

ACADEMIC ENTREPRENEURSHIP'S GROWTH PERSPECTIVES IN THE OPINION OF RESEARCHERS AND STUDENTS

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Abstract:

The subject matter of the paper pertains to the academic entrepreneurship and its growth opportunities in Poland and in Lublin Voivodeship. Lublin Voivodeship boasts a considerable potential in the form of universities, students, graduates and faculty members. Lublin Voivodeship's projects and analyses indicate that academic entrepreneurship may offer growth opportunities in the region. Undeniably, 2014-2020 EU financing perspective may assist in the process. However, these resources must be applied in the most effective way possible. The aim of the present paper is to present the evaluation of the region's growth potential in terms of academic entrepreneurship. The entrepreneurship in the paper is defined broadly as entrepreneurship of students, graduates and researchers. Empirical data consists of research commissioned by Lublin Voivodeship Marshal's Office in 2013. Research carried out among 52 researchers and 390 university students aimed at indicating academic entrepreneurship growth opportunities in the region. Respondents answered questions relating to plans of establishing own businesses and consequences of such actions. In addition, university classes pertaining to entrepreneurship were also evaluated. Research results indicated that 44% of the evaluated students declared they planned to establish their own businesses in the future. The majority of evaluated researchers did not declare such activity. When asked about the reason behind the decision, they answered they did not see the necessity or had other responsibilities and priorities.

Keywords: education, globalization, entrepreneurship, innovation, students, graduates

1. INTRODUCTION

The subject matter of the paper pertains to the academic entrepreneurship and its growth opportunities in Poland and in Lublin Voivodeship. In recent years in Poland, as well as in other European countries, there has been a significant debate on the future of higher education. The debate is the consequence of the higher education becoming strictly connected with economy. The role of the modern university has been changing. Nowadays, the academia is no longer exclusively involved in education and development, but more and more frequently tackles issues of promoting entrepreneurship among its students and faculty members in order to offer them tools for independent functioning on the market.

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2. THE CHANGING ROLE OF THE PRESENT-DAY UNIVERSITY

In recent years in Poland, as well as in other European countries, there has been a significant debate on the future of higher education. The debate is the consequence of the higher education becoming strictly connected with economy.

The mission of modern university in global world is not only to be a knowledge-generating institution. At present another mission of the university is a response to global processes, changing environment, internationalization of studies and science, and increased competition (Binkauskas, 2012, pp. 232-233).

The role of the modern university has been changing. Nowadays, the academia is no longer exclusively involved in education and development, but more and more frequently tackles issues of promoting entrepreneurship among its students and faculty members in order to offer them tools for independent functioning on the market. Current position of universities is closely related to the ever-stronger local, regional and even global cooperation. Common projects are implemented, new companies are established. These companies generate new work-places for students and graduates (Schulte, 2013, p. 118).

In order to survive in a global market, modern university must be flexible. The mission of the university should be analyzed in the larger context of the nowadays transition from the industrialism to the information era (Strogetskaya, 2009). Present-day university have to act as provider of intellectual capital as well as a medium for the creation of new companies and innovations. "The mission of an entrepreneurial university implies that universities have now found themselves in the conditions of global competition in striving for students in the so-called 'mass market of higher education'; moreover, they are encouraged to provide their own research for practical application and get benefit from this activity" (Binkauskas, 2012, p. 234).

The emergence of entrepreneurial mission of the university was stimulated by several external factors. The first of these is the decrease in public financing for universities, which demands a higher degree of competitiveness on their part in order to obtain additional external resources. Next factor exerting influence upon the issue is the fact that business and industry operate in close proximity to the academia and more and more frequently play a significant role in its activities. The influence of business upon universities and scientists is growing. On the other hand, universities-innovation generators cooperate in the process of knowledge, technology and innovation moulding. As an effect present-day university is also a facilitator (or inhibitor) of academic entrepreneurship (Giuri, Grimaldi, & Villani, 2014)

The interest in the issue of academic entrepreneurship has led to the emergence of numerous definitions of the term. Predominantly, it is understood as entrepreneurship of the academia manifesting itself in the involvement of research institutions, their employees, students, doctoral students and graduates in various types of business activities.

The development of academic entrepreneurship is fostered not only by the above-mentioned external factors, but also by internal ones, which depend on the academia, such as the pursuit of development

and intensification of business-university cooperation, focus on novelties and innovation (Osiri, McCarty, 2013, p. 4). Universities' autonomy and independence, which enable the shaping of development and innovation culture and emergence of conditions favourable to innovation, is of crucial importance. Researchers are unanimous in the opinion that current flexibility of the academia and capacity of adapting to a novel educational model, which demands more intensive cooperation with business, pro-activity and innovation, seem extremely significant (Shattock, 2005).

In such innovative activities, universities ought to grant their young faculty members freedom of undertaking additional entrepreneurial activities and develop organisational infrastructure and mechanisms supporting young people in such activities (e.g. involvement in technology transfer centres, science parks, innovation centres, business incubators) (Brennan & McGowan, 2005). Literature of the subject emphasizes the fact that academic entrepreneurship is a complex issue and universities' decisions as regards the development of such strategies require scientists and students to be presented with the opportunity of participation in projects aiming at the development of entrepreneurship (Laukkanen, 2003).

3. THE POTENTIAL OF LUBLIN VOIVODESHIP IN TERMS OF ACADEMIC ENTREPRENEURSHIP

In today's economy, where knowledge, understood as the ability to undertake action, plays a vital role, the development of academic entrepreneurship is becoming more and more significant. Bridging the gap between Poland and highly developed EU member states and providing sustainable growth at the same time, require the policy of economic growth to be implemented. The policy ought to be based on the improvement of innovation and competitiveness of the country and regions' economy. Apart from R&D, mobility of researchers, ICT and services, education and human resources are enumerated as economic growth factors among others.

Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee and the Committee of the Regions-An Integrated Industrial Policy for the Globalisation Era. Putting Competitiveness and Sustainability at Centre Stage indicates the necessity of boosting industrial productivity and connected services in order to foster economic growth, improve the condition of labour market and restore the good condition and sustainable growth of the EU economy (An Integrated ..., 2010). The communication defines the strategic framework for the new integrated industrial policy for EU countries.

EU policy papers „A European Strategy for Key Enabling Technologies – A bridge to growth and jobs” (A European strategy ..., 2012) as well as national policy papers pertaining to the Polish economy's growth strategy (Polish economy's ..., 2013) indicate the need for activation of the academia as regards technology transfer from the Polish universities and commercialisation of knowledge. These activities will be stimulated by actions planned in 2014-2020 financing perspective via the Operational Programme Intelligent Development (Operational Programme ..., 2013), which includes a wide array of tools facilitating technology transfer by means of financing joint business and science projects with the assistance of business environment institutions. The programme's main objective is to support innovation and competitiveness of Polish economy by increasing R&D expenditures.

Lublin Voivodeship boasts a considerable potential in the form of universities, students, graduates and faculty members. In 2012/2013 academic year, there were 92 thousand students studying in 18 higher education institutions in the region. The academic centre is located in Lublin, the region's capital city. There are 9 higher education institutions located here, which provide education to 88% of the total number of students in the region.

Further aspects distinguishing Lublin region from the rest of the country are its large area when compared to other regions in Poland (3rd in the country in terms of size) and agricultural character. These factors determine the lack of developed industries and relatively low number of companies, which usually represent SME sector and employ few employees. All these are reflected in the Polish GDP (in 2013, the region ranked 9th with the rate amounting to 3,8% of the total GDP). The economic situation coupled with a considerable number of graduates graduating annually from universities leads to the unemployment rate among young people to remain unchanged. The fact is particularly disturbing in case of educated people, who upon graduation, have virtually no interesting employment

opportunities in line with their qualifications. As a consequence, these people emigrate from the region to other regions in the country or abroad.

Lublin Voivodeship's projects and analyses indicate that academic entrepreneurship may offer growth opportunities in the region. Undeniably, 2014-2020 EU financing perspective may assist in the process. However, these resources must be applied in the most effective way possible.

Operational Programme Eastern Poland schedules significant assistance for newly-established companies and business environment institutions as well. The assistance for the newly-established businesses will be implemented by platforms whose objective will be the establishment of favourable conditions for the development of innovative business ideas in Eastern Poland. The support will be addressed mainly to university graduates and final-year students who plan to develop their ideas and establish their own companies in Eastern Poland. The support for newly-established companies will be addressed mainly to those representing intelligent specialisations of the region and will focus on developing the best possible growth conditions. Lublin Voivodeship decided upon embracing four intelligent specialisations:

- Bio-economy (key specialisation)
- Medical and health-oriented services (supplementary specialisation)
- IT and automation (supporting specialisation)
- Low-emission energy (emerging specialisation)

4. RESEARCH RESULTS

The aim of the present paper is to present the evaluation of the region's growth potential in terms of academic entrepreneurship. The entrepreneurship in the paper is defined broadly as entrepreneurship of students, graduates and researchers.

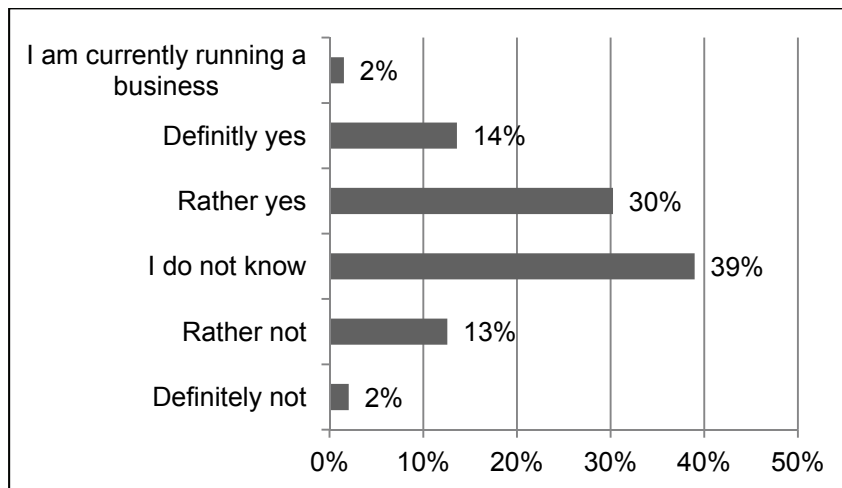
Empirical data consists of research commissioned by Lublin Voivodeship Marshal's Office in 2013. Research carried out among 52 researchers and 390 university students aimed at indicating academic entrepreneurship growth opportunities in the region. Respondents answered questions relating to plans of establishing own businesses and consequences of such actions. In addition, university classes pertaining to entrepreneurship were also evaluated (Jakubiak & Mażewska, 2014).

The academic staff and students represented public universities in Lublin. The majority of academic staff consisted of men (62%) and people holding the PhD degree (69%). The staff aged 35-45 constituted the most numerous age group (40%).

The study targeted final year university students who intended to decide upon the career path in the near future. The majority of respondents in this group consisted of women (58%). The respondent structure in terms of fields of studies corresponded to the fields of intelligent specialisations in Lublin Voivodeship. 41% of student respondents represented social sciences (including economics). Medical sciences and technical sciences were represented by 20% and close to 1/5 of student respondents respectively. The respondents studied full time and majority of them did not undertake employment in the course of their studies (79%).

When asked about the intention of establishing their own business, 44% of student respondents' answers were positive (yes-14%, rather yes-30%). Significantly fewer of them answered negatively-rather no (13%) and no (2%). Almost 1 out of 3 student respondents could not give a definite answer (Figure 1).

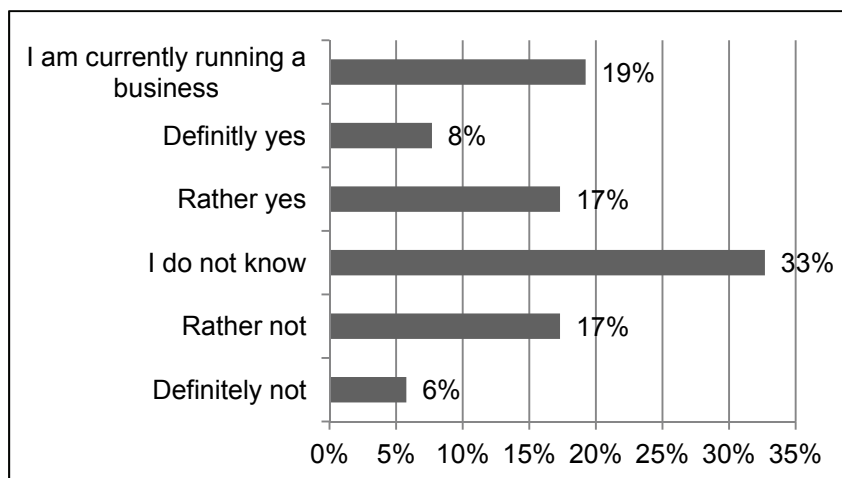
Figure 1: Students' intention of establishing their own business



Source: authors' own findings

When asked about the reason behind the decision to set up a business, the most frequent answer was that the business would enable self-actualization and fulfilment of life plans (28% of student respondents declaring the intention of setting up a business). A further reason behind the decision pertained to financial matters – opportunity for higher earnings than those in case of the full time employment (24%). Students highlighted independence and being one's own boss as well (18%).

Figure 2: Academic staff's intention of establishing their own business



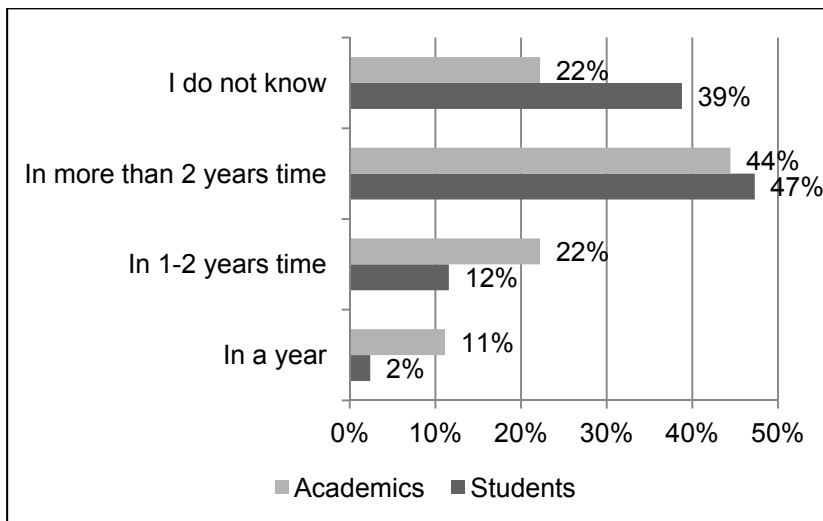
Source: authors' own findings

The most frequent reason for declining the opportunity of establishing a business was the lack of financial resources and high operational cost in sectors of interest (19% of student respondents declining the opportunity). The next reasons pertained to high failure risk (18%) and lack of business ideas (14%). 1 out of 10 student respondents declared lack of entrepreneurial predispositions.

The second target group consisted of the academic staff of Lublin universities. Only 25% of them answered positively to the question regarding the intention of establishing a business and only 8% answered yes. Slightly fewer of them did not express the intention (23%) and 1 out of 3 answered "I do not know" (Figure 2). It is noteworthy that 20% of the academic staff declared they have already set up a business of their own.

When asked about the lack of interest in entrepreneurial activities, the academic staff stated they saw no necessity or had other responsibilities and priorities (25% of respondents respectively).

Figure 3: The time frame for establishing a business as indicated by both respondent groups



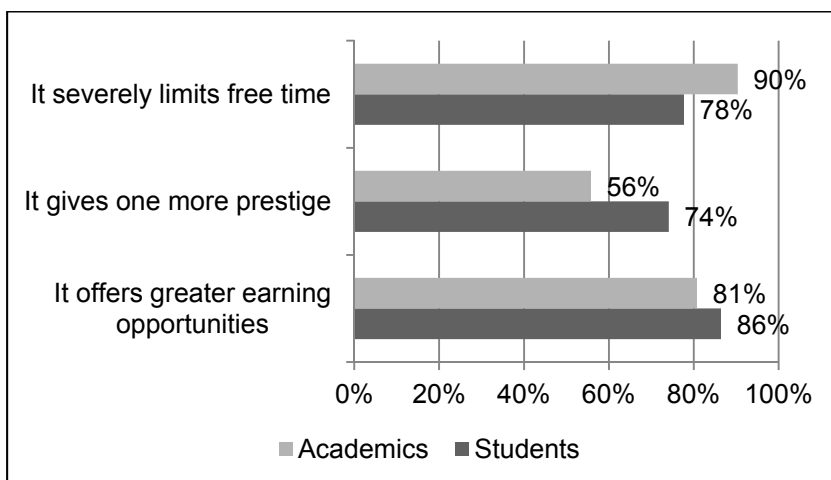
Source: authors' own findings

As regards the time frame they took into account when intending to establish a business, both respondent groups indicated 2 years and more. Such answer was given by 47% of students and 45% of the academic staff. Significantly more of the latter declared the intention to set up a business in the coming year (11% vs. 2%) (Figure 3).

Regardless of whether respondents declared the intention of establishing a business, they were invited to evaluate the consequences of running it. In order to provide assessment, respondents made use of 1 through 5 scale where 1-denoted impossible, 2-rather impossible, 3- I do not know, 4-rather possible, 5-possible. The comparative analysis of answers provided by both respondent groups indicated the highest degree of diversity as regards opinions on the consequences of running a business in the following:

- It offers greater earning opportunities (86% in students vs. 81% in academic staff; $T=1,18$) and it gives one more prestige (74% vs. 56% respectively= $2,66$). It is noteworthy that students placed more importance on these consequences than academic staff.
- It severely limits free time (78% vs. 90%; $T=3,35$). The consequence was highlighted more frequently by the staff than students (Figure 4).

Figure 4: The consequences of running a business (statistically significant differences)



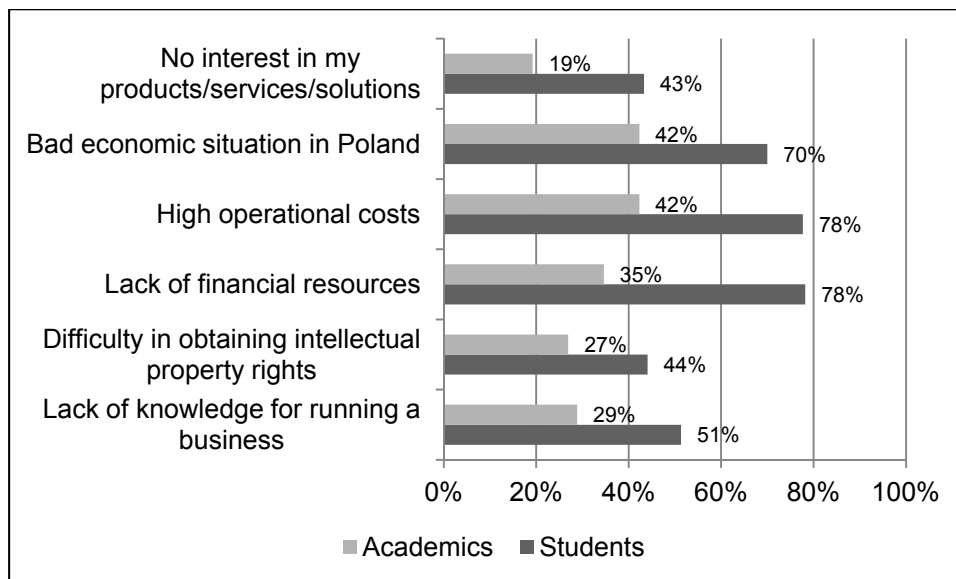
Source: authors' own findings

Respondents were invited to evaluate the potential occurrence of individual difficulties connected with establishing a business. As in the case of evaluating the consequences, respondents used the 1 through 5 scale.

The comparative analysis of the potential occurrence of difficulties carried out in both respondent groups revealed that students, when compared with academic staff's responses, indicated the potential to be higher. Statistically significant differences were observed in case of 6 out of 11 reasons for the occurrence of difficulties (Figure 5). Students indicated the possibility for the occurrence of the following difficulties much more frequently than academic staff did:

- lack of knowledge for running a business (52% vs. 29%; T=3,30);
- difficulty in obtaining intellectual property rights (44% vs. 27%; T=3,36);
- lack of financial resources (78% vs. 35%; T=5,60);
- high operational costs (78% vs. 42%; T=4,85);
- bad economic situation in Poland (70% vs. 42%; T=4,56);
- no interest in my products/services/ solutions (43% vs. 19%; T=2,51).

Figure 5: Respondents' opinions as regards difficulties in running a business (statistically significant differences)



Source: authors' own findings

Respondents were invited to indicate forms of assistance which would be of value to them when running a business. 86% of students and 58% of academic staff would expect financial support for establishing a business. Coaching, mentoring or counselling (58% of students and 56% of academic staff) and assistance in entering the market (72% of students and 50% of academic staff) were also frequently indicated.

When invited to carry out a self-assessment of knowledge as regards running a company they possessed, academic staff's evaluation was higher than that of students' (approx. 54% vs. 22%).

5. CONCLUSIONS

Research results indicated that 44% of the evaluated students declared they planned to establish their own businesses in the future. The majority of evaluated researchers did not declare such activity. When asked about the reason behind the decision, they answered they did not see the necessity or had other responsibilities and priorities.

A rather large group of students (30%) declared they were unsure whether they would establish a business and subordinated the decision to external factors. In case of these respondents, the prospect of setting up a business ranks last when their careers are considered. As a consequence, without changes in the perception of entrepreneurial activities, expenditures on academic entrepreneurship will be ineffective.

When asked about the timeframe for establishing a business, 47% of students indicated the period of 2 years and more. This may be connected with the fact that the respondents studied full time and wanted to graduate first and subsequently start gaining professional experience.

Every fourth of the academic staff gave a positive response to the question regarding prospects of running a business in the future. The willingness towards entrepreneurial activities may arise from previous contacts of the respondents with entrepreneurs. More than 50% of the staff declared having had contacts with business in various forms of cooperation. This fact is significantly positive in terms of supporting academic entrepreneurship.

Academic staff who did not declare interest in running a business, when invited to give reason behind their decisions, stated they saw no need or had other responsibilities and priorities (25% respectively). This may be the consequence of a considerable workload connected with didactic responsibilities and the necessity of academic development.

It was rather students than academic staff who anticipated the occurrence of difficulties in running a business. It was also students who declared considerably more shallow knowledge in terms of business management. Such structure of answers may arise from the fact that academic staff are more familiar with the market (may it be merely by more extensive professional and life experience). Therefore, risk assessment is verified by their experience. Young people possess less knowledge and their fear of unknown is considerably greater. A good way of bridging the gap is to encourage students to undertake various forms of activity while still at university. Internships, projects worked out on the basis of practical, real-life problems are a good means of becoming familiar with the market and developing competencies in terms of running a business.

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