

K. Szara

**The use of EU projects within the framework
of the mechanism of competitiveness among universities
in Poland**

The changes in higher education in Poland have to create the basis for general notion of other countries' problems. The basic aim of this work lies in attention attraction to the EU funds received by higher educational establishments and increasing of their potential on the market of higher education. It is worth mentioning however that this subject is utterly rich in terms of theoretical understanding. Conducted research is focused at the practical aspects. It is presented in the form of the study of projects implemented in the University of Rzeszow.

Key words: EU projects, universities, competition, potential.

Introduction. Higher education in Poland is accommodating to European standards. The European guidelines constitute the background which is the direction of changes within universities. Opening borders allow exchanging not only students but also the standards of education [10].

The changes implemented in higher education of Poland are to create the framework of common understanding of problems regarding other countries. There are many problems which are currently faced. From one side, it means the necessity of increasing the level of public financing available on the competitive basis as well as providing candidates for studies with information allowing, to greater extent than previously, assess the quality of a didactic offer of particular universities. The presentation of all problems regarding higher education in Poland is not possible in the context of this study.

The main aim of this study is to draw attention at EU resources obtained by universities and building their potential in the market of higher education. It shall be emphasised that this subject is really vast in the aspect theoretical considerations. Some references have been also made to practical aspects. It shall be presented in form of a case study of the projects implemented by the University of Rzeszów.

Higher Education in Poland. The mission of higher education relies on the contribution to improving the quality of life of Polish people by creating, extending and propagation of knowledge, teaching their use for the individual

© *K. Szara*, 2013.

and collective benefits as well as improving the quality of public services. The mission of higher education is also creating links of the national academic environment with the global academic and intellectual community as well as national and foreign enterprises as well as public institutions. The achievements of Polish scientific shall positively influence the image of Poland in the world. Universities shall be helpful in eliminating barriers and ethnical prejudices, creating positive interpersonal relations, ethnic nationalities, religions and views [8, p. 3].

At present, there are 470 universities in Poland, out of which 132 are public and 338 are private universities. More than 2 million students are educated in the universities which gives Poland one of the greatest index of scholarisation and the greatest number of higher education institutions in Europe (table 1).

Table 1

Number of universities

| Academic year | Universities in total | Private universities in total |
|---------------|-----------------------|-------------------------------|
| 1992/93 | 124 | 18 |
| 1995/96 | 179 | 80 |
| 2000/2001 | 310 | 195 |
| 2005/2006 | 445 | 315 |
| 2008/2009 | 458 | 326 |
| 2010/2011 | 470 | 338 |

Source: [6].

Table 2

Students pursuant to educational forms

| Description | Total | Females | Studies | | | |
|-----------------|---------|---------|-----------|---------|------------|---------|
| | | | full time | | extramural | |
| | | | total | females | total | females |
| Total | 1927762 | 1098351 | 928133 | 520026 | 999629 | 578325 |
| Public schools | 1268366 | 708178 | 807615 | 449039 | 460751 | 259139 |
| Private schools | 659396 | 390173 | 120518 | 70987 | 538878 | 319186 |

Source: [6].

In the last 20 years, when the number of students in Poland increased from 403 K in the academic year 1990/1991 to 1.930 K in the academic year 2007/2008 – which is widely perceived as one of the greatest achievements of system transformations – expenditures per one student allocated to public universities were low (three or four times lower than in leading national economies) and decreasing as the number of students was increasing faster than the expenditures on education as a whole.

At present, in Poland, students educate in more than 200 faculties, including unique and macrofaculties. The greatest number of students attend economic and administrative faculties – 23 %, social – 13,9 % pedagogical – 12 %, humanities – 8,8 %, engineering and technical – 6.8 %, medical – 5.8 %, information technology – 4,9 %, public services – 3.7 %, law – 3.1 % and environment protection – 1,4 % (other 16,4 %).

Totally, more than half of all students from public and private universities study in these faculties. It shall be emphasised that a high number of students studying in the group «education» is a European phenomenon, however, in Poland their number is almost two times higher than average in EU member states.

Common charge free studies is fiction: ca. 60% of students pay fees for education, others make various additional payments.

The level of interest in higher education is one of the greatest in Europe. The process of interest in higher education was mostly spontaneous, by establishing new, private universities and dynamic development of paid studies at public universities in the narrow range of university faculties. Mass, cheap studies dominated the activity of many universities, influencing unfavourably other important tasks, in particular conducting scientific research [4].

In Poland, 75 % persons conducting scientific research are employed at Polish universities. Scientific research is not satisfactory. The achievements of Polish scientists rely on chemistry, physics and mathematics as well as less numerous, more appliqué and similar subjects. It is also surprising that even experimental disciplines are very expensive, the reasons for a poor level of research in Poland, is mainly connected with underfinancing. Much interesting research (e.g. social) conducted in Poland is not contributed to international community as the dominating language of publications is Polish.

In the ranking of production and visibility, the Jagiellonian University (133 position) and the University of Warsaw (134 position) were only scored

out of 171 European universities. The position in other rankings is also unsatisfactory – the same two universities are in the top 400 universities of the world Shanghai ranking. The University of Wrocław, which was included in the top 500 hundred universities, is now beyond it. The measurable result of the assessment formulated in these rankings are minor successes of Polish scientists in applying for EU resources. The situation in the scope of research shall be considered as alarming, however this level regards not only universities but also the entire sector of scientific research [4].

At present, Polish higher education and the research and development sector undergo analysis by many specialised institutions such as EU i OECD, which perform specific international comparisons. In these analyses, Poland is rather poor and what is worse – in the last few years, the position of Poland has not been improving. Poland is located among those countries in which processes of transformation of the higher education sector and research is not paid attention to, the changes are introduced slowly and financial and institutional obligations which are directly resulting from them are assumed with much resistance. Energetic actions that would reverse this unfavourable trend are indispensable. On the contrary, higher education in Poland would be internationally marginalised [4].

Expenditures on higher education in Poland in 2006 amounted to PLN 15 bn ca. 1.4 % of GDP, out of which PLN 10 bn (1.0 % of GDP) constitute public expenditures, only PLN 5 bn (0.4 % of GDP) are private expenditures. International comparison indicates that Poland spends the similar part of GDP on higher education, as average OCED states (1.5 % in 2006). The average percentage of expenditures on private academic education is higher than expenditures in total expenditures: shaped at the level of ca. 30 %, which constitutes one of the highest levels of this relation in Europe.

Secondly, sources of revenues from didactic activity of public and private universities are totally different – in case of public universities are mainly public resources (74 %), the private universities function on the basis of fees paid by students (93 %).

Thirdly, the percentage of public resources in financing the activity of the research and development activity (82 %) is significantly higher than in case of didactic activity (62 %). It results from the fact that the research and development activity of university is concentrated almost totally on the public sector (98 % of total revenues comes from research activity) in comparison to

the low activity of universities in gaining resources on research in the private sector.

Eagerness in creating competitive systems of higher education in Europe and Poland is connected with adjusting this education to educational standards.

Each undertaken action is connected with financing. In case of Poland, universities gain support from the state budget. The resources, mostly, do not allow conducting innovative actions so as to improve didactics and education.

State-owned higher education in Poland is financed in form of subject subsidies from the state budget on the didactic activity and running a university and material help for students and target subsidies on investment activity, mainly in the scope of investments (universities) [3; p. 1–99].

The awareness of creating a new model of a university emerges, as a widely cooperating and establishing competitive advantage of the closest environment and constituting the driving force of economic development. There is a belief that within the framework of the traditional university model (so called Humboldt like), the mechanisms adaptation to the changing environment and mostly the commercialisation of scientific research and cooperation of academic circles with economy are implemented in a manner that is not effective enough. We talk about the need for transforming the university and world of science as the driving force of economic development. Within the framework of the 21st university, there is a needed for compromise of innovative mechanisms with academic traditions as well as the specificity of the sector of science (freedom of research, future markets and culture-establishing functions) [9; p. 25 – 26].

Funds as a source of financing changes in higher education. Universities may use EU budgetary resources, applying for subsidies granted within the framework of operational programmes launched in Poland, implementing the tasks (research or training) ordered by beneficiaries of operational programmes or applying for resources granted within the framework of centralised (managed directly by the European Commission) EU programmes such as the Framework Programme of Scientific Research. Nowadays EU resources do not constitute a significant part of university budgets, however, they are important due to other reasons – favouring the inclusion in the international scientific cooperation, while using national resources of operational programmes, they strengthen contacts of university with company and institutional solving real and current problems [2; p. 21].

The European Union spends 1,3% of GDP on higher education whilst the USA 3,3 %. The difference is greater if it is about private expenditures on education which are several times higher in the USA than the EU. On average, in 2001, full costs of education amounted to annually EUR 8600 per student in the EU, whilst in the USA – EUR 20000 per annum. The meaning of higher education in Europe is proved by research which shows that unemployment is experienced by people with higher education than persons which they don't have. In Europe, 84 % persons with higher education in the age of 25-64 had work, whilst 3.9 % of the persons with higher education was employment [12; p. 89].

Polish universities faced an opportunity which is given to EU funds. This support exists within the framework of various programmes and strengthens not only hard but also soft innovative actions.

In the years 2007–2013, higher education contracted 4,15 mld euro (3,53 mld euro of EU resources) [5].

The Ministry of Science and Higher Education as an intermediary institution in all three implemented programmes are in the top institutions which have the most contracted resources: in case of the Innovative Economy Operational Programme is mostly 93% of allocation, Human Capital Operational Programme – 75% and Infrastructure and Environment Operational Programme – 99% of available allocation. Such a significant increase of financial resources shall generate positive results transferring into the improvement of competitiveness of Polish science.

EU funds pose a great opportunity for the university. By February 2011, within the framework of three operational programmes 1510 contracts were signed in the amount of PLN 14.5 bn.

Science and higher education faces the challenge of reorientation in the direction of greater intellectual support of the process of social and economic development of Poland, especially by means of research and development activities with a high level of usability. Reorientation in this direction requires creating the entrepreneurial university i.e. a university creating a usable and practical inspiration for the economic and social development. An entrepreneurial university requires new knowledge: how effectively cooperate and design scientific research, how to act creatively and go beyond the existing schemes, how to motivate scientific workers to internal entrepreneurial cooperation of science and economy for the benefit of Poland [1; p. 6].

In order do that in practice of scientific thought, it is necessary to provide many circumstances which generally may be seen as «cooperation» and «partnership». The success of the project is connected with i.a. the author of idea, research and development team, R&D unit by providing their resources, an entrepreneur absorbing research results, especially when the intermediary unit in this transfer as well as a subject (or subjects) financing the entire process at a given level. That is why, the cooperation between the aforementioned parties, creating partnership or a network of engaged institutions and people has a basic meaning for successful implementation of the project [11; p. 58].

Also in the future, basic assumption regarding 8. Framework Programme Research (8 PR) indicates that after the year 2013, availability of EU resources to Polish universities shall be more difficult than nowadays. On the basis of preliminary discussions results that the allocation of resources in the 8 Programme Research is subordinate, to a greater extent than previously, to concentrate expenditures in research institutions disposing the greatest intellectual potential and experiences while implementing great research projects financed by EU. From the viewpoint of EU policy, this strategy seems to be appropriate, however it is sure that Polish higher schools shall allow access to EU resources [2; p. 21–22].

EU projects implemented at the University of Rzeszow. The University of Rzeszów was established on 01 September 2001 and set up by the virtue of the Act passed by the Sejm of the Republic of Poland as of 7 June 2001 and signed by the President of Poland as of 2001 July 4. The university was established from three individual units: Higher School of Pedagogy in Rzeszów, Branch of Maria Curie – Skłodowska University, Branch of the Faculty of Economics in Rzeszów of the University of Agriculture in Cracow.

The University of Rzeszów has a right to assign the title assistant professor in the scope of history and Ph.D. in five specialties: history, physics, sociology, literature and linguistic sciences.

At present, the university have 14 K full time persons and 8 K extramural students. The University maintains broad contact with universities from abroad. The university cooperates with more than 20 universities from Central Europe (Germany, Ukraine, Slovakia, Romania, Hungary, the Czech Republic, Russia) and 38 universities from EU member states.

Within the framework of actions aimed at activation of both employees and students of the University of Rzeszów the projects are implemented so

Table 3

Areas of creating and strengthening competitive advantage of UR.

| Actions increasing competitiveness of UR | Name of the project | Tasks |
|--|---|--|
| Improvement of didactics | 1. Development of the University of Rzeszów as a chance for a region. 2. Development of the didactic potential of the University of Rzeszów at a European level 3. UR – modernity and future of the region. 4. SPIN PROMOTOR. | Organisation of trainings, post-graduate studies for teachers. Organisation of internships and visits in academic centres |
| Improvement of administration | 1. Development of the University of Rzeszów as a chance for a region. 2. Competences of the students as the key to success in the labour market. 3. UR – modernity and future of the region. | Training for employees |
| Mobility of students | 1. Competences of the students as the key to success in the labour market. 2. Development of the University of Rzeszów as a chance for a region. 3. Development of the didactic potential of the University of Rzeszów at a European level. | Specialist training adjusting skills and professional qualification of UR students and graduates to the requirements of the labour market. Implementation of activities in English |
| Increasing the mobility of disabled students | 1. Competences of the students as the key to success in the labour market. 2. Development of the University of Rzeszów as a chance for a region. | Organisation of workshops aimed at activation of the disabled |
| E learning | Development of the University of Rzeszów as the chance for the region. | Organisation of activities with the use of an e-learning platform |
| Education for the entire life | 1. Development of the University of Rzeszów as the chance for the region. 2. Development of the didactic potential of the University of Rzeszów at a European level. | Organisation of post graduate studies Organisation of trainings for persons beyond the academic society. |
| Creating relations with economic practice | 1. Competences of the students as the key to success in the labour market. 2. Promotion of science on the Internet. | 1. Organisation of internships for graduates and students aimed at acquiring skills which are indispensable in professional work, establish contact and gain practical experience. 2. Organisation of seminars of the business with academic environment, with the participation of students, in order to develop the best educational standards for the benefit of the labour market. |

Continued table 3

| Actions increasing competitiveness of UR | Name of the project | Tasks |
|--|--|--|
| <p>Adjusting curricula to the needs of the labour market</p> | <p>1. Creating the didactic potential of the University of Rzeszów at a European level. 2. EDISON – Enriching the educational offer of the faculty «Technical Physics». 3. Biotechnology students as the accelerator of knowledge based economy. 4. Ordering education in technical faculties, mathematical and environmental-pilotage – Fenix – long-term programme of restructuring, popularisation and supporting physics in schools in order to develop basic scientific and technical competences. 5. UR – modernity and future of the region. 6. TESLA – Technical Education as the Success of Ambitious People – Enriching the educational offer of the faculty «Technical physics». 7. Information technology as your chance.</p> | <p>Adjusting curricula in the Department of Economics, Mathematical and Environment, Biology and Agriculture, Pedagogy</p> |
| <p>Extension of infrastructure</p> | <p>1. Launching the scientific and didactic complex Zalesie – Regional centres of innovation and transfer of production technology, processing and marketing in the agricultural and food sector. 2. Operational Programme Infrastructure and Environment Scientific and Didactic Centre of Microelectronics and Nanotechnology at the University of Rzeszów. 3. Regional Operational Programme for the Podkarpackie Voivodship University Centre of Innovations and Technical and Natural Knowledge Transfer. 3. Development of the Information Technology System at the University of Rzeszów. 4. Rebuilding the palace in Werynia for scientific and didactic purposes Rebuilding the Cultural Centre of WSK for the benefit of the Institute of Music. 4. Rebuilding the athletics stadium Resovia in Rzeszów – set of activities: increase in the security International Centre of Ecological Education – adaptation of the Palace and Park Complex in Iwonicz.</p> | |

Prepared by: [7].

as to strengthen not only the didactic potential but also create possibilities of establishing relations with enterprises. Another area financed with projects is connected with training not only the human resources but also infrastructure. The University of Rzeszów is the beneficiary of resources which were allocated for hard and soft actions (more than 29 967 tys during the first period of funding, and more than 125 766 tys. zł. in the next time).

Table 3 presents the projects aimed at creating and strengthening competitive advantage of the university.

Conclusions. The actions undertaken within the framework of the projects financed from EU resources contribute to strengthening the didactic and organisational potential of the university. Thanks to the activity of employees using the measures financed from projects, new international relations are being established. The supported beneficiaries gain knowledge at prestigious universities by means of which they gain experience which allow them to strengthen the didactic and scientific potential of the university. The extension of the infrastructural base shall allow undertaking research in fully equipped laboratories.

Competition in the higher education market is huge. Maintenance and establishing the image of the university is connected with undertaking many actions in the future. Such actions are currently possible thanks to EU funds.

Bibliography

1. Designing and conducting scientific research in cooperation with economy / collective work under the supervision of M. Bąk and P. Kulawczuk. – Warsaw: Institute of Research and Democracy and Private Entrepreneurship, 2009.
2. Determinants of development of higher education: law, public finance, cultural determinants, preparation of graduates // Partial report prepared by the consortium Ernst & Young Business Advisory. – Institute of Research on Market Economy. – November 2009.
3. Development strategy for higher education in Poland by 2010. – Published by IMEN, 2006.
4. Diagnosis of Higher Education in Poland // Partial report prepared by the consortium Ernst & Young Business Advisory. Institute of Research on Market Economy, 2009. – Available on: <http://www.nauka.gov.pl/finansowanie/fundusze-europejskie/program-operacyjny-kapital-ludzki/projekty-systemowe/strategia-rozwoju-sw-do-roku-2020>).
5. Fundusze strukturalne dla nauki i szkolnictwa wyzszego. – Available on: <http://www.nauka.gov.pl/finansowanie/fundusze-europejskie/fundusze-strukturalne-dla-nauki-i-szkolnictwa-wyzszego/>.

6. Szkolnictwo wyższe. – Available on: <http://www.nauka.gov.pl/szkolnictwo-wyzsze/dane-statystyczne-o-szkolnictwie-wyzszym/>.
7. Uniwersytet Rzeszowski. – Available on: <http://www.univ.rzeszow.pl/uniwersytet/projekty-wspolfinans-przez-ue>.
8. Mission, vision and strategic goals of higher education in the perspective of 2020 // Partial report prepared by the consortium: Ernst & Young Business Advisory. – Institute of Research on Market Economy. – November, 2009.
9. Recommendations of changes in the Polish system of technology transfer and knowledge commercialization / Ed. K.B. Matusiak, J. Guliński. – Warsaw: Polish Agency for Enterprise Development, 2010.
10. Szara K. Educational Quality as an Element of Change In Higher Education // Recent trends in higher education in Europe. – Published by Mitel, 2011. – P. 5–77.
11. Szcześniak A. Practical usability // Designing and conducting scientific research in cooperation with economy / collective work under the supervision of M. Bąk and P. Kulawczuk. – Warsaw: Institute of Research and Democracy and Private Entrepreneurship, 2009.
12. Thieme J. Higher Education. Challenges of the 21st century Poland, Europe, USA. – Warsaw: Publishing House Difin SA, 2009.

Шара К. Використання проектів ЄС в рамках механізму конкуренції вищої освіти у Польщі.

Зміни у вищій освіті Польщі повинні створити основу для загального розуміння проблем інших країн. Основною метою цієї статті є залучення уваги до коштів ЄС, отриманих вищими навчальними закладами та напроцювання їх потенціалу на ринку вищої освіти. Виокремлена тематика є надзвичайно багата в плані теоретичних міркувань. Однак, проведене дослідження зосереджено на практичних аспектах. Воно представлено у формі аналізу проектів, реалізованих в Університеті міста Жешув.

Ключові слова: проекти ЄС, вищі навчальні заклади, конкуренція, потенціал.

Шара К. Использование проектов ЕС в рамках механизма конкурирования высшего образования в Польше.

Изменения в высшем образовании Польши должны создать основу для общего понимания проблем других стран. Основной целью этой статьи является привлечение внимания к средствам ЕС, полученным высшими учебными заведениями и наращивание их потенциала на рынке высшего образования. Выделена тематика чрезвычайно богата в плане теоретических соображений. Но проведенное исследование сосредоточено на практических аспектах. Оно представлено в форме анализа проектов, реализованных в Университете города Жешув.

Ключевые слова: проекты ЕС, высшие учебные заведения, конкуренция, потенциал.