PhD holders are a highly skilled population, and are seen to be a key component of the knowledge society and economy. The literature underlines the importance of knowledge flows between university and industry through the mobility of PhD graduates into the private sector. This has led the European Commission to launch programmes to support such flows for the benefit of Europe. Policies, among others the ‘Lisbon Strategy for Growth and Jobs’ in 2000, have been implemented to increase the stock of human capital in research and to facilitate its transfer into various sectors of the society. The supply of highly qualified researchers with doctoral degrees working in different sectors of the economy was then seen as the crucial way to achieve sustainability. In 2010, the European Commission called for the strengthening of the capacity to train young people to become researchers and offer internationally competitive research careers. It was recommended that reforms in higher education focus on increasing the quantity and the quality of graduates, including doctoral graduates, and on strengthening the articulation between education, research and industry. Various countries set up policies regarding PhD education with a focus on developing the doctoral degree as a professional experience for a variety of perspectives beyond careers in teaching and research, which would improve employment prospects.

However, both academic literature and institutional reports underline the difficulties for PhD holders to find employment outside the academic profession in jobs corresponding to their qualifications and skills, in particular for SSH PhD graduates. Even if they leave the academic milieu due to the lack of employment opportunities, the attractiveness of jobs outside the academic milieu is not clear. This might lead to frustration due to their over-qualification for the job. It appears that improved career prospects and earning opportunities outside academic cannot explain the drop-out. The motivations for leaving academia also differ according to discipline based on the potential to apply skills in other sectors.

In fact, little is known about SSH PhDs leaving academia to work in private research or outside research activities: who they are, where they are going and into what type of positions, what was the process of moving from academia toward other sectors, what did they have to learn to succeed in these new activities, and what skills did they acquire during the PhD which was useful for that move?
The POCARIM research improves the understanding of PhDs’ trajectories in SSH and how these trajectories are shaped. It sheds lights on the learning processes of the PhD journey with a specific attention to SSH.

**EVIDENCE AND ANALYSIS**

After PhD graduation, half of the POCARIM respondents were offered permanent employment, with 66% of these going into higher education and research. A further 10% ended up in higher education and research later on following a variety of alternative employment experiences.

One common characteristic for the vast majority of the SSH PhDs is the fact they are expecting to develop a career in teaching and/or in research in academia. Most of those who left academia say that it was mainly due to the fact their contract finished or because they were looking for better career opportunities. Those who left another sector to go back into higher education or research did so mainly because they were looking for better career opportunities.

Through the interviews, we can better understand the dynamics of the moves from one sector to another. A considerable change in career aspirations occurred during the PhD thesis. Before the thesis only 37% of the interviewees were thinking about an academic career, whereas at the end this had increased to 57%, including some who had no expectation to work in academia or who had no idea of what they wanted. Doing the thesis appears to increase the motivation to pursue an academic career (figure 1).

**Figure 1. Moves between steps of the interviewees regarding career.**

However, the limited number of positions in academia leads many to work in insecure positions (for example on temporary research or teaching contracts positions), in marginal positions (for example in administration posts in academia), or in public research out of academia. At the time of the interviews most still aspired to a position in academia but were preparing themselves for the eventuality of never getting such a position and to the necessity of working out of academia or out of research.

It is also interesting to note that some were prepared to work in business (some of them were trained in engineering, business, health, agronomy, etc. before moving towards social sciences) but during the thesis changed their expectations. Furthermore, those who were thinking in terms of an academic career but who discovered the business or social and policy worlds during their thesis did not change their expectations. Finally, most of those who left academia still maintained some elements of academic work: participating in teaching at a university; still doing research in cooperation with academics; recruiting PhD students to their business and co-supervising the thesis; publishing, sometimes with co-authorship with academics, even if research is not part of their job.

However, there is some variation in career trajectories according country. In some countries, most of the PhD candidates were expecting to pursue an academic career and were already in permanent academic positions. In others, more candidates had no special expectation of an academic career, or were already working outside academia but became interested in and achieved permanent academic positions. In France, for instance, many of the PhD candidates started with the expectation of an academic career but
only a few of them actual found permanent positions (figure 2). In Switzerland, half of the PhD holders stayed in the margins of an academic career with very few achieving stable positions. In Poland, many moved towards research out of academia, while in Germany many were moving out of research.

Figure 2. Career moves between steps of the French interviewees

In terms of entry into an academic career or staying on the margins of academia, there is no difference between men and women in the first job after the PhD. However, after this first job more women PhD holders obtained a permanent position in academia.

The major differences appear between the main scientific domains. In the Humanities, there is a much greater expectation of an academic career but they are much less likely to obtain a permanent academic position than their colleagues; they are also less likely to find a position outside of research or in research outside the academy.

Finally, only a small number of interviewees planned or had begun a career outside academia. The move towards research outside the academia or towards another sector came mainly as a result of the combination of the uncertainty of obtaining an academic position and a growing knowledge of other sectors of activity. Moving outside academia is a process of progressive re-orientation. For some respondents, it was the discovery of the possibility to valorise the PhD for jobs like project management, design, consulting, innovation, etc.

But what emerges from the interviews is the learning process during which they discover both another world and the way to translate their knowledge for this new world. They also reshape the meaning of their research skills. But this process is very long.

**Policy Implications and Recommendations**

1) National and European policymakers, institutional leaders, and training organisations should create opportunities to expose doctoral researchers to a diversity of environments through measures including:
   - Placements and secondments (block and day release) and through part-time research
   - Joint Supervisions
   - Access to funding to support face-to-face meetings and participation in conferences and events

2) Doctoral training institutions (and research groups) should build partnerships across sectors and develop innovative training programmes which provide opportunities for PhD candidates to explore non-academic career paths and settings.

3) Doctoral training institutions should support staff development opportunities designed to increase awareness of and confidence in impact-related activity. This might include writing and presenting for different audiences, Intellectual Property Rights, entrepreneurship, leadership, project management and other types of complimentary training.
4) National and European policymakers, and research institutions should increase funding to support the exploitation of the results of academic research, or the translation of academic results into products or programmes. This could include, for example, funding researchers’ time beyond the life of a project.

5) Academic employers should review career progression systems to give greater weight to impact-related outputs to balance the emphasis on peer reviewed publications and research grant income. This may include recognition of dissemination in grey literature/policy reports; presentations to stakeholder communities and receipt of ‘soft money’ such as commissioned evaluations and consultancy funding.

**Research Parameters**

The findings contained in this brief are based on original work carried out in each of the POCARIM countries¹ and which includes: a review of the literature, policy and existing data, as well as original empirical survey and interview research. We draw out the implications of our findings for policymakers.

The research consisted of two core phases. Each phase was coordinated by a key partner and carried out across the 13 countries by all partners.

Phase one of the research consisted of:

- A review of over 350 studies on the themes of: employment trends, career paths and graduate destinations; and impact, engagement and the contribution of SSH research (Gustafsson and Hansen, 2013).
- A review of policy approaches to interdisciplinarity, doctoral education as the first phase of an academic career, and responses to the economic crisis in terms of funding of doctoral education (Bitusikova, 2013).
- A review of existing statistical data sources on the population of social science and humanities researchers in the POCARIM countries and beyond (Canibano et al., 2013).

Phase two consisted of:

- An online survey of 2,723 SSH doctoral graduates which asked a number of questions on the key themes of the project. These included the perceived impacts of respondents’ work, and their international, intersectoral and interdisciplinary mobilities. Survey data was cleaned and analysed in SPSS and EXCEL (Kupiszewska et al., 2013).
- In-depth, qualitative interviews with 25 respondents in each of the thirteen POCARIM countries. Each interview was transcribed, translated into English if necessary, and entered into a single NVIVO project file for analysis (Ackers et al., 2013).

**References**


---

¹ The countries in which the study was carried out were: France, Germany, Hungary, Italy, Latvia, Norway, Poland, Portugal, Slovakia, Spain, Switzerland, Turkey and the UK.
**PROJECT NAME**  
(290770) Mapping the Population Careers, Mobilities and Impacts of Advanced Research Degree Graduates in Social Sciences and Humanities (POCARIM)

**COORDINATOR**  
Professor Louise Ackers, University of Salford ([H.L.Ackers@salford.ac.uk](mailto:H.L.Ackers@salford.ac.uk))

**CONSORTIUM**  
University of Lausanne, Institut for Social Sciences, Lausanne, Switzerland  
Loughborough University, UK  
IKU Innovation Research Centre, Hungary  
Ceris-Cnr, Italy  
Ministry of Education and Science of Latvia  
Oxford Research AS, Norway  
CEFMR/IOM, Poland  
CESIS, Portugal  
University Mateja Bela, Slovakia  
CSIC-UPV, Spain  
Koç University, Turkey  
University of Salford, UK

**FUNDING SCHEME**  
FP7 Framework Programme for Research of the European Union – Coordination and Support Actions – Career Paths and Patterns of SSH Graduates

**DURATION**  
March 2012 – August 2014 (34 months)

**BUDGET**  
EU contribution: €996,847.00.

**WEBSITE**  
[http://www.salford.ac.uk/nmsw/research/research-projects/pocarim-home](http://www.salford.ac.uk/nmsw/research/research-projects/pocarim-home)

**FOR MORE INFORMATION**  
Contact: Professor Louise Ackers, University of Salford [H.L.Ackers@salford.ac.uk](mailto:H.L.Ackers@salford.ac.uk)  
Contact: Professor Dominique Vinck, Uni. Lausanne [Dominique.Vinck@unil.ch](mailto:Dominique.Vinck@unil.ch)

**FURTHER READING**  