MAPPING THE POPULATION, CAREERS, MOBILITIES AND IMPACTS OF ADVANCED DEGREE GRADUATES IN THE SOCIAL SCIENCES AND HUMANITIES (POCARIM)

Policy Report 11

Geographies of Transnational Career (Im)mobility of European PhD Graduates in the Social Sciences and Humanities

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**1 Introduction**

This POCARIM policy report analyses the **geographies of transnational career mobility and immobility** of European PhD graduates in the social sciences and humanities since the year 2000. It presents research findings from the **EU-funded FP7 research project POCARIM** (*Mapping the POpulation, CAReers, Mobilities and IMpacts of Advanced Research Degree Graduates in the Social Sciences and Humanities)* that is led by Professors Louise Ackers and joins 13 interdisciplinary teams of researchers in different European countries.

The 13 partner countries, in which the POCARIM research was undertaken, include ten EU member states, ranging from the largest countries Spain, France, Germany, Italy, Poland and the UK to smaller countries such as Latvia and Slovakia. They also include the three non-EU states Norway, Switzerland and Turkey, which results in a wide coverage of European countries (Figure 1).

Figure 1. Partner countries in the EU-funded FP7-project POCARIM
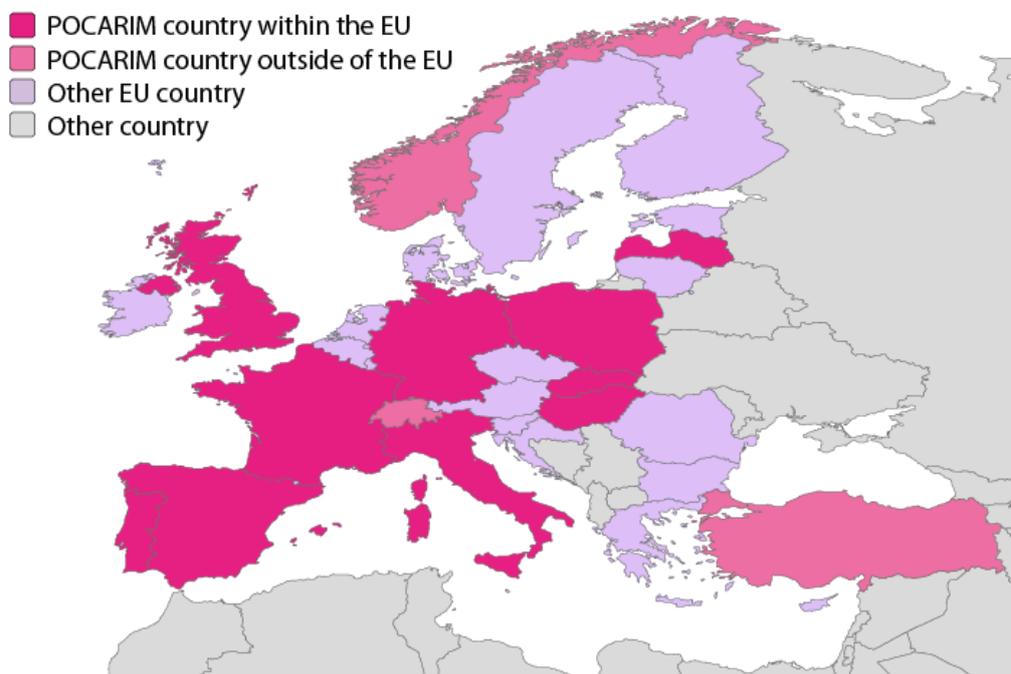
Source: Own design.

This policy report sums up research findings presented by Dr Heike Jöns at the Annual Meeting of the Association of American Geographers in Tampa, Florida, in April 2014 and at the Annual International Conference of the Royal Geographical Society with the Institute of British Geographers in London in August 2014. In this report, we will apply a comparative perspective between selected POCARIM partner countries with an emphasis on Germany because Dr Heike Jöns is the POCARIM country coordinator for Germany, having generated the survey and interview data together with Dr Hannah Deakin, who worked as an Research Assistant on the POCARIM project for 12 months.

The policy context of the POCARIM research is European integration and especially the aim formulated by the Bologna declaration in 1999 to create an integrated European Higher Education Area by 2010 (Sursock and Smidt, 2010). While academic research has mainly focused on the comparability of academic degrees and the transfer of academic credit, less attention has been devoted to the integration of European labour markets for PhD graduates (Auriol, 2010), of whom according to our research, up to ten years after their PhD, 80% work in HE and 20% held at least one job outside of their PhD country by then.

This report will address two research questions:

I. What is the **relationship between transnational mobility and immobility** in the career trajectories of European PhD graduates in the social sciences and humanities?

II. How can variations in this relationship between different European countries and sectors of the knowledge economy be explained?

2 Academic research context

The academic research context in geography and other social sciences has shown a growing interest in skilled migration and career mobility. Three types of people have attracted most attention, namely highly skilled professionals with an emphasis on high tech industries and advanced producer services (e.g., Koser and Salt, 1997; Lowell and Findlay, 2001; Beaverstock, 2004; 2005; Saxenian, 2006; Yeoh and Lai, 2008; Harvey, 2010; Fechter and Walsh, 2012); university students and graduates (e.g., Altbach, 1989; Blumenthal et al., 1996; King and Ruiz-Gelices, 2003; Findlay et al., 2006; 2012; Hazen and Alberts, 2006; Findlay, 2010; Brooks and Waters, 2011; Deakin, 2012; Waters, 2012); and researchers and academics (e.g., Heffernan 1994; Jöns, 2002; 2007; 2008; 2009; 2011; Ackers, 2005; 2008; Ackers and Gill, 2008; Fahey and Kenway, 2010; Cañibano et al., 2011; Leung, 2011; 2013; Heffernan and Jöns, 2013; Jöns et al., 2014). What is noticeable in this work is a focus on transnational movements, whereas POCARIM offers the opportunity to compare career mobility between jobs at different geographical scales.

For framing the empirical analysis conceptually, we have taken particular inspiration from King and Skeldon's (2010: 1619) recent call for integrating approaches to **internal migration within states and international migration between states**, two fields that according to these authors are "characterised by different literatures, concepts, methods and policy agendas" (Ibid.). As one research strategy, King and Skeldon (2010: 1622) suggest to examine **migration systems** or, in other words, the ways in which internal and international migration are interlinked in a range of migration pathways that they outlined in a typology using a two-country and two-region matrix. Accordingly, we adopt this scheme to examine how some of these migration pathways are represented in the POCARIM survey sample.
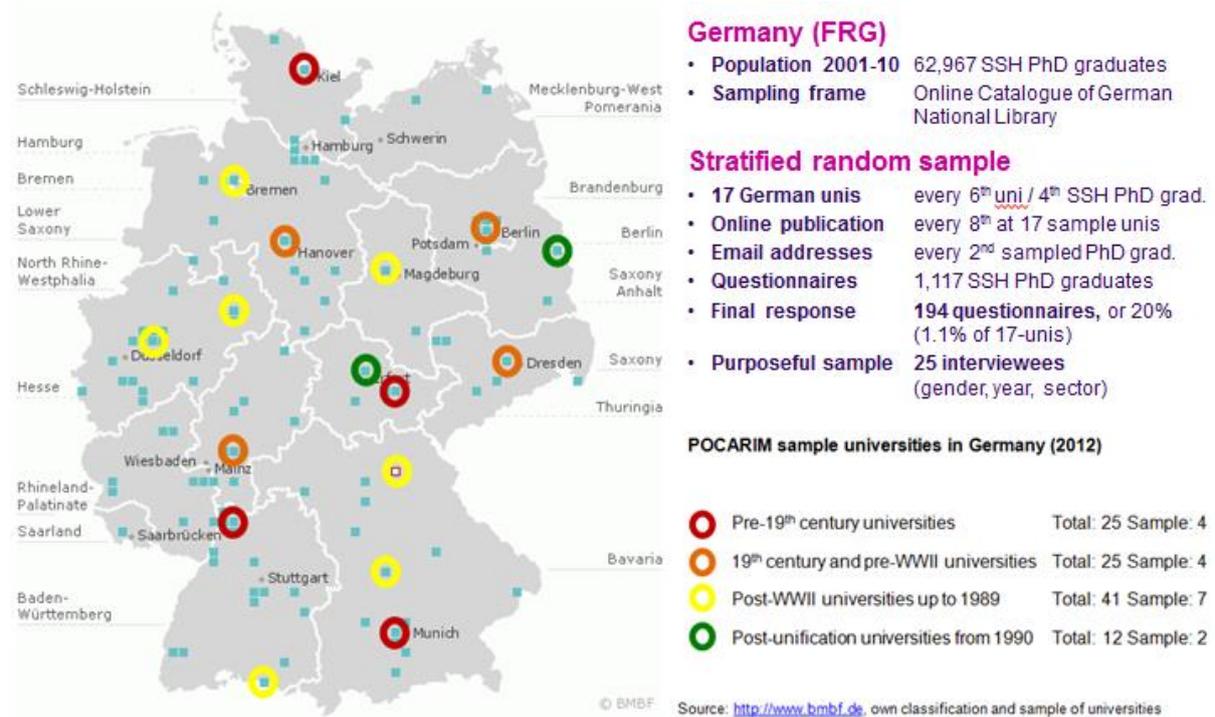
3 Methodology

Methodologically, the POCARIM project has examined the career trajectories of PhD graduates in the social sciences and humanities (hereafter SSH PhD graduates) in 13 European countries since the year 2000, using a literature review, policy analysis, secondary data analysis, an online survey, and qualitative interviews. This multi-method approach has generated **2,652 questionnaires** and **325 qualitative interviews** for the analysis. The online survey created the greatest methodological challenge because access to names and email addresses of PhD graduates varies enormously by country and thus required different sampling strategies in the partner countries. Each project team was responsible for designing a sampling strategy that represented the population as well as possible. At the second project meeting in Bratislava, it was agreed to apply an institutional approach where possible, which would enable to trace the careers of SSH PhD graduates, who graduate from a university in the partner country. Accordingly, this report interprets the survey data as country-specific data for all partner countries, even if the applied sampling strategies might require a restriction of this assumption in some countries (for details, see Kupisccewska et al., 2013).

In Germany, we applied a rigorous institutional approach so that the **population** comprises all **62,967 SSH PhD graduates from German universities in the ten years 2001 to 2010**, irrespective of their citizenship. We compiled a list of all German universities and divided them into four generations to select a historically and geographically balanced **sample of 17 German universities**, choosing every sixth university from each of the four generations that accounted for **every fourth SSH PhD graduate** from 2001 to 2010 (Figure 2).

The sampling frame was constituted by the Online Catalogue of the German National Library, which represents a share of 13% (2000) to 40% (2010) of all PhD theses and habilitations examined at German universities. Via the DissOnline database, we were able to access **every eights of all SSH PhD graduates at the 17 sample universities** and found the email addresses of **every second DissOnline author** via social media sites. The online survey was sent to 1,117 SSH PhD graduates and resulted, after one reminder, in a final **response rate of 20%**, or **194 questionnaires,** which equals **1.1% of the 17-uni population** and thus a representative stratified random sample in the order of magnitude of a micro census.

In addition, 25 interviewees were chosen through **purposeful sampling** based on the survey response sample, considering gender, year of PhD completion and current sector of employment.

Figure 2. Sample universities and strategy for POCARIM country Germany

Germany (FRG)
- **Population 2001-10** 62,967 SSH PhD graduates
- **Sampling frame** Online Catalogue of German National Library

Stratified random sample
- **17 German unis** every 6th uni / 4th SSH PhD grad.
- **Online publication** every 8th at 17 sample unis
- **Email addresses** every 2nd sampled PhD grad.
- **Questionnaires** 1,117 SSH PhD graduates
- **Final response** 194 questionnaires, or 20% (1.1% of 17-unis)
- **Purposeful sample** 25 interviewees (gender, year, sector)

POCARIM sample universities in Germany (2012)

◎ Pre-19th century universities	Total: 25	Sample: 4
◎ 19th century and pre-WWII universities	Total: 25	Sample: 4
◎ Post-WWII universities up to 1989	Total: 41	Sample: 7
◎ Post-unification universities from 1990	Total: 12	Sample: 2

Source: http://www.bmbf.de, own classification and sample of universities

Source: Own design.

4 Employment of SSH PhD graduates from European universities

In general, the POCARIM findings show that Europe is still characterised by **strong national academic labour markets** because the types of jobs and mobility patterns of SSH PhD graduates vary substantial between country of PhD and country of current job. Main differences seem to result from the **size of the national labour market** and its **degree of neoliberalization** and **career structures**.

The degree of **intersectoral mobility** in national labour markets is shaped by the lab**our market status and function of different disciplines** in the social sciences and humanities. For example, a degree in history will most likely not qualify someone for a job in research and development in engineering, but in some countries, it is more common than in others to go on to work in advanced producer services such as banking and insurance.

Geographical patterns of international mobility vary due to place-specific geopolitical path dependencies, varying national economic performances and the different language areas that characterise the European knowledge economy and creates the largest difference between the UK and other European knowledge economies, which will be explained in the following.

5 Internal and international migration by country

The **first main finding** of this report is that **transnational immobility remains the norm** in the careers of European SSH PhD graduates. The relationship between **internal and international career trajectories** in the POCARIM survey sample can be mapped by comparing the country of the last degree before the PhD with the country of the PhD and the country of the current job, including a job history of up to six jobs post-PhD. Based on the analysis, **five types of career trajectories** can be differentiated, whose frequency is displayed for the average of all countries and for selected countries in Figure 3. The most important type is represented by **internal careers** in which all career

stages were performed within the PhD country. Internal career trajectories were performed by three fourth of SSH PhD graduates.

Figure 3. Career trajectories of SSH PhD graduates since 2000 by country
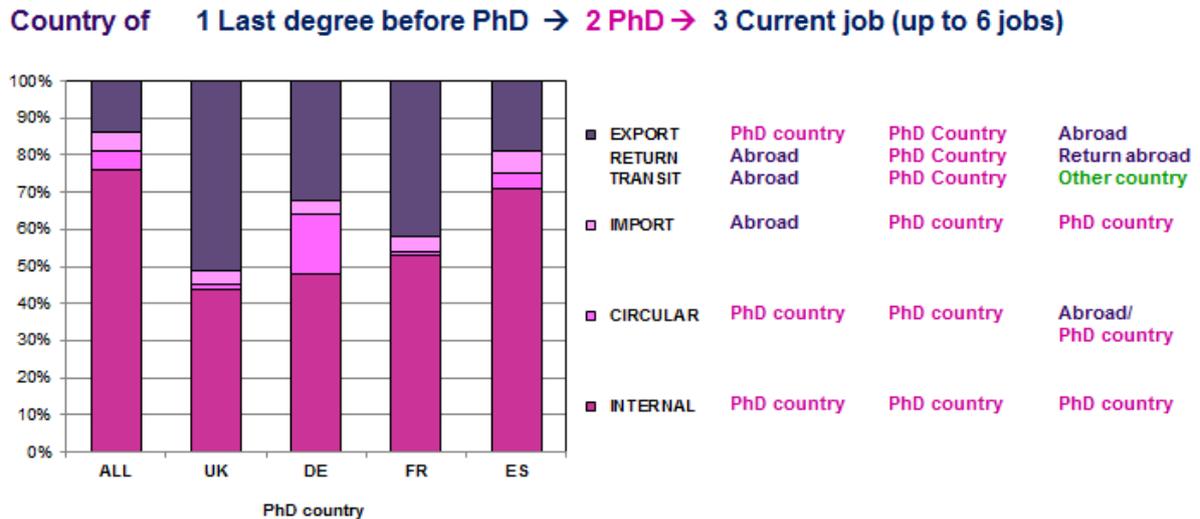
The **UK** produces the **lowest share of internal SSH PhD careers** with less than 50% because the strong marketization of UK higher education, its high quality, and English as the *lingua franca* attract many international students, who often do all university degrees or at least their PhD in the UK and subsequently return to their home country or move on to a third country after their PhD.

Interestingly, **the UK and Germany keep a similar share of internal PhDs**, whereas Germany has by far the highest share of SSH PhDs with international job experiences between PhD and current job. This can be explained by well-established exchange programmes for post docs that keep one sixth of SSH PhDs employed for at least some time. Previous research has shown how important these exchange schemes were for the international integration of German universities over the past sixty years (Jöns, 2009).

Spain represents a large European knowledge economy with a much higher share of transnationally immobile PhDs than the UK, Germany and France, which is most likely linked to the different language context and a related lower international attractiveness of Spanish universities for international PhD students.

Each of these European countries **attracts about 5% of PhD graduates**, who did their last degree before the PhD abroad, permanently to their knowledge economies, which underlines **the validity of the POCARIM survey data** despite different sampling strategies.

The other SSH PhDs left their PhD country after their first job or a subsequent job and thus can be classified either as **exportees**, as **returnees**, who went back to their country of the last degree before their PhD, or as **those in transit**, who came from a different country and went to work in a third country after completing their PhD (Figure 3).

The **second main finding** of this report thus shows that **SSH PhD career trajectories vary significantly by PhD country**. This is even more evident when comparing the role of King and Skeldon's (2010) migration pathways in more detail, which can be used for highlighting the following

four points (Figure 4): First, **stationary internal career paths** with only one job after the PhD are prominent in Spain, which might link to close family relations that tie individuals to particular regions. Second, in the UK, Germany and Spain, a similar share of one fifth experienced **internal job changes** and thus **the greatest likelihood of internal career migration**. Third, in Germany, **circular international job migration** facilitated by postdoctoral schemes for academic mobility is much more significant than elsewhere, whereas fourth, the career migration system of SSH PhDs in the UK is characterised by high shares of exportees and returnees – both a sign of the **largest share of international students**.

Figure 4. Frequency of selected migration pathways of SSH PhD graduates
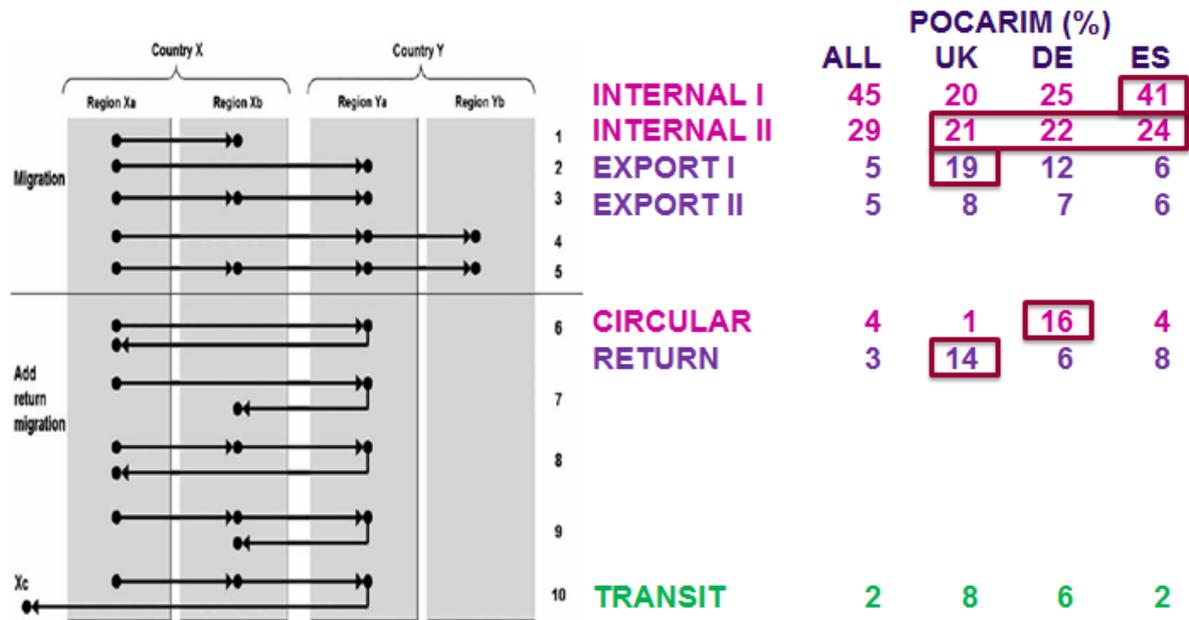
Source: King and Skeldon, 2010: 1622; POCARIM online surveys 2013; own analysis.

Such migration systems can also be identified in regard to prominent career trajectories between different countries. These underline the **importance of attractive labour markets**, for example, of exports from Germany to the United States and the UK; **the important role of a common language** for mobility of German SSH PhD graduates to Switzerland and Austria; the **significance of return migration** of SSH PhD graduates from several other European countries to Italy, where PhD training might not be of a similar standard; and **the path dependency of postcolonial ties** that see large shares of return migration of SSH PhD graduates to former colonies of the UK, France and Spain (Figure 5).

Figure 5. Transnational migration pathways of SSH PhD graduates by country

Country of current main job	UK	DE	FR	ES	Main reasons
US	2%	3%	0%	0%	1 Attractive labour market
UK	51%	3%	0%	1%	
DE	3%	68%	0%	0%	
FR	2%	1%	70%	0%	
ES	1%	1%	2%	81%	
CH	1%	4%	1%	0%	1 + 2
AT	0%	3%	0%	0%	2 Common language
IT	8%	3%	5%	3%	3 Return migration
Other countries	17%	10%	13%	12%	4 Postcolonial ties

PhD country

Source: POCARIM online surveys 2013; own analysis.

The third main finding demonstrates that these **systems of career migration also vary significantly by sector of post-PhD employment.** In **Germany**, the role of transnational careers is most important in higher education and decreases in the business and government sectors, reaching 100% of internal careers in primary and secondary education (Figure 6). This means that in Germany, **transnational mobility of SSH PhD graduates is mainly driven by the desire to pursue an academic career**, which is often difficult within the country due to a lack of permanent positions for early career researchers and the related long-term job insecurity as a main problem of the German academic labour market (e.g., Bahle, 2002; Enders, 2002; Majcher, 2002; Grigolo et al., 2009; Fischer and Minks, 2010; Jöns, 2011; Fitzenberger and Leuschner, 2012).

Figure 6. Career trajectories of SSH PhD graduates since 2000 by sector
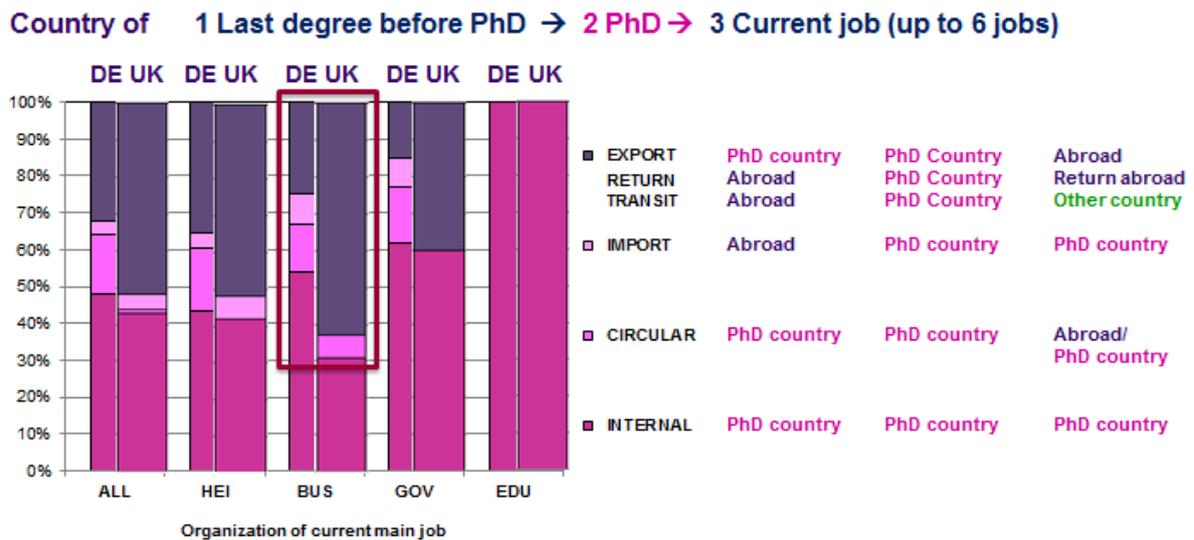
HEI   Higher education or research organisation
BUS   Business/commercial entity
GOV   Government or administration organisation
EDU   Primary or secondary education institution

Source: POCARIM online surveys 2013; own analysis.

In non-academic professions, transnational mobility is rarely relevant as most career paths require local, regional and national expertise and networks that can only be built up by spending several years in one place. This is stressed by a male human geographer working in municipal planning management and consulting:

> I have the feeling that **networks play a very important role**. You cannot develop networks by force. They develop little by little. And **it needs time**. Partly **this is a point against a change of location**, as you start again at zero. Well, you can always look if you know some people in advance in a city … **but it takes a while until you build your networks up, like I have done it over the past years**. [POCARIM interviewee DE-20]

More generally, this interviewee's reasoning provides a powerful explanation for the fact that transnational immobility remains the norm in most post-SSH PhD careers. In the **UK**, however, this pattern differs because UK universities train a much larger share of SSH PhDs for the international business sector, in which PhD training in the UK and a first job in the leading world city of London serve as stepping stones for promising career trajectories. The **fourth main finding** thus stresses that **sectoral career patterns also vary by country** and that the **UK represents in many ways an exception in Europe** because of the **much more internationalised higher education and business sectors**. This finding, however, would need to be verified through a thorough analysis of subject-specific SSH PhD career trajectories because PHD graduates in business and management from one UK university are overrepresented in the POCARIM survey sample (Kupisccewska et al., 2013).

Conclusions

In conclusion, these POCARIM research findings on the relationship between internationally mobile and immobile SSH PhD career trajectories confirm Musselin's (2004) observation of highly

segmented labour markets and Bauder's (2012) suggestion that the needs and possibilities for international mobility differ between academics and knowledge workers in other professions. In addition, this research has demonstrated first, the importance of **country-specific sectoral career patterns**. In **Germany**, for example, transnational mobility is most often linked to an academic career, whereas jobs in other sectors of the knowledge economy do far less often require transnational mobility between jobs. In the **UK**, however, the business sector is much more globalised due to the leading world city of London, postcolonial and Anglo-American economic networks.

Second, this research has revealed **path dependent systems of internal and international career migration** based on the typology of migration pathways developed by King and Skeldon (2010). In comparison, the UK higher education system trains many more SSH PhDs for the higher education and business sectors in **Commonwealth countries and North America**. A growing demand for academics in an expanding UK higher education system is **filled by SSH PhDs from mainland EU** facing inaccessible and insecure academic labour markets, but these individuals need to be willing and able to be both transnationally mobile and academically competitive if they wish to settle in the UK permanently.

Despite the methodological challenges involved in conducting an online survey in 13 different European countries, these findings show that the POCARIM project allows for a unique comparative perspective that helps to put **policy recommendations** on a sound empirical basis. Most importantly, our findings underline, as stressed elsewhere before (Jöns, 2011), that the creation of an integrated European labour market through increased transnational mobility requires compatible career paths and promotion criteria, especially in academia, in order to be inclusive of all postdoctoral research, in different disciplines as well as from different countries, classes and genders. Accordingly, we emphasize Jöns' (2011) policy recommendation that the **Bologna process,** which has successfully created compatible degree programmes at European universities, **needs to be extended to career trajectories of researchers and academics.**

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