

“Assessment of quality of financial support for local social development in Ukraine”

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ASSESSMENT OF QUALITY OF FINANCIAL SUPPORT FOR LOCAL SOCIAL DEVELOPMENT IN UKRAINE

Abstract

The article proposes a way of determining the future directions of financial support for the social development needs. To this end, the Tintner method of consecutive differences is used. The practical application of this method allows for pre-selecting the best curve that describes the level of financial support for social needs. The model of financial support for local self-government is determined. The adequacy of funding for the needs of local budget social development is analyzed. The share of expenditure of local budgets in Ukraine on health care, intellectual and physical development, education, social protection and social security is described. A number of challenges when it comes to financial support are considered, both from a theoretical perspective and those confirmed by actual calculations.

Keywords

financial support, social development, forecasting the financial security level, the Tintner method, budget process, local self-government, territorial communities, public finance

JEL Classification P43, E60, E63, H70, H40

INTRODUCTION

Providing local self-government with a sufficient financing for social needs of the population is currently a quite acute problem. It should be borne in mind that taking efforts to reform local self-government on the financial decentralization principles began relatively recently, and accordingly, time is needed to adapt all the budget process participants to new financial support mechanisms. Only theoretically grounded principles of local self-government, in particular, territorial equality, are gradually transferred into an action-oriented level. After all, the peculiarities of the administrative and territorial system in Ukraine sometimes make it impossible for the population to receive the basic social goods necessary for them directly in the place of their residence. Accordingly, there are issues of interaction between local authorities of different levels regarding the budget financing division between fund managers. The existing tendency towards insufficient amount of financial resources to fulfill the powers assigned to local authorities is gradually eliminated. This creates a problem of limited satisfaction of the population with the social services quality.

The purpose of the article is to identify the problematic aspects of the financial support for social development and make proposals to improve the situation in the future.

The theoretical aspects of the financial support for the social development needs are always considered in the economic literature, but the practical implementation of the theoretical concepts requires time and adaptation to the real operational conditions.

Consequently, the present status of financial support for social development requires a detailed theoretical and practical analysis with respect to the current realities.

1. LITERATURE REVIEW

Scientists from different schools analyze the issue of financial support at the local self-government level and demonstrate different insights in this category. The indisputable condition for the normal functioning of local self-governments is a well-established system of financial support for their activity needs. Without a proper level of funding, any theoretically perfect model has no chances to exist. According to the idea of local self-government decentralization, the ideal is the maximum financial independence from state aid, except for nation-wide functions that cannot be implemented at the community level, given their comprehensive nature (the protection of territorial integrity, the elimination of natural disaster effects, etc.).

While theoretically reviewing the financial support category, most researchers analyze it from the entrepreneurial sector perspective, and the views on the study of local self-government and its needs can be found less frequently. However, some authors give a rather reasoned point of view on the local self-government and financial support interconnection.

Among scientists who have handled a problem of financial support for local self-government, Hou (2006), Schick (2000), Wang and Hou (2009), Wassmer and Fisher (2011), Shadbegian (1999), Wagner and Sobel (2006), Boex, Martinez-Vazques, and McNac (2000) can be emphasized. The problems of forecasting changes in the status of financial support for local self-government were explored by Forrester (1991), Rogers and Joyce (1996), and Stonecash (1994).

Panasiuk (2009) believes that the financial support of local self-government is a set of measures for the accumulation, distribution and use of financial resources in order to create environment conducive to the normal implementation of eco-

nomical processes in the relevant territory. That is, adequate environment for social development is the ultimate goal of creating an adequate system of financial support.

Kosarevych (2012) does not separate financial support from the concept of inter-budgetary relations. He argues that the formation of local budgets should take into account the degree of balancing financial and economic relations, which will enable to optimize the structure of administrative and territorial units, increase the expenditure efficiency, provide a high level of budget planning and forecasting of local budgets as an instrument of socio-economic development of territories.

According to Shcherbakova and Manierov (2011), financial support is a process of mobilizing available resources and finding potential financial resources of the city development authorities (local authorities, state, economic entities, local community), and also the resources of external investors and the formation of the financial basis, based on them, for implementation of economic processes in the appropriate territory, the implementation of planned social programs, projects, support of the stable functioning of the city's infrastructure and improvement of urban living environment. This definition has a comprehensive approach to sources of financing socio-economic development needs.

Krainyk (2010) considers the financial support of local government in terms of optimal allocation of powers to finance functions and responsibility areas between central executive authorities and local authorities.

Sapozhnikov (2010) follows the functional and procedural approach, considering the financial support for local governments as a set of specific financial norms, budgetary methods, levers, instruments that provide the process of local budget

choices. The main goals are rationality, optimal representation of the communities will and its practical implementation, which reflects the legality, time observance, transparency and controllability of funds of administrative and territorial entities.

Melnychuk (2011) gave one of the most succinct and complete definitions. He considered financial support of local self-government as a set of financial resources that are concentrated in respective funds and using which local self-government bodies fulfill their responsibilities, providing socio-economic development of administrative territorial units.

Teslia (2014) considers financial support as a system activity consisting of two components: 1) managerial, which should ensure the proper performance and completeness of the functions, and 2) the main activity consisting in mobilizing, accumulating and distributing financial resources to end consumers in order to achieve the goals stated.

Considering the historical basis for the need to achieve the appropriate level of financial support for social development, it is important to draw attention to the European Charter of Local Self-Government, which initiated a modern understanding of effective local self-government. Thus, Article 9 «Financial Resources of Local Authorities» provides for the following recommendations to be implemented by each ratifying country, and involves the following key provisions (European Charter of Local Self-Government, n. d.): local authorities have the right for sufficient financial resources within authorities provided. At least part of the community's financial resources should be formed at the expense of local taxes and fees; the need to protect financially weakened local authorities in order to avoid the uneven distribution of potential sources of funding and the financial burden they have to bear.

Unfortunately, nowadays, local self-government in Ukraine has not yet reached a sufficient autonomy, despite the chosen course towards financial decentralization. In particular, among the problems that result in insufficient financial support for social development, the following are emphasized: centralization of powers and appropriate

financial and material resources; socio-economic disproportions in the development of territories; insufficient use of internal tax capacity; the problem of raising capital for infrastructure development projects, etc. (Pavlichenko, 2009).

In the process of theoretical analysis, attention was drawn to the model developed by Mamonova (2006), namely the 4S model of financial security decentralization, based on the self-dependence, self-sufficiency, self-activity and singularity (identity) principles. In our opinion, taking into account the current problems of local self-government, one can add the principle of subsidiarity and create a 5S model.

Koroliiov (2004) highlights the following principles to be fulfilled in the formation of financial support mechanisms for social development: the priority of the territorial community in the financial provision of its development and functioning; the adequacy of the revenue part of the local budget for the implementation of a certain range of responsibilities and territorial development; equal participation in the development of the legal basis of taxation in the territory of their own community; the fair budget formation, which consists in the ownership of the territorial community for all taxes collected on its territory; transparency of budget formation and stability, i. e. all conditions and requirements for budget formation should be known in advance and on a stable basis.

Consequently, in the process of theoretical analysis of financial support for local self-government, various views of scientists on the mechanism of optimal financing of basic population social needs are considered. It has been discovered that some scholars consider financial support solely as a process of accumulation, distribution and use of financial resources. Others focus on the ultimate goal of building an optimal financial support mechanism – improving cost efficiency and ensuring a high level of social development. This point of view is a priority in the current study, since the implementation of planned social programs and projects, and the maintenance of a stable functioning of social infrastructure is a guarantee of the population interest satisfaction. The historical bases for the need to achieve an adequate level of financial support for social development are considered. The

existing problems of insufficient financial provision of social development are analyzed. Attention was also drawn to the model of decentralization of financial security based on principles which are the key to the formation of optimal mechanisms for financing social development.

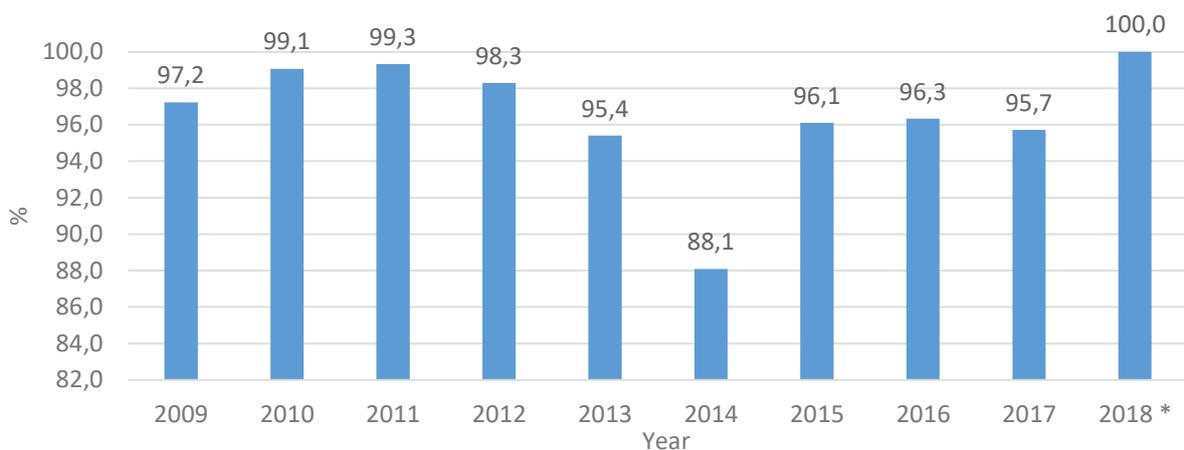
2. RESEARCH RESULTS

A high level of financial resources centralization is a significant threat to the balanced development of local self-government and optimal financing of population needs. This leads to the fact that some basic needs of the community are not satisfied only because the central level is unaware of their existence. These threats to qualitative financial support for social development have led to the need to reform local self-government in Ukraine.

Before analyzing the financial support for the social development needs at the local self-government level, let's consider the degree of financing of budgeted social expenditure items. The data obtained will provide grounds for arguing how local budgets of different levels are able to provide the primary population needs transferred from the state budget to the local level. Based on published budget reports for 2009–2018, Figure 1 reflects the current state of providing local government with the socio-economic development resources.

The current situation indicates that social expenditures delegated to the local level (education, health care, physical and intellectual development, social protection and social support) have different levels of financing for the period under study. In particular, in the 2009–2012 period, scheduled financing reached 99.3%, which is a positive factor, given the pre-decentralization model of local self-government. The year 2014 is the most critical one, because only 88.1% of the scheduled social expenditure of local budgets have been financed (2018 will not be taken into account due to preliminary data). This negative tendency resulted from the difficult economic situation in the country and the need to direct funds to national urgent goals. The 2015–2018 period can be characterized as a period of reforming the system of inter-budgetary fiscal relations and the gradual transition of local self-government to a decentralized development model. The average indicator of 96% of the social development items implementation is currently provided through the support of local budgets by central-level transfer payments. Since in the event of a sharp transition of local budgets to self-financing, there may be problems and threats to operational activity, because a country-independent model of local development was non-typical of Ukrainian environment.

Next we consider it expedient to detail the share of local budget expenditures in four basic directions of social development according to the functional expenditure classification.



Note: * – developed based on preliminary data.

Figure 1. Financial support for the social development needs of local budgets in Ukraine for 2009–2018, %

Table 1. The share of social development expenditure in the total expenditures of local budgets in Ukraine for 2011–2018, %

Social development directions	Year							
	2011	2012	2013	2014	2015	2016	2017	2018*
Health care	21.7	21.3	22.3	20.8	21.5	18.2	17.5	16.6
Intellectual and physical development	3.9	3.7	3.9	4.0	3.5	3.4	3.4	3.3
Education	33.1	32.2	34.2	32.0	30.3	27.3	27.9	29.8
Social protection and social support	23.5	22.6	25.9	25.7	26.2	30.7	28.8	27.4
Total social development expenditure	82.2	79.8	86.3	82.5	81.5	79.7	77.5	77.2

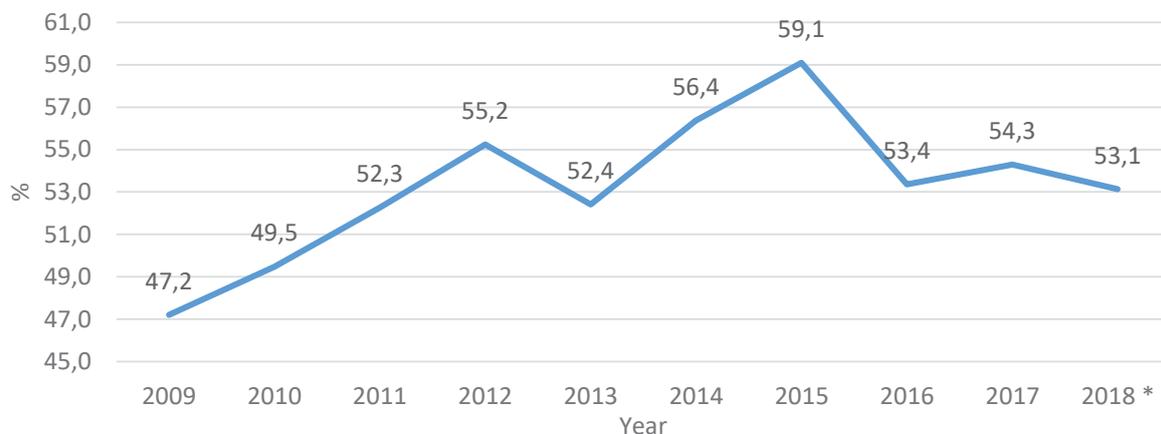
Note: * – developed based on preliminary data.

The calculations obtained confirm the importance of the chosen direction of studying the status of financial support for the social development needs, since in general for the period under study, the relative share of this group of expenditure in the total volume of local budgets ranges from 77.2% to 86.3%. It should be noted that in 2013, social development expenditure reached the highest percentage, and smallest in 2018 (however, this situation may change taking the preliminary budget data into account). Also, there was a tendency towards the reduction of social development expenditures since 2015. This resulted from the initiation of the decentralization reform, which has led to the emergence of new, previously non-typical funding streams at the local budgets expense. If one considers the social development expenditure breakdown by items, then costs on education (27.3–34.2%) and social protection and social support (22.6–30.7%) are of the greatest importance. The gradual decrease of the relative share of expenditure on health financing from local budgets should be noted. This is due to the medical reform

and the elimination of rural ambulatory clinics and paramedical stations. The intellectual and physical development is the least financed direction of social development among the considered, it amounts on average to 3–4% of local budgets.

Given that a quite large share of social development expenditures at the local budgets level is financed through inter-budgetary payments, we propose a more detailed analysis of the dynamics of change in the share of transfers in the total amount of local budget revenues. This will make possible to conclude about sources of financial support for basic population social needs, which are assigned to local communities by the state.

The obtained results show the gradual decrease in the level of transfer dependence of local budgets and increase in the level of their own financial support. This is due to the decentralization reform consequences, which led to the transfer of part of the financial resources directly to the community level. Based on Figure 2, one can emphasize sev-



Note: * – developed based on preliminary data.

Figure 2. Dynamics of inter-budgetary transfers share in the total local budget revenues for 2009–2018, %

Table 2. Financial support models for local self-management

Model	Characteristic	Country of distribution
Scandinavian model	Local taxes – 10-20% of GDP Local taxes – 20-50% of all tax revenues in the country	Finland, Sweden, Denmark
Latin model	Local taxes – 4-6% of GDP Local taxes – 20% of all tax revenues in the country	Spain, Italy, France
Hanover model	Local taxes – 1-2% of GDP Local taxes – 4-5% of all tax revenues in the country	Germany, Poland, Great Britain

eral time periods. The period of 2009–2015 can be called the time of growth of the local self-government transfer dependence and centralization. In particular, in 2015, 59.1% of the needs of local budgets were financed through interbudgetary transfers. The second period of 2016–2018 can be called a post-reform gradual transition. But indicators of 53-54% of the transfer dependence cannot be considered acceptable, taking world standards into account. The further reform of the local self-government system aims to gradually reduce the share of transfers in the revenue item of local budgets.

In Ukraine, the financial decentralization reform has been actively being pursued for several years now, the main purpose of which is the transfer of financial resources and relevant powers to the community level. Taking this fact into account, let's analyze the changes that have taken place in this period. In the scientific literature, three models of financial support for local self-government are emphasized. We suggest comparing the Ukrainian results with existing models. Table 2 displays the models of financial support for local self-government.

Taking into account that decentralization reform began to be actively implemented from 2014 in Ukraine and in order to analyze the dynamics of changes, it is necessary to select the indicators of several pre-reform years and the period of the reform itself (2014–2018). In Table 3, two indicators are calculated: the local taxes to GDP ratio and the ratio of local taxes to the tax revenues of the Consolidated Budget of Ukraine.

The local taxes to GDP ratio is an important indicator of the financial autonomy of local budgets. The dynamics of the results shows that the role of local taxes in the revenues of local budgets is growing, which is a small factor in increasing the financial support of the social development. In 2012–2014, the share of local taxes did not even exceed 1% of GDP. Starting from 2015, the situation is gradually changing towards improvement. In particular, local taxes in GDP reached their largest share in 2018 – 1,81%. However, their share is small when taking foreign experience into account (the share of local taxes in the United States is 66%, in France it amounts to 67%, and in the UK it is 37%) (Olshanskyi, 2012).

The results of the calculations obtained indicate that Ukraine can be attributed to the Hanover model in terms of local self-government financial support, since after 2014 the local taxes to GDP ratio is more than 1%, and the indicator of the ratio of local taxes to tax revenues of the Consolidated Budget of Ukraine is 5-6%. The pre-reform period of 2012–2013 clearly illustrates that the share of local taxes and duties in GDP was at a rather low level. The chosen course towards decentralization will help to improve the financial support of the social development needs. It should be noted that Ukraine takes over the experience of Poland in implementing the financial decentralization reform, which respectively leads to the creation of an appropriate model of financial support for local self-government.

It is proposed to determine the promising state of financial support for the social development needs

Table 3. Indicators to assess the financial support model for local self-government for 2012–2018, %

Indicator	Year						
	2012	2013	2014	2015	2016	2017	2018*
Local taxes to GDP ratio	0.39	0.50	0.51	1.37	1.77	1.76	1.81
Ratio of local taxes to the tax revenues of the Consolidated Budget of Ukraine	1.51	2.07	2.19	5.33	6.49	6.35	6.34

Note: * – developed based on preliminary data.

Table 4. Indicators of differences (increases) of social development expenditure for 2003–2018, UAH mln

No.	Year	Total social development expenditure	The first average increase	The second average increase	The first average increase to the average level ratio
1	2003	21,167.31	–	–	–
2	2004	24,929.52	3,762.21	–	0.02
3	2005	34,573.72	9,644.20	5,881.99	0.06
4	2006	45,253.72	10,680.00	1,035.80	0.07
5	2007	72,577.44	27,323.72	16,643.72	0.17
6	2008	93,869.43	21,291.99	–6,031.73	0.13
7	2009	104,249.14	10,379.71	–10,912.28	0.07
8	2010	128,588.26	24,339.12	13,959.41	0.15
9	2011	146,577.55	17,989.28	–6,349.84	0.11
10	2012	176,616.77	30,039.23	12,049.95	0.19
11	2013	188,349.67	11,732.90	–18,306.33	0.07
12	2014	184,432.68	–3,916.99	–15,649.89	–0.02
13	2015	225,806.59	41,373.91	45,290.91	0.26
14	2016	275,953.61	50,147.03	8,773.12	0.32
15	2017	380,008.59	104,054.97	53,907.94	0.65
16	2018*	444,110.90	64,102.31	–39,952.66	0.40

Note: * – developed based on preliminary data.

in 2019, taking into account available statistical data for previous baseline periods. The Tintner method of consecutive differences was chosen as a method of simulating promising values of the amount of the social sphere financing. This makes it possible to pre-select the best type of curve that describes the appropriate data series. Further, the selected curve is used to construct a trend model for time series and forecasting for subsequent periods. Applying the method of consecutive differences in our case is due to the fact that the statistical series studied, namely, the amount of social development expenditures, is expected to contain only two components, namely trend and random.

Also, one should take into account the possibility of smoothing the trend with the help of polynomials of different levels. Estimates for the calculation of this methodology contain several indicators: the first average increase (the difference between the current and the previous level), the second average increase (the difference between the current and the previous values of the first average increase) and the ratio of the first average increase to the average level of the row. Table 4 summarizes pre-calculated proxy indicators.

Based on the calculated increases and applying the graphic method, the nature of the change for each growth curve was determined. It was decid-

ed that a ratio of the first average increase to the middle level of the series has the smallest growth deviation. According to the consecutive differences method, this type of increase corresponds to a simple exponential curve. Consequently, this kind of curve is the most adequate to forecast the amount of social development expenditure in future periods.

Further calculations are needed directly to find the amount of social development expenditure for 2019. Necessary calculations are carried out using a package of data analysis, namely regression analysis in the MS Excel program. The input data interval (x) is the amount of social development expenditure. Output data interval (Y) is generated from the calculated values of the natural logarithm of the data series studied.

As a result of calculations, the following equation of a simple exponent has been obtained, which explains the change in the volume of the social development expenditure for local self-government in Ukraine:

$$Y = E_{xp} \cdot (12.27 + 0.0088 \cdot x), \quad (1)$$

where Y – total social development expenditure, E_{xp} – the exponent function, x – serial number of the forecast period.

The obtained model using regression analysis tools was evaluated. It is established that the determination coefficient for this model is 0.95. This means a quite high quality of the model. The estimated amount of social development expenditure for 2019 is UAH 574,944.06 million, which is 130,833 million more than previous 2018 figures. Logically, this growth can be explained by the fact that the volume of the state budget losses in 2019 exceeds UAH 1.1 trillion, of which a significant part is spent on financ-

ing the basic social needs of the population (education, health care, and social protection). It is important to consider the increasing amount of functions assigned to local communities for the establishment of primary health centers, basic schools, etc. Every year, the decentralization reform needs an ever increasing financial support for the population needs in order to comply with the principles of financial resources adequacy. It also needs a list of responsibilities assigned to local self-government.

CONCLUSION

In the current economic climate, the adequacy of financial support for local self-government is one of the prerequisites for a high standard of living in the country, sustainable social and economic development of the territories and the well-being growth. An analysis of existing Ukrainian and foreign literary sources has made it possible to conclude that representatives of various scientific areas are engaged in the issue of local self-government financial support. Some scholars consider financial support exclusively as a process of accumulation, distribution and use of financial resources. Others address this mainly from a purely financial perspective. They also believe that ensuring the optimum level of financial support needs for creating conditions for socio-economic development of territories. There is also a view that financial support is a mechanism for optimally allocating powers to finance functions and responsibility areas between central executive bodies and local authorities.

In the European Charter of Local Self-Government, much attention is paid to the declaration of provisions, which in fact is the guideline for building a balanced system of local governance. The problems, which lead to lack of financial support for social development, are singled out. The theoretical model of financial support decentralization is considered, which is based on the principles of self-dependence, self-sufficiency, self-activity and singularity.

That is, in the course of the literature review, it became clear that the scientists pay enough attention to the problems of financial support for social development.

Practical part of the work provided an idea of the dynamics of changing the state of financial support for the social development needs, including the adequacy of financing education, health care, social protection and social security, intellectual and physical development. It was found that the year 2014 with a level of 88.1% was the most crisis year in terms of implementing the financing scheme. In recent years, the average rate of implementation of budget items for social development is at 96%. A detailed analysis of the social development items pointed out that the relative share of this group of expenditure in the total amount of local budgets ranged from 77.2% to 86.3% for the analyzed period. Expenditure on education (27.3-34.2%) and social protection and social security (22.6-30.7%) are of the greatest importance. Given the existing transfer dependence of local self-government, it was decided to consider the change in the share of interbudgetary transfers in the total revenues of local budgets. In 2015, local budgets reached the maximum transfer dependency – 59.1%. The financial decentralization reform somewhat reduced the average transfer dependence by incomes to 53-54%.

Based on the indicators of the local taxes to GDP ratio and the ratio of local taxes to tax revenues of the Consolidated Budget of Ukraine, it was determined that Ukraine relates to the Hanover model of financial support for local self-government, which is also characteristic of Poland and Germany.

Thus, using data on the amount of spending on local self-government social development, extrapolation of the values of the researched indicator for 2019 is carried out. As a forecasting technique, the method of the Tintner consecutive differences was used, which gave the idea that the simple exponential equation with the least error explains the data series studied. The quality of the forecast exponential model is estimated at a high level, which is confirmed by the determination coefficient (0.95). The probabilistic data on the amount of social development expenditure for 2019 will increase by UAH 130,833 mln in relation to the previous period. This is generally quite realistic, as there is a tendency to increase the level of financing of the basic population needs from the local level.

Consequently, the comprehensive theoretical and practical analysis of the current state of financial support for social development in Ukraine pointed to the need to address the problematic aspects of the post-Soviet centralized management system, which must be transformed into market-decentralized and oriented towards basic needs of the population.

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