## РОЗВИТОК ЕКОНОМІЧНОЇ ОСВІТИ



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### THE FINANCIAL ASPECT OF THE OPERATION OF NON-PUBLIC HIGHER EDUCATION INSTITUTIONS (HEI) IN POLAND

Вищі навчальні заклади в Польщі не можуть розраховувати на субсидії для покриття своїх витрат. Для забезпечення життєздатності та конкурентоспроможності недержавні ВНЗ повинні створювати додатній фінансовий результат. Відповідно вони можуть розглядатись як специфічна форма підприємства, яке оперує на ринку освітніх послуг. Метою даного дослідження є подання базових фінансових показників недержавних ВНЗ у Польщі за останні 10 років.

*Ключові слова*: вищий навчальний заклад, витрати, доход, прибуток. Higher education institutions in Poland cannot rely on subsidies to cover their costs. To survive and compete on the market, non-public schools must generate a positive financial result. They can therefore be considered as specific forms of enterprises operating in the market of educational services. The purpose of this paper is to present the basic financial categories of non-financial institutions in Poland over the last ten years.

*Keywords*: higher education institutions, costs, revenues, income

The main task of contemporary higher education institutions (HEI) is to produce graduates focused on continuing education and to make them well-equipped for their future careers. Although business solutions should be implemented in some areas of the operation of non-public HEIs, these institutions are not typical businesses. However, they are undoubtedly economic organizations which cannot ignore the changes in their immediate and more distant environments. Currently, schools of higher education in Poland operate under very complex and dynamically changing conditions, which makes their effective management difficult. They are subject to constant influences of their external environments.

Generation of a positive financial result is the financial footing of non-public HEIs. These institutions cannot rely on any subsidies or government grants to cover their costs. They must generate an income in order to finance the implementation of their curricula, research programmes, payroll (both teaching and administration staff), costs of maintenance of assets as well as development needs. Additionally, quite often they must incur significant expenditure on premises (including renovation of their own or leased ones), libraries or specialist laboratories. Thus, non-public HEIs may be regarded as special forms of businesses operating on the educational services market.

The basic financial categories connected with non-public higher education institutions are presented in Table 1 below.

The dynamic growth of the non-public school sector is reflected in the revenues of the schools in question, which nearly tripled in the period 1999–2010 from PLN 1,088,652,200 to PLN 3,173,151,400. The above increase was attributable mainly to two factors: increase in tuition fees and in the number of students.

Year	Total revenues		Income		
		Total costs	gross	net	
1999	1 088 652.2	850 574.2	237 945.5	236 329.1	
2000	1 486 865.0	1 187 357.1	298 798.3	296 962.4	
2001	1 755 562.4	1 452 455.3	303 148.9	301 016.7	
2002	1 894 880.1	1 623 544.1	271 230.2	270 234.2	
2003	2 007 715.1	1 751 784.0	255 771.5	255 015.9	
2004	2 109 298.3	1 947 801.5	161 463.7	160 487.3	
2005	2 274 690.9	2 084 254.0	190 405.7	188 290.2	
2006	2 453 953.1	2 265 845.5	188 382.3	186 145.0	
2007	2 664 623.8	2 442 362.7	222 239.9	219 216.4	
2008	2 776 388.7	2 553 519.6	222 762.9	220 130.4	
2009	3 056 353.2	2 793 448.7	262 694.4	260 122.7	
2010	3 173 151.4	3 024 043.1	149 152.3	111 152.2	

### Revenues, costs and financial result of non-public institutions of higher education in Poland in 1999-2010 [PLN '000]

Source: own work on the basis of: Higher Education Institutions and Their Finances in 1999, GUS, Warsaw, 2000; Higher Education Institutions and Their Finances in 2000. GUS, Warsaw, 2001; Higher Education Institutions and Their Finances in 2002; Higher Education Institutions and Their Finances in 2002, GUS, Warsaw, 2003; Higher Education Institutions and Their Finances in 2003, GUS, Warsaw, 2004; Higher Education Institutions and Their Finances in 2004, GUS, Warsaw, 2005; Higher Education Institutions and Their Finances in 2004, GUS, Warsaw, 2005; Higher Education Institutions and Their Finances in 2005, GUS, Warsaw, 2006; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2009, GUS, Warsaw, 2010; Higher Education Institutions and Their Finances in 2010, GUS, Warsaw, 2011

The above increase translated into higher operating costs of the schools, including mainly depreciation (connected with extensions of the premises and other assets of the school) and payroll (hiring of more teachers). In the above period, costs were growing at a very fast rate, which was a negative tendency. Consequently, the financial result was improving only in the first three years, while in the following years it was falling until 2006. In 2007-2009, the growth rate of costs was lower than that of revenues, which enabled the schools to report an income growth. However, in 2010, the growth rate of costs was 4.43% higher than the growth rate of revenues, which unfortunately had a negative impact on the bottom line. The above trend is especially alarming given the coming baby bust.

In the period 1999-2010, total revenues of non-public HEIs grew at a very significant rate. Their structure however was undergoing certain changes (Table 2).

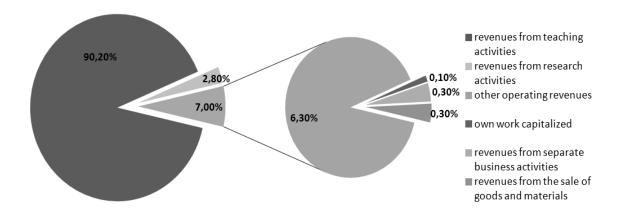
Teaching activities are the main source of revenues of tertiary education institutions. However, faced with the drop in the number of students and the forecasted baby bust, non-public higher education institutions are making efforts to increase the share of other revenues. According to GUS (Central Statistical Office), in 2010, revenues from teaching activities constituted more than 90% of revenues from the operating activities on non-public HEIs. Revenues from research and other activities represented less than 10% of revenues from operating activities. Revenue breakdown is shown in Fig. 1 below.

Table 2

	Revenues from:								
Year	teaching ac- tivities	research ac- tivities	separate busi- ness activity	sale of trade goods and ma- terials	other operat- ing revenues				
1999	95.8	0.1	_	-	3.5				
2000	96.1	0.2	-	-	3.1				
2001	96.9	0.1	-	-	2.5				
2002	96.9	0.2	-	-	2.5				
2003	97.0	0.3	-	-	2.5				
2004	95.5	0.4	0.5	0.2	3.5				
2005	94.6	0.7	0.6	0.2	4.0				
2006	93.1	1.4	0.6	0.2	4.8				
2007	92.9	1.4	0.4	0.3	5.0				
2008	92.4	1.3	0.3	0.4	5.7				
2009	93.2	1.8	0.3	0.4	4.4				
2010	90.3	2.8	0.3	0.3	6.3				

# Structure of revenues from operating activities of non-public HEIs in Poland in 1999-2010 [PLN '000]

Source: own work on the basis of: *Higher Education Institutions and Their Finances in 1999, GUS,* Warsaw, 2000; *Higher Education Institutions and Their Finances in 2000, GUS,* Warsaw, 2001; *Higher Education Institutions and Their Finances in 2001, GUS,* Warsaw, 2002; *Higher Education Institutions and Their Finances in 2002, GUS,* Warsaw, 2003; *Higher Education Institutions and Their Finances in 2004, GUS,* Warsaw, 2005; *Higher Education Institutions and Their Finances in 2004, GUS,* Warsaw, 2005; *Higher Education Institutions and Their Finances in 2004, GUS,* Warsaw, 2005; *Higher Education Institutions and Their Finances in 2005, GUS,* Warsaw, 2006; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007, GUS,* Warsaw, 2008; *Higher Education Institutions and Their Finances in 2009, GUS,* Warsaw, 2010; *Higher Education Institutions and Their Finances in 2010, GUS,* Warsaw, 2011.



#### Fig. 1 Breakdown of revenues from operating activities of non-public HEIs in 2010

Source: Higher Education Institutions and Their Finances in 2010, GUS, Warsaw, 2011, p. 47

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The structure of revenues from teaching activities was as follows:

- 86.6% tuition fees,
- 6.4% subsidies from the central government,
- 0.4% funds from communes and other public funds,
- 6.6% other [12, p. 48].

Sources of revenues from research activities are presented in Fig. 2.

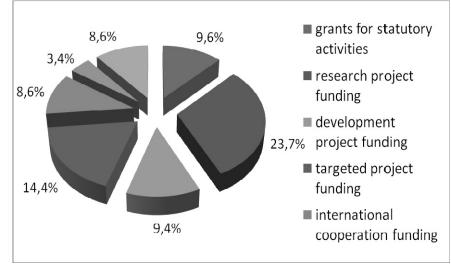


Fig. 2 Structure of revenues from research activities of non-public HEIs in 2010 by source of financing

#### Source: Higher Education Institutions and Their Finances in 2010, GUS, Warsaw, 2011, p. 50

In 1999-2001, revenues of non-public HEIs did not include funds for the implementation of targeted projects received under a contract or funds for research support activities. Targeted projects were not funded until 2002. Additionally, until 2004, only two Catholic schools were receiving subsidies from the central government, on the basis of separate acts of law: Papieska Akademia Teologiczna (Pontifical University of John Paul II in Cracow) and Katolicki Uniwersytet Lubelski (The John Paul II Catholic University of Lublin), while other universities were receiving subsidies for their research activities from the "Science" [13, pp. 117-118] budget.

The prime costs of non-public HEIs include mainly the costs of their teaching activities. The share of research costs and of separate business activity costs is insignificant. The prime cost break-down is shown in Fig. 3 below.

It should be stressed that payroll represents more than a half of operating costs of non-public HEIs. In their efforts to meet the requirements regarding the minimum academic staff and the requirements concerning the quality of education (including, among others, delivery of a specified number of teaching hours per field of study), schools need to incur high costs, including both costs of payrolled staff (employment contracts) and of outsourced staff (contracts to perform a specified task/ contracts of mandate). Outsourced services constitute the second largest item in the structure of costs by type of non-public HEIs.

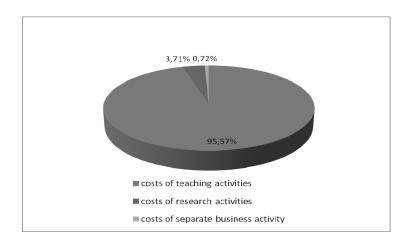


Fig. 3 Prime cost structure of non-public HEIs in 2010.

Source: own work based on Higher Education Institutions and Their Finances in 2010, GUS, Warsaw, 2011

The above significant share is owed to frequent use of outsourced services and to the consumption of materials and energy. The share of other types of costs is insignificant. Changes in the cost structure are presented in Table 3.

Table 3

Year	Depreciation	Materials consumption	Energy con- sumption	Outsourced services	Taxes and charges	Salaries and wages	Including payrolled staff	Employee benefits:	Social insur- ance contri- butions	Other
1999	3.4	4.8	1.1	18.2	0.8	57.7	28.2	6.9	5.4	7.1
2000	3.7	4.6	1.0	20.1	0.8	56.1	29.7	3.7	5.2	7.0
2001	4.3	4.1	1.2	18.6	0.8	56.9	32.5	7.4	5.6	4.3
2002	4.8	4.2	1.2	18.9	1.0	55.9	31.3	7.6	5.8	6.4
2003	5.1	4.2	1.4	17.8	1.1	56.7	32.4	7.6	5.7	6.2
2004	5.4	4.1	1.4	17.2	1.1	56.8	33.8	7.6	6.2	6.4
2005	5.4	3.9	1.5	17.3	1.0	56.7	35.0	7.7	6.2	6.6
2006	5.2	3.9	1.6	17.2	1.0	56.9	36.8	7.7	6.4	6.5
2007	5.2	5.4	1.5	17.0	1.0	57.6	37.9	7.5	6.6	6.3
2008	5.2	3.7	1.5	17.4	1.0	57.8	38.0	7.4	6.1	6.0
2009	4.9	3.8	1.7	17.4	0.8	58.1	38.2	7.7	6.2	5.6
2010	5.3	3.5	2.0	17.4	0.7	57.8	40.3	7.4	6.3	5.8

Costs by type of non-public HEIs in Poland in 1999-2010

Source: own work on the basis of Higher Education Institutions and Their Finances in 1999, GUS, Warsaw, 2000; Higher Education Institutions and Their Finances in 2000, GUS, Warsaw, 2001; Higher Education Institutions and Their Finances in 2001, GUS, Warsaw, 2002; Higher Education Institutions and Their Finances in 2002, GUS, Warsaw, 2003; Higher Education Institutions and Their Finances in 2004, GUS, Warsaw, 2005; Higher Education Institutions and Their Finances in 2004, GUS, Warsaw, 2005; Higher Education Institutions and Their Finances in 2005, GUS, Warsaw, 2006; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2008; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2010; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2010; Higher Education Institutions and Their Finances in 2007, GUS, Warsaw, 2010; Higher Education Institutions and Their Finances in 2010, GUS, Warsaw, 2011.

There is a noticeable increase in the share of depreciation in total costs. It reflects the development of schools and their expenditure on infrastructure, new facilities and equipment.

Costs of training reflect the financial outlays incurred by individual schools on teaching students. The unit cost of training is the relation between total costs of training and the number of fulltime equivalent students. Full-time student equivalent is a factor used in GUS statistics, calculated using special weights (corresponding to the costs of training per student enrolled in a particular study system). Full-time students have a weight of 1, evening students – 0.8, and weekend students – 0.6. Subsidies for schools are awarded on the basis of a factor calculated in the above manner (e.g. subsidies for financial aid for students). The above cost is calculated in two variants:

- Variant I sum of prime costs of total maintenance activities (costs by type and changes in products), financial aid for students fund utilized and own scholarship fund;
- Variant II sum of prime costs of teaching activities, financial aid for students fund utilized and own scholarship fund;

As can be seen in Table 4, this cost, both under variant I and II, has more than doubled over the past ten or so years.

Year	Vari	ant I	Vari	Number of	
	Cost of train- ing	Unit cost	Cost of training	Unit cost	full-time stu- dent equiva- lents
1999	833 557.7	3 106.0	823 711.3	3 069.0	268 405
2000	1 154 540.9	3 690.0	1 138 275.1	3 638.0	312 849
2001	1 424 795.6	4 336.0	1 403 800.2	4 272.0	328 619
2002	1 601 482.3	4 716.0	1 570 487.9	4 624.0	339 604
2003	1 731 109.4	4 886.0	1 715 997.0	4 844.0	354 273
2004	2 045 063.6	5 358.0	2 023 312.0	5 301.0	381 700
2005	2 339 052.0	5 812.0	2 289 545.1	5 689.0	402 441
2006	2 703 101.7	5 541.0	2 648 950.4	5 430.0	685 529
2007	2 657 684.1	5 606.0	2 592 654.3	5 469.0	474 098
2008	2 770 185.9	5 872.0	2 683 647.4	5 689.0	471 764
2009	3 131 666.8	6 361.0	3 030 292.0	6 155.0	492 336
2010	3 242 294.8	7 100.0	3 114 998.2	6 821.0	456 688

Unit cost of training in non-public HEIs in Poland in 1999-2010 [PLN]

Table 4

Source: own work on the basis of *Higher Education Institutions and Their Finances in 1999*, GUS, Warsaw, 2000; *Higher Education Institutions and Their Finances in 2000*, GUS, Warsaw, 2001; *Higher Education Institutions and Their Finances in 2001*, GUS, Warsaw, 2002; *Higher Education Institutions and Their Finances in 2002*, GUS, Warsaw, 2003; *Higher Education Institutions and Their Finances in 2004*, GUS, Warsaw, 2005; *Higher Education Institutions and Their Finances in 2004*, GUS, Warsaw, 2005; *Higher Education Institutions and Their Finances in 2004*, GUS, Warsaw, 2005; *Higher Education Institutions and Their Finances in 2005*, GUS, Warsaw, 2006; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2008; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2010; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2010; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2010; *Higher Education Institutions and Their Finances in 2007*, GUS, Warsaw, 2010; *Higher Education Institutions and Their Finances in 2010*, GUS, Warsaw, 2011.

In the analysed years, the sector of non-public HEIs in Poland was very dynamic. Its attractiveness is demonstrated by the constantly increasing number of schools and by their growing revenues. However, according to statistical forecasts, in the coming ten years, the number of students will drop by around one third. Non-public HEIs will find themselves in an increasingly competitive environment which will be an effect of not only the growing baby bust but also of competition from foreign schools and from state-owned schools which receive financial support from the central government. If they want to continue their growth or at least maintain their existing market positions, non-public HEIs will have to effectively manage their organisations, including in particular their finances.

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