

# **MOTIVATION OF RESEARCH DEGREE GRADUATES FOR ACADEMIC CAREER – COMPARATIVE RESEARCH BETWEEN POLAND AND CZECH REPUBLIC**

**Tomasz Bronislaw Czapran – Blanka Habrmanová**

---

## **Abstract**

One of the main apparatuses used to increase competitiveness of each country is its human capital. Highly educated and qualified society is an unlimited asset that could benefit future generations.

Universities and higher education facilities should play the main part in generating human potential through knowledge. These institutions should create a steady foundation for the young generation of researchers who would effectively replace older employees. However, research conducted in the Czech Republic and Poland showed that the age structure among academics is unfavourable, yet attempts to change it remain unsuccessful. Motivating and encouraging research degree graduates to work as academic teachers should be one of the main priorities of higher education institutions.

A research on what factors motivate and discourage doctoral graduates to remain in academia was conducted in the Czech Republic and Poland in the spring 2013. Results of the study showed that the main reasons why young researchers decline offers of employment at universities included: lack of vacancies, low income and no real perspectives for further development. The study showed what should be changed.

**Key words:** education, academia, academic career, doctoral students, doctoral graduates, researchers, professional activity, necessary changes

**JEL Code:** I00, I21, I23

---

## **Introduction**

One of the tools to increase a country's competitiveness is a focus on the human capital development. Education and qualifications will provide future generations with unlimited sources of prosperity.

A major role in developing human potential will be played by universities. Hence, promising doctoral students should be encouraged to stay in academia and deepen their knowledge so as they could in the future replace older researcher fellows.

A team formed by the University of Economics in Prague studied the willingness of junior Polish and Czech researchers (Ph.D. holders) to work at university. To do so, a survey was sent to Ph.D. students and academic researchers in both countries. The content of the survey, which was prepared both in Polish and Czech, was alike. The obtained results were analysed in depth, revealing similarities and differences among Polish and Czech doctoral students.

The aim of the study was to find out what encourages Ph.D. graduates to work at university and what steps should be taken to persuade them to connect their future career with academia.

The survey on the career development of young researchers, as the basis of the economy grounded on knowledge, is one of first of this kind conducted in Poland and the first in the Czech Republic.

The reason behind conducting the survey in precisely these countries was similar history of past 100 years and close geographic proximity. Simultaneously, alike studies were conducted in other post-communist countries (Estonia, Lithuania, Slovakia and Slovenia).

### **1 Data collection**

Doctoral students and academic researchers from several dozen of Polish and Czech universities were surveyed. The survey was conducted between 3rd January 2013 and 20th May 2013 in the form of an online survey. The survey was addressed to doctoral students and fellow researchers of all specialisations, stages of their career and ages.

Two diverse surveys were sent to majority of doctoral students and academic researchers studying and working at major universities in the Czech Republic. The first group of 10 359 academic researchers and 8 095 doctoral students from 29 Czech state universities was created by searching websites of all state universities for email addresses. Responses were received from 1 599 academic researchers and 1 344 doctoral students, thus the response

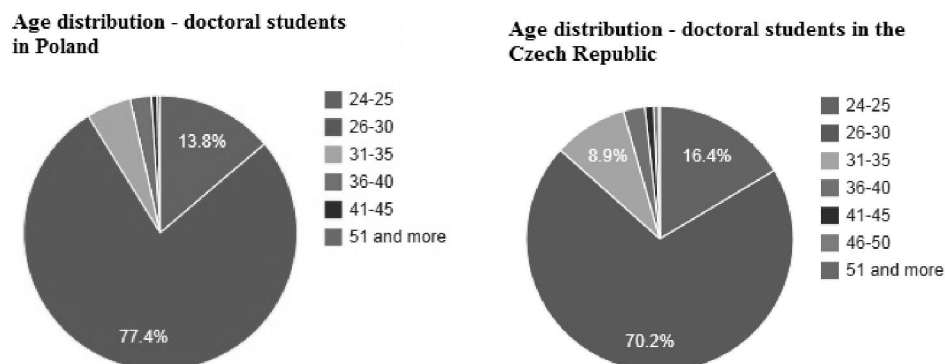
rate was 15,4 % (academic researchers) and 16,6 % (doctoral students). Moreover, feedback was received from over 200 people who gave their opinion on the subject by the means of an e-mail and 150 of them wanted to know final results of the survey.

In Poland, doctoral students of the following universities participated in the survey: the Warsaw School of Economics, Jagiellonian University in Krakow, Nicolaus Copernicus University in Torun, Collegium Medicum in Bydgoszcz, University of Silesia in Katowice, Silesian University of Technology in Gliwice, Poznan University of Economics, Opole University of Technology, Warsaw University of Life Sciences, Szczecin University, Opole University, Gdansk University of Technology, University of Gdansk, Bialystok University of Technology, Lublin University of Technology and University of Life Sciences in Lublin. The survey was posted on official websites of the aforementioned universities, their Facebook profiles and on discussion forums of those universities. Another survey was also directly sent to several dozen of academic representatives of Poznan University of Economics, Opole University of Technology and Silesian University of Technology in Gliwice. Additionally, there were two meetings with academic representatives of Silesian University of Technology in Gliwice and Opole University of Technology who were asked to respond to the survey. A significant number of responses, i.e. approximately 500 answerers from various universities, gave a comprehensive outlook on the situation of Polish doctoral students and research fellows.

### 1.1 Survey characteristics

The majority of respondents were under 30, comprising respectively 77.4% of respondents in Poland and 70.2% in the Czech Republic. The average age of a doctoral student was 28.15 in Poland and 28.45 in the Czech Republic.

**Fig. 1: Age distribution of doctoral students in Poland and Czech Republic**

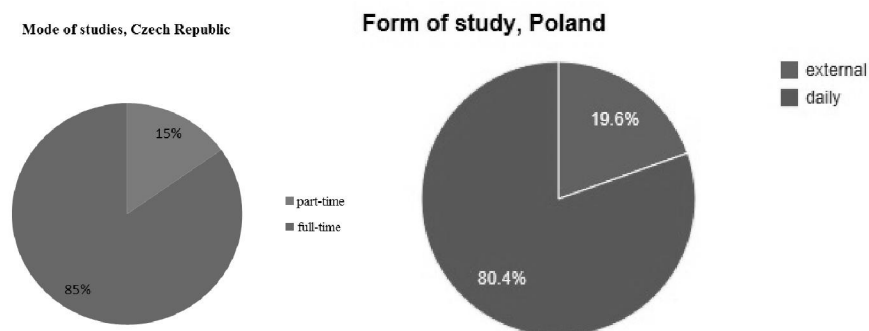


Source: authors

In Poland there are two modes of studies: full-time and part-time (weekend studies). More than 80% respondents were full-time doctoral students. In full-time studies attendance is required on more than half of lectures and seminars. A doctoral student of a full-time programme, pursuant to the law, is to carry out independent and original research leading to obtaining a Ph.D. degree. Thus, doctoral students are not students per se. Still, there are some similarities with undergraduate and graduate students like eligibility for scholarships and student cards. Part-time studies allow doctoral students to combine studying and working since lectures and seminars are only at the weekends.

In the Czech Republic most of doctoral students choose full-time studies and most of graduates decide to stay in academia. Participants in Ph.D. courses are called doctoral students and until graduation receive a scholarship (only if studies are completed on time). Extramural doctoral studies are called in Poland combined studies<sup>1</sup> and are mostly intended for students who already work but outside university. They are less likely to work in academia after earning a Ph.D. degree. Extramural studies are more flexible by allowing students to combine professional career and studies.

**Fig. 2: Form of studies in Poland and Czech Republic**



Source: authors

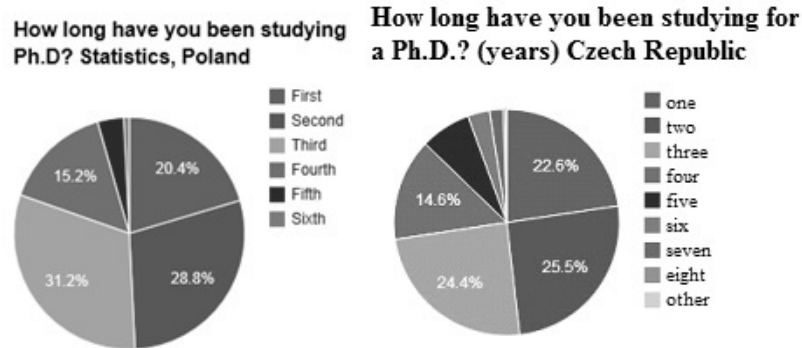
To sum up, obtained results showed, by comparing Polish and Czech doctoral students, that preferable is a full-time mode of studies. In the Czech Republic approximately 85% of all doctoral students chose this mode of studies, while in Poland precisely 80,4%.

In terms of a year of studies of the students who participated in the survey, in both countries, doctoral students of the second year constituted the most numerous group, respectively 28.8% in Poland and 25.5% in the Czech Republic. The second, slightly smaller

<sup>1</sup> Ministry of Science and Higher Education in Poland, (2011). Regulation of the Minister of Science and Higher Education of 1 September 2011 on education of doctoral studies at universities and scientific institutions.

group participating in the survey was composed in Poland of doctoral students of the first year - 31.2%, while in the Czech Republic students of the third year - 24.4%.

**Fig. 3: Length of study**

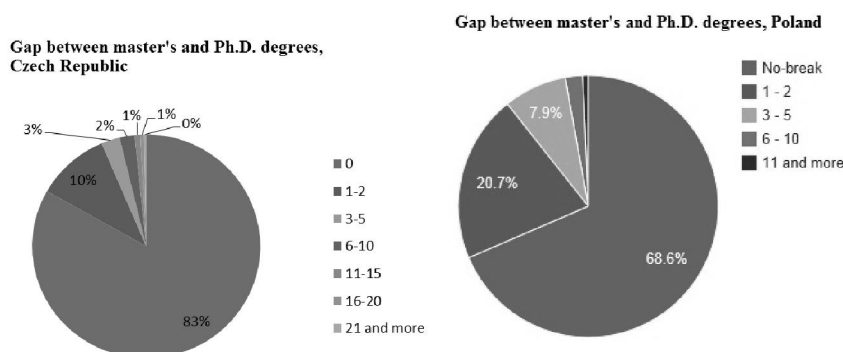


Source: authors

Both in Poland and in the Czech Republic there was a group of first-year doctoral students who decided to further their education a few years after earning a master's degree. There are various reasons behind this gap. A delay in entering doctoral studies is observed more and more frequently, still it is not as common as for instance in the Great Britain. A detail analysis of this phenomenon is presented below.

A decision of taking a break, between obtaining a master's degree and starting doctoral studies, lasting one year or longer is quite rare among both Polish and Czech students. Such phenomenon is observed more and more frequently in the Western Europe, yet in the Czech Republic it is rather uncommon. To give numbers, only 17% of doctoral students decided to further their education after a break, while the break was not longer than two years for 10% of students. In Poland, the situation is lightly different, as each year the increasing numbers of students take a break, lasting from several months to several years, before entering doctoral studies. Based on the undertaken survey, 31.4% of Polish doctoral students took such a break and for 20.7% of students this break exceeded two years.

**Fig. 4: Gap between master's and Ph.D. degrees in Poland and Czech Republic**

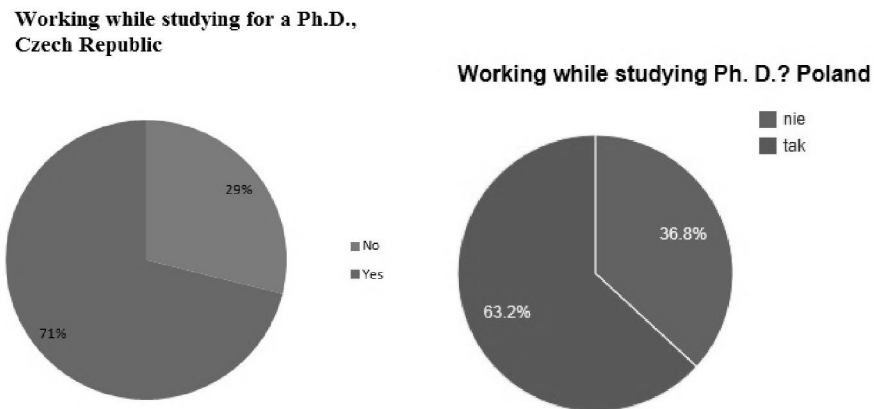


Source: authors

The main reason for the break before doctoral studies was getting professional experience - as declared by 32.6% of respondents - and a failure of fulfilling formal requirements to enter doctoral studies caused by for example, a delay in defending master's thesis - as stated by 33.7% of respondents. Another reasons included lack of willingness to enter doctoral studies at the time of obtaining a master's degree, more time to rethink further education and family or health problems.

Little financial help in a form of scholarship and rare employment of doctoral students in attended university make them look for a job outside academia. Over 71% of Polish and 46% of Czech doctoral students who work are employed outside academia. However, majority of them would be willing to work at university as lecturers or researchers only if such an opportunity arises.

**Fig. 5: Working activities during Ph.D. studies**



Source: authors

Among surveyed doctoral students less than a third, i.e. 24% of Czech and 21.9% of Polish students, were employed in academia. Vacancies at universities are rare, and if there is an opportunity to be employed, it is mostly a part-time position. Hence, doctorates often seek additional employment outside academia. Pertaining to Czech doctorates, 14% of them simultaneously work in and outside academia. Another group of doctorate students comprised those who run their own business and among the questioned, encompassing 8% of Czech and almost 6.4% of Polish students.

## 2 Motivation to stay in academia

Although majority of respondents in both countries were interested in working in academia but after completing doctoral studies only 37% of Czech and 47.8% of Polish doctoral students wanted to take full-time employment in academia. Thirty-two percent of Czech respondents considered working in academia in the future and 24% of Czech respondents and over 10% of Polish students wanted to work in academia only part-time. Among Polish respondents who expressed their interest in working in academia 75.9% wanted to be both a lecturer and a researcher. By and large, every tenth surveyed student declared their willingness to work, after earning a Ph.D. degree, either as lecturer or as researcher. Among Czech respondents 60% wished to work both as lecturer and researcher, 23% would prefer working only as scientist and only 18 % would like to work only as lecturer.

Merely 7% of Czech and 5% of Polish doctoral students were not interested at all in working in academia. These findings suggests that there is potential in this group for ensuring future academic workforce.

The main reason which discouraged Polish and Czech PhD students from taking a university position was low salary (low salary means a basic remuneration excluding fees from scientific publications or grants) - inadequate to the carried out work. This reason was most frequently mentioned by the respondents, irrespective of their age, record of work in academia or professional activity.

Recently, however, Polish Minister of Science and Higher Education promised to allocate, this year alone, 970 million PLN for pay rise for higher education teachers. The government has already secured money for this aim and universities may soon expect it. Currently in Poland, on average, 53 000 zlotys is spent annually for the salary of one academic. That is much below the national average wage which is PLN 3 521. Please compare the minimum base salaries of holders of the following academic degrees: Master of Science and Master of Arts - PLN 1 885, Doctor - PLN 2 935, Associate Professor - PLN 3 310 and Professor - PLN 3 865.<sup>2</sup>

Next reasons mentioned by Ph.D. students were: few vacancies at Czech and Polish universities, uncertainty of keeping the job (due to time limited working contracts or financing from grants and projects), lack of real life experiences and uselessness of research

---

<sup>2</sup> regioPraca.pl. (2013, 05 08). *Pracownicy uczelni dostaną podwyżki. wciąż jednak zarobią mniej niż średnia pensja*. Retrieved from <http://www.regiopraca.pl/porta1/rynek-pracy/wiadomosci/pracownicy-uczelni-dostana-podwyzki-wciaz-jednak-zarobia-mniej-niz-srednia-pe>

conducted at their institutions, bureaucracy and political games at home institutions along with pressure to focus on quantity rather than on quality of research and teaching.

The most positive influence on research students' perceptions of an academic career come from their own supervisor. Many students indicated that watching their supervisor at work made them more interested in pursuing academic career. Another positive influence comes from experience gained while working as university lecturers during their degree. This suggests that the more experience these students have with the academic environment, the more their desire for working at academia increases.

Among PhD students who aspire to enter an academic career upon graduation, nearly 30% indicated that they consider finding an academic job unrealistic.

## **Conclusion**

The development in higher education is viewed as unsatisfactory. The average age of academics is quite high alike motivation of young people to continue studying towards Ph.D. Most important is to encourage doctoral graduates to stay in academia. Our survey showed that only 37% of Czech and 47.8% of Polish doctoral students wanted to take full-time employment in academia. Thirty-two percent of Czech respondents considered working in academia in the future and 24% of Czech respondents and over 10% of Polish students wanted to work in academia only part-time. The main reason which prevented Polish and Czech PhD students from taking a university position was low salary and few job vacancies.

Moreover, conducted studies showed not only real state, but they also allow us to draw conclusions - that is - changes that need to be implemented to encourage promising doctoral graduates to pursue their careers in academia. To do so, fundamental changes in financing of academics are necessary. Academics who have outstanding achievements should be adequately distinguished and what follows, paid. There should be also more vacancies at universities to enable talented graduates to start careers at their home universities. However, the received answers revealed that a group of Polish and Czech academics disapprove of any changes. Their grounds include promotion of the best academics leaving no place at academia for ineffective scholars. Recent actions taken by the Polish Minister of Science and Higher Education Professor Barbara Kudrycka are good steps towards improving the state of higher education including doctoral graduates. This is also reflected in the opinions of respondents who believe that this is just a beginning of positive changes in academia.



## References

Ministerstwo Nauki i Szkolnictwa Wyższego, (2011). Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 8 sierpnia 2011r. w sprawie *obszarów wiedzy, dziedzin nauki i sztuki oraz dyscyplin naukowych i artystycznych*. Retrieved from Biuletyn Informacji Publicznej website:

[http://www.bip.nauka.gov.pl/\\_gAllery/15/03/15036/20110823\\_rozporzadzenie\\_obszary\\_wiedzy\\_08082011.pdf](http://www.bip.nauka.gov.pl/_gAllery/15/03/15036/20110823_rozporzadzenie_obszary_wiedzy_08082011.pdf)

Ministerstwo Nauki i Szkolnictwa Wyższego, (2011). *Rozporządzenie ministra nauki i szkolnictwa wyższego z dnia 1 września 2011 r. w sprawie kształcenia na studiach doktoranckich w uczelniach i jednostkach naukowych i szkolnictwa wyższego*. Retrieved from Biuletyn Informacji Publicznej website:

[http://www.bip.nauka.gov.pl/\\_gAllery/15/49/15491/Dz.\\_U.\\_Nr\\_207\\_\\_poz.\\_1232.pdf](http://www.bip.nauka.gov.pl/_gAllery/15/49/15491/Dz._U._Nr_207__poz._1232.pdf)

Ministerstwo Nauki i Szkolnictwa Wyższego, (2011). *Rozporządzenie ministra nauki i szkolnictwa wyższego z dnia 5 października 2011 r. w sprawie studiów doktoranckich oraz stypendiów doktoranckich*. Retrieved from Biuletyn Informacji Publicznej website: [http://www.bip.nauka.gov.pl/\\_gAllery/15/93/15933/Dz.\\_U.\\_Nr\\_225\\_\\_1351..pdf](http://www.bip.nauka.gov.pl/_gAllery/15/93/15933/Dz._U._Nr_225__1351..pdf)

Aghion, P., Dewatripont, M., Hoxby, C., Mas-Colell, A., & Sapir, A. (2008). *Higher aspirations an agenda for reforming european universities* (978-9-078910-07-7). Retrieved from European University Association website:

[http://www.eua.be/fileadmin/user\\_upload/files/newsletter/BPJULY2008University.pdf](http://www.eua.be/fileadmin/user_upload/files/newsletter/BPJULY2008University.pdf)

Lee, A. (2009). *Some implications of European initiatives for doctoral supervision*. Retrieved from <http://epubs.surrey.ac.uk/485/1/fulltext.pdf>

Sursock, A. (2010). *Trends 2010: A Decade of Change in European Higher Education*. Retrieved from

[http://www.ond.vlaanderen.be/hogeronderwijs/bologna/2010\\_conference/documents/EUA\\_Trends\\_2010.pdf](http://www.ond.vlaanderen.be/hogeronderwijs/bologna/2010_conference/documents/EUA_Trends_2010.pdf)

*Doctoral Programmes in Europe's universities: Achievements and challenges*. (2007). Retrieved from

[http://www.eua.be/fileadmin/user\\_upload/files/Publications/Doctoral\\_Programmes\\_in\\_Europe\\_s\\_Universities.pdf](http://www.eua.be/fileadmin/user_upload/files/Publications/Doctoral_Programmes_in_Europe_s_Universities.pdf)

Ministerstwo Nauki i Szkolnictwa Wyższego, (2007). *Strategia Rozwoju Nauki w Polsce do 2015 roku*. Retrieved from Biuletyn Informacji Publicznej website: [http://www.bip.nauka.gov.pl/\\_gAllery/20/48/2048/20070629\\_Strategia\\_Rozwoju\\_Nauki\\_w\\_Polsce\\_do\\_2015.pdf](http://www.bip.nauka.gov.pl/_gAllery/20/48/2048/20070629_Strategia_Rozwoju_Nauki_w_Polsce_do_2015.pdf)

Adam, Z., Komenda, M., Doubek, M., Krejčí, M., Krejčí, M., Tomíška, M., Schwarz, D., & Vorlíček, J. (2010). Universities need to have high quality education as well as an effective quality control of their students' (products') knowledge and skill base. In Z. Adam (Ed.), (Vol. 56, pp. 624-8). Brno: Interni hematologická klinika Lékařské fakulty MU a FN Brno. Retrieved from

[http://apps.webofknowledge.com/full\\_record.do?product=UA&search\\_mode=GeneralSearch&qid=19&SID=S2B4hhfPgn35IFIGHN1&page=4&doc=37](http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=19&SID=S2B4hhfPgn35IFIGHN1&page=4&doc=37)

Vavrečková, J., Baštýř, I., Michalička, L., Brachtl, M., & Vlach, J. (2007). Postavení vědy a výzkumu v ČR; riziko odchodu vědců, výzkumných a vývojových pracovníků z ČR do zahraničí In J. Vavrečková (Ed.), *Postavení vědy a výzkumu v ČR; riziko odchodu vědců, výzkumných a vývojových pracovníků z ČR do zahraničí* (1 ed., p. 70). Prague: Výzkumný ústav práce a sociálních věcí, v.v. Retrieved from [http://praha.vupsv.cz/Fulltext/vz\\_250.pdf](http://praha.vupsv.cz/Fulltext/vz_250.pdf)

regioPraca.pl. (2013, 05 08). Pracownicy uczelni dostaną podwyżki. wciąż jednak zarobią mniej niż średnia pensja. Retrieved from <http://www.regiopraca.pl/portal/rynek-pracy/wiadomosci/pracownicy-uczelni-dostana-podwyzki-wciaz-jednak-zarobia-mniej-niz-srednia-pe>

## Contact

### **Tomasz Bronisław Czapran**

University of Economics, Prague  
Faculty of Business Administration  
Department of Human Resources  
W. Churchill Sq. 4  
130 67 Prague 3  
Czech Republic  
[tomasz.czapran@vse.cz](mailto:tomasz.czapran@vse.cz), [tomasz.czapran@gmail.com](mailto:tomasz.czapran@gmail.com)

### **Blanka Habrmanová**

University of Economics, Prague  
Faculty of Business Administration  
Department of Human Resources  
W. Churchill Sq. 4  
130 67 Prague 3  
Czech Republic  
[blanka.habrmanova@vse.cz](mailto:blanka.habrmanova@vse.cz)