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Mechanism of private funding of higher education in OECD countries and Ukraine

OLHA HRYHORASH. Mechanism of private funding of higher education in OECD countries and Ukraine. *The mechanisms of higher education funding in the OECD countries and in Ukraine is considered in the paper. An analysis of the sources of higher education funding was carried out and separate indicators of higher education funding in OECD countries were considered. The mechanism of financial support for obtaining higher education in countries, where public and private higher education funding prevails, is characterized. The peculiarities of higher education funding in Ukraine at the expense of private sources and the experience of using state loans are analyzed.*

Keywords: *higher education, state funding, private funding, student loan.*

Higher education is an integral part of the development of society. In addition to higher education applicants, the state is also interested in the growth of the population's level of education. On the one hand, according to calculations in EU countries, each additional year of education provides an 8 percent increase in wages (Harmon et al, 2001) [1], on the other hand,



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in the study of Bouhajib Mabrouka et al. (2018) it is indicated that a 1 percent increase in research expenditures increases 0.854% economic growth, 1% increase in education expenditures increases 2,862% economic growth, 1% increase in patent application increases 0.075% economic growth in the long-run. Thus, the state contributes directly and indirectly to the opportunities for higher education, depending on the financing policy that the government chooses.

Financial support of higher education cannot use completely budget funds within the limits of the state order, especially under the conditions of a deficit of budget funds. Melnyk & Myroshnychenko (2021) [3], analyze the approaches of higher education funding in England, Germany, the Scandinavian countries and the USA and finds that the countries have in common a multi-channel system of higher education funding, which includes both state budget sources and private sources, as well as paid services provided by the higher education institutions. There is also a high level of financial support for students with the help of grants, scholarships, loans, subsidies, etc. A similar study of the European experience is conducted by Kharlamova (2017) [4] and Horin (2013) [5], the authors identify recommendations to improve the Ukrainian model of higher education funding.

Tereshchenko (2018) [6] and Zatonatska & Tereshchenko (2018) [7] consider the reasonability of using various financial mechanisms for the development of higher education. The authors emphasize that the decrease in the share of budget funding of higher education should not turn into uncontrolled commercialization of educational activities, it may make higher education impossible for some segments of the population. On the other hand, the authors consider the foreign experience of higher student loans, as well as granting grants.

Bilinets (2016) [8] also reveals the substance of an student loan as a financial instrument of a social nature. Based on the synthesis of foreign experience, the author describes two main models of educational lending with fixed and proportional payments, analyzes the legal regulation of preferential long-term lending for education and the implementation of the this program in Ukraine. Based on the research the main problems of educational lending for borrowers (students) and creditors (banks and the state) are determined.

Poltorak (2018) [9] analyzes the opportunities of educational lending from the point of view of strengthening the level of state financial security and proves that the development of the lending mechanism for higher

education in Ukraine will have a positive effect on the general level of education of the population, the efficiency of decision-making in the process of developing strategies and directions of strengthening the level of financial security of the state in the conditions of globalization.

The authors Ierfort & Yerfort (2018) [10] have assessed of the current program of preferential state student loans from the point of view the key principle of reversibility of funds. The basic parameters of such program are proposed, it makes it possible to balance the interests of graduates and the financial capabilities of the state. Also Hryshchenko (2015) [11], on the basis of the peculiarities of various forms of education lending, funding sources and methods of loans repayment, proposed an author's model of student loan, which can be introduced in Ukraine.

The lack of budget funds for educational institutions necessitates the search for new mechanisms of funding. It should be noted that the problem of higher education funding is currently one of the topic economic problems of all countries of the world. One of the effective mechanisms of higher education funding is a loan. Sources of higher education funding in OECD countries are presented in fig. 1.

The analysis of sources of higher education funding (Fig. 1) showed that the structure of financial support for higher education is significantly different in OECD countries. In particular, the countries, where higher education is mostly paid (60 or more percent of private sources) include: United Kingdom, Colombia, Japan, Australia, United States, Korea and Chile; countries that provide mostly free higher education (20 or less percent of private funding) are: Germany, Sweden, Slovenia, Belgium, Denmark, Iceland, Austria, Finland, Luxembourg and Norway.

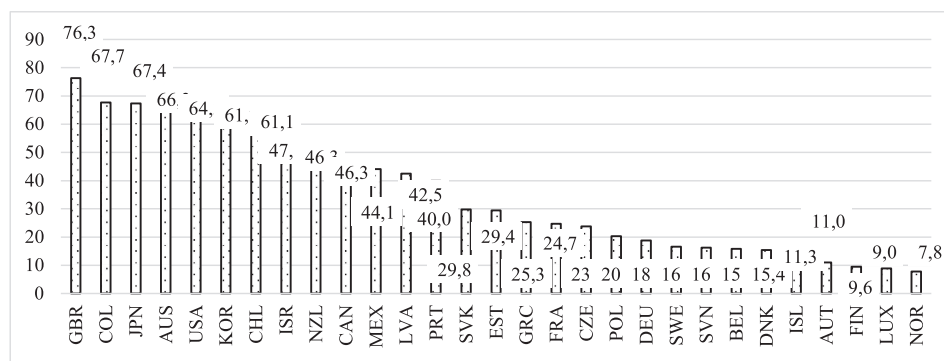


Figure 1. Sources of higher education funding in OECD countries in 2019, % Source: compiled by the authors according to OECD data (2019) [12].

In other OECD countries, the share of private and public funding of higher education has a lower level of asymmetry. Separate indicators of higher education funding in OECD countries are presented in the Table 1.

Table 1.
Separate indicators of higher education funding in OECD countries

Country	Shares of expenditure on educational institutions, %			Expenditures per 1 student, USD PPP	GDP per capita, current USD
	Public	Private	Including householders		
United Kingdom	23,7	76,3	53,9	29 688	43 070
Japan	32,6	67,4	51,9	19 504	40 778
Australia	33,7	66,3	50,9	20 625	54 875
United States	35,7	64,3	44,2	35 347	65 280
Korea	38,3	61,7	42,3	11 287	31 937
Germany	81,2	18,8	0,0	19 608	46 795
Sweden	83,4	16,6	1,2	26 046	51 939
Belgium	84,1	15,9	7,0	21 082	46 591
Denmark	84,6	15,4	0,0	21 658	59 776
Iceland	88,7	11,3	7,0	16 610	68 941
Austria	89,0	11,0	3,5	21 329	50 114
Finland	90,4	9,6	0,2	18 129	48 678
Luxembourg	91,0	9,0	1,5	51 978	113 219
Norway	92,2	7,8	3,8	25 019	75 826

Source: compiled by the authors according to OECD data (2019) [12, 13], World Bank data. (2019) [14].

Analysis of the sources of higher education funding in the OECD countries, it should be noted that the amount of expenditures for the training of one student is not related to the indicator GDP per capita, but only reflects the result of state policy in the field of training specialists. At the same time, it can be noted that, in general, in the group of countries where higher education is financed mainly by public funds, the average GDP per capita is higher. It should be emphasized that the low level of public spending on higher education is not the evidence of insufficient

public funds, since the countries represented in the table, where private funding prevails, have high indicators of GDP per capita, thanks to which the education is paid at the expense of householders using developed system of educational lending. On the other hand, we support the conclusions of Antonyuk et al (2017) [15] about the impossibility of ensuring a sufficient level of higher education funding in countries with a budget deficit, in particular, Ukraine.

As it known, higher education funding can be carried out at the expense of state funds, own funds of higher education applicants, and credit resources. Funds from customers of educational services can be attracted on the basis of pre-payment of tuition with the provision of scholarships and grants to students, the size of which depends on the average level of their income (Austria, France, Spain), and the use of student loan programs with a fixed repayment schedule after graduation from a higher educational institution (USA, Canada, Japan) or with payments, the size of which depends on the income level of graduates (Australia, New Zealand, Great Britain) (Chapman & Ryan (2002) [16]).

Let's consider examples of the organization of higher education funding systems in the presented countries with a predominant share of private funds. Student loans and grants in the UK are mostly provided by the government through the Student Loans Company (SLC), a non-departmental government body. Most university students living in the UK are eligible for student loans [6]. Private student loans in the UK do not replace public lending, but rather complement it (for example, if the student does not have enough funds for living). Such loans are made by banks, they don't depend on future income and must be returned after a certain period of time [11].

Private loans for higher education in the USA are direct (the loan is provided directly to the student) and indirect (through university, college). Loans granted to higher education institutions are immediately credited to the university's accounts. Unlike the UK, in the US, student loans are provided by a large number of banks and non-bank lending institutions. Interest on such loans is determined taking into account the borrower's credit history. Federal loans are provided under the guarantee of the US government at a rate that is related to the refinancing rate and does not exceed 8% per year. Federal lending is provided through accredited credit institutions or directly by universities. The most widespread and popular among borrowers is the government loan, which is carried out under two programs: 1) Federal Direct Student Loan Program - a federal program of

direct student lending, which is provided to students and their parents directly by the US government; 2) Federal Family Student loan Program – a federal family education program for which a student applies to a bank or other credit organization. In this case, the loan is issued under the guarantee of the federal government [7].

In South Korea student loans are provided by the Korea Student Aid Foundation (KOSAF). Student loan programs in Korea include income-based loans, direct loans, and loans for rural students. Income-based loans are provided to students from poor and large families based on the applicant's high academic performance. The borrower may not repay the loan until his annual income reaches a certain minimum level. Direct loans with a reduced interest rate are provided and guaranteed by the state based on the applicant's satisfactory academic performance and are repaid after 10 years. After that, the borrower is given 10 years, during which he repays the body of the loan and pays interest. Loans for students from rural areas are provided by the state on an interest-free basis [11].

Finland is an example of the organization of higher education funding in countries where budgetary resources prevail. In addition to financial support for students in the form of grants and loans, housing subsidies are used in Finland (which may be provided depending on the student's income), the amount of assistance is higher if the student lives alone and not with his parents. In Norway, if this condition is met, 40% of the loan, which is the basic aid, turns into a grant. Grants are provided mainly for a period of about 6-9 years, but in general, in each of the countries, the system of providing financial assistance is quite flexible. There are also additional grants and preferential conditions for certain vulnerable categories of students. The terms of loans are quite loyal. Payments begin 0.5 - 2 years after graduation [3].

State funding of education in Germany is implemented at three levels: federal, regional (land) and local (municipalities). In general, almost 90% of the funding of higher education institutions comes from state sources, about 75% of which are the budgets of the federal states. In Germany the opportunities of attracting extra-budgetary funds are quite limited, since education is mostly free. At the same time, the system of financial support for students in Germany is quite developed and is represented by grants and loans. The main part is provided according to the BAföG Federal Student Aid Law. If the family income is insufficient, financial support from the state is provided. BAföG provides the opportunity for students to work or almost not work during their studies have. At the same time,

about two-thirds of students have part-time employment. Half of the received funds are usually provided in the form of a grant, the other half in the form of an interest-free loan, which begins to be paid five years after the end of higher education (Melnyk & Myroshnychenko (2021) [3]). In Germany, all students between the ages of 18 and 30 can take out a student loan. The maximum amount is 7,800 euros per year (650 euros per month). Flexible interest rate is from 5.95 to 8.38%. The repayment period is up to 25 years. The German Development Bank (Kreditanstalt für Wiederaufbau) assumes all non-return risks Horin (2013) [5].

Sources of higher education funding in Ukraine are presented in Table 2.

Table 2.

Sources of higher education funding in Ukraine in 2010-2021

Sources of funding	2010/11	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Public	42,1	50,5	65,0	49,2	46,9	46,3	41,5
Privat	57,9	49,5	35,0	50,8	53,1	53,7	58,5

Source: compiled by the authors according to State Statistical Service data (2021) [17].

In Ukraine the share of state funding of higher education decreases every year (Table 2). This determines the need to use private funds to pay for educational services. The situation is complicated by the fact that the Cabinet of Ministers Resolution ‘Some issues of the introduction of indicative costing’ has entered into force [18]. This means that educational institutions must set the cost of study under the contract for 38 popular specialties at the level of up to 80% of the amount of budget costs for training one student with budget funds. Private higher education institutions found themselves in a more advantageous position, since they didn’t have to apply the indicative cost formula to calculate the price, and therefore in some cases they set prices lower than public higher education institutions. It turned out that the price of education for the same specialties could differ by 1.5–2 times in institutions of the same region. In any case, in the conditions of a reduction in the volume of state orders for the training of specialists (reduction of state funding) and an increase in the price of education, the need for loan funds has increased.

In Ukraine both mechanisms of private and state educational lending are used. Ukrainian banks do not offer targeted loans for education. But

they offer non-target cash study loan. Such credit products are available in almost every bank. The amount of the loan depends on the potential client's income and his security. If the amount required is small, it is more profitable to issue a credit card or take a cash loan. So, if a small amount of money is taken for an student loan (20-50 thousand UAH), then the repayment period rarely exceeds 2-3 years. Such loans are the easiest to obtain, but also have the highest interest rate. Another option to get a loan for education is credit unions. There are more than 300 credit unions in Ukraine, about 200 of them are active. On average, the interest rate in a credit union is the same 30% as in banks. But unlike the banks, they provide smaller amounts of funds and shorter terms, than banks [19].

Besides the private education lending, there is also preferential government lending. Since 2003 the Cabinet of Ministers Resolution № 916 'On approval of the Procedure for providing targeted preferential state loans for higher education' [20] had been in effect. Since 2018 the Cabinet of Ministers Resolution № 673 'On approval of the Procedure for preferential lending for professional (vocational education), professional pre-higher and higher education' [21] is in effect. According to it, the loan amount is returned:

- with the payment of three percent of the annual amount owed on the loan;
- within fifteen years;
- payments to the state budget or to local budgets start from the twelfth month after the recipient of the loan receive the appropriate educational level;
- payment of one-fifteenth of the total amount of the received loan and interest for its use is provided every year.

The recipient of the loan can return the loan earlier than the term in the agreement.

The effectiveness of the terms of such lending is debatable. Taking into account the depreciation of funds due to inflation, the authors Ierfort & Yerfort (2018) [10] calculated that the repayments of the principal amount of the debt and interest amounts provide only 40.6% of the amount provided.

During the period from 2000 to 2014, only 22 402 people received preferential loans. No loans were granted during 2014-2018. In 2019 – 77 people Kovtun (2020) [19].

In accordance with the Cabinet of Ministers Resolution dated 11.03.2022 'On the suspension in 2022 of some resolutions of the Cabinet of Ministers

of Ukraine' to regulate the funding of higher education institutions under martial law, the effect of the Order of the Cabinet of Ministers of Ukraine 'Some issues of the introduction of indicative costing' [18] is suspended. At the same time, in the conditions of a reduction in budget revenues, which means a reduction in the volume of state orders and a decrease in the purchasing power of population, the need to use credit resources will increase significantly. There is a need to expand opportunities of implementation the mechanism of student loans in Ukraine.

Conclusions. Thus, the analysis of mechanisms of higher education funding in the OECD countries showed that the use of both the bureaucratic model (with the prevalence of budgetary resources) and the market model (with the prevalence of private resources) is equally effective. In Ukraine there is an urgent need to reform the higher education funding system in conditions of limited financial resources, a reduction in the share of state funding for the training of specialists with higher education, an increase in the prices for educational services with decrease in the purchasing power of the population. The demand for credit resources is increasing, and private financial institutions with excessively high rates do not provide conditions for affordable educational lending. Targeted preferential state lending has low financial efficiency for the state and did not gain popularity among the population. Based on the analysis of foreign experience, it can be concluded that in conditions of a budget deficit, an effective measure to increase the efficiency of higher education funding in Ukraine is to reduce the amount of budget resources directed to the state order for training the specialists with higher education, in behalf of increasing the educational lending fund.

References:

1. Bouhajeb, M., Mefteh H. & Ammar, B. R. (2018). Higher education and economic growth: The importance of innovation. *Atlantic Review of Economics*. 1(2). Retrieved from <https://www.econstor.eu/handle/10419/213791>.
2. Harmon, C., Walker, I., & Westergaard-Nielsen, N. (2001). *Education and earnings in Europe: a cross country analysis of the returns to education*. Edward Elgar. Retrieved from <https://www.e-elgar.com/shop/gbp/education-and-earnings-in-europe-9781840645309.html>
3. Melnyk, O., Myroshnychenko, Yu. O., V. (2021). Derzhavne rehuliuвання finansuvannya vyshchoi osvity: svitovyi dosvid [State regulation of higher education funding: world experience]. *Visnyk Sumskoho derzhavnoho universytetu. Seriya Ekonomika*. 3, 120–126. (In Ukrainian). DOI: 10.21272/1817-9215.2021.3-13.

4. Kharlamova H. O. (2017). Brytanska model finansuvannia vyshchoi osvity: uroky dlia Ukrainy [The British model of financing higher education: lessons for Ukraine]. Visnyk Kyivskoho natsionalnoho universytetu imeni Tarasa Shevchenka. Ekonomika. 5, 58-66. (In Ukrainian). Retrieved from http://nbuv.gov.ua/UJRN/VKNU_Ekon_2017_5_11.
5. Horin I. I. (2013). Foreign and Ukrainian experience of financing higher education. [Foreign and Ukrainian experience of financing higher education]. Aktualni problemy rozvytku ekonomiky rehionu. Vyp. 9(1). S. 176-182. (In Ukrainian). Retrieved from http://nbuv.gov.ua/UJRN/aprer_2013_9%281%29_32
6. Tereshchenko H. M. (2018). Otsiniuvannia perevah ta nedolikiv finansuvannia zdobuttia vyshchoi osvity cherez mekhanizm kredyтуvannia ta hrantiv na navchannia studentiv [Evaluating the advantages and disadvantages of financing higher education through the mechanism of loans and grants for student training]. Osvitnia analityka Ukrainy. № 3 (4). C. 108-127. (In Ukrainian). DOI: <https://doi.org/10.32987/2617-8532-2018-3-108-127>.
7. Zatonatska T. H., Tereshchenko H. M. (2018). Kredytnyi mekhanizm finansuvannia zdobuttia vyshchoi osvity v Ukraini. [Credit mechanism for financing higher education in Ukraine]. Visnyk Kyivskoho natsionalnoho universytetu imeni Tarasa Shevchenka. Ekonomika. № 2. S. 19-23. (In Ukrainian). DOI: Retrieved from http://nbuv.gov.ua/UJRN/VKNU_Ekon_2018_2_5
8. Bilinets M. Yu. (2016). Osvitni kredyty yak dzherelo finansuvannia vyshchoi osvity: svitova praktyka ta ukraïnski realii. [Educational loans as a source of financing higher education: world practice and Ukrainian realities]. Investytsii: praktyka ta dosvid. № 15. S. 34-38. (In Ukrainian). Retrieved from: http://nbuv.gov.ua/UJRN/ipd_2016_15_8
9. Poltorak A. S., Palamarchuk V. Yu., Manukian T. A. (2018). Rozvytok mekhanizmu kredyтуvannia dlia zdobuttia vyshchoi osvity yak napriam zmitsnennia rïvnia finansovoi bezpeky derzhavy. [Development of the crediting mechanism for obtaining higher education as a direction of strengthening the level of financial security of the state]. Investytsii: praktyka ta dosvid. № 23. S. 44-49. (In Ukrainian). DOI: 10.32702/2306-6814.2018.23.44.
10. Ierfort O. Yu., Yerfort I. Yu. (2018). Rozvytok mekhanizmiv kredyтуvannia zdobuttia vyshchoi osvity v Ukraini. [Ierfort O. Yu., Yerfort I. Yu. (2018). Rozvytok mekhanizmiv kredyтуvannia zdobuttia vyshchoi osvity v Ukraini.]. Finansy Ukrainy. 2018. № 3. S. 67-79. - Rezhym dostupu: http://nbuv.gov.ua/UJRN/Fu_2018_3_6 Finansy Ukrainy. 2018. № 3. S. 67-79. (In Ukrainian). Retrieved from http://nbuv.gov.ua/UJRN/Fu_2018_3_6
11. Hryshchenko, A. I. (2015). Osvitnie kredyтуvannia: svitovi dosvid ta perspektyvy vprovadzhennia v Ukraini [Educational lending: global experience and prospects for implementation in Ukraine.]. Ekonomika ta derzhava. Ekonomika ta derzhava. № 3. S. 38-42. (In Ukrainian).

12. OECD. (2019). Relative shares of public, private and international expenditure on educational institutions. OECD Publishing. Retrieved from: <https://stats.oecd.org/index.aspx?queryid=93063>
13. OECD. (2019). Total expenditure on educational institutions per full-time equivalent student. OECD Publishing. Retrieved from: https://stats.oecd.org/Index.aspx?DataSetCode=AV_AN_WAGE
14. GDP per capita. World Bank data. Retrieved from: <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
15. Antonyuk L., Ilnytsky D., Barabas D., & Sandul M. (2017). International competitive disposition of national higher education systems. *International Economic Policy*, 2, 7-38. Retrieved from http://iepjournal.com/journals_eng/27/2018_1_Antoniuk_Ilnytsky_Barabas_Sandul.pdf.
16. Chapman B., Ryan C. Income-contingent financing of student charges for higher education: assessing the Australian innovation / Center for economic policy research. Australian National University. 2002. Retrieved from: <https://digitalcollections.anu.edu.au/handle/1885/40577>
17. Higher and professional pre-higher education in Ukraine (2021). State Statistical Service of Ukraine. Retrieved from: <https://ukrstat.gov.ua/>.
18. Cabinet of Ministers of Ukraine (2020), Some issues of introducing the indicative cost price. Retrieved from: <https://zakon.rada.gov.ua/laws/show/191-2020-%D0%BF#Text>
19. Kovtun O. (2020) Kredyt na navchannia: yak otrymaty ta yaki umovy proponuiut derzhava y banky. [Study loan: how to get it and what conditions are offered by the state and banks]. *Ukrainskyi kapital*. (In Ukrainian). Retrieved from: <https://ucap.io/kredyt-na-navchannya/>
20. Cabinet of Ministers of Ukraine (2003), The procedure for providing targeted preferential state loans for higher education. Retrieved from: <http://zakon3.rada.gov.ua/laws/show/916-2003-%D0%BF>.
21. Cabinet of Ministers of Ukraine (2003), The procedure for preferential lending for obtaining professional and technical and higher education. Retrieved from: <https://zakon.rada.gov.ua/laws/show/673-2018-%D0%BF>

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Abstracts

ОЛЬГА ГРИГОРАШ. Механізм приватного фінансування вищої освіти в країнах ОЕСР та Україні. У статті розглянуто механізми фінансування вищої освіти у країнах ОЕСР та в Україні. Проведено аналіз джерел фінансування вищої освіти та розглянуто окремі показники фінансування вищої освіти у країнах ОЕСР. Охарактеризовано механізм фінансової підтримки здобуття вищої освіти у країнах, де переважає бюджетне та приватне фінансування вищої освіти. Проаналізовано особливості фінансування вищої освіти в Україні за рахунок приватних джерел та досвід пільгового державного кредитування.

Ключові слова: вища освіта, державне фінансування, приватне фінансування, освітній кредит.

OLHA HRYHORASH. Mechanizm prywatnego finansowania szkolnictwa wyższego w krajach OECD i w Ukrainie. Artykuł analizuje mechanizmy finansowania szkolnictwa wyższego w krajach OECD i w Ukrainie. Przeprowadzono analizę źródeł finansowania szkolnictwa wyższego oraz rozpatrzono poszczególne wskaźniki finansowania szkolnictwa wyższego w krajach OECD. Scharakteryzowano mechanizm finansowego wsparcia uzyskiwania wyższego wykształcenia w krajach, w których przeważa budżetowe i prywatne finansowanie szkolnictwa wyższego. Przeanalizowano specyfikę finansowania szkolnictwa wyższego w Ukrainie kosztem środków prywatnych oraz doświadczenia związane z ulgowymi pożyczkami państwowymi.

Słowa kluczowe: szkolnictwo wyższe, finansowanie państwowe, finansowanie prywatne, pożyczka na kształcenie.