EUROPEAN TERTIARY EDUCATION REGISTER

What ETER is...

... a European Commission database initiative collecting information on Higher Education Institutions (HEIs) in Europe

Contact us:

E-Mail:
eter@eter-project.com

Web:
www.eter-project.com

Internationalisation of Academic Staff in European Higher Education

European Tertiary Education Register

The ETER project, 2019

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Internationalisation of Academic Staff in European Higher Education

European Tertiary Education Register

Internationalisation of higher education plays a key role in ensuring that Europe becomes a smart, sustainable and inclusive economy. Internationalisation encompasses short-term and/or long-term mobility of students and staff, strategic partnerships on education, research and innovation, curriculum development, shared or joint programme offers, intercultural understanding and social engagement, knowledge creation and application, global positioning, increased reputation, visibility and competitiveness.

The contribution of international academic staff to the improvement of teaching and the quality of curricula, transfer of good practices, educational methodologies, new classroom technologies and approaches have not been systematically studied yet. These questions remain unanswered because there is a lack of information on foreign academic staff in higher education systems. This report, based on unique data from the European Tertiary Education Register, provides evidence on the proportion of international academic staff based on nationality from 19 countries and more than 1,500 European higher education institutions. It is a first step in addressing the impact of internationalisation on teaching and educational activities.

Key findings

Country-level patterns

- Internationalisation of academic staff is much more widespread in Western and Northern Europe.
- Southern European countries display lower proportions of foreign academic staff, with a gradual increase in the recent years.
- The medium of instruction (mainly English), national investment in research and the presence of highly-reputed international universities may be associated to the extent of internationalisation of academic staff.

Institution-level patterns

- Higher education institutions in Western Europe, particularly in the UK, Switzerland and the Netherlands, and in Northern Europe, particularly in Denmark and Finland, have the highest numbers of foreign academic staff.
- Top-reputed international universities have a sizeable number of foreign academic staff that can be measured in thousands.
- About 200 European higher education institutions count more than 200 foreign academic staff.

Institutional characteristics and internationalisation

- PhD-awarding universities attract more foreign academic staff compared to other types of institutions.
- Institutions with a high share of foreign academic staff also display high levels of internationalisation of the student body.
- Education-oriented institutions are less internationalised as compared to research-oriented institutions.

Content

1. This report

This report provides novel empirical evidence on the number and distribution of foreign academic staff across Higher Education Institutions (HEIs) in Europe based on data from the European Tertiary Education Register (ETER).

As reviewed in section 2 of this report, the international mobility of academic staff is one of the priorities of the European Commission's higher education modernisation agenda[1] and has been the subject of intense policy debate since the start of the Bologna reforms. It is generally believed that obstacles to international mobility remain too high in a number of European countries, but, at the same time, many European countries are reforming their policies to achieve this goal[2]. Several policies have also been introduced at the European level, including measures within the Erasmus+ and the European Framework programmes, to support international mobility of academic staff.

Lack of data, however, has been a serious obstacle to analyse the state of play. Most of the empirical evidence on the subject has been derived from surveys of academics (Franzoni, Scellato and Stephan, 2014), while "harmonised comprehensive statistics on the mobility of academic staff in Europe are not currently available" (European Commission/EACEA/Eurydice 2017, 103). This is largely due to the lack of common definitions and of systematic data collection at the institutional and national level, as data on internationalisation of HEI staff is not included in the EUROSTAT higher education data collection (Fritzell, 2007).

An improvement in this respect is ETER, which provides data on the number of foreign academic staff in European HEIs obtained via National Statistical Authorities.

ETER offers a clear and harmonised definition of foreign academics, as individuals without the citizenship of the country in which they are employed. ETER provides a very extensive coverage of all universities in Europe (that is, PhD-granting institutions) and a very comprehensive coverage of non-university institutions (offering up to the Master degree, or ISCED 7). Moreover, data availability from 2011 to 2016 allows the first-ever analysis of the evolution over time of foreign academic staff. As such, this is the first report that provides a systematic analysis of internationalisation of academic staff across European countries and different types of HEIs.

This report, therefore, provides empirical evidence on questions such as:

- What is the share of foreign academic staff in European HEIs?
- Which are the countries with the largest proportion of foreign academic staff?
- Which are the European HEIs with the largest proportion of foreign academic staff?
- Are there systematic differences between types of HEIs, for example between universities (PhD-awarding) and non-university HEIs?
- Is internationalisation related to other HEI characteristics, like research orientation and the field in which the HEI is active?

It should be noted that the data i) allows the investigation of foreign academic staff based on nationality, ii) does not include all countries and, in particular, is missing for Eastern European countries, iii) cannot be disaggregated by staff level and iv) does not include short international staff mobility.

This report has been prepared by Andrea Bonaccorsi (University of Pisa) and Daniele Biancardi (University of Bergamo) with the support of Alessandro Daraio, Benedetto Lepori, Daniel Wagner-Schuster and Marija Breitfuss-Loidl.

[1] Communication on a Renewed EU Agenda for Higher Education COM (2017) 247

[2] Eurydice Brief: Modernisation of Higher Education in Europe: Academic Staff (2017)

What is ETER?

The European Tertiary Education Register (ETER) is a database of European Higher Education Institutions (HEIs) delivering degrees at the tertiary level. It provides data on descriptors and regulatory characteristics, geographical information, students and graduates, staff, HEI expenditures, research and transfer activities, as well as a set of pre-defined indicators characterising relevant dimensions of HEI activities, like the extent of subject specialisation, international mobility and gender balance.

ETER is currently providing information on nearly 3,000 HEIs in 37 European countries from the year 2011 (academic year 2011/2012) to 2016 (2016/2017), including EU-28 countries, EEA-EFTA countries (Iceland, Liechtenstein, Norway and Switzerland) and candidate countries (Albania, North Macedonia, Montenegro, Serbia and Turkey). However, for some of these countries, no data (French part of Belgium, Montenegro, Romania) or very limited data (Albania, Denmark, Iceland, North Macedonia, Turkey) is available.

What is the rationale for ETER?

Reliable information on higher education systems is key for the modernisation of European higher education, as it lays the groundwork for evidence-based policies. Reliable information at the institutional level is important for HEIs and stakeholders to make informed choices, for example on potential cooperation partners, subjects offered, the quality of education, employability, and research quality.

ETER contributes to these goals in two main ways. First, it provides a reference list of HEIs in the European higher education area, including descriptive and geographical information, which can be used to describe the system and allows matching ETER with other data sources. Second, it provides a core set of statistical data on these HEIs, which are sufficiently comparable between European countries.

Which is the coverage of ETER?

In terms of HEI coverage, ETER provides a broad coverage of institutions in the tertiary sector delivering at least a diploma at the bachelor level (level 6 of the International Standard Classification of Educational degrees, ISCED[3]). ETER mainly excludes institutions delivering only short diplomas (ISCED 5), but this is of less concern for the analysis of internationalisation, which largely refers to institutions involved in research.

ETER HEIs can be divided into two groups: a) the institutions delivering degrees up to the doctoral level (ISCED 8), broadly labelled as 'universities' and b) the 'non-university HEIs' delivering degrees up to the bachelor (ISCED 6) or the master (ISCED 7) level. While universities are somewhat structurally similar across countries, in the sense that they jointly pursue education (up to the doctoral degree) and research, non-university institutions comprise very different types and groups of institutions, including colleges, artistic schools, educational schools etc.; non-university HEIs tend to be smaller, more specialised and, in most cases, with a limited or no research activity.

What are ETER's uses?

ETER is a general public resource, which can be accessed free of charge and combined with other sources. The potential uses therefore cover different scholarly and policy domains, like analysing the structure of European higher education, studying the impact of HEIs in regions and cities, analysing the efficiency of HEIs and the 'best' size to inform national consolidation policies. Most ETER data are freely accessible online at the public ETER website www.eter-project.com. Part of the data is available upon registration and for research purposes only.

[3] https://ec.europa.eu/eurostat/statistics-explained/index.php/International_Standard_Classification_of_Education_(ISCED)

Who is leading ETER?

ETER is a project funded by the European Commission's Directorate General for Education, Youth, Sport and Culture (contracts EAC-2013-0308 and EAC-2015-280) and the Joint Research Centre (contract 934533-2017 A08-CH). It is a joint undertaking of five partners – USI, Università della Svizzera Italiana, Lugano, JOANNEUM RESEARCH, POLICIES, Graz, NIFU, Nordic Institute for Studies in Innovation, Research and Education, Oslo, University of Rome La Sapienza and University of Pisa – in close collaboration with EUROSTAT, a network of national experts and the National Statistical Authorities of the participating countries.

How is ETER related to EUROSTAT educational statistics?

ETER is a voluntary data collection promoted by the EC and is not part of the European Statistical Infrastructure. To a very large extent, however, ETER follows the UOE manual definitions and practices, particularly for students and graduates. Most data sources are the same as collected for EUROSTAT by National Statistical Authorities which deliver them to ETER in disaggregated form.

The main difference with UOE data collection is that the reference unit is the higher education institution (HEIs) rather than a higher education system/country. Furthermore, ETER provides additional institutional-level data including HEI characteristics, financial and academic staff data mostly obtained from National Statistical Authorities.

2. Internationalisation of academic staff: state of play

In its recent report on academic staff in Europe, Eurydice, the European network on education policies and systems, showed that internationalisation and mobility of academic staff is becoming a central issue for the EU higher education agenda (European Commission 2017). Eurydice's report observed that "there is a wide understanding among policy makers and actors at the institutional level that the mobility of academic staff is beneficial for improving the quality of higher education and research, developing the circulation of knowledge and supporting student mobility" (European Commission/EACEA/Eurydice 2015). The report also acknowledged that "from the perspective of academic staff, opportunities for international activities and mobility could be viewed as an essential part of the terms and conditions of academic employment and as an important means for professional development" (ibid.).

Using ETER data, the Eurydice report demonstrated a highly differentiated situation among European countries, with countries like Italy and Spain having less than 5% foreign academic staff, while the share exceeded 25% in the UK and 40% in Switzerland.

In this report, further analysis on the topic is presented based on the most recent data collection by ETER in the broader context of internationalisation of higher education.

2.1. The broader context. Internationalisation of higher education

Internationalisation of higher education is a large-scale process that is changing the landscape of institutions all over the world. It is anything but a new phenomenon, since scholars were highly mobile as early as in medieval Europe (Welch 1997). However, it has taken an unprecedented scale in the last decade and has become a global phenomenon (Altbach and Knight 2007) as well as a central issue for national policies and institutional strategies (Seeber et al. 2016).

Among the most important dimensions of this phenomenon, the mobility of students[4], the rise of cross-border higher education and of virtual higher education, mobility of researchers and the emergence of global universities have to be mentioned (Hazelkorn 2015).

Internationalisation is closely related to the *globalisation of higher education and the emergence of 'world universities'* (Teichler 2017). The largest and more productive universities in the world are increasingly involved in a global competition for reputation and the ability to attract talented students and academics, a competition also spurred by the increasing role of international university rankings (Collins and Park 2016). Worldwide competition puts HEIs under pressure on the continental and national level as well, since stakeholders and policymakers take international rankings into account in their decisions, for example concerning the attribution of resources (Vernon, Balas and Momani 2018). Global competition for talented academics is a key dimension in this process (Lepori, Seeber and Bonaccorsi 2015).

Students are becoming increasingly mobile. In 2014, 4 million students were mobile at world level (Source: OECD), a number which has doubled since the year 2000 (Bhandari and Blumenthal, 2011). In 1950, this number amounted to only 110,000. A commonly cited forecast for the year 2025 expected 7.2 million worldwide (Bohm et al. 2002). According to the most recent British Council, growth is however predicted to slow from 5.7 percent (from 2000 to 2015) to 1.7 percent annual average growth up to 2027[5].

Student mobility is rapidly increasing in Europe, also thanks to the introduction of the bachelor-master model and to the establishment of the Erasmus programme for student mobility. A recent JRC report offers the latest analysis. Combining ETER data with UNESCO-OECD-EUROSTAT data, they show that institutional characteristics of individual universities are an important determinant of attractiveness (Sán-

[4] Mobile students are usually defined in international educational statistics as students moving from one country to another after obtaining their secondary degree to enrol to a tertiary education institution (so-called degree mobility). Some statistics still refer to permanent mobility based on citizenship (i.e. students not having the citizenship of the country where they are enrolled).

[5] https://www.britishcouncil.org/contact/press/international-student-mobility-grow-more-slowly-2027

chez-Barrioluengo and Flisi 2017).

Parallel to the increasing internationalisation of students, *a rise in the global mobility of researchers* can be witnessed. This phenomenon takes place at universities and at public research organisations and is attracting large policy attention. The internationalisation of academic staff at universities is part of this larger mobility trend.

Staff mobility is a multifaceted phenomenon that takes a number of forms such as academic visits, exchanges, sabbaticals, grants and employment positions (European Commission 2015). Academic visits and exchanges are common practice in almost all universities, while sabbaticals and grants supporting short-term visits are largely diffused. In this report, the focus is on the most engaging and resource-intensive form of internationalisation, that is, employment. By making the decision to look for employment in the academic sector outside their country of nationality, academics make a long-term commitment, with important personal, emotional, family and social implications, not to mention economic and financial consequences. In turn, by hiring foreign academics, institutions make a commitment to internationalisation that has far-reaching consequences.

Internationalisation of higher education is a complex and multi-dimensional process.

Attracting foreign academic staff is a key dimension of the global competition between universities.

This report focuses on a key structural dimension, i.e. hiring of foreign staff.

2.2. Mobility of researchers[6]: general patterns

This report focuses on the internationalisation of academic staff at HEI level, a broad definition including all individuals employed by a HEI in education and research, such as professors, lecturers, researchers and PhD students. We therefore analyse differences in the share of foreigners by HEIs and the connection with the institutional profile, such as the research orientation of the whole HEI. The literature on this subject is rather scarce (see Lepori, Seeber and Bonaccorsi 2015 and Seeber et al. 2016).

There are, however, comprehensive sources on mobility of individuals engaged in R&D activities (researchers or scientists), which mostly focus on individual determinants as well as on its implications for individual careers and scientific production (Geuna, 2015). Nevertheless, this literature also contains important insights for public policies and institutional management.

Results of a large-scale survey of researchers in 16 countries and four disciplines (Biology, Chemistry, Earth and environmental sciences, Materials science) indicate that the main motivation for going abroad is eminently scientific interest (Franzoni, Scellato and Stephan 2105). This includes the opportunity to improve future career prospects, collaboration with outstanding faculty, colleagues, or research teams; the excellence/prestige of the foreign institution in one's own area of research. On the contrary, the main motivations for returning home are personal and family-based.

At the European level, a number of studies provide more in-depth knowledge on researcher's mobility and internationalisation patterns at the country and institutional level.

The OECD-UNESCO-EUROSTAT survey of doctorate holders (Auriol, 2010; Auriol, Misu and Freeman, 2013; OECD, 2014) showed that the preferred destination for European researchers going abroad is another European country. This led some authors to state that „there is not any evidence yet to believe that there is a loss of talent in Europe as a whole, at least when it comes to the mobility of doctorate holders. The international mobility of scientists, in general, and of doctorate holders tends to be mainly intra-EU mobility" (Chaminade and Plechero, 2016, 216).

However, surveys targeting researchers with highest potential show a different pattern. A commonly used definition is ‚highly cited scientists', defined as those scientists who receive a number of citations that is in the top 1% of the world distribution of citations in a particular discipline. For these scientists, also labelled star scientists, the central place to go is the Uni-

[6] In the following, we use the word *researchers* to identify people engaged in R&D activities irrespectively of their institutional affiliation, while we refer more specifically to *academic staff* as individuals employed by HEIs and having research and/or teaching duties (so called 'instructional staff'; see definitions in section 3).

ted States (Schiller and Diez, 2010). As noted by Trippl: "The US islands (of innovation) were found to be highly successful in attracting expatriates. […] Compared to the United States, the European islands of innovation perform less well when it comes to attract foreign star scientists. However, they are highly successful in luring returnees back home" (Trippl, 2012, 73).

Somewhat complementary results are obtained by Veugelers and Van Bouwel (2015) by using data from the MORE survey, a survey on EU-US post-PhD mobile researchers supported by the European Commission. It turns out that international student mobility during the PhD is an important determinant of the decision to go abroad after the PhD. At the same time, prior intra-EU mobility during the PhD motivates researchers to remain mobile, but to select European countries as their destination, rather than the US. On the contrary, PhD graduates who put strong motivational emphasis on career and working with star scientists are significantly inclined to choose US as a destination. As the authors note, "there is still relatively substantial heterogeneity in Europe in terms of internal governance and typical career progression which could hinder mobility within Europe" (Veugelers and Van Bouwel, 2015, 230).

In a study on researchers' mobility from Eastern European countries to Germany and the UK, Ackers and Gill also noted that "the high level of mobility in UK and German science markets is a direct consequence of the growth in insecure, fixed-term and externally funded employment. These positions form the primary access point for foreign researchers, the overwhelming majority of whom occupy temporary, nominally early-career positions" (Ackers and Gill, 2008, 86).

Mobility is largely intra-European, except for top European scientists who move to the United States.

Mobility flows of researchers are directed towards the US and, within Europe, towards Northern and Western European countries.

Insecurity and poor career perspectives in the home country play an important role in the decision of academics to move abroad.

2.3. Consequences of mobility at individual, institutional and country level

In general, literature agrees that internationally mobile researchers are more productive and have a higher propensity to establish large international networks than researchers remaining at home for the duration of their entire career (Schiller and Diez, 2010; Trippl, 2012). Similar advantages have been identified at the institutional level, where it has been consistently shown that hiring researchers trained in the institution, so-called 'inbreeding', is detrimental to scientific output (Horta et al. 2010).

While positive effects on the scientific productivity of mobile researchers are unquestioned, the implications at the country level are debatable. The asymmetry of mobility flows suggests that the countries of origin suffer from 'brain drain' losing a share of their scientific talent (Veugelers 2017). Similar concerns have been raised for Europe losing its most talented scientists to the US and, within Europe, for Southern and Eastern European countries losing human capital to Western and Northern Europe and, accordingly, weakening European research integration (Chessa et al. 2013).

However, the literature suggests the need to move *beyond the traditional brain drain-gain debate* (Davenport 2004) and to enlarge the framework from a static or allocative framework, representing a zero-sum situation, to a connective and creative framework (Canibano, Vertesy and Vezzulli, 2017), in which mobility generates productivity gains that could benefit both the outgoing and the incoming country.

In this respect, the literature shows, first, that foreign expatriates keep strong connections with their origin country, which could therefore benefit from collaborations with top-scientific countries and institutions (Baruffaldi and Landoni 2012). Second, researchers that migrate are more productive when returning home and bring opportunities to connect the home institutions with foreign partners (Baruffaldi and Landoni, 2012; Jonkers and Cruz-Castro, 2013).

These results have important policy and institutional implications. They suggest shifting the focus from 'keeping researchers at home' to offering attractive positions to foreign researchers and opening academic positions for

returnees; furthermore, they also suggest that increasing the 'absorptive capacity' of the national research system will allow bringing home some of the benefits of scientific connections with expatriates (Lepori, Seeber and Bonaccorsi 2015).

We have much less evidence on the impact of internationalisation on teaching and educational activities. There is anecdotal knowledge about informal or short educational activities (seminars, workshops) of mobile academic staff. However, systematic knowledge on the impact of curricula is missing. To what extent does foreign academic staff contribute to the improvement of teaching and the quality of curricula? Do they transfer good practices, educational methodologies, new classroom technologies and approaches to the host institution? These questions, for the time being, remain unanswered.

Mobile researchers are better networked and more productive.

Mobility can be a positive-sum game profiting also the origin country and institution.

There is a need for dedicated policies for returnees and expatriates, particularly in less well-off countries.

The impact of foreign academic staff on higher education systems has not been systematically investigated.

2.4. Institutional and policy challenges

The findings suggest that the propensity of academic institutions to offer career opportunities to non-national researchers on equal grounds with respect to national candidates is a key pre-requisite for the internationalisation of academic staff. The condition is the implementation of transparent recruitment processes. This is particularly important for foreign and mobile researchers, because they cannot rely on relational networks and national affiliations (Ackers and Gill, 2008, 87).

In this respect, evidence concerning national policies is somewhat mixed: The Eurydice report shows that almost all European countries have a high-level policy in favour of internationalisation of researchers. When coming to the operationalisation, however, few countries establish quantitative targets in terms of incoming or outgoing flows (European Commission/EACEA/Eurydice, 2017). A European University Association survey also showed that many Higher Education Institutions are developing pro-active policies towards internationalisation (Seeber et al. 2016). At the European level, staff mobility has also been actively promoted through the Erasmus+ programme and the Marie Curie-Sklodowska actions within EU Framework Programmes. While not a focus of this report, ETER also provides data on these forms of mobility.

The researchers' report edited by Deloitte on behalf of the European Commission stated that "in a number of countries, national authorities and/or research institutions report having taken steps to make the process more transparent. (…) Nevertheless, many researchers' perception is that there is still a long way to go. They believe that protectionism and nepotism are still widespread in a number of countries and that institutions do not have sufficiently open and transparent recruitment practices" (European Commission, 2014, 7).

An important factor associated with mobility is the difference in academic salaries among countries. While the salary is not the main motivation for mobility, it enters into a package of more complex motivations that include research environment, intellectual challenge, autonomy, and prospects for career (Canibano, Vertesy and Vezzulli, 2017). A paper based on data on eight European countries collected under the EUMIDA project (i.e. the predecessor of ETER) also shows that the variability among HEIs in the internationalisation of academic staff is largely explained by country-level factors associated with national wealth and national R&D investments (Lepori, Seeber and Bonaccorsi 2015). In other words, universities become attractive for international faculty only if their strategy is placed in the context of countries with large and increasing R&D budgets.

This implies that less wealthy countries and institutions must compete on different grounds, such as the stability of employment, the research environment and the working conditions. Moreover, this suggests that expatriates should be considered as an important target for internationalisation policies in such countries and institutions, since they might also be motivated

by personal and cultural reasons to return home (Baruffaldi and Landoni 2012).

Open and transparent recruitment processes are key for internationalisation of staff.

Economic and research funding conditions are highly relevant as factors driving international mobility.

Less wealthy countries and institutions need tailored policies, particularly towards expatriates.

3. The ETER data. Definitions and limitations

The literature review in section 2 displays considerable heterogeneity between countries and individual institutions in researcher's mobility patterns as well as the need for differentiated policies at the European, country and national level. InFrom this point of view, the availability of disaggregated data on mobility represents a key pre-requisite for the development of evidence-based policies.

Unfortunately, as the literature review suggests, most information on researchers' mobility comes from researchers' surveys; while providing important insights into the characteristics of mobile researchers, on mobility determinants and outcomes, they do not allow generating a systematic overview of mobility and internationalisation of academic staff in European higher education.

ETER contributes to filling this gap, since one of the variables collected is the number of foreign academic staff for each HEI in the database. Moreover, this information can be combined with other variables available in ETER, such as the number of academic staff, the enrolled students and the number of foreign students, in order to investigate the relation of internationalisation of staff with other HEI characteristics. Finally, using HEI localisation in countries and regions, national and regional-level statistics could be easily integrated in the analysis.

In this respect, ETER is unique in providing systematic evidence on the internationalisation of academic staff across a large number of countries and at the level of individual HEIs. Moreover, it offers the opportunity of linking them with other potential determinants of internationalisation.

Staff and academic staff. Consistent with EUROSTAT definitions, staff includes all individuals having a contractual relationship with the institution, whose activities are required for the HEI operations (UOE 2013, section 3.5). This definition covers both staff involved in student instruction and R&D activities as well as support and management staff.

Within this scope, academic staff, i.e. the main focus of this report, includes:

- staff whose primary responsibility is instruction, research or public service,
- staff who hold an academic rank, like professor, assistant professor, lecturer or an equivalent title.
- staff with other titles (like dean, head of department, etc.) if their principal activity is instruction or research, and
- PhD students employed for teaching assistance or research.

Therefore, academic staff includes professorial positions as well as several types of teacher and researcher positions, including a large share of PhD students in some countries. For the time being, it is not possible to disaggregate academic staff data according to the different academic career levels.

Staff is counted in Full-Time Equivalents (FTEs) and in headcounts. For FTEs, staff is counted in terms of its average employment over the year, for example, an individual having a 50% employment contract for six months will count as 0.25 FTEs. In the second case, all staff is counted as one unit that is employed at the end of the reference year (usually 31.12.). In our example, if the individual worked from 01.01. to 30.06., he/she will not be counted, if he/she worked from 01.07. to 31.12., he/she will count as one headcount.

By their counting method, headcount data tends to be more affected by comparability problems, such as the inclusion of part-time staff. The ETER database provides for extensive documentation of comparability problems through data flags as well as detailed remarks on the nature of the issue.

Staff data mostly refer to the calendar year, respectively to the end of the year for headcount data, but there are some exceptions. For some countries, such as Denmark and France, only some years are available.

Foreign academic staff. Foreign academic staff is defined as academic staff not having the citizenship of the country in which the HEI is established. This definition has the advantage of being clear and easy to enforce, but has some limitations in terms of analysing international mobility of staff.

First, it focuses on long-term mobility as related

to appointments, thus excluding other forms of mobility like sabbaticals or visiting periods not associated with a formal appointment; second, it might underestimate long-term mobility as mobile staff who acquired the citizenship of the hosting country will be excluded; third, it excludes cross-border commuting, which might be relevant for a few HEIs near the national border.

In principle, foreign academic staff is calculated in headcounts, i.e. all employed people will count as one, regardless of their employment period. For Finland and the Netherlands, data is based on FTEs, which might lead to slight overestimates in case full-time staff is less internationalised than part-time staff.

Data availability. Out of the 37 countries comprised in ETER, data on foreign staff is available for 19 countries (combining different years) and slightly more than 1,500 HEIs. With few exceptions (Ireland, the French-speaking part of Belgium) data is available for all countries in Western Europe, while until now no country in Eastern Europe except Lithuania has provided such information. Nevertheless, this represents an important improvement in respect to the EUMIDA pilot, where only eight countries provided data, which shows that data on internationalisation is increasingly collected at national level.

Non-availability is largely due to the fact that data is not collected at the national level since the nationality of staff is not included in the mandatory data collection for educational statistics by EUROSTAT.

Methodological issues. While this data is the best currently available empirical evidence on internationalisation of academic staff at HEI level, the reader should be aware of some methodological issues:

• First, despite a standardised definition, the scope of academic staff might vary between countries, particularly concerning the inclusion of young researchers (for example PhD students), healthcare personnel and contract teachers. This might particularly affect the headcount of foreign staff and to a lesser extent their share among total staff.

• Second, the definition of ‚foreign' excludes mobile researchers who acquired the nationality of the host country; in this respect, the figures presented might slightly underestimate the extent of internationalisation.

• Third, figures might also include cross-border commuters. This is likely to have an impact on data for HEIs in very small countries, such as Luxembourg, or near a border, such as Basel. This issue, however, concerns only a few HEIs, which are easily identifiable in our data.

• Fourth, the most important limitation is that data cannot be disaggregated by academic level. This would be highly relevant since different mobility patterns are expected for young researchers vs. tenured employees. The option of breaking down staff data by academic level is currently under discussion in ETER, based on the levels proposed by Eurydice.

ETER provides unique data on the internationalisation of academic staff in European HEIs based on nationality from 19 countries and more than 1,500 HEIs.

The main limitation is that data is not disaggregated by academic career levels.

4. Main findings

4.1. A country view

At country level, the ETER data shows that country-level differences in the internationalisation of academic staff are very large (Figure 1). These results confirm and extend previous findings by Eurydice (European Commission/EACEA/ Eurydice 2015) and by Lepori et al. 2015.

We can identify five groups:

(a) Two very small countries (Liechtenstein and Luxembourg) for which the share of foreign staff is extremely high due to the small size of the country.

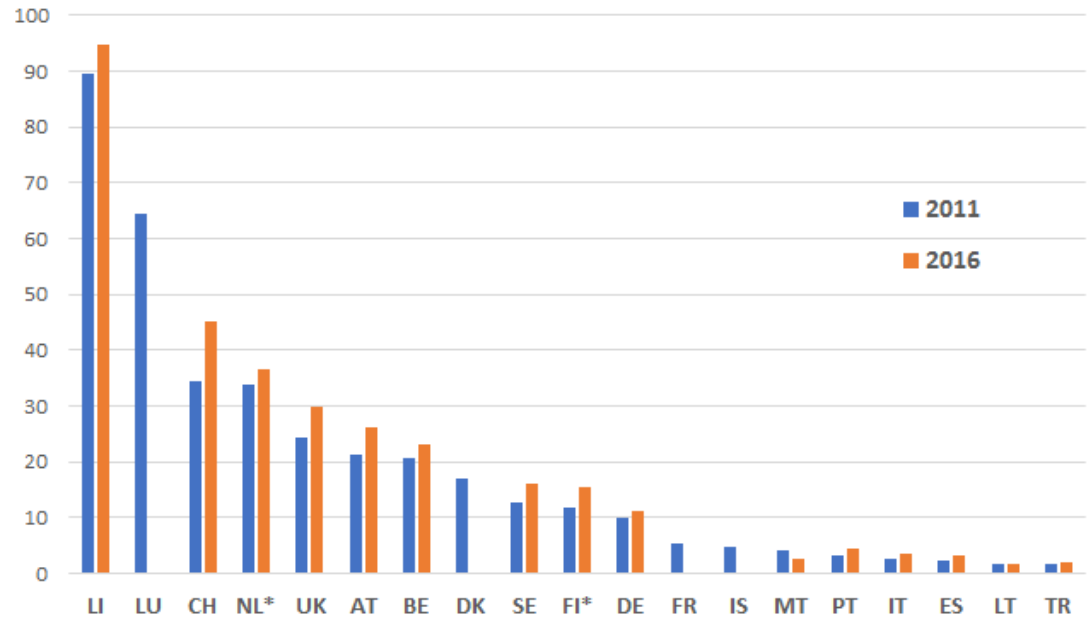
(b) Two Western European countries, Switzerland and UK, for which foreign staff is beyond one quarter of total staff.

(c) Three additional Western European countries, i.e. Austria, Belgium and the Netherlands, for which foreign staff is above 20% of total staff. For these countries data is available only for universities, and therefore the share is overestimated as compared with the remaining countries.

(d) A group of countries located in Northern Europe (Denmark, Finland and Sweden), as well as Germany, for which the ratio is between 10% and 20% of total academic staff.

(e) A group of Southern European countries (Malta, Italy, Portugal, Spain and Turkey) as well as France and Lithuania, for which the ratio is below 10%.

Figure 1. Degree of internationalisation of academic staff in Higher education institutions (HEIs) by country. Years 2011 and 2016.



*Note: For the Netherlands, Lithuania and Turkey the first year available is 2013. For Luxembourg, Denmark, France and Iceland the only year available is shown in „Figure 1. Degree of internationalisation of academic staff in Higher education institutions (HEIs) by country. Years 2011 and 2016." auf Seite 14 *Data in Full Time Equivalents for Netherlands and Finland. Data is partial for Austria (22 HEIs out of 73), BE (7 out of 44) and the Netherlands (15 out of 62).*

As Figure 1 displays, internationalisation increased in all countries, but at different rates. In the group of the more internationalised countries, a significant increase in the 2011—2016 period was observed for CH and UK (Table 1 in Appendix): In Switzerland the share of foreign staff increased from 34% to 45% and in United Kingdom from 24% to 30%. A slower process of internationalisation is taking place in Northern and Western European countries, which increased between 5% (Austria) and 1% (Germany).

A more moderate increase (1-2 percentage points) is visible for Southern European countries, such as Spain, Italy and Portugal. It should be mentioned that these countries have suffered public budget cuts in the last decade due to the financial crisis, with severe impact on HEIs and recruitment opportunities. This data may suggest a (potentially worrying) divergence between a group of European countries which are becoming highly internationalised and Southern Europe, where the process is slower.

We can interpret the data as follows; there are structural factors present: first, n*ational wealth and national tertiary education investment*. All countries with a high share of international academic staff, in fact, enjoy a situation of extensive public R&D investments and the gap had a tendency to increase after the financial crisis. The large differences in the degree of internationalisation of academic staff somewhat support the findings of Lepori, Seeber and Bonaccorsi (2015) about the dominant role of national wealth and R&D investment in determining the attractiveness of European universities for foreign scholars.

Secondly, *language plays a role*. The United Kingdom benefits from the universality of the English language in science, while Northern European countries adopted a policy of English as a second language with high proficiency at school level and intense practice in the social life. This makes the integration of foreigners more viable and smooth. Anecdotal knowledge and international practice suggest that in these countries many courses at university level are taught in English, making it easier for foreign scholars to comply with academic teaching duties. To a lesser extent, similar considerations might apply to Germany and France for their respective languages. Finally, Switzerland shares its national languages with its neighbouring countries, while English has also become widespread in university education.

Third, the presence of *highly reputed international universities* in these countries is an essential factor, since all studies confirm that scientific reasons mostly drive academic mobility. Here, UK and Switzerland universities take top places in most international rankings with very few institutions in Southern and Eastern parts of Europe achieving a similar result.

Internationalisation of academic staff is much more widespread in Western and Northern Europe.

Southern European countries display low levels of internationalisation, with a gradual increase observed in the recent years.

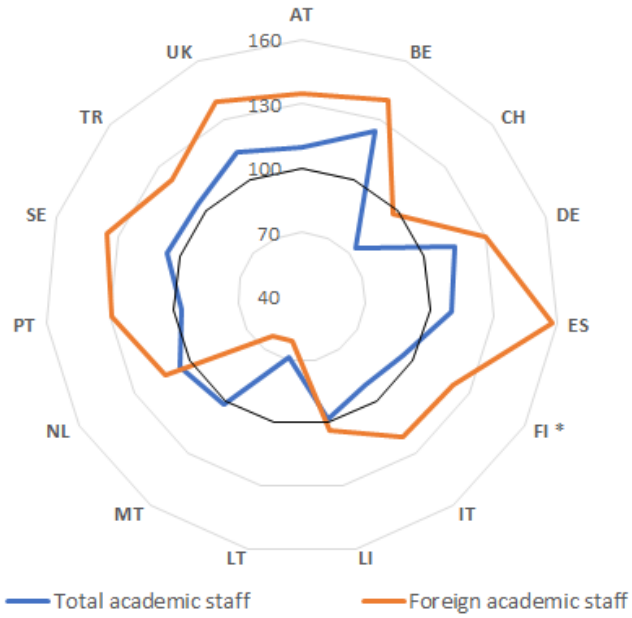
Internationalisation of academic staff may be associated to the medium of instruction (mainly English), national investment in research and the presence of highly-reputed international HEIs.

4.2. Dynamics of internationalisation at country level

While the previous analysis emphasised differences across countries in the internationalisation process, Figure 2. provides a more specific view of the dynamics of foreign academic staff (as compared with total academic staff) within each country, in both cases assuming 2011 as the initial year (index=100; see also Table 2 and Table 3 in the appendix).

This data needs to be interpreted carefully since the number of academic staff in headcounts is sensitive to methodological changes; these changes particularly affect data for Switzerland (changes in the counting method) and in Portugal (changes in the scope of academic staff). Nevertheless data shows a clear overall picture; in almost all countries the increase in the number of foreign academic staff was higher than for total academic staff, the difference being in the range of 10-30 percentage points (again with few exceptions). The foreign component of academic staff has therefore been more dynamic than the domestic one.

Figure 2. Index of academic staff and of foreign academic staff in selected European countries 2011–2016 (2011=100).



In absolute numbers, the largest increases took place in the UK (from 44,135 to 61,540 individuals) and in Germany (from 31,995 to 41,699 individuals). A noteworthy pattern concerns Southern European countries. While compared with other countries the level of internationalisation remains low, the absolute number has grown considerably in a few years – from 2,700 to 3,200 in Italy, from 2,700 to 4,300 in Spain.

So, we find confirmation of the general trend highlighted in the literature: The average level of internationalisation of European HEIs is low, but is increasing and this movement involves all European countries (to different degrees).

4.3. HEI-level patterns: most internationalised HEIs

A specific strength of ETER is to provide data at the level of individual institutions. This is relevant since there are many reasons why some HEIs might be more internationalised than others, like their international reputation, their location in metropolitan cities and the subject specialisation, because internationalisation is stronger in natural and technical sciences than in social sciences and humanities.

Figure 3 (and Table 4 in the appendix) shows the list of the top 50 in Europe for the share of international staff, keeping together universities and a few non-university HEIs.

With the exception of a few very small institutions (such as European Humanities University in Latvia or the University of Liechtenstein) the picture is quite clear:

i) Internationalisation of academic staff is strongly concentrated in Switzerland (10 out of 12 universities), in the UK (24 universities) and in the Netherlands (5 universities). These are the only countries for which large universities are included in the list.

ii) The remaining 11 institutions are either universities in very small countries (Luxembourg or Liechtenstein) or specialised institutions that are highly internationalised due to their specific field, such as the Veterinary University in Vienna and the Arts and Music University in Salzburg, or private institutions that probably are more open to international recruitment.

iii) Southern European countries do not have HEIs in the list of the top 50.

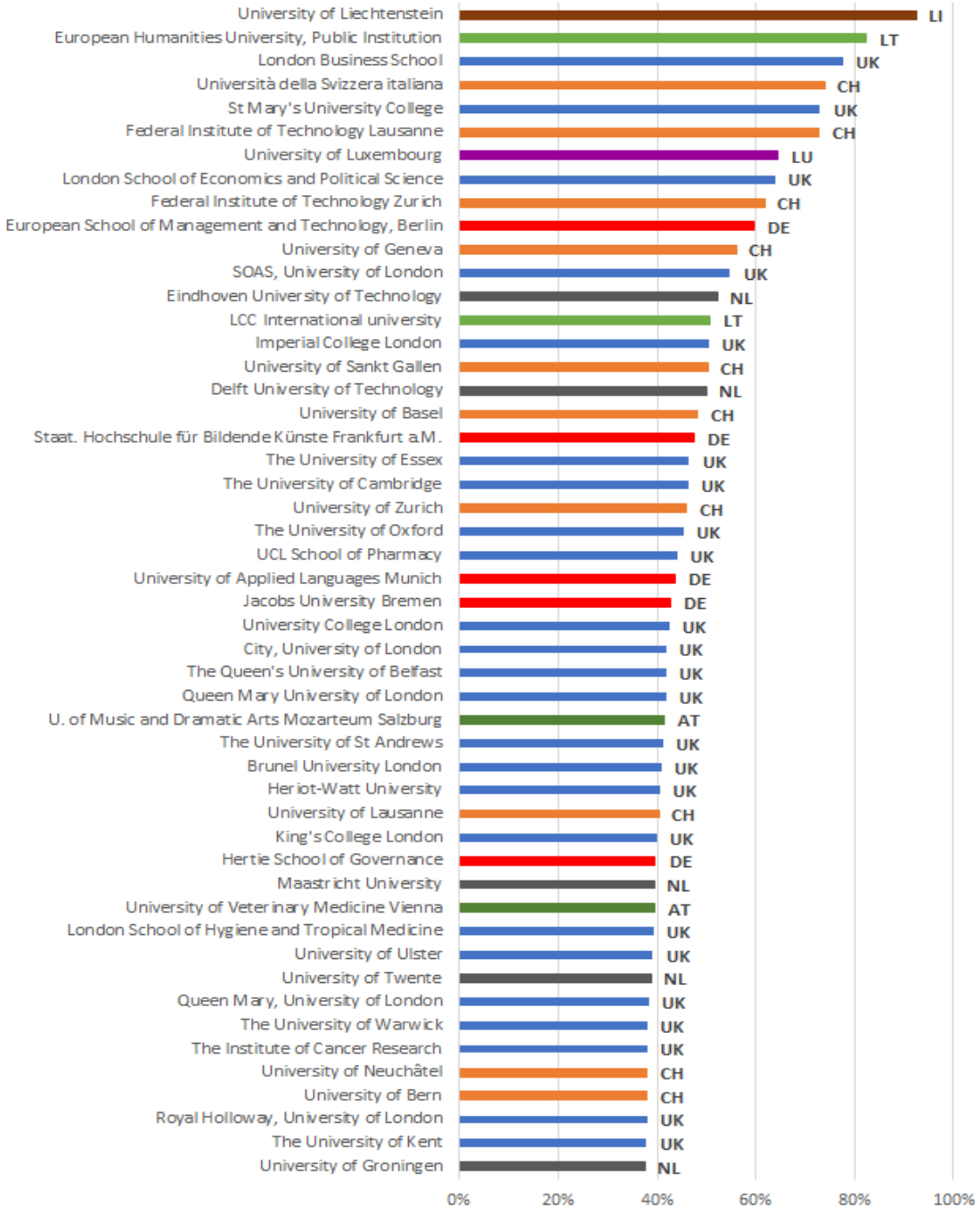
iv) In the top list we find some of the most prestigious research based universities in Europe, including ETH and EPFL in Switzerland, Imperial College, UCL, LBS and LSE, Oxford and Cambridge in the United Kingdom, and some of

the top Dutch universities.

v) We also find institutions located close to national borders (e.g. Basel, Liechtenstein), a few business schools (e.g. London Business School, European School of Management and Technology, Berlin) and a few private institutions.

On the one hand, this analysis confirms the patterns identified at country level, with countries such as UK and Switzerland being much more internationalised than most other European countries. On the other hand, it identifies two groups among the most internationalised HEIs in Europe: the top international research universities on the one hand, some smaller specialised schools on the other.

Figure 3. Top 50 Higher Education Institutions (HEIs) by share of academic staff of foreign origin (Average 2011—2016).



The picture we obtain by looking at absolute numbers is slightly different from the previous one, although it confirms some of the key points (see Figure 4 and the list of top-50 HEIs by number of foreign academic staff in Table 5 in the appendix).

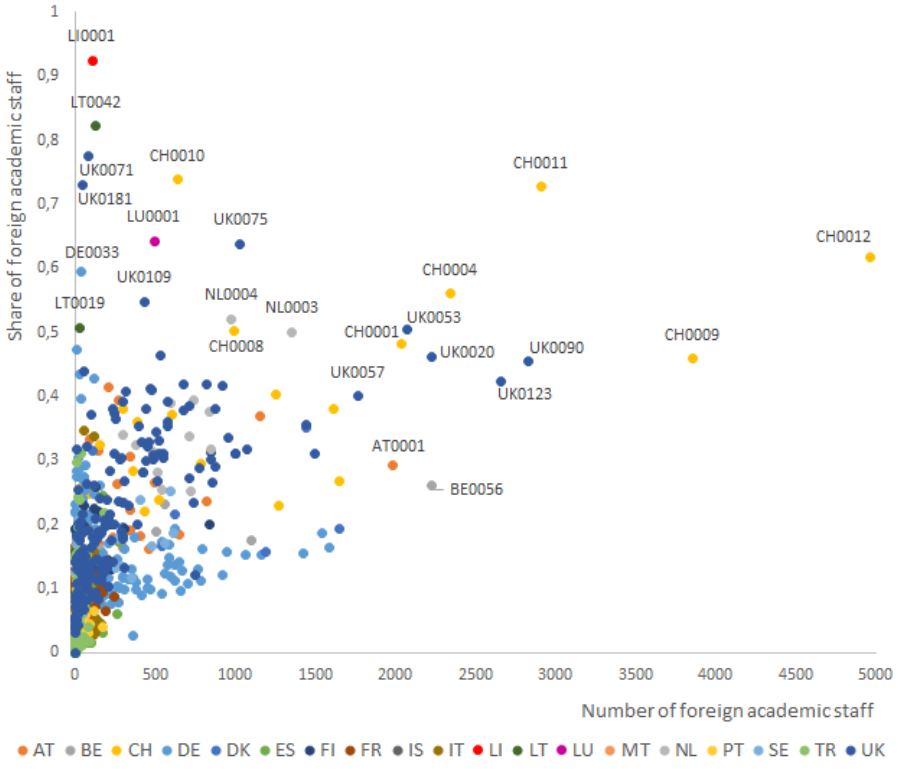
Of course, in this list we find large institutions in terms of total academic staff, but not all large HEIs also have a large number of foreign academic staff. Particularly, some large HEIs in Italy and Spain, with several thousands of academic staff, only employ a few hundred foreigners.

The upper end of the distribution (of the number of foreign academic staff) is dominated by large research universities in Switzerland and the UK; the three top Swiss universities together (ETH Zurich, University of Zurich and EPFL) host more than 10,000 foreign researchers in total. These are immediately followed by Oxford, UCL and Cambridge. Among the top-10 universities by number of foreign academic staff five are in Switzerland and four in the UK.

Among the 32 institutions with more than 1,000 foreign academic staff we find a number of large German universities (Ludwig Maximilian and Technical University in Munich, Heidelberg, Freiburg and Aachen), and some universities in Belgium, the Netherlands, Denmark and Austria. This list is strongly dominated by large research-oriented universities and, particularly, by those topping international rankings. Large but less research-oriented universities, such as those in the Southern part of Europe, still have a low number of foreign academic staff.

Beyond this core of highly internationalised institutions, the figure displays that there is a substantial number of institutions in Europe in which the presence of foreign academics has become a sizeable phenomenon – there are 200 HEIs in ETER employing more than 200 foreign academics. This should be compared with the total number of universities (the institutions more concerned with internationalisation), which is only slightly above 1,000.

Figure 4. Plot of Higher Education Institutions (HEIs) by absolute number of academic staff of foreign origin and share of foreign academic staff (Average 2011—2016).



The group of most internationalised HEIs is concentrated in Western Europe, particularly in the UK and in Switzerland, and in Northern Europe.

Top-reputed research-intensive international universities have a sizeable number of foreign academic staff, which can be measured in thousands.

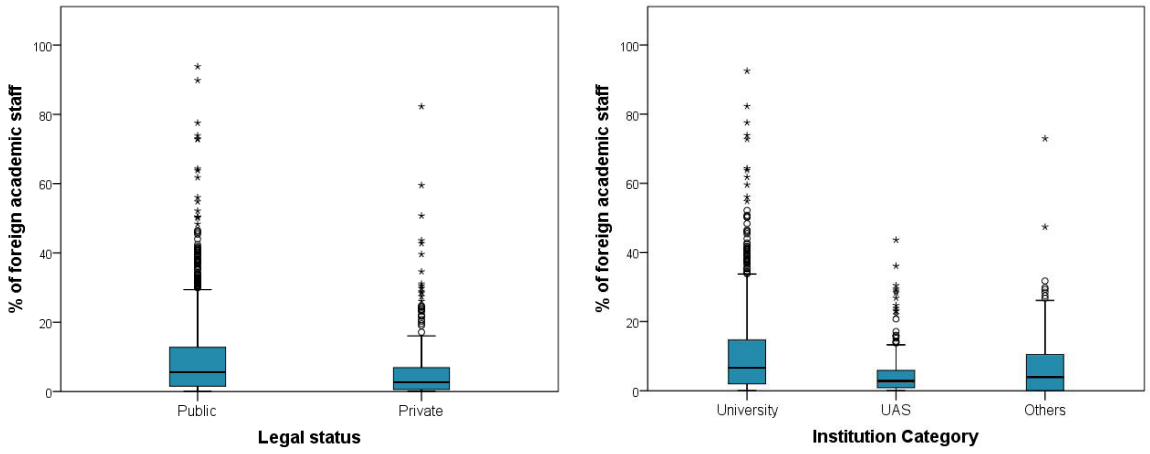
About 200 European HEIs have more than 200 foreign academic staff.

4.4. HEI profile and internationalisation

A strength of ETER is to be able to combine data on foreign staff with other HEI characteristics, therefore allowing a first investigation of differences in internationalisation patters according to the different HEI profiles.

First, type and legal status matter for internationalisation. As shown in Figure 5, public HEIs tend to be more internationalised than the private ones, consistent with the fact that the latter are more focused on education. Similarly, universities have a larger share of international academic staff than Universities of Applied Sciences and other HEIs.

Figure 5. Boxplots of share of foreign academic staff by HEI legal status (left) and type (right)

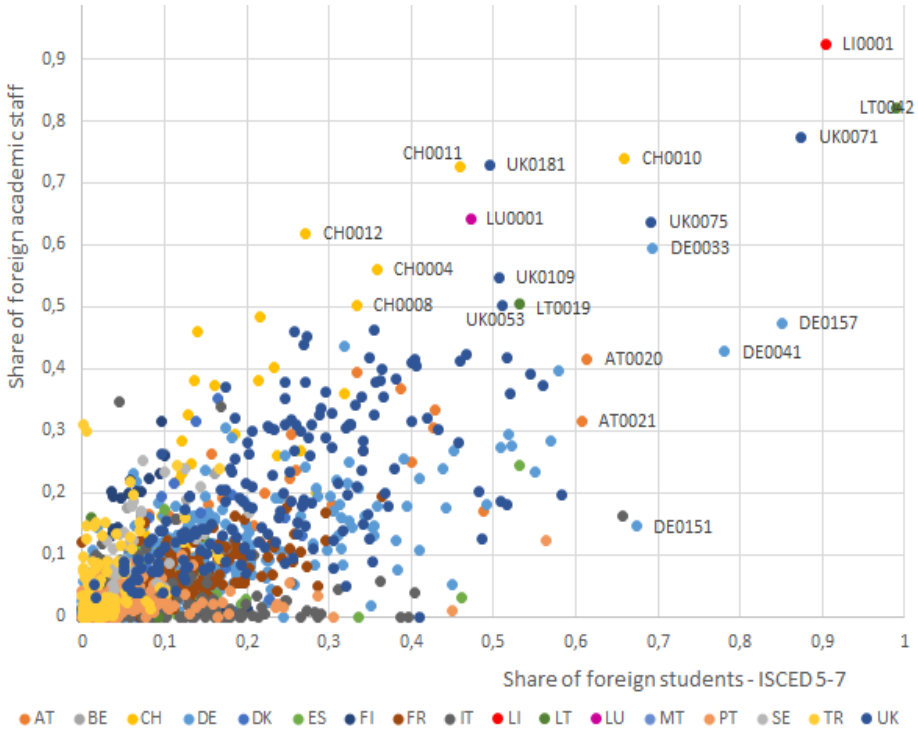


In the boxplot, the solid line is the median of the cases, top and down of the box the first, respectively the third quartile. Stars and circles are outliers.

Second, as shown by Figure 5, there is a rather clear association between internationalisation of academic staff and internationalisation of students. HEIs with a high share of foreign academic staff also display high levels of internationalisation of the student body, suggesting they have a consistent internationalisation strategy across all their activities (Seeber et al. 2016).

At the same time, we can identify a group of HEIs that is much more internationalised in terms of their student body. A closer inspection of the data shows that these are mostly specialised institutions in fields like theology, music and arts; their internationalisation strategy is therefore related to a small niche specialisation and the ability to attract students in these very specific fields.

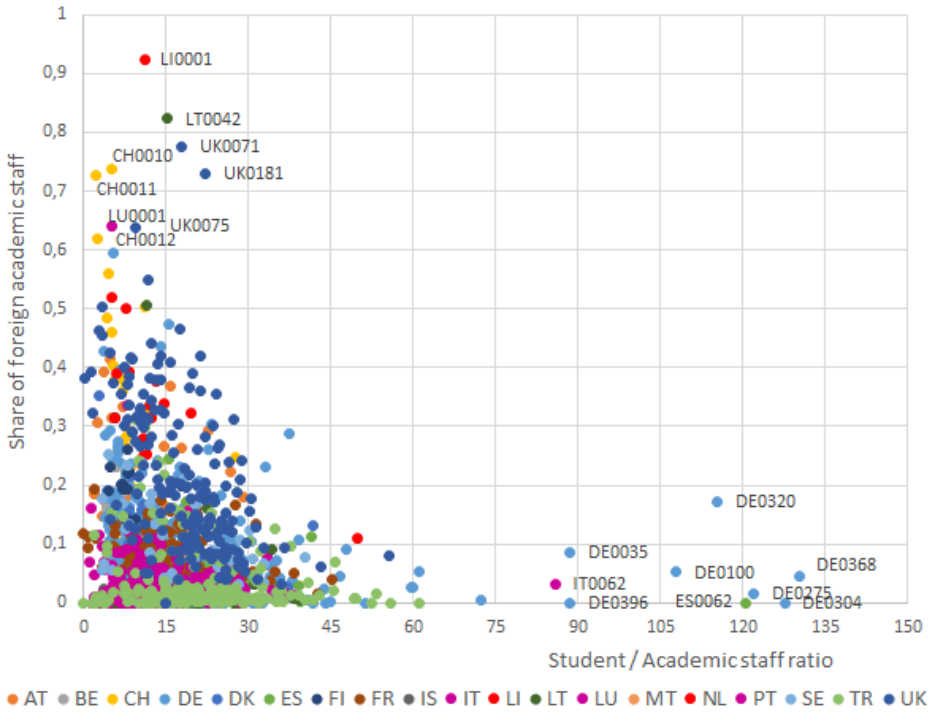
Figure 6. Higher Education Institutions (HEIs) by share of students of foreign origin and share of academic staff of foreign origin (average 2011—2016).



Third, ETER data shows a negative relationship between the student to staff ratio and internationalisation of academic staff (see) with highly internationalised HEIs having low or moderate student to staff ratios.

We can speculate on a number of reasons for this pattern. First, high student to staff ratios express lower resources available per student and, therefore, such HEIs are less attractive for foreign academics in the international competition for talent. Second, for the same reason, HEIs with large student loads may find it difficult to adopt an internationalisation strategy which is demanding in terms of language, procedures, student services and administrative staff. Third, these HEIs are likely to be less oriented towards research, which is, as we have seen, a major determinant of internationalisation.

Figure 7. Higher Education Institutions (HEIs) by share of academic staff of foreign origin out of total and student/staff ratio (average 2011—2016). Distance education institutions are excluded.



Internationalisation is much stronger in universities than in other types of HEIs.

HEIs with a high share of foreign academic staff also display a high level of internationalisation of the student body, (exception: very specialised HEIs).

Education-oriented HEIs are less internationalised as compared to research-oriented HEIs.

5. Conclusion: the multiple facets of HEI internationalisation

The analysis in the previous section illustrates the strength of ETER in looking at both country-level and HEI-level patterns, as internationalisation of academic staff is clearly a multi-level phenomenon in which both country factors (such as the national R&D investment) and HEI factors (such as the international reputation) come together (Lepori, Seeber and Bonaccorsi 2015).

The combined analysis of country-level and individual institution-level data shows that a) there is a general process of internationalisation of academic staff in Europe, but b) the degree of internationalisation is very different depending on the country and HEI profile.

First, we observe a strong divide between Western and Northern Europe, where internationalisation has become widespread and many HEIs have a sizeable share of foreign staff, and Southern European countries, in which the process is less advanced, even if there have been signs of change in the recent years. The geography of internationalisation therefore largely follows the economic and scientific geography of Europe and, specifically, the scientific strength of national systems (in terms of the presence of top international universities) and of national R&D investment.

These findings therefore suggest, while it may be difficult for the less wealthy countries to make similar investments as the top group of international countries, that these countries may need specific policies targeting those academics who would be more likely to move, like returners.

Second, HEI-level patterns are superimposed by national patterns. More specifically, we identified different paths of internationalisation as associated with different profiles and strategic drivers (Seeber et al. 2016).

On the one hand, universities with a strong research orientation and reputation lead the process, as shown by inspecting the list of top 50 institutions by total number of foreign academic staff and by percentage of total academic staff. The number of foreign academic staff in these institutions can be measured in thousands and their share exceeds one quarter (and even one third in the UK and in Switzerland) of total academic staff. This means that internationalisation has become a constitutive part of academic life with wide implications for hiring processes, education and research.

This trajectory is associated with the emergence of truly international, or global, institutions. In the last decade there has been a lively debate on the change in the academic labour market in the direction of mobility and internationalisation (King, 2009; Wildavsky, 2010; Teitelbaum, 2014). The notion of *global university* or *world class university* has been introduced in order to describe those institutions that are fully integrated, and competitive, in the world flows of mobility of students and academic staff (Salmi, 2009; Aubrey Douglass, King and Feller, 2009; Altbach, 2011; Nelson and Wei, 2012). While international research reputation is clearly a pre-requisite to belong to this group, universities that wish to attract international staff must be prepared to create an international environment in all directions through consistent institutional policies concerning education, recruitment, support and administrative processes. It can be said that the group of highly internationalised research-oriented universities that we find in the top list is prepared to compete according to this logic.

The positive finding from the ETER data is that there is a sizeable number of European universities moving in this direction. However, the worrying dimension is the strong concentration in few geographical areas within Europe, showing how the emergence of these global universities is contingent upon suitable national and regional conditions, such as autonomy and good level of state funding. Not surprisingly, among the countries in which these global universities are most likely located, we find the United Kingdom, a country with a clear international orientation in terms of language and culture, and small countries with a tradition of multilingual education and culture, such as the Netherlands or Switzerland. To make this point clear, it is enough to observe that the three top Swiss universities in the list attract more foreign academic staff than France, Italy and Spain combined (for the year 2014 for which we have French data).

On the other hand, there is a good number of universities in Europe, particularly in Central and Northern Europe, where the number of foreign academic staff is slowly increasing. Many coun-

tries have an explicit policy for increasing the openness of universities, demand more courses taught in foreign languages and support multiple forms of international collaborations. This trend does not require the emergence of new organisational forms. This trajectory is likely to bring benefits in terms of internationalisation in education and research and of quality of academic staff, introducing some (limited) competition elements in academic recruitment.

Finally, we must emphasise that, despite their uniqueness and novelty, ETER data have certain limitations that should be overcome in the future. First, the most important one is certainly a lack of coverage of Eastern European countries, in which availability of data on internationality of academic staff is scarce. This requires a dedicated effort by national ministries and statistical agencies; we suggest that the related investment would be justified given the importance of internationalisation in the current higher education agenda (at the national and European level). Second, for a more fine-grained analysis of internationalisation it would be important to break down (foreign) academic staff by level; this issue is highly complex given the diversity of national qualification systems, but efforts in this direction undertaken by Eurydice might provide a promising starting point (European Commission/EACEA/Eurydice 2017). Third, longer time series would allow investigating the dynamics of internationalisation and, specifically, whether the observed increase represents an enduring trend and whether differences between countries and HEIs are increasing or decreasing over time and are affected by changes in policy.

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7. Annex. Data tables

Table 1. Degree of internationalisation of academic staff in Higher education institutions (HEIs) by country. Years 2011—2016.

Country	Share of academic staff of foreign origin out of total academic staff Data in Head Count (HC) (%)					
	2011	2012	2013	2014	2015	2016
AT	21	23	24	25	26	26
BE	21	21	21	22	23	23
CH	34	35	43	43	45	45
DE	10	10	10	11	11	11
DK	n.a.	n.a.	17	n.a.	n.a.	n.a.
ES	2	2	2	2	3	3
FI*	12	15	16	14	15	15
FR	n.a.	n.a.	n.a.	5	n.a.	n.a.
IS	5	n.a.	n.a.	n.a.	n.a.	n.a.
IT	3	3	3	3	4	4
LI	90	90	92	95	94	95
LT	n.a.	n.a.	2	2	1	2
LU	64	n.a.	n.a.	n.a.	n.a.	n.a.
MT	4	1	2	2	2	3
NL*	n.a.	n.a.	34	35	35	37
PT	3	3	3	3	3	5
SE	13	14	13	15	16	16
TR	n.a.	n.a.	2	2	2	2
UK	24	25	26	28	29	30

**Data in Full Time Equivalents*

Table 2. Dynamics of total number of academic staff in selected European countries 2011—2016. Absolute values and index number (2011= 100).

For AT, BE and NL data refers only to the HEIs for which foreign academic staff is available.

	Total academic staff						Total academic staff (index number)					
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
AT	36578	37324	38068	38737	39825	39980	100	102	104	106	109	109
BE	17951	18732	21728	22122	22273	22345	100	104	121	123	124	124
CH	81065	85141	61284	62652	58832	59828	100	105	76	77	73	74
DE	321774	338543	354750	366270	369870	370542	100	105	110	114	115	115
ES	117527	115332	115071	115366	127278	129519	100	98	98	98	108	110
FI *	25092	25140	24877	24447	23923	23676	100	100	99	97	95	94
IT	97846	96910	96190	89705	87853	89050	100	99	98	92	90	91
LI	115	111	98	119	112	113	100	97	85	103	97	98
LT	13767	13487	13802	12804	10086	9514	n.a.	n.a.	100	93	73	69
MT	1658	1291	1509	1600	1652	1688	100	78	91	97	100	102
NL	n.a.	n.a.	25182	25516	25913	26489	n.a.	n.a.	100	101	103	105
PT	37591	34816	32590	32150	34772	36301	100	93	87	86	93	97
SE	33469	33448	34119	34971	35208	35500	100	100	102	104	105	106
TR	n.a.	n.a.	144697	148502	156168	151763	n.a.	n.a.	100	103	108	105
UK	181240	185470	194115	198215	201640	206705	100	102	107	109	111	114

Table 3. Dynamics of academic staff of foreign origin in selected European countries 2011—2016. Absolute values and growth (2011= 100).

	Foreign academic staff						Foreign academic staff (2011=100)					
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
AT	7802	8406	9012	9585	10203	10498	100	108	116	123	131	135
BE	3699	3934	4566	4830	5014	5178	100	106	123	131	136	140
CH	27881	30156	26433	26895	26607	27101	100	108	95	96	95	97
DE	31995	33839	36529	38611	40511	41699	100	106	114	121	127	130
ES	2762	2875	2807	2730	4299	4362	100	104	102	99	156	158
FI*	2999	3686	3870	3462	3591	3648	100	123	129	115	120	122
IT	2708	3102	3073	3031	3240	3261	100	115	113	112	120	120
LI	103	100	90	113	105	107	100	97	87	110	102	104
LT	n.a.	n.a.	245	319	148	149	n.a.	n.a.	100	130	60	61
MT	70	19	29	33	41	44	100	27	41	47	59	63
NL*	n.a.	n.a.	8527	8871	9165	9694	n.a.	n.a.	100	104	107	114
PT	1275	1137	1093	1055	1074	1645	100	89	86	83	84	129
SE	4233	4521	4433	5300	5543	5755	100	107	105	125	131	136
TR	n.a.	n.a.	2372	2944	3114	2880	n.a.	n.a.	100	124	131	121
UK	44135	46620	51320	54945	58265	61540	100	106	116	124	132	139

Table 4. Top 50 HEIs by share of academic staff with foreign origin out of total academic staff. Includes universities and non-university HEIs. Average 2011—2016.

ETER ID	English institution name	% of foreign academic staff	No. of foreign academic staff (HC)	No. of academic staff (HC)
LI0001	University of Liechtenstein	92%	103	111
LT0042	European Humanities University, Public Institution	82%	128	173
UK0071	London Business School	78%	83	107
CH0010	Università della Svizzera italiana	74%	645	872
UK0181	St Mary's University College	73%	45	61
CH0011	Federal Institute of Technology Lausanne	73%	2911	3998
LU0001	University of Luxembourg	64%	490	1000
UK0075	London School of Economics and Political Science	64%	1034	1622
CH0012	Federal Institute of Technology Zurich	62%	4968	8037
DE0033	European School of Management and Technology, Berlin	60%	39	69
CH0004	University of Geneva	56%	2344	4178
UK0109	SOAS, University of London	55%	432	809
NL0004	Eindhoven University of Technology	52%	972	1846
LT0019	LCC International university	51%	33	65
UK0053	Imperial College London	50%	2073	4103
CH0008	University of Sankt Gallen	50%	990	1973
NL0003	Delft University of Technology	50%	1357	2641
CH0001	University of Basel	48%	2038	4213
DE0157	Staat. Hochschule für Bildende Künste Frankfurt a.M.	47%	9	19
UK0041	The University of Essex	46%	533	1152
UK0020	The University of Cambridge	46%	2232	5432
CH0009	University of Zurich	46%	3854	8388
UK0090	The University of Oxford	45%	2828	6447
UK0110	UCL School of Pharmacy	44%	55	125
DE0240	University of Applied Languages Munich	44%	32	74
DE0041	Jacobs University Bremen	43%	124	290
UK0123	University College London	42%	2658	6467
UK0027	City, University of London	42%	825	2000
UK0163	The Queen's University of Belfast	42%	679	1635
UK0094	Queen Mary University of London	42%	924	2239
AT0020	U. of Music and Dramatic Arts Mozarteum Salzburg	41%	213	512
UK0157	The University of St Andrews	41%	469	1134
UK0017	Brunel University London	41%	480	1178
UK0152	Heriot-Watt University	41%	315	780
CH0005	University of Lausanne	40%	1252	3133

ETER ID	English institution name	% of foreign academic staff	No. of foreign academic staff (HC)	No. of academic staff (HC)
UK0057	King's College London	40%	1769	4409
DE0034	Hertie School of Governance	40%	40	99
NL0008	Maastricht University	39%	740	1867
AT0009	University of Veterinary Medicine Vienna	39%	271	684
UK0076	London School of Hygiene and Tropical Medicine	39%	298	760
UK0166	University of Ulster	39%	582	1497
NL0005	University of Twente	39%	599	1587
UK0094	Queen Mary, University of London	38%	715	1928
UK0124	The University of Warwick	38%	879	2327
UK0021	The Institute of Cancer Research	38%	235	619
CH0007	University of Neuchâtel	38%	301	791
CH0002	University of Bern	38%	1618	4296
UK0103	Royal Holloway, University of London	38%	441	1163
UK0056	The University of Kent	38%	677	1790
NL0006	University of Groningen	38%	844	2174

Table 5. Top 50 HEIs by number of academic staff with foreign origin. Includes universities and non-university HEIs. Average 2011—2016.

ETER ID	English institution name	No. of foreign academic staff (HC)	No. of total academic staff (HC)	% of foreign academic staff
CH0012	Federal Institute of Technology Zurich	4968	8037	62%
CH0009	University of Zurich	3854	8388	46%
CH0011	Federal Institute of Technology Lausanne	2911	3998	73%
UK0090	The University of Oxford	2828	6447	45%
UK0123	University College London	2658	6467	42%
CH0004	University of Geneva	2344	4178	56%
UK0020	The University of Cambridge	2232	5432	46%
BE0056	KU Leuven	2228	8478	26%
UK0053	Imperial College London	2073	4103	50%
CH0001	University of Basel	2038	4213	48%
AT0001	University of Vienna	1985	6771	29%
UK0057	King's College London	1769	4409	40%
DK0001	University of Copenhagen	1652	8513	19%
CH0014	University of Applied Sciences and Arts Western Switzerland	1648	6405	27%
CH0002	University of Bern	1618	4296	38%
DE0021	Ludwig Maximilian University of Munich	1587	9657	16%
DE0022	Technical University of Munich	1542	8240	19%
UK0079	The University of Manchester	1503	4818	31%
UK0148	The University of Edinburgh	1446	4038	36%
DK0006	Technical University of Denmark	1440	4088	35%
DE0002	Heidelberg University	1424	9127	16%
NL0003	Delft University of Technology	1357	2641	50%
CH0019	Zurich University of Applied Sciences	1276	5887	23%
CH0005	University of Lausanne	1252	3133	40%
DK0002	Aarhus University	1194	7533	16%
DE0001	University of Freiburg	1162	7600	15%
AT0003	University of Innsbruck	1158	3137	37%
BE0060	Ghent University	1105	6306	17%
UK0086	University of Nottingham	1074	3375	32%
DE0069	Aachen University	1068	6937	15%
UK0075	London School of Economics and Political Science	1034	1622	64%
UK0151	The University of Glasgow	1003	3164	31%
UK0008	University of Birmingham	1001	3198	31%
CH0008	University of Sankt Gallen	990	1973	50%

ETER ID	English institution name	No. of foreign academic staff (HC)	No. of total academic staff (HC)	% of foreign academic staff
NL0004	Eindhoven University of Technology	972	1846	52%
UK0114	The University of Southampton	960	2878	34%
DE0008	Tübingen University	953	6040	16%
DE0020	University of Erlangen-Nürnberg	926	7696	12%
UK0094	Queen Mary University of London	924	2239	42%
UK0124	The University of Warwick	879	2327	38%
UK0112	The University of Sheffield	873	2983	29%
UK0062	The University of Leeds	858	3231	26%
UK0016	The University of Bristol	853	2818	30%
FI0025	Aalto University	847	2587	31%
NL0001	University of Amsterdam	845	2596	32%
FI0001	University of Helsinki	845	4208	20%
NL0006	University of Groningen	844	2174	38%
UK0027	City, University of London	825	2000	42%
AT0005	Vienna University of Technology	819	3446	24%
DE0060	Georg August Göttingen University	796	4921	16%

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