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EUROPEAN FUNDS AS A PUBLIC FORM OF INVESTMENT IN HIGHER EDUCATION INSTITUTIONS IN POLAND

Introduction

The internationalization of higher education and economic integration have a significant impact on higher education policy of particular states, especially in the area of the public investment. Despite the fact that education is not subject to regulations that result from EU membership, it is obvious that particular member-states influence the EU policy so that it should take into consideration the needs of education, higher education including. The EU budget reflects the financial policy of the Community.

The aim of the paper is to present EU funds as a significant impact factor on investment in the sector of higher education in Poland by correlating the intensity of the funds with – among other elements – the investments of the schools of higher education. The data necessary for the investigation were obtained mainly from the reports of the Central Office of Statistics (GUS), (including the publication *Szkoły wyższe i ich finanse* (Higher Education Institutions and their Finances), as well as from the study of the literature on the subject.

1. European funds as an instrument of EU financial policy

The EU financial policy is based on the so called general budget from which various areas are paid that are related to the EU policy and have legal basis in the Treaty documents[1]. Thus, the EU budget is an organizational institution (EU being the organization) from the point of view of institutional economics. The budget is the most important financial instrument that supports the integration processes within the EU. Consequently, the EU general budget is one of the basic instruments of economic policy[2] and, as a result, it is the policy tool of particular member-states that influence the trends of EU development policy. The EU budget differs from the budgets of particular states in terms of the targets and the means to achieve them.

[1] J. Osiatyński, *Finanse publiczne*, Wydawnictwo Naukowe PWN, Warszawa 2006, p. 262.
[2] L. Oręziak, *Finanse Unii Europejskiej*, Wydawnictwo Naukowe PWN, Warszawa 2009, p. 106.

1) unity – which means that all revenue and expenditure must be entered in a single document,
2) universality – which means that budget revenue must not be assigned to expenditures;
3) annuality – which means that all budget operations should be assigned to one year.

An important characteristics of the EU budget is that – according to the regulations – it must always be balanced, i.e. there is no eventuality for a deficit[3]. In the case when in the course of a budget year the expenditure exceeds the revenue, changes to the budget are required. When a budget surplus appears in the budget year, it is treated as the revenue of the next year.

The EU budget is supplemented by the member-states within the framework of the so called own resources which include (Owsiak, 2005, p. 768; Oręziak 2009, p. 151):

1) traditional own resources - i.e. agriculture and sugar levies and taxes;
2) revenue based on VAT;
3) membership fees from the EU member-states calculated by their GNI;
4) other revenue, e.g. personal income taxes from individuals employed in the EU institutions, possible penalties charged by the European Commission.

The expenditure in the EU budget is crucial as its forecast constitutes the basis for the determination of the budget revenues. The budget expenditure is broken down within the EU budget into two main headings (Podstawka, 2010, s. 767):

1) administrative expenditure, i.e. related to the maintenance and operation of community institutions;
2) operational expenditure, i.e. the expenditure assigned to achieve the targets of the common EU policy.

When considering the fundamental targets of the European integration, the most significant group of expenditure is involved with the accomplishment of the common EU policy targets. This includes the expenditure on the common agricultural policy and the costs related to the strengthening of the EU economic and social cohesion.

Since late 1980s, due to the dynamics of the European integration processes and the accession of new member-states, the budget policy has been related to the so called financial perspective. Financial perspective is a long-term schedule of operations that are connected with

[3] Treaty of Amsterdam, Office for Official Publications of the European Communities, Luxembourg, 1997, Art. 268.

the EU budget policy and which aims at the determination of the financial seven-year framework for the Community operations. The perspective determines maximum expenditure for seven-year intervals and the expenditure reflects the main targets of the Community policy that were agreed on by the member-states[4].

The structure of the EU budget, the revenue sources and the trends in expenditure determine the fact that the budget is a part of public finance and its impact has the features of interventionism of the UE member-states towards the economic growth. Moreover, structural and cohesion funds (which constitute the EU budget expenditure) are the key instrument to influence the economy. As regards the role of funds conceived as the public forms of investing in higher education, two structural funds are of the greatest significance. Tthey are: the European Social Fund (ESF) and the European Regional Development Fund (ERDF).

ESF is one of the main EU financial instruments. Its objective is to model the employment in the member-states and to promote economic and social cohesion. The main prerequisite of EFS operations is to reduce the differences in the affluence level and life quality of EU inhabitants. Such objectives are clearly in line with the macroeconomic definition of human capital as the crucial factor of economic growth support. The origins of ESF date back to the late 1950s and its legal conditions were included in the so called Rome Treaties[5]. ESF, as a structural fund, is the instrument applied to finance the EU priority areas that are related to the objectives of the cohesion policy which were developed by the member-states[6]. One of the key areas of ESF financing is human capital, whose crucial element is constituted by the investment in education, higher education including.

In Poland, the implementation mechanisms of ESF projects are determined through operational programs[7], in which the so called priorities are distinguished that define the objectives of the Fund resources. The Lisbon Strategy and the European Commission program documents emphasize clearly the significance of higher education in shaping and developing knowledge-based economy. Thus, every program cycle includes priorities that provide for the instruments dedicated to higher education.

ESF can also cover investments that aim at:

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[4] Podstawka M. (ed.), *Finanse*, Wydawnictwo Naukowe PWN, Warszawa 2010, p. 767.
[5] Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union , Official Journal of EU C83, Vol.53
[6] Tkaczyński J.W., Świstak M., *Encyklopedia polityki regionalnej i funduszy europejskich*, Wydawnictwo C.H. Beck, Warszawa 2013, pp. 118-119.
[7] Operational programs are only an ESF implementation tool in Poland and cannot be identified with the fund that is the financial capital source

1. strengthening the teaching potentials of higher education institutions,
2. adapting syllabuses to the needs of the labour market,
3. improving the quality of educational offer ,
4. enhancing the attractiveness of teaching in the areas of mathematics, physics, engineering and natural science,
5. enhancing the qualifications of R&D staff.

Soft operations can also be subsidized by ESF with the exclusion of material investment. However, the so called cross-financing is acceptable, i.e. the use of a part of resources from other structural funds to cover material expenditure in the scope of projects supported financially by ESF.

Higher education absorbs substantial funds from ESF, e.g. to develop syllabuses for the so-called ordered specialties, modernize syllabuses, enhance the qualifications of the teaching and admin staff as well as to conduct international exchange within the framework of educational and research co-operation.

In 1975 the European Regional Development Fund (ERDF) was established, which – as opposed to EFS – " is intended help to redress the main regional imbalances in the Community through participation in the development and structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions"[8]. The ERDF resources are directed towards[9]:

1) investments that aim at the creation and maintenance of jobs for EU citizens;
2) infrastructure investments, which - after financing period - should support a durable and sustainable growth;
3) the development of endogenous potentials through the support of local and regional development;
4) technical support.

As a result of the catalogue of operations that can be financed by ERDF, the main function of the Fund – as far as higher education is concerned – is focused on hard investment projects, i.e. projects that are material in character. The effect of the functioning of ERDF is the financial feasibility of projects that consist in the construction, development or modernization of the infrastructure of higher education institutions, the purchase of teaching facilities and a direct investment support.

[8] Treaty on European Union, EU Official Journal C321E.
[9] Ibidem.

ERDF can also finance operations out of the higher education sector that aim at the co-operation in the areas of operation of schools of tertiary education.

European funds are a wider category than EU funds and, consequently, in the methodological review one should take into consideration[10]:

- the European Economic Area (EEA) Financial Mechanism,
- the Norwegian Financial Mechanism (NFM),
- the Swiss Financial Mechanism (SFM).

The EEA Financial Mechanism and NFM are the result of two agreements signed between Poland and Norway, Iceland and Lichtenstein. The main objective of the implementation of these funds is to reduce inequalities in the social and economic development between the Donators and Poland.

SFM started operating on February 2006 when the governments of Poland and Switzerland signed a memorandum on the implementation of support regarding the reduction of differences between the social and economic development of Poland and the developed EU countries. The funds from SFM are designed for public and private sector institutions as well as NGOs.

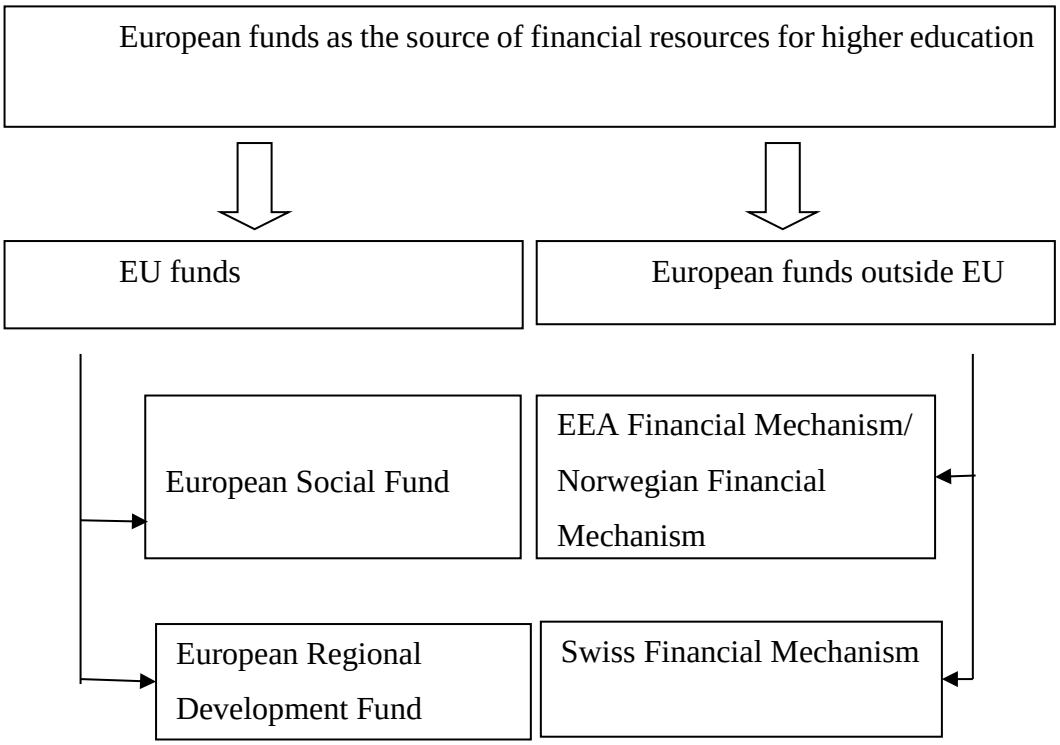
As regards science and higher education, SFM assumes the support of international exchange programs, the creation of scholarship funds and the financing of scientific research. Within the framework of the general criteria for support, the schools of higher education can also apply for financing pro-environmental activities, e.g. in the area of renewable sources of energy[11].

A synthetic presentation of European funds that are available to higher education is given in Fig.1.

The article – due to the fact that aggregated data are available – analyses the implementation of EU funds as the public form of investment in higher education. Such task, apart from the identification of the source of the means, involves placing the EU funds in the financial structure of a school of higher education. Thus, the EU funds have to be referred to the regulations of balance sheet law and the financial management of schools of higher education, the more so as – when implementing the funds - the schools become both beneficiaries and investors which decide on the allocation of public resources.

[10] They are not EU funds and their implementation is conditioned by signing appropriate agreements between the government of the Republic of Poland and the Donating-States; A. Szymańskia, *Fundusze UE dla mikro, małych i średnich firm,* Placet, Warszawa 2008, p. 26.
[11] www.programszwajcarski.gov.pl (accessed: 01 June 2014)

Figure 1. European funds for higher education



Source: Author's research

EU funds in the context of balance sheet law.

From the point of view of the balance sheet law, EU funds are perceived as grants that result in the investments (material or untouchable assets) of schools of tertiary education. The type of the subsidized project involves the way in which the information about the grant is disclosed, which is provided by IAS 20[12]. The reference to international regulations is important as the Polish balance sheet law does not define issues that concern the accounting for of grants, including EU funds. IAS 20 classifies grants - and consequently also the funds transferred to beneficiaries within the distribution procedures European funds - in two ways depending on the subsidized project implementation results.

The first method is connected with infrastructure projects that result in balance sheet effects on the asset side (a new position of intangible and legal values and/or tangible fixed assets). In such cases, in the course of a financial year, the acquisition of a grant by a school of

[12] IAS 20, Accounting for government grants and disclosure of government assistance, EU OJ , L.320/130

tertiary education involves firstly an increase in funds on a separate project bank account. As a result, the value of current assets increases and other operational revenue appear in the operating activities segment of the profit and loss account. The disbursement of the grant leads to a gradual decrease in the funds in the separate bank account. On the asset side of the balance sheet the so called active operation is created, which results in the transformation of current assets (the funds from the grant) into intangible or/and legal values or tangible fixed assets. Then, at the end of the financial year, the balance sheet of the school will show tangible and legal values or/and tangible fixed assets. The grant will be accounted for in other operating activities of the profit and loss account, while the disbursement of the funds from the grant will show in the bank account. In the cases when the grant is not fully disbursed in the course of the investment process, the remaining amount will be visible in current assets and accounted for in the opening balance sheet for the following period.

The other way of accounting for grants in the account books of higher education institutions is applied in the implementation of projects that are non-structural in character. The accomplishment of such investment projects results in the development of untouchable assets. The balance sheet law does not provide for the possibility to account for untouchable assets in the balance sheet of a school[13]. In such cases (in the course of the financial year) the grant is accounted for – at the moment of its payment - in a separate bank account, which results in the generation of new current assets. This operation will lead to the creation of other operating revenues related to the grant (the result aspect). Together with the project accomplishment and the achievement of particular project products, i.e. the untouchable assets, other operating costs are generated in the operating activity segment of the profit and loss account; they correspond to the values of the decrease in current assets that results from the disbursement of the funds from the grant. Thus, at the end of the school's reporting period other operating revenue and costs will be accounted for. In the cases when the grant is not fully disbursed in a financial year, the undisbursed part of the grant will be visible in current assets of the opening balance sheet for the following period. This mechanism is given in Fig.2.

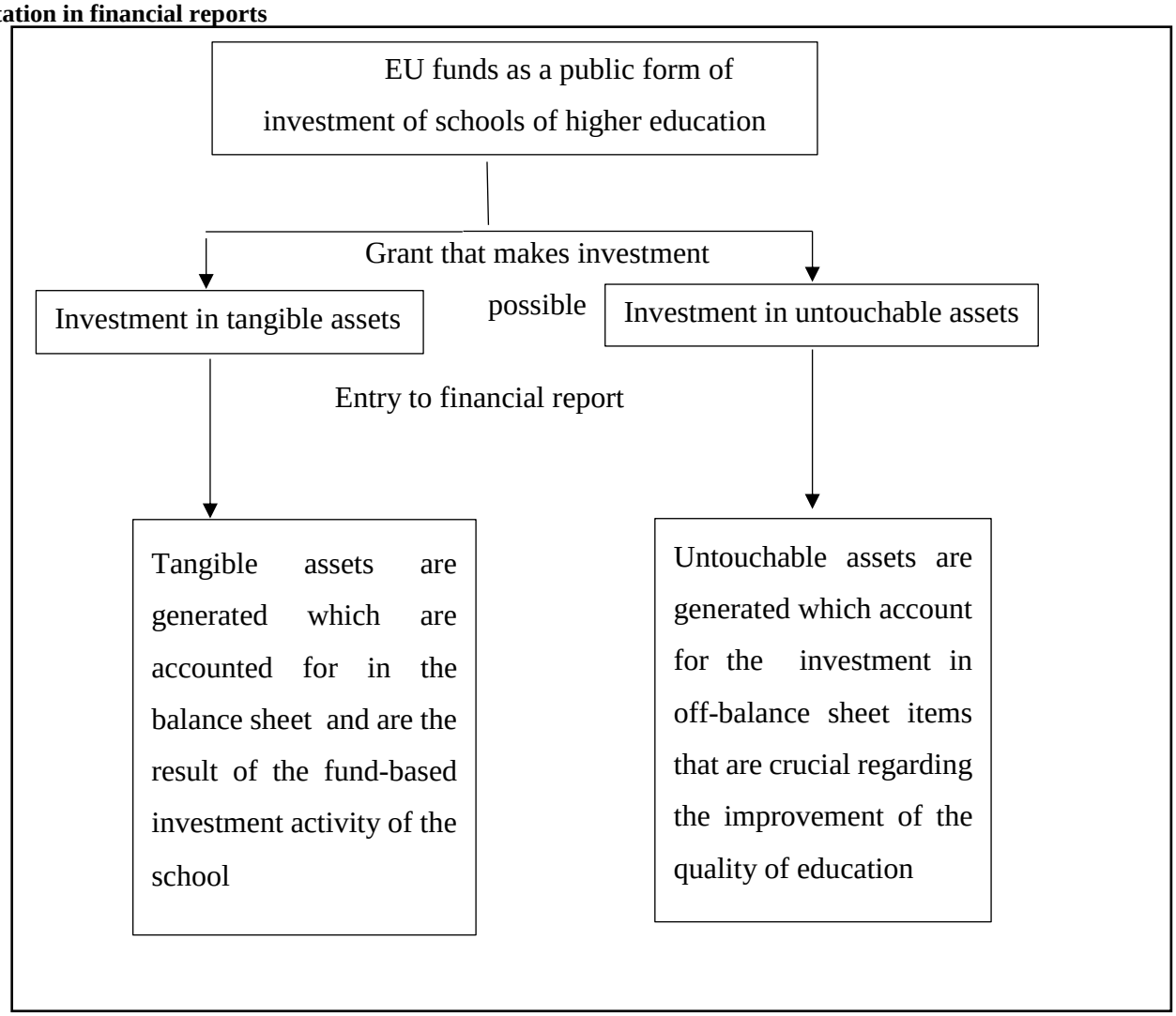
The measure of economic benefits obtained through the investment in schools of higher education and the generation of untouchable assets is reflected by social accounting which deals

[13] Such investment results in the increase in the value of intellectual capital, the development of new program of studies and the modernisation of education; these are teh untouchable assets; J. Krasodomska, *Informacje niefinansowe w sprawozdawczości spółek*, UEK, Kraków 2014.

with (apart from the development of quantity information) the investigation of quality phenomena[14].

The investments of schools of higher education, both in tangible and untouchable assets, have an impact on the economic development of the country. This process should be visible in the GDP figures and the related measurements can be conducted with the use of the economic growth models. Such a model should consider the implementation of European funds as a public (but based on competitive procedures) source of investing by higher education (human capital) (Pońsko, 2000, p. 18). This is particularly important as present-day research points at the necessity to spread education in time (life-long learning), which has its impact on economy (Fogel, 2000, p.240).

Figure 2. Forms of investments of higher education institutions with the participation of EU funds and their presentation in financial reports



Source: Authors' research

[14]E. Ginalska, *Rola rachunkowości społecznej w gospodarce rynkowej*, Zeszyty Naukowe Uniwersytetu Szczecińskiego 2014, No. 827, p. 231.

Analysis of the value and intensity of EU grants for schools of higher education

The assistance funds from ESF and ERDF are transferred to schools of higher education in the form of grants, which is accounted for in current assets and – simultaneously – in the profit and loss account of the school as other operating revenue. Every beneficiary of EU funds is obliged to keep itemized records but the financial report does not give detailed information on the value of grants received. This constitutes a barrier to the generation of macroeconomic information about grants given to schools of higher education.

When analyzing EU grants one should take into consideration grants for higher education together with the EU grants for research. This is due to the fact that the implementation of investment grants (both tangible and intangible / touchable and untouchable ones) in the area of science has a direct impact on the infrastructure of higher education.

Table 1 presents the value of EU grants for higher education with the consideration of the structure of the grant given to beneficiaries, which results from the provisions of the project grant agreement. According to them, 85% of every grant is financed directly from the EU budget, while 15% is constituted by the contribution from the state budget to the projects that are granted funding. The data on the value of the Community grants given in the reports constitute a sum of the two transfers. Table 2 presents the value and structure of EU grants and the transfers to higher education are given separately.

In 2004-2006, i.e. in the first financial perspective the was available to Poland after the accession to EU, the total EU grants for higher education amounted to 10 038 million zlotys; thus the average annual value was 3 346 million zlotys. In the programing period of 2007-2013, the total value of EU grants for higher education equaled 27 073 million zlotys, which accounted for 72% of the total EU grants since 2004.

Table 1. EU grants for higher education and research in Poland in 2004-2013 (in thousands zlotys)

	Years	EU grants for higher education		Total EU grants for higher education	EU grants for research		Total EU grants for research	Total EU grants for higher education and research
		85% of EU budget contribution	15% of state budget contribution		85% of EU budget contribution	15% of state budget contribution		
1	2004-2006	No data	No data	No data	No data	No data	No data	10037759
2	2007	175576	30984	206560	341082	60191	401273	607833
3	2008	214194	37799	251993	556092	98134	654226	906220
4	2009	2026632	357641	2384273	3453640	609466	4063106	6447380
5	2010	1759296	310464	2069760	1197978	211408	1409386	3479146
6	2011	2210555	390098	2600653	2994119	528374	3522493	6123146
7	2012	2185032	385594	2570626	2439732	430541	2870273	5440900
8	2013	1303645	230055	1533700	2154438	380195	2534633	4068333
Total 2007-2013								27072960
Total 2004-2013								37110719

Source: Authors' research based on Execution of the state budget in 2004-2013 and Analysis of the execution of the state budget and European funds' budget in 20104-2013

Table 2. Structure and dynamics of EU grants for higher education and research in 2007-2013 (%)

	Years	Structure		Dynamics of total EU grants for higher education and research (2007=100)
		Total EU grants for higher education / Total grants for higher education and research	Total EU grants for science / Total grants for higher education and research	
1	2007	33,98	66,02	100,00
2	2008	27,81	72,19	149,09
3	2009	36,98	63,02	1060,72
4	2010	59,49	40,51	572,39
5	2011	42,47	57,53	1007,37
6	2012	47,25	52,75	895,13
7	2013	37,70	62,30	669,32

Source: Authors' research based on Execution of the state budget in 2004-2013 and Analysis of the execution of the state budget and European funds' budget in 20104-2013 .

The total EU grants for higher education in 2007-2013 had a varied dynamics (2007 = 100). In 2008 the grants increased by 49%, while in 2010 – in comparison to the base year - they increased almost 11 times. Another significant growth of the dynamics ratio occurred in 2010: a 10 times growth in comparison to the base year. In 2012-2013, the dynamics ratio was lower than in 2012 but the increase (in relation to 2007) in EU transfers was still noted. In 2013, the value of grants was almost 7 times higher than in the base year.

In the first programing period that was available to Poland, i.e. in 2004-2006, the redistribution of EU funds (ERDF, ESF) was conducted through the so called Sector Operational Programmes and the Integrated Operational Programme for Regional Development. In 2007-2013 (15) [15], the following operational programmes were the main tools of the redistribution of ESF and ERDF funds:

- the Human Capital Operational Programme,
- the Infrastructure and Environment Operational Programme,
- the Innovative Economy Operational Programme,
- the Development of Eastern Poland Operational Programme,
- Regional Development Programmes.

The schools of higher education implemented the available EU funds through the all above mentioned operational programmes.

The volume and scale of the external assistance of EU funds, which became a significant supporting tool of investments in the higher education sector, resulted in the fact that since 2004 the funds from ESF and ERDF have become a crucial source of money for the schools that constitutes their revenues. The funds were used to cover the expenditure related to the acquisition of tangible assets or intangible and legal values and untouchable assets.

As regards development operations, the schools of higher education most frequently invest EU funds in the following areas (Kabuła, 2011, p.15):

1) trainings and educational projects to enhance the quality of institutions (untouchable assets);
2) new fields of study (the so called ordered specialties; untouchable r fixed assets);
3) scholarship programmes (untouchable assets);
4) scientific research (untouchable or fixed assets);

[15] Pursuant to the „n+2" rule, which assumes that the expenditure from the European funds' budget can be implemented within two years following the end of a given financial budget perspective – Act of 27 August 2009 on public finance (consolidated text), Journal of Laws 2013, item 885, Art. 117, as amended.

5) R&D infrastructure (fixed assets);
6) teaching facilities (fixed assets);
7) school building and their infrastructure, the IT infrastructure (fixed assets).

Some of these activities are pure investments that result in the change of the value and structure of school's fixed assets – which is typical for "hard" projects, i.e. ones that lead to the construction or development of the infrastructure, which increases fixed assets. Numerous development programmes that are financed by EU funds are "soft" in character, which means that they do not generate changes directly in the asset structure but they generate untouchable assets.

Table 3 presents the ratio of EU funds for higher education to GDP, as well as the ratio of these funds to the value of investment spending of schools of higher education in Poland in 2004-2013. Table 4 gives the ratio of EU funds to the revenues of the schools.

As the figures in table 3 show, the relation of EU grants for higher education to GDP in 2004-2006, 2007 and 2008 was 0.34%, 0.05% and 0.07%, respectively. In 2009, there was an increase to 0.48% but already in 2010 the ratio went down do 0.25%. In the following years: 2011, 2013 and 2013, the ratio was 0.40%, 034% and 0.25%, respectively.

Table 3. Ratio of EU grants for higher education to GDP and the ratio of these grants to the value of investment spending of schools of higher education in Poland in 2004-2013.

.	Year	EU funds (in thousands zlotys)	GDP (in thousands zlotys)	Ratio of EU funds to GDP (%)	Investment value (in thousand zlotys)	Ratio of EU funds to investment value (%)
1	2004-2006	10037	2967871	0,34	5780	173,65
2	2007	607	1176737	0,05	2246	27,05
3	2008	906	1275432	0,07	2394	37,84
4	2009	6447	1343366	0,48	2624	245,68
5	2010	3479	1416585	0,25	4950	70,27
6	2011	6123	1523245	0,40	4963	123,37
7	2012	5440,9	1612000	0,34	4411	123,34
8	2013	4068	1635745,8	0,25	3465	117,39

Source: Authors' research based on Execution of the state budget in 2004-2013 and Analysis of the execution of the state budget and European funds' budget in 20104-2013

Moreover, table 3 shows the ratio of EU grants for higher education to the value of investment spending in schools of higher education. In 2007-2013, the average ratio was 106.4%; in 2007-2008 it was relatively low as it amounted to 27% and 38% in 2007 and 2008,

respectively. In 2009, the ratio went up to 246% and in the last year of the research it decreased to 117%. The ratio was less favourable in 2010 (70%). It should be emphasized that the ratio in question describes indirectly the contribution of the schools' own resources to the investments so, consequently, the ratio of EU grants to the investments is frequently over 100% which means that the value of the projects that were financed by EU grants exceeded the value of the schools' investment spending.

It should be emphasized that EU funds constituted an impulse that incited the investment trend in higher education institutions in Poland and, consequently, it motivated them to find their own investment resources. One should also remember that the programming period 2014-2020 will be the last period when EU funds for investment are available on such a scale.

The analysis of EU grants to higher education institutions was developed by the presentation of the ratio of these funds to the volume of public transfers to these institutions and to their revenues (see table 4). Moreover, the table presents the volume of a grant per student and per one institution of higher education.

Table 4. Ratio of EU grants to public transfers to higher education institutions, the revenues of higher education institutions, the number of students, the number of graduates, the number of higher education institutions in Poland

	Years	Ratio of EU grants to total public transfer to higher education institutions (%)	Ratio of EU funds to the revenues of higher education institutions (%)	Grant amount per student (zlotys)	Grant amount per graduate (zlotys)	Grant amount per higher education institution (in thousands of zlotys)	Ratio of grant per one higher education institution to GDP (%)
1	2004-2006	35	23	1760	8580	33835	0,0011
2	2007	6	4	310	1480	1911	0,0002
3	2008	8	5	470	2150	2796	0,0002
4	2009	54	35	3350	14660	19838	0,0015
5	2010	30	18	1830	7260	10542	0,0007
6	2011	51	31	3330	12310	18668	0,0012
7	2012	44	27	3080	11210	16949	0,0011
8	2013	31	19	2430	8940	13338	0,0008
9	Średnia	32	20	2070	8330	14735	0,0009

Source: Authors' research based on Execution of the state budget in 2004-2013 and Analysis of the execution of the state budget and European funds' budget in 20104-2013

The results of the research that are given in table 4 facilitate the assessment of the role of EU funds in shaping the basic financial flows as regards the schools of higher education in Poland. The analysis of data in the table cover years 2007-2013 as there are no data for particular years in the period 2004-2006.

EU grants constituted from 6% (2007) to 54% (2009) of public transfers to higher education institutions. The ratio of the grants to the total volume of public transfers to these institutions presents clearly that also in 2011 (51%) and 2012 (44%) the situation was favourable. In 2013 the index amounted to 31%.

EU grants generated from 4% (2007) to 35% (2009) of operating revenues of the schools of higher education. The grants influenced the revenues particularly significantly in 2011 and 2012 (31% and 27%, respectively). In the last year of the investigation the ratio was 19%.

The average EU grant per student of higher education institution was 310 zlotys in 2007 and as high as 3 350 zlotys in 2009. A high value of EU grant per student was also in 2010 and 2012 (3330 and 3080, respectively), in 2013 it was 2430.

On the average, one graduate obtained from 1 480 zlotys (2007) to 14 660 zlotys (2009) worth of EU grants. In 2011 and 2012, the ratio was 12 310 zlotys and 11 210 zlotys, respectively. In 20013 the figure went down to 8 940 zlotys.

On the average, one school of higher education acquired from 1.9 million zlotys (2007) to 19.8 million zlotys (2009). The situation was favourable also in 2011 and 2012 (18.668 and 16.949 million zlotys, respectively). In the last year of the research the value of grant per one higher education institution was 13.338 million zlotys.

Table 4 also presents the ratio of EU grant per one school of higher education to GDP. In 2007-2013, the ratio fluctuated from 0.0002% (2007 and 2008) to 0.0015 (2009). In 2013, the ratio was 0.0008%

Investments and educating students and graduates are important (material and human) factors of GDP development. Thanks to EU grants that were acquired by higher education institutions, new investment projects were created that supported the search for knowledge and the acquisition of skills and competencies by students, i.e. potential graduates. Both the flow of investments in schools of higher education (including EU funds) and the number of citizens with higher education that work on the market have an impact on the GDP growth and the development of human capital.

Conclusions

In 2004-2013, EU funds were a substantial source of the investment financing of higher education institutions in Poland. This fact is reflected by the ratio of the volume of EU grants for the schools to GDP and by the reference of this ratio to the ratio of the expenditure of the state on higher education to the GDP. The higher education sector absorbed very well the EU funds, which increased the expectations of academic centres as regards the continuation of the policy of EU funds redistribution which takes into consideration the needs of the higher education sector. It must be emphasized that EU funds were an impulse that triggered higher education investment in Poland which resulted in the necessity for the schools of higher education to find their own investment resources and made them rationalize their financial policies.

The above analyses indicate that synergy is necessary between the state expenditure on higher education and adequate EU funds redistribution if a high level of investment in the higher education sector is to be maintained. Moreover, a permanent source of financing higher education investment from EU funds should be guaranteed at the level of approx. 0.30% of GDP.

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Abstract

Higher education is becoming an important sector of Polish economy and a creator of human capital which is generally considered a factor of economic growth. The investment in higher education leads to the enhancement of the quality of human capital and the increase of its productivity, which results in a quicker pace of the GDP growth. In recent years, EU funds have become a crucial source of public investment in higher education and the Multiyear Financial Framework for 2014-2020 supports this trend.

The objective of this paper is to present EU funds as a significant factor that influences investment in the higher education sector in Poland through the correlation of the intensity of the funds with – among other elements – the investments of higher education institutions in Poland. The authors obtained the data necessary for the research mainly from the reports of the Central Statistical Office (GUS), including the publication: Szkoły wyższe i ich *finanse* (Higher Education Institutions and their Finances), and also from the literature on the subject. The research covered the period of 2004-2013.