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EUROPEAN EXPERIENCE OF EDUCATION FINANCING: MEASUREMENT FOR UKRAINE

The article examines the dynamics of public expenditures on education in the countries of the European Union. The tendencies of financing of education in the countries of the European Union and Ukraine are analyzed. The features that are characteristic for Ukraine and EU countries are revealed. The attention is drawn to the fact that the European Union's policy is aimed at creating a knowledge-based, resource-efficient, knowledge-based economy: education ranks third among the public spending of the European Union after health and general public service. It is concluded that the state funds in Ukraine for education are spent inefficiently, education spending are not considered by the state as an investment in human capital. So, economic principles of the education system need to be reformed by creating a transparent financial and economic mechanism and targeted use of funds necessary for the realization of the constitutional rights of citizens to education.

Keywords: European Union, education, expenditures, financing, GDP, consolidated budget.

ЄВРОПЕЙСЬКИЙ ДОСВІД ФІНАНСУВАННЯ ОСВІТИ: ВИМІР ДЛЯ УКРАЇНИ

Журавльова Ю.О.

У статті досліджено динаміку державних видатків на освіту в країнах Європейського Союзу. Проаналізовано тенденції фінансування освіти в країнах Європейського Союзу та Україні, виявлено особливості, що характерні для України та країн ЄС. Звернено увагу на те, що політика Європейського Союзу спрямована на створення конкурентоспроможної економіки, основаної на знаннях: серед суспільних видатків країн ЄС система освіти займає третє місце після охорони здоров'я та суспільних послуг. Зроблено висновок, що державні кошти в Україні на систему освіти витрачаються неефективно, видатки на освіту не розглядаються державою як інвестиції в людський капітал, тому економічні засади системи освіти потребують реформування шляхом створення прозорого фінансово-економічного механізму та адресного використання коштів, необхідних для реалізації конституційних прав громадян на освіту.

Ключові слова: Європейський Союз, освіта, видатки, фінансування, ВВП, зведений бюджет.

ЕВРОПЕЙСКИЙ ОПЫТ ФИНАНСИРОВАНИЯ ОБРАЗОВАНИЯ: ИЗМЕРЕНИЕ ДЛЯ УКРАИНЫ

Журавлева Ю.О.

В статье исследована динамика государственных расходов на образование в странах Европейского Союза. Проанализированы тенденции финансирования образования в странах Европейского Союза и Украине, выявлены особенности, характерные для Украины и стран ЕС. Обращено внимание на то, что политика Европейского Союза направлена на создание конкурентоспособной экономики, основанной на знаниях: среди общественных расходов стран ЕС система образования занимает третье место после здравоохранения и общественных услуг. Сделан вывод, что государственные средства в Украине на систему образования тратятся неэффективно, расходы на образование не рассматриваются государством как инвестиции в человеческий потенциал, поэтому экономические основы системы образования необходимо реформировать путем создания прозрачного финансово-экономического механизма и адресного использования средств для реализации конституционных прав граждан на образование.

Ключевые слова: Европейский Союз, образование, расходы, финансирование, ВВП, сводный бюджет.

Formulation of the problem. The signing of the Association Agreement between Ukraine and the European Union in 2014 opened up new opportunities for the sustainable economic development of our country, reforming all key areas and implementing European standards in order to improve the quality of life of the Ukrainian people. Integration of Ukraine into the European space requires, in particular, qualitative modernization of the sphere of education by introducing innovative approaches, increasing investments in the industry, and so on. Therefore, it is relevant to analyze the financing of public spending for the provision of public goods, in particular education, taking into account European experience.

Analysis of recent research and publications. Researches on the financing of education in the European Union countries are the works of Gasanova L. E. [1] Max Roser, Esteban Ortiz-Ospina [2], Hauptman Manica [3], Fran Galetić [4], Sebastian Leitner and Robert Stehrer [5] and other.

Setting objectives. The purpose of this article is to analyze the trends of public spending on the provision of public goods, in particular, education, taking into account European experience.

Presentation of the main research material. The government sector of the EU, according to statistical standards, includes organizations that produce public goods, participate in the distribution of national income and national wealth, is headed by public authorities and for which the level of income from market transactions in the total amount is lower.

The increase in resources for the provision of public goods depends on economic growth combined with careful management of public finances. The European Union's economic policy is aimed at creating a knowledge-based, resource-efficient, knowledge-based economy. Therefore, the key factor for medium-term cost planning is the efficiency of the economy, which implies, in particular, investments in social infrastructure.

In order to efficiently allocate resources, it is necessary to reorient public spending into categories that increase growth, to adapt tax structures, to strengthen growth potential, to ensure mechanisms for assessing the relationship between public spending and the achievement of policy objectives and to ensure the overall consistency of reform packages.

In March 2010, a new European economic development strategy for the next 10 years was adopted – "Europe

2020: Strategy, Smart, Sustainable and Comprehensive Growth". The Strategy states that "the composition and quality of public finances are important: budget consolidation programs should identify priority" growth-enhancing items "such as education and skills, research and development, and innovation and network investments, such as high-speed Internet, energy and transport links, that is, the key thematic areas of the Europe 2020 Strategy [6].

The analysis of Figure 1 shows that during 2006-2016, expenditures on public services, defense, remain relatively stable. Changes are taking place in financing public services, health and education. Thus, during 2006-2011, expenditures on public services (+ 0.3% of GDP), health (+ 0.7% of GDP), education (+ 0.3% of GDP) are increasing. From 2011 to 2016, expenditures on public services (-0.6% of GDP), health (-0.2% of GDP), education (-0.6% of GDP) are reduced.

The analysis of Table 1 shows that at the EU-28 level, public spending on "education" as a ratio to GDP in 2012-2016 remained relatively stable, decreasing by 0.56% (from 5.26% of GDP in 2012 to 4.7% of GDP in 2016). Eighteen countries of the European Union have exceeded the average indicator of education expenditures (4.94% of GDP).

During 2009-2016, the largest reduction in education expenditure was in the United Kingdom (6.85% of GDP in 2009 to 4.7% of GDP in 2016), Ireland (5.40% of GDP in 2009 to 3.3% of GDP) in 2016).

In Ukraine, in 2016, public spending on education exceeds the EU-28 (5.01% of GDP versus 4.7% of GDP). The state funded education at the level of Poland (5.0% of GDP). At the same time, during 2009-2016 there is a reduction of public spending on education from 6.78% of GDP in 2009 to 5.01% of GDP in 2016.

The analysis of Figure 2 shows that the largest average indicator of expenditure on education, for 2009-2016 among the EU countries, is observed in Denmark (7.53% of GDP), the smallest – in Romania (3.48% of GDP). In Ukraine, this figure is 6.0% of GDP, which exceeds the average for 2009-2016 by EU-28 (4.94%) and is the eighth indicator among EU countries, after Denmark (7.53% of GDP), Sweden (6,77% of GDP), Cyprus (6,58% of GDP), Finland (6,37% of GDP), Estonia (6,30% of GDP), Belgium (6,29% of GDP), Slovenia (6,18% of GDP) Of GDP), Portugal (6.17% of GDP).

The analysis of Table 2 shows that at the EU-28 level during 2012-2016, education expenditure as a percent-

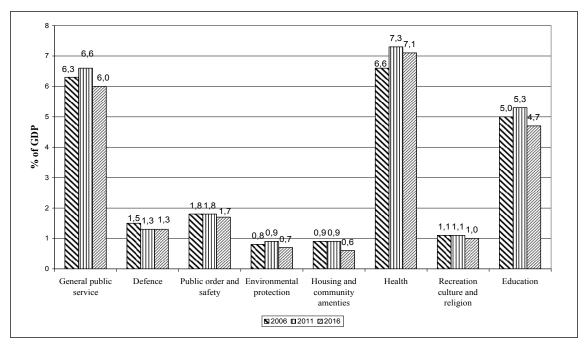


Fig. 1. Dynamics of public expenditures of EU member states,% of GDP

Source: [7]

Table 1. Public spending on education in EU and Ukraine, 2009-2016 (% GDP)

Countries	The average indicator for 2009-2016	2009	2010	2011	2012	2014	2015	2016	+/-
1	2	3	4	5	6	7	8	9	10
EU-27	5,46	5,55	5,51	5,33	•••				-0,22
EU-28	4,94	•••			5,26	4,9	4,9	4,7	-0,56
EA -18	5,08	5,18	5,06	5,06	5,02				-0,16
EA -19	4,7					4,8	4,7	4,6	-0,2
Denmark	7,53	7,97	8,06	7,76	7,88	7,2	7,0	6,9	-1,07
Sweden	6,77	7,23	6,90	6,80	6,82	6,6	6,5	6,6	-0,63
Cyprus	6,58	7,24	7,45	7,18	6,69	5,8	5,7	6,0	-1,24
Finland	6,37	6,58	6,57	6,40	6,35	6,4	6,2	6,1	-0,48
Estonia	6,30	7,11	6,70	6,34	6,40	5,6	6,1	5,9	-1,21
Belgium	6,29	6,23	6,14	6,26	6,32	6,3	6,4	6,4	+0,17
Slovenia	6,18	6,53	6,60	6,62	6,41	5,9	5,6	5,6	-0,93
Portugal	6,17	6,80	7,07	6,57	5,66	6,2	6,0	4,9	-1,9
Latvia	5,92	6,78	6,09	5,73	5,48	5,9	6,0	5,5	-1,28
France	5,84	6,16	6,16	6,05	6,14	5,5	5,5	5,4	-0,76
United Kingdom	5,84	6,85	6,83	6,21	6,02	5,2	5,1	4,7	-2,15
Lithuania	5,75	6,83	6,09	5,79	5,60	5,4	5,4	5,2	-1,63
Malta	5,63	5,39	5,67	5,74	5,91	5,8	5,5	5,4	+0,01
Netherlands	5,63	5,90	5,84	5,78	5,81	5,4	5,4	5,3	-0,6
Poland	5,39	5,58	5,65	5,54	5,46	5,3	5,2	5,0	-0,58
Austria	5,36	5,74	5,73	5,59	5,57	5,0	5,0	4,9	-0,84
Luxembourg	5,18	5,30	5,23	5,13	5,43	5,2	5,2	4,8	-0,5
Hungary	5,18	5,32	5,65	5,20	4,80	5,2	5,2	4,9	-0,42
Czech Republic	4,85	4,81	4,82	4,92	4,84	5,2	4,9	4,5	-0,31
Croatia	4,81			•••	5,05	4,7	4,7	4,8	-0,25
Ireland	4,64	5,40	5,40	5,19	5,21	4,3	3,7	3,3	-2,1
Spain	4,49	5,05	4,94	4,81	4,47	4,1	4,1	4,0	-1,05
Germany	4,31	4,40	4,43	4,36	4,34	4,3	4,2	4,2	-0,2
Greece	4,21	4,26	4,01	4,11	4,1	4,4	4,3	4,3	+0,04

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Зактичения	таблици	- 1

1	2	3	4	5	6	7	8	9	10
Italy	4,20	4,64	4,46	4,19	4,15	4,1	4,0	3,9	-0,74
Slovakia	4,12	4,35	4,47	4,08	3,85	4,1	4,2	3,8	-0,55
Bulgaria	3,82	4,32	3,79	3,63	3,52	4,1	4,0	3,4	-0,92
Romania	3,48	4,09	3,35	4,13	3,01	3,0	3,1	3,7	-0,39
Ukraine	6,0	6,78	6,63	5,94	6,44	5,87	5,34	5,01	-1,77

Source: [7]

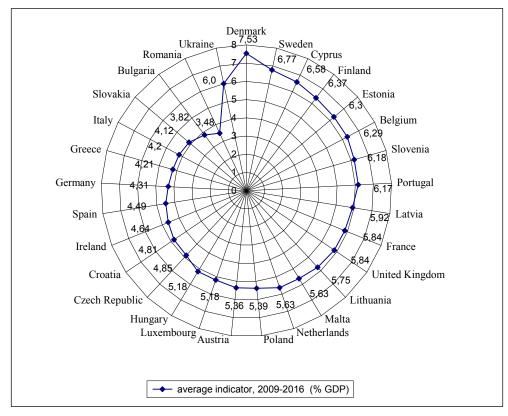


Fig. 2. Average indicator of public spending on education in EU countries and Ukraine for 2009-2016, % of GDP

Source: calculated by the author for [7; 8, p.6]

age of total public spending remained relatively stable, decreasing by 0.47% (from 10.67% in 2012 to 10.2% in 2016). At the same time, spending cuts are highest in Portugal (13.67% in 2009 to 10.8% in 2016) and United Kingdom (13.48% in 2009 to 11.2% in 2016).

The analysis of Figure 3 shows that the largest average indicator of education expenditures for total public spending in 2009-2016 is observed in Estonia (15.66%), Latvia (15.23%) and Lithuania (15.23%), the lowest – in Greece (8.01%).

In Ukraine during 2009-2016, the Consolidated Budget of Ukraine reduces education spending from 21.7% in 2009 to 15.5% in 2016, i.e. by 6.2%. In addition, during 2011-2016, there is a tendency towards a reduction of the share of education spending in the state budget and a corresponding increase in expenditures of local budgets. So, if in 2011, 31.6% of education spending were at the expense of the state budget, and 68.4% — of the local budget, then in 2016 the spending on education are allocated as follows: 26.9% — the state budget, 73.1 % — local budgets [9]. Thus, there was a 4.7% decrease in education spending in

the state budget and a corresponding increase in the local budget. This is due to the budget decentralization process launched in 2015, aimed at reducing the share of education spending from the State Budget of Ukraine and increasing spending from local budgets.

In terms of education, the largest spending for preschool and primary education in 2016 was observed in Sweden (4.2% of GDP), Denmark (3.1% of GDP), Croatia (2.4% of GDP). The lowest are Bulgaria (0.7% of GDP), Romania (0.7% of GDP) and Lithuania (0.9% of GDP) [8]. The average for the EU-28 countries was 1.5% of GDP, for countries EA-19 – 1.4% of GDP [7].

Finland, Belgium and France have the highest costs for general secondary education (2.6% of GDP, 2.5% of GDP and 2.4% of GDP, respectively). The lowest are in Slovakia and Croatia (0.8% of GDP and 0.9% of GDP respectively). The average for the EU-28 and the EA-19 countries is 1.9% of GDP [7].

The highest expenditure on tertiary education is observed in Finland (1.8% of GDP) and Denmark (1.8% of GDP). The smallest are the UK (0.2% of GDP) and

Table 2. Public spending on education in EU Countries, 2009-2016 (% of total public spending)

Table 2. I ubite spending on education in EO Countries, 2007-2010 (70 of total public spending)										
Countries	The average indicator for 2009-2016 years	2009	2010	2011	2012	2013	2014	2015	2016	+/-
EU-27	10,82	10,87	10,89	10,85	10,67					-0,2
EU-28	10,33				10,67	10,3	10,2	10,3	10,2	-0,47
EA-18	10,15	10,20	10,15	10,22	10,05					-0,15
EA -19	9,7					9,7	9,7	9,7	9,7	
Estonia	15,66	15,89	16,55	16,88	16,22	15,4	14,7	15,1	14,6	-1,29
Latvia	15,23	15,50	14,02	14,90	15,03	15,7	15,8	16,2	14,7	-0,8
Lithuania	15,23	15,22	14,41	14,98	15,53	15,7	15,5	15,4	15,1	-0,12
Cyprus	14,90	15,66	16,14	15,53	14,61	15,7	11,8	14,2	15,6	-0,06
Malta	13,57	12,70	13,63	13,79	13,66	13,9	13,5	13,3	14,1	+1,4
Denmark	13,14	13,72	13,96	13,45	13,25	12,3	12,8	12,8	12,9	-0,82
Sweden	13,02	13,15	13,18	13,21	13,12	12,4	12,7	13,0	13,4	+0,25
Portugal	12,67	13,67	13,74	13,31	11,95	13,5	12,0	12,4	10,8	-2,87
Poland	12,54	12,50	12,43	12,77	12,92	12,5	12,5	12,6	12,1	+0,04
Slovenia	12,52	13,42	13,36	13,26	13,34	10,9	11,9	11,6	12,4	1,02
United Kingdom	12,46	13,48	13,70	12,94	12,58	12,0	11,8	12,0	11,2	-2,28
Luxembourg	12,11	11,74	12,02	12,03	12,25	12,7	12,2	12,4	11,5	-0,24
Netherlands	11,71	11,48	11,38	11,59	11,53	11,8	11,7	12,0	12,2	+0,72
Belgium	11,69	11,59	11,68	11,71	11,48	11,8	11,4	11,9	12,0	+0,41
Czech Republic	11,45	10,77	11,03	11,39	10,86	12,3	12,2	11,8	11,3	+0,53
Finland	11,28	11,72	11,77	11,60	11,20	11,2	11,0	11,0	10,8	-0,92
Ireland	11,06	11,22	8,24	11,02	12,25	10,2	11,1	12,4	12,1	+0,88
Slovakia	10,39	10,46	11,18	10,64	10,19	12,2	9,9	9,3	9,3	-0,07
Croatia	10,34				11,04	10,6	9,8	10,1	10,2	-0,84
Hungary	10,31	10,34	11,31	10,40	9,85	9,5	10,3	10,3	10,5	+0,16
Austria	10,27	10,91	10,84	11,02	10,76	9,8	9,5	9,6	9,8	-1,11
France	10,22	10,86	10,89	10,83	10,84	9,6	9,6	9,6	9,6	-1,26
Bulgaria	9,95	10,41	10,14	10,19	9,81	9,8	9,7	9,8	9,8	-0,61
Spain	9,81	10,94	10,67	10,5	9,37	9,1	9,1	9,3	9,5	-1,44
Romania	9,13	9,94	8,34	10,47	8,22	8,1	8,6	8,6	10,8	-0,81
Germany	8,31	9,11	9,27	9,64	9,70	9,7	9,7	9,6	9,5	+0,39
Italy	8,26	8,95	8,85	8,42	8,21	8,0	7,9	7,9	7,9	-1,05
Greece	8,01	7,89	7,80	7,90	7,65	7,6	8,8	7,8	8,6	+0,71
Source: [7]	-									

Source: [7]

Italy (0.3% of GDP). Average indicator for EU-28 and EA-19 countries – 0.7% of GDP [7].

Compared to EU countries, in 2016, Ukraine's preschool education spending was 1.0% of GDP, which is less than the average for EU countries; general secondary education is 2.8% of GDP, which is more than the average indicator for the EU countries, in particular Finland and higher education -1.9% of GDP, which is also more than the average indicator for the EU countries [8].

At the same time, Ukraine has a low level of expenditure per schoolboy/student compared to the countries of the European Union. So, in 2016, the budget of one pupil in Ukraine was 9.3-10 thsd. UAH, or 350-400 dollars, while in the European Union this figure is 6.8 thsd. EUR. The cost per student in Ukraine is 1,000-1,300 USD, while in the UK and France 16-18 thsd. USD [10].

According to the structure of expenditures of the Consolidated Budget of Ukraine for financing education in 2016, wages and salaries accounted for 47.8%, which is 2.3% less than in 2011. At the same time, in 2014, wages and salaries accounted for 54% [9].

Conclusions. Thus, education ranks third among the public spending of the European Union after health and general public service, as education is a factor in the socioeconomic and political development of each country. In 2009-2016, the spending on education in the EU countries remains relatively stable. Ukraine spends on education no less than the European Union. At the same time, state funds in Ukraine for education are spent inefficiently, education spending are not considered by the state as an investment in human capital. Therefore, in order to increase the effective use of expenditures, it is necessary to reform the economic foundations of the education system by establishing a transparent financial and economic mechanism and targeted use of funds necessary for the implementation of the constitutional rights of citizens to education.

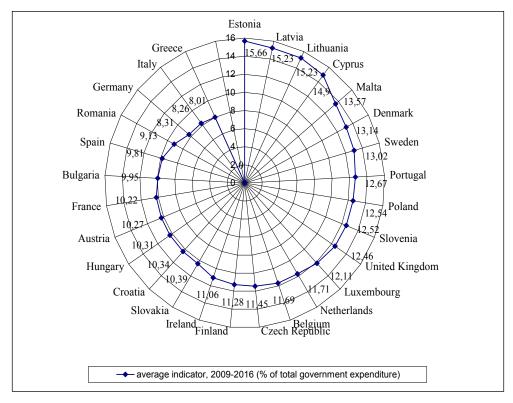


Fig. 3. The average indicator of public spending on education in EU countries, 2009-2016 years, % of total public spending

Source: calculated by the author for [7]

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