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

Policy Report 4

Working outside Academia

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Section 1. Introduction

This policy Report outlines the main findings and some policy recommendations issued from an analysis focusing on the trajectories of the PhD graduates in Social Sciences and Humanities (SSH) in 13 countries (France, Germany, Hungary, Italy, Latvia, Norway, Poland, Portugal, Slovakia, Spain, Switzerland, Turkey, and the UK). The objective of this study is to explore the shaping of SSH PhD trajectory leading them to work in or outside the Academia.

This study is part of the POCARIM Project (Mapping the Population Carriers, Mobilities and Impacts of Advanced Research Degree Graduates in Social Sciences and Humanities), funded under the VII European Framework, coordinated by Prof. Louise Ackers, University of Liverpool, then University of Salford, Manchester (Contact to: H.L.Ackers@salford.ac.uk).

The report discusses the results of the qualitative interviews with 25 respondents to the survey in each POCARIM country (29 for OK), 329 in total (see Section 4 on Research parameters for aims and methodology).

The target population were PhD holders graduated between 2000 and 2012 in one of aforementioned 13 countries but most of the PhD holders who answered (60 %) were graduated in the years 2008-2012, which makes the sample skewed towards younger PhDs.

By SSH, we mean the following disciplines: in Humanities (archaeology, history, languages and literature, philosophy, ethics and religion, other humanities), in Social Sciences (anthropology and ethnology, demography, educational Sciences, media and communications, political science (including public administration and international relations), psychology, social and economic geography, human geography, sociology, other social sciences) and in Economics and Law (economics, business and management science, law).

The data gathered from interviews help to explore the shaping of the trajectory and the involved processes. The guideline explored the pre-PhD situation and its relationship to the PhD and the work after the PhD, the PhD training (orientation, expectation), the jobs after PhD awarded (way to find the job, expectation, relevance of PhD skills, motivation, international and inter-sectorial mobility, international collaborative experience, language issue, interdisciplinarity, impact of the work, networks, family issues). Each interview was around one hour, registered, fully transcribed and coded on NVivo. With the qualitative information, we study when and how connexions were constructed outside the academia, how bifurcations in trajectory occurred, and what were the expectations at each step.

The shaping of the trajectory is not clear and met unresolved challenges. PhD graduates are not a reservoir of explicit or formal knowledge but persons who incorporated tacit and social knowledge during and after their training. They build individual and institutional relationships and a capacity to relate to others and to specific organization, which could be valued outside the academia. Studying their trajectories and its shaping implies to look at knowledge and skills acquisition and re-construction. But there are also actors having expectations, discovering new possibilities, exploring them and learning also about what are their own skills and interests. They perform themselves to identify their capacities. The present report contributes to the understanding of these learning processes taking along the PhD journey with a specific attention put on SSH due to the fact that their particular fields make not evident their a priori contribution to a society structured around technological and economical competition.
The Report is based is organized as follow: Section 2 outlines some results coming from the literary review, Section 3 presents some of the results, Section 4 policy recommendations.
Section 2. Literature review

Little is known about SSH PhDs leaving the academia to work in private research or outside research activities: who are they, where are they going, what type of position, which was the process of moving from academia toward other sectors, what did they have to learn which was different to succeed in these new activities, what skills they acquired during the PhD which was useful for that more. There have been very few attempts to assess these trajectories in SSH field. This report would contribute to the understanding of SSH PhD trajectories by exploring their shaping, moves and transformations. It would also give some perspective to study the contribution of SSH PhDs to the society.

However, PhD holders are highly skilled population, which are supposed to be a key component of the knowledge society and economy. The literature underlines the importance of knowledge flow between university and industry through mobility of PhD graduates getting a position in private sector. This leads to the European Commission to launch programmes to support such flow for the benefit Europe. Policies, among others the “Lisbon Strategy for Growth and Jobs” in 2000, are implemented to increase the stock of human capital in research and to facilitate its transfer into various sectors of the society. The aim was to lead to a more dynamic and competitive knowledge-based economy capable of economic growth with a greater social cohesion. The supply of highly qualified researchers with doctoral degrees working in different sectors of the economy was seen as the crucial way to have a sustainable development. It is part of the wider move towards an increasingly global and knowledge-based economy. In 2010, the European Commission called for strengthening the capacity to train young people to become researchers and offer internationally competitive research careers. The reforms in higher education had to focus on increasing the quantity and the quality of graduates, among other doctoral graduates, and on strengthening the articulation between education, research and industry.

The literature highlights the increasing number of PhD holders working outside the academia (Auriol, 2010; Cruz Castro and Sanz Menéndez, 2005). Some are getting positions that require scientific knowledge and technical skills like for private research or consulting. However, both academic literature and institutional reports also underline the difficulties for PhD holders to get employed outside academia profession, into a job corresponding to their qualifications and skills, mainly for SSH PhD graduates. There would be frustrated due to their over-qualification for the job when they work in public administration, health and social work, secondary education or manufacturing. If most are leaving the academic milieu, it would be due to the lack of employment opportunities in the academia. This leads to high rates of drop-out from an academic career either after the PhD graduation or after a postdoctoral grant or a few temporary research contracts. Conversely, the attractiveness of jobs outside the academic milieu is not clear. If promising PhD graduates decide to switch career path to the private sector due to improved career prospects and earnings opportunities, this does not seem to be the main factors explaining the drop-out. The motivations for leaving the academia would also differ according to discipline and the corresponding commercial potential. It would be less attractive in the humanities than in business, economics and law. But career opportunities and earnings do not seem to be the main reasons to leave the academic milieu. According to OECD, PhD graduates in the field of humanities face the highest level of unemployment in most countries while PhDs in social sciences face an unemployment higher-than-average rate. The difficulty to get employed inside (due to the high level of the competition for a limited number of places) or outside the academia weakens the implicit contract between PhD students and the research institution.
Various countries set up policies regarding PhD education insisting on developing the doctoral degree as a professional experience for a variety of perspectives, beyond the careers in teaching and research. There would be a need to improve the employment perspectives while PhDs associations and some authors call for a better recognition of the PhD degree into public administration and industry and business sector. The doctorate is not intended only to achieve jobs in the academic world but also for managerial jobs and high position in public functions (generally reserved to engineers). In some countries, the idea was to develop a practice-driven applied research doctorate in order to meet the needs of professionals outside academia at doctoral level but there is a debate in the literature regarding the relevance to differentiate a professional doctorate from the traditional PhD, because their programmes have many similarities. Many PhDs are already applied, engaged or embarked research doctorate including a partnership with firms, public administration or NGOs and a professional experience out of the academic research. Furthermore, the distinction between fundamental and applied research is not clear-cut. The problematic of the doctorate employment seems to be the same; the difference would be between individual trajectories during and after the doctorate according to the fact that it allowed partnership and professional experience out of academia or not. Research groups also are engaged with non-academic actors through activities like joint research, consultancy, training of professionals, follow-up of students’ professional experience, personnel mobility and informal contacts.
Section 3. Outcomes from interviews of SSH PhD holders

One of the issues addressed by the POCARIM survey concerns the trajectory of the SSH PhD holders. The interviews addressed a sample of the population of SSH doctoral researchers graduating in thirteen POCARIM countries since 2000, irrespective of nationality or citizenship (including nationals, other EU nationals and third country nationals). Due to the fact that a central repository of PhD holders is not available, it was not feasible to do a random sampling in all the countries under study. Interviews capture more insights about expectations, discovery, exploration, learning and re-orientation. Hereafter, we outline a few results that would help to understand the shaping of the SSH PhD holders trajectories.

Employment trajectory

After the PhD graduation, half (49 %) of respondents were offered permanent employment. With the time passing, this share increases (54 % in their current job) except in four countries where the share of permanent / fixed-term contracts is decreasing due either to job insecurity increase or to less secure but more attractive jobs or better career. According to the discipline, PhD holders enjoyed more of less stable position; in Economics or law, 60 per cent of the surveyed PhDs got a permanent position while it was the case for only 49 per cent in Humanities. Men PhDs also enjoyed the stable form of employment (58 %) more often than women (50 %) for their current position. They generally are on full-time position (87 %), except for Switzerland (only 41 %).

Most of the surveyed PhDs stayed in higher education and research (66 %): 56 per cent were in the same position since they get their degree; 10 per cent had one or more contracts in the academia. But, after various employment experiences, 10 per cent more finally worked for higher education and research; most of them combined business experience with higher education and research (3.6 %), various experiences in primary, secondary and higher education and research (1.9 %), public administration experience and higher education and research (1.5 %), NGO experience and higher education and research (0.7 %) or experiences in various sectors (2.7 %).

Among those who are no more in higher education and research (2.8 %), 0.9 per cent worked for public administration, 0.8 per cent in business, 0.4 per cent in NGO, 0.3 per cent in primary or secondary education. This means that at the total, 78.5 per cent had working experiences in the academia.

Regarding those who never had working experiences in the academia, they were 5.2 per cent in public administration, 4.9 per cent in the business or industry, 1.5 per cent in education, 1.1 per cent in NGOs.

Motivation to move

One common characteristic for the quasi totality of the SSH PhDs is the fact they are expecting to do a career in the academia, in teaching and public. Most of them were working or have been working in higher education or research and most of those who left the academia say that is was mainly due to the fact their contract finished (35 %) or because they were looking for better career opportunities (20.4 %). This is the case when they left the academia for the business sector (31.9 per cent because the contract finished; 23.4 per cent because they were looking for better career opportunities) or for public administration (51.9 per cent because the contract finished; 18.5 per cent because they were looking for better career opportunities). Those who left the academia for primary or secondary education, the reason is the end of the contract (56.5 %) or because they were offered a better salary (17.4 %). Those who left the academia for NGOs, the reason is the end of the contract (23.8 %), because they were looking for better career opportunities (19 %).
On the contrary, those who have been left another sector to go back into higher education or research did that mainly because they were looking for better career opportunities (40.5%). This is particularly the case for those who were working in public administration and in business. Those who left NGOs to join the academia did it because their contract finished. Those who left a sector to join the academia because they were offered better working conditions or another position in the same organisation were mainly going out from education. Those who left a sector to join the academia for family or personal reason were working before in business sector.

Dynamics of the move

Through the interviews, we could better understand the dynamics of the move from one sector to another. Here a few cases are mobilized in order to point on some of the mechanisms and processes. We will look at the trajectories of all our interviewees, no matter they got or no position in the academia, because understanding the moves inside would help to understand the move outside. We will now try to present a few models emerging from individual cases. A further investigation could start from these models to explore their prevalence among the population of those who are going out the academia. We could resume the results as a series of steps and bifurcations as following, which served for coding the interviews:

1. Before doing the thesis, we encounter four types of situation:
   a. In the academia: the person was studying with the idea to enter into the academia; engaging a PhD thesis was than an obligatory pint of passage.
   b. Marginal to the academia: the person was studying without any idea in terms of carrier plan; he/she started a PhD because he/she wanted to pursue in research or get the opportunity to do it but with no specific expectation.
   c. Out of academia: the person was working and wanted to change his/her horizons, among which the possibility to do research or to enter into the academia.
   d. Out of research: the person was working (maybe in research outside the academia and maybe in parallel or in-between with his/her studies) and wanted to improve his/her skills with no expectation towards the academia.

2. During the PhD thesis, confirmation or bifurcation occurred:
   a. In the academia: the person discover or confirmed he/she liked doing research and than expected to pursue in research in the academia or at the margins of the academic milieu.
   b. Marginal to the academia: the person discovered another world out of academia but stayed with the idea to do an academic carrier.
   c. Research out of academia: the person discovered another world out of academia and started to think seriously to do a carrier out of academia.
   d. Out of research: the person confirmed his/her project to work out of academia.

3. After the thesis, the first job:
   a. In the academia: is in the academia with the desire to pursue in it.
   b. Marginal to the academia: is in the academia but on unsecure position or on a marginal position with the desire to get in.
   c. Research out of academia: is in public research but out of academia.
   d. Out of research: is out of academia but keeping some links.

4. Finally, their actual job is:
a. In the academia: is in the academia with the desire to pursue in it.
b. Marginal to the academia: is in the academia but on unsecure position or on a marginal position with the desire to get in.
c. Research out of academia: is in public research but out of academia.
d. Out of research: is out of academia but keeping some links.

A global overview

Through the interviews, we could better understand the dynamics of the move from one sector to another. Here a few cases are mobilized in order to point on some of the mechanisms and processes. We will look at the trajectories of all our interviewees, no matter they got or no position in the academia, because understanding the moves inside would help to understand the move outside. We will now try to present a few models emerging from individual cases. A further investigation could start from these models to explore their prevalence among the population of those who are going out the academia. We could resume the results as a series of steps and bifurcations as following (figure 1):

Figure 1: moves between steps of the interviewees regarding career.

One remarkable result is the bifurcation occurring during the PhD thesis. If before the thesis only 37% of the interviewees were thinking about an academic career, at the end of the thesis, there were 57% including part of those who were working with no expectation towards the academia or who had no idea of what they wanted. The thesis appears to be a generator of motivation towards the academic career. But the limited position into the academia leads many of them (47%) to work on unsecure position for the academia (a research contract, a temporary teaching position), or on a marginal position (like in the administration of the academia) or in public research outside academia. Most of them still were expecting to get a position in the academia but were preparing themselves to the eventuality of never getting such a position and to the necessity to work outside academia or out of the research. It is also interesting to note that various persons 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. Those who were thinking in terms of academic career but
who discovered the business or social and policy worlds during the thesis did not change their expectations. And finally, most of all those who left out the academia still pursue some contact and relation with the academic work: participating in teaching at the university; still doing research in cooperation with academics; recruiting PhD students in their business and co-supervising the thesis; publishing, sometimes with co-authorship with academics, even if research is not part of their job.

**Major differences among the countries**

The following figures show very contracted trajectories according the countries (figures 2 to 7). In some countries, like Turkey (figure 2), most of the PhD candidates were expecting to do an academic career and are in fact doing it with permanent positions.

![Figure 2: moves between steps of the Turkish interviewees regarding career.](image)

In some countries, like Latvia (figure 3), more of the PhD candidates had no special expectation to do an academic career but became interested to pursue into academia and got to do it with permanent positions. These two countries seems to correspond to a dominant idea regarding the trajectory into academia, since the bachelor or, at least, the master studies, with an orientation towards of academic career and the reproduction of the academic milieu. The academic vocation would start at last during the PhD if not before and could be realized as expected. However, this one-strait career seems to be relatively exceptional in most of the other countries where we met a variety of academic journeys.
In the case of Norway (figure 4), many of the PhD candidates were on a trajectory of change before entering to the doctorate. The doctorate represents a major bifurcation; most of the PhD students started them to expect to do an academic career. Doing the PhD in SSH is a started for an academic vocation, which, in fact, could be a reasonable expectation since most of the PhD holders get to pursue with permanent positions.

In other countries, like France (figure 5), many of the PhD candidates also started to expect to do an academic career when they were doing their PhD. Once again, the doctorate in SSH seems to give them the wish to pursue with an academic career. They got the pleasure to do research and sometimes to teach and to stay into this professional milieu even if there were not thinking about that before starting.
the doctorate. But, having their PhD, the reality of the academic market seems to be hard. Only few of them are getting to pursue with permanent positions. Many of them stay into the margins of academia expecting to get a permanent position but very few of them get to stabilize in academia if there were not stabilized soon.

Figure 5: moves between steps of the French interviewees regarding career.

In the case of Portugal, Spain and UK (figure 6), there were more pre-doctorate vocations. Here again, many more got the wish to pursue in academia during the doctorate but very few of them got, soon or not, a permanent position; most of the PhD holders stay after the PhD in the margin of the academic career.

Figure 6: moves between steps of the British interviewees regarding career.
In the case of Italy, 44% had no expectation regarding any academic career before the PhD but there were no so much changing their expectation during the PhD, many be due to the very bad perspectives; only 8% got soon a permanent position and only 36% after a few years. But, many of them stay in the margin of academia (56% just after the PhD and 28% a few years later). In the case of Switzerland (figure 7), the trajectory is very similar with few pre-doctorate vocations and no so much expectative emerging during the doctorate mainly due to their knowledge and anticipation regarding the very few possibilities to stabilize into permanent academic position. Only 4% got soon a permanent position while half of the PhD holders stay in the margin of the academic career with temporary position and part-time research contracts. Their situation is not significantly changing with time.

Figure 7: moves between steps of the Swiss interviewees regarding career.

Source: POCARIM

In the case of Poland (figure 8), 44% of the PhD holders moved toward research out of academia. For Germany, 44% are moving out of research.

Figure 8: moves between steps of the Polish interviewees regarding career.

Source: POCARIM
Slight gender differences
Men and women interviewees have very similar profiles in terms of expectation before and during the PhD thesis. But after the thesis, some differences emerge: more men are moving outside the research since their first job and even more after the first job while more women are going back to the academia or its margins. Regarding the entry into academic career or staying in the margin of the academia, if there is no difference between men and women for the first job, after the first job more women PhD holder are getting a permanent position into the academia (figures 9 and 10).

Figure 9: moves between steps of the women interviewees regarding career.

Figure 10: moves between steps of the men interviewees regarding career.
Major differences between disciplines

The differences between the main scientific domains are interesting. In the Humanities (figures 11), there are much more expectation to do an academic career before (59%) and during (71%) the PhD (59%) than in other disciplines (respectively 34% and 55% in social sciences, 30% and 44% in economics, business and law) (figures 11, 12 and 13). PhD holders in Humanities get much less permanent academic position than their colleagues; they also get less position outside the research and in research outside the academia. Thus, they are much more in marginal academic position. There are no major differences between history-archaeology, philosophy-ethics-religion and languages and literature.

Figure 11: moves between steps of the human scientists interviewees regarding career.

The PhD holders in economics, business and law (figure 12), on the contrary, get much more permanent academic positions, since the first job and after. They also get more position out of research and in research outside academia. In Law, they were having no expectation regarding academic career but getting an academic position.

Figure 12: moves between steps of the interviewees from economics, business and law regarding career.

The social scientists (figure 13) are in between with in terms of permanent and marginal academic positions. There are some important differences between the disciplines: for sociologists and
anthropologists, there are more expectation to do an academic career but finally stay more at the margin of the academia. In psychology, at the end, they are mainly in the academia or out any research activity; the trajectories are similar in education sciences except they had less expectation before the PhD. In geography, most are staying into the margin of the academia or working out of research. In political sciences, they are more to enter into the academia or to stay at its margins.

**Figure 13: moves between steps of the social scientists interviewees regarding career.**

![Graph showing career trajectories]

*Source: POCARIM*

**Expressions of the interviewees to understand their trajectory**

One group is composed of people who were studying with the idea to enter into the academia, for which engaging a PhD thesis was than an obligatory point of passage and who get an academic position soon after the thesis: “I expected to become a lecturer” (Lawyer). It was a dream or evidence since long time.

> As far as I remember, at least as a teenager, [...] I wanted to become a researcher and at that time I saw that having a professional career at the university was the only way for me. So to do so, of course, having a PhD was an obvious step. (Anthropologist)

For others, this perspective and strategy relates to the fact they were already working into the academic milieu.

> Before the PhD, I was working at the University as an assistant. [...] Than I started to work as assistant in the department of Roman studies in my university meanwhile I went to France for a DEA in linguistic and literature and than the PhD. [...] The PhD degree was required to continue to work at the University. [...] I expected to get the possibility and the right to be promoted into the position of the senior assistant at the University. (Linguist)

Some of those who were expecting to do an academic career since before their PhD met difficulties higher than expected. Some can finally get an academic position while others stay at the margins with many difficulties to mourn his/her academic dream.

> I wanted to do a PhD long before I was in position to do so. Yes, it was a real wish, real envy and I don’t know, maybe I didn’t know how hard it could be to get a job once you get your PhD but I thought things would be easier to get a job. When I was in Master, I earned a living as a professional [Arts] and I did my PhD, my Master and PhD on that topic. And I felt that being, I thought that an academic career would be easier and more comfortable than a career in [Arts]. I was wrong. That is what I thought and so for an academic career, of course, you need to do your
PhD. And I was really, it was of course also a story of commitment and patience, etcetera. (Sociologist in academic position)

These difficulties concerns also people who moved from other disciplines (like engineering) toward social sciences and humanities.

[Before the PhD] I was studying in an engineering school. But I had the project, before starting to study engineering, to become an historian of technology. I choose an engineering school opened to social sciences. A famous historian of science and technology suggested me first to study engineering before moving toward history. [...] My plan was to make research in Humanities, hence the PhD. But things changed [...] I wanted to enter the academia and become investigator and professor in history of science and technology. [My first job] was an interesting opportunity to get some experience in consultancy in history and in business management. Furthermore, I discovered that not been graduated from one of the Temples from where comes the scholars in history would complicate my academic career. In fact, this experience was a bifurcation. [...] At the beginning, it was not in my plan. [...] I was than recruited into an applied research laboratory, working on the study and the exploration of potential uses for new technological devices. It was closer to the sociology than to the history. But simultaneously, I pursued to give a class in History of technology at the Polytechnic Institute. I have always had a full awareness of job instability, and of the difficulty to enter into the Academia, which is still the case today. [...] I’m working at some levels of articulation between Academia and Business. (Sociologist not in academic position)

Others were studying without any idea in terms of carrier plan or had completely different dreams. Even when they were engaged in a PhD, part of them still had no idea about entering the academia; someone only wanted to pursue in research while others get the opportunity to do it but with no specific expectation. Doing the PhD, they discovered their passion for the research and started to expect an academic career.

I was aiming for other things, I had a science baccalaureate, I was going to do photography, I was always told I was an artist, except that, well, there were quite decisive personal family circumstances just when I was about to go on to higher studies, and so I remember gathering information from local universities because in fact I didn't have the choice, and that's how I looked for a subject. And so that's how I landed in sociology. [...] I started down the sociology path, from the beginning to the end [...] some of my colleagues, I mean among the students, they saw themselves becoming lecturers. But I was immersed in the subject, I didn't ask myself, I'm not the kind to ask myself what I'm going to do with it, where I'm going [...] after that, it was obvious, and anyway I'm a researcher in my everyday life (Sociologist)

After two Master [in biology and in development studies], I conducted this study in [a southern country] and then I chained with the thesis. [...] I shot a personal development first. (Social scientist)

I discover the field of purchasing during courses and after, during my trainee at [a multinational company] in a non-production buying service, I decided to pursue in a PhD because I wanted to do research. (Manager)

I was very curious about research even if I had no precise idea about what it was. I was afraid to be bored about my job and so I had the idea that researchers never bore because they always learn new things. I was also attracted by lectures and teaching attracted me. (Manager)
I studied Sociology at the University [X]. And then I had a break for one year where I worked. I was considering, in fact, a career as [artist], as a professional [artist]. I applied for a school, for a graduate school in [foreign country] and it was a misapplication [...] and I decided to go back to my career as a sociologist. So I started my doctorate studies in sociology. (Sociologist)

Various engaged into a PhD because of their passion for the topic or the field they were working in.

For me, [the PhD] was a kind of continuity. I started to do field studies on transformation in agriculture, on the introduction of new technics. I had an empirical thematic I was interested in and I would to pursue. I already had some introduction to rural sociology. I was thinking in doing a PhD in social sciences but on agronomic transformations. [...] I wanted to learn about sociology, theory in social sciences, and to find an interesting job in which I could have a broader view on the field, not only agronomical things. (Sociologist)

Another group of persons were projecting themselves outside the academia. Some of them were already working in business, consulting or teaching at secondary schools and were looking for changing their horizons or improving their skills.

I have been doing kind of a long term consultancy work [...] I didn’t do the Ph.D. to sort of go into academia. [...] what I was interested in was the ideal of having a career that was essentially more easily diversifiable, so I felt that the Ph.D. would allow me kind of more flexibility. [...] the Ph.D. does give you that extra qualification. (Geographer)

I was teacher in a college. [...] After about 25 years of career as a teacher, I wished a change. I took the opportunity of changes in my former professional environment to start doctoral studies. (Manager)

I wasn’t happy at work [as consultant in economics]. I didn’t find the work challenging or interesting enough. My father is a university professor, so it made me aware of this kind of profile, this kind of profession. I just embarked on a project. I knew it was going to be long. I did not know what the outcomes would be but given that I was working already in consultancy, I knew it could only be a good thing. Doing PhD also opens new doors, academic doors which I find much more interesting, stimulating in connection. (Sociologist)

As delivery driver, I worked for one year between the licence and the master. I wanted then to pursue into research and to go forward, the most far I could do. (Geographer)

I had no professional project except to avoid going back to work as cashier because it was very boring and I had some problem in the rug. [...] It was a personal interest. I like to do research, to do fieldwork, to discover, to think about. (Socio-anthropologist)

I wanted to challenge myself, but also to change career path. After 7 years in the Army it was time to take a decision: to move and change career or to stay and to finish there. I choose the challenge instead of the stability. My career path at the army was already planed. In fact, I finished Major at 30 years old. If I were still there I will have been Lieutenant- colonel in 5 year and colonel in 10-12 year. So, basically, I like think out the box and challenged myself. (Manager)

I was hesitating between marketing research because I was working for [a multinational company] but at customer service and they proposed me to switch to the marketing research unit and I was really pleased by this offer. But then at the same time I had the offer from
University of [X] to be an assistant. Then I really hesitated between the two and the first concrete offer was the one from the University (sociologist)

Sometimes they discover a passion for research.

I worked for thirteen years. First I studied Management in a Business School. Then I worked in several projects, in European projects [...] At the beginning [the idea to do a PhD thesis] was only to be able to teach and immediately when I started I discovered I loved research. Before I wanted to be a consultant and I discovered that doing intervention research, action research was exactly the kind of thing I wanted to do. (Sociologist)

Some discovered they don’t like private sector:

To get start my MBA, I needed some work experience that is why I worked. After my MBA, I went to some interviews and realized the private sector was not very suitable to me. I grew more and realized academia was closer to me, so I continued with a PhD. (Business)

The majority (63%) of our interviewees had no special motivation to enter into an academic career; thus we could expect they would have no difficulties to work outside the academia, in working sector already known by them. But, in fact, the PhD changed the trajectory of many of them who discovered their own interest for the research and started to expect to pursue in the academia. They were entering the academia. And those who discovered another world outside academia stayed with the idea to do an academic carrier; discovering business sector or public administration was not a sufficient motivation to go out the academia.

The rationales of the move outside the academia

They were marginal those who started to think seriously to do a carrier out of academia or who confirmed his/her project to work outside academia (as manager, as professional in a specific sector). The bifurcation toward research outside the academia or towards another sector came mainly with the combination of the uncertainty to get an academic position and a growing knowledge of other sectors of activity. Most of our interviewees moving outside the academia are looking for intermediary position like researcher in applied research organisms or are preparing themselves for another job as a necessity.

To join the academic milieu, I know very well I have very few chances to get it. Thus I’m open to various perspectives. But my first perspective is always to have an academic career, into the university. I see me more working for a territorial authority, or an institution more than in consultancy or in firms. (Geographer)

There were no so many those who planned to work outside the academia with their PhD thesis, except those who were coming from an employment outside the academia. For them, the PhD was an opportunity to change something but there was not the idea to become scholars.

I have always been working on the side [consultancy] [...] my Ph.D. looks more sort of capacity adaptation [...] I wanted to be more of an expert [after the PhD, she got a postdoc but don’t change her idea of going back to consulting] So the Postdoc was more... it sort of tick boxes professionally and I tick boxes just a little bit of waiting room to sort out things in my life (Geographer)
I started my PhD and at that time I was employed as a lecturer by the university and I had a job at a publishing company. [...] in the publishing business, I would say that you are only able to get into a certain position if you have a PhD. [...] the publishing business, which was my career choice for the future, that would be very useful and not hinder me in any sense. So the plan was to keep working in publishing and do a PhD on the side. (Historian)

Those who were not coming from outside with the idea to pursue outside the academia generally want to stay in the academia but a few of them want to go out and to avoid academic career.

I had not any ambition. [...] I get to see this world [the academic world] and I think I didn’t appreciate too much because there are people who are assistants and then they are waiting like sharks in the sea, they are killing one another to get the place. (Historian, teaching in public school before and during the PhD)

I really had this passion about doing what I did [during the PhD] and then I somehow lost it. (Psychologist who went to go to manage project for a company)

I already wanted to do a PhD. And then I did it, and it was really hard, really difficult. [...] I really wanted to finish it. (Philosopher working into a small company, organising the text in different languages)

Moving outside as a progressive move and a learning process of another way to work

There were very few whose who discovered from one day to the other the opportunity to work outside the academia or the research. For most of those who moved from the academia toward research, it was a progressive re-orientation, often due to the combination of necessity to find a job and of discovered of another world were research is possible. For some of them, this move toward research outside the academia was also the discovery of the possibility to valorise the PhD for job outside the research 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. The journey of the following PhD holder offers a good synthesis of theses moves.

One of the factors facilitating the move is the encounter of other researchers working outside the academia.

I have changed my mind during my PhD [...], my only professional horizon was being a researcher within the institution like university or CNRS and gradually I changed my mind because I met other anthropologists. At that time [...], many anthropologists were hired to work for private, not private company but they worked for museum or natural parks or other multicultural institutions but however they opened my mind to being an anthropologist and working for something which is not only matter of academic and research. (Anthropologist)

Such a move is supported by the personal interest of the research for some topics, which allow some proximity with the private sector.

I had very personal interest for design, so I start to meet some designers and I realized that it was obvious for me that studying cognition is interesting but working for new way of knowing the world with working with designer was something more interesting for me. So I have decided to redefine my professional agenda. (Anthropologist)
The necessity to find some funds in order to finish the thesis or to get a first job also opens possibilities to meet partners outside the academia. The partnership developed during the PhD played a determinant role. It engaged a smoothly translation from academic research towards research in private business going through a private foundation.

Doing my fourth year of PhD, [...] I had the opportunity to work as research partner for private institution which is [X], a culinary school. I graduated from culinary school which had opened research centre at that time and I knew the head of the research centre, so I started to work for this institution for several research missions funded by a private company to observe and study culinary practices and professional cooks and so on. (Anthropologist)

This first move was an opportunity to meet a private company interested in the results produced by the anthropologist. Working in a hybrid environment allowed the PhD holder to learn to work with the company. Among others, he learned to translate anthropological research results into engineering prescriptions.

So at this stage, at the end of my PhD, I build post-doctoral fellowship with a company, which is my employer currently. It was a very specific way to fund this fellowship was paid by the French government [...], dedicated to innovation in the food industry with strong emphasis on social sciences [...]. I was both an employee of the company and the institute and it was quite difficult to find my way between the two institutions but because as an employee of the institute, I was a researcher, I mean a researcher in a kind of more academic way and as an employee of the company I was asked to become like an innovation project leader which is my current position. [...] (Anthropologist)

[I] work[ed] for something which is in between innovation, design, let’s say working for creating a new material culture instead of studying the material culture, it is more about creating this material culture. (Anthropologist)

I wasn’t clear about my skills as an anthropologist and I think those four years [of the PhD] were really important to let me become more skilled and aware about professional world. [...] currently I am within one single business unit dedicated specially to kitchen appliances. So I have changed vocation, [...] I am a full time innovation project leader. (Anthropologist)

But, before becoming an innovation project leader, the anthropologist had to create his job inside the firm, to convince people and to invent a way to combine academic style of research, design, innovation and management. This implies changing both the organization...

There are no researcher within the organization. [...] So I started to express my interest about the company to the leader of Innovation [...]. So we start to think about how to transform this interest into a real job. We met several people. I made a lot of presentations to explain my job, to explain what could be my job in the next time. I spent a lot of time looking after anthropologists working for other companies like mostly in the IT industry in North America or Denmark to write what could be my future job and after nearly one year I started to have interview with HM manager and we wrote the position together. So I was really lucky because I had the opportunity to say what could be the ideal job for an anthropologist in this industry and I wrote it and they hired me to do the job. (Anthropologist)

and oneself.
I am not really a researcher now. Yes, it was a new position and there is clearly something about being a researcher. [...] with a clear emphasis on being an anthropologist. And as such I spend a lot of time doing something which is quite similar to academic research but [...] because of the pressure of the innovation process in this sector [...] each time I need to re-demonstrate the value of being an anthropologist. So now I am clearly defined as an Innovation Project leader and the fact that I am an anthropologist is known by everybody. But at the same time I really have to find a way between being a researcher in social sciences and being an Innovation Project leader which means having five or six projects in parallel and being the manager of the project and not really the one who will do the fieldwork, one who will view the literature. (Anthropologist)

I continue to publish, to participate to symposium and so on. I do continue to give some course with the university or currently for management school and design school, so yes I continue to have a large range of connection with the academic world. And it is valuable for my job, which is something I am really happy because it is time consuming to have connection with academics and to defend it I have to prove that it is useful for my company. (Anthropologist)
**Section 4: Policy implications and recommendations**

These interviews help to identify some policy implications that lead to few recommendations.

1) Move outside the academia and using his/her research skills for a different job is nothing evident. Neither incentives nor the necessity would be sufficient to engage such translation. Both for PhD holders, for the academia and for employers this is a challenge and a problematic but relevant and fascinating issue.

2) The POCARIM results issued from the analysis of 329 interviews of SSH PhD holders confirmed both the difficulties and the possibilities. But they also lead to point the necessity to enter into the details and to understand the ongoing dynamics. This requires a sound conceptualization of what is a PhD holder (not only a reservoir of knowledge but also a capacity to connect with people and organisations, to translate knowledge and approaches from one domain to another, to open the black boxes of the knowledge and practices, to de-contextualize and re-contextualize) and what does it mean changing of sector. The POCARIM results show that this is a process which requires time because it is a learning process similar to becoming a researcher but with much less peers having the same experience and able to accompany the PhD holders.

3) Thus, policy measures for improving this kind of move outside the academia without loosing the research skills would focus on the learning pathway for both the PhD holder and the employer. As far as there is a broad variety of situations, domains and skills, it seems not relevant to propose a one best way for this kind of translation but general conditions should facilitate these move, like: thinking as a process which requires various years, maintaining contacts between research and out of research activities, and between academia and outside academia.
Section 5. Research Parameters of the POCARIM Project

5.1 Aims and goals
The POCARIM study explores the practices and experiences of doctoral graduates in the social science and humanities. The target population were awarded their doctoral degrees between 2000 and 2012 in one of 13 countries (France, Germany, Hungary, Italy, Latvia, Norway, Poland, Portugal, Slovakia, Spain, Switzerland, Turkey, and the UK), and is conducted collaboratively between researchers from those same countries. Its core aims are to understand the SSH doctoral populations and their production in the POCARIM countries; to identify their mobilities across disciplines, sectors and borders; and to identify and understand the types of impacts that are generated, as well as how and according to what timeframes these impacts are felt.

5.2 Methodology
The project is divided into a number of Work Packages, led by different national teams, each one dedicated to exploring and understanding a particular dimension of the project.

Work package 1 takes the form of a review of existing research on relevant themes at the relevant geographical scales and contexts; Work Package 2 is a review of relevant policy, again on national and European levels; Work Package 3 is a review of available data sources that contribute to the mapping of the SSH doctoral graduate population; Work Package 4 takes the form of a survey of the experiences and practices of a sample of the SSH doctoral population; and Work Package 5 consists of a qualitative interviews with 25 respondents to the survey in each POCARIM country, 325 in total.

As to the survey, a variety of sample strategies were employed in each country depending on national circumstances, but which were intended to provide a sample of at least 100 respondents in each country balanced across the following variables:

- PhD discipline (to ensure that the representatives of every broadly defined SSH discipline were included)
- Gender
- Current employment sector (private and public; higher education, NGOs, government, business, other if relevant)
- Country-level ranking of the HE institutions
- Geographical locations within a country (to have the representatives of both large cities and smaller towns)

All interview transcripts were sent to the UK partners, who entered them into a qualitative analysis software package (NVivo). Interviews were coded initially according to the themes of the survey, and interview guide, and others that emerged. The UK partners produced a report on their analysis, which was distributed to all national teams.

5.3 Contacts
The POCARIM Coordinator is Professor Louise Ackers, University of Liverpool, then University of Salford, Manchester (H.L.Ackers@salford.ac.uk).

Further information on the POCARIM team and participating organizations can be funded on the Project website: http://www.salford.ac.uk/nmsw/research/research-projects/pocarim-home