

# 6

## Factors Limiting the International Competitiveness of European Universities

Krzysztof Pawlowski

### 1. Introduction

At present, it seems as though the era of economic and political transformation in Poland, which started in 1988 with the so-called Economic Freedom Act, the Polish 'Round Table Talks', and the first open parliamentary elections of June 1989, is coming to an end. This period began with the opening up of Poland to international trade, which put an end to socialistic shortages, as well as the reforms of Leszek Balcerowicz and the policy of imitative development, in which institutions typical of developed countries were adopted. The next stage of the process was massive privatization, based to a large extent on international capital inflows, the opening up of branches of new manufacturing and service companies by foreign corporations in Poland, as well as the relocation of service centers of large international corporations.

The decisions of foreign corporations to come to Poland were driven by the large size of the country's market, which was badly under-supplied at the beginning of the 1990s, the availability of cheap and relatively well-qualified labor, as well as the expectations of Poland becoming a member of the European Union (EU). At the same time, small- and medium-sized family enterprises were also beginning to develop. Today, however, the process of massive privatization is coming to an end, and there remain only a few areas of the Polish economy that have yet to be privatized, and that are still attractive to foreign investors. In that regard, it is expected that within the next two or three years, this period will have come to an end.

As a result of this opening up to foreign trade, privatization and foreign investment, Poland has become part of the global economy, which is ruled by one fundamental law, the law of profit maximization. This law pushes companies to move their production to locations that offer the biggest profits. Poland has benefited from this over the last 20 years. However, as average salaries increase, with some professionals in Poland receiving pay that is similar to their counterparts in developed countries, combined with the emergence of new, lower-wage locations such as Ukraine or Belarus that are gaining political stability and reinforcing the rule of law, the attractiveness of Poland for foreign companies may be decreasing, and this may result in a situation where international corporations will decide to relocate some of their Polish branches to new, more lucrative locations. Taking into consideration that the so-called 'new economy', the knowledge-based economy, is developing rapidly, Polish political authorities should seriously consider creating new, or reinforcing existing, development mechanisms that would allow the Polish economy to continue developing.

The development of a knowledge-based economy, as well as the current extraordinary GDP growth in Germany in the recovery from the 2008 to 2009 economic crisis both indicate that the biggest opportunities in the new global economy will arise for countries whose economies are based on technology-based companies that have effective mechanisms for the transfer of knowledge, technologies and innovations between businesses and the scientific sector. It is in this field, the field of scientific research and higher education, that the Polish elite must search for new, effective mechanisms for development and launch them now, knowing that changes in the sectors of higher education and research require a relatively long period to establish.

### 2. The state of Polish higher education from the perspective of 2010

In recent years we have come to the end of a period of rapid growth in Polish higher education, which has created a new era where the education market is difficult mainly for private education institutions, but also for many public universities. The situation will be increasingly difficult in the future. This is because there are significantly fewer 19-year-olds and, consequently, fewer students who take the *matura* exam – the high school exit examination – every year. Gradually, we are also running out of the so-called 'educational reserve', that is those people who did not take up university studies at the age of 19–23, but who later want



to obtain a degree. An additional factor is growing competition for Polish students by EU universities. Thus, it may be that there will not be enough candidates to apply to Polish universities. This will affect paid full-time studies in private universities in the first place, but a growing number of departments of public schools, higher vocational state schools in particular, will also encounter recruitment difficulties.

The last 20 years were a fruitless period as far as Polish scientific achievements are concerned. It is hard to identify even a single remarkable instance of success by a Polish scholar working in Poland. The implementation of research results in the economy in the form of finished goods also leaves a lot to be desired. Hence, single cases of successful research spin-offs only seem to prove the above thesis. To make things worse, in the period following 1989, almost no changes were made to adjust the system of higher education and the research sector to the new socio-economic reality (excluding the 1990 Act 'Prawo o szkolnictwie wyższym' which allowed a sector of non-public higher education institutions to be created). Public universities focused on extending their educational offerings often accompanied by significantly reduced involvement on the part of academic teachers in the process of scientific research and in local and regional development. Taking the last ten years (2000–2009) into account, it is hard to put the blame on the lack of investment in university research. In this period, public higher education institutions acquired as much as 16.4 billion PLN for investment from the state budget; additionally, in 2007, 30 public higher education institutions were granted over 2.4 billion PLN from EU funds by the Ministry of Science and Higher Education (Central Statistical Office, 2010: 329). Public schools obtained additional substantial funds for regional development schemes.

In the last 20 years, Polish political authorities have failed to establish any specific state policy regarding exploiting the potential of higher education and scientific research. Public schools, on the other hand, enjoyed a considerable degree of autonomy, reinforced their internal structures and expanded their material infrastructure, which mainly increased the comfort of working at universities and studying there.

Unfortunately, the last three years have not been groundbreaking, despite the initial hopes raised by the government of the Civic Platform (PO) and the Polish People's Party (PSL). The Ministry of Science and Higher Education quickly abandoned the planned system reforms, and the call for a development strategy for the higher education system proclaimed in 2009 may unfortunately be seen largely as a public relations effort at best. Many months have passed since two versions

of the strategy were proposed by Ernst and Young<sup>1</sup> with the Gdansk Institute for Market Economics (IBnGr) and the Conference of Rectors of Academic Schools in Poland (KRASP).<sup>2</sup> The Ministry has not adopted an official strategy, and the amendment of the act of November 2010 has nothing to do with a strategy. Judging by the attitude of the government in power, it may be assumed that the Polish ruling authorities have withdrawn from any attempt at implementing significant reforms of the higher education system, especially as regards encouraging competition for public funds between universities.

I believe that the issue of reforms or their lack in the sectors of higher education and scientific research is not a problem of the academic milieu only, but it is the future of Poland that largely depends on effective actions taken in this area. It is worth analyzing the experiences of others when taking strategic decisions. My cooperation with US universities has enabled me to carry out some benchmarking with regard to the Polish and the US educational systems, and this comparison constitutes the main argument in this chapter.

### 3. What do the data say and why are US universities the best?

When analyzing the effectiveness of the US system of higher education and the sector of scientific research, two factors seem to be the most convincing: the percentage of Nobel Prizes awarded to scholars working at US universities in relation to Nobel Prizes awarded to scholars working at European universities, and the way of financing the R&D sector.

Globalization processes and the development of the knowledge-based economy will increase the role and strength of world leaders; those corporations and countries that will have direct and instant access to the results of scientific research and its application are going to gain the most. Therefore, those who will create the best conditions for doing research and exploiting its results, and who will gather the best scientists, are bound to win. That is why the number of Nobel Prize laureates working in a given country clearly reflects its scientific potential, and consequently, its development potential as well. To illustrate, I add up the Nobel Prizes awarded in the decades from 1900 to 2009.

The data presented in Figure 6.1 speak for themselves, as it is clear that the share of Nobel Prizes awarded to Europeans within the last 100 years dropped from nearly 100 per cent to about 24 per cent in the years 2000–2009. In the same period, the number of Nobel Prizes awarded to researchers working in the USA rose from almost 3 per cent to more





Figure 6.1 Percentage of Nobel Prizes according to nationality awarded in the years 1900-2009 (excluding prizes in literature and the Nobel Peace Prize)  
 Source: Own based on Nobel Prize [online] available at: [www.nobel.se](http://www.nobel.se)

than 60 per cent. The number of Nobel Prizes awarded to researchers from outside the USA and Europe is gradually rising too (Braun et al., 2003).

Reports and analyses concerning higher education reveal dramatic differences between the ways of financing higher education in EU countries and in the USA. The volume of public funds is almost identical. In 2007, it was 1.1 per cent of GDP in the EU, and 1.0 per cent in the USA, whereas the volume of private funds that supported higher education was 10 times higher in the USA compared to the EU. In 2007, it was 2.1 per cent of GDP for the USA, and 0.2 per cent for the EU. The volume of private funds in the USA has considerably increased in the last few years, increasing from 1.2 per cent of GDP in 1999 to 2.1 per cent in 2007, whereas in most European countries it has remained on the same level (OECD, 2010).

#### 4. Sources of US advantage

If we take it as given that it is the best US research universities, not European ones, that set world standards, it is worth specifying what differentiates them from European universities. My personal experience in creating and managing a higher education institution that arose from the meeting of two cultures and systems of higher education in Europe,

including Poland and in the USA, suggests five main characteristics which put US universities at an advantage over European ones:

1. effective management of universities at the administrative level;
2. increasing scientific and didactic independence for faculty;
3. financial and organizational stability;
4. an academic life that unites scientists and students, and shapes people's characters and attitudes;
5. connections with the surrounding world, especially with the economy, that are much stronger than those in Europe.

#### 4.1. University management

Interestingly enough, it may be assumed with almost perfect certainty that, if a widespread and comprehensive debate regarding the future of higher education and science were to take place in Europe, such a debate would involve politicians and representatives of the academic world; that is, professors and the luminaries of science. If a similar debate were to take place in the USA, it would almost certainly also involve politicians and university representatives, but it would also engage professional groups – representatives of think tanks and private research institutes, as well as representatives of large business corporations vitally interested in implementing new scientific achievements, like in the pharmaceutical industry or in IT sectors. This is a substantial difference, as even the most passive observer of higher education in Europe will notice that European universities lack assertive managers who take charge of generating, transferring and applying knowledge. This seriously affects the state of European higher education and science.

Indeed, a crucial factor that differentiates European and US higher education is the way universities are managed. In the US system, managerial and academic functions have been separated, and a specific group was created, namely professionals specializing in managing higher education institutions, who are chosen for the position of president in a competition, and they are almost never part of the scientific or didactic personnel of the school over which they preside. A typical president of an US higher education institution is a graduate of a good university, who spent many years working at one or many universities as a researcher and academic teacher, obtained numerous titles and academic degrees, fulfilled various administrative and academic functions, and who received special training. Crucial factors in the selection process for the position of president are managerial skills, as well as the ability to combine academic experience with managerial skills.



US universities have preserved the system of terms as regards the office of president. However, terms of office in the USA are longer than in Poland, and the number of succeeding terms is generally unlimited. As far as management is concerned, the differences between the European, including Polish, and US systems of higher education lie in the fact that European higher education is determined by politicians and professors, and they are the ones who play a key role, defining strategies and making decisions. In the USA, the importance of politicians and professors is not so big, as they leave room for educational managers.

The issue of professional university management does not come down to effective management of finances, human and material resources, because an equally important factor in university management is managing knowledge, which is generated, processed and transferred, and the effective management of this knowledge is the key to achieving success. When observing the way public European universities are managed, it may be assumed that the president of a public university has three main functions: administering, representing and raising funds from public authorities. Factors which make it difficult for rectors of Polish universities to act effectively are a short term of office, the necessity to gain support from internal interest groups when re-elected and, naturally, attracting their support during the term of office, and the fact of returning to one's previous faculty position in the university that the rector held before being elected. All these factors obviously hinder development and sometimes even make it impossible for universities to develop.

That is why not only external observers, but also more critical, and impatient, employees of Polish universities have a strong impression that these schools are going nowhere, and that the time necessary for the school to adapt to the surrounding reality is excessively long. A university rector in Poland is usually elected by his fellow professors, and, inevitably, becomes their hostage. The US university president is elected according to special procedures, and the faculty have the right to express their opinion on the candidates; it is, however, people from outside the university, but strongly related to the university and vitally interested in its success, who have the biggest say. This includes members of boards of trustees in the case of private universities and state authorities in the case of state universities.

The position of the US president is very strong, and they have the right to choose their close collaborators such as vice presidents who are often people from the outside. The president studied, did his doctorate and worked at different universities; not infrequently he also managed

a few different universities, so he has wide experience, which allows him to take an objective look at the resources available and to effectively manage the university of which he is the president. He does not have to adopt the 'survival strategy' typical in Polish conditions determined by the necessity to go back to his faculty or institution, but he is functionally interested in the success of the institution he is in charge of, because its success, with his clearly visible value added, strengthens his position when running for the position for another term in the same university or when applying for a different position in a different university.

The need for strong leadership, either by a president or a dean, in present-day universities is rather urgent. As Drucker (1992) points out, the only constant in the functioning of organizations in the future is change. Making changes, however, even urgent ones and ones that are accepted by a majority of academic staff within a university, is a difficult process. Each traditional university (for-profit schools excluded) is a 'conglomerate' of bigger or smaller teams of research and didactic employees, largely independent (this independence is ensured by academic autonomy), immersed in the same administrative 'tissue'. Each team, beside scientific research, conducts didactic classes in a given group of courses or in the entire subject or specialization, and is therefore interested in the stability or growth of its didactic area, and almost never favors limiting or closing it, even in situations when there are no rational reasons for offering a given course of studies or group of courses.

The Polish accreditation system, which grants authorizations for study and the requirements of accreditation procedures, further reinforces stability. Gaining authorizations for study and accreditation often depends on the number of professors who conduct courses in given subjects, rather than on their rank. As a result, the number of these people grows steadily and professors try to keep their best PhD students, which, in turn, allows universities to recruit bigger numbers of students, irrespective of whether the need for experts in given fields determined by the local and global labor markets is high or low. Anyone working in higher education may give examples of educating students in areas that prove completely useless from the point of view of the labor market or educating specialists for dying branches of the economy. Higher education institutions require strong leadership if a given subject is to be closed and a number of research and didactic workers in given teams is to be reduced. The alternative, accepting uncontrolled growth, restricted only by the budget of a university, is negative in its effects and may lead to losing prestige and, consequently, to closing down the institution.



#### 4.2. Shortening the path to promotion

One important factor that distinguishes the US system of higher education from most European public systems is the simplification and shortening of the way to promotion for academic researchers. Pragmatic as they are, the Americans connected the title of professor only with the highest university function. Consequently, the final academic degree is the PhD, and the title of professor is linked to working at a given university and depends on winning the competition for the position on the basis of clear criteria, of which the most important are scientific achievements, and very important are didactic achievements. In most European countries, in addition to the position of academic professors, there is the academic title of professor conferred by the state. In some Central and Eastern European countries, there is a degree in between the two, the degree of *doktor habilitowany*. As access to most university posts at European universities is available only for people having the state title of professor or assistant professor, the time it takes to gain academic and organizational independence at European universities is very long, which strongly discourages many talented and dynamic academic teachers with a PhD degree from pursuing a university career. In the European academic culture, we may observe a professional corporation of professors, which, on the one hand, has almost monopolized taking higher university positions, from the department director on up, and on the other hand, has an advantage as regards access to research funds. Moreover, they hold their positions until the age of 70.

In this situation, it is hardly surprising that so many prominent young European researchers leave for the USA, where a 30-year-old having remarkable scientific achievements, and holding the position of professor at a renowned university, is not that unusual. In debates concerning the model of a university career in Europe, it is often argued that additional degrees and university titles and the related access to posts protect the prestige of researchers and deny access to key university posts to people with poor scientific achievements, and, as a result, the quality of a given university is unlikely to decrease. It is difficult to agree with this statement, as the fact that American scholars 'limit' themselves to the PhD degree does not stop them from having the most significant scientific achievements and receiving the most prestigious awards, including a growing number of Nobel Prizes. The European academic culture clearly makes it difficult for research in new areas to be conducted, as posts of department directors may be held by the same people for a few decades and, as a result, decisions concerning the areas of research to

be done and the distribution of funds for research do not change for such a long time. This practice concerns the most dynamically developing research areas, but it is quite the reverse in the humanities, where experience of many years may play a crucial role. In most European universities there are clear barriers that make it difficult for innovators to be promoted and for new innovative research areas to develop. The strict hierarchical structure of universities hinders enterprising and innovative activity on the part of young academics, and prevents them from gaining considerable organizational abilities at a young age.

#### 4.3. Finances and concentration of resources

In Poland, the key factor that stabilizes public universities, and at the same time one that hinders change and responding to the challenges of the contemporary world, is constant financing from the state budget. As with most European countries, Poland maintains the principle of free university education, so the state is obliged to finance its schools, even when it is clear that they are not useful or ill functioning. Easy access to public money, however limited, tends to encourage indolence.

An American professional university manager is not related to any interest groups within a university, and is not emotionally attached to creating specific teaching programs or doing research at this university, and, therefore, he is able to manage in a more rational and effective way, not just administer generating and transferring knowledge. He may create excellent working conditions and a proper motivation scheme for researchers and teachers of a university in an objective way, and also invest financial resources in research areas and research teams, which will bring the university the biggest benefits.

I would advocate adopting stricter scientific and educational policies by the state. When analyzing the policies of European countries in this respect, it may be assumed that it comes down to 'spreading' the money, that is supporting all universities and research units in an equal way. US practice in this matter seems to be different and more efficient. In order to avoid accusations of partiality, we may quote a commentary from the statement of the European Commission of 5 February 2003:

... for comparison, there are over 4000 higher education institutions in the USA. The lion's share of the academic potential of the USA, public funds for academic research and Nobel Prizes go to 50 of them.

This is the reason why the pragmatic managerial inclination to support the best brings very beneficial results on a national scale. It is also worth



noticing that the US system of financially supporting the best universities does not lead to closing down the other schools because they function on the real educational market. Depending on their legal status, that is on who is the founder of the university, they impose high or low fees, apply for federal or state grants and subsidies, or grants from private institutions or foundations, and their employees are used to the situation where they need to raise funds by themselves if they want to do research in their area. What is more, the US promotion system is healthier. Competitions for the post of professor require a longer research and didactic activity on the part of university faculty. It is common to constantly apply for jobs at better universities as one's scientific achievements and experience increase, and this, in turn, requires increasingly bigger involvement in university activity, in contrast to a typical Polish public university. Tenure crowns the academic career but it does not imply academic retirement; that is, holding the job at all costs (e.g. without doing actual work).

It is worth noting that the policy of concentrating public funds in the best universities is aimed at improving the quality of the scientific and didactic personnel employed in other universities. I have seen many CVs of American professors, usually working at universities that are not included in the top 50 universities. The CVs are marked by some common characteristics: studies, especially graduate studies, completed at one of the leading universities, frequently a PhD degree at a university of the top league, and experience working at a minimum of two or three state or private universities. This way of supporting the whole system of higher education by PhD graduates from the best universities, which is not forced, but based on the principle that the better wins over the weaker, gradually improves the quality of education in the whole US higher education system. PhD graduates who have spent a few years at the best universities bring in best practices of doing research, and techniques and methods of conducting classes with students, as well as the specific atmosphere of the teacher-student relations characteristic of US universities of the Ivy League. This leads to promoting the desirable improvement of quality.

One of the factors ensuring the greater financial stability of US universities is the diversification of the sources of financing. In this way, beside student fees, federal or state subsidies and research contracts with the private sector, a key source of financing, especially at leading universities, is money that comes from graduates, ranging from small annual donations to generous legacies. In order to maximize the effects of being supported by graduates and other benefactors, US universities

have worked out a system of communicating with persons who support universities financially, from special magazines addressed to graduates, to naming schools, institutes, research centers or departments or lecture rooms after their biggest donors. This diversification of sources of financing, and, especially, the well-developed system of private donations, builds long-term financial security for US universities. The best and most renowned ones have large endowment funds. In such institutions, there are no economic dangers triggered by the lack of resources essential for investment or research, and this accumulated wealth allows the schools to plan long-term strategies of development.

#### 4.4. Social environment

The higher education system in Poland is to a large extent in a double trap: fee-free education and the financing of public universities only from budget resources. This state is a trap because it hinders progress on the part of universities and sometimes even makes it impossible to introduce any changes that would lead to acquiring the desirable academic excellence. It has to be acknowledged that the dominant group on the list of top US universities is made up of private universities. A question arises whether this is only a coincidence or whether it is a regularity that stems from the general rules of capitalism, namely that an institution is better off when in the situation of the real market and strong competition.

Poland requires a strong sector of private universities, not only to free the state of the responsibility for financing higher education or to reduce this responsibility, but also to maximize competition among universities and encourage more universities to achieve academic excellence. A private university has two classical ways of maintaining long-term stability: either by 'selling diplomas cheaply' (i.e. offering easy studies for small fees) or by offering programs of studies of a very high quality. In the first case, the practice of ruining the educational market may be stopped by creating an effective national system of granting charters and accreditation as well as actions by relevant public authorities who must be entitled to deprive schools of the right to confer public academic and professional titles in case they lose their accreditation. In Europe, private elite universities operate only in the area of widely understood business education. Examples are the French INSEAD, the Spanish IESE and the German WHU. In the USA, the best private universities are to be found in a broad range of disciplines and the challenge for relevant Polish authorities is to adopt legal and administrative procedures that would make it possible to establish high-quality multidisciplinary



private universities presenting a diversified curriculum, and simultaneously rationalizing the financing and management of public universities in order to start the enhancement processes.

#### 4.5. Personnel mobility and dynamic social environment

An important positive feature of the US academic environment, which to a large extent facilitates encouraging and popularizing good academic practices, is high mobility of the academic personnel employed at US universities. Rarely does an American professor devote his entire academic career to one university, which is still typical European practice. More frequently it is two or three schools for their education followed by employment at several different universities. If we combine this with the practice of parallel work for private business or different kinds of institutions such as think tanks, research institutions, foundations, scientific associations or advisory companies, an American professor has a wider network of connections, and wider practical experience. Interestingly enough, this high mobility and the ease of moving from one university to another, especially for people with extraordinary results in scientific and didactic work, gives American professors the necessary intellectual independence and resistance to administrative pressures that is much more efficient and healthier than the famous European academic autonomy.

It seems that one of the most important reasons for the advantage of the US universities is the fact that they operate in a very dynamic social environment, where there is a quick transfer of knowledge and information and its accumulation in many different places. US society is extremely active; people form social organizations and professional associations, and they create a very wide social network that efficiently exchanges information. In the USA, there is proportionally the largest number of clusters of people acting together or meeting in special organizations, people having specialist knowledge, experts and prominent practitioners. In such cases, there is an instant accumulation of knowledge and multidimensional 'pumping' of new knowledge to participants in these meetings and among members of organizations. The social mobility of Americans translates into social activity of the members of the US academic community. University professors are often members of social and professional organizations. They are invited to give lectures and they invite experts and practitioners to their universities. In such conditions, the transfer of knowledge happens very quickly and successfully. Widespread knowledge of how to start a company, how to transfer technologies and so on, and practical knowledge is a

typical US phenomenon. All this creates a social climate that encourages an attitude of openness to new knowledge and the conviction of its availability. One of the secrets of the US success is that it is the widely understood social system, and not only the economy, that created mechanisms for identifying and promoting innovators. Such people are open to new knowledge and have the ability to process it. The concept of educating innovative people seems to be wholly real in the USA.

#### 4.6. The atmosphere of academic life

A typical characteristic of most US universities, especially the best ones, is the partner-like professor-student, or university administrative staff-student relationship. Students who pay for their studies, often very high fees, obviously expect a relevant curriculum, proper organization and partner-like treatment. Lecturers are aware that educating students is their primary, and often sole, responsibility. At a good US university, professor-student relations are not limited to the lecture room, which is often the case in European universities, with the exception of the best British universities. Such partner-like relations facilitate spotting the most gifted students, and at the same time building strong, emotional and long-term bonds between the students and their *alma mater*.

### 5. The future of the Polish higher education system and introducing necessary reforms

The future of the Polish higher education system largely depends on removing three stumbling blocks embedded in the system due to faulty laws. They are:

- financing the education of students from public funds only at public universities;
- slow promotion of researchers employed at universities;
- allowing through new laws, and greater acceptance in the academic milieu of more modest programs for part-time studies than for full-time studies.

Theoretically, all three of these would be easy to remove from the point of view of legal regulations and organizational procedures. However, these changes would disturb the interests of very influential groups, and they could also disturb the stability of public universities. Nevertheless,



in the long run, removing these obstacles would undoubtedly be beneficial for strengthening the whole system of Polish higher system and increasing the competitive potential of the country.

The present system of financing higher education is similar to the one in most European countries as far as its design is concerned. However, it is a caricature of the European system in its implementation. The Constitution of the Republic of Poland ensures democratic access to higher education, meaning studies are free of charge. In practice, however, this access is restricted to fewer than 50 per cent of current students. The others pay for their studies whether studying at private or public institutions. This restriction is caused by the insufficient funds provided by the public budget which limits the number of students who can be admitted 'for free' and forcing the rest to pay if they want a university education. It is highly probable that this situation will exist for years to come. Therefore, public universities will offer free studies for only a limited number of students. This is why there is the practice of recruiting candidates who achieved top scores in the high school exams for full-time studies at public universities. In this situation, as a principle, it is candidates from the wealthiest families, where investing in good education from early childhood and sending them to the best schools at an early stage of education are of primary importance, who are recruited. Such a 'gift' in the form of studies paid from public funds is of great value to well-off families, as the average cost of five years of university studies in Poland is 35,000 PLN, which is the equivalent of a small car. On the other hand, candidates who come from poor families living in small towns or villages, and who graduated from poor-quality high schools, must pay for their studies. Therefore, in Poland access to democratically ensured higher education seems to be distorted and socially unfair with regard to social groups that are in need of financial support from the state.

Now is the favorable time for change, because, in the next few years, the number of candidates will gradually decrease. The prospective change in financing higher education ought to be introduced along with changes in the way part-time studies are carried out. Introducing the European Credit Transfer System as the clear criterion for obtaining a diploma would equalize requirements for obtaining a degree and, with time, it would decrease the attractiveness of part-time studies, which are very popular today. The most favorable solution for Poland would be, in accordance with the democratically ensured principle of access to higher education, to finance the first or the first two years of studies for full-time students from the state budget. In Poland, the state donation

for academic activity at public universities in 2009 was 9356 million PLN (Central Statistical Office, 2010).

A simple calculation indicates that this money would be enough to finance the studies of all first- and second-year students in Poland. It would then suffice to wisely extend the grant system, so as to enable students from poorer families to continue their studies after successfully completing the first two years.

In 2004, I published a book (Pawłowski, 2004) titled *Spoleczeństwo Wiedzy – Szansa dla Polski (The Knowledge Society – a Chance for Poland)*, in which I argue that an effective university system in Poland, which would produce and maintain a well-educated citizenry for the country and a productive labor force for its economy, should include:

1. competence studies that would be free for about 20,000 students enrolled each year doing particular subjects in the best schools;
2. free-of-charge studies for all first-year students, regardless of the subject or mode of study, thus ensuring democratic access to higher education;
3. paid studies for the rest of the students, beginning with the second year; however, full-time studies, as the preferable form, would be partially supported from the budget through by about 3000 PLN per year for most subjects and more for technical and medical subjects;
4. free doctoral studies for the most developmental areas of knowledge, such as mathematics, physics, biotechnology and biology, for about 4000 PhD students enrolled each year for three-year full-time doctoral studies; additionally, PhD students, provided that they are promoted to the next year, would receive a grant of 50–60,000 PLN per year.

It may be assumed that, in the next few years, the number of students in Poland will be gradually decrease to the target of 1.0–1.2 million people, with the scholarization rate being 50 per cent. Introducing this new system of finance would be the most costly in the first several years, when present-day solutions would still be valid for present-day students and new ones would be adopted for new students. From the financial point of view, it would be easier to introduce the new system in about ten years, when the number of people enrolling will drop to fewer than 300,000 a year. The question is: can Poland afford to wait and waste chances and talents for as long as ten years? More than seven years have passed since my original proposals were made public. They have been generally well-received. However, the changes in the Polish system



of higher education have been nothing but minor corrections, which obviously puts the future of Poland at a disadvantage.

#### NOTES

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