

THE DEVELOPMENT OF INTER-BUDGETARY RELATIONS ON THE BASIS OF ASSESSMENT OF REGIONS' FINANCIAL POTENTIAL

РОЗВИТОК МІЖБЮДЖЕТНИХ ВІДНОСИН НА БАЗІ ОЦІНКИ ФІНАНСОВОГО ПОТЕНЦІАЛУ РЕГІОНІВ



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INTER-BUDGETARY RELATIONS AS ONE OF THE KEY PROBLEMS IN THE FINANCIAL POLICY OF UKRAINE

One of the major problems in the fiscal policy in Ukraine is the existing system of budget equalization and inter-budgetary relations. Insufficient levels of local budgets' independence coupled with the lack of interest of local authorities in improving the financial and economic activity of the region lead to an extremely insufficient use of Ukraine's financial potential.

Statistics show that the dependence of local budgets from inter-budgetary transfers grows over time – as of the beginning of the year 2011 the share of transfers in the local budgets' revenues was almost 50% (with 20-30% in the early 2000-ies) [1].

The existing formula approach creates the basis for inefficient usage of the regions' financial potential that eventually leads to the unsatisfactory use of the financial potential in the whole country.

The research of inter-budgetary relations in Ukraine is conducted by such researchers as V.Oparin, M.Karlin, Y.Hanushchak, O.Kaun, Y.Pasechnik, G.Starostenko, I.Sazonets', V.Shvets', I.Volohova, V.Fedosov, S.Frolov. Regarding the research of the financial potential of territories and its assessment, it is necessary to mention the works of the following scholars: G.Voznyak, J.Golodova, K.Ionenko, S.Kalambet, T.Stets'ko, I.Chunyts'ka, S.Shums'ka.

Despite the considerable efforts of scientists to improve the system of inter-budgetary equalization in Ukraine the problem kept growing. Therefore, it is necessary to find principally new approaches to its solution. A promising option, in our opinion, is to change the basis for the calculation of the amounts of inter-budgetary transfers. **This study is devoted to the substantiation of the need for the use of the territories' financial potential as a basis to determine the amount of inter-budgetary transfers.**

The article lays out the principles of inter-budgetary relations based on the assessment of financial potential. It offers changes to the formula of inter-budgetary transfers' calculation: instead of the indicator of the local budgets' revenues it proposes to use the financial potential of territories multiplied by the efficiency coefficient of the financial potential's usage. This calculation makes it possible to give the real estimation of both the volumes of local budgets' revenues and the volume of budgetary compensation they can lay a claim to.

Обгрунтовано принципові засади розвитку міжбюджетних відносин на базі оцінки фінансового потенціалу. Розроблено зміни до формули розрахунку обсягів міжбюджетних трансфертів: замість показника розрахунковий обсяг доходів, закріплених за відповідними місцевими бюджетами – пропонується використовувати обсяг фінансового потенціалу відповідної території, помножений на коефіцієнт ефективності використання фінансового потенціалу. Такий розрахунок дає змогу дати реальну оцінку як обсягів доходів місцевого бюджету, так і обсягів бюджетних компенсацій, на які він може претендувати.

According to the Decree No. 1149 of the Cabinet of Ministers of Ukraine, the formula for the allocation of inter-budgetary transfers between the state and budget budgets looks as follows:

$$T_i = a_i(V_i - D_{izak}), \quad (1)$$

where T_i is the amount of equalization subsidies from the state budget, which are given to the budgets of the Autonomous Republic of Crimea, the consolidated budgets of Kyiv and Sevastopol, the budgets of towns of regional significance;

V_i – the design parameter of the amount of territories' expenses;
 D_{izak} – the estimated amount of revenues (revenue basket), assigned to local budgets;

a_i – the equalization coefficient of a territory [2].

The analysis of the formula shows that local authorities are not only disinterested in increasing their revenues, but on the contrary, try to reduce budget revenues, because in this case the amount of budget transfers to them will increase. In order to increase the volumes of inter-budgetary transfers, local authorities, in addition to the inefficient use of the financial potential, under the existing conditions will be inclined to hide the sources of possible new budget revenues. This assumption is confirmed by the results of the Clearing House of Ukraine. Almost 20% of the budget is used with violations. The characteristic feature of the budgetary system of Ukraine is that most of the violations occur not with budget expenditures, but with the wrong administration of revenues (about 21,5 billion Hryvnas of 270 billion Hryvnas of the state budget revenues in 2010). As regards specific mechanisms of such violations, the major violations during the formation of budget revenues are the reduction of the tax base and weaknesses in the monitoring of the resource base formation.

Ultimately, this leads to significant regional differentiation in the local

budget per capita revenues. With the average local budget per capita revenues in Ukraine standing at 1748 Hryvnas, this figure for the Volyn region was about 1000 Hryvnas, while in Kyiv it exceeded 5300 Hryvnas. Of course, it is not entirely correct to compare the Kyiv and Volyn regions, because objectively they have different financial potentials, although the differentiation is also typical for the regions, which have similar potentials. In other words, failure to use a region's own potential leads to a decrease in per capita income. Regions can afford it, because their inefficiency will be compensated by the state in the form of inter-budgetary transfers. At the same time the analysis of local budgets' expenditures shows that their volume is distributed more evenly, that is to say, there is relatively equal access to the state-guaranteed social benefits regardless of the region.

From the economic point of view, this situation is unacceptable. Regions have similar expenditures, but earn different revenue amounts. The relative uniformity of expenses indicates that the differentiation of Ukraine's regions is largely an artificial phenomenon – revenues should also be evenly distributed. Of course, there is a number of objective reasons for that – industrial underdevelopment in the western regions, high unemployment, different resource potential, etc. However, speaking of the western regions, the reluctance of local authorities to «earn» money, because they can get it «free» in the form of transfers, is obvious. Although it is evident that with the introduction of an adequate control over the financial flows of the regions and the payment of corresponding taxes and duties – that is, the withdrawal of funds from the shadows – the revenues of local budgets could be considerably increased. In our opinion, this situation is caused largely by the information asymmetry in relations between the state and the regions. **By using the absence of the central government's opportunities (or willingness) to adequately assess the potential of a territory, regions artificially lower the indicators of their own revenues and the resource base, pursuing opportunistic behavior, which, however, is not only not prohibited, but even stimulated by the existing legal and regulatory framework (the above-mentioned formula for the allocation of inter-budgetary transfers).**

In this manner, the existing system of financial equalization is one of the main factors that restrain the realization of the financial potential of Ukraine's territories. We do not reject the need in the mechanism of financial equalization, at least at the present stage of Ukraine's development. The objectively existing differences in the socio-economic development of different territories determine the use of inter-budgetary equalization. However, its usage in the present form will negate much of the efforts to increase the efficiency of the financial potential's use.

The source of the above-mentioned problems is the lack of information about the nominal state of the system, that is, the information about the potential possibilities to generate a certain level of resources. The absence of such information makes it possible to manipulate the financial resources of territories, including their inefficient use without any legal consequences.

It is fundamentally wrong to determine the amount of inter-budgetary transfers based on the gap between the current revenues and budget expenditures of the region. According to the system of inter-budgetary equalization, the regions' revenue generating potentials should be considered for the definition of "donor regions" and "recipient regions".

FINANCIAL POTENTIAL OF REGIONS AS A BASIS FOR DETERMINING INTER-BUDGETARY TRANSFERS

If the financial potential is used as a basis for determining the amount of inter-budgetary transfers this problem could be eliminated as it would be more difficult to manipulate the financial potential in the presence of adequate methods of its assessment.

Therefore, **the ability of the central government to adequately assess the regions' financial potential is a necessary condition**

Table 1. Calculation of financial potential's components
Таблиця 1. Розрахунок складових фінансового потенціалу

Components	Calculation
Financial potential of local authorities	$\Phi\Pi_{MB} = \sum_{i=1}^n \Phi\Pi_{MBi} = \sum_{i=1}^n (\Delta MB_i + KM_i + ЦПМ_i)$ <p> $\Phi\Pi_{MB}$ – financial potential of local authorities; $\Phi\Pi_{MBi}$ – financial potential of local authorities in a certain region; ΔMB_i – local budget revenues of a certain region; KM_i – volume of loans borrowed by local authorities of a certain region; $ЦПМ_i$ – volume of securities issued by local authorities of a certain region. </p>
Financial potential of economic entities	$\Phi\Pi_{CF} = \sum_{i=1}^n \Phi\Pi_{CFi} = \sum_{i=1}^n (\Delta_{CFi} + Kp_{CFi}) \cdot k_{CFi}$ <p> $\Phi\Pi_{CF}$ – financial potential of economic entities; $\Phi\Pi_{CFi}$ – financial potential of local authorities of a certain region; Δ_{CFi} – revenues of economic entities of a certain region; Kp_{CFi} – loans taken by economic entities of a certain region; k_{CFi} – adjustment factor for economic entities of a region, which takes into account the influence of the shadow economy. </p>
Financial potential of households	$\Phi\Pi_{D} = \sum_{i=1}^n \Phi\Pi_{Di} = \sum_{i=1}^n (\Delta_{Di} + Kp_{Di}) \cdot k_{Di}$ <p> $\Phi\Pi_{D}$ – financial potential of households; $\Phi\Pi_{Di}$ – financial potential of household in a certain region; Δ_{Di} – revenues of households of a certain region; Kp_{Di} – loans borrowed by households of a certain region; k_{Di} – adjustment factor for households of a region, which takes into account the influence of the shadow economy. </p>
Financial potential of banks	$\Phi\Pi_{B} = \sum_{i=1}^n \Phi\Pi_{Bi} = \sum_{i=1}^n (\Delta_{Bi} + Kp_{Bi} + K_{Bi})$ <p> $\Phi\Pi_{B}$ – financial potential of banks; $\Phi\Pi_{Bi}$ – financial potential of banks of a certain region; Δ_{Bi} – deposits received by banks of a certain region; Kp_{Bi} – loans received by banks of a certain region (distributed according to the number of branches); K_{Bi} – capital of banks of a certain region (distributed according to the number of branches). </p>
Investment financial potential	$\Phi\Pi_{I} = \sum_{i=1}^n \Phi\Pi_{Ii}$ <p> $\Phi\Pi_{I}$ – investment component of financial potential; $\Phi\Pi_{Ii}$ – investment component of financial potential of a certain region. </p>
Export financial potential	$\Phi\Pi_{E} = \sum_{i=1}^n \Phi\Pi_{Ei} = \sum_{i=1}^n [(E_{Ti} + E_{Ti}) - (I_{Ti} - I_{Ti})]$ <p> $\Phi\Pi_{E}$ – export financial potential; $\Phi\Pi_{Ei}$ – export financial potential of a certain region; E_{Ti} – export of goods of a certain region; E_{Ti} – export of services of a certain region; I_{Ti} – import of goods by a certain region; I_{Ti} – import of goods by a certain region. </p>
State financial potential	$\Phi\Pi_{3D} = \sum_{i=1}^n \Phi\Pi_{3Di} = \sum_{i=1}^n (3BP_i + \Delta B_i + KD_i + ЦПД_i)$ <p> $\Phi\Pi_{3D}$ – state financial potential; $\Phi\Pi_{3Di}$ – state financial potential distributed to a certain region; $3BP_i$ – the share of a certain region in the foreign currency reserves of the National Bank of Ukraine; ΔB_i – the share of a certain region in the state budget revenues; KD_i – the share of a certain region in the loans borrowed by the state; $ЦПД_i$ – the share of a certain region in the securities issued by the state. </p>

for successful budgetary equalization. This assessment makes it possible to determine the gap between the future levels of a region's revenues and the forecast levels of local expenditures. In the process of horizontal equalization the assessment of the financial potential

Table 2. **Aggregate absolute value of the regions' financial potential in 2010**
Таблиця 2. **Сумарне абсолютне значення фінансового потенціалу територій у 2010 році**

Region	Value of indicators of financial potential, million Hryvnas								Cate-gory
	Households	Economic entities	Banks	Local budgets	Investment potential	Export potential	State potential	Total	
Crimea	55828,9	42736,0	37746,9	5003,9	7764,2	4785,2	42792,91	196658,0	9
Vinnitsa	37221,1	30706,4	13304,2	1928,8	1686,3	1484,0	30110,83	116441,7	12
Volyn	22480,1	18392,4	10894,1	1065,4	2730,6	-1072,9	18911,85	73401,7	23
Dnipropetrovsk	106127,4	267460,3	61648,3	7048,9	59411,5	20108,0	61212,22	583016,6	3
Donetsk	131835,1	257758,9	86285,5	8611,3	16359,2	80666,2	81483,12	662999,3	2
Zhytomir	28941,1	19308,3	12375,9	1637,9	1958,5	-296,0	23456,02	87381,7	17
Zakarpatska	25061,7	13093,1	11958,5	1140,8	2877,4	-1448,2	22708,08	75391,4	21
Zaporizhzhya	51366,3	84078,6	21669,9	3261,8	7458,7	15117,3	33049,67	216002,3	7
Ivano-Frankivsk	30568,5	21404,8	18320,3	1466,4	4305,9	-703,1	25187,22	100550,1	14
Kyiv	259305,6	565502,8	215787,1	18071,0	186186,6	-154956,1	82216,47	1172113,6	1
Kirovograd	22109,7	18730,1	12135,9	1250,1	519,8	1265,7	18567,07	74578,4	22
Lugansk	55629,9	84014,3	32975,0	3383,0	5005,8	18297,1	42169,03	241474,2	6
Lviv	62823,8	50021,2	44219,5	3378,1	10108,4	-8044,3	46510,71	209017,4	8
Mykolayiv	30270,1	32436,9	19671,6	1686,5	1437,9	6970,6	21699,28	114172,8	13
Odessa	72388,7	78604,1	45387,9	4423,9	8926,8	-6934,9	43617,47	246413,8	5
Полтавська	38133,8	71940,1	26976,9	2591,4	4217,8	8507,0	27356,23	179723,1	10
Rivno	24976,5	20359,8	12289,1	1320,2	2415,6	0,8	21007,90	82369,8	19
Sumy	26896,7	22810,9	17627,8	1527,7	2837,8	2029,9	21385,51	95116,3	15
Ternopil	21751,0	12271,5	10622,8	977,9	516,6	-607,9	19864,10	65396,1	24
Kharkiv	79543,8	82938,3	35907,7	4426,1	21469,0	-4132,1	50514,90	270667,7	4
Kherson	24443,4	20558,7	12844,1	1249,0	1609,3	1822,8	19946,19	82473,5	18
Khmelnitsky	30540,5	20299,6	14371,1	1524,7	1456,2	-1303,8	24335,30	91223,6	16
Cherkassy	28835,2	38324,9	20755,7	1754,0	2277,5	2264,8	23627,50	117839,7	11
Chernivtsi	18612,3	8594,4	9426,4	944,5	494,4	-23,0	16498,39	54547,3	25
Chernigiv	24862,2	19936,0	13807,5	1286,0	753,1	-552,3	20243,54	80335,9	20

of towns and districts helps the government determine the areas for the redistribution of state resources between local budgets. As a result, taxation possibilities of relatively prosperous regions could be used for solidarity transfers to less prosperous regions.

We have developed methodological approaches to the assessment of financial potential. On this basis we have also calculated financial potentials of some regions in particular and of Ukraine in general. **Table 1** gives the formula, which is used to calculate the components of a region's financial potential.

For the final calculation of the financial potential of a region the following formula is used.

$$\Phi\Pi = \sum_{i=1}^n \Phi\Pi_i = \sum_{i=1}^n (\Phi\Pi_{\text{лi}} + \Phi\Pi_{\text{сгi}} + \Phi\Pi_{\text{бi}} + \Phi\Pi_{\text{лi}} + \Phi\Pi_{\text{бi}} + \Phi\Pi_{\text{злi}} + \Phi\Pi_{\text{мбi}}), \quad (2)$$

where $\Phi\Pi$ is an aggregate financial potential;

where $\Phi\Pi_i$ is an aggregate financial potential of a region.

We have calculated the financial potential according to each of the analyzed components as well as the aggregate value of the financial potential (**table 2**).

Based on the knowledge of the financial potential volumes we propose the following approach to assessing the potential revenue base

of local budgets. The essence is in finding the ratio of financial potential volumes of a region to local budget revenues (excluding transfers), which is the coefficient of the efficient use of a region's financial potential. After that we determine the reference value of this ratio (a level of local budget revenue generated from a unit of financial potential, which is essentially accessible in Ukraine's conditions) and calculate the projected indicators of the local budget's revenues generation.

As a reference point we use the average coefficient of the efficient use of financial potential for the group of regions that showed the best results. As a result of calculations, the following group of the best regions was identified: Zhytomir region – 1,75%, Chernivtsi region – 1,73%, Kirovograd region – 1,68%, Odessa and Khmelnytsky regions – 1,67%. As a benchmark for the level of local budget revenues generated from a unit of financial potential we use the value of coefficient of financial potential's efficiency use, which amounts to 1,7%.

THE USE OF FINANCIAL POTENTIAL AS A BASIS FOR DETERMINING INTER-BUDGETARY TRANSFERS

We have calculated the revenues of regional budgets without transfers, which they could obtain by using the available financial

Table 3. Comparison of local budget deficits according to the methodology based on the financial potential (the coefficient of financial potential's efficiency use is 1,7%).
Таблиця 3. Порівняння дефіцитів місцевих бюджетів за наявним методом та розробленою методологією на базі фінансового потенціалу (коефіцієнт ефективності використання фінансового потенціалу дорівнює 1,7%)

№	Region	Expenses adjusted to the amount of subsidies	Local budgets revenues (without inter-budgetary transfers)	Deficit volumes according to the existing norms (with regard for subsidies)	Local budget revenues (without inter-budgetary transfers, calculated on the basis of the financial potential (K=1.7%))	Deficit volume on the basis of financial potential (with regard for subsidies)
1	Crimea	7 552 490,8	5 004 116,8	-2 548 374,0	5 004 116,8	-2 548 374,0
2	Vinnitsa	4 227 461,0	1 930 372,8	-2 297 088,3	1 979 508,9	-2 247 952,1
3	Volyn	2 879 882,4	1 057 413,7	-1 822 468,7	1 247 828,9	-1 632 053,5
4	Dnipropetrovsk	8 868 443,9	7 048 945,6	-1 819 498,3	9 911 282,2	1 042 838,3
5	Donetsk	11 096 114,6	8 611 545,4	-2 484 569,2	11 270 988,1	174 873,5
6	Zhytomir	3 485 547,7	1 530 238,5	-1 955 309,2	1 530 238,5	-1 955 309,2
7	Zakarpatska	3 354 855,6	1 140 816,5	-2 214 039,2	1 281 653,8	-2 073 201,8
8	Zaporizhzhya	4 970 941,9	3 261 778,6	-1 709 163,3	3 672 039,1	-1 298 902,8
9	Ivano-Frankivsk	3 877 860,0	1 466 366,7	-2 411 493,3	1 709 351,7	-2 168 508,3
10	Kyiv	15 148 558,2	18 075 996,0	2 927 437,9	19 925 931,2	4 777 373,0
11	Kirovograd	2 650 628,3	1 250 079,4	-1 400 548,9	1 267 832,8	-1 382 795,5
12	Lugansk	5 432 074,8	3 352 434,6	-2 079 640,2	4 105 061,4	-1 327 013,4
13	Lviv	6 658 035,0	3 378 090,5	-3 279 944,5	3 553 295,8	-3 104 739,2
14	Mykolayiv	3 127 660,7	1 686 501,5	-1 441 159,1	1 940 937,6	-1 186 723,1
15	Odessa	6 354 251,4	4 123 817,4	-2 230 434,1	4 189 034,6	-2 165 216,8
16	Poltava	4 125 289,8	2 591 371,8	-1 533 918,1	3 055 292,7	-1 069 997,1
17	Rivno	3 224 677,9	1 320 227,5	-1 904 450,4	1 400 286,6	-1 824 391,3
18	Sumy	2 994 708,9	1 527 714,7	-1 466 994,1	1 616 977,1	-1 377 731,8
19	Ternopil	2 800 333,0	978 068,2	-1 822 264,8	1 111 733,7	-1 688 599,3
20	Kharkiv	6 968 942,2	4 426 375,5	-2 542 566,7	4 601 350,9	-2 367 591,3
21	Kherson	2 855 888,1	1 249 002,8	-1 606 885,3	1 402 049,5	-1 453 838,6
22	Khmelnytsky	3 625 296,3	1 524 763,6	-2 100 532,7	1 550 801,2	-2 074 495,1
23	Cherkassy	3 567 754,1	1 749 000,1	-1 818 754,1	2 003 274,9	-1 564 479,2
24	Chernivtsi	2 499 770,6	944 767,6	-1 555 003,0	944 767,6	-1 555 003,0
25	Chernigiv	2 899 693,1	1 285 963,9	-1 613 729,2	1 365 710,3	-1 533 982,8
Total		125 247 160,3	80 515 769,5	-44 731 390,8	91 641 345,9	-33 605 814,4

potential more efficiently, and compared the local budget deficits by using the methodology on the basis of financial potential (**table 3**) in order to determine the base that will be used in the calculation of equalizing subsidies.

As we see, the majority of regions use their financial potential in extremely inefficient ways. The difference in revenues calculated on the basis of the level of the used financial potential and those, which in fact have been received by the local budgets, on average, amounts to about 500 million Hryvnas. The biggest outsiders in this regard are the Dnipropetrovsk region, where the difference exceeded 2,8 billion Hryvnas and the Donetsk region, where this difference was 2,6 billion Hryvnas. As a result of inefficient use of the existing financial potential, local budgets in Ukraine received over 10 billion dollars less. The main problem is that these funds were reimbursed by the state budget in the form of subsidy equalization. In other words, the state not only failed to introduce sanctions and mechanisms against disastrous results, but also encouraged them.

Table 4. The calculation of local budget revenues and subsidy volumes if the level of the shadow economy is 25% and the efficiency of the financial potential's use is on the same level with countries, which have a similar socio-economic development
Таблиця 4. Розрахунок доходів місцевих бюджетів та обсягів доцятій за умови рівня тіньової економіки 25% та досягнення ефективності використання фінансового потенціалу на рівні країн зі схожим соціально-економічним розвитком

№	Region	Financial potential	Local budget revenues (without inter-budgetary transfers, calculated on the basis of the financial potential (K=1,7%))	Deficit volume on the basis of financial potential (with regard for subsidies)	Volume of subsidies on the basis of financial potential
1	Autonomous Republic of Crimea	414 293 280,3	7 042 985,8	-509 505,0	-335 569
2	Vinnitsa	245 306 992,8	4 170 218,9	-57 242,1	-54 143
3	Volyn	154 632 876,7	2 628 758,9	-251 123,5	-222 409
4	Dnipropetrovsk	1 228 221 796,0	20 879 770,5	12 011 326,6	0
5	Donetsk	1 396 719 065,6	23 744 224,1	12 648 109,5	0
6	Zhytomir	183 857 399,7	3 125 575,8	-359 971,9	-311 954
7	Zakarpatska	158 824 560,1	2 700 017,5	-654 838,1	-595 841
8	Zaporizhzhya	455 044 745,5	7 735 760,7	2 764 818,8	0
9	Ivano-Frankivsk	211 825 407,6	3 601 031,9	-276 828,1	-231 047
10	Kyiv	2 469 263 013,5	41 977 471,2	26 828 913,1	0
11	Kirovograd	157 111 824,1	2 670 901,0	20 272,7	0
12	Lugansk	508 641 227,8	8 646 900,9	3 214 826,1	0
13	Lviv	440 329 952,0	7 485 609,2	827 574,2	0
14	Mykolayiv	240 524 110,5	4 088 909,9	961 249,2	0
15	Odessa	519 111 709,6	8 824 899,1	2 470 647,6	0
16	Poltava	378 616 610,2	6 436 482,4	2 311 192,6	0
17	Rivno	173 525 746,5	2 949 937,7	-274 740,2	-253 319
18	Sumy	200 378 233,7	3 406 430,0	411 721,1	0
19	Ternopil	137 768 005,3	2 342 056,1	-458 276,9	-423 087
20	Kharkiv	570 207 164,5	9 693 521,8	2 724 579,6	0
21	Kherson	173 744 245,9	2 953 652,2	97 764,1	0
22	Khmelnytsky	192 177 749,9	3 267 021,7	-358 274,5	-327 017
23	Cherkassy	248 248 945,2	4 220 232,1	652 477,9	0
24	Chernivtsi	114 913 678,5	1 953 532,5	-546 238,1	-477 581
25	Chernigiv	169 241 035,6	2 877 097,6	-22 595,5	-19 611
Total		11 142 529 377,2	189 422 999,4	64 175 839,1	-3 251 579

It should be noted that the selected group of the best regions (Zhytomir, Chernivtsi, Kirovograd, Odessa and Khmelnytsky) is usually fairly conditional, because they are characterized by such systemic weaknesses as the lack of interest in the effective use of funds and very low levels of financial potential's use. Therefore, the coefficient's value of 1,7% is fairly conditional and in reality is much higher. However, from the perspective of a gradual increase in the level of financial potential and changes in the system of inter-budgetary equalization as well as for the demonstration of the economic impact of innovations offered in the paper, we consider it expedient to use this coefficient.

Comparing the budget deficits data adjusted to the volumes of subsidies calculated in accordance with the existing regulation and the methodology, which takes into account the financial potential, we can conclude that the data of this methodology in many respects has artificial and conditional character. Calculations based on the financial potential indicate that Ukraine needs not one donor region (Kiev region, Kyiv in fact), but three regions – Kyiv, Donetsk and Dnipropetrovsk. **There is a systematic disparity between the regions' capabilities and their realization – almost all regions declare larger deficits than they could actually have** due to the existing formula of inter-budgetary equalization, which does not stimulate the growth of local budgets revenues. The total amount of deficit (with the favorable coefficient of financial potential's efficiency of 1,7%) appears to be 25% lower than the one that was declared by local budgets and which, accordingly, was compensated through equalization subsidies.

We can make the conclusion about **the necessity of making changes in the formula for the calculation of equalization subsidy volumes based on the data of the financial potential of certain regions**, which would be focused on the efficient use of financial potential.

We propose to make changes in the formula for the calculation of inter-budgetary transfer volumes (formula 3). Instead of the indicator D_{izak} – the amount of revenues (revenue basket) of local budgets – we propose to use the financial potential's volume of a region multiplied by the coefficient of efficiency of financial potential's use. Therefore, the basic formula for the calculation of volumes of equalization subsidies will look as follows:

$$T_i = a_i(V_i - \Phi\Pi_i \times K_{efn}), \quad (3)$$

where T_i is the amount of equalization subsidies from the state budget, which are given to the budgets of the Autonomous Republic of Crimea, the consolidated budgets of Kyiv and Sevastopol, the budgets of towns of regional significance;

- V_i – the design parameter of the amount of territories' expenses;
- K_{efn} – the coefficient of efficiency of financial potential's use;
- $\Phi\Pi_i$ – the financial potential of a region;
- a_i – the equalization coefficient of a territory.

The calculation of equalization subsidy volumes on the basis of the regions' financial potential will make it possible to assess both the volume of local budget revenues and the amounts of compensation they can lay a claim to. The use of the coefficient of efficiency of financial potential's use, calculated on the basis of the current values for Ukrainian regions as a benchmark indicates the inefficient and unpractical use of the available financial resources.

At the same time, the use of the coefficient of efficiency of financial potential's use calculated on the basis of actual revenues and the available financial potential as a benchmark gives a conditional and very limited understanding of the efficiency and potential revenues of local budgets. As we noted earlier, the existing financial potential of Ukraine is only a small fraction of what Ukraine actually owns. Our study shows that Ukraine uses only a small part of its existing financial potential.

In order to assess the development prospects of the system of inter-budgetary relations in Ukraine if the proposed modifications are included in the formula for determining the volumes of equalization subsidies, we have calculated the volumes of local budget revenues as well as the volumes of local budget deficits and the amounts of equalization subsidies (**table 4**) provided that the level of the shadow economy is reduced to 25% (this figure is similar in countries, which are close to Ukraine in terms of development, geography and mentality) and the efficient use of financial potential on the level with countries having a similar socio-economic development (we have

calculated the lag coefficient of Ukraine in comparison with similar countries, which stands at 1,58, that is, Ukraine needs to generate 1,58 times more financial resources than today).

As shown by the data of Table 4, **adequate financial policies aimed at realization of Ukraine's financial potential and increasing its efficient use (on condition that our methods for the calculation of the amounts of inter-budgetary transfers are used) would radically change the system of the state budget equalization.**

In general, Ukrainian regions will no longer be subsidized. If today Ukraine has only one donor-region (Kyiv region), then in the future there should be 14 of them – the majority. The volumes of the state aid to the regions will be much smaller than the funds that it will be receiving from local budgets (the resources from the Lugansk region alone will be sufficient to cover all budget deficits of the regions, which have to be subsidized). The only regions to be subsidized will be the least industrially developed parts in the West of Ukraine (Vinnytsia, Volyn, Zakarpatska, Chernivtsi, etc.).

CONCLUSIONS

The proposed methodology will not only make it possible to save the state budget, but will also raise its revenues by increasing the number of donor regions. On the whole, if the financial potential is used as an objective basis for assessing the budget revenues, the increase in the efficiency of its use and effective measures against the shadow economy will fundamentally change the system of inter-budgetary equalization. It will not be the state helping the regions, but the regions will be the donors of financial resources. The only regions to be subsidized will be the least industrially developed parts in the West of Ukraine, but the volumes of aid to them will be considerably reduced and will no longer be a burden for the state.

ВИСНОВКИ

Підсумовуючи вищевикладене, відмітимо, що запропонована методологія не лише дозволить зекономити кошти державного бюджету, але й підвищить його дохідну частину за рахунок збільшення кількості регіонів-донорів. У цілому, за умови використання фінансового потенціалу в якості об'єктивної бази для оцінки надходжень бюджету, за рахунок підвищення ефективності його використання та вжиття дієвих заходів по боротьбі з тіньовою економікою система міжбюджетного вирівнювання зміниться докорінно. І вже не держава буде допомагати регіонам, а регіони будуть виступати в ролі донору фінансових ресурсів. У якості дотаційних залишаться лише найменш промислово розвинені регіони (Західна Україна), але обсяги допомоги ним знизяться в рази та перестануть бути тягарем для держави.

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