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DIVERSIFICATION OF UNIVERSITY INCOME – POLISH PRACTICE AND INTERNATIONAL SOLUTIONS

Andrzej Rozmus¹, Karolina Cyran²

Abstract

In the face of global economic problems European (and not only European) universities are forced to diversify their income. The constant and stable stream of governmental funds for education is beginning to dry up. For the majority of Polish universities the main and noticeably dominant source of income are the revenues from teaching activity. Thus the current diversification of universities' revenues appears to be just a fiction. The situation is even worse because of both the global economic crisis and the imminent decrease in the birth rate.

Polish universities should follow funding models of foreign leaders, who successfully deal with diversification of their revenues. Obviously we cannot compare such universities as Harvard or Oxford with Polish universities, but some of their solutions are worth following. Only by diversifying sources of their revenues will Polish universities be able to compete with the foreign leaders and secure a stable basis for development and use of their potential.

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Introduction

In the face of global economic problems European (and not only European) universities are forced to diversify their income. The constant and stable stream of governmental funds for education is beginning to dry up.

Of course, the situation differs depending on the country or educational sector (public or non-public). The problem of dependence on both governmental grants for teaching students and tuition fees is however universal.

The fact that it is more a global than a national problem is proven by the research on higher education in developing countries. As Andrew Riechi writes:

“Despite their role in teaching, undertaking research and training of skilled manpower for economic development, public universities in developing nations especially those in Africa are facing financing crises. Over the past decade or so, these institutions have continued to receive less financial allocations from their governments than their estimated expenditure. Given the prevailing unfavorable economic conditions in developing countries, governments are unable

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to adequately finance the provision of public services including education. This means that a trend of under funding in the public education sector especially the university sub-sector is expected to persist in the foreseeable future” (2012).

The seriousness of this problem in the European dimension is described in the reliable study by Thomas Estermann and Enory Bennetot Pruvot: *“Financially Sustainable Universities II - European universities diversifying income streams”* (2011).

The authors, working under the auspices of the European University Association, underline both the economic and social role of diversification of universities’ revenues. Globalization, increasing competition between universities, budgetary problems of many European governments or demographic factors – those are only a few reasons to encourage universities to look for as many funding sources as possible (Estermann and Pruvot, 2011, p. 12).

It could even be said that in some sense the idea of diversification of universities’ income corresponds with the doctrine of sustainable development. This is because this doctrine strives for social justice using i.a. economic effectiveness of enterprises provided e.g. by strict account of production costs, extending itself in a very complex way to the external resources (OECD, 2006). The higher education sector should set an example of how the idea of sustainable development can work in practice by developing appropriate attitudes among young people (respect for environmental resources, long-distance planning of actions taking into account the effects on society and the environment) on the one hand, and appropriate management of its own resources, including financial reserves, on the other.

As mentioned by the authors of the report on the role of higher education in the process of caring about sustainable development: *“Higher education institutions play a major role in improving the environment, preserving natural resources and making an economic and social impact. Graduates are entering a volatile world and higher education needs to respond to challenging, rapidly changing socioeconomic and environmental conditions. Through their roles as educators and researchers, institutions can contribute to securing a safer and more sustainable future against recognised threats such as climate change and global poverty”* (HEFCE, 2009, p. 6).

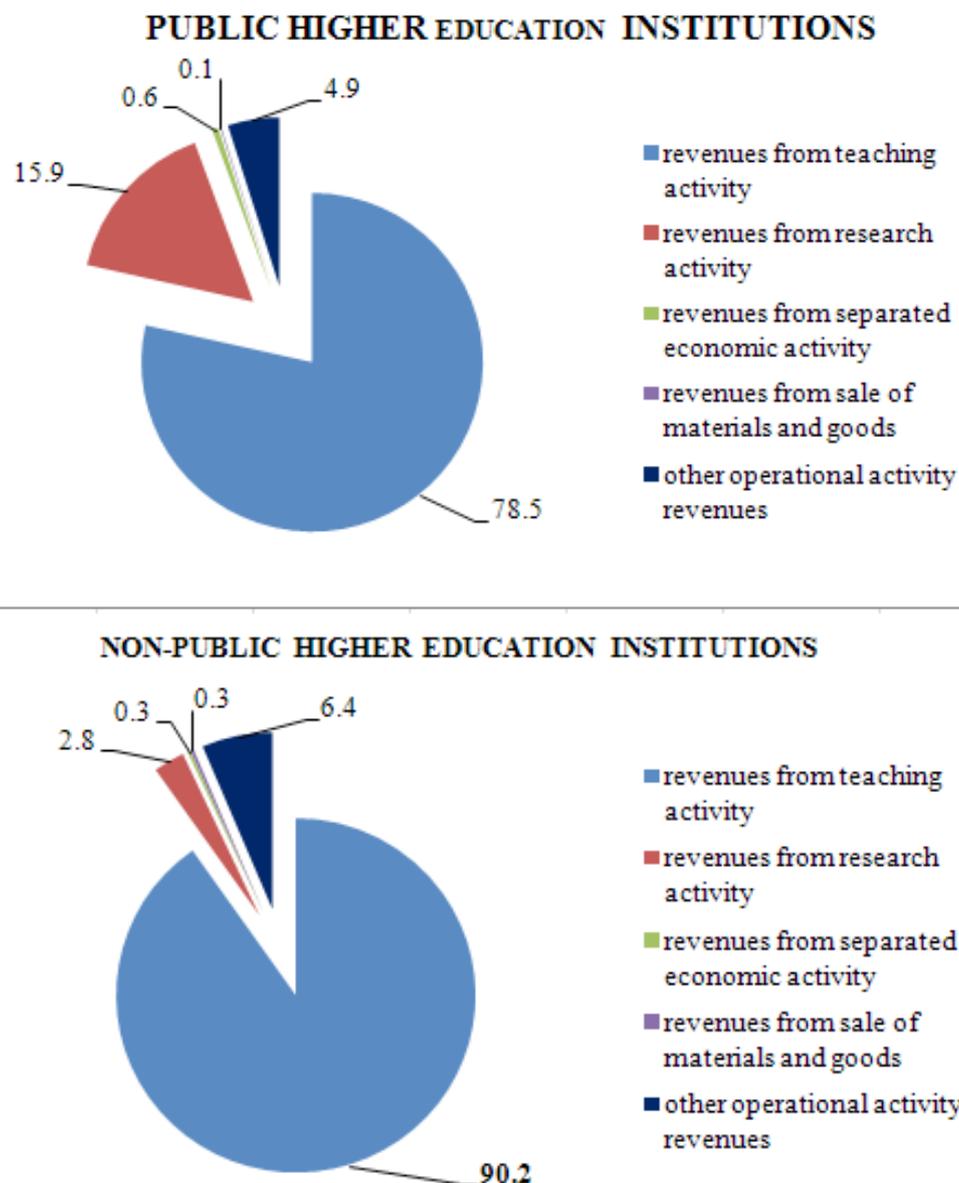
It should be stressed that draining just one funding source (e.g. governmental) by some universities goes against the idea of sustainable development since these funds, as the common good, may probably be spent in much better ways. However, without engaging in the discussion about the need for income diversification, it is worth considering how Polish universities manage to gain funds from different sources, and also how the world’s leading universities diversify their revenues.

Diversifying sources of income at Polish universities

For the majority of Polish universities the main and noticeably dominant source of income are the incomings from teaching activity. At some universities they even constitute the all revenues. In 2010 78.5% of all public universities’ operational activity income came from teaching activity and 15.9% from research activities. The remaining 5.6% were: revenues from separated economic activity, revenues from sale of materials and goods, the cost of the production of benefits for the needs of the education institution and other operational revenues.

For non-public universities these indicators are even worse: in 2010 90.2% of all revenues from operational activity came from teaching activity, only 2.8% came from research activities, and the remaining 7.0% were other operational revenues. (GUS, 2011, p. 342).

Graph 1: Structure of operating activity revenues in higher education institutions by type of activity in 2010



Source: *Higher Education Institutions and their Finances in 2010*, GUS, Warsaw 2011, p. 342

Taking into account the revenues from teaching activity, in 2010 the subsidies from the state budget and fees for teaching activities constituted respectively 67.7% and 19.7%, at universities, at technical universities – 75.8% and 12.3%, at agricultural academies – 76.9% and 12.4%, at academies of economics – 53.6% and 36.9%, at higher teacher education schools – 69.3% and 23.0%, at physical academies – 70.0% and 20.2%.

In non-public universities the main share in the revenues from teaching activity were tuition fees (86,6%). The main source of revenues from research activity in public universities were subsidies for financing statute activity and in non-public universities - funds for carrying out research projects (GUS, 2011, p. 343).

If we add the governmental funds for teaching activities and subsidies for financing statute activity, it seems that public universities are almost entirely dependent on the state budget. On the other hand, non-public universities seem to be almost completely dependent on tuition fees. Thus the current diversification of universities' revenues appears to be just a fiction. The situation is even worse because of both the global economic crisis and the imminent decrease in the birth rate. According to the forecasts, in Poland there will not be any growth in the age group 19-24 before about 2026. Until then we will be observing a decreasing number of people at the "best" age for studying (GUS, 2009).

Table 1: Change in number of people in the age group 19-24 (2007=100)

age group	2008	2009	2010	2015	2020	2025	2030	2035
19-24	96.3	92.8	89.5	74.8	61.6	56.7	62.8	64.2

Source: *Population projection for Poland 2008–2035 GUS, Warszawa 2009*
http://www.stat.gov.pl/cps/rde/xbcr/gus/PUBL_L_progniza_ludnosci_na_lata2008_2035.pdf

Table 2: Increase/decrease of population size in the age group 19-24 (in thousands)

Wiek	2008	2009	2010	2015	2020	2025	2030	2035
19-24	-140.4	-1312	-124.6	-553.7	-496.8	-185.0	231.5	49.7

Source: *Population projection for Poland 2008–2035 GUS, Warszawa 2009*
http://www.stat.gov.pl/cps/rde/xbcr/gus/PUBL_L_progniza_ludnosci_na_lata2008_2035.pdf

What seems interesting is that this problem concerns not only non-public universities – the public ones are also struggling with decreasing enrolment and financial problems. Many of the recognized and respected public universities have debts which do not allow them to develop in their desired direction.

The reasons for this state of affairs are even more serious than the upcoming baby bust. There are at least two: too many universities in Poland (more than 450 at the moment of writing this article) and a non-effective funding scheme in higher education.

As Tadeusz Pomianek claims: "the current funding scheme is just an effective recipe for a worse and worse educated graduate. It encourages poor quality and waste of public funds. Instead of the level of the studies, the number of students is the only guarantee for existence - in both types of universities: public and non-public. (...)".

"Furthermore population decline will intensify this "struggle for a student at the expense of quality". This higher education funding scheme is ruinous also for public universities. As the above-mentioned data prove, all possible resources are involved in boosting the number of students instead of developing research activity and the cooperation of science and business. This is not a way leading to a solid development of universities" (2011).

This dependence on just one source of funds deprives universities of chances to develop. What should be emphasized once more is that it concerns both sectors: public and non-public.

Obviously, there are some universities in Poland which are aware of the need to diversify revenues – these are some technical universities, the University of Science and Technology in Kraków, or – among the non-public ones – the University of Information Technology and Management in Rzeszów, whose half of revenues today (2012) comes from non-teaching activity (e.g. revenues from research and development and European Funds).

However, these are isolated cases. The overwhelming majority of Polish universities does not (and cannot) make an efficient move to achieve practical and measurable income diversification.

American universities - model patterns in the diversification of income sources

In the U.S., a combination of public funding for education and research together with large private funding creates a situation in which the best universities have funds that are unattainable in other countries. Harvard University and Stanford University might serve as examples here. The annual revenues of Harvard University in 2010 reached \$3.7 billion (about 13 billion PLN), and the value of the assets of the Foundation at Harvard University is \$32 billion. A similar situation exists at Stanford University, where the budget in 2011 amounted to \$4.1 billion. Meanwhile, the revenues of all non-public universities in Poland in the same year equalled about 3.2 billion PLN, and in case of public universities - 16.5 billion PLN (GUS, 2011).

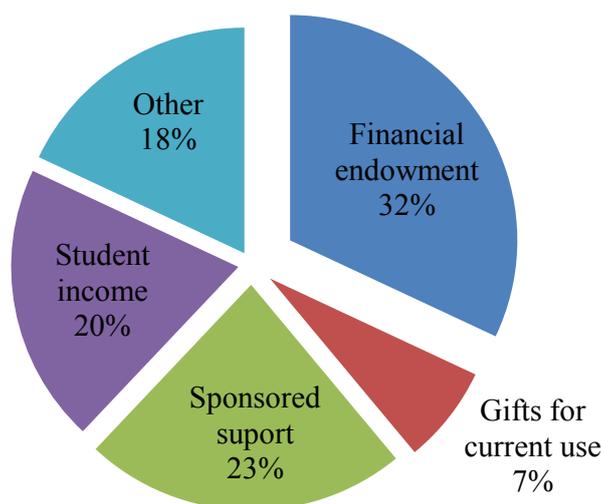
Harvard University was founded on September 8, 1636, and was the first university of the British colonies in North America.

Currently, it consists of schools (departments), where learning takes place at colleges (undergraduate institutions, whose graduates receive a bachelor's degree: BA/BSc) or at schools where it is possible to obtain an MA or PhD degree (graduate and professional schools). There are about 21,000 students at the moment.

The main sources of the university's income are as follows:

- 1) financial endowment,
- 2) student income: tuition fees, board and lodging,
- 3) sponsored support: grants for education that come from central government and federal sources,
- 4) gifts for current use: funds from donors / corporations devoted to current expenses,
- 5) other: royalties from patents, copyrights and trademarks, rental and parking, publications, services income, sales income, interest income, etc.

Graph 2: Structure of operating revenues in 2011 at Harvard University - as of June 30, 2011 (presented in [%])



Source: Annual Reports Harvard University, <http://vpf-web.harvard.edu/annualfinancial/>, p. 4

Stanford University has a very similar structure of income. This university is ranked second in the overall ranking of all universities in the world. The main income of this university in

2011 comes from the following sources: revenues from sponsored research (29%), endowment income (20%), student income (18%), health care services income (13%), expendable gifts and net assets released (7 %) and other income (9%).

As it can be observed, a very important, and in many cases the most important source of funding for U.S. universities is the accumulated “iron capital” of the university (endowment) derived from donations and previously invested resources (Wilkin, 2010).

Endowment is a specific type of asset which is meant to generate revenue for the organization. It is usually also considered a basis for its functioning. This is an inviolable capital, separated from the property of the organization, which constitutes a long-term protection of statutory activities of the organization.

There are three types of iron capital based on its purpose:

- 1) capital for general support of the organization (general institutional endowment), destined to provide regular income to cover expenses of the organization,
- 2) special purpose capital (special purpose endowment) designed to support a particular program of the organization, such as a scholarship program,
- 3) endowment-like grants to finance activities of the organization, but without the restrictions that are present within a true endowment. Grants may be present in two forms:
 - a. grants that reduce the base capital (capital depletion grants), with a specific duration time (an organization can get benefit from both capital gains and from the capital itself) and,
 - b. reserves (working capital reserve grant), ensuring the survival of the foundation in the case of unexpected loss of income from other sources.
- 4) endowment-related grants intended to support the management of endowment by funding –e.g. investment strategies. These grants may also be used to support the campaign of endowment collection or production of educational materials about endowment.

The main purpose of iron capital is to secure the financial condition of the university, acting as a safe asset and allowing universities to act not only in the times of prosperity, but also during the crisis (Domaradzka and Widła, 2009).

At Harvard University, the endowment income in 2011 accounted for 32% (i.e. \$32 billion) and was the main source of revenue. Such high iron capital made this university the second richest non-profit organization in the world (after the Bill and Melinda Gates Foundation).

Table 3: Structure of revenues from endowment on June 30, 2011 in Harvard University (in thousands of dollars)

Endowment funds	23,131,202
Funds functioning as endowment	8,288,451
Pledge balances	284,649
Interests in trusts held by others	308,427
TOTAL ENDOWMENT	32,012,729

Source: *Annual Reports Harvard University*,
<http://vpf-web.harvard.edu/annualfinancial/> p. 35

Stanford University has the third largest academic fund in the world. As can be read on the web page of the university: “Stanford’s \$16.5 billion endowment (as of Aug. 31, 2011) provides an enduring source of financial support for fulfillment of the university’s mission of teaching,

learning and research. About 75 percent of the endowment is designated by donors for a specific purpose. There are nearly 7,000 endowed university funds.”

Another important sources of revenue for the American universities are the federal government sponsors and non-federal sponsors. For example, the revenues from these sources at Harvard University in June 2011 accounted for 23%, while at Stanford University – 29% of total revenue. Thus, research and university projects are to a large extent possible thanks to the funds that are obtained from foundations, corporations, government and scientific organizations. Universities also get many benefits through cooperation with local, federal and state governments. They create partnerships with government units, and often act as leaders in projects of high importance to the region and even the state (Forys, 2004).

Another very important source of funding for the above-mentioned universities is student income. Tuition fees amount to \$35 - 40 thousand per year. However, these are not the only costs incurred by students. Additionally there has to be added about 7,200 thousand for accommodation, about 4,5 000 for meals, nearly 3,000 for insurance, about 2,000 for additional fees and a couple of thousand for personal expenses. In total, these additional costs can sometimes equal the amount of the tuition fee. In 2011, student income at Harvard University came to \$740,573 thousand.

It should be noted, however, that the best American universities have very large financial resources and many sponsors, offering scholarships that are appropriate for the candidates’ needs. Harvard University may again serve as an example, which has adopted the need-bling admission system. This means that if someone is accepted at Harvard but cannot afford to cover the costs of study, the University provides assistance by financing tuition fees and maintenance (such a student does not pay for tuition, dormitory or meals, obtains the funds to purchase books or other personal items and even gets travel expenses reimbursement). Such a policy makes it possible for the best candidates to study, regardless of their income.

Currently, approximately 70% of Harvard students receive some financial assistance, of which almost 60% is entirely need-based. In 2011, the value of approximately \$ 335,000 was destined for non-repayable maintenance grants.

Table 4: Revenue structure from student income on June 30, 2011 at Harvard University (in thousands of dollars)

Undergraduate program	254,095
Graduate and professional degree programs	411,153
Board and lodging	149,972
Continuing education and executive programs	260,390
Scholarships applied to student income	- 335,036
TOTAL STUDENT INCOME	740,573

*Source: Annual Reports Harvard University,
<http://vpf-web.harvard.edu/annualfinancial/> p. 15*

An important source of income are also the funds collected from alumni and friends of the university, i.e. „Gifts for current use”. Building the relationships with alumni and friends of the university is a very important part of the university’s external policy. Most universities have units responsible for maintaining contacts with alumni and friends, which organize meetings, reunions, seminars, lectures, tours and training courses for alumni and friends.

In Poland it does not seem likely to adopt such a funding system, however, it might be wise to introduce a change in the tax rules so that wealthy people were more inclined to support foundations. Another income source are royalties from patents, copyrights and trademarks, rental and parking, publications, services income (e.g. university shops, where in addition to books, course-books and souvenirs with the college logo, you can make use of the services of a travel agency or a bank), sales income, interest income, etc.. For example, at Harvard University in 2011 the value of such income was 18% of the overall revenue.

Table 4: Gifts received for the years ended June 30, 2011 are summarized as follows (in thousands of dollars)

Rental and parking	136,102
Royalties from patents, copyrights, and trademarks	107,067
Publications	78,079
Services income	62,010
Health and clinic fees	49,878
Sales income	49,103
Interest income	10,768
Other student income	6,711
Other	46,882
TOTAL OTHER INCOME	546,600

*Source: Annual Reports Harvard University,
<http://vpf-web.harvard.edu/annualfinancial/> p. 44*

Furthermore, the concept of “lifelong learners” (a substantial source of Harvard’s professional education arm income) is also very important. In an era in which the pace of economic change increasingly demands that workers become “lifelong learners,” the research universities have emerged as major providers of continuing education.

To sum up, as can be concluded from the data presented above, the income of both Harvard and Stanford University comes from many different private sources (own and external endowment). Thanks to that these universities can develop and work on the projects that would be impossible to carry out using only government subsidies.

However, not only such well-known universities as Harvard and Stanford are looking for financial independence by seeking for a so-called “third stream of funding” i.e. additional, private and non-traditional sources of funding (non-core/non-state income). Also the smaller and perhaps less known universities feel the need to change their sources of income from public budgets to private sources. For instance, at Clemson University and Radford University the main sources of revenue include: student tuition and fees, sales and services, grants and contracts, state appropriations, federal appropriations, gifts and grants, investment income and endowment income.

University of Cambridge and University of Oxford – the best universities in Europe

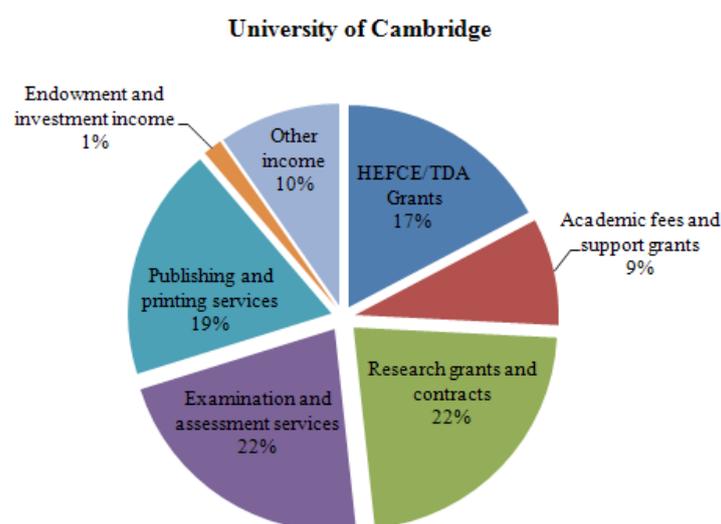
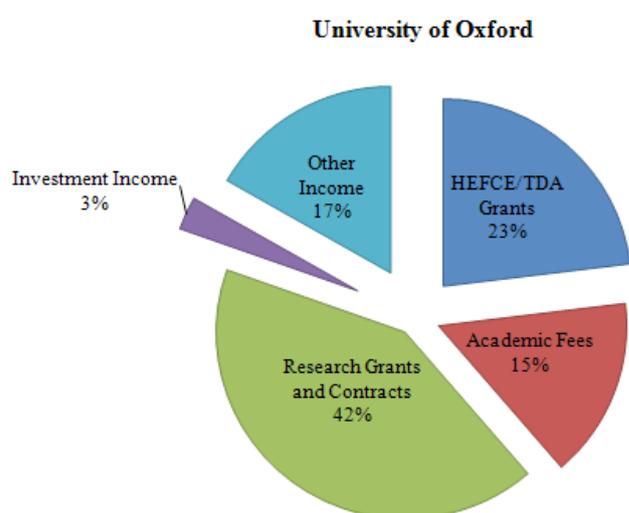
In Europe, British universities are classified high in international rankings. This success is due to two universities mainly: **Cambridge and Oxford**, where the share of private sources in overall revenue is growing very rapidly.

The sources of income of the Universities are:

- 1) the government, which through the Higher Education Funding Council for England (HEFCE) provides a block grant for teaching and a grant determined by the quality and volume of research through the Research Assessment Exercise last carried out in 2008,
- 2) students through fees charged for instruction and facilities,
- 3) research income from publicly funded Research Councils, charitable foundations, and through collaborations with the private sector,
- 4) benefactions and donations for current use,
- 5) investment income from our accumulated endowment,
- 6) income from services provided to external customers, including the customers of Cambridge Assessment and Cambridge University Press,
- 7) a small but increasing income from commercialization of intellectual property.

Table 4: Consolidated income account for the year ended 31 July 2010 (in £m)

	University of Cambridge	University of Oxford
Funding body grants	205	203
Academic fees and support grants	102	137,3
Research grants and contracts	268	367
Examination and assessment services	260	-
Publishing and printing services	222	-
Endowment and investment income	18	25
Other income	115	147,5
TOTAL INCOME	1,190	879,8



Source: *Annual Reports of Cambridge University*, <http://www.admin.cam.ac.uk/univ/annualreport/2010/Statement.pdf>, p.65, and *Annual Reports of Oxford University: Financial Statements of the Oxford Colleges (2009-10)*, www.ox.ac.uk/document.rm?id=1779, p. 1

When analyzing the above structure, it should be noted that the power of the University of Cambridge and the University of Oxford is built primarily on the huge financial resources gained by

these institutions for scientific research. In 2010, income from research activities at the University of Cambridge accounted for 22% of the total revenue, while at the University of Oxford - 42%. This is possible - among other reasons - due to university-business cooperation. The research carried out in cooperation with companies provide the universities with access to innovations from all around the world, which explains the rapid increase of their revenues. Moreover, the movement for the change of legal status of universities into foundations or public benefit organizations is getting more and more popular in Europe. Additionally, university science and technology parks are created, and universities are also shareholders of spin-off companies. It should be noted that the University of Cambridge and the University of Oxford are the only European universities with such a high share of "iron capital" (endowment) in their income.

Conclusions

It may be concluded that in Europe the dominant view is that universities should be financed by government subsidies and tuition fees. However, taking into account different funding schemes at universities around the world, it appears that in many cases those two sources represent a minor share of universities' revenues.

Universities such as Harvard, Stanford, Cambridge and Oxford, which are in a strong position in the world rankings, determine the path that other universities should follow.

Their method is to look broadly for "the third stream" of funds which could go together with the model of financing by philanthropy and building strong reserve fund (*endowments*).

European and Polish universities should try to follow these examples, especially in the area of administration, diversification of income streams and cooperation of science and business.

In terms of the level of this diversification Polish universities pale in comparison with British or American ones. Currently they are mainly funded by three sources:

- 1) state budget subsidies, funds from local governments' budgets and other public funds (for teaching and research activity, material assistance for students and investment activity),
- 2) own resources (tuition fees, fees for failing exams, student record books and student cards, foreign non-refundable financial funds),
- 3) external funds (gained mainly from EU funds, in lesser part from business cooperation and gifts).

Meanwhile the main funding sources in the above mentioned, leading universities are:

- 1) endowment, used for constant financing of university activities,
- 2) gifts for current use,
- 3) student income,
- 4) sponsored support,
- 5) income from science and business cooperation and
- 6) others, including: royalties from patents, copyrights, trademarks, rental and parking, publications, services income, sales income.

Unfortunately, Polish universities incompetently multiply funds (if they do it at all). Perhaps there is a need to change legal regulations so as to encourage universities to invest funds. This is the only way to create a so called "endowment" ensuring financial stability and constant stream of funds for the university's activity.

Obviously we cannot compare such universities as Harvard or Oxford with Polish universities, but some of their solutions are worth following. In the above-mentioned Estermann and Pruvot's study about the diversification of funding bodies, we can find some recommendations for universities. The authors divide them into four modules: 1. integrate income diversification in

your institutional strategy; 2. invest in people; 3. incentivise faculties & staff to take an active part in income diversification and 4. interact smartly: set up professional stakeholder management (Estermann and Pruvot, 2011, p. 87).

In the first module the following activities are recommended: Apply a proactive approach in diversification and identify opportunities, incorporate partnerships with broader implications across the whole institution and engage the academic community in the diversification strategy and its actions. The second module suggests to invest in the development of institutional human capital to improve further capacities and competences, to engage in income diversification and establish and nourish strong leadership and management. In the third module it is advised to increase the use of untapped potential within the universities, design resource allocation models that provide incentives for income diversification at faculty/departmental level (performance agreements, development plans) and provide incentives that foster the commitment of the academic staff to the strategy. And finally in the fourth module there are recommendations to create a professional stakeholder management (create a “brand” around the university), enhance the awareness that the university is creating value for external stakeholders and identify areas of mutual benefit with local and regional partners (Estermann and Pruvot, 2011, p. 87).

To sum up, we should start rethinking our higher education funding scheme, due to the fact that some of the solutions applied in foreign leading universities are possible to implement in Poland. These are: encouraging universities to invest their funds, employing experienced managers in university management posts, and making the institutional assessment of university dependent on its effectiveness in gaining external funds. Following these recommendations could result in release of research and development potential at many universities.

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