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FINANCIAL SUPPORT OF REGIONAL SOCIO-ECONOMIC DEVELOPMENT PROGRAMS ESTIMATING

Abstract. Introduction. The authors have analyzed the experience of financial support for regional socio-economic development programs and the ways of the territory's internal and external resources usage. Dynamic and balanced development of regions is one of the most important issues for further market relations establishment and social transformations in Ukraine. The purpose of this research is evaluation of the approved regional programs financial support and its disbursement. Results. Assessment of socio-economic situation in Ivano-Frankivsk region (western Ukraine) in terms of nationwide tendencies allows asserting that economic growth depends on the amounts and sources provided by the state. To determine close connection between the amount of financing for the programs and gross domestic product, the Pearson correlation coefficient was calculated for 2011-2020 on chosen launched programs. It was proved that the amount of regional socio-economic development programs financing influences the growth rate of gross domestic product. Conclusion. During research period, the activation of regional authority institutions is being surveyed regarding target regional programs adoption and financing. It was determined that consecutive activity of the regional community and its territorial units of socio-economic development programs defined strategic priorities will facilitate disproportion and differences in the development reduction of territory communities in the region, as well as positively influence the growth of gross domestic product, providing steady increase of socio-economic welfare.

Keywords: regional socio-economic development; ecological programs; social programs; gross regional domestic product; Pearson correlation coefficient; Ivano-Frankivsk region.

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ОЦІНКА ФІНАНСУВАННЯ РЕГІОНАЛЬНИХ ПРОГРАМ СОЦІАЛЬНО-ЕКОНОМІЧНОГО РОЗВИТКУ

Анотація. У статті проаналізовано досвід фінансового забезпечення регіональних програм соціально-економічного розвитку та напрями використання внутрішніх і зовнішніх джерел регіону. Проведено оцінку фінансового забезпечення затверджених регіональних програм та освоєння обсягів їх фінансування. Доведено вплив місцевих видатків на обсяг фінансування регіональних програм соціально-економічного розвитку та темпи зростання валового регіонального продукту. Визначено, що активна діяльність громади області та її територіальних складових із реалізації програм соціально-економічного розвитку в рамках окреслених стратегічних пріоритетів сприятиме зменшенню диспропорцій і диференціацій у розвитку територіальних одиниць області, а також позитивно впливатиме на зростання внутрішнього регіонального продукту та забезпечення стійкого росту добробуту населення. Дослідження проводилося на прикладі Івано-Франківської області.

Ключові слова: соціально-економічний розвиток регіонів; екологічні програми; соціальні програми; валовий регіональний продукт; коефіцієнт кореляції Пірсона.

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ОЦЕНКА ФИНАНСИРОВАНИЯ РЕГИОНАЛЬНЫХ ПРОГРАММ СОЦИАЛЬНО-ЭКОНОМИЧЕСКОГО РАЗВИТИЯ

Аннотация. В статье проанализирован опыт финансового обеспечения региональных программ социально-экономического развития и направления использования внутренних и внешних источников региона. Проведена оценка финансового обеспечения утвержденных региональных программ и освоения объемов их финансирования. Доказано влияние местных расходов на объем финансирования региональных программ социально-экономического развития и темпы роста валового регионального продукта. Определено, что активная деятельность областной громады и ее территориальных составляющих по реализации в рамках очерченных стратегических приоритетов программ социально-экономического развития будет способствовать уменьшению диспропорций и дифференциации в развитии территориальных единиц области, а также положительно воздействовать на рост внутреннего регионального продукта и обеспечение устойчивого роста благосостояния населения. Исследование проводилось на примере Ивано-Франковской области.

Ключевые слова: социально-экономическое развитие регионов; экологические программы; социальные программы; валовой региональный продукт; коэффициент корреляции Пирсона.

Introduction. Nowadays, regional development is one of the prior tendencies of regional state policy aiming to establish favorable conditions for dynamic, balanced socio-economic development in Ukraine and its regions, improve social welfare, provide guaranteed social security for every citizen regardless of his/her place of living.

One of the tasks of regional state policy is to intensify the processes of market transformation, exploiting regional capacity, which are efficiency of the authorities' decisions; improvement and mutual coordination of different local authorities regarding budgets.

Brief Literature Review. Theoretical-methodological aspects of regional development, regional economic complexes transformation, regional policy are in focus of the Ukrainian and foreign economists' research, such as O. Novikova, and O. Amosha [1], B. Danylyshyn [2], K. Udovenko [4], O. Makarova [4], N. Kanisheva, V. Mamutova, S. Melnyk, V. Popovkin, and also D. Kamerschen, R. McKenzie, and S. Nardinelli (1991) [6] et al. In the works of domestic scientists the ways to solve the problems of regional development differentiation reducing were proposed, as well as the regional economic systems complex formation and social orientation of economical growth were proposed. At the same time, the problem of the regional programs financial support has not been investigated completely.

Purpose of the article is to estimate financial support of the approved regional programs and its disbursement.

Results. Interrelation between capital and regions is a crucial factor for development of a state in general. They do not only establish state concord, but also influence people's welfare greatly. The absence of own well-considered regional policy in the past has led to considerable disproportions in the territorial structure of Ukrainian economy. The benefits of territorial labor division, regional natural resources and scientific production potential were being used inappropriately and caused pollution in many cities and districts. Financial-economic basis of many administrative territorial units is rather weak. All these factors cause the necessity of taking dedicated measures in the state regional economic policy to provide efficient regulation for the processes of regional development, monitor activity of the state and local authorities regarding the structural transformation of the state economy and impose consecutive market relations.

Socio-economic development of Ivano-Frankivsk region is

characterized by considerable productive, financial, geopolitical, touristic, cultural and scientific potential conditioned at post-crisis period by the influx of nation-wide and worldwide tendencies. On one hand, the positive thing is that there is a switch over to the initial development in most economic spheres, and on the other hand, the tempos of the economic growth are extremely slow and do not allow to forecast optimistic prospects. Let us analyze the estimation and financial sources of the regional socio-economic development programs of in Ivano-Frankivsk region from 2011 up to present. At the end

of 2013, state financing was provided for such Programs: «The Health Population of Precarpathian Region» (2013-2020) – 569801.2 thousand UAH; «Drinking Water» (2012-2020) – 214.4 thousand UAH; «Environment Protection» (2011-2015) – 4233.14 million UAH; «Own House» – 34255.0 thousand UAH, at official exchange rates 1 USD / 15.90-16.50 UAH.

To determine interrelations between the amount of financing according to the Programs and regional gross domestic product (RGDP), we have calculated Pearson correlation coefficient. Its prerequisites are: all observations are interrelated; the observations have standard method of distribution.

Regional special-purposed program aims to support individual building constructions in the villages and improve living conditions is called «Own

House». By 2012-2015, it suggests increasing amount of growth of houses in the villages by giving long-term (up to 30 years) mortgages; increasing the amount of startup houses with the first-priority investments for unfinished houses with high level of readiness; social orientation of building – immediate credits for large families and young families, local social workers; improvement of country land planning, giving practical aid with the support of rural authorities, individual construction companies in choosing and signing contracts on allotting lands, housing projects

Financing support of the Program is to be based on the involving different non-traditional resources at three levels: state, regional, district (local). Housing construction financing in every district is held according to the following scheme: 50% of the price is at the cost of the state budget, and 50% comes from the local budget. Resulting from the financial availability and other sources of financing, state authorities allot financial support on the Program annually while forming regional, district and local budgets (Table 1; Figure 1).

The Program «Health Population of Precarpathian Region» (2013-2020) to support regional healthcare system was given 1350.5 million UAH (in 2011 - 1083.8 million UAH) out of common fund - 1372.1 million UAH (assigned within the budget by 2012). Expenditures per person went up from 786.47 UAH in 2011 to 978.0 UAH under 2012 (on 24.4 %). By January1, 2013, to fulfill state programs in centralized order, there were received medicines and medical goods on the total sum of 42647.6 thousand UAH (Table 2; Figure 2). Moreover, to fulfill measures on regional medical programs, in 2012 out of assigned 41.0 million UAH within the budget, 39.8 million UAH were allotted. During 2012 within the framework of the program «Health of the Nation», almost 23.0 million UAH was spent on preventive maintenance, among which on AIDS - 568.0 thousand UAH, on tuberculoses preventive measures - 309.7 thousand UAH, on patients suffering from myeloid leucosis - 989.1 thousand UAH, on cancer preventing and treatment - 876.3 thousand UAH. On the Program «Reproductive Health of the Nation» the expenditures made 519.1 thousand UAH, «Diabetes» - 12.0 million UAH, the programs for the sick in cardiovascular diseases -312.8 thousand UAH, on blood donor supply – 1.3 million UAH.

Regional special-purpose program «Drinking Water» for 2012-2020 will give an opportunity to implement state policy in

Tab. 1: Impact of Financing Amount of the Program «Own House» on the Speed Growth of the Regional Gross Domestic Product, 2012-2015

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Index	2012	2013	2014	2015			
The Program is to support individual housing construction in the villages and improving living conditions of rural population «Own House», million UAH	6801.0	7789.0	9203.0	10462.0			
Regional Gross Domestic Product, million UAH	32286.0	32932.0*	33591.0*	34263.0*			
Pearson correlation coefficient	R = 0.998106	38					

^{*} Calculated on average annual rates of RGDP [1; 2] Source: Prepared by the authors

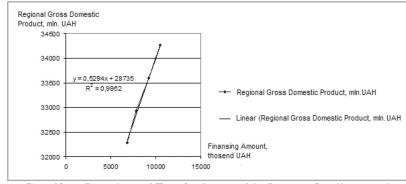


Fig. 1: Linear Dependence of Financing Amount of the Program «Own House» and Growth Speed of the Regional Gross Domestic Product

Source: Prepared by the authors

Tab. 2: Impact of Financing Amount of the Program «Health Population of Precarpathian Region» on the Speed Growth of the Regional Gross Domestic Product, Ivano-Frankivsk Region, 2013-2020

				•	•			
Index	2013	2014	2015	2016	2017	2018	2019	2020
«Health	110651.10	55766.20	60968.9	63003.2	65520.8	67536.1	71972.4	74382.5
Population of								
Precarpathian								
Region»,								
million UAH								
Regional	32932.0*	33591.0*	34263.0*	34948.0*	35647.0*	36360.0*	37087.0*	37829.0*
Gross								
Domestic								
Product,								
million UAH								
Pearson	R = -0.245127506							
correlation								
coefficient								

^{*} Calculated on average annual rate of RDGP [1; 2] Source: Prepared by the authors

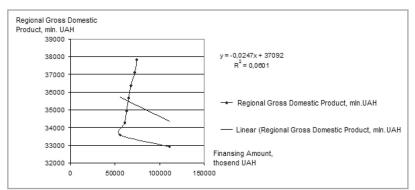


Fig. 2: Linear Dependence of the Financing Amount of the Program «Health Population of Precarpathian Region» on the Speed Growth of the Regional Gross Domestic Product Source: Prepared by the authors

the sphere of drinking water and water supply and has the following goals: to improve the quality of drinking water and sewage treatment; to utilize sediment, appearing while clearing

sewage systems; to improve sanitary, epidemic, ecological conditions in the region; to provide the protection of water supply resources; to adjust latest technologies with new equipment, tools and materials at water supply enterprises; to reduce water expenditure; to provide people with qualitative drinking

water through 24-hours access to the system of centralized water supply (Table 3; Figure 3).

The Environment Protection Program (2011-2015) provides financing of environmental protection measures, included in the Program, and will be fulfilled at the cost of the following sources: state budget of Ukraine, local budgets, environment protection funds (state, regional, local); private enterprises' investments, other (Table 4; Figure 4).

Realization of planned environment protective measures of the Program will provide the following changes: transformation of the system of integrated and balanced management in natural

resources using and reorganizing, environment protection and ecological security of the territory; reducing fumes congestion in the air; improving the quality of shallow waters by constructing and reconstructing (total repairs, modernization) filter equipment at the companies with different forms of property; reducing the quantity of utility areas for industrial and household waste by applying modern technologies, collecting it separately, constructing facilities (plants, equipment, processing and utility factories).

Conclusion. Thus, during the current period (2011-2015), more effective regional authorities' activity is being noticed regarding special-purpose

regional programs assigning and financing. As a result of socio-economic development programs in Ivano-Frankivsk region financial support analysis and estimation, we found essential drawbacks and problems that slow down economic raise. Active and dynamic work of the regional community and its territorial subdivisions in assigned strategic priorities of the socio-economic development programs realization will reduce disproportions and differentiations in the region's territorial units development, and will also influence the growth of regional domestic gross rate and provide stable welfare increase.

The aim of the regional policy should be provision economic, legitimate and organizational conditions to hold municipal and administrative reforms, optimize production system of the regions, eliminate disproportions between their social and production development, improve environment for

population, and align the levels of economic development. The main aspects of the regional policy stipulate, first of all, establishing effective regional structures of the economy.

Tab. 3: Impact on Financing Amount of the Regional Special-Purpose Program «Drinking Water» (2012-2020) on the Speed Growth of the Regional Gross Domestic Product,

Ivano-Frankivsk Region									
Index	2012	2013	2014	2015	2016	2017	2018	2019	2020
«Drinking	19.52	19.57	22.52	24.23	25.33	25.64	25.65	25.25	25.79
Water», million									
UAH									
Regional Gross	32286.0	32932.0*	33591.0*	34263.0*	34948.0*	35647.0*	36360.0*	37087.0*	37829.0*
Domestic									
Product,									
million UAH									
Pearson	R = 0.890	6541093							
correlation									
coefficient									

^{*} Calculated on average annual rates of RGDP [1; 2] Source: Prepared by the authors

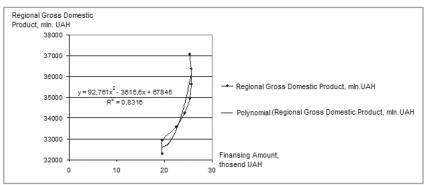
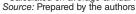


Fig. 3: Linear Dependence of the Financing Amount of the Regional Special-Purpose Program «Drinking Water» (2012-2020) and Speed Growth of the Regional Gross Domestic Product Source: Prepared by the authors

Tab. 4: Impact of Financing Amount of the Environment Protection Program (2011-2015) on Speed Growth of the Regional Gross Domestic Product

Index	2011	2012	2013	2014	2015		
The Environment	846.0	846.0	846.0	846.0	849.14		
Protection							
Program,							
million UAH							
Regional Gross	26752.0	32286.0	32932.0*	33591.0*	34263.0*		
Domestic							
Product,							
million UAH							
Pearson	R = 0.427424779						
correlation							
coefficient							

^{*} Calculated on average annual rate of RDGP [1; 2]



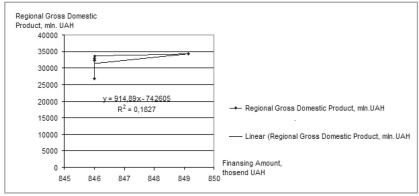


Fig. 4: Linear Dependence of the Financing Amount of the Environment Protection Program and Growth Speed of the Regional Gross Domestic Product

Source: Prepared by the authors

Ivano-Frankivsk regional experience in the sphere of working out and realizing the programs at the regional level proves the possibility to unite all financial sources, assigning substantial amounts of regional and local budgets to solve the tasks of socio-economic development in the region, satisfying socio-economic needs of the population according to the strategic priorities of socio-economic policy.

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