

РОЗДІЛ 2

МІЖНАРОДНЕ СПІВРОБІТНИЦТВО У СФЕРІ ОСВІТИ, НАУКИ І ВИРОБНИЦТВА

TOWARDS TO A MODERN HIGHER EDUCATION INSTITUTIONS IN POLAND

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Since the dawn of time, universities have contributed significantly to the economic development. However, presently operating higher education institutions are characterized by a significant diversity of goals, missions and functions, which significantly go beyond the ones traditionally assigned to this type of institutions³. Views on the impact of higher education institutions on the environment have been evolving towards a more complex view, taking account of not only social and cultural, but also economic effects of the university's operations. Currently, the role of the university is examined most often on four planes:

- the university as an economic unit,
- the university as a knowledge producer,
- the university as an institution shaping human capital,
- the university as a regional actor^{4, 5}.

Other sources indicate larger fragmentation of the abovementioned functions. J. Drucker and H. The Goldstein identify eight functions of a modern higher education

institution, which can potentially influence the economic development of spatial systems where they operate. These are:

- creating knowledge,
- creating human capital,
- transferring existing knowledge,
- technological innovations,
- capital investments,
- regional leadership,
- creating knowledge infrastructure,
- affecting regional environment⁶.

³J. Drucker, H. Goldstein, *Assessing the Regional Economic Development Impacts of Universities: A Review of Current Approaches*. International Regional Science Review. 30(1), 2007.

⁴G. Boucher, C. Conway, E. V. D. Meer, *Tiers of Engagement by Universities in their Region's Development*. Regional Studies. 37(9), 2003.

⁵Olechnicka A., Pander W., Płoszaj A., Wojnar K., *Analiza strategii, modeli działania i ścieżek ewolucji wiodących szkół wyższych w świecie*, Raport z badania http://www.euroreg.uw.edu.pl/dane/web_euroreg_publications_files/340/analiza_strategii_wiodacych_szkol_wyzszych_na_swiecie.pdf, pp. 21-26 (access: 19.02.2015).

It is worth emphasizing that some of the above indicated types of operations undertaken by the university bring about effects simultaneously in several of the mentioned planes. For example, creating human capital is favourable for the provision of educated employees to companies, and it also reinforces internal possibilities of businesses to absorb innovations, may affect creating knowledge due to relations between teaching and research and, apart from this, may affect creation of a creative class, which constitutes a beneficial environment for the knowledge-based development.

An interesting analysis of changes in European higher education is presented by J.K. Thieme^{7,8}. Assuming the description of the classic organizational model of higher education by B.R. Clark⁹ in the form of the so-called triangle of impacts (its vertices are: state authority, academic oligarchy and market), J.K. Thieme presents closer three models of education: with the predominance of state authority over higher education institutions (French, Soviet), market model (Anglo-American or, more generally, Anglo-Saxon) as well as a model with a large role of academic oligarchy (Humboldtian or Germanic). J.K. Thieme presents also the model by V.F. Vought¹⁰ - based on the methods of exercising external supervision over universities (direct control of the state as in the continental Europe, or intermediate supervision as in the US and England) as well as the model by D. Braun and F-X. Merrien¹¹ resulting from relations between three basic factors, i.e. force (large, small) of direct mandatory and material impact of the state on higher education institutions, methods of indirect legal and procedural impact of the state (detailed, general, legal, regulatory) and politically preferred system of higher education values (cultural, market character). In the light of the quoted model descriptions, obtained from different combinations of the above factors, J.K. Thieme proposed his own higher education institution functioning model. The basis for this model are three components, i.e.:

⁶H. Goldstein, C. Renault, *Contributions of universities to regional economic development: a quasi-experimental approach*. Regional Studies. 38, 2004.

⁷J.K. Thieme, *Szkolnictwo wyższe. Wyzwania XXI wieku. Polska, Europa, USA*, Difin, Warsaw 2009, pp. 46-59.

⁸M. Herbst, A. Olechnicka, A. Płoszaj, *Higher Education Institutions: Potential, Barriers, Costs, Opportunities*, [in:] S. Mazur (ed.), *The Resource-integrating state: Development Potential vs. the Quality of Public Regulations*, The Malopolska School of Public Administration, Crakow University of Economics, Krakow 2011, pp. 107-109.

⁹B.R. Clark, *The Higher Education System: Academic Organization In Cross-national perspective*, University Of California Press, 1986, http://www.google.pl/books?hl=pl&lr=&id=j_YKq7DuqAC&oi=fnd&pg=PR11&dq=.R.+Clark,+The+Higher+Education+System:+Academic+Organization+In+Cross-national+perspective&ots=uqxI0Q0FUF&sig=MjgYriXBACMBgIfxvNQ-owRft6c&redir_esc=y#v=onepage&q=.R.%20Clark%2C%20The%20Higher%20Education%20System%3A%20Academic%20Organization%20In%20Cross-national%20perspective&f=false, pp. 137-145 (access: 19.02.2015).

¹⁰F. van Vought, *Governmental Strategies And Innovation In Higher Education*, Jessica Kingsley, London, 1989, *quot.* M. Herbst, A. Olechnicka, A. Płoszaj, *Higher Education Institutions: Potential, Barriers, Costs, Opportunities*, [in:] S. Mazur (ed.), *The Resource-integrating state: Development Potential vs. the Quality of Public Regulations*, The Malopolska School of Public Administration, Crakow University of Economics, Krakow 2011, p. 109.

¹¹D. Braun, F. Merrien, *Towards A Model Of Governance For Universities? Comparative View*, Jessica Kingsley, London/Philadelphia 1999, *quot.* M. Herbst, A. Olechnicka, A. Płoszaj, *Higher Education Institutions: Potential, Barriers, Costs, Opportunities*, [in:] S. Mazur (ed.), *The Resource-integrating state: Development Potential vs. the Quality of Public Regulations*, The Malopolska School of Public Administration, Crakow University of Economics, Krakow 2011, p. 109.

- state (large – small),
- scope of legal regulations (loose – strict),
- value system (culture- or service-based).

The higher education institution functioning solutions presented below (see table 1) confirm large diversity of both structures as well as principles and values of the functioning of higher education institutions, particularly visible in European countries.

As compared to the above, the Polish higher education system is characterized by bureaucratic and hierarchical structures with small impact of the state. On the contrary, legal regulations are very detailed. As far as the value system is concerned, management in Polish higher education institutions is based on traditional models. Attention is drawn to the fact that in the model developed by J.K. Thieme our country was classified into one group together with Germany. The authors believe that this is a too far reaching simplification, especially in the context of changes in the cultural model in Germany, initiated with 1968 events, and transformations of the German economy towards the knowledge and innovation-based economy.

Table 1. Higher education institution models

No	Impact of the state	Legal regulations	Value system	Description of the model	Example
1.	small	loose	culture-based	Collegial	European states in the period of the Middle Ages
2.	small	loose	service-based	Market	USA
3.	small	strict	culture-based	Bureaucratic-oligarchic	Germany, Poland
4.	small	strict	service-based	Etatistic	France
5.	large	loose	culture-based	-	does not exist
6.	large	loose	service-based	New-managerial	The Netherlands
7.	large	strict	culture-based	-	does not exist
8	large	strict	service-based	Planned	Former Soviet Union, Cuba, North Korea

Source: prepared by the authors on the basis of J.K.Thieme, *Szkolnictwo wyższe. Wyzwania XXI wieku. Polska, Europa, USA*, Difin, Warsaw 2009, p. 53.

On the other hand, assuming the French model as the basis for further development and changes in the higher education in Poland would require radical change in the value system - from cultural to service-based. Certainly, it is possible, provided that businesses will use to a greater extent innovations from national higher

education institutions. Unfortunately, poor financial position of regional businesses and the lack of broader interest in such innovations on the part of transnational corporations are serious barriers making it impossible to implement this idea.

On the contrary, the American model admired by the academic environment in Poland is, in the nearest time, hardly feasible, since its implementation would require (according to the model by J.K. Thieme) fulfilment of as many as two conditions, namely a change in the value system - from cultural to service-based, and a creation of liberal legal regulations (in this case, the market mechanism would absorb appearing irregularities and degenerations). It may appear that the first condition is hardly feasible due to a small demand for innovations on the part of businesses (like in the French model), whereas the second condition is hardly feasible due to the need for a revolutionary change in the approach to law (including intellectual property protection), which, as it seems in practical terms, may be unacceptable by academic oligarchs who regard such changes (and justifiably) as loss of power and privileges.

On the other hand, introducing in Poland the Dutch higher education system is also difficult owing to the need to change as many as three dimensions: greater (active) commitment of the state in the development of higher education institutions, general legal regulations and change in the value system to market system. A larger commitment of the Polish state in supporting the development of higher education institutions would require a significant increase in the share of expenditures on research, teaching and innovations, from approx. 0.40% of GDP to 1.5-2.5% of GDP, like in the European countries and the US which are the object of this analysis. In the present political-economic situation in Poland it is hardly feasible.

The described directions of changes in higher education institutions (such as: in France, the US and the Netherlands) should be seriously considered in Poland, since they give a chance for implementing the idea of creating and sharing knowledge with the sector of economy and the society. This idea may stimulate industry to develop absorption capacity to make use of the potential of academic research. According to the authors, Poland still lacks of sufficient mutual exchange of new knowledge with the business environment and the broadly understood society. The lack of opening to the business environment can be seen also in the process of selecting career by people with the PhD degree; they incline to continue their whole career in their academic or industrial circles, rather than as entrepreneurs.

To sum up the considerations presented in this part of the paper, it can be ascertained that a modern university, next to the fulfilment of traditional functions - educational and research functions, should be focused on the development of disruptive innovations and should co-create an innovative environment for businesses operating in the area. The condition of fulfilling this new role and function of a higher education institution is to maintain balance between the sphere of education, scientific research and innovations. Such an approach is determined as sustainable development of a modern university. The authors believe that it corresponds to the guidelines and postulates presented in the Commission Message to the Council and the European Parliament of 2006 "Implementing the modernization program for universities: education, scientific research and innovations"¹².

¹²*Implementing the modernization program for universities: education, scientific research*, <http://eur->