

Usefulness of SSH PhD Graduation in Hungary

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Theme: Universities as interactive partners

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State-of-the-art

The development of highly skilled workforce is a prerequisite for a successful and internationally competitive knowledge economy. From this point of view PhD graduates are being considered as one of the most important actors to assess the condition of human resources for science and technology. The spheres of university, industry and government are increasingly interrelated – as it is stated by the triple-helix idea - and PhD graduates are key elements in this process as they are involved in knowledge production and transfer and create networks among these spheres. (Thune, 2010.) Obtaining a PhD degree is a long-term and costly investment for both the individuals and the society. The usefulness of these investments is arising crucial questions for all involved parties. What is the main impact of PhD graduation on the individuals' career and how can be described the impact of PhD graduates for the society? In other words: are these investments offering better positions on the job market, better career opportunities for PhD degree holders than others can obtain? Will degree holders have impacts on the progress of economy and society? Does it worth to spend public sources for PhD education?

The social sciences and humanities (SSH) are taken into account in many countries by decision makers as less important area of education and research as science, technology, engineering and mathematics (STEM). However there are some evidences SSH are important not only for human being but for innovative society. Not only in Hungary but in Europe too have been very few attempts to assess the impact of PhD graduation in the field of social sciences and humanities (SSH).

Transformation of universities, strengthening the Triple Helix Model as well as broadening third mission of universities have been opening new career paths for PhD graduates beyond academic jobs. The enterprises demanding more and more highly qualified researchers, building laboratories

and global research networks. Firms need various skills and abilities, willingness to change from fresh research graduates (EUA 2009) and the success of the university education can be measured in the employment of their PhD graduates in the various sectors. The 'triple helix' literature usually concentrates on the university-industry interface by employment (Beltramo et al. 2001, EUA, 2009, Herrera et al. 2010) or in fields where industry involvement in the education is strongest (Harman, 2004; Salminen-Karlsson & Wallgren 2008) and usually focus is on the characteristics of collaboration (Cruz-Castro & Sanz-Menendez, 2005; Thune, 2009) This changing environment has initiated a new direction of research: studying PhD career.

Recently various aspects of the PhD/research career have been investigated in the international literature. Most of these attempts investigate researchers' (PhD graduates) career from a labour market perspective. (Lavoie & Finnie 1998, HEA, 2000, Auriol, 2007, MORE 2010) In the last decade more and more attention has been devoted to the question how the educational system can provide appropriate supply of PhD graduates for the demand of highly-skilled human resources in science and technology (HRST). Many studies in the international literature usually concentrate on graduates in the natural sciences or engineering considering the role these people play in knowledge transfer through their geographical and sectoral mobility. (e.g. ResCar 2007, Mangematin 2000, Fox & Stephan, 2001) Hardly any studies are focusing on the usefulness of PhD education and on the possible career paths in the field of social sciences and humanities. Recent OECD survey identified (OECD, 2010) that people graduating in the field of humanities face the highest level of unemployment in most investigated countries, and people in social sciences also face usually higher-than-average rates among PhDs. They also have to consider the uncertainties in getting a proper position or take on a lower-level job and obtaining a temporary vs. permanent contract. According to the OECD statistics both situations occur for a significant number of PhD graduates.

The importance of knowledge flow through mobility of PhD graduates has been realized by the European Commission, too, which launched various programs to support it for the benefit of European Research Area. (see Euraxess, IISER). These programs recognize that PhD students and graduates are often involved in international mobility as research becoming a truly international activity. (Inzelt, 2012) The mobility of HRST can reach a level which influences the development of human resources in certain countries. (OECD 2008) In some fields multinational corporations are also looking for

internationally experienced graduates but we do not have a clear picture of how this aspect of globalisation affects the fields of SSH.

There have been various attempts to measure the scale of knowledge dissemination through the mobility of PhD degree holders of which the most comprehensive attempt was the CDH survey launched by the OECD (2010), but various aspects were investigated by other research attempts (Brain drain project 2001, ENMOB 2002, Zellner, 2003, Auriol, 2007, Canibano et al. 2008).

In the field of social sciences and humanities the emphasis has been more on research impact and on the utilisation of research results for the benefit of society. (Landry et al. 2001, Mathieu, 2003, Jeffrey, 2010). Furthermore in many cases the focus is rather on programs than individual researchers (Bakhshi et al. 2009, Ackers et al 2010).

This paper is focusing on PhD graduates in SSH. On the base of collected information it investigates the impact of SSH PhD graduation from both perspectives: individual career and the society/environment. We analyse these impacts in the Hungarian situation where PhD graduation has one and half decade history. Majority of PhD awards were obtained after 2004.

Methodology

There are many challenges in measuring impact of PhD education and even more in the fields of SSH. Various attempts have been based on case studies, surveys, indicators or on a combination of these tools. (Grant et al., 2009) Our empirical investigation employed two different techniques: (1) face-to-face interviews to collect qualitative information, and (2) on-line survey to accumulate quantitative information. Both methods were developed jointly with many other researchers in the frame of EU FP7 POCARIM project. Another methodological challenge was to identify the targeted population with valid e-mail addresses. We selected 8 universities from different regions of the country with several SSH doctorates schools. The sample from the on-line survey is 244 valid responses (22%). Number of in-depth interviews carried out in Hungary among SSH PhD-holders on their career paths is 25. These sources are providing us information from various fields of SSH on graduates who obtained there degrees between 2000 and 2010 thus standing in various stages of their career.

Expected results & implications

The paper will discuss two different kinds of impacts on the base of the results of empirical research. (1) The impact of the PhD qualification on the degree holder's career. (2) The impact of PhD degree holders on their narrower or broader environment, the society as a whole. Both kinds of impacts are varying by fields of social and human sciences as well as by regions of awarding universities. The analysis highlights how the respondents see the relevance of PhD graduation for their professional career and whether they are satisfied with their current position. We will get in-depth knowledge on their career choices and any specificity of the available career paths by sectors. Responses will reveal what PhD graduates think to be the main use of their degree and the main ways in which they use their knowledge for the benefit of society. This on-going research will also identify and analyse the most common and most important ways through which PhD graduates may have impact on the Hungarian society. This insight of the Hungarian PhD graduates' career will contribute to the assessment of the present system of PhD education. This knowledge may help to consider the strength and weaknesses of PhD degree and its value for the various stakeholders and potential employers.

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