

# MONEY, FINANCE AND CREDIT

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## FINANCIAL RESERVE OF VOCATIONAL EDUCATION AND TRAINING (VOCATIONAL TECHNICAL EDUCATION AND TRAINING) INSTITUTIONS

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**Introduction.** Today education as a form of training organization, systematic knowledge and information transfer to the next generations faces radical changes all around the world. Changes in current education system have lots of facets and their nature is reflected in different forms: learning process` sophistication, institutional forms` and organizational structure`s expansion, diversification of its financial mechanism. Ukraine is not an exception, since amid decentralization of its administrative and territorial system and the whole of society, it is important to provide these important processes with qualified personnel capable of effective implementation of the reform tasks, as well as to create conditions for economic sustainable development.

**Analysis of recent researches and publications.** Bohynia D.P., Vovkanych S.Yo., Heiets V.M., Holubets M.A., Hrishnova O.A., Dolishnii M.I., Zlupka S.M., Kanygina Yu.M., Kolot A.M., Kuzmin O.Ye., Mochernyi S.V., Fedulova L.I., Khmil F.I. [1-4] and other scholars made considerable contribution to the development of human capital issues.

**The aim of research.** The issue of reform process and power decentralization management to ensure national sustainable development is intrinsically linked to the educational reform process, so reforms` effective mechanisms study requires particular attention and in-depth theoretical and practical research. Therefore, there is a need to study the mechanisms of education funding in general and vocational training in particular in the process of decentralization and reform of the country`s administrative and territorial structure.

**The main material.** According to the State Statistics Service, there is a professional and qualitative imbalance between supply and demand in the Ukrainian labour market: 75% of school graduates receive higher education, 25% – vocational. As a result, almost 44% of unemployed are university graduates, and in some big cities this figure reaches 90%. Analysis of the labour market of Ukraine regarding supply and demand balancing for labour resources of certain jobs and qualifications, also showed the disproportion. Thus, there were seven vacancies per one qualified locksmith, ten vacancies per one welder, but 6.8 vacancies per one lawyer.

Shortage of qualified workers was because of the 40% decline of the number of vocational educational

institutions during the period of independence – from 1285 in 1991 to 736 in 2018. The number of trained workers has fallen by more than half: in 1991 there were 338.1 thousand graduates of vocational education institutions, in 2018 there were only 133.5 thousand graduates.

Therefore, today there is a need to solve the problems associated with these disparities. The last is the objective of vocational education reform which has been started in the country recently.

To fulfill the strategic tasks of education system reform and ensure its quality and competitiveness, the possibility of its integration into the European and world educational environment, it is necessary to determine optimization of its financing system in general and vocational education and training in particular.

Table 1 illustrates the analysis of dynamics of education funding in Ukraine. During 2000 – 2017 yrs. vocational education and training (VET) share decreased of 6,53% to 4,88%, index's growth rates have slowed down too. During 2013 – 2015 VET funding significantly dropped down. We consider that the mentioned trends negatively affected VET development and blue collars' training.

Table 1

Indices of education funding dynamics in Ukraine, 2000-2017 yrs.

Year	Total consolidate budget expenditure, mln UAH	Public spending on education, mln UAH	Public spending on education as a share of total consolidated budget expenditures, %	Expenditure on early childhood education as a share of spending on education, %	Expenditure on secondary education as a share of spending on education, %	Expenditure on VET as a share of spending on education, %	Expenditure on higher education as a share of spending on education, %	Expenditure on VET growth rate, %
2000	48148,60	7085,50	14,72	11,14	36,20	6,06	32,26	
2005	141989,50	26801,80	18,88	10,97	41,63	6,53	29,60	407,81
2010	377842,80	79826,00	21,13	12,83	41,16	6,40	31,32	291,80
2011	416853,60	86253,60	20,69	13,72	40,85	6,15	30,86	103,90
2012	492454,70	101560,90	20,62	14,40	41,81	5,94	28,89	113,73
2013	359044,50	75951,80	21,15	14,69	42,10	6,00	28,45	75,47
2014	364087,70	71767,90	19,71	14,94	42,32	5,80	28,54	91,45
2015	433159,80	75907,00	17,52	15,86	42,91	5,46	27,74	99,46
2016	701801,30	109155,20	15,55	15,53	42,86	4,80	28,03	126,43
2017	1056759,90	177755,70	16,82	15,87	47,45	4,66	21,76	158,09

<sup>1</sup>Authors' development based on the reference book «Statistical yearbook of Ukraine» (<http://www.ukrstat.ua>)

During 2015-2019s the system of VET financing faced some changes due to the decentralization process started in 2014. In 2015, in accordance with Article 26 of the Law of Ukraine “On the State Budget for 2015”, subvention from the state budget was provided to local budgets for blue collars training. Changes that took place in 2016 were stipulated in the Budget Code and the Law of Ukraine “On the State Budget for 2016”. The main result was VET funding transfer from central to the local level. The main sources of VET funding in 2016 were the State budget, regional and Kyiv budgets, budgets of regional centers, budgets of cities of regional significance. Besides, the mechanism of contingency allowance from the State Budget (redistribution of stabilization grants) was applied. Therefore, funding of vocational schools located in cities of regional significance, namely regional centers, was covered by municipal budgets, and other vocational schools – from the regional budgets and the budget of Kyiv (Articles 89 and 90 of the Budget Code of Ukraine). In 2016, a new subvention from the state budget to local budgets was introduced aimed at modernization and updating of VET physical infrastructure. The procedure for its distribution was approved by the Law of Ukraine “On the State Budget of Ukraine for 2016”.

Table 2 analyzes the dynamics of VET expenditure funded from the state budget of Ukraine and local budgets.

Data analysis describes that in 2014 there was a significant decrease in VET financing both from state budget and local budgets. Since 2015, there has been a redistribution of financial constraints on VET

financing from the state to the local level. During 2016 – 2017 VET financing process was accelerated, but since 2018 funding growth has slowed down. We believe that these indicators of financing dynamics do not fit the expected results of VET reform. Therefore, there is a need to find sources of additional funding for the local reforms.

Nowadays education is considered to be a form of investment in human capital. Since Ukraine has chosen a knowledge-based economy development model, investment in education is undoubtedly the investment in national economy, and its volume must grow dynamically.

Analysis of education funding sources has demonstrated that it is funded from budget funds, chargeable services provided by educational institutions, stock dividends, foreign exchange receipts, voluntary contributions, tangible assets supplied by enterprises, institutions, organizations, individual citizens. Correlation between budgetary and non-budgetary education financing is determined by: rates of economic development, availability of budgetary resources under the adequate national educational policy, forms of ownership of educational institution. Funding restrictions cause the introduction of chargeable services as the form of educational institutions' funding.

**Table 2**

**Dynamics of VET expenditure funded from the state budget of Ukraine and local budgets**

years	VET expenditure plan indices' growth rates funded from the state budget (plan indices), %	VET expenditure plan indices' growth rates funded from the state budget (actual performance), %	VET expenditure plan indices' growth rates funded from local budget (plan indices), %	VET expenditure plan indices' growth rates funded from local budget (actual performance), %
2008	142,16	141,19	141,09	126,26
2009	106,75	108,30	112,90	91,28
2010	125,11	125,89	100,00	100,00
2011	25,29	25,11	507,03	553,96
2012	120,26	118,53	113,45	1474,23
2013	115,25	115,31	105,41	102,86
2014	97,65	93,15	101,67	92,36
2015	9,01	9,43	118,68	132,48
2016	103,52	104,68	100,21	100,09
2017	228,30	147,61	145,05	133,62
2018	95,25	147,32	113,54	120,21
2019	125,54	125,52	106,23	107,61

In our opinion, deposits income and domestic government loan bonds income should be additional source of funding for local education reforms.

Typical method of temporary free funds investment is deposits. Municipalities use them to receive additional funding to local budgets in the form of interest paid by banks. Thus, in 2018, local budget receipts for temporarily free funds investment in deposit accounts amounted to 1.3 billion UAH, which is 0.6% of the total revenues of local budgets' general fund of Ukraine (excluding transfers from the state budget).

Tables 3 – 6 provide analysis of public funds' of Ukraine deposit banking indices during 2018 – 2019.

As we can see, in 2018, the above-mentioned general found mechanism was used extensively in some regions of Ukraine, for instance in Vinnytsia, Dnipro, Donetsk, Lviv, Poltava and Cherkasy regions. Zakarpattia, Ivano-Frankivsk, Luhansk and Kherson regions had the lowest level of application, while in Kyiv it had never been used at all. Regarding the special fund, the maximum level of deposit opening was observed in Donetsk region, somewhat lower level – in Volyn, Zaporizhzhia and Kharkiv regions. Ivano-Frankivsk, Kirovograd, Luhansk, Odesa, Ternopil, Khmelnytskyi and Cherkasy regions had the lowest figures. In Mykolaiv and Kherson regions and Kyiv it had never been used at all.

In January 2019, the Government took a decision to suspend by the end of 2019 the investment of temporarily free funds of local budget general fund in banking accounts. The relevant changes were approved by the Resolution of the Cabinet of Ministers of Ukraine No. 53 of 23.01.2019 “On Amendments to the Procedure for Investment of Temporarily Free Local Budgets' Funds in Deposit Banking Accounts”.

In certain regions, namely Donetsk, Vinnytsia and Poltava, placement of general fund resources

contracted in January 2019. In Zaporizhzhia, Ivano-Frankivsk, Kropyvnytskyi, Luhansk, Odesa, Rivne and Kherson regions, the general fund resources were not invested in the deposit accounts. Investments in other regions had decreased significantly.

Table 3

## Indices of local budgets' general and special funds investments for 01.11.2018

Region	General fund			Special fund		
	Invested from the beginning of the year	Payback from the beginning of the year	Balance of deposit facilities by the date of report	Invested from the beginning of the year	Payback from the beginning of the year	Balance of deposit facilities by the date of report
Vinnitsia	1 327 911,0	940 260,0	387 651,0	316 482,2	186 565,0	129 917,3
Volyn	854 853,5	520 160,0	334 693,5	624 515,8	356 516,4	267 999,4
Dnipro	3 832 087,9	2 646 120,0	1 185 967,9	297 648,4	97 798,0	199 850,4
Donetsk	1 479 500,0	348 000,0	1 131 500,0	2 920 000,3	320 934,8	2 599 065,5
Zhytomyr	484 239,9	180 872,5	303 367,4	455 461,9	198 651,8	256 810,1
Zakarpattia	50 788,6	11 894,3	38 894,3	112 389,3	106 835,7	5 553,6
Zaporizhzhia	377 412,8	119 412,8	258 000,0	593 087,2	185 700,0	407 387,2
Ivano-Frankivsk	42 000,0	18 000,0	24 000,0	21 495,0	4 788,0	16 707,0
Kyiv	437 989,0	92 500,0	345 489,0	168 620,9	32 162,0	136 458,9
Kropyvnytskyi	150 012,0	96 200,0	53 812,0	43 720,0	14 797,4	28 922,6
Luhansk	3 000,0	0,0	3 000,0	50 000,0	0,0	50 000,0
Lviv	1 110 000,0	312 500,0	797 500,0	445 201,8	290 295,0	154 906,8
Mykolaiv	300 000,0	0,0	300 000,0	0,0	0,0	0,0
Odesa	390 000,0	300 000,0	90 000,0	20 310,0	0,0	20 310,0
Poltava	1 026 099,4	461 420,0	564 679,4	171 809,8	31 607,2	140 202,6
Rivne	227 333,7	0,0	227 333,7	365 000,0	318 500,0	46 500,0
Sumy	733 399,6	458 314,2	275 085,4	256 369,4	208 115,9	48 253,5
Ternopil	238 460,7	158 290,0	80 170,7	32 079,3	9 140,7	22 938,7
Kharkiv	923 455,0	308 755,0	614 700,0	412 261,6	176 576,6	235 685,0
Kherson	16 200,0	1 200,0	15 000,0	0,0	0,0	0,0
Khmelnitskyi	652 093,0	476 380,0	175 713,0	23 825,5	12 537,8	11 287,7
Cherkasy	1 187 473,8	913 223,8	274 250,0	44 543,9	33 675,9	10 868,1
Chernivtsi	594 625,0	343 555,0	251 070,0	256 351,0	43 412,9	212 938,1
Chernihiv	484 791,8	321 779,8	163 012,0	154 004,5	80 830,4	73 174,1
City of Kyiv	0,0	0,0	0,0	0,0	0,0	0,0
TOTAL	16 923 726,6	9 028 837,4	7 894 889,2	7 785 177,8	2 709 441,3	5 075 736,5

As for the special funds resources, only Donetsk region was characterized by the maximum level of investment in deposit accounts, Dnipro and Kharkiv regions had lower figures. They were the lowest in Zakarpattia, Ivano-Frankivsk, Kropyvnytskyi, Luhansk, Odesa and Rivne regions. Mykolaiv and Kherson regions as well as the city of Kyiv had not used the mechanism at all.

Tables 5 – 6 contain the analysis of fund balance in deposit accounts by the end of the year and its cost efficiency. It has been demonstrated that cost efficiency level ranged from 10% to 16,5% in 2019.

Thus, the imposed restriction affected temporarily free funds investment (in the part of special funds resources) in banking deposit accounts.

As an alternative, the Government proposed to invest temporarily free funds of local budgets general fund through buying government securities. This is governed by part 8 of Article 16 of the Budget Code and by the Resolution of the Cabinet of Ministers of Ukraine No. 544 of 23.05. 2018 “On Approval of the Procedure for Investment of Temporarily Free Local Budgets Funds through buying Government Securities”.

Table 4

Indices of local budget general and special funds investments for 01.11.2019

Regions	General fund			Special fund		
	Invested from the beginning of the year	Payback from the beginning of the year	Balance of deposit facilities by the date of report	Invested from the beginning of the year	Payback from the beginning of the year	Balance of deposit facilities by the date of report
Vinnitsia	351 233,8	98 526,5	252 707,3	326 710,7	109 066,6	217 644,1
Volyn	60 950,0	27 167,0	33 783,0	237 096,5	193 169,6	43 926,9
Dnipro	500 960,0	500 000,0	960,0	567 061,7	271 310,4	295 751,3
Donetsk	1 559 000,0	7 000,0	1 552 000,0	3 388 502,0	875 841,7	2 512 660,3
Zhytomyr	137 786,7	55 900,0	81 886,7	396 104,6	264 365,5	131 739,1
Zakarpattia	10 000,0	10 000,0	0,0	29 306,1	23 661,1	5 645,0
Zaporizhzhia	0,0	0,0	0,0	221 082,0	120 790,0	100 292,0
Ivano-Frankivsk	0,0	0,0	0,0	65 000,0	49 500,0	15 500,0
Kyiv	27 000,0	500,0	26 500,0	189 470,8	83 200,0	106 270,8
Kropyvnytskyi	0,0	0,0	0,0	33 790,0	16 350,0	17 440,0
Luhansk	0,0	0,0	0,0	50 000,0	0,0	50 000,0
Lviv	330 000,0	50 000,0	280 000,0	48 261,4	18 890,0	29 371,4
Mykolaiv	0,0	0,0	0,0	0,0	0,0	0,0
Odesa	0,0	0,0	0,0	6 000,0	0,0	6 000,0
Poltava	572 482,9	25 550,0	546 932,9	111 816,1	35 807,8	76 008,3
Rivne	0,0	0,0	0,0	27 800,0	18 700,0	9 100,0
Sumy	183 081,0	92 063,3	91 017,7	153 305,9	79 565,1	73 740,8
Ternopil	30 060,0	10,0	30 050,0	79 722,6	27 235,7	52 486,9
Kharkiv	65 784,9	16 649,8	49 135,1	439 821,1	89 947,9	349 873,3
Kherson	0,0	0,0	0,0	0,0	0,0	0,0
Khmelnyskyi	101 900,0	96 932,0	4 968,0	176 748,6	110 134,4	66 614,2
Cherkasy	233 428,1	159 607,0	73 821,1	315 084,7	273 541,9	41 542,8
Chernivtsi	185 500,0	103 721,7	81 778,3	327 303,8	192 389,3	134 914,5
Chernihiv	68 027,4	35 896,8	32 130,7	193 213,7	122 128,7	71 085,1
City of Kyiv	0,0	0,0	0,0	0,0	0,0	0,0
TOTAL	4 417 194,8	1 279 524,1	3 137 670,8	7 383 202,3	2 975 595,6	4 407 606,7

It should be noted that the instrument for managing temporarily free budget funds is relatively new for local government bodies. As known, domestic government loan bonds are government securities, which confirm Ukraine's obligation to repay the nominal value of bonds to the bondholders with payment of income in accordance with the terms of the bond placement.

Government bonds' issue is a source to finance state budget deficit in the amount established under the Law on the State Budget of Ukraine for the respective year, and within the margin amount of the government debt.

The Ministry of Finance issues and places domestic government loan bonds; determines timing and number of government bonds; determines circulation and interest rate (selling price) of government bonds; provides annually in the draft Law of Ukraine on the State Budget of Ukraine for the respective year the funds needed for government bonds' servicing and retirement; acts on behalf of the Cabinet of Ministers of Ukraine as the guarantor of timely retirement and bonds' yield payment.

Bonds are sold on the basis of profitability criterion through government bond auctions or an auction rate bond. Government bonds yield is set by the market when they are issued by the Ministry of Finance.

Table 5

## Indices of local budgets` investment and fund balance for 01.11.2018

Region	Invested from the beginning of the year	Payback from the beginning of the year	Balance of deposit facilities by the date of report
Vinnitsia	1 644 393,2	1 126 825,0	517 568,2
Volyn	1 479 369,3	876 676,4	602 693,0
Dnipro	4 129 736,3	2 743 918,0	1 385 818,3
Donetsk	4 399 500,3	668 934,8	3 730 565,5
Zhytomyr	939 701,8	379 524,3	560 177,5
Zakarpattia	163 177,9	118 730,0	44 447,9
Zaporizhzhia	970 500,0	305 112,8	665 387,2
Ivano-Frankivsk	63 495,0	22 788,0	40 707,0
Kyiv	606 609,9	124 662,0	481 947,9
Kropyvnytskyi	193 732,0	110 997,4	82 734,6
Luhansk	53 000,0	0,00	53 000,0
Lviv	1 555 201,8	602 795,0	952 406,8
Mykolaiv	300 000,0	0,00	300 000,0
Odesa	410 310,0	300 000,0	110 310,0
Poltava	1 197 909,2	493 027,2	704 882,0
Rivne	592 333,7	318 500,0	273 833,7
Sumy	989 769,0	666 430,1	323 338,9
Ternopil	270 540,1	167 430,7	103 109,4
Kharkiv	1 335 716,6	485 331,6	850 385,0
Kherson	16 200,0	1 200,0	15 000,0
Khmelntskyi	675 918,5	488 917,8	187 000,7
Cherkasy	1 232 017,7	946 899,7	285 118,1
Chernivtsi	850 976,0	386 967,9	464 008,1
Chernihiv	638 796,3	402 610,2	236 186,1
City of Kyiv	0,00	0,00	0,00
TOTAL	24 708 904,4	11 738 278,6	12 970 625,8

The National Bank of Ukraine is the general agent for domestic government loan bonds` servicing and redemption. Transactions related to bonds issue are carried out by the National Bank through brokers and / or dealers who act as custodians and clients of the National Bank's depository. The bonds are recorded in electronic form at the National Bank's depository. That is, there are no bonds in paper form, their issue and maturity have exclusively electronic (non-documentary) form. Domestic government loan bonds according to the maturity are divided into short-term – up to one year; medium term – from one to five years; long term – over five years. The face value of one government bond is 1,000 UAH. Annual interest rate for medium-term and long-term government bonds is defined as weighted average return on competitive bids through the auction after the initial public offering and subject to the decision of the Ministry of Finance, taking into account yield margins on bonds.

Short-term government bonds are sold at a price lower than their par value. Short-term government bond yield is the difference between the par value paid off to the bondholder by its redemption and the bid price.

Banks – primary dealers and the National Bank of Ukraine are the subjects of government bonds offerings. According to the terms of cooperation agreement in the government securities market, primary dealers cooperate with the Ministry of Finance, which includes providing bilateral domestic government loan bonds quotation and their buying through the primary market. Moreover, the Ministry of Finance grants dealers the exclusive right to buy domestic government loan bonds. The Ministry of Finance of Ukraine identifies banks – primary dealers, namely JSC CB PRIVATBANK, JSC Oshchadbank, JSC State Export-Import Bank of Ukraine, JSB UKRGASBANK, JSC OTP Bank, JSC Alfa-Bank, JSC FUIB, PJSC KredoBank, RAIFFEISEN BANK AVAL JSC, Public joint-stock company JSB PIVDENNY, JSC UKRSIBBANK, JSC Citibank.

Table 6

Indices of local budgets investment and fund balance for 01.11.2019

	Invested from the beginning of the year	Interest rate		Payback from the beginning of the year	Balance of deposit facilities by the date of report
		min	max		
Vinnitsia	677 944,5	12,50	15,30	207 593,1	470 351,4
Volyn	298 046,5	11,50	16,40	220 336,6	77 709,9
Dnipro	1 068 021,7	10,00	15,70	771 310,4	296 711,3
Donetsk	4 947 502,0	10,00	16,20	882 841,7	4 064 660,3
Zhytomyr	533 891,2	12,00	16,45	320 265,5	213 625,8
Zakarpattia	39 306,1	13,25	16,30	33 661,1	5 645,0
Zaporizhzhia	221 082,0	12,50	15,35	120 790,0	100 292,0
Ivano-Frankivsk	65 000,0	12,00	16,40	49 500,0	15 500,0
Kyiv	216 470,8	10,50	15,75	83 700,0	132 770,8
Kropyvnytskyi	33 790,0	10,00	13,75	16 350,0	17 440,0
Luhansk	50 000,0	15,50	15,50	0,00	50 000,0
Lviv	378 261,4	13,25	15,30	68 890,0	309 371,4
Mykolaiv	0,00	0,00	0,00	0,00	0,00
Odesa	6 000,0	13,25	13,25	0,00	6 000,0
Poltava	684 299,0	12,00	15,40	61 357,8	622 941,2
Rivne	27 800,0	13,25	14,25	18 700,0	9 100,0
Sumy	336 386,9	12,00	16,30	171 628,4	164 758,5
Ternopil	109 782,6	12,50	15,50	27 245,7	82 536,9
Kharkiv	505 606,1	13,25	15,60	106 597,7	399 008,4
Kherson	0,00	0,00	0,00	0,00	0,00
Khmelnyskyi	278 648,6	12,50	15,35	207 066,4	71 582,2
Cherkasy	548 512,9	15,00	16,30	433 149,0	115 363,9
Chernivtsi	512 803,8	10,00	15,25	296 111,0	216 692,8
Chernihiv	261 241,2	13,50	16,50	158 025,5	103 215,7
City of Kyiv	0,00	0,00	0,00	0,00	0,00
TOTAL	11 800 397,1	10,00	16,50	4 255 119,6	7 545 277,5

Repayment of local budget funds that have been temporarily invested by buying domestic government loan bonds is made after their redemption or sale in the stock market. If necessary, the financial authority can apply for the early sale of domestic government loan bonds (before maturity). In this case domestic government loan bonds are sold in the secondary market, where the price is determined by market supply and demand. That is why the price of domestic government loan bonds' sale may be higher or lower than the bid price.

Tables 7 and 8 analyze transactions in the domestic government loan bonds market during 2018 – 2019.

Assessment of the bonds' yield in comparison with deposits, domestic government loan bonds' yield for 2018 was 17.79%, including the maturity date: 1 year – 17.92%, from 1 to 3 years – 16.18%, from 3 to 5 years – 15.87%.

As we can see, the size of domestic government loan bonds market increased significantly in 2019, but, in our opinion, this is not due to the activities of local governments in this market. They are not able to enter the stock market quickly as they do not have relevant experience. Higher stock markets profitability will not prompt them to pull out the deposit mechanism in favor of the stock market.

Table 7

## Key domestic government loan bonds market characteristics in 2018

Period	Invested in the domestic government loan bonds` primary market, UAH		i.e.									
			Budget funds		in particular by maturity							
					up to 1 year		from 1 to 3 years		from 3 to 5 years		Over 5 years	
	amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH.	weighted average return, %	amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH	weighted average return, %
January	8 528,35	16,11	8 528,35	16,11	7 553,87	16,16	233,20	15,70	741,27	15,80	-	-
February	8 877,46	16,34	8 877,46	16,34	8 244,01	16,38	345,63	15,79	287,82	15,79	-	-
March	7 376,42	17,12	7 376,42	17,12	6 692,43	17,22	683,99	16,11	-	-	-	-
April	2 636,40	16,87	2 636,40	16,87	1 962,86	17,17	27,17	16,15	646,37	15,97	-	-
May	1 542,16	16,94	1 542,16	16,94	1 089,72	17,27	422,44	16,14	30,00	16,00	-	-
June	4 563,37	17,29	4 563,37	17,29	4 418,01	17,33	145,36	16,13	-	-	-	-
July	4 513,57	17,48	4 513,57	17,48	3 426,54	17,81	1 087,04	16,43	-	-	-	-
August	7 953,31	17,99	7 953,31	17,99	7 923,61	18,00	19,41	16,79	10,28	16,00	-	-
September	319,15	18,48	319,15	18,48	319,15	18,48	-	-	-	-	-	-
October	2 516,45	18,95	2 516,45	18,95	2 503,29	18,95	13,16	18,22	-	-	-	-
November	1 308,85	18,90	1 308,85	18,90	1 303,09	18,91	5,76	18,50	-	-	-	-
December	14 992,30	20,00	14 992,30	20,00	14 992,30	20,00	-	-	-	-	-	-
Total	65 127,79	17,79	65 127,79	17,79	60 428,88	17,92	2 983,16	16,18	1 715,75	15,87	-	-

Balance of local budgets in deposit accounts amounted to 12.5061 billion UAH by 01.12.2018. Therefore, the recommendations of the Ministry of Finance for the cities of regional significance and UTCs to invest local budget temporarily free funds by buying domestic government loan bonds are forward-looking.

Another stock market promising instrument is local authority stock, but its main disadvantage is that it takes a long time for the accumulation of essential resources and therefore there is a risk that minor savings will be spent to solve minor issues rather than significant problems.

Thus, the analysis have demonstrated that in the future, when the domestic stock market reaches the appropriate level of development, it will be possible to apply studied models and methods of financial resource management using stock market instruments.

**Conclusion.** Based on the analysis of structure and sources of education in general and VET funding in particular in Ukraine, it has been proved that positive results of educational reform, decentralization and funding can only be ensured by raising additional resources for its development. It has been illustrated that additional income of local budgets, which could be used to finance VET system, is obtained through temporarily free funds` investment in deposit accounts of banks and stock market instruments application. It is advisable to recommend to the bodies of regional government and local self-government to increase VET institutions financing through unutilized balances.



Table 8

Key domestic government loan bonds market characteristics in 2019

Period	Invested in the domestic government loan bonds' primary market, UAH		i.e.									
			Budget funds		in particular by maturity							
					up to 1 year		from 1 to 3 years		from 3 to 5 years		over 5 years	
amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH.	weighted average return, %	amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH	weighted average return, %	amount sum, mln. UAH	weighted average return, %	
January	24 402,08	18,96	24 402,08	18,96	24 066,91	18,98	335,17	17,58	-	-	-	-
February	10 349,48	19,20	10 349,48	19,20	9 605,61	19,30	743,87	17,94	-	-	-	-
March	22 731,14	18,76	22 731,14	18,76	13 741,64	19,24	8 989,50	18,02	-	-	-	-
April	33 887,94	18,60	33 887,94	18,60	22 032,89	19,16	9 190,43	18,00	2 664,62	16,00	-	-
May	12 320,95	17,94	12 320,95	17,94	8 216,16	18,35	2 537,04	17,79	1 567,75	16,00	-	-
June	17 338,13	17,00	17 338,13	17,00	5 982,35	18,23	3 542,12	17,49	-	-	7 813,66	15,84
July	45 618,86	16,67	45 618,86	16,67	9 045,86	17,49	22 763,0	17,04	-	-	13 809,93	15,53
August	7 475,67	16,04	7 475,67	16,04	2 157,63	16,21	3 962,11	16,21	-	-	1 355,93	15,30
September	20 691,27	15,12	20 691,27	15,12	2 448,93	15,78	5 366,69	15,72	-	-	12 875,66	14,75
October	7 966,17	15,09	7 966,17	15,09	2 297,96	15,08	3 548,83	14,90	2 119,38	15,42	-	-
Total for 2019	202 781,69	17,49	202 781,69	17,49	99 595,92	18,63	60 978,83	17,10	6 351,75	15,81	35 855,17	15,31

To do this, conditions for projects' and programs' target financing aimed at the development of such institutions must be formed. It should be noted that it is advisable not to finance institutions in general, but specific programs and projects that aim to improve the quality of educational services and graduates' competitiveness in labour market.

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робітничих кадрах, то це стало наслідком скорочення впродовж тривалого часу як кількості професійно-технічних навчальних закладів, так і кількості їх випускників. За результатами аналізу структури та джерел фінансування освіти в Україні й професійно-технічної, зокрема, доведено, що позитивні результати децентралізації освіти та фінансування освітніх послуг можливо забезпечити тільки в разі залучення додаткових коштів. Показано, що додатковий дохід, який може бути використаний на фінансування системи професійно-технічної освіти, місцеві бюджети можуть отримувати з таких джерел, як розміщення тимчасово вільних коштів на депозитних вкладах у банках з одночасним використанням інструментів фондового ринку. Запропоновані механізми можуть бути ефективними за умови їх використання в процесі управління фінансовими ресурсами місцевих рад у коротко- та довгостроковому періоді.

**Ключові слова:** освітня галузь, професійна (професійно-технічна) освіта, фінансування освіти, децентралізація, депозити, облигації внутрішньої державної позики.

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**Lidiia Horoshkova**, Doctor of Economic Sciences, Associate Professor. Zaporizhzhia National University. **Yevhen Khlobystov**, Doctor of Economic Sciences, Professor. National University of «Kyiv-Mohyla Academy». **Vira Kharahirlo**. Bila Tserkva Institute of Continuous Professional Education. **Financial Reserve of Vocational Education and Training (Vocational Technical Education and Training) Institutions.** The effectiveness of education funding in Ukraine in general and vocational education and training in particular is analyzed in the study. It is proved that Ukraine has disparities between market needs in certain specialties and the number of graduates. The needs in blue collar workers have resulted in the decline in vocational schools number and their graduates. According to the analysis of the structure and sources of education and VET financing in Ukraine, it has been proved, that positive results of education decentralization and educational services financing can be assured by raising additional resources. It has been shown that additional income to finance vocational education and training is available to local budgets through the investment of temporarily free funds in deposit accounts and application of stock market instruments. The proposed mechanisms are efficient if they are used in the process of local councils' financial resource management in the short and long term.

**Keywords:** educational industry, vocational education and training, financing of education, decentralization, deposits, domestic government loan bonds.

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**Ключевые слова:** образовательная отрасль, профессиональное (профессионально-техническое) образование, финансирование образования, децентрализация, депозиты, облигации внутреннего государственного займа.