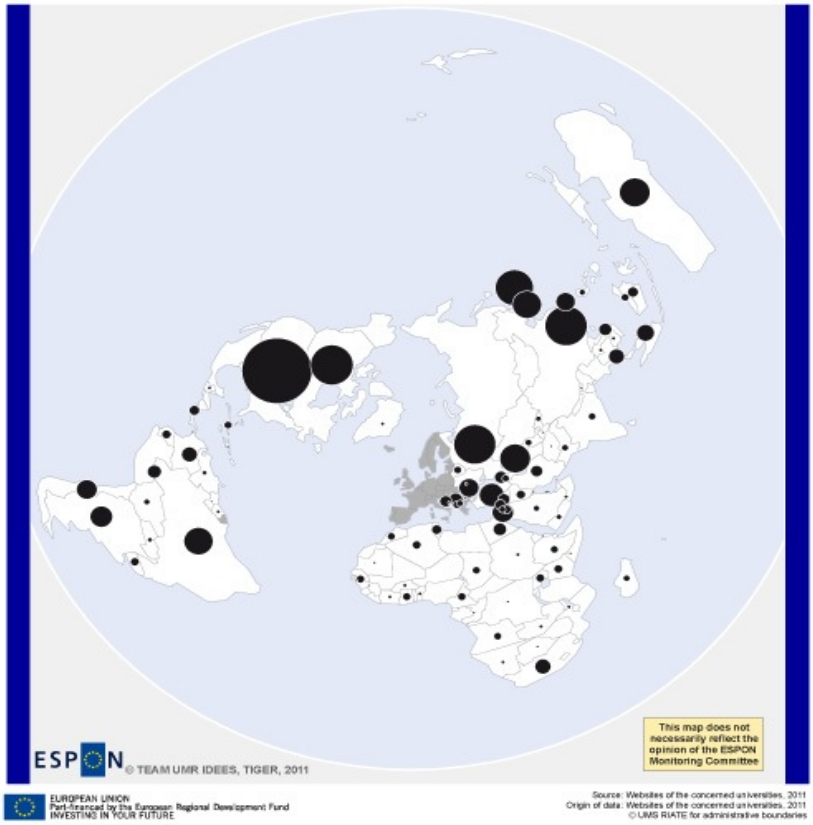
Regionalization without regionalism? International cooperation of universities

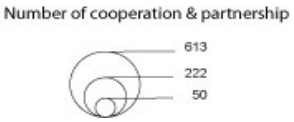
Regionalization designates the concentration of international exchanges in large multinational ensemble between contiguous countries. In spite of globalization, geographical proximity is still a powerful factor of commercial and social relations. This process is often backed by regionalism, i.e. a set of strategies implemented by various actors in order to foster their relation with other actors located in the same part of the world (contiguous countries). Until the 1980s, regionalism was most of the time a top down initiative for it was based on intergovernmental cooperation. According to Hettne and Söderbaum, this kind of regionalism has not disappeared but another one has emerged in the 1990s: the new regionalism. This new regionalism is a bottom up one, because it is based on the development of dense networks of horizontal relations between non governmental actors (civil society, local governments, NGO, etc.). In this subpart, we identify basic actors in order to reveal their participation in the construction of a wider European region, including Espon and its neighbourhood: universities and other higher education institutions, scientific cooperation programs.

We have built a sample of European universities and higher education institutions and we have searched information about the geography of their bilateral international agreements. The sample is composed by 43 institutions. First, we included well ranked European universities in the Times Higher Education Supplement: these 17 universities are the best European in five World Top 50 (one top 50 per academic domain: Arts and humanities, Social sciences, Engineering and IT, Natural sciences and Live sciences and biomedicine). Secondly, we enlarged the sample to 26 extra universities all located in the capital cities of the Espon countries. We chose these universities because we made the following hypothesis: thanks to their particular status (highly ranked or located in capital cities), they are the most accessible and they supposed to be embedded in large networks of cities spreading over many countries; they are located in the most competitive European regions; their scientific excellence maybe a efficient pull factor for international students and researchers form neighbour countries. The objective is to evaluate the relative importance of neighbour countries' universities in these networks. Generally, the lists of bilateral agreements

signed by the chosen universities are available on their websites.[15] When it was not the case (Oxford, Cambridge, La Sapienze and Malta), we found the lists on the website University directory world wide (http://www.university-directory.eu/), which provided information about 46,500 academic institutions in higher education in the world. These agreements are aimed at facilitating the mobility of students and researchers between universities. We can then consider that they provide a useful insight in the construction of a wider European space of knowledge.

Geographical distribution of cooperations & partnership
signed by ESPON universities



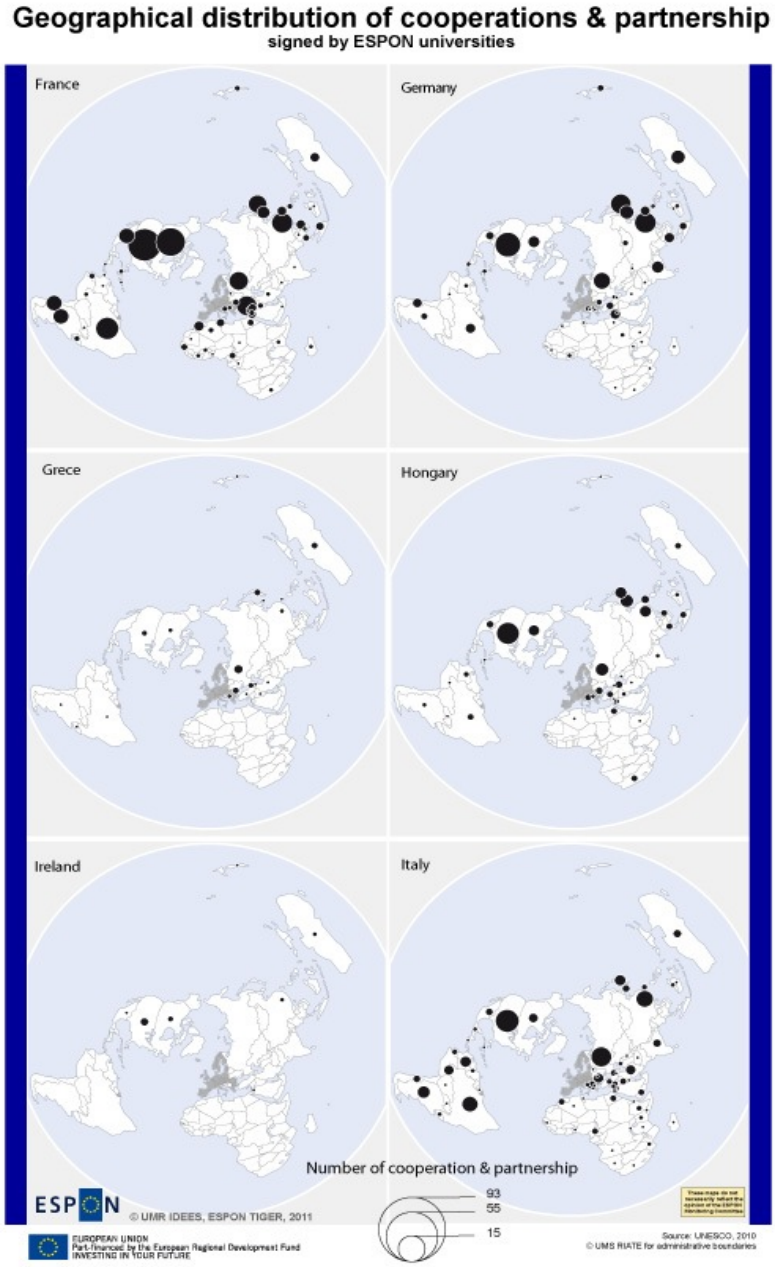


The geography of bilateral agreements is shown by the map and the graph above. As a whole, the neighbourhood represents 22% of the total number of agreements (648 out of 3,010). But surprisingly the agreements signed with universities of the Mediterranean neighbourhood are very few. The agreements signed with Morocco (20) are less numerous than with small countries such as Serbia (23), Israel (24) or South Korea (104). The eastern neighbourhood is more concerned by bilateral agreements. Universities of North America are by far the main partners, before those of Pacific countries (China, Japan, Australia). Africa and South Asia are far behind. Besides, the

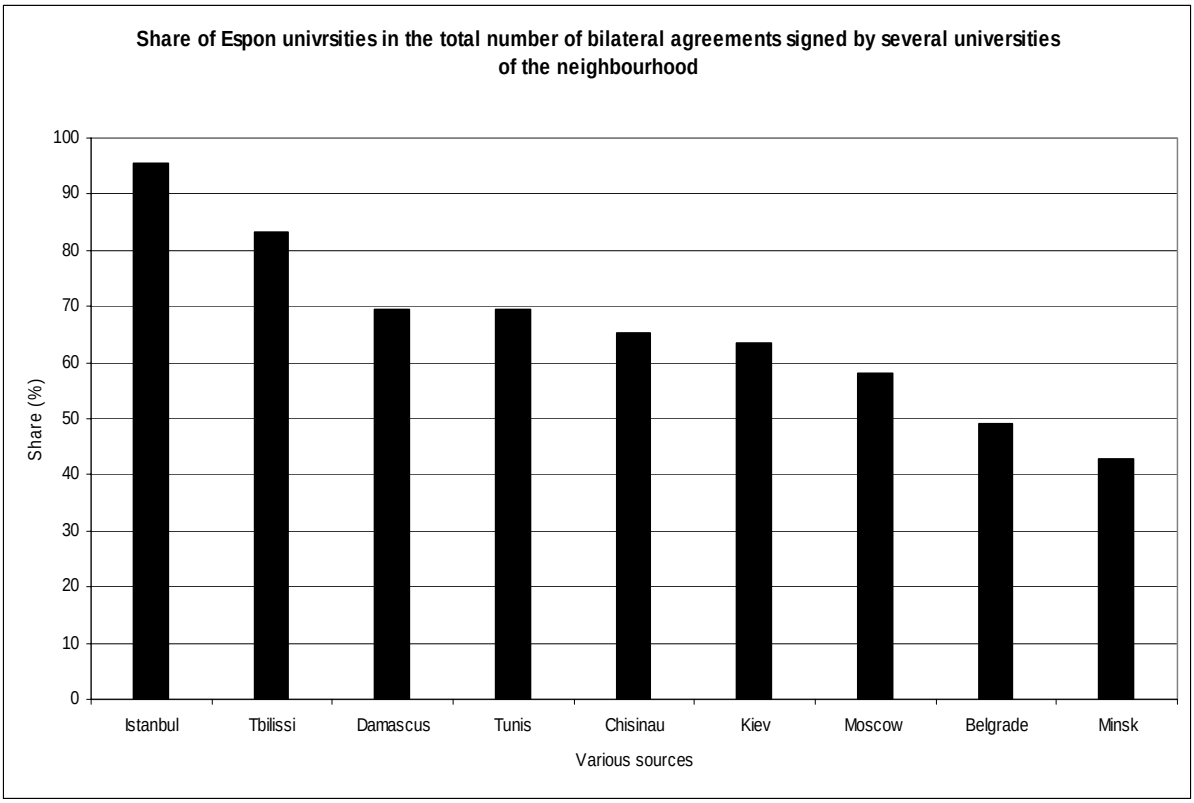
[15] University of Vienna, Katholieke Universiteit Leuven, Université Libre de Bruxelles, Sofia, University of Copenhaguen, University of Barcelona, Tallinn, Helsinki, Ecole polytechnique, Ecole normale supérieur de Paris, Paris 6, Paris 5, Paris 4, Paris 3, Free university of Berlin, Technical university of Munich, Heidelberg, National and Kapodistrian University of Athen, Budapest Corvinus University, Budapest Univ of Technology and Economics, University College Dublin, Riga, Vilnius, Delft University of technology, Utrecht University, University of Leiden, University of Amsterdam, Oslo, Varsovie, Lisbonne, Bucarest, Bratislava, Ljubljana, Lund, Uppsala, Genève, Ecole polytechnique de Lausanne, ETH Zurick, Karolinska Institute, University of Cambridge, University of Edinburgh, University of Bristol.

geographical distribution of bilateral agreements varies according to the considered Espon countries:

- Austria, Belgium, Denmark, Estonia, Finland, Greece, Ireland, Latvia, Lithuania, Netherlands, Norway, Slovenia, Sweden and United Kingdom chosen universities are almost not oriented toward the Mediterranean neighbourhood, except for Turkey in some cases.
- French, German, Hungarian, Italian and Swiss universities have more relations with their counterparts in this part of the world.
- Some Espon universities have strong relations with former USSR, especially the universities located in former European communist countries: Hungary, Latvia, Lithuania, Poland, Slovakia and Sweden.



We have used the same methodology for the universities located in all the regional capitals in France.[16] We made the following hypothesis: these universities located in smaller cities would have contractual relationships with a smaller number of foreign universities and with universities in less distant countries; we supposed that universities located in French Mediterranean cities had dense relations with the universities of the Mediterranean neighbourhood. But the average share of the universities of neighbour countries is only 27%, slightly more than for the whole European sample. However, it seems that the French Mediterranean universities are more oriented to the neighbourhood, especially the Mediterranean one. The university of Nice Sophia Antipolis signed only 24% of its bilateral agreements with universities of the neighbourhood, but the university of Provence (Marseille and Aix-en-Provence) 33% and the universities of Montpellier 36%.[17]



From the point of view of the neighbourhood's universities, the situation looks different. We have applied the same methodology to a small sample of universities located in the following capital cities: Minsk, Chisinau, Kiev, Moscow, Tbilissi, Istanbul, Damascus, Tunis, Belgrad. The graph shows that these universities are clearly oriented to their European counterparts. This reveals the existence of a non symmetric regionalism. Minsk is less oriented than others and keeps strong relations with Russia, China and Ukraine. Nevertheless, more than 40 of its bilateral agreements are signed with Espon universities.

The same conclusion can be drawn from the geographical analysis of various international associations of universities, according to the information provided by the International Association of Universities: 29 associations, 628 institutions, 129 countries in 2010 (11% in African countries,

[16] 21 cities and 35 universities, excepting Parisian Universities already included in the previous Espon sample.

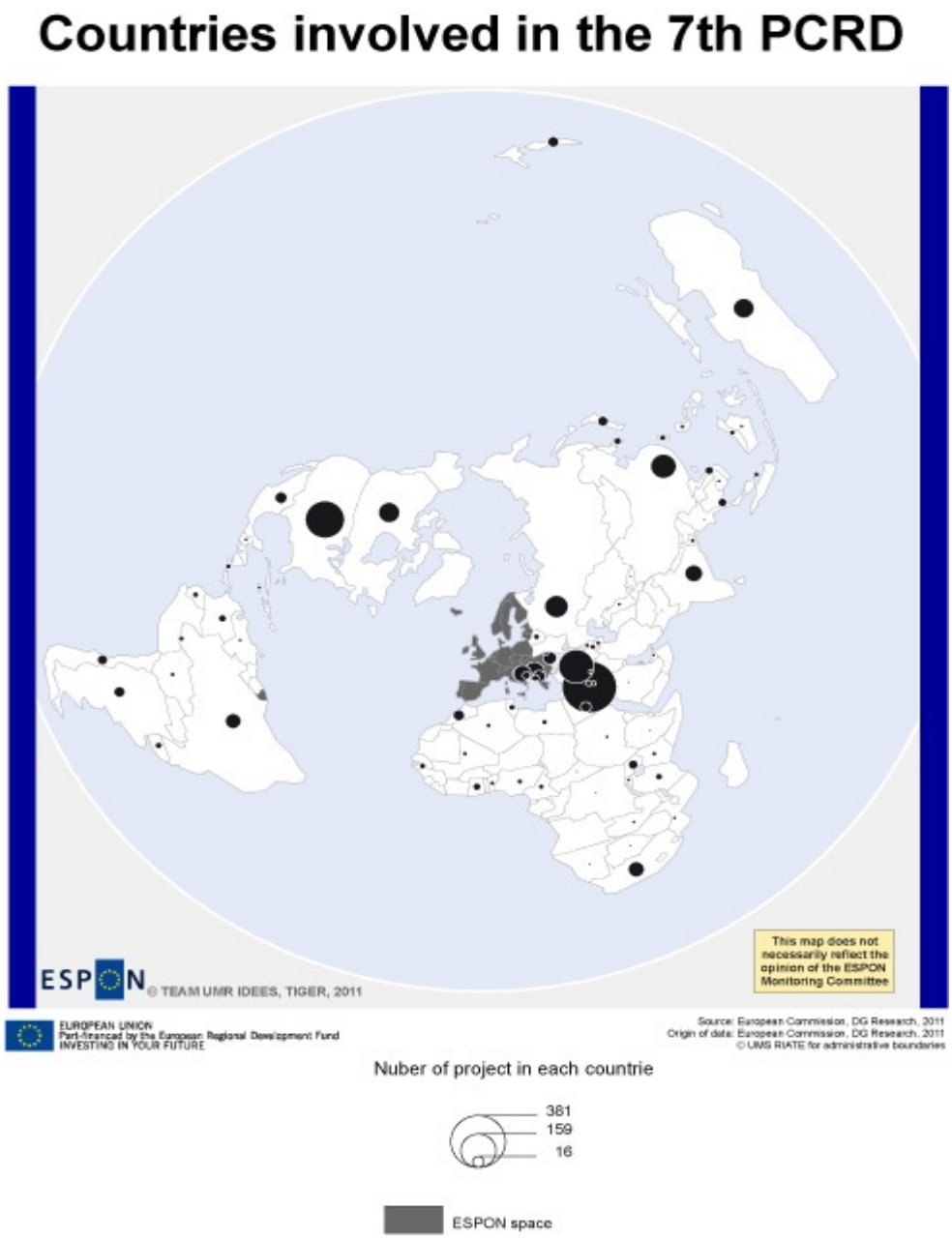
[17] These percentages include the whole neighbourhood of Espon and they should not be overestimated because the Mediterranean neighbourhood attracts only a small percentage of bilateral agreements signed by the three universities.

23% in Asia and Pacific, 40% in Europe, 5% in Latin America and Caribbean, 13% in the Middle East, 8% in North America).[18] According to the website of this organization, « IAU, founded in 1950, is the UNESCO-based worldwide association of higher education institutions. It brings together institutions and organisations from some 120 countries for reflection and action on common concerns and collaborates with various international, regional and national bodies active in higher education. Its services are available on the priority basis to Members but also to organisations, institutions and authorities concerned with higher education, as well as to individual policy and decision-makers, specialists, administrators, teachers, researchers and students ». The universities of the neighbourhood involved in these associations have more numerous connexions with Espon than with other regions of the world: a total of 434 connexions, 153 with Espon universities (35% of the total), 78 with other neighbourhood universities and 203 with the rest of the world. The polarization by Espon is clear. Once more, it is a one way relation because espon universities involved in these associations have only 72 connexions with neighbourhood universities out of a world total of 480: 34% of connection inside Espon, 72 with the neighbourhood and 51% with the rest of the world.

Regionalization and asymmetric regionalism: The case of scientific cooperation programs

The European Union implements several scientific research and training programs characterized by their global coverage. They are not limited to European universities: Erasmus Mundus and the 7th Framework Programme.

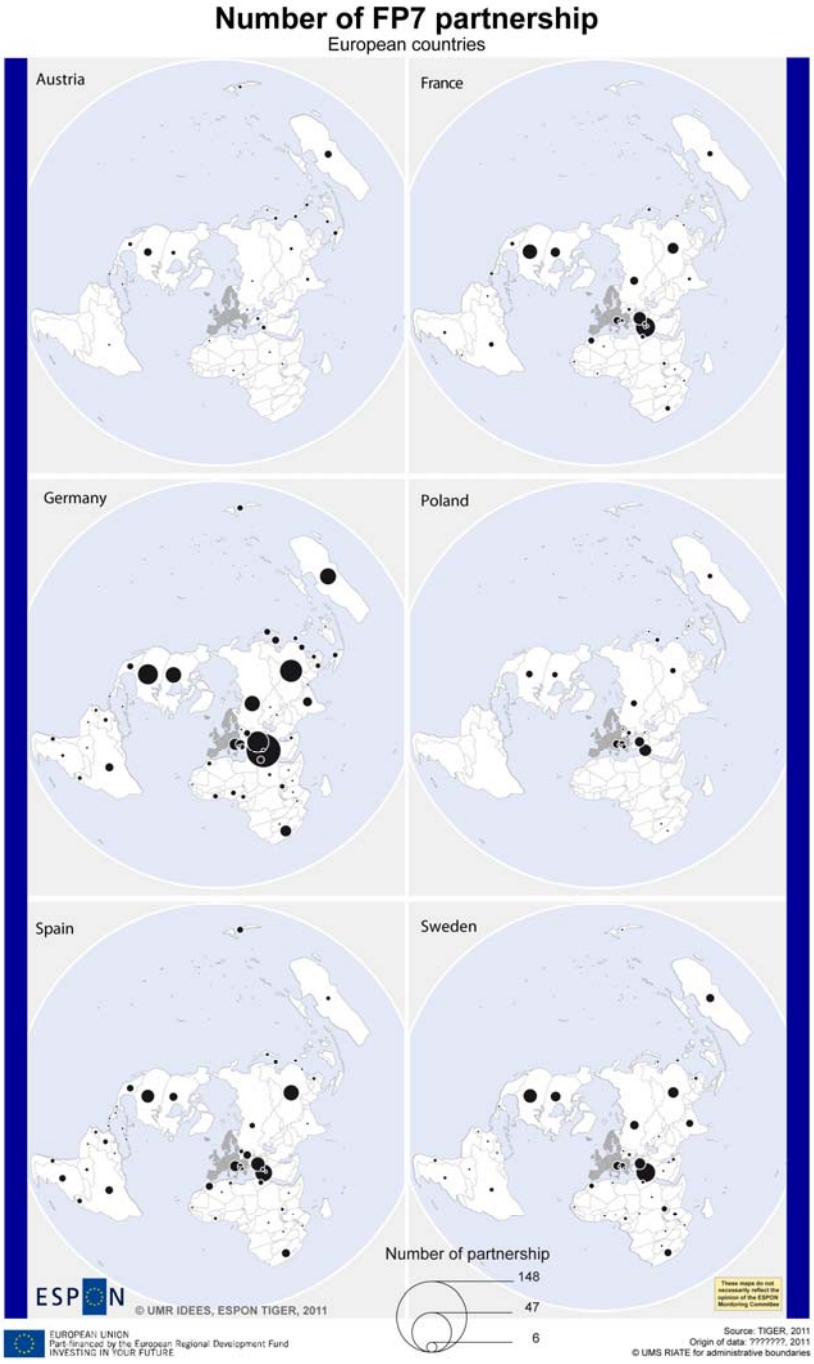
[18] The complete list of associations is available on this website: http://www.iau-aiu.net/



According to the EU official website, the 7th FP "is the European Union's main instrument for funding research in Europe. FP7, which applies to the years 2007-2013… Since their launch in 1984, the Framework Programmes have played a lead role in multidisciplinary research and cooperative activities in Europe and beyond. FP7 continues that task, and is both larger and more comprehensive than earlier Framework Programmes. Running from 2007 to 2013, the programme has a budget of 53.2 billion euros over its seven-year lifespan, the largest funding allocation yet for such programmes… The core of FP7 and its largest component by far, the Cooperation programme fosters collaborative research across Europe and other partner countries, according to several key thematic areas".[19] Thanks to the wide coverage of this programme, it is possible to map the connexions of European universities at the global level. The bulk of these connexions is located inside Europe. This is not a surprise, so we decided not to represent the intra Espon connexion on the map. The map shows that the neighbourhood is almost totally by-passed. Research institutions of the neighbourhood are involved only 778 times out of a total of 15,500 participations in the projects of FP. Turkey, Israel (the most involved country in the world), Russia and the Western

[19] See http://ec.europa.eu/research/fp7/pdf/fp7-brochure_en.pdf

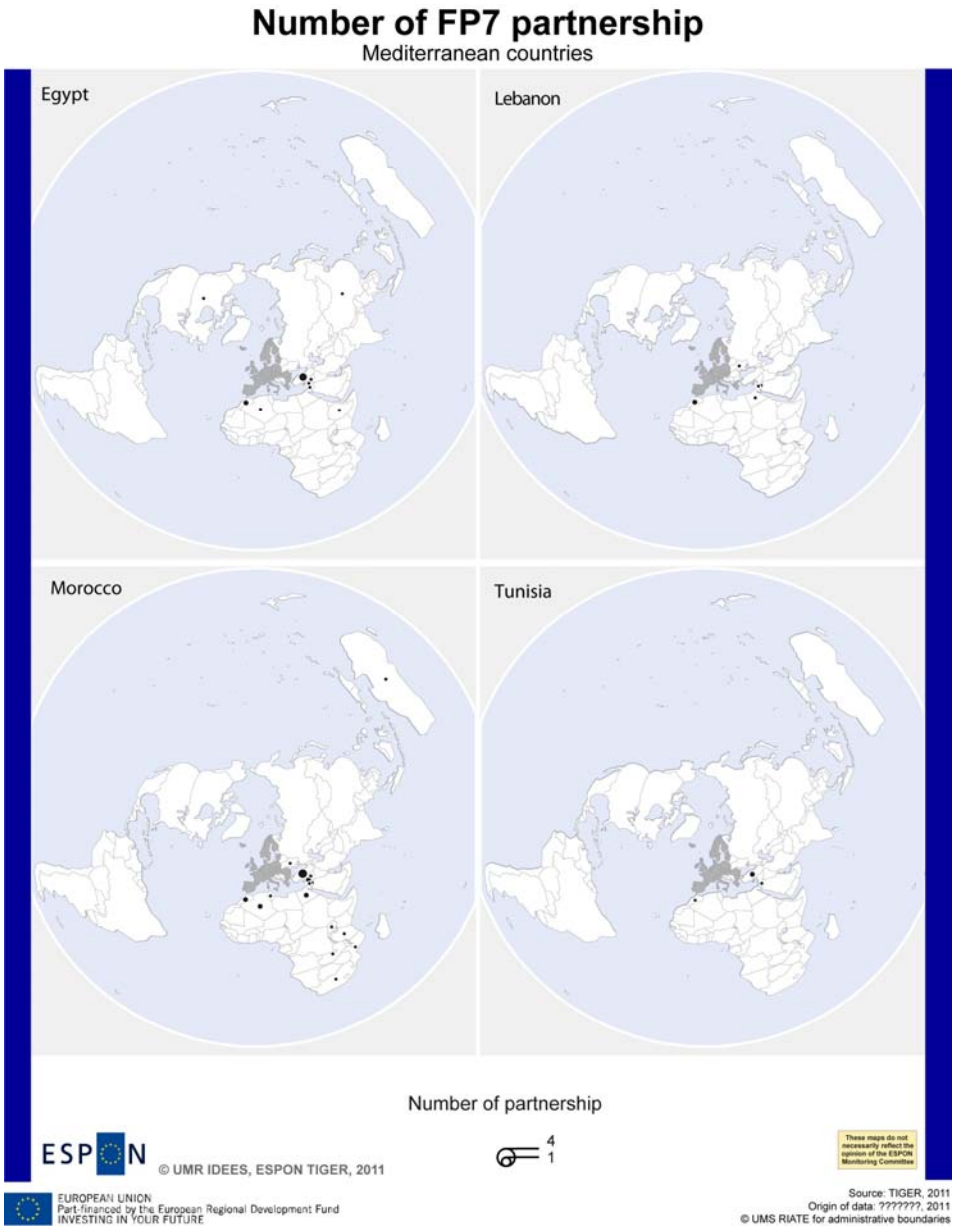
Balkans are the only exceptions. The neighbours of Northern Africa are almost absent (apart from Morocco). The level of the involvement in the FP7 does not match their demographic size or the number of their universities and research institutions. This conclusion is confirmed by the following map which takes into consideration only the partners located outside the Espon area. Beside the strong involvement of Israel and Turkey, It reveals clear geographic specializations of Espon countries and the quasi absence of connections with other Med countries, even in the case f France in spite of traditional relations; like Germany, France is more connected to North America than to Mediterranean counrtries.



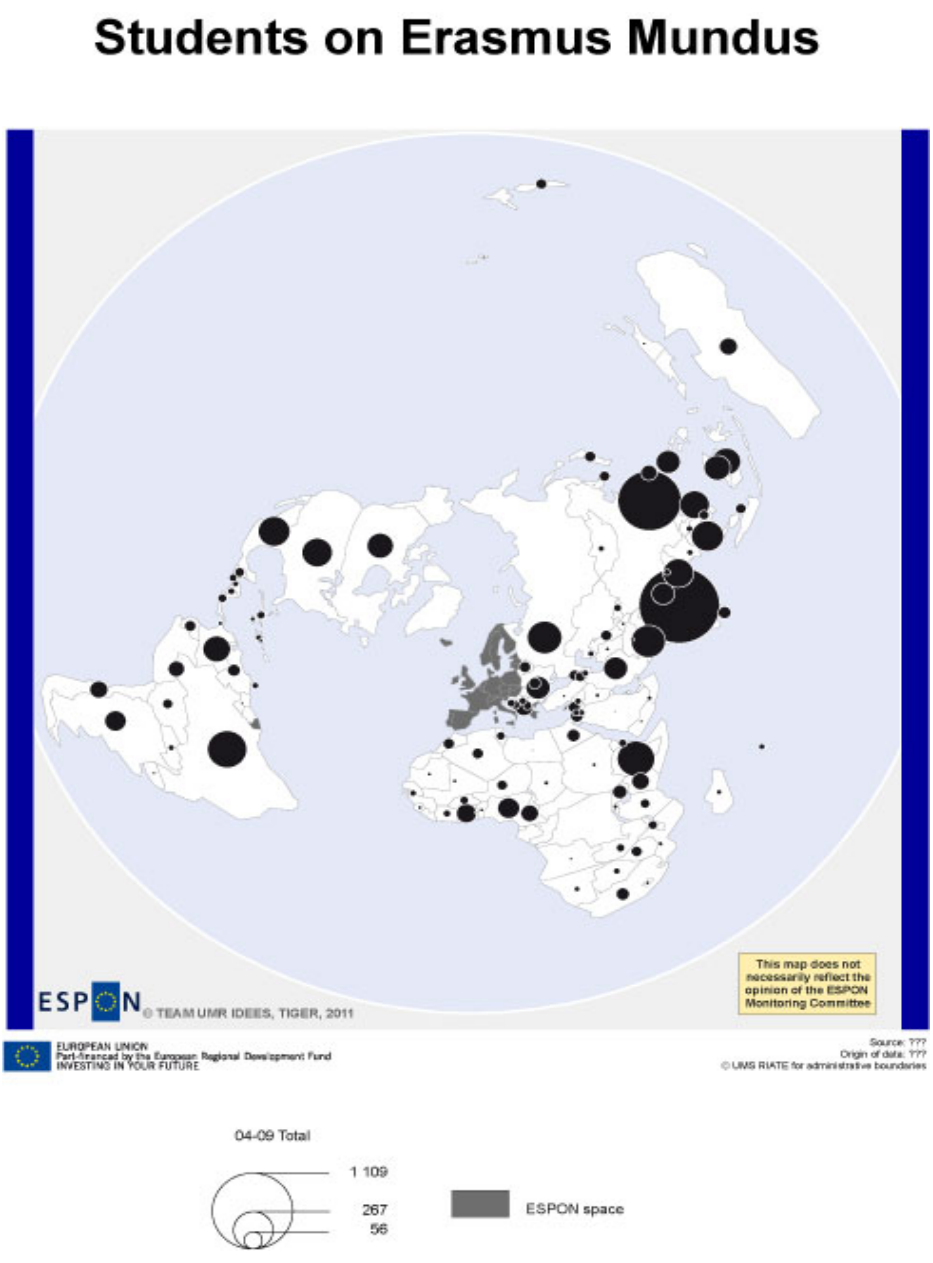
Beside, the density of cooperation network inside the various neighbourhoods of EU varies a lot. The following maps show how many times the scientific partners in Belarus, Georgia, Russian and Ukraine are involved in FP7 research project without consideration to the partners located in the

Espon area. For three countries, one can see that the most numerous partners are located in the same region. The intensity of scientific cooperation seems correlated to the belonging to the former USSR. In other words, the partners located in the Eastern neighbourhood of Espon are often connected with European scientific partners; meanwhile, they are still connected to each other. This is certainly caused by the legacy of several decades of sovietization: in the framework of the USSR, exchanges of students and scientific cooperation were intense.

When it comes to the Mediterranean neighbourhood, the picture is totally different (map below). The number of partnership is much lower. The Mediterranean scientific partners are more rarely present in the same research project. In other words, the former USSR still appears as a functional regional space, but not the Mediterranean countries. Tunisia is never involved in FP7 research project with Algerian, Libyan or Egyptian partners. And the situation is roughly the same for Lebanese and Egyptian research teams. These maps perfectly match the intensity of bilateral trade of goods (see Espon project Europe in the world): the intensity of bilateral trade is high inside the former USSR and between former USSR and EU; it is high between Mediterranean countries and EU but low between Mediterranean countries.

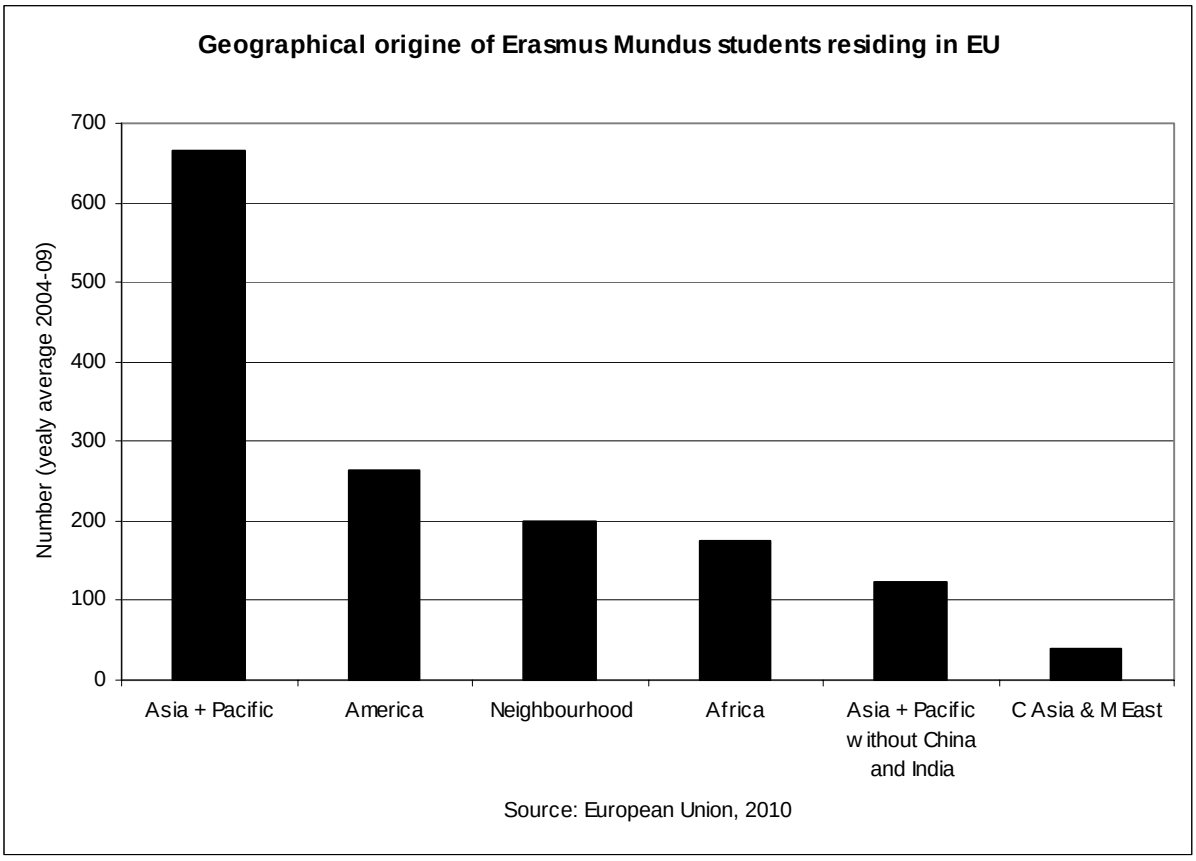


On its official website, Erasmus Mundus is presented as "a cooperation and mobility programme in the field of higher education that aims to enhance the quality of European higher education and to promote dialogue and understanding between people and cultures through cooperation with Third-Countries. In addition, it contributes to the development of human resources and the international cooperation capacity of Higher education institutions in Third Countries by increasing mobility between the European Union and these countries. The Erasmus Mundus programme provides support to higher education institutions, to individual students, researchers and university staff, to any organisation active in the field of higher education that wishes to develop projects aimed at enhancing the attractiveness, profile, visibility and image of European higher education worldwide".[20]

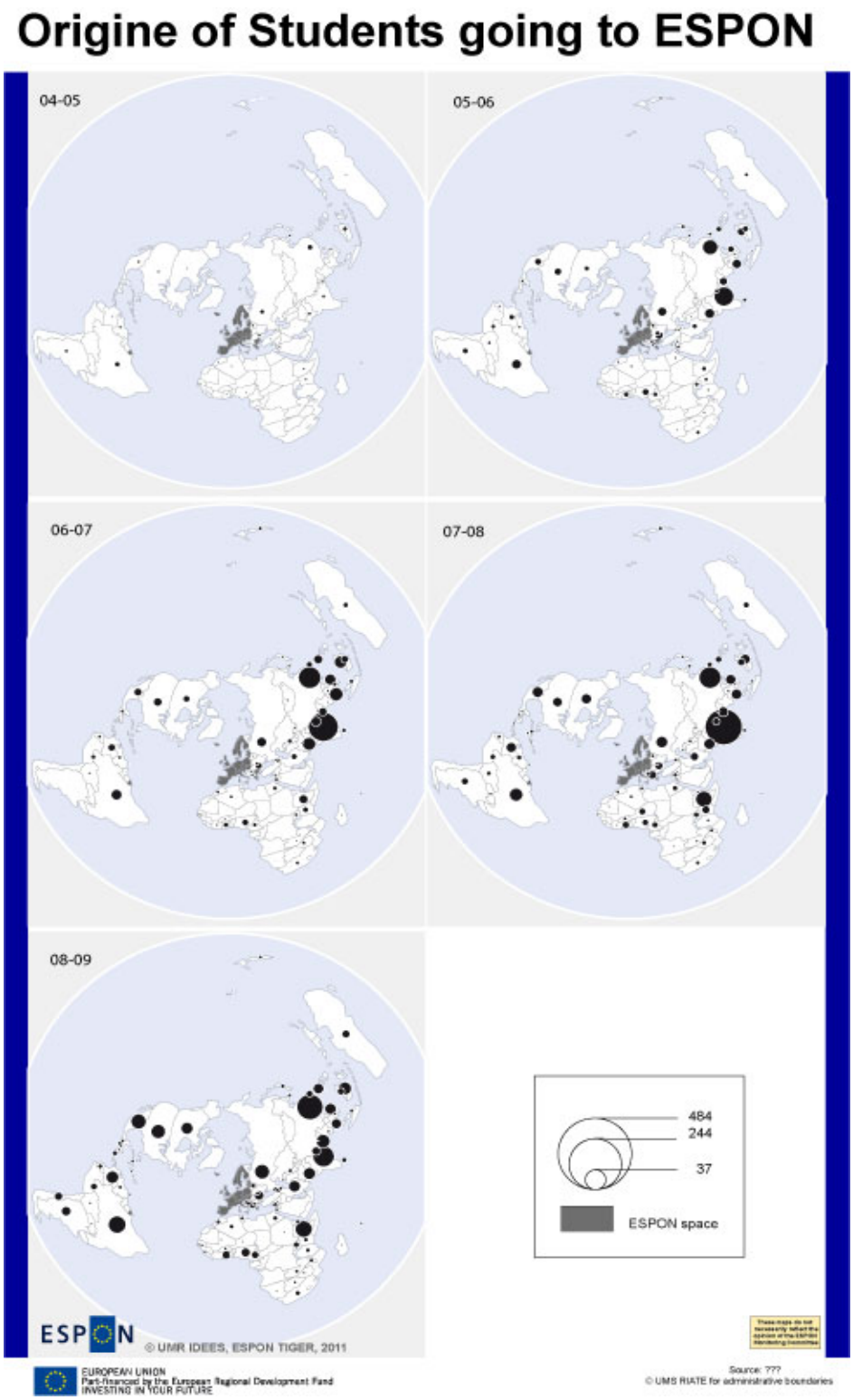


[20] http://eacea.ec.europa.eu/erasmus_mundus/programme/about_erasmus_mundus_en.php

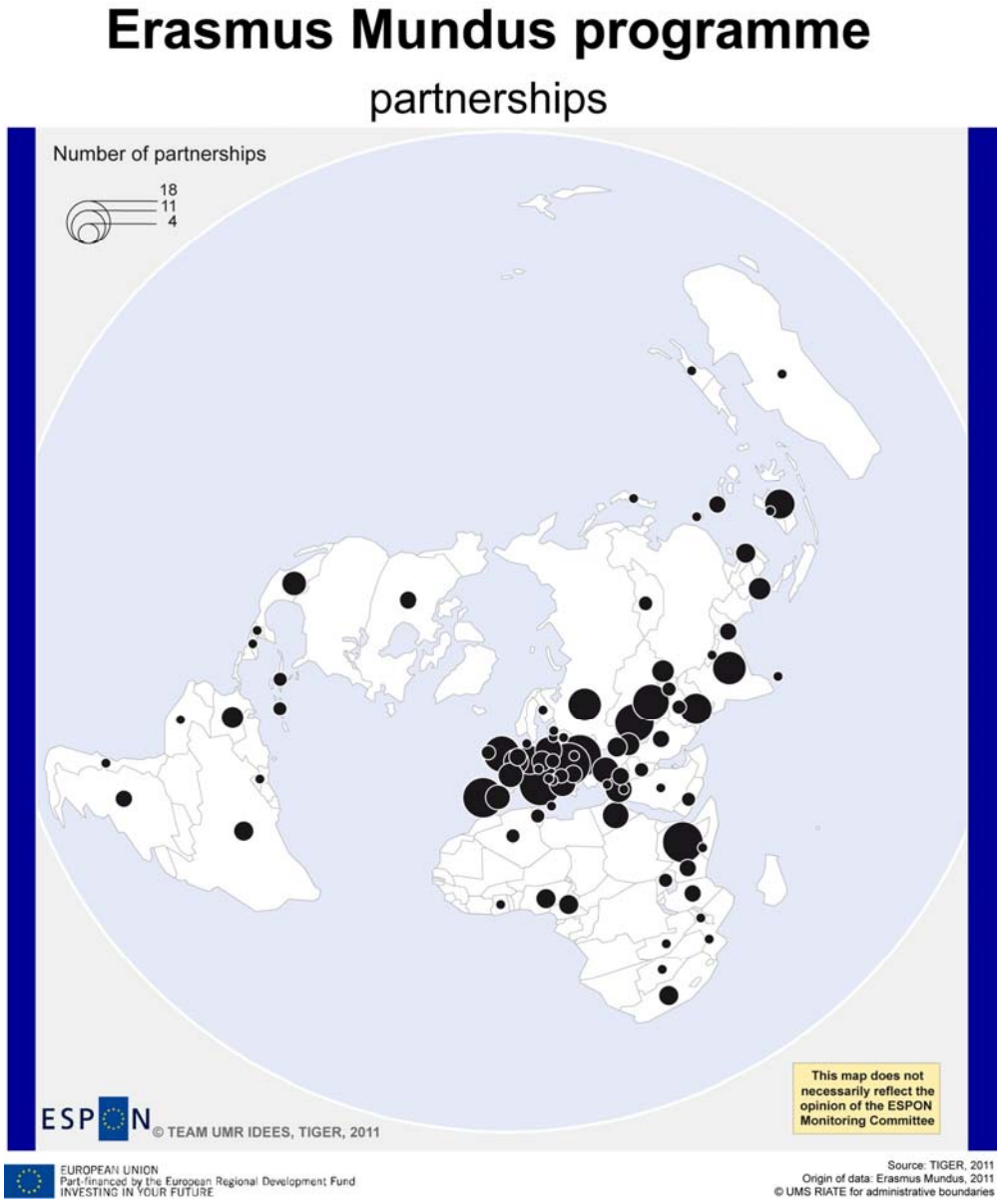
The graph shows the average number of Erasmus Mundus students present in EU between 2004 and 2009. We decided to represent the yearly average because many countries entered this programme in very recent years (former Yugoslav republic, Niger, Malawi, Central American counties, etc.). it is more relevant to compare yearly average than the absolute number of scholars sent to EU over the whole period. The graph shows the relatively low level of involvement of neighbour countries and the strong presence of students coming from Asia and Pacific (45% of scholarships but this high share is partly biased by the demographic size of China and India: 37% for these two countries), before America (18%), neighbour countries (14%), sub-Saharan Africa (12%), Central Asia and Middle East (3%).



According to the most recent data, only 21% of the students residing in EU in the framework of the Erasmus Mundus Programme came from the neighbour countries, but only 14 % if we except those coming from Russia. One more, the first partner is the United States (15.5% of the scholarships in 2009-2010).



Last, if one takes into consideration the number of times each non Espon country si involved in Erasmus Mundus exchange programs, the neighbourhood is once again badly ranked, especially the Mediterranean one, as it is confirmed by the map below: Egypt comes only in 15th position, Palestine in 16th, Turkey in 18th, Syria and Algeria in 42nd and 45th. Ukraine and Russia are the sole exceptions (2nd and 10th position).

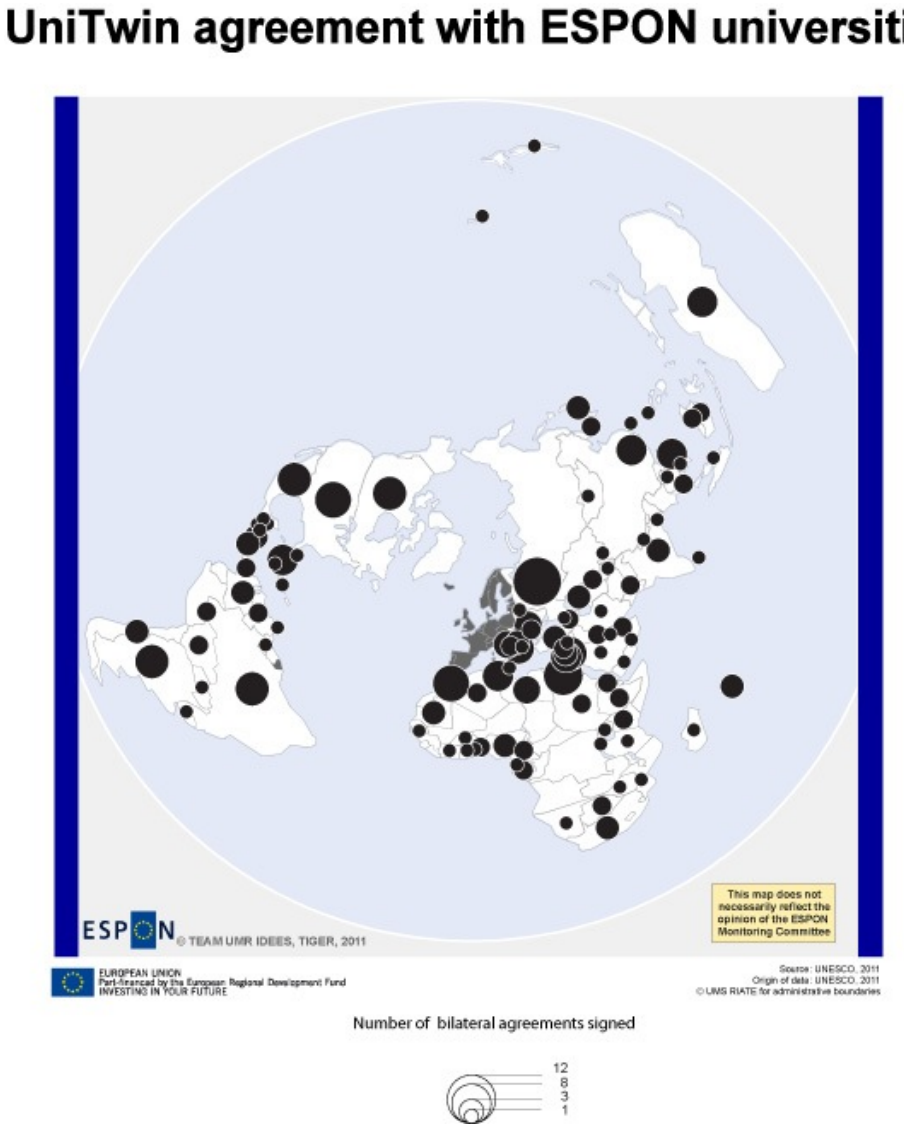


Beside, the European Union must face a serious contradiction as it was highlighted by the analysis of its relations with the neighbourhood. On the one hand, it considers itself a global power exerting influence at various levels in official discourses. To this respect, the discourse matches the reality. By attracting thousands of students form all over the world, the European Union contributes to the training of the future political and economic elites of many countries. On the other hand, EU presents itself as a champion of the social and economic development and it is a major donor of official development assistance. However, the orientation of international students flows shows that EU has dissymmetric relations with the developing countries. Many students leave these countries to study and eventually to work in the European Union. In this process, the EU inquestionnably contributes to the so-called brain drain, at the expense of the developing countries.

Besides, there is a clear lack of consistency between various European policies especially when it comes to the relations with the neighbourhood. The European Neighbourhood Policy is supposed to help the development and to encourage the integration of neighbour countries in the European regional system (without participation to the institutions). To be successful, this policy should be totally coherent with various initiatives of the EU in the field of education and with the actions of non official actors such as higher education institutions. But there is no evidence of such a

consistency. The cooperations between the universities of the EU and those of neighbour countries are not sufficiently developped. The neighbour countries are not sufficiently involved in the scientific and education cooperation programs carried out by the EU. And yet, a strengthened cooperation in these fields is an evident precondition for the development of the neighbours, for the maintaining of the European Union's influence and for the secure of its regional environment.

The Unitwin Programme of the UNESCO



According to the Unesco website, « UNITWIN is the abbreviation for the University Twinning and Networking Programme. The Programme was established in 1992 following the relevant decision of UNESCO's General Conference taken at its 26th session. The UNITWIN/UNESCO Chairs Programme was conceived as a way to advance research, training and programme development in all of UNESCO's fields of competence by building university networks and encouraging inter-university cooperation through the transfer of knowledge across borders. Since it was established in 1992, the programme has aroused great interest among Member States. The UNITWIN programme aims to be pertinent, forward-thinking and to impact socio-economic development effectively. So far UNESCO Chair and UNITWIN Network projects have proven useful in establishing new teaching programmes, generating new ideas through research and reflection, and facilitating the enrichment of existing university programmes while respecting cultural diversity ». In 2010, 715

Unesco Chaors and 69 Unitwin Networks were established within the Programme, involving over 830 institutions in 131 countries.

In the framework of this cooperation programme, Espon countries are connected with 80 non Espon countries, with 338 connections (a connection is the co-presence of at least one Espon and one non Espon countries in the same project). Non Espon countries appear 338 times in the projects where Espon countries are involved. In this total, the number of participations of neighbour countries is 65 (19 of the total). This average is low but there are variations behind it: 27% for France, 16% for UK, 6% for Spain; 14 European countries are not involved in Unitwin networks and chairs; Sweden and Estonia are connected with a few non Espon countries (USA, China, United Arab Emirates). For many European countries, the geography of networks is more often global (even when there are a few countries in the network, they are often distant) than regional.

The relation is less asymmetric than in other contexts. For Russia, the number of connection with Espon universities reaches 37% of the total, but only 26% for Egypt and Tunisia, 21% for Morocco and Ukraine.

4. Mobility of international students: The case of foreign students at the University of La Sapienza.

Perkins and Neumayer (2011) suggest several elements that should be considered when evaluating the attractiveness of universities for international students. They can be summarized in the following ones: (i) the national migratory policy, (ii) the spatial proximity, (iii) the existence of a common language, (iv) the existence of colonial ties, (v) the existence of differences in the domestic GDP, (vi) the existence of a well-established national community in the hosting country, (vii) the role and importance of university fees, (viii) the position of the universities in international rankings, (ix) the role and importance of social ties and networks. All these elements are considered in the following case study dedicated to La Sapienza University.[21]

Research methodology

In the research designed all the elements supplied by the literature and the international organizations have been taken into account. It was, then, decided to implement a case study analysis at different scales and different level of depth.

In a first stage, the statistics of international students in all the Rome public universities were analyzed with special attention paid to the statistics of international students of Sapienza University of Rome.

In a second stage statistics of students attending courses at the Human Sciences Faculty were analyzed. This choice was determined by the fact that this faculty owns the highest ratio of foreign students.

21 This part of the working paper is written by Armando Montanari and Barbara Staniscia, with the collaboration of Filippo Belloc for DB elaboration and management.

In a third stage a qualitative analysis was carried out of foreign students attending courses in Sapienza, through the use of questionnaires and in-depth interviews. The process of submission was developed in the spring-summer 2011.

The questionnaires were submitted in Italian, the only common language of all the students. 100 students answered to the questionnaires which were managed by international students, in order to achieve a more friendly atmosphere, under the guidance of the Tiger research team. They were structured questionnaires, included 57 questions grouped into 10 main areas: (i) personal data, (ii) information concerning the migratory path, (iii) spatial information concerning their accommodation and life in the Rome area, (iv) former residence in Italy, (v) university course, (vi) movements between place of residence and the university, (vii) information concerning the university path, (viii) information concerning the availability of services and infrastructures in the Rome area, (ix) socialization process, (x) information about personal and social needs.

The in-depth interviews involved eight students of different nationalities. The interviewers posed open questions concerning the following issues: (i) origins, (ii) reasons for leaving the own country, (iii) image of Rome before the departure, (iv) life in Rome, (v) the future.

Foreign students in Rome universities and in Sapienza University of Rome

According to data provided by the Italian Ministry of Education (MIUR), 10877 students of non Italian nationality were attending university courses in Rome in the year 2009. More than half of them were students at Sapienza University. About 63% of them was female (this ratio seems to recur quite constantly in different universities). Female gender is almost always prevailing among foreign students in Rome: a remarkable exception can be detected only in the values of Egyptian nationality and at the Faculties of Engineering (fig. 3.1).
A quite large number of students is recorded as having “undefined nationality”, a statement which includes only few cases of statelessness. This is due to a problem in the way data are captured and recorded. Most of non Italian students in Rome come from Eastern Europe, followed – at a large distance – by Western Europe, South America and Africa. Asia and the English-speaking countries (in North-America and Oceania) are the least represented areas (fig. 3.2).

When moving to an analysis by country, after Albania and Romania, the most represented ones, we find China and Iran, then Peru, before going back to Eastern Europe with Poland. The Mediterranean basin is well represented through Greece, Egypt and, later on , Israel. While the former Soviet Union stands out through Ukraine, Moldova and Russia (fig. 3.3).

In Sapienza the difference between Eastern Europeans and Western Europeans is more accentuated that in the average of Rome universities. This is even more striking when looking at the female component alone. Asia is better represented than America and Africa doesn’t stand out among the most important areas of origin (fig. 3.4).

The most represented foreign nationalities in Sapienza are Albanian and Romanian are the two most represented nationalities (as in general for the Rome universities) but China come only after Greece, Iran, Poland, Peru and Israel; in general, Chinese and Peruvian students are better represented in other universities of Rome. Serbia, Ukraine, Moldova, Russia and Bulgaria confirm the importance of the countries belonging to the former Communist bloc (fig. 3.5).

In Sapienza, non Italian students are particularly numerous in the faculties of Medicine, Economics, Architecture, Arts and Literature, Humanities. Middle values are recorded in the technical faculties

(Engineering) and in international and legal affairs (Law, Politology). Except for not largely attended faculties, it looks remarkable the quite low number of foreign students attending the faculties of Sociology, Natural Sciences, Psychology and Philosophy (fig. 3.6-3.7).

Foreign students at the Faculty of Human Sciences, Sapienza University of Rome

The Faculty of Human Sciences is, in Sapienza, the one presenting the highest ratio of non Italian students. This is because of two courses: the course in Mediation and the one in Tourism Sciences.

The first one is devoted to the training of professionals able to work in the mediation among different cultures. Somebody who is able to speak languages not for business-related of translation-related issues, but as a vehicle of a specific culture. Those professionals are expected to be integrated in the job market as the link between hosting and hosted cultures. That is the reason why it attracts foreign students who can use their culture of origin turning it in a strength in the working environment.

The second one is devoted to train professionals who will work in the tourist industry. This one is, in Italy, particularly flourishing and this is why the course is very successful among young students. Foreign students are attracted because the knowledge of a second language is particularly important and because they can use their specific knowledge of the country of origin to support and boost their position in the future job.

92% of the students of the faculty of Human Sciences was born in Italy; 5% of them was born in other European countries and almost 3% in non-European countries (fig. 4.1). In the course of Mediation the share of students born in Italy is sensibly lower: 88% and, consequently, higher are the share of students born in other European countries (8%) and in non-European countries (4%) (fig. 4.2). in the course in Tourism Sciences the share of Italian students is even lower: 85%. Students born in other European countries represent 8% of the total, while students born outside Europe represent 7% of the total (fig. 4.3). A course with 15% of foreign students is rather rare in the Italian context.

The most represented nationalities in the Faculty of Human Sciences are from Eastern Europe (Rumanian, Albanian, Polish are the three first ones; Ukraine, Russia, Bulgaria can be found in the 8th, 9th, 10th position). Germany, Switzerland and Brazil – in between – are countries of former Italian emigration, while Iran accounts for many students who escaped from politically and culturally rigid regimes (fig. 4.4 – 4.5).

In the course of mediation, Eastern European origins occupy the first 4 positions (Romania, Albania, Poland, Ukraine) while in the course in tourism only the first two (Romania and Albania) and right after Iran (fig. 4.6 – 4.7).

International students in Sapienza University of Rome

In our survey we choose of not including Erasmus students and students who came to study at Sapienza in the framework of bilateral agreements between universities. The survey, thus, concern only students who decided to go and study in Rome, in Sapienza, on their own for whatever reason but the existence of an institutional framework.

The students who responded to our questionnaire are, for the large majority, less than 30 years old. The number of students between 25 and 30 years old is not negligible (fig. 5.1). This can be explained in two ways: on the one hand, since they have more difficulty in studying in a different

country with a different language, graduation takes longer time; on the other hand, many of them, left their country to improve their life after they graduated. The experience in Sapienza is, thus, not their first university experience.

The majority of them belongs to families composed by four members. Very numerous are the households composed by five members. Less but not negligible are the households with six or more components (fig. 5.2). This fact is clear when we think about the household structures prevailing in the most represented countries (Eastern Europe and the Mediterranean basin).

For almost 1/3 of the interviewed students, the family's head is retired. More than 1/3 of them come from a family where the breadwinner is a businessman or white collar. The other 1/3 belongs to family where the head does a manual work (blue collar, craftsman, farmer) (fig. 5.3). From in-depth interviews looks clear that many of these international students come from wealthy families. We can consider them as representing the second wave of immigrants to Italy: the first ones were poor, often coming from the rural areas where leaving was economically impossible. This new generation is composed by the children of more advanced families who approve the choice of sending them to more developed countries to improve their future, a future that could, in any case, be prosperous even in the home country.

It is worth of note the fact that Rome was chosen as a location by students mostly coming from large cities. More than four out of ten, indeed, come from the national capital city and fifty per cent from the regional capital city. More than 45% of those students originated from cities with more than 3 million of inhabitants and 20% of them from cities with a population between 100,000 and 1 million.

The large majority of the international students left their home country less than 48 months before the interview (fig. 5.5). The large majority of them arrived directly to Italy and to Rome (fig. 5.6, 5.7), without stopping in other countries and cities. All that let us suppose that the large majority of them left the country with the purpose of attending a university course in Sapienza. This is confirmed directly by the students: 80% declared, indeed, that the main reason for leaving home was university attendance (fig. 5.8). Worth of mention is the fact that just around 10% of them quoted the family reunion as the main reason.

Having understood that university was the main factor we investigated why Rome and Sapienza were chosen, among the many possibilities offered by the international context. We gave them the possibility to choose more than one answer (fig. 5.9). More than 50% of the students paid importance to the reputation of the university but 50% of them gave importance to the possibility of getting a scholarship and to the low university fees. It means that Sapienza has two main factors of attraction: the good image and the relatively low costs. The existence of a network – of friends and relatives – is not negligible. The in-depth interviews allow us to affirm that, often, the Sapienza students have followed some already existing beaten tracks towards Rome. In some cases the decision to study in Rome follows a former tourist experience. Rome is represented in the imagination of the international students as a cultural and historic city, with a rich cultural heritage. Rome is dreamed like it's in the movies and, often, in the soap operas in tv. Once arrived in Rome, many of the international students, had to adapt to the reality in Rome, very different from the dreamed city, much more chaotic and disorganized than they had thought.

More than 60% of the interviewed students do not intend to stay in Rome when the university career will be completed and more than 50% of them have intention to go back home (fig. 5.10-5.11). All the students have as main objective before going back home to acquire a university degree, even of different types: three years, five years, master degree. 10% of them declared to aim

at acquiring professional skills as well (fig. 5.12). From the in-depth interviews is clear that the international students are more open-minded than their friends who decided to stay and have a better vision of the world. They see their societies as conservative and closed-minded and understand that going back will not be necessarily easy. They will certainly bring knowledge and innovation and contribute to improve the leaving conditions.

The interviewed students live almost all on their own: around 50% in the students' dormitory, around 40% share a flat with some friends (usually other students), only 10% of them live together with relatives and friends (fig. 5.13).

Numerous students (more than 40%) have a job in Rome, almost all of which are employees. Only half of them have a regular contract; all of them have a temporary contract, more than 80% has a part time job. More than 80% works in the services sector (fig. from 5.14 to 5.19).

University and their own homes are the favourite places for socialization, but public spaces such as squares and streets are not neglected (fig. 5.20).

International students express the same needs and, probably, wishes of the Italian ones: finding a job is a priority. But for them even having medical, administrative and social assistance is a priority; that is, on the contrary, just taken for granted by the Italians (fig. 5.21).

Conclusions

The analysis of the international students mobility and their choice of the city of Rome and the Sapienza University suggested us the following conclusions: (i) the Italian national migratory policy is totally unimportant for the decision of the students; indeed we can affirm that the international students choose Rome and Sapienza in spite of the very severe and restrictive Italian migratory policy; (ii) the spatial proximity is moderately important: the Eastern European students, the most represented in our statistics, have chosen a country – Italy – that is in the ESPON space, but it is not necessarily the closest to their home country; (iii) the language: Italian is a language not spoken outside Italy, thus we cannot consider it as an important element; what we can say is that there are some similarities between languages that could be important for some specific groups (Rumanians); (iv) existence of colonial ties: this element is irrelevant except for the specific case of Albanian students; (v) differences in GDP are an important element: the majority of international students in Rome and in Sapienza come from countries characterized by a lower average GDP per capita; (vi) the existence of a community and the presence of a network of friends and relatives seem to be a very important driving factor; (vii) the quality of the university, the relatively low university fees, the possibility to get a fellowships are very important factors in the choice.

References

Altbach, P.G., 1997, *Comparative higher education: Knowledge, the University and Development*, Chestnut Hill, Center for International Higher Education, Boston College and Ablex Publishing Corporation

Amin, S., 1970, L'accumulation à l'échelle mondiale. Critique de la théorie du sous développement, Paris, Anthropos

Arghiri, E., 1972, *Essai sur les antagonisme dans les rapports économiques internationaux*, Paris, Maspéro

Beckouche, P., 2008, *Les régions Nord-Sud. Euromed face à l'intégration des Amériques et de l'Asie orientale*, Paris, Belin

Beckouche, P., Grasland *et alii*, 2008, *Europe in the World. Territorial Visions and Evidence*, Paris, Luxembourg, CNRS, Diact, Université Paris 7 Denis Diderot, Université Paris 1 Panthéon Sorbonne, Espon Programme

Beckouche, P., Richard, Y., 2008, *Atlas d'une nouvelle Europe. L'UE et ses voisins : vers une région mondiale ?*, Paris, Autrement

Bohm, A., Davies, A., Meares, D., Pearce, D. 2002, *Global student mobility*, Sydney, IDP Education

Bourne, R. (ed.), 2000, *Universities and development*, London, Association of Commonwealth Universities

Castells, M., 1996, The Rise of Network Society, Cambridge MA, Oxford UK, Blackwell Publishers

Chanda, N., 2000, "The tug of war for Asia's best brains", *Far Eastern Economic Review*, 163(45), 38-45.

Chen, D.A.C., Dahlman, D.J., 2004, *Knowledge and development: a cross-section approach*, World Bank policy research working paper n° 3366, Washington DC, World Bank

Christiansen, T., Petito, F., Tonra, B., 2000, "Fuzzy Politics aaround Fuzzy Borders. The European Unions's Near Abroad", *Cooperation and Conflict*, vol. 35, n°4, pp. 389-415

Coulon, A., Paivandi, S., 2003, *Les étudiants étrangers en France : l'état des savoirs*, Observatoire de la vie étudiante (OVE)

Cummins, W.K., 1993. "Global trends in overseas study", in C. D. Godwin (ed.), International investment in human capital: overseas education for development, New York, Institute of International Education, pp. 31-46

Didelon, C., Richard, Y., 2008, "The Enlarging European Union. How to stay a global player?", *Global Studies Journal*, vol. 1, n°4, pp. 105-123

Dollfus, O, 1997, *La mondialisation*, Paris, Presses de Sciences Po

Enders, J., Fulton, O., 2002, *Higher education in a globalizing world*, Dordrecht, Kluwer Academic Publishers

Garrett, R., Verbik, L., 2003, "Transnational higher education: major markets and emerging trends", Observatory of Borderless Higher Education (OBHE) (ed.), *Mapping borderless higher education: policy, markets and competition*, London: John Foster House, pp. 319-371

Goodwin, C. D. (ed.), 1993, *International investment in human capital: overseas education for development*, New York, Institute of International Education

Hettne, B., Söderbaum, F., 1998, « The New Regionalism Approach », *Politeia*, vol. 17, n°3, pp. 6–22

Hugon, P., Winter, G., Baby, M.-C., 2002, *Enseignement supérieur, recherche et coopération avec les pays en développement*, Haut conseil de la coopération internationale

Haut conseil de la coopération internationale, 2007, *Enquête sur les relations des universités avec les pays en développement : analyses par zone géographique et par pays*, Premier ministre

IIE, 2007, *Atlas of student mobility*, New York, Institute of International Education.

Kapur, D., McHale, J., 2005, *Give us your best and brightest: the global hunt for talent and its impact on the developing world*, Baltimore: Brooking Institution Press, Center for Global Development

Knight, J., 2002, *Trade in higher education services: implications of GATS*, London, Observatory on Borderless Education

Knight, J., 2003, *Internationalization remodelled: responding to new realities and challenges*, London, Observatory on Borderless Education.

Knight, J., 2003, *Internationalization of Higher Education. Practices and Priorities*, International Association of Universities Survey Report

Koshi, U., 1997, "Internationalization of Japanese higher education", *Higher Education*, 34(2), 259-273

Lechner, F., Boli, J., 2000, *The Globalization Reader*, Oxford, Edinburgh, Blackwell

Li, M., Bray, M., 2007, "Cross-border flows of students for higher education: push-pull factors and motivations of mainland Chinese students in Hong Kong and Macau", *Higher Education*, 53, 791-818

Maiworm, F., 2001, "ERASMUS: Continuity and change in the 1990s", *European Journal of Education*, 36(4), pp. 459-472

OECD, 1998, *Redefi ning tertiary education*, Paris: OECD.

OECD, 2003, Cross-border education: an overview, Forum on Trade in Services held in Trodheim, Norway, 3-4 November 2003

OECD, 2004a, Internationalization and trade in higher education: opportunities and challenges, Paris, OECD

OECD, 2004, "Internationalization of higher education", in *OECD Observer*, August, pp. 1-8

OECD, 2008, *Higher education to 2030: what futures for quality access in the era of globalization?*, Paris, OECD

OECD, 2009, *Education at a Glance 2009. OECD Indicators*, Paris

OECD, 2010, *Education at a Glance 2010. OECD Indicators*, Paris

Prebish, R., 1963, *Towards a Dynamic Development Policy for Latin America*, Commission des Nations Unies pour l'Amérique latine

Reynaud, A., 1981, *Société, espace et justice* Paris, PUF

Sassen, S., 1991, *The Global City, New York*, London, Tokyo, Princeton, NJ, Princeton University Press

Sassen, S. (Ed.), 2002, *Global Networks. Linked Cities*, London, Routledge

Söderbaum, F., 2008, "On the waning State, conceptualizing the Region and Europe as a Global Actor", Schouten, P., *Theory Talk #19* (http://www.theorytalks.org/2008/10/theory-talk- 19.html)

SOPEMI, 2009, *Migration Outlook 2009*, OECD, Paris

Tremblay, K, 2002, "Student mobility between and towards OECD countries: a comparative analysis", in OECD, *International mobility of the highly skilled*, Paris, OECD, pp.39-70

UIS, 2010, *Global Education Digest 2010. Comparing Education Statistics Across the World*, UNESCO Institute for Statistics, Montreal, Canada

Varghese, N.V., 2008, *Globalization of higher education and cross-border student mobility*, IIEP Research Papers, UNESCO, IIEP

Varghese, N.V., 2009, *Globalization, economic crisis and national strategies for higher education development*, IIEP Research Papers, UNESCO, IIEP

Varghese, N.V., 2009, *Globalization and cross-border education: Challenges for the development of higher education in Commonwealth countries*, IIEP Research Papers, UNESCO, IIEP

Varghese, N.V., 2009, *Globalization of higher education and cross-border student mobility*, IIEP Research Papers, UNESCO, IIEP

Väyrynen, R., 2003, « Regionalism: Old and New », *International Studies Review*, vol. 5, n°1, pp. 25-51

Veltz, P., 1996, *Mondialisation, villes et territoires. L'économie d'archipel*, Paris, PUF

Vérillaud, F., 2007, « La mondialisation de l'enseignement supérieur et de la recherche », in *Questions internationales*, n° 27, pp. 95 à 101

Verbik, L., Jokivirta, L., 2005, *National regulatory framework for transnational higher education: models and trends*, London, The Observatory on Borderless Higher Education

Vuilletet, G., 2005, *Comparaison internationale des politiques d'accueil des étudiants étrangers - Quelles finalités ? Quels moyens ?*, Avis et rapports du Conseil économique et social, Journaux officiels

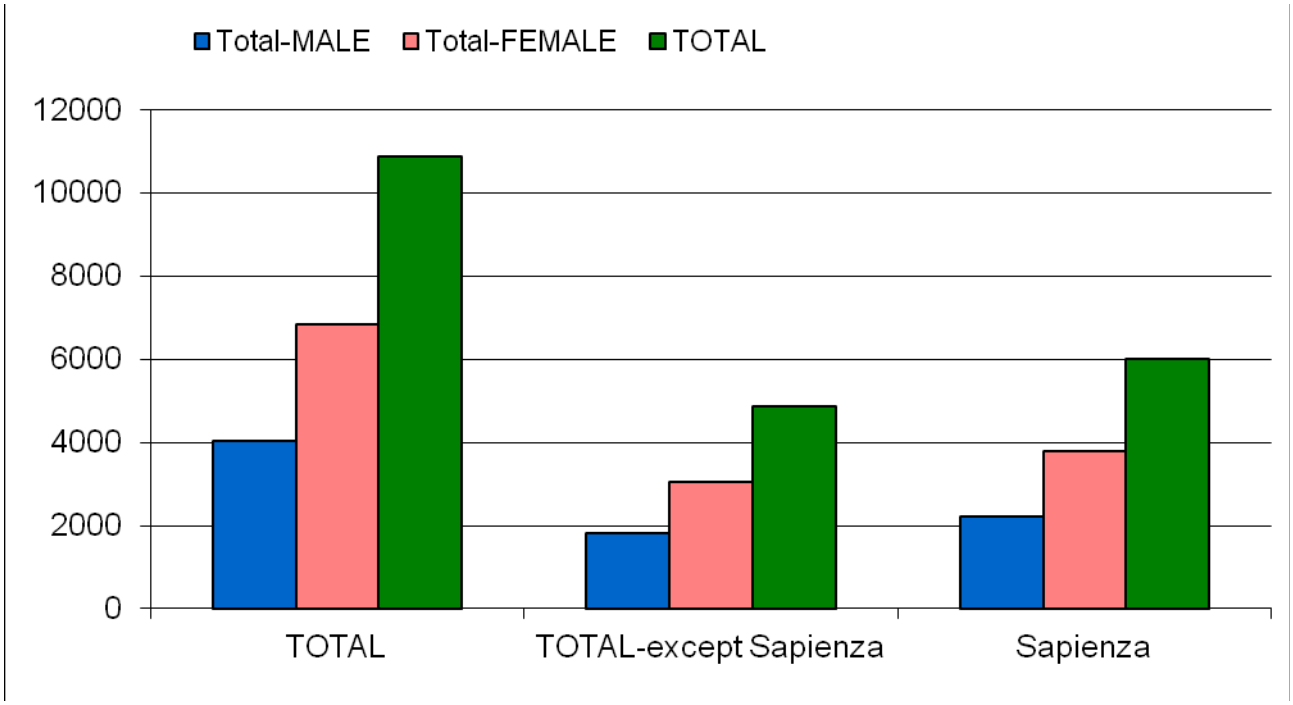
Wallerstein, I, 1974, The Modern World-System, New York Academic Press

Wallis, A., 2002, "The New regionalism". Paper available at the following address: www.munimall.net/eos/2002/wallis_regionalism.nclk

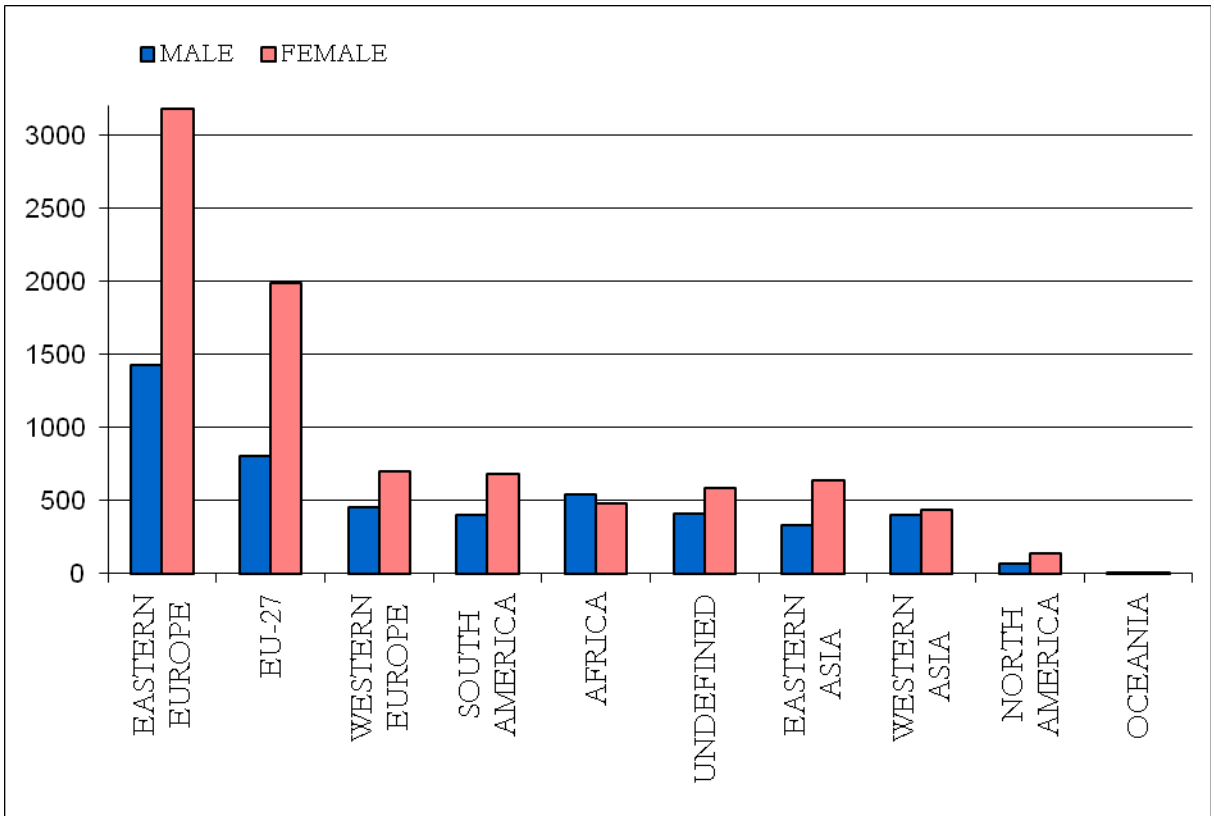
World Bank, 2002, *Constructing knowledge societies: new challenges for tertiary education*, Washington DC, World Bank

Yang, R., 2005, "Internationalizing Chinese higher education: a study of a major comprehensive university", in P. Ninnes and M. Hellsten (eds.), *Internationalizing higher education: critical explorations of pedagogy and policy*, Hong Kong, Comparative Education Research Centre; the University of Hong Kong, pp.97-118

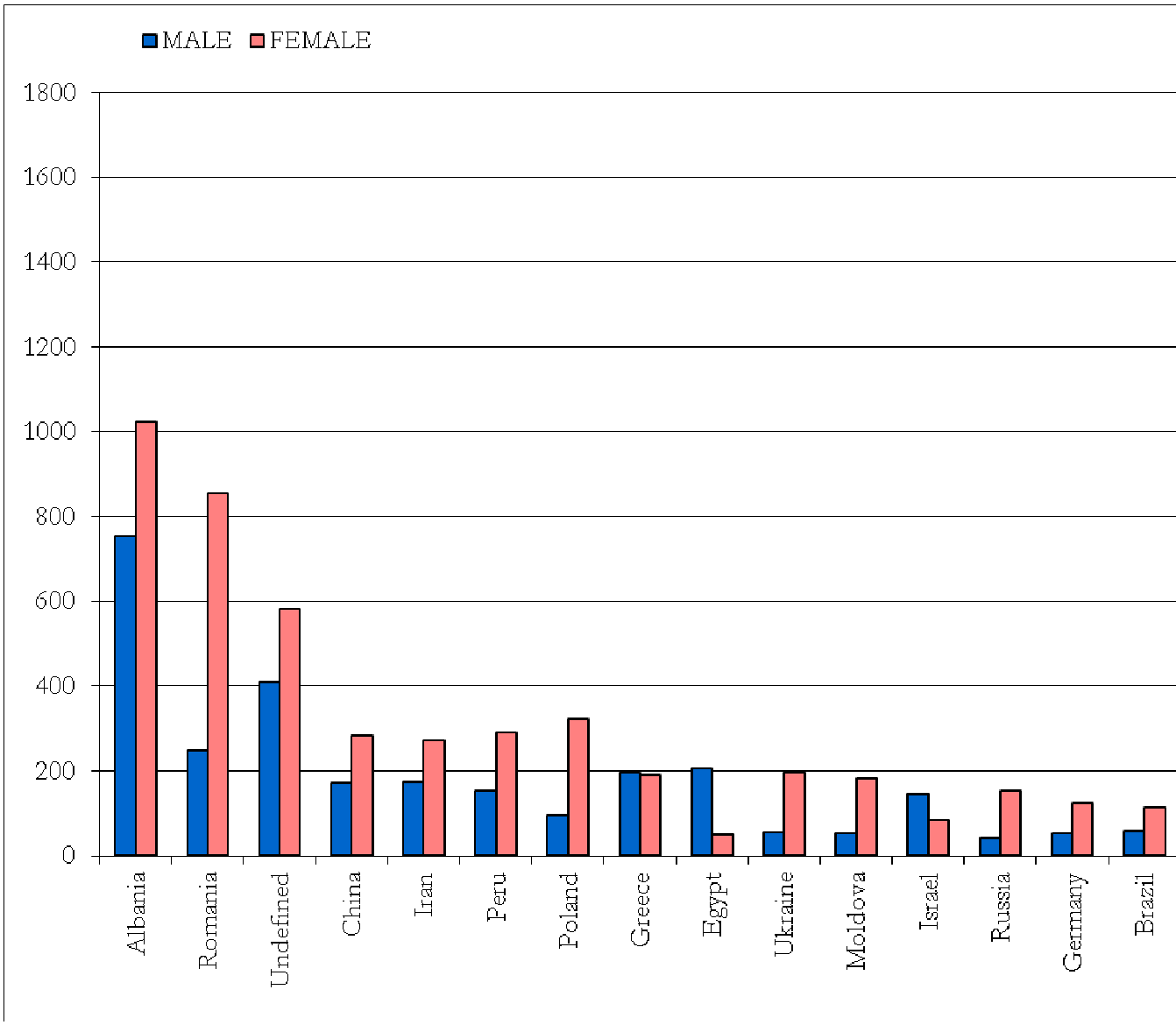
Annex – Figures



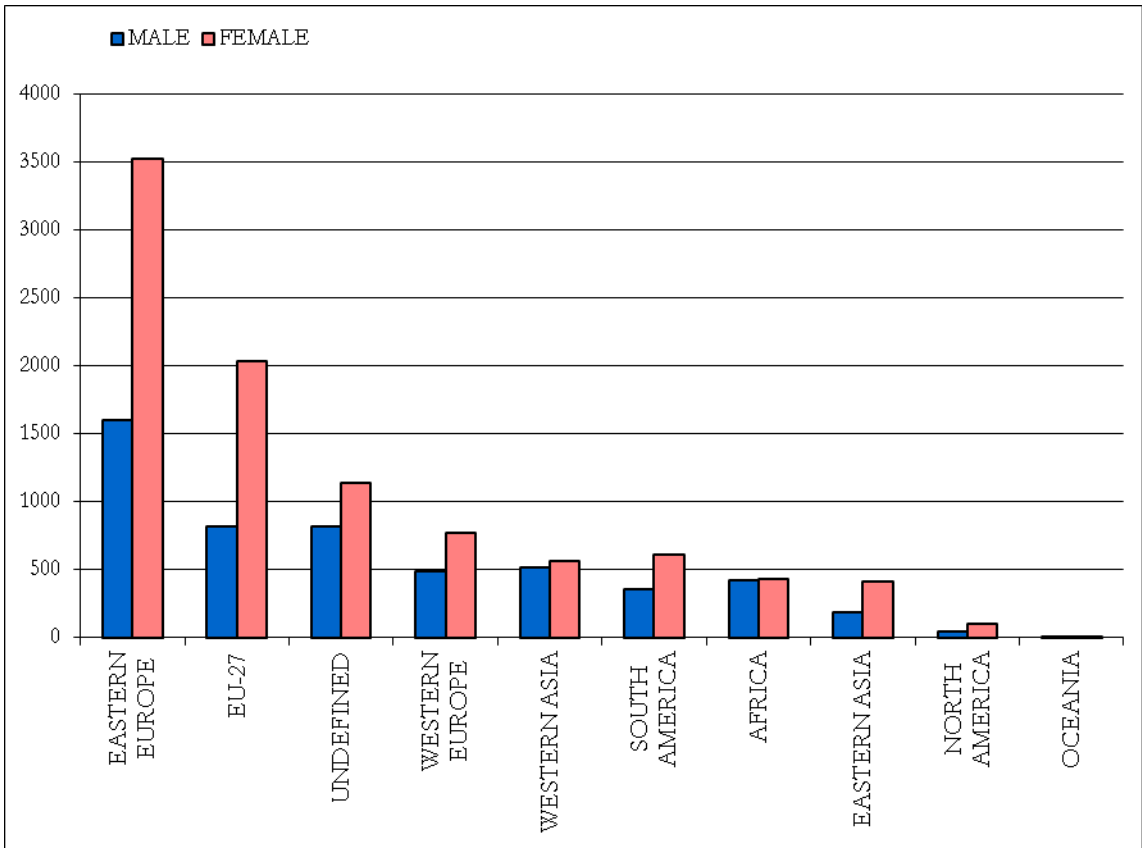
3.1 Universities in Rome, 2009: absolute number of non Italian students.



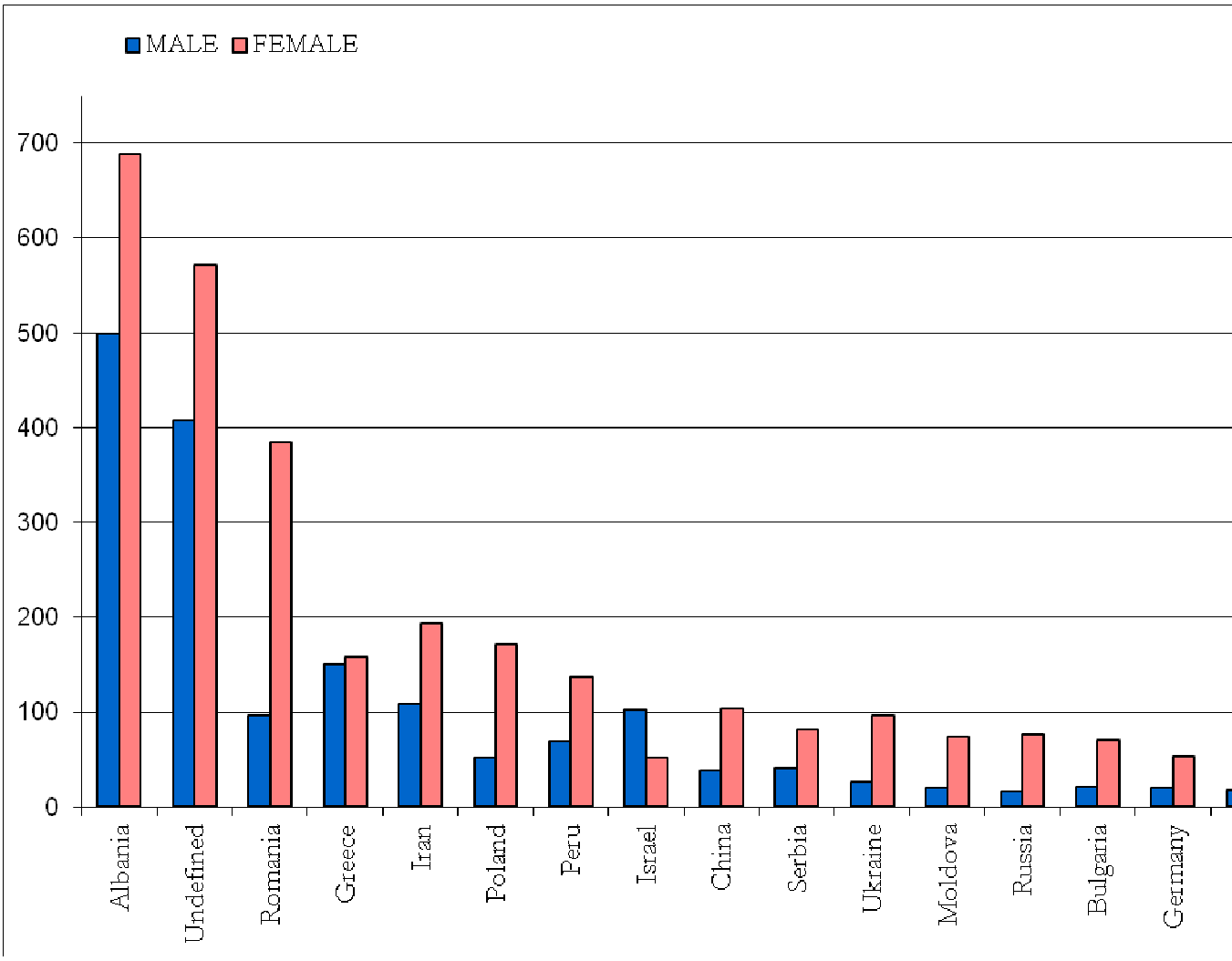
3.2 Universities of Rome, 2009: absolute number of non Italian students attending universities in Rome, by continental and sub-continental areas of origin.



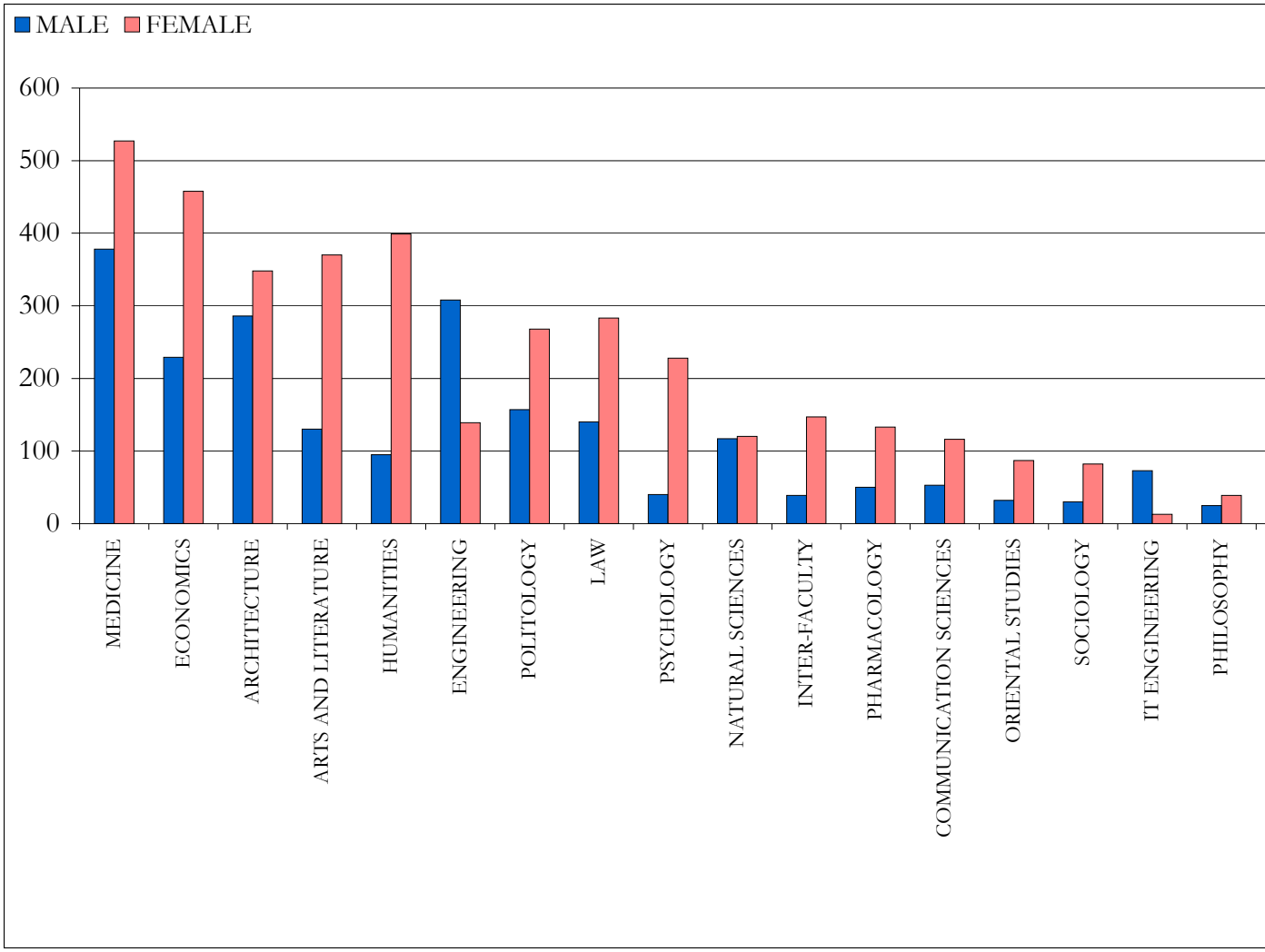
3.3 Universities of Rome, 2009: absolute number of non Italian students by nationalities.



3.4 Sapienza University of Rome, 2009: absolute number of non Italian students by area of origin.



3.5 Sapienza University of Rome, 2009: absolute number of non Italian students by nationalities.

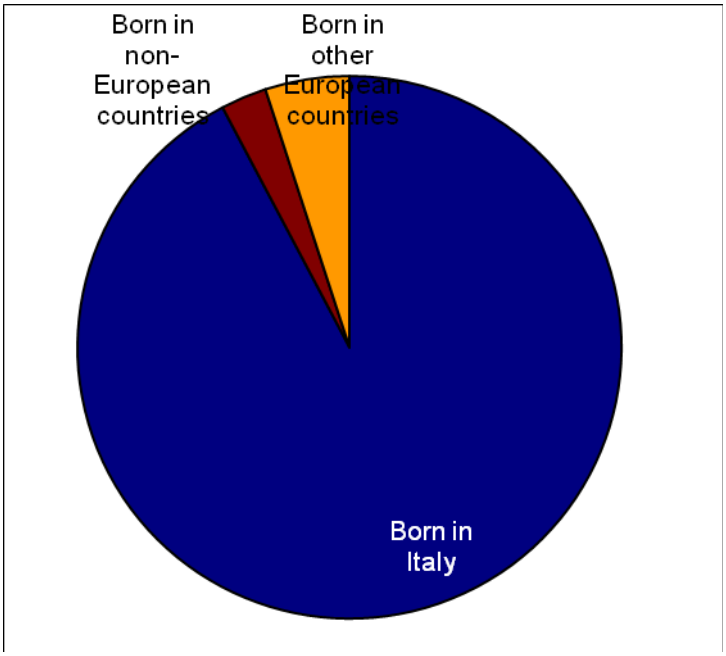


3.6 Sapienza University of Rome, 2009: absolute number of non Italian students by Faculties.

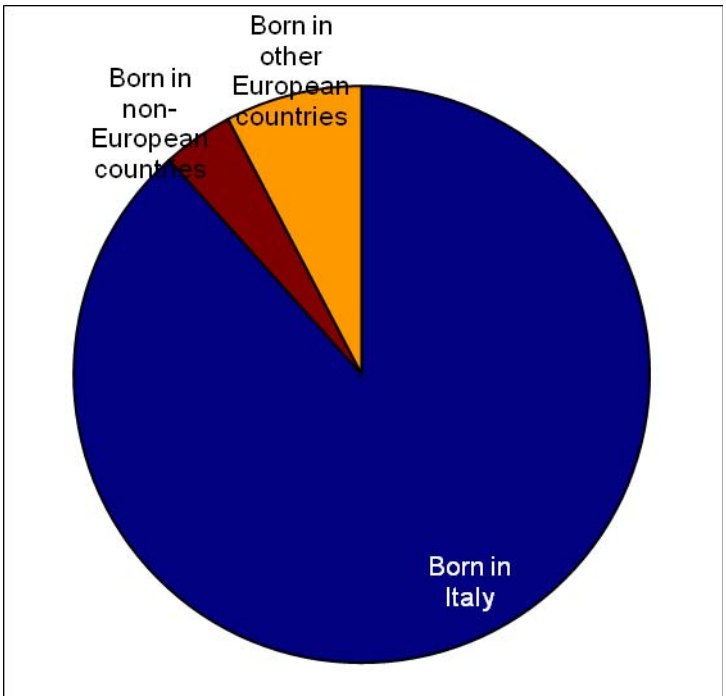
FACULTY	MALE	FEMALE	TOTAL	Nationality - #1	Nationality - #2	Nationality - #3	Nationality - #4	Nationality - #5
MEDICINE	378	527	905	Albania	Greece	Israel	Undefined	Romania
ECONOMICS	229	458	687	Albania	Romania	Peru	China	Undefined
ARCHITECTURE	286	348	634	Iran	Undefined	Albania	Greece	Serbia
ARTS AND LITERATURE	130	370	500	Albania	Undefined	Iran	Romania	Poland
HUMANITIES	95	399	494	Undefined	Romania	Albania	Poland	Iran
ENGINEERING	308	139	447	Albania	Undefined	Iran	Romania	Greece – Peru
POLITOLOGY	157	268	425	Albania	Undefined	Romania	Poland	Russia
LAW	140	283	423	Albania	Undefined	Romania	Poland	Peru
PSYCHOLOGY	40	228	268	Undefined	Albania	Romania	Poland	France
NATURAL SCIENCES	117	120	237	Albania	Undefined	Romania	Greece	Iran
INTER-FACULTY	39	147	186	Albania	Undefined	Romania	Poland	China

PHARMACOLOGY	50	133	183	Albania	Greece	Undefined	Romania	Iran
COMMUNICATION SCIENCES	53	116	169	Undefined	Albania	Romania	Serbia	Peru
ORIENTAL STUDIES	32	87	119	China	Romania	Iran	Undefined	Albania – Morocco
SOCIOLOGY	30	82	112	Undefined	Albania	Poland	Romania	Brazil – Germany – Peru
IT ENGINEERING	73	13	86	Albania	Iran	Romania	China	Ecuador – Peru – Undefined
PHILOSOPHY	25	39	64	Undefined	Greece	Poland	Peru – Switzerland	
STATISTICS	15	20	35	Undefined	Romania	Albania	All others	
AERONAUTICAL ENGINEERING	19	2	21	Romania	Albania	Colombia	Tunisia	All others
SCHOOL OF AEROSPACE ENGINEERING	2	1	3	Greece – Iraq – Serbia				
SCHOOL FOR ARCHIVISTS AND LIBRARIANS	1	0	1	Undefined				

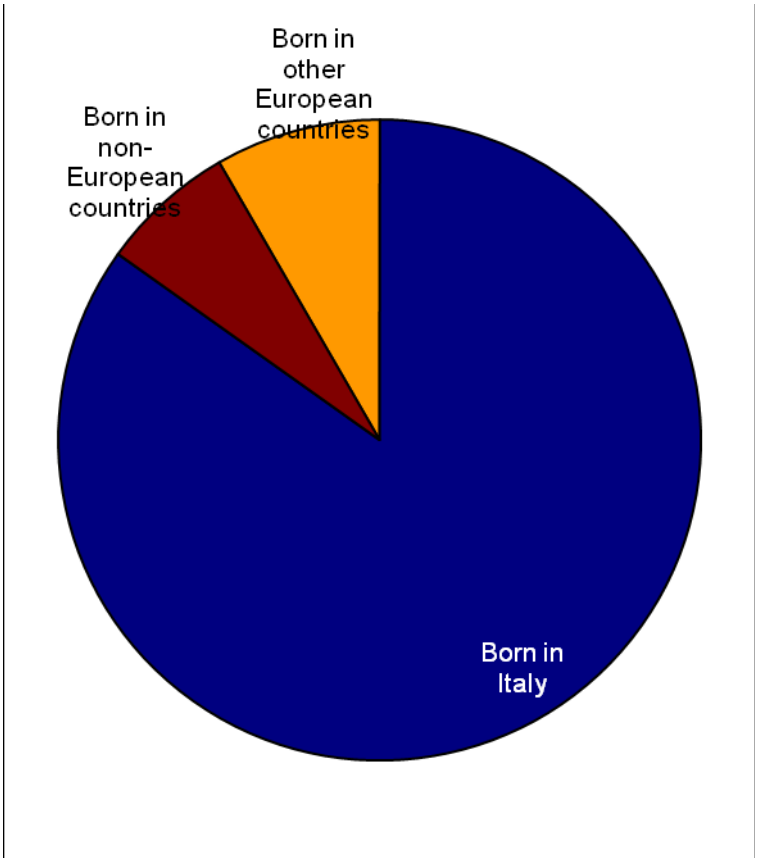
3.7 Sapienza University of Rome, 2009: absolute number of non Italian students by Faculties and the five most represented nationalities



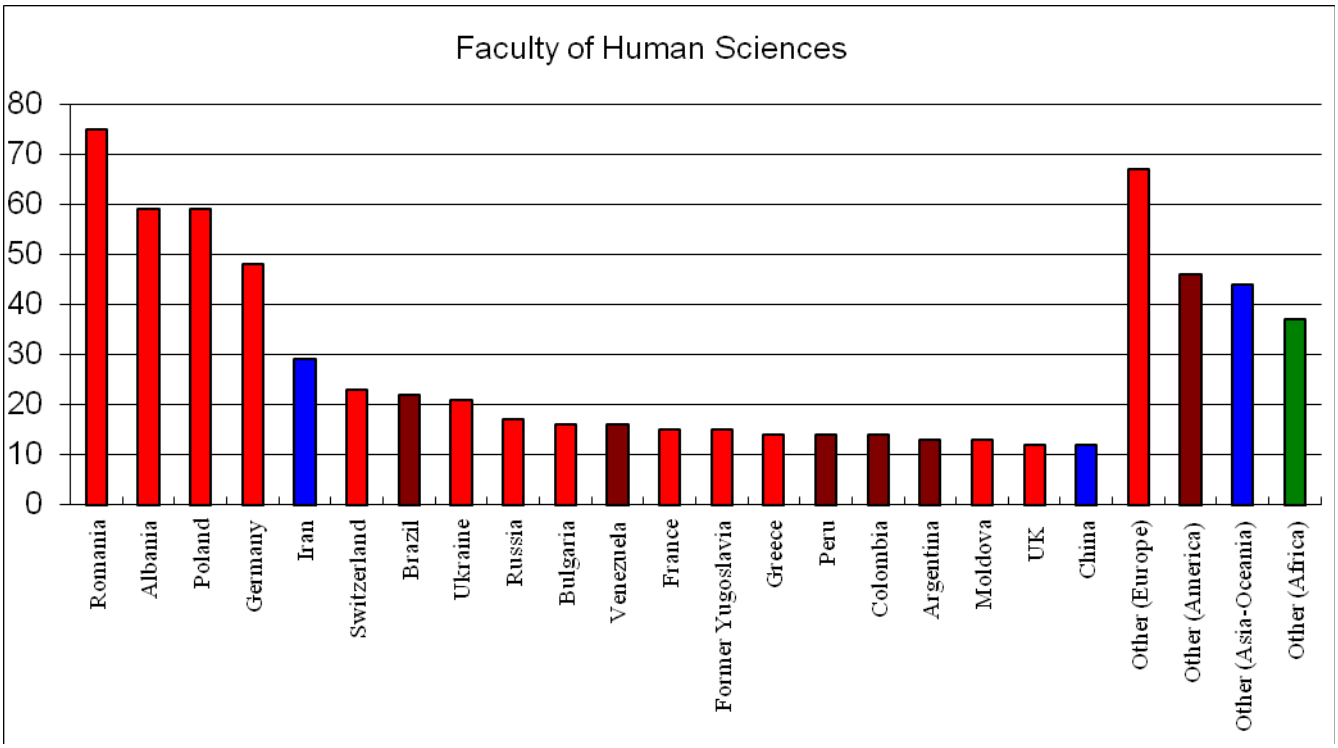
4.1 Faculty of Human Sciences, Foreign students by place of birth, 2009/2010



4.2 Faculty of Human Sciences, Course of Mediation, Foreign students by place of birth, 2009/2010

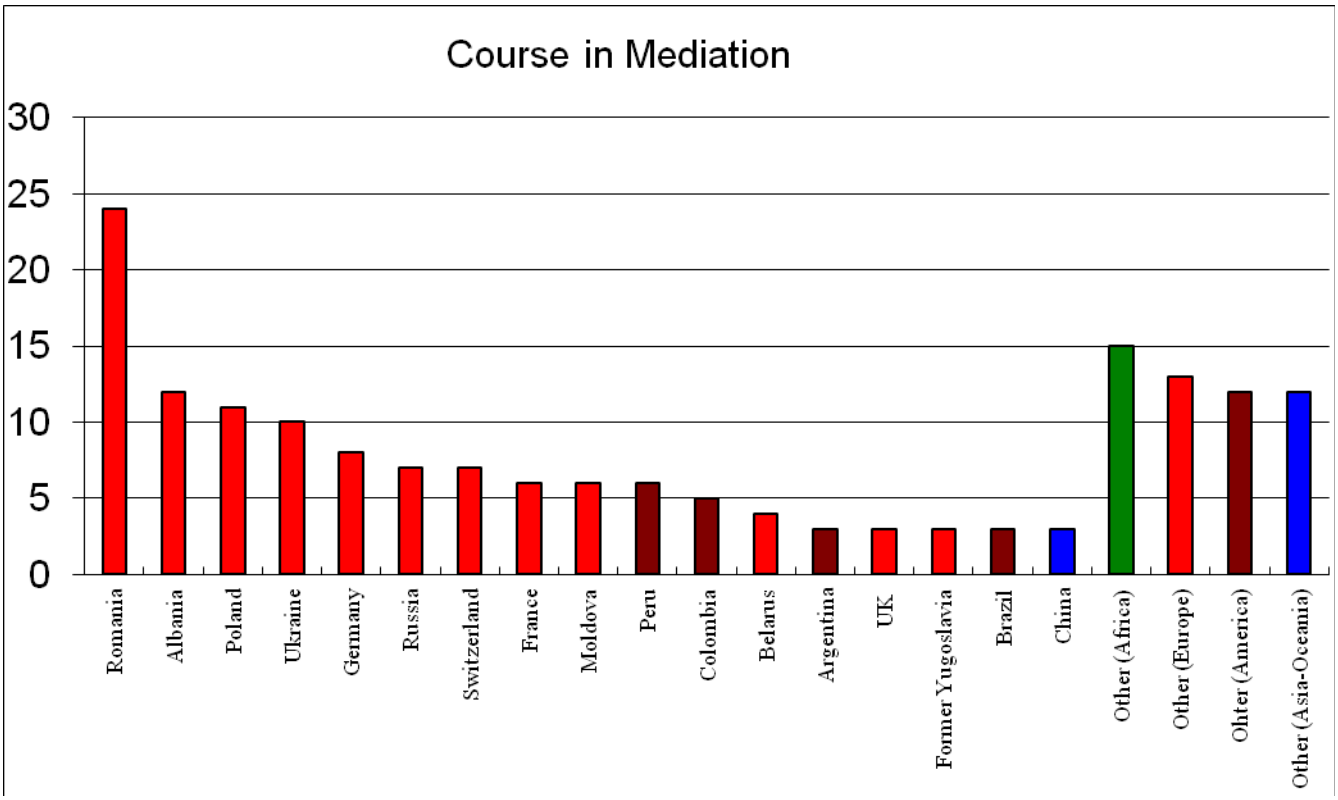


4.3 Faculty of Human Sciences, Course of Tourism Sciences, Foreign students by place of birth, 2009/2010

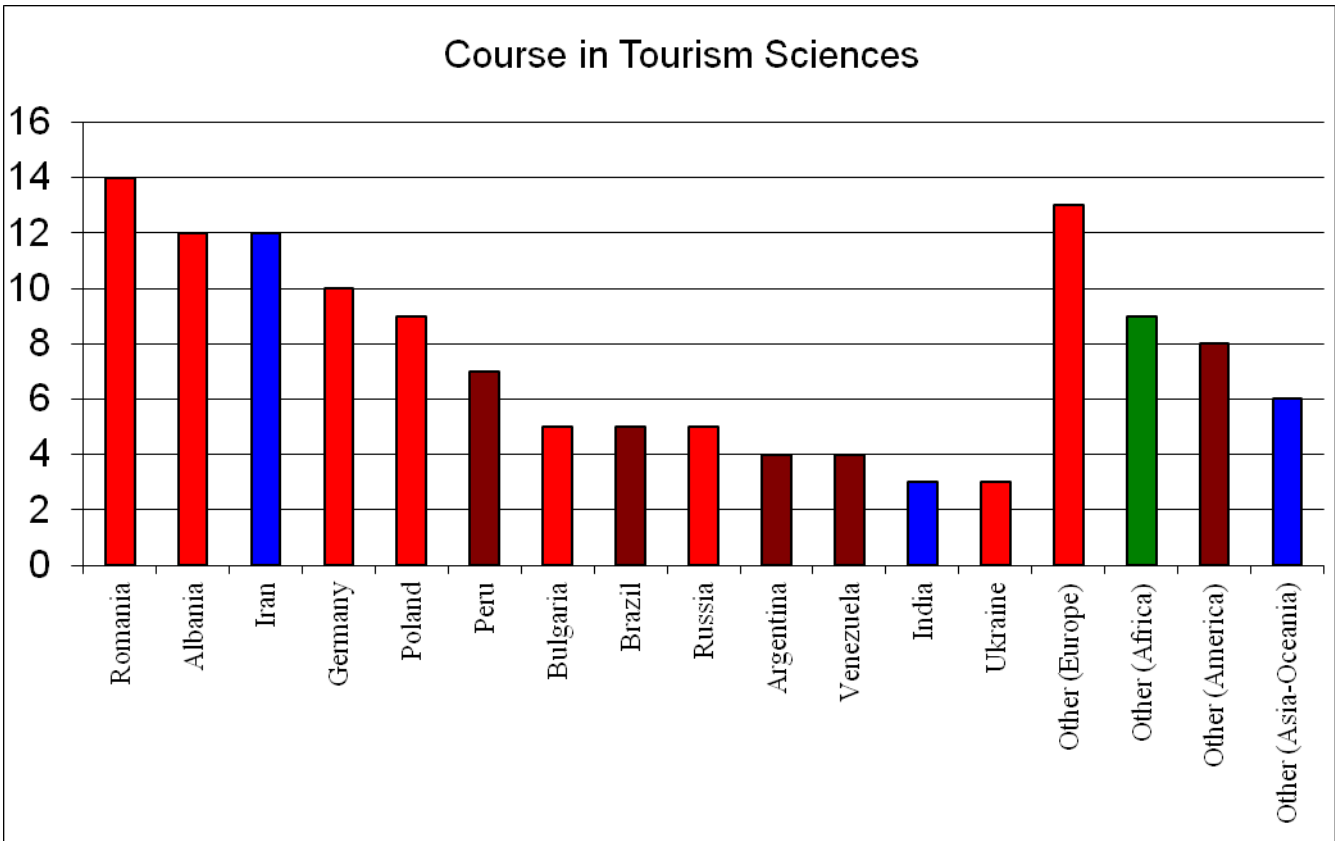


4.4 Faculty of Human Sciences, Foreign students by place of birth, absolute values, 2009/2010

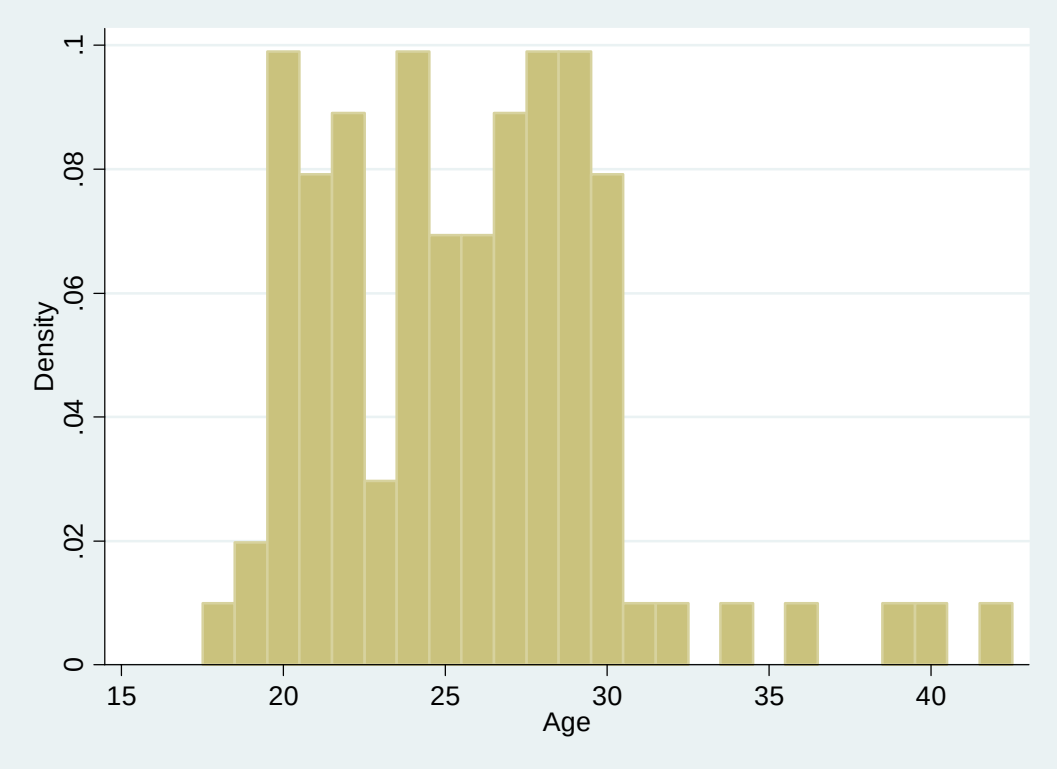
4.5 Faculty of Human Sciences, Foreign students by place of birth, locations, 2009/2010



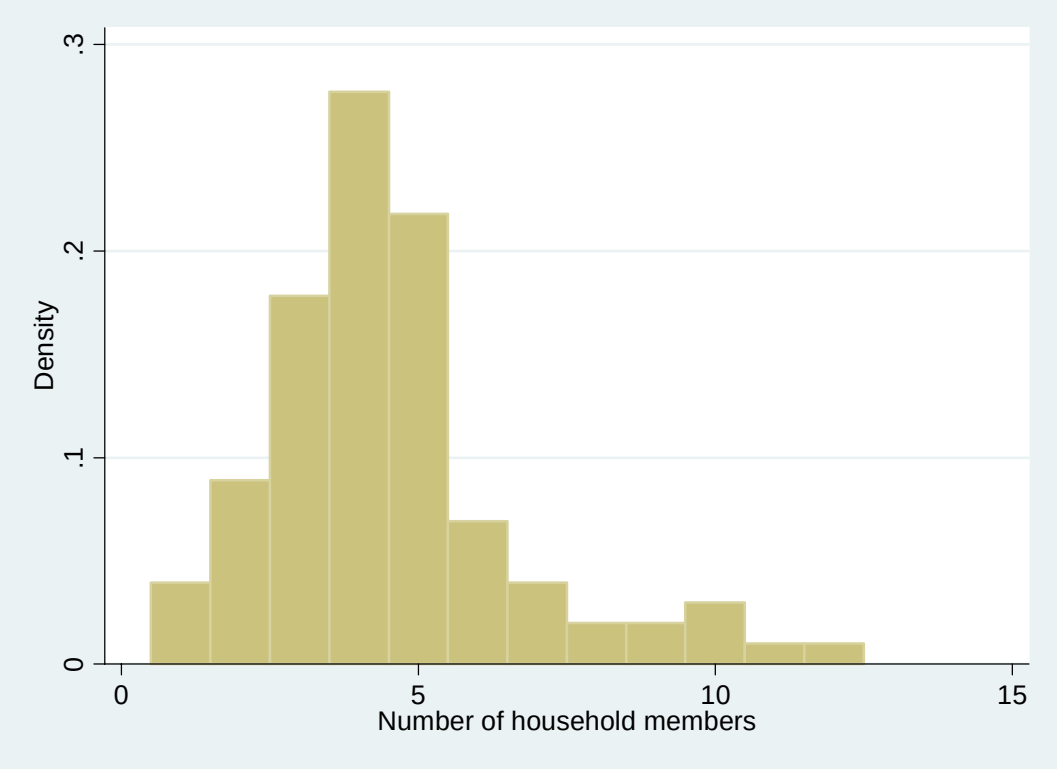
4.6 Faculty of Human Sciences, Course in Mediation, Foreign students by nationality, absolute values, 2009/2010



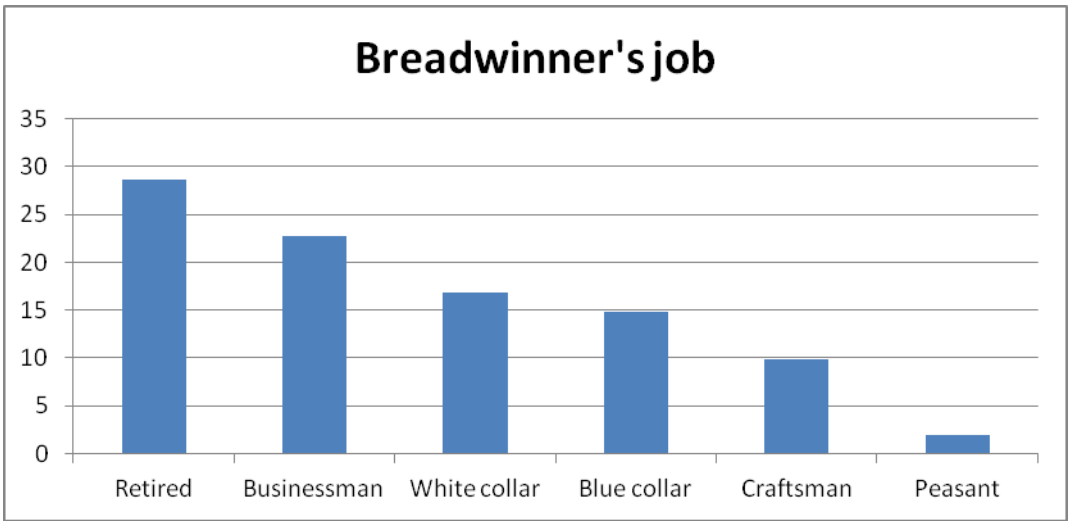
4.7 Faculty of Human Sciences, Course in Tourism Sciences, Foreign students by nationality, absolute values, 2009/2010



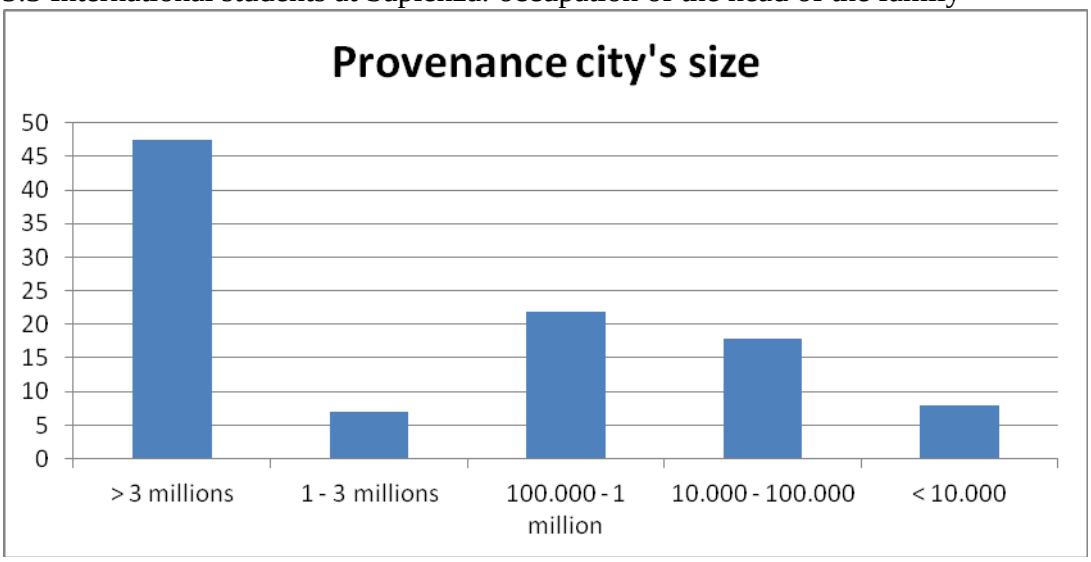
5.1 International students at Sapienza: age range



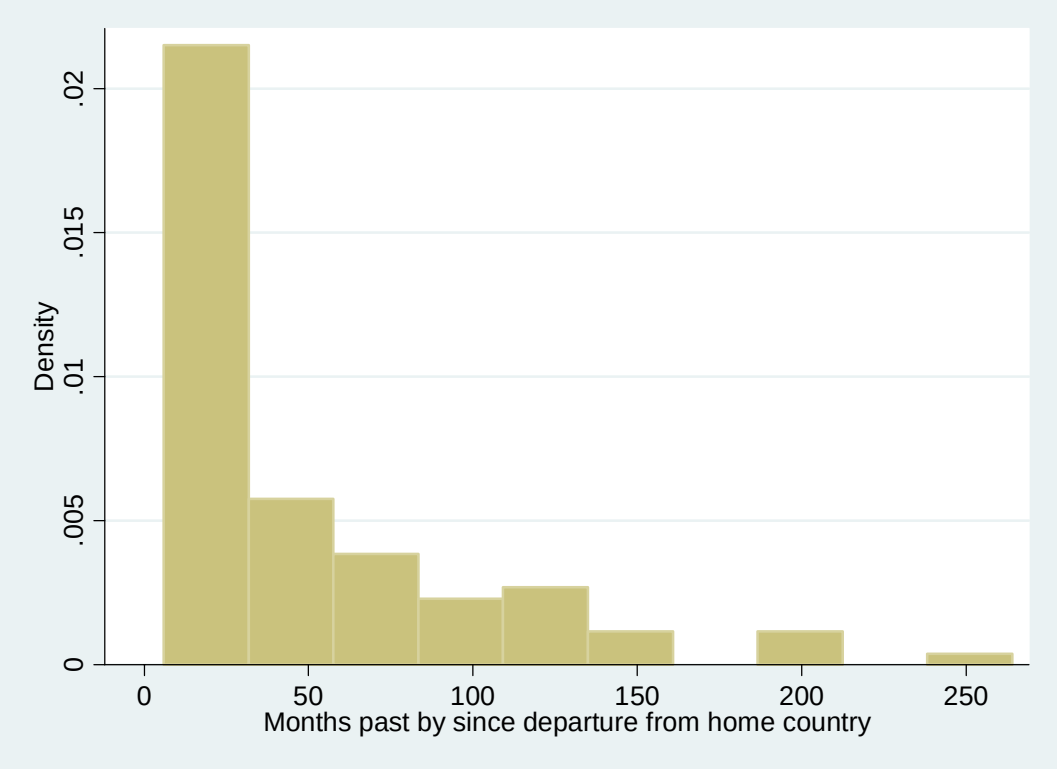
5.2 International students at Sapienza: households' size



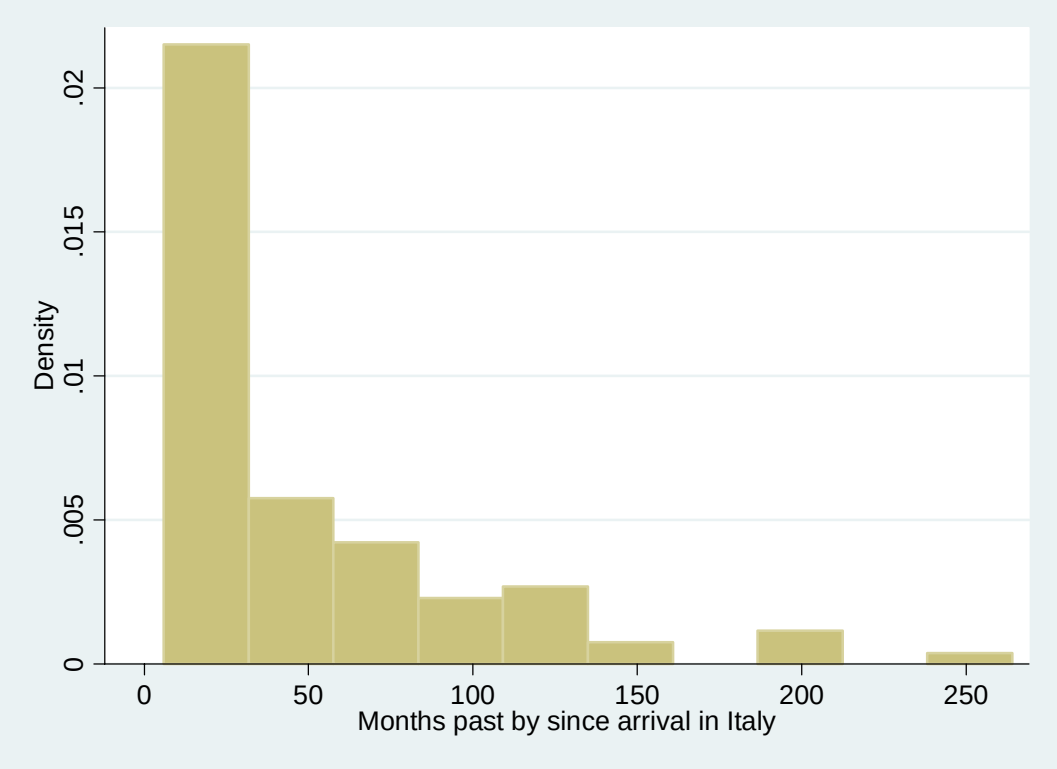
5.3 International students at Sapienza: occupation of the head of the family



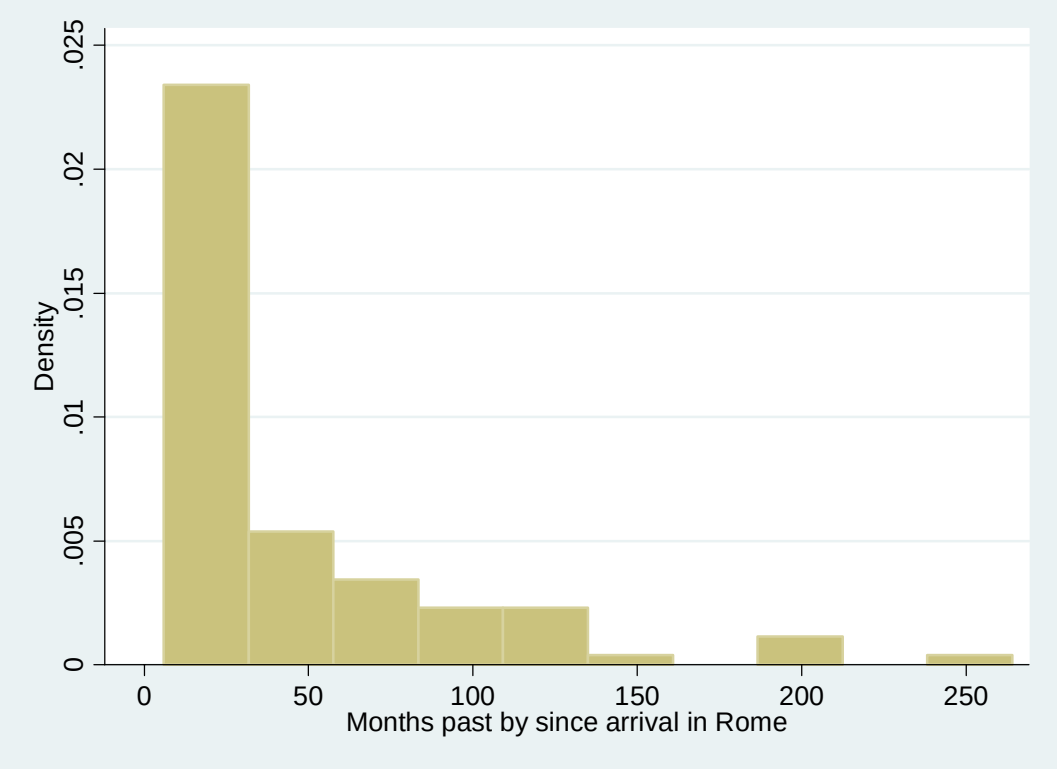
5.4 International students at Sapienza: size of the city of origin



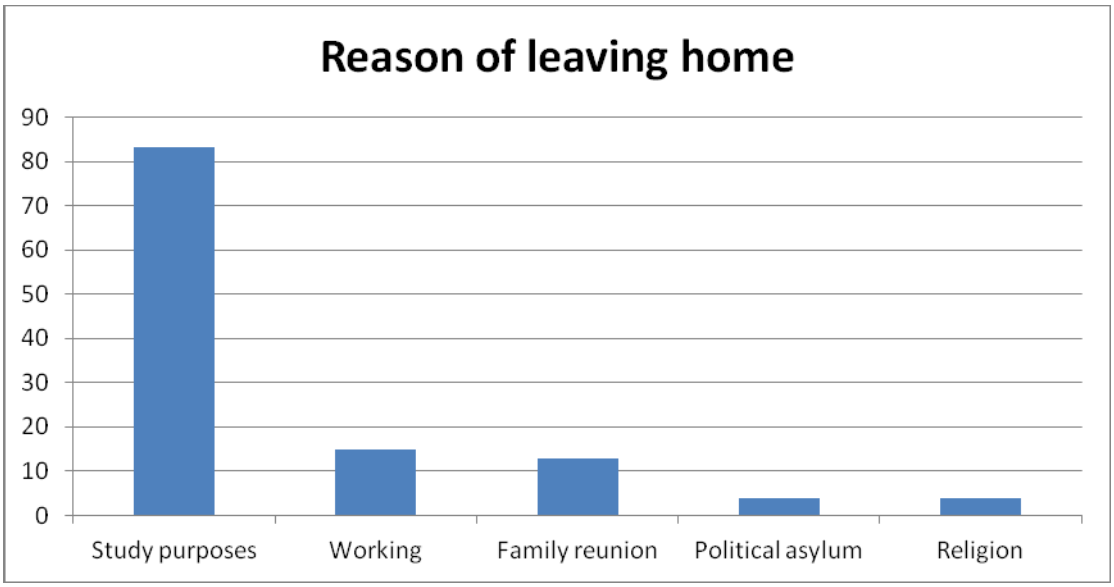
5.5 International students at Sapienza: length of the migratory path



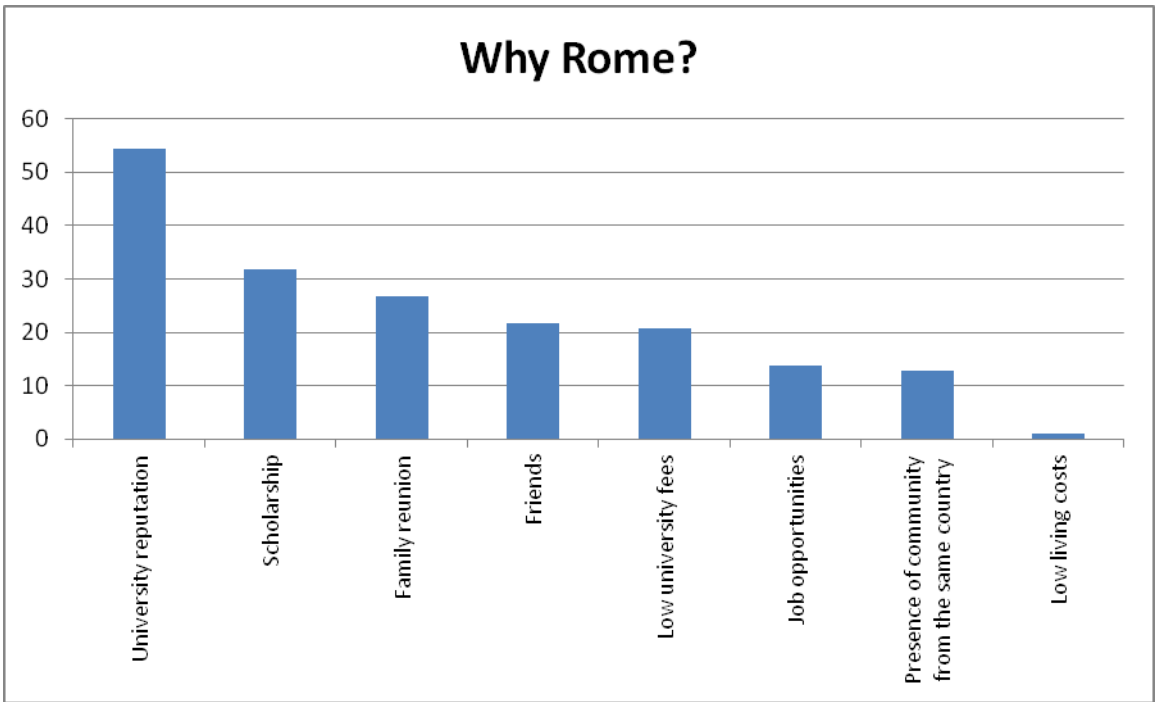
5.6 International students at Sapienza: length of their stay in Italy



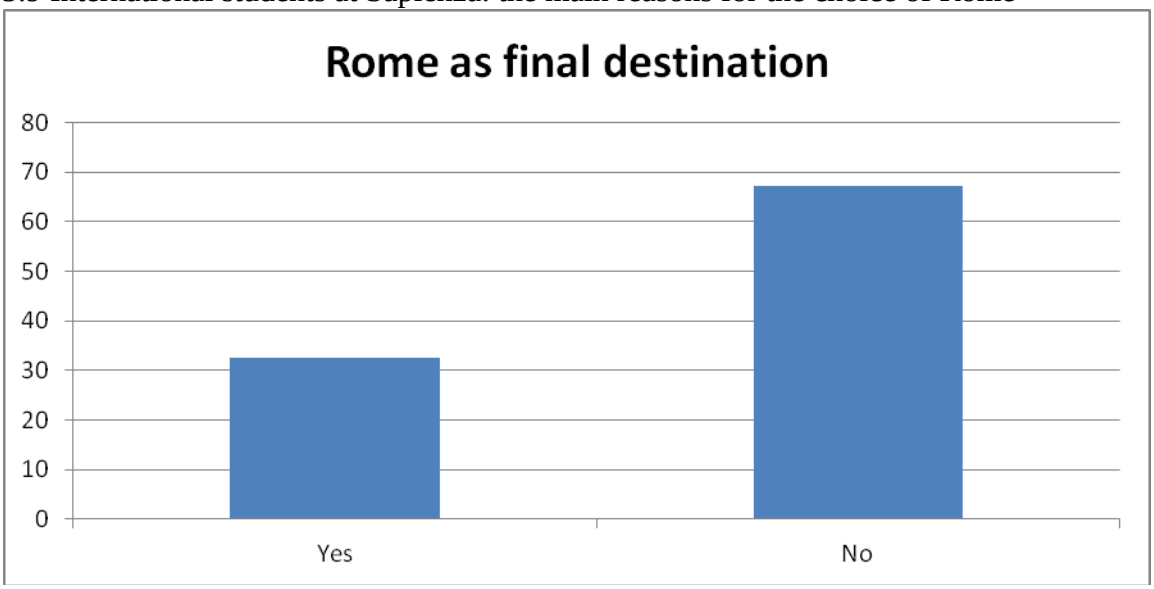
5.7 International students at Sapienza: length of their stay in Rome



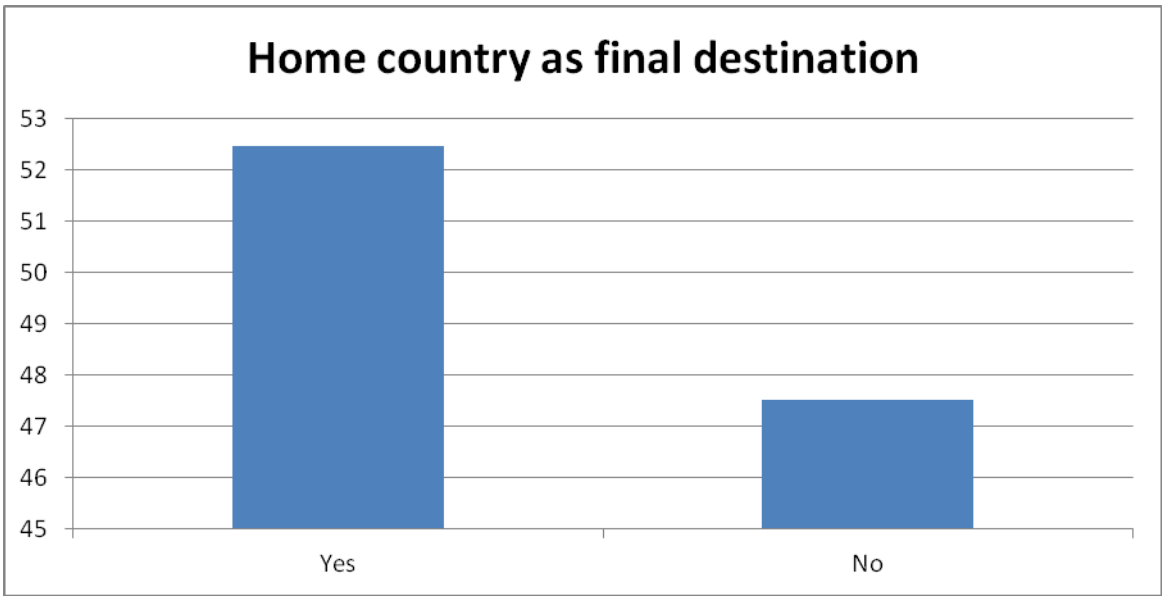
5.8 International students at Sapienza: main reason to leave the home country



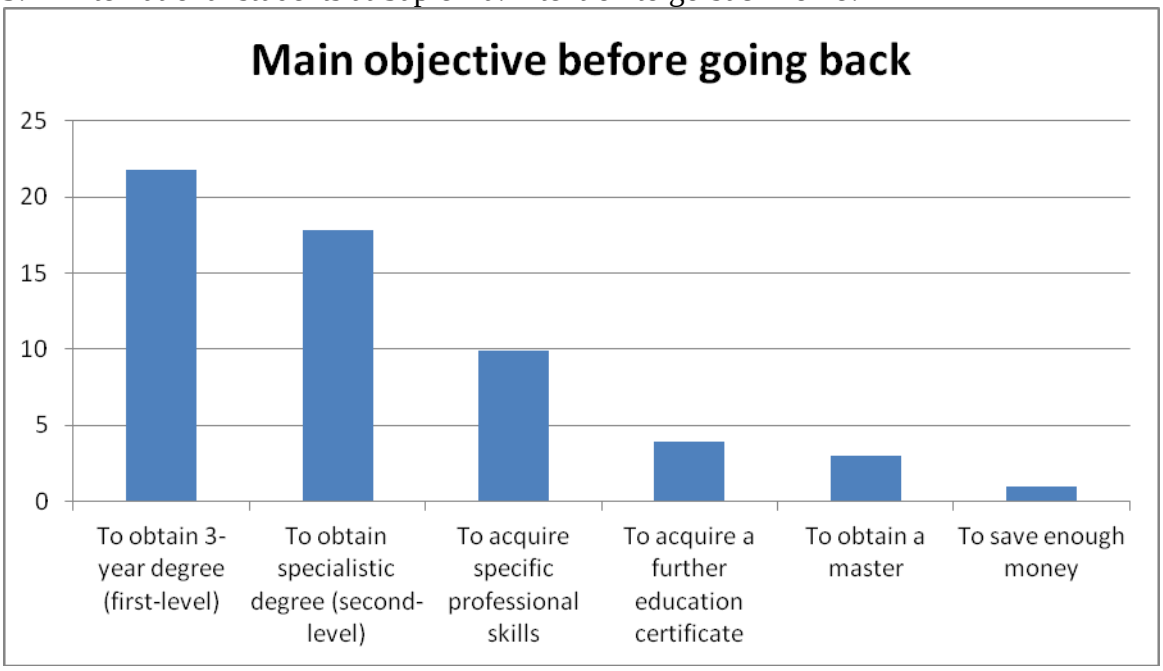
5.9 International students at Sapienza: the main reasons for the choice of Rome



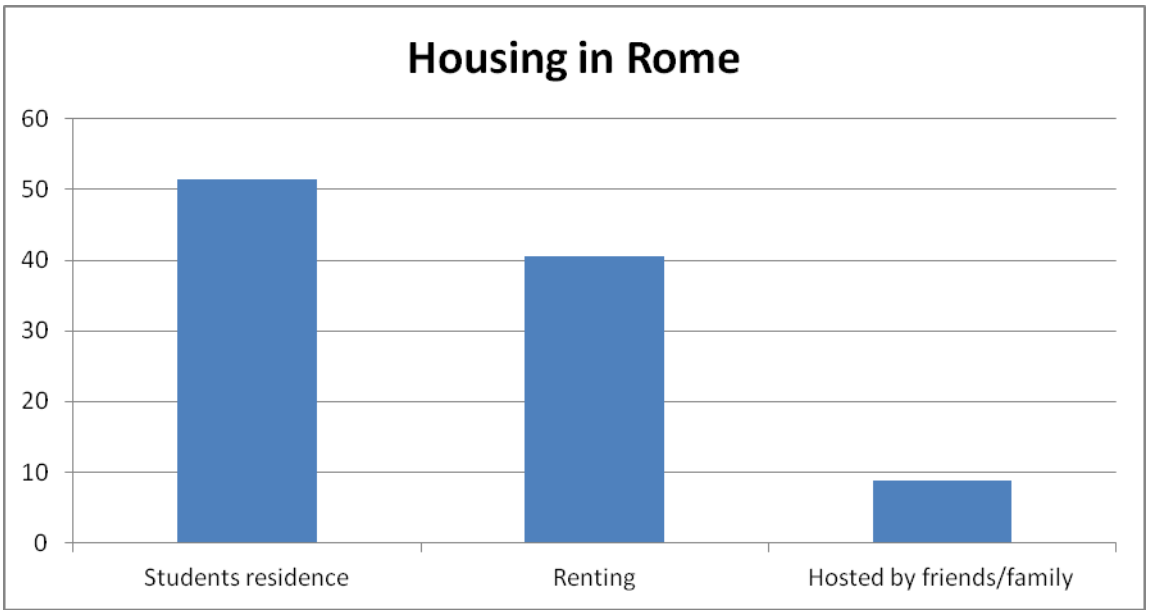
5.10 International students at Sapienza: Rome as final destination?



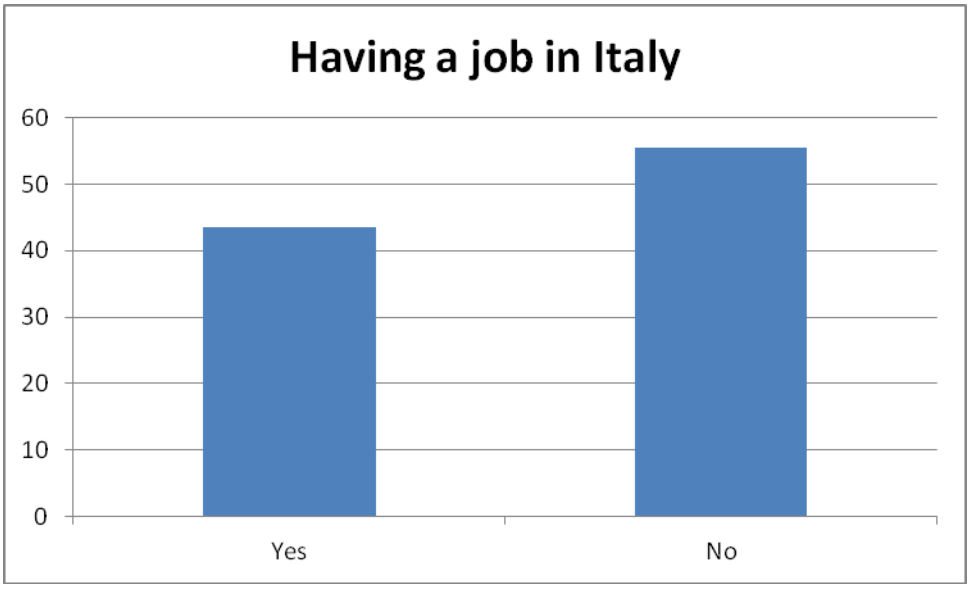
5.11 International students at Sapienza: intention to go back home?



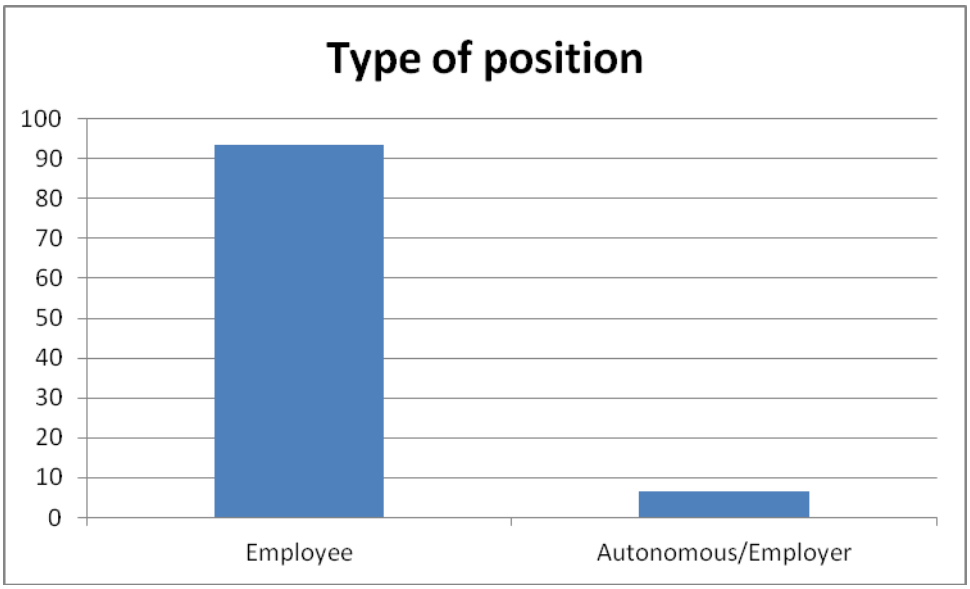
5.12 International students at Sapienza: main aims before going back home



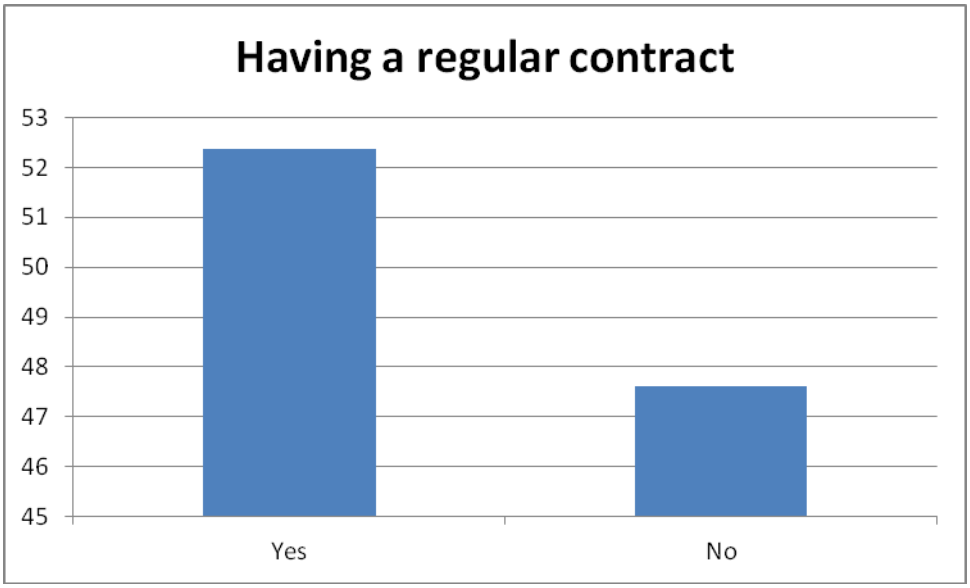
5.13 International students at Sapienza: housing condition



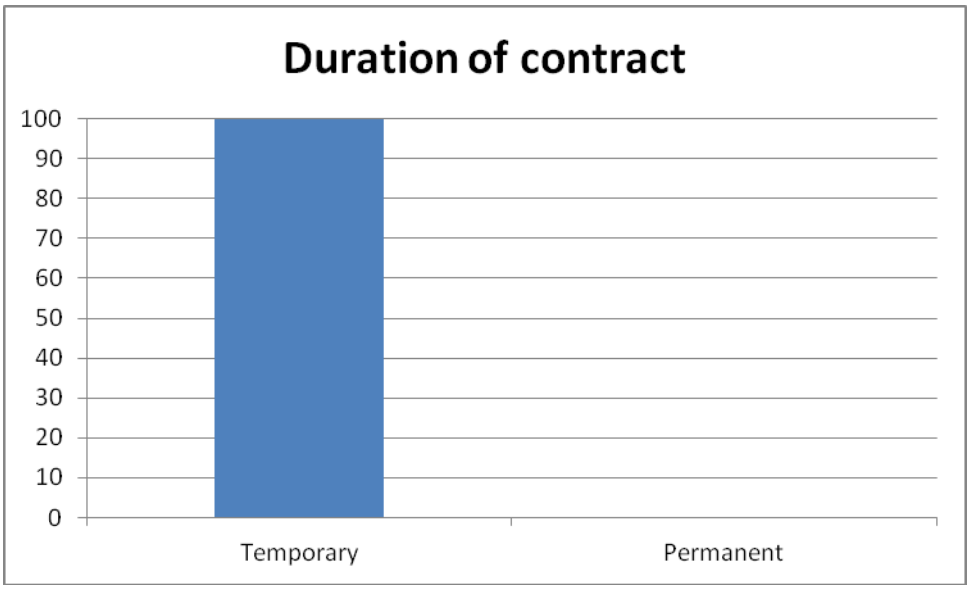
5.14 International students at Sapienza: working students?



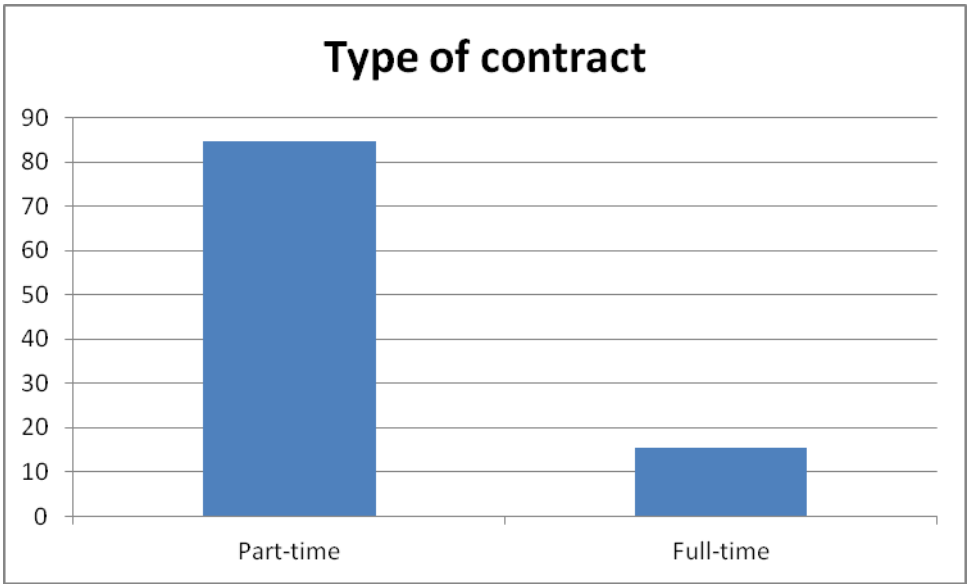
5.15 International students at Sapienza: position in the job



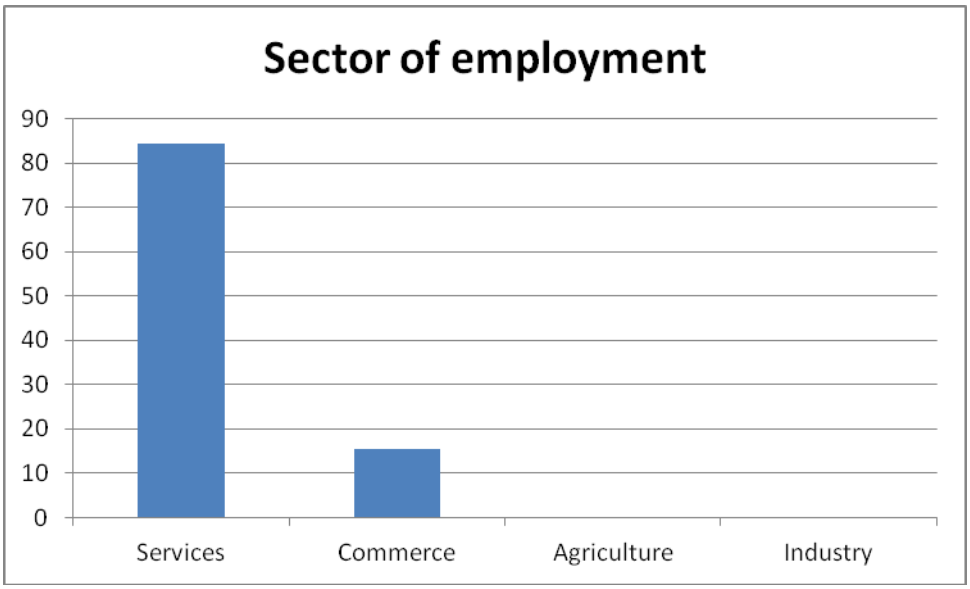
5.16 International students at Sapienza: working condition



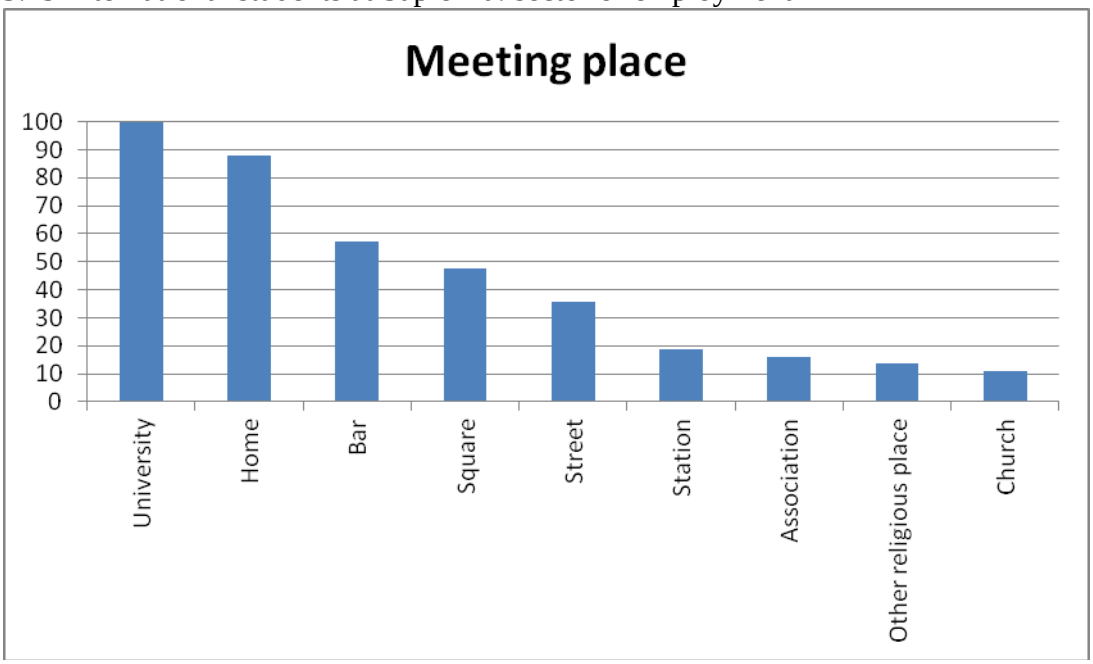
5.17 International students at Sapienza: duration of the working condition



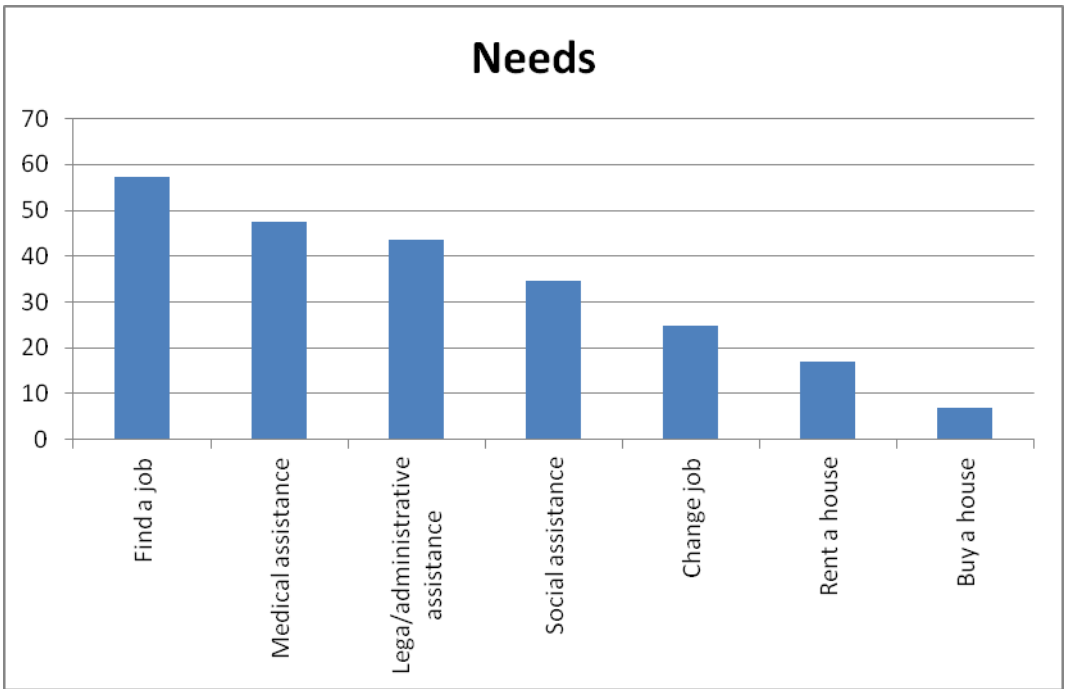
5.18 International students at Sapienza: typology of contract



5.19 International students at Sapienza: sector of employment



5.20 International students at Sapienza: places for the socialization



5.21 International students at Sapienza: main needs and wishes