

# Unpredictable Future: The Impossibility of Higher Education Policy

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## ABSTRACT

Higher education policy, as a part of broader public policy, must be built on the foundations of government strategic planning. Modern understanding of the role of higher education emphasizes growing importance of well-educated graduates for the stability of national economies. In 2004 Poland joined European Union and tried to adjust higher education policy to the demands of knowledge-based economy of the UE. The examination of government strategic documents and regulations reflects the challenge defining and managing higher education policy. Polish ministry responsible for higher education still cannot define the strategic goals and thus the ministry questions the possibility of implementing a coherent policy.

**Keywords:** Poland, higher education policy, strategy

## INTRODUCTION

At the beginning of the 21<sup>st</sup> century two important international institutions: the World Bank (WB) and the Organization for Economic Co-operation and Development (OECD) share almost the same understanding of higher education. They claim that investing in higher education results in stable and sustainable economic development and social progress. Knowledge-based economy and information-based society should be built on four pillars: “an appropriate economic and institutional regime, a strong human capital base, a dynamic information infrastructure, and an efficient national innovation system” (Salmi, 2009). An efficient higher education system is the foundation of two of these pillars: “human capital base” and “national innovation system”. Therefore the latest edition of OECD report *Education at a Glance 2013* concludes that “expanding access to and improving the quality of tertiary education is vital to knowledge-based economies...” (OECD, 2013).

The World Bank and OECD promote neoliberal approach to national higher education policies; they should be based on open market, free trade and substantial reduction of the public sector. According to the World Bank and OECD limited interventions of governments should focus on securing equal access to “higher education market” for educational providers (universities and colleges) and consumers (students) (Olsen, 2006). As graduates become more and more vital for stability and efficiency of job market, it leads to the necessity of adopting higher education policy. It is the duty of a national government to secure the influx of new skilled and innovative workers (St. John, Daun-Barnett and Moronski-Chapman, 2013).

Recent research is not always as optimistic as the visions presented by WB or OECD and points out that public returns on investments in education decrease with the level of educational attainment and the age of population (Technology, Higher Education and Society (2020)

being educated (Kwiek, 2012a). The shift in understanding of the role governments play in supporting and managing higher education systems calls for well-planned higher education policies: with properly sketched plans, prudently distributed resources and carefully outlined outcomes. Higher education policy is built upon ‘intended’ course of action, similarly to any other policies: the state invests in higher education and expects returns on such investment (Parsons, 1995; Knight and Johnson, 2011).

Modern higher education policy represents an important field of much broader public policy. Investigation of public policy that might be defined as the study of “what governments do, why they do it, and what difference it makes”, as explained by Thomas Dye (1987). In a more academic way Larry Gerston defines public policy:

*“as the combination of basic decisions, commitments, and actions made by those who hold or affect government positions of authority. In most instances these arrangements result from interactions among those who demand change, those who make decisions, and those who are affected by the policy in question”* (1997).

## HIGHER EDUCATION POLICY DIMENSIONS

### Higher education policy planning

Higher education policy thus can be examined by the combination of two sets of aspects: actions (planning, providing means, and evaluating results) and actors (people demanding higher education, government, and people profiting from higher education: both graduates and employers). As expressed in the seminal textbook by Malcolm Tight, *Researching Higher Education: Issues and Approaches*, the government is the most important actor in shaping higher education policy (Tight, 2003). Even the widely accepted concept of triple helix has not undermined the authority of the state and the government. The interplay of government, business, and universities (and resulting education policy) depends on government (Etzkowitz and Leydesdorf, 1997; Etzkowitz, 2008).

The reports of the World Bank and OECD focus in their analyses on the level of investments (the means provided for this level of education) and results. This is why *Education at a Glance* is divided into two large chapters: “The Output of educational institutions and the impact of learning” and “Financial and human resources invested in education”. The purpose of OECD activities is to evaluate performance of member states and set the strategic visions of higher education policy, therefore OECD focuses on measurable data representing investments and outputs (OECD, 2013; Yusuf, 2007).

Measuring “financial and human resources invested in education” is not a manageable task. Furthermore, the available data provide a convenient ground for cross-national comparisons and suggest that there can be a solution adaptable to different national higher education systems. Evaluating “the output” presents more problems, however. Some of the externalities (public gains) of higher education can be easily calculated (e.g. wage premium or employability rate) but there are also private and public benefits that cannot be explained and measured in economic terms only (McMahon, 2009). Even *Education at a Glance 2013* states that public returns are underestimated, especially after taking into consideration such public benefit as stable democracy (OECD, 2010; OECD, 2013). In other OECD publication authors claimed that “Private non-monetary benefits are not yet clearly identified or understood in the literature and it is difficult to quantify their importance” (Santiago, Tremblay, Basri and Arnal, 2008). The situation is even more confusing in the case of public benefits: “the existing evidence is limited but (...) the major shortcoming is that existing studies essentially capture only those externalities which can be monetarily quantified” (Santiago, Tremblay, Basri and Arnal, 2008; McMahon, 2004).

Although the challenge of calculating the benefits of higher education represents an important task for researchers of the field, it also reveals yet another problem in evaluating higher education policies. Both private and public benefits are not only the results of planned government actions (regulations and financial support). Decisions of students’ families, performance of students, and actions of colleges and universities shape the actual output of higher education. Moreover, the institutional autonomy, widely accepted as the foundation of the 21<sup>st</sup> responsive university, makes such calculations almost impossible (Salmi, 2009; Eurydice, 2008). Since any efficient public policy must be based on careful planning and later accomplishment of accepted plans, the institutional autonomy represents an

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intriguing obstacle for government actions.

### Planning in Polish higher education

The Republic of Poland has a distinct higher education policy, managed by the Ministry of Science and Higher Education (MSHE). Although majority of higher education institutions in Poland are private (328 out of 460 in 2011), less numerous public schools educates more than two thirds of all students (1,245,900; which was 70.6%) (Central Statistical Office [CSO], 2012). The Ministry, along with some other governmental agencies (e.g. National Science Center, National Center for Research and Development), remains the main source of financing of higher education system. In 2011 public expenditure on higher education totaled 12,009.2 million PLN, while revenues of higher education institutions totaled 20,368.128 million PLN (ca. 59% of revenues) (CSO, 2012)<sup>1</sup>. Being the main and unrivalled player in higher education system, MSHE has the power and authority to implement its higher education policy. The ongoing Ministry decisions on spending should be based on a set of strategic plans and goals; otherwise the policy would change into a set of rather accidental outcomes of the investment of the government.

The parliamentary elections of 2007 resulted in the creation of a new political coalition of two parties: rather liberal Civic Platform (Platforma Obywatelska) and post-communist Polish People's Party (Polskie Stronnictwo Ludowe). The new government very soon noticed that the general condition of Polish higher education was not satisfactory and should be quickly improved. The driving force for change was the global context: comparison of Polish and foreign higher education institutions (HEIs) led to the conclusion that Polish citizens were offered education of lesser quality and the schools themselves did not seem to be accountable for the public support they receive (Kwiek, 2012b). The Minister of Science and Higher Education, Barbara Kudrycka, expressed her belief that Polish students and young researchers could compete with their colleagues from the Western Europe, USA or Canada because they had equally great talents and skills. The international collaboration, attracting prominent scholars to come to Poland, was necessary to keep most brilliant students and scholars at home and protect Poland from brain drain. The Minister understood that Polish higher education system was in a desperate need of deep structural reforms (Kudrycka, 2010).

The Minister was also aware of the complexity of higher education system therefore she commissioned at the Ernst & Young Business Advisory a report to validate strategic goals and future actions of the Ministry. The main part of E&Y investigation was presented in two sub-reports: *Diagnoza stanu szkolnictwa wyższego (The Diagnosis of the Situation of Polish Higher Education)* (Ernst & Young Business Advisory and Instytut Badań nad Gospodarką Rynkową [E&Y], 2009) and *Strategia rozwoju szkolnictwa wyższego w Polsce do 2020 roku (The Strategy for the Development of Higher Education in Poland until 2020)* (E&Y, 2010). In the meantime, the Foundation of Polish Rectors (an independent institution established for the advancement of higher education, science and culture) prepared so called "academic community's report": *Polskie szkolnictwo wyższe. Stan, uwarunkowania i perspektywy (Polish Higher Education: Present situation, challenges, and perspectives)* (Morawski, 2009), accompanied by the proposed strategy for Polish higher education: *Strategia rozwoju szkolnictwa wyższego: 2010-2020 (The Strategy for Higher Education Development: 2010-2020)* (Fundacja Rektorów Polskich [FPR], 2010).

The Ministry of Science and Higher Education has accepted both strategies as the documents setting the long-term goals of ministerial activities. These two strategies are not complementary and they are exclusive in some of basic assumptions as well as proposed means. This situation suggests that either Ministry does not take strategy seriously, as the document being the reference point for all decisions and later evaluations, or it does not take seriously higher education policy itself: instead of relying on long-term goals, the Ministry still prefers tentative and ad hoc actions or re-actions to the changing situation. However, as Marek Kwiek explains in his publications, long-term planning is essential in the context of globalization and cross-border interdependencies in higher education systems (Kwiek, 2002; Kwiek 2012a).

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<sup>1</sup> It is worth to notice that, according to Polish regulations, regional governments (*samorząd wojewódzki*) should also care for higher education. But this kind of public support reached completely irrelevant level of 72.8 million PLN. Thus higher education policy in Poland remains highly centralized. Technology, Higher Education and Society (2020)

## MODELLING THE FUTURE

### Review of Polish higher education strategies

Having two different strategies is a new situation for Poland. Previously the Ministry prepared their own documents: in 2002: *Strategia rozwoju szkolnictwa wyższego w Polsce do roku 2010 (The Strategy of higher education development in Poland till 2010)* (Ministerstwo Edukacji Narodowej i Sportu [MENiS], 2002), and in 2005: *Strategia rozwoju edukacji na lata 2007-2013 (The Strategy of the development of education in the years 2007-2013)* (MENiS, 2005). The latter document covered all levels of education but it had separate chapters on higher education.

All these four strategic documents of Polish Ministry are an excellent basis for investigating whether higher education policy in Poland is viable at all. Cross-examination of these strategies can reveal misassumptions and mistakes in governmental planning. The examination is especially tempting since two of these strategies described periods that are already closed. It therefore enables critical evaluation of strategic goals of the Ministry: one can find out if the goals have been actually achieved. Such “critical-empirical research approach” is based on “deconstructing claims and assumptions, examining evidence in relation to those claims, and reconstructing understanding” (St. John, 2013).

The first of the strategies, *The Strategy of higher education development in Poland till 2010*, was prepared and accepted when Poland was still a candidate for full European Union membership. The document set seven strategic goals of Polish higher education reflecting seven fields of the activity of the Ministry:

1. greater inclusiveness of higher education;
2. improving quality of higher education;
3. greater employability of graduates;
4. improving quality of research at Polish HEIs;
5. capital investments and greater Internet availability;
6. lifelong learning; and
7. harmonization within European Higher Education Area.

Just after the release of the document the Conference of Rectors of Academic Schools in Poland (KRASP; a statutory organization of research universities) stated that the strategy was “too general, and in a very limited sense could be used as a starting point for further actions in developing higher education in Poland” (Konferencja Rektorów Akademickich Szkół Polskich [KRASP], 2002). After many years it is still hard to disagree with KRASP’s opinion. Greater access to higher education, better quality of education and research, stronger collaboration with business—these are the goals of higher education everywhere, not only in Poland, but the document did not specify more detailed goals to be achieved and provided almost no information on funding.

There were two points of the 2002 MENiS strategy, reflecting problems of long-terms planning in higher education policy. The strategy declared that “it is unrealistic to expect a substantial growth of public spending on higher education. In 2001 it was 0.88% of GDP and one can expect the growth to 1.0%, at maximum”. The strategy set also the goal for scholarization rate: 65% of traditional student cohort (age 19-24). It was then estimated that the number of students would reach in 2009/10 2,357,323 (MENiS, 2002). The reality proved that the first assumption was too pessimistic. The share of public expenditure in GDP in 2001 was 0.82% and within three years it reached 1.0% and because of the stable growth of Polish economy, the expenditures grew from 6,370.7 million PLN in 2001 to 8,822.3 in 2004, and 11,722.4 in 2010 (CSO, 2012). in 2010 the actual number of students was only 1,900,014; 19% less than it had been expected (CSO, 2012). So, the Ministry, despite the fact that provided the main share of funding, was not able to predict its growing support. The growth was even more impressive because of the overestimation of the number of students, thus spending per student was much higher than had been planned.

*The Strategy of the development of education in the years 2007-2013* was released shortly after joining the European Union. The economic and political situation of Poland was much different than five years earlier. Although Poland was still facing some drawbacks (e.g. high rate of unemployment), Polish economy entered the period of substantial growth and the authors of the strategy understood the importance of higher education-business connections (MENiS, 2005). This second strategy did not propose any projections on changes of the number of students; it just provided Technology, Higher Education and Society (2020)

information on the situation in the academic years 2003/04 and 2004/05 without any estimation for the future (MENiS, 2005). The strategy had just one proposal for the improvement of economic conditions of Polish higher education—imposing tuition, even at public higher education institutions (MENiS, 2005).

This second proposal is the reaction to the communist heritage of People's Republic of Poland: under the previous regime all higher education institutions were public (except for one catholic university in Lublin) and the education was for free, although it was very exclusive (the scholarization rate was only 7% for the traditional college cohort) (Jablecka, 1994). The Constitution of the Republic of Poland of 1997 preserved free education at public institutions of all levels. Therefore, as noticed by the authors of the strategy, it would be necessary to amend constitution to give public HEIs authority to charge tuition for regular programs of studies. The “tuition issue”, treated as a remedy for financial problems, has remained a widely discussed solution (Santiago, 2008; WB, 2004; E&Y, 2010), but as everywhere in the world—amending a constitution is a very complicated political task and there is not sufficient political support in Poland to make the necessary constitutional changes.

### **New wave of higher education reforms**

Both early strategies for higher education policy were very general and did not suggest any specific goals and means, except a very unlikely amendment of the constitution. That was the reason why they were not used in actual higher education policy-making. After parliamentary elections of 2007, a new Minister, Barbara Kudrycka, also asked for a new strategy. She hoped to use it as the reference point for future actions. This time the Ministry of Science and Higher Education did not rely on its own resources but commissioned professionally prepared strategy and Ernst & Young Business Advisory won the contract. The Foundation of Polish Rectors also decided to prepare its own vision of the development of Polish higher education. Eventually, the Minister declared that both documents would be used as the basis for government policy and further actions (Polska Agencja Prasowa [PAP], 2010). Both 2010 strategies are rather lengthy documents, especially as compared to the previous ones, and both are based on thorough research. Both teams of authors took into consideration many previously neglected factors, e.g. demographic changes; challenges of globalization, the impact of emerging markets on EU higher education.

Both the E&Y and FPR strategies warned that demographic changes would be a tough challenge for Polish higher education system. Foundation of Polish Rectors estimated that the number of students would drop to 1,375,400 students in 2020; a substantial and dramatic change comparing to 1,900,000 in 2010. FPR was also afraid of the aptitude of students applying to Polish HEIs because of massification of secondary education and lowering standards at high schools (FPR, 2010). E&Y predicted that in 2020 the number of students would be even lower: ca. 800,000 (half of the number in 2010); and more importantly: the number of students would be lower than “number of seats offered at present by public HEIs” (E&Y, 2009). Moreover, E&Y report noticed that aging society would create new problems for higher education system, as more and more resources would have to be allocated to programs targeted towards the elderly (E&Y, 2010).

Both strategies noticed also that financial problems of Polish higher education system had resulted not only from the insufficient funding. The most vital issue was (and unfortunately, still is) inefficient system of funding that did not promote accountability of Polish public HEIs. FPR strategy stated that constant underfunding was partially the outcome of the lack of consistent strategy of the development of Polish higher education (FRP, 2010). Ministerial decisions were always shaped by political influences; therefore FRP suggested the creation of independent agency, National Fund for Higher Education, responsible for distributing all financial support for educational purposes. This National Fund for Higher Education should have been organized on a similar basis as the National Science Center or the National Center for Research and Development. (These two latter agencies were actually established and they started to distribute money for research activities of colleges, universities and other entities conducting various types of research.) The goal of FRP was not to increase the funds but allocate them on a more rational, less dependent on current political sympathies, basis. Furthermore, FRP based its financial scheme on charging tuition even at public HEIs (FRP, 2010).

E&Y strategy presented a more elaborate and complete strategy for financing educational activities of Polish HEIs. Knowing the challenges private HEIs would face because of the demographic changes, E&Y proposed the distribution of public support regardless of the type of control. The allocation of funds should have been based on contracting: an institution would be given money to educate a defined number of students of defined programs of studies. The institution would be granted a multiyear contract, securing sufficient funds for educating undergraduate Technology, Higher Education and Society (2020)

(four years) or graduate students (two-three years). The institution competing for the contracts would have to assure the quality of educational outcomes (E&Y, 2010). The procedures as well as the results of the competition should be transparent and public, thus preserving the accountability and efficiency of Polish HEIs and providing top-class education to new generations of young Poles. According to the proposal of E&Y, a new act on higher education should clearly define who would be eligible for free higher education, thus E&Y did not make the amendment of the constitution one of the foundation of the strategy (E&Y, 2010).

## CONCLUSIONS

Relatively short post-transformation history of Polish higher education policy is an intriguing field of research. If a policy is understood as the action that is planned and carried out with the use of adequate resource, a clear and achievable strategy should be a necessary starting point. Otherwise, the minister responsible for higher education would never know if he/she succeeded in performing governmental duties. Without clear strategy any achievement might be declared to be a success, no matter what was the actual cause of the achievement. Public policy researchers agree that extraction and later distribution of the resource have to be organized to reach some defined goals. This cannot be done without previously existing strategy.

The recent development of Polish higher education policy has been either based on almost no strategy (being to general, with but too obvious goals), or on partially excluding strategies. The report of Ernst & Young Business Advisory suggested that there would be 900,000 students in 2020 and the money for educational purposes should be distributed by government-run granting system, with free higher education still available for some students. Foundation of Polish Rectors estimated the number of students to be ca. 1,375,000 the very same year and proposed the creation of independent National Higher Education Fund to distribute financial support among HEIs, but all students would have to pay at least some tuition. (FPR suggested the creation of national scheme for grants and loans similar to Pell Grants and Stafford Loans of the USA).

Summarizing, the difference in the estimated number of students is almost half a million; proposed funding is based either on free (although with some restriction) or paid education. Having these two strategies as the foundation of Polish higher education, the Ministry and the government is not able to achieve all prescribed goals. And in this case such blurred foundation would probably lead to a delusive higher education; or to a real policy that is a simple adjustment to the ever changing situation and ever emerging challenges on a year to year basis. Anyway, one can doubt if this is higher education policy.

## REFERENCES:

- Central Statistical Office [CSO]/Główny Urząd Statystyczny. (2012), *Higher Education Institutions and Their Finances in 2011*. Warszawa: Central Statistical Office.
- Dye, T. (1987). *Understanding Public Policy* (6<sup>th</sup> ed.). Englewoods Cliffs, NJ: Prentice-Hall.
- Ernst & Young Business Advisory and Instytut Badań nad Gospodarką Rynkową [E&Y]. (2009). *Diagnoza stanu szkolnictwa wyższego w Polsce*. Warszawa: Ernst & Young Business Advisory.
- Ernst & Young Business Advisory and Instytut Badań nad Gospodarką Rynkową [E&Y]. (2010). *Strategia rozwoju szkolnictwa wyższego w Polsce do 2020 roku*. Warszawa: Ernst & Young Business Advisory.
- Etzkowitz, H. (2008). *The Triple Helix: Industry, University, and Government in Innovation*. New York, NY: Routledge.
- Etzkowitz, H., Leydesdorf, L.A. (Eds.). (1997). *Universities and the Global Knowledge Economy: A Triple Helix of University-Industry-Government Relations*. New York, NY: Pinter.
- Eurydice. (2008). *Higher Education Governance in Europe. Policies, Structures, Funding and Academic Staff*. Brussels: Eurydice.
- Fundacja Rektorów Polskich [Foundation of Polish Rectors; FPR]. (2009). *Strategia rozwoju szkolnictwa wyższego: 2010-2020*. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
- Gerston, L.N. (1997). *Public Policy Making Process and Principles*. Armonk, NY: M. E. Sharpe.
- Jablecka, J. (1994). Reflections on the Polish Higher Education. In I. Białecki, M. Dąbrowa-Szeffler (Eds.), *Changes in Higher Education in Central European Countries* (pp. 11-24). Warszawa: IFiS Publishers.
- Knight, J., Johnson, J. (2011). *The Priority of Democracy. Political Consequences of Pragmatism*. Princeton, NJ: Princeton University Press.

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<https://openaccess.cms-conferences.org/#/publications/book/978-1-4951-2110-4>

- Konferencja Rektorów Akademickich Szkół Polskich [KRASP]. (2002). *Uchwała Zgromadzenia Plenarnego KRASP z dnia 14 listopada 2002 r.* Warszawa: KRASP document no. 7/III.
- Kudrycka, B. (2010, September 15). Idzie młodość w nauce. *Gazeta Wyborcza*, pp. 18-19.
- Kwiek, M. (2002). *The social functions of the university in the context of the changing State/Market relations (the global, European Union, and accession countries' perspectives)*. Poznań.
- Kwiek, M. (2012a). *Knowledge Production in European Universities. States, Markets, and Academic Entrepreneurialism*. Frankfurt and New York, NY: Peter Lang.
- Kwiek, M. (2012b). Changing higher education policies: From the deinstitutionalization to the reinstitutionalization of the research mission in Polish universities. *Science and Public Policy*, 39, 641-654.
- McMahon, W.M. (2009). *Higher Learning, Greater Good. The Private and Social Benefits of Higher Education*. Baltimore, MA: The Johns Hopkins University Press.
- McMahon, W.M. (2009). The Social and external benefits of education, In G. Johnes, J. Johnes (Eds.), *International Handbook on the Economics of Education* (pp. 211-259). Cheltenham: Edward Elgar Publishing Ltd.
- Ministerstwo Edukacji Narodowej i Sportu [MENiS]. (2002). *Strategia rozwoju szkolnictwa wyższego w Polsce do roku 2010*. Warszawa: MENiS Website: <http://www.men.waw.pl/szk-wyz/strategia/strategia.htm>.
- Ministerstwo Edukacji Narodowej i Sportu [MENiS], 2005, *Strategia rozwoju edukacji na lata 2007-2013*. Warszawa: Ministerstwo Edukacji Narodowej i Sportu.
- Morawski, R.Z. (Ed.). (2009). *Polskie szkolnictwo wyższe. Stan, uwarunkowania i perspektywy*. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
- OECD. (2010). *Education at a Glance 2010. OECD Indicators*. Paris: OECD.
- OECD. (2013). *Education at a Glance 2013. OECD Indicators*. Paris: OECD.
- Olssen, M. (2006). Neoliberalism, Globalization, Democracy: Challenges for Education, In H. Lader, P. Brown, J.-A. Dillabowgh, A.H. Hasley (Eds.), *Education, Globalization, and Social Change* (pp. 261-287), Oxford: Oxford University Press.
- Parsons, W. (1995). *Public Policy. An Introduction to the Theory and Practice of Policy Analysis*. Aldershot: Edward Elgar.
- Polska Agencja Prasowa [PAP]. (2009). *Min. Kudrycka: Zmiany w polskim szkolnictwie są konieczne*. PAP; Nauka w Polsce Website: [http://www.naukawpolsce.pap.pl/palio/html.run?\\_Instance=cms\\_naukapl.pap.pl&\\_PageID=1&s=szablon.depesza&dz=szablon.depesza&dep=368651&data=&lang=PL&\\_Checksum=-1111331628](http://www.naukawpolsce.pap.pl/palio/html.run?_Instance=cms_naukapl.pap.pl&_PageID=1&s=szablon.depesza&dz=szablon.depesza&dep=368651&data=&lang=PL&_Checksum=-1111331628).
- St. John, E.P., Daun-Barnett, N., Moronski-Chapman, K.M. (2013). *Public Policy and Higher Education*, New York, NY: Routledge.
- Salmi, J. (2009). *The Challenge of Establishing World-Class Universities*, Washington, DC: The International Bank for Reconstruction and Development/The World Bank.
- Santiago P., Tremblay K., Basri E., Arnal E. (2008). *Tertiary Education for the Knowledge Society. Volume 1: Special Features: Governance, Funding, Quality*. Paris: OECD.
- Tight, M. (2003). *Researching Higher Education: Issues and Approaches*. Maidenhead: Open University Press & McGraw-Hill Education.
- The World Bank. (2004). *Tertiary Education in Poland. Report no. 29718*. Warszawa: Protea-Taff Studio DTP.
- Yusuf, S. (2007). University-Industry Links: Policy Dimensions, In S. Yusuf, K. Nabeshima, *How Universities Promote Economic Growth* (pp. 1-25). Washington, DC: The World Bank.