The article discloses the problem of distributing state financial support based on an integrated approach. The study has proved the urgency and necessity of state support for the lowest priority territorial units (regions). It answers the research question of what components need to be included in the methodology for determining state financial support. A comprehensive method for estimating the share of public funds is proposed, taking into account the investment attractiveness of a region (oblast) and the risk of the corresponding region (oblast). To achieve this goal, the following general scientific and special methods and research techniques were used in the work, such as comparative analysis of scientific literature and information sources based on methods of comparison, systematization, and generalization; generalization of the analysis results, as well as logical generation of conclusions and integral assessment.

Since the problem of financing the construction and reconstruction of bridges is relevant for a number of countries, this technique was tested using an example of bridge construction.

According to the obtained results, territorial units (regions) that are not leaders in priority for the investor and have a high level of riskiness of investing financial resources become eligible for state financial support. The problem of financing such regions can be solved only through state support. The results of calculations show that the distribution of financial resources with the available volume of public finances K=1 allocated for support is carried out proportionally. An integrated approach made it possible to identify 10 territorial units (oblasts) for funding, with the oblasts with the worst priority factors receiving the largest share of state financial support.

This study is of practical interest to government agencies in the distribution of public funds, and it is of theoretical importance to researchers dealing with issues of financial security and public administration

Keywords: government funding, financial support, government support, financing model, bridge construction

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ESTIMATION OF STATE FINANCIAL SUPPORT FOR NON-PRIORITY TERRITORIAL UNITS USING THE EXAMPLE OF BRIDGE CONSTRUCTION

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1. Introduction

Research that is aimed at solving the problem of financing the reconstruction and construction of bridges is relevant for a number of countries [1]. For example, inspections of bridges in Italy have resulted in disappointing conclusions: 300 bridges in the country are in disrepair and may collapse at any time. Traffic is partially blocked on those bridges, and the reason of this is structural damage to their supports. Most of the bridges and roads in Italy were built between the 1950s and 1960s and are in poor condition. The useful time of the concrete of which they are made is the same 50 or 60 years [2]. Seismic activity and climatic collapses only aggravate the situation [3]. The results of [4] showed a long absence of funding and maintenance of the existing structures, which often led to partial or complete overlap of the bridge section and material destruction.

The situation is similar in France. Every tenth bridge is in poor condition. Of the 12,000 French bridges, a third is in need of cosmetic repairs in order to exclude structural changes. In 7 % of cases, the damage is quite serious, and some of them are at risk of potential collapse [2], which indicates the presence of the same problems as in Italy.

The results of research on the condition of bridges in Germany are as follows: 12.4 % of bridges are in very poor condition, and only 12.5 % are in good condition. Many structures were built in the period from the 1960s to the 1970s and are not designed for the very busy traffic of our days [2]. In general, the condition of bridges in the east of Germany was improved thanks to the State Programme for Support of Endangered Cities [5, 6]. In the western part of the country, the situation is much worse: on a number of bridges, the movement of heavy vehicles is already prohibited [2].

According to the Information Portal of the Russian Community in Latvia [7], almost half of the 969 Latvian state-run bridges are in poor or very poor technical condition. The technical condition of 34.9 % of bridges is assessed

as poor and of 12.1 % as very poor. This indicates insufficient state funding.

For the countries of Latin America, in particular Brazil, the problem of unsuccessful bridges and roads is also relevant [8]. This fact is recorded in the work [9], where attention is focused on the age of the bridges. The authors of study [10] acknowledge the problem and propose to take a set of measures to prevent rapid destruction. At the same time, it was noted in [11] that researchers in Brazil focus on solving "narrow problems". They are engaged in technical developments related to the construction of new roads, bridges and hydraulic systems, which are considered as priority ones on the path to the innovative development of the country. In this case, we are talking not only about structures in big cities but also about small ones, in which people also live and which must also follow the path of innovative development [11]. However, this requires the maximum "elimination of regional imbalances in the state" and financing of the most problematic regions and districts [12, 13].

Taking into account the complexity of the current situation, study [14] proposed to carry out reconstruction, extending the service life of bridges through strengthening measures. Some researchers see a solution to the problem through government intervention, focusing on the need for significant capital expenditures [5, 6]. Financing bridge construction is a challenging task [15]. These questions were raised in the first half of the 20th century [16] and are relevant in the 21st century [8, 17–20]. Summing up, on the one hand, we have a catastrophic wear and tear on bridges; on the other hand, there are backward regions that are unable to cope with the problem of bridge wear. This is what provokes the development of new forms of financing the latter [21], which provide for the solution of both problems at once.

2. Literature review and problem statement

The leaders of European countries as world leaders are looking for ways and call on other countries to help business, which is a global investor and which suffers during the 2020–2021 crisis, by introducing government support measures. The road industry in general and bridge construction in particular especially need state support, since it is a guarantee of the country's defence capability [22–24]. A striking example is the data of [25], where it is recorded that only about 3 % of bridges do not provide the state's defence capability. Talking about full financing of bridge construction is hardly acceptable in a crisis, but selective and fair regional financing is within the power of every state. Therefore, it becomes necessary to develop a comprehensive methodology for the distribution of public finances and determining their share. It should solve the problem of disastrous wear of bridges and "eliminate regional imbalance in the state" (support backward regions that are unable to cope with the problem of bridge wear) on the way to innovative development [12, 13].

To solve this problem, it is necessary to answer the research question of what components should be taken into account when determining government financial support. Therefore, the question of an integrated approach [26], for the fair distribution of public funds, remains open and relevant [27].

According to existing methods, preference for financing is given to territorial units (regions) that have high priority. This approach raised doubts and questions. Pursuing the experience of India, on the way of eliminating the regional imbalance in the state [12, 13], it is proposed to distribute state funds (state financial support) according to the principle that "the weakest should have the biggest state support", which contradicts the views of predecessor researchers.

The existing financing methods do not give a clear answer on how to identify weak territorial units (regions) for financing and in what proportion it is necessary to distribute state financial support among them.

In study [28], the authors discussed in detail some of the modern financial techniques: intergovernmental financing and loan guarantees. They showed in their article that financing of large infrastructure projects can be provided not only by the state but also by the regions that are supported by the state. At the same time, the study does not say anything about which regions should be classified as "supported".

In study [29], the author proposed a methodology that represents a standardized structure and mechanisms of financial flows. However, this model is specific because it is focused on the management of finance in the municipal housing stock. At the same time, nothing is said about the influence of such components as priority, riskiness, and the influence of these components on decision-making on financing.

Study [30] paid attention to the financial provision of cities. The authors proposed a financing model based on a factor of investment attractiveness. This factor is the key. The methodology is interesting for its complex approach to assessing the territorial investment attractiveness, based on the rating of which the authors proposed to provide funding but did not offer a methodology for the fair distribution of public funds. This part is theoretical, which is the scientific gap of the above study.

The methodology of state financing was proposed in [31]. The dependence of financing on territorial attractiveness was also proved there. The fair competition of territories for investment has been substantiated. The territorial attractiveness is based on the attractiveness of the land that will subsequently be able to bring a return on investment.

The research results of [30, 31] prove the fact that the higher the level of investment attractiveness, the more attractive the region is for financing. If we talk about attractiveness from an "investor" perspective, then everything is logical and understandable. However, when it comes to state support, everything should be the other way around. The state is obliged to support less attractive regions, which the investor may never come to and which have no hope of getting into the "top" investment-attractive regions. Thus, study [16] proposed a methodology for financial support of the bridge construction industry based on selective regional financing. The authors of study [31, 32] considered selective financing as a factor in the stabilization and sustainable development of the regional economy because its main result is not formal reorganization but the effect of interaction with the state. At the same time, state support and selective financing of regions is the basis for the development of their economies [33]. In support of point funding, study [34] proposed a method for selecting regions for funding from the standpoint of a set of characteristics. The authors of the study used an approach to quantifying the attractiveness of a region to determine compliance with specific requirements. The study is indirectly devoted to the method of financing based on assessing the investment attractiveness of the region that was discussed in study [30]. However, this study does not pay attention to the financial component. Namely, it

does not indicate how selective government funding is made or how its size is determined. Researchers in [33] also proposed an interesting funding methodology that was based on a combination of private and public funds. However, it concerned public-private partnership, and attention was paid to the methodology for determining the equity participation of private funds. The issue of equitable distribution of public funds based on mathematical calculations was ignored.

To determine the amount of financial support, it is proposed to take into account the strengths and weaknesses of the potential object for financing and clearly define the public benefits and services provided, as well as positive externalities. This is what is decisive with the support of state funding [35]. However, this approach is unacceptable, since in this case the support of weak regions is completely ignored.

After analysing works [16, 28–31, 33–35], it can be argued that the problem of the distribution of state financial support from the standpoint of supporting weak regions has not been sufficiently considered by other researchers. Also, the absence of a unified approach to determining the share of funding from the standpoint of supporting weak regions has been proved, which indicates the need for appropriate research and determining state financial support for non-priority territorial units.

3. The purpose and objectives of the study

The aim of the study is to develop a methodology for determining state financial support for non-priority territorial units using the example of bridge construction. This will make it possible to eliminate the regional imbalance in the state on the way of its innovative development.

To achieve the goal, the following tasks were set and done:

– to select the conditions for classifying regions as non-priority in terms of state financial support;

– to determine territorial units (regions) for the distribution of state financial support based on factors of the region's investment attractiveness and risk; and

– to estimate the share of financing based on the factors of the region's investment attractiveness and risk.

4. Research materials and methods for determining state financial support for non-priority territorial units

To determine the state financial support for non-priority territorial units, two important factors were needed, namely: the factor of the investment attractiveness of the region (IAR) and the risk factor.

To determine the IAR, the "Methodology for assessing the work of central and local executive authorities in attracting investment and implementing measures to improve the investment climate in the relevant sectors of the economy, regions and the corresponding report form" was used [36]. For the calculation, we used a list of factors developed by the Ministry for Development of Economy, Trade and Agriculture of Ukraine; it concerns four groups, including 36 factors characterizing the level of development of a region (Table 1).

Table 1 shows the factors that are open data of the State Statistics Committee of Ukraine. The IAR calculation was carried out in three stages.

Table 1

List of factors for assessing the IAR [36]

Group	Factor
Economic factors	Gross regional product per capita, mln c.u. (USD). Profit earned by enterprises from ordinary activities before tax, mln USD. Volume of agricultural products (in comparable prices), mln USD. Share of innovatively active enterprises, %. Gross agricultural production per 100 hectares of agricultural land, mln USD. Agricultural land area per farm, ha. Retail turnover of enterprises on average per month per capita, mln USD. Volume of sold market non-financial services to consumers per capita, USD. Assimilated investment in fixed assets per capita, USD. Assimilated investment in fixed assets at the expense of foreign investors, mln USD. Ratio of unprofitable enterprises to the total number of enterprises, %. Volume of construction works, mln USD. Growth (decrease) rate of overdue accounts payable, %. Growth (decrease) rate of overdue receivables, %. Total export volume per capita, mln USD. Increase in direct foreign investment per capita in the period, mln USD. Direct foreign investment per capita as of the end of the period, mln USD. The volume of investment from regions in the economy of other countries per capita, mln USD
Infrastructure development	Total volume of freight traffic, thousand tons. Total passenger traffic, thousand people. Provision of the population with home telephone sets per 100 families, units. The total volume of innovation costs for technological innovations, mln USD. Applications for invention submitted to legal entities, units. Number of Internet users (contract), thousand people
Human resources	Commissioning of housing by developers of all forms of ownership, thousand m^2. Arrears in payment of wages on average per employee, USD. The level of economic activity of the population aged 15–70, %. Average monthly nominal wage of one full-time employee, USD. Unemployment rate (according to the methodology of the International Labour Organization), %. Employment rate of the unemployed registered population, %. Graduation by higher educational institutions of Levels I and II of accreditation, thousand people. Graduation by higher educational institutions of Levels III and IV of accreditation, thousand people
Entrepreneurship	Average annual number of employed workers of small enterprises with the number of employed workers in general at enterprises as subjects of entrepreneurial activity, thousand people Volume of sold products (works, services) of small enterprises, %

At the first stage, the IAR was assessed by summing the relative deviations of the factors characterizing the relevant activities of a region to the best values of these factors of the regions according to the formula

$$S_j=\sum((B_{max}-B_{ij})/(B_{max}-B_{min}))+ \\ +\sum=\sum((B_{ij}-B_{min})/(B_{max}-B_{min})), \quad (1)$$

where S_j is a rating assessment of the investment attractiveness of the j-th region by each factor; B_{ij} is the value of the i-th factor of the j-th region, $1<=i<=n$; B_{max}, B_{min} are the maximum and minimum values of the factors; n is the number of factors for which the calculation is made [36].

The first part of the formula was used to assess factors whose growth has a positive effect (stimulants); the second part was used to assess factors whose growth has a negative effect (destimulants).

At the second stage, the arithmetic mean of the sum of the IAR ratings for each factor was determined using the formula

$$S_{av}=S_j/n, \quad (2)$$

where S_{av} is the arithmetic mean of the sum of rating assessments of the activity of a particular region for n-th factors; n is the number of factors for which the calculation is made [36].

At the third stage, the integral rating factor of the IAR was determined according to the following formula:

$$S_{rj}=\sum S_{av}\times g_n, \quad (3)$$

where S_{rj} is the integral rating factor of the IAR; g_n is the weight of the n-th group of factors [36].

Further, the calculation of the risk factors was carried out as the most important indicator for financing [37, 38] to be taken into account when determining state financial support for non-priority territorial units. In contrast to the neoclassical approach where the coefficient of variation is used to assess the risk [39], the coefficient of semivariation was used, which makes it possible to better assess the degree of risk [19]. Its use is advisable, in particular, when the external economic environment; the risk factors characteristic of the project under consideration are marked by dynamism.

Semivariation was calculated as follows:

$$SV=\frac{1}{P^-}\sum_{i=1}^{n} d_i^2 p_i, \quad (4)$$

where p_i is the probability of the i-th result; d_i means negative deviations of actual results from the expected average:

$$d_i=\begin{cases}0, & x_i\geq\overline{x},\\ x_i-\overline{x}, & x_i<\overline{x},\end{cases}$$

P is the sum of the probabilities for which d_i are negative.

If it is necessary to allocate public funds and determine the share of financing, an appropriate methodology is proposed, based on the obtained factors of the IAR and risk. Its use will allow making the optimal management decision, which will be useful both for the state budget and for the regional one.

5. Results of estimating the state financial support for non-priority territorial units

5. 1. Choice of conditions for classifying regions as non-priority in terms of state financial support

Imagine that a regional programme (regional development programme) consists of n number of projects or areas (within the country) that need support. The index of a project that participates in investment processes will be designated as $i=\overline{1,n}$. Let the impact from projects per unit of investment spent be for the state a_i $\left(a_i<1, i=\overline{1,n}\right)$.

Since regional economic resources are limited, the most effective way to increase production is to attract additional capital resources [38], namely public funds. The regions are also interested in receiving budget funds. The idea of interaction between a region and the state is that budgetary funds are provided on the condition that the region participates in financing the project and undertakes to provide its own regional resources for financing.

A model is proposed for ensuring effective interaction between the state and the region, which takes into account the amount of state funding (support). The economic interest of the i-th project can be described by the expression

$$Z_i(S_i x_i)=\varphi_i(S_i)-y_i=\varphi_i(S_i)-(S_i-x_i),\ i=\overline{1,n}, \quad (5)$$

S_i is the total amount of financing; $\varphi_i(S_i)$ is income of the i-th project; $y_i=(S_i-x_i)$ is lack of funds for the project implementation; Z_i is the net profit of the i-th project.

Also, for the calculation, an artificial factor q_i is needed, which was calculated according to (6):

$$(1-a_i)/l_i=q_i, \quad (6)$$

where a_i is efficiency; l_i is priority.

Substituting in formula (6) instead of the efficiency factor the risk factor (4) and instead of the priority factor the IAR factor (3), the calculation of the artificial factor q_i was carried out as follows:

$$(1-SV)/S_{rj}=q_i, \quad (7)$$

where SV is the risk (semivariate); S_{rj} is the IAR.

To determine the total number of regions for participation in regional development programmes, such a maximum value of n was found that would satisfy the inequality

$$q_i<Q_n/(n-1), \quad (8)$$

where Q_n is the sum of artificial factors q_i corresponding to n.

When condition (8) was not met, the corresponding regions were excluded from the list of candidates.

5. 2. Determination of territorial units for the distribution of state financial support

Based on statistical data on the factors presented in Table 1, which are in the public domain, using formulas (1) (3), the calculation of the IAR was carried out. Since this study is performed using the example of Ukraine, the IAR values are presented by regions (oblasts and Kyiv as the capital city) of Ukraine (Table 2).

It should also be noted that during the anti-terrorist operation on the territory of Donetsk and Luhansk Oblasts of Ukraine, the data for the assessment were taken exclusively from the controlled territories of these regions.

The results of calculating the risk (semivariations) were obtained according to formula (4), and they are presented in Table 3.

Table 2

The IAR of Ukraine (2018)

Region	S_{rj}
Cherkasy	0.398636
Chernihiv	0.363765
Chernivtsi	0.431203
Dnipropetrovsk	0.422116
Donetsk*	0.458794
Ivano-Frankivsk	0.373391
Kharkiv	0.395974
Kherson	0.377155
Khmelnytskyi	0.363777
Kirovohrad (Kropyvnytskyi)	0.383469
Kyiv	0.406496
Kyiv City	0.569373
Luhansk*	0.403544
Lviv	0.356200
Mykolayiv	0.398673
Odesa	0.396466
Poltava	0.410794
Rivne	0.361749
Sumy	0.376327
Ternopil	0.352696
Transcarpathian	0.374684
Vinnytsia	0.408514
Volyn	0.355415
Zaporizhzhia	0.405340
Zhytomyr	0.369553

*Note: * means data on the region controlled as the territory of Ukraine; summarized by the authors on the basis of research [19, 28]*

Table 3

Risk calculation for the regions of Ukraine [19]

Region	*SV*, %
Ternopil	0.81
Kyiv City	0.96
Luhansk*	1.28
Khmelnytskyi	1.42
Lviv	1.69
Kirovohrad (Kropyvnytskyi)	2.03
Chernihiv	2.31
Poltava	2.71
Zaporizhzhia	2.85
Volyn	2.93
Ivano-Frankivsk	3.05
Odesa	3.06
Kyiv	3.65
Kherson	3.70
Rivne	3.74
Transcarpathian	4.07
Kharkiv	4.21
Dnipropetrovsk	4.49
Donetsk*	5.50
Cherkasy	5.58
Vinnytsia	5.58
Sumy	8.78
Mykolayiv	9.65
Chernivtsi	11.37
Zhytomyr	20.03

*Note: * means data on the region controlled as the territory of Ukraine*

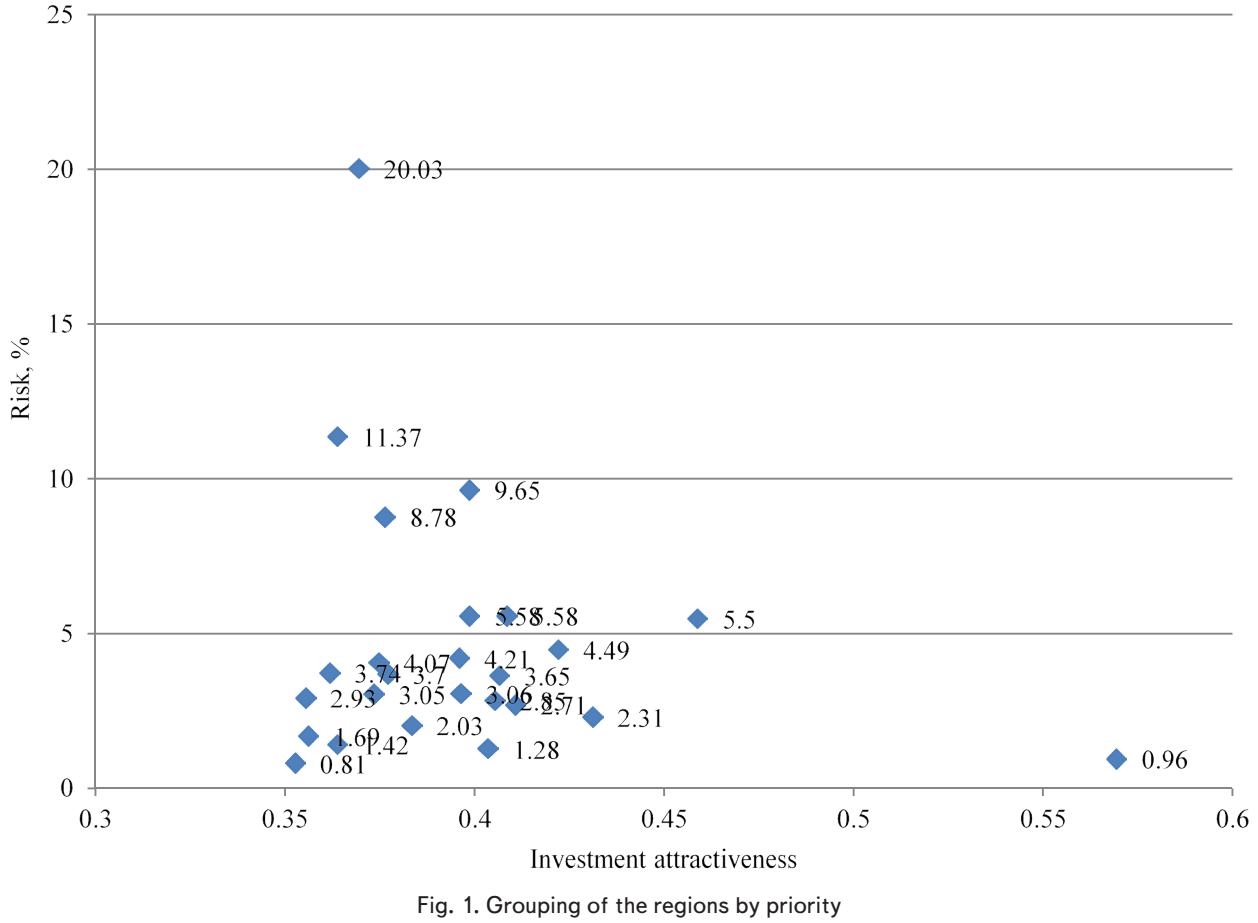

Fig. 1. Grouping of the regions by priority

Based on the calculations carried out, the regions are grouped by the level of risk, that is:

1. 0–3 % – regions with a low level of riskiness (Kyiv City as well as Ternopil, Luhansk, Khmelnytskyi, Lviv, Kirovohrad (Kropyvnytskyi), Chernihiv, Poltava, Zaporizhzhia and Volyn Oblasts);

2. >3–6 % – regions with an average level of riskiness (Ivano-Frankivsk, Odesa, Kyiv, Kherson, Rivne, Transcarpathian, Kharkiv, Dnipropetrovsk, Donetsk, Cherkasy and Vinnytsia Oblasts);

3. >6 % – regions with a high level of riskiness (Sumy, Mykolayiv, Chernivtsi and Zhytomyr Oblasts).

Fig. 1 shows the generalized results of calculating the IAR and risk by formulas (3) and (4), respectively.

Thus, we obtained a list of regions as potentially eligible for state financial support, namely: Ivano-Frankivsk, Odesa, Kyiv, Kherson, Rivne, Transcarpathian, Kharkiv, Dnipropetrovsk, Donetsk (the controlled territory of Ukraine), Cherkasy, Vinnytsia, Sumy, Mykolayiv, Chernivtsi and Zhytomyr Oblasts.

For the implementation of the state financial support programme, the emphasis was placed on financing the least priority areas. In conditions of a shortage of funds and provided that such regions are less likely to attract an investor than others, it is they that need state financial support.

5. 3. Estimation of the share of funding

To determine the share of financing, it is necessary to calculate q_i. The initial data for the calculation were presented in Tables 2, 3.

The calculation of q_i was carried out according to formula (7). When determining state financial support for non-priority territorial units, according to the proposed methodology, it is necessary to line up the candidates in the order of increasing q_i values. The calculation results are presented in the ascending order in Table 4.

Table 4

Q_i values in the ascending order

Region	q_i value
Zhytomyr	1.62683
Donetsk*	2.09440
Chernivtsi	2.13310
Dnipropetrovsk	2.23895
Vinnytsia	2.29833
Cherkasy	2.33897
Mykolayiv	2.34252
Kyiv	2.35721
Odesa	2.38860
Kharkiv	2.44940
Sumy	2.50048
Kherson	2.53609
Transcarpathian	2.54801
Ivano-Frankivsk	2.58040
Rivne	2.64686

*Note: * means data on the region controlled as the territory of Ukraine*

According to the calculation results presented in Table 4, we can conditionally distinguish three groups of areas eligible for funding. Moreover, Group 1 is the weakest area. The grouping is as follows:

1. Group 1 – Zhytomyr, Donetsk, Chernivtsi, Dnipropetrovsk and Vinnitsa Oblasts.

2. Group 2 – Cherkasy, Mykolayiv, Kyiv, Odesa and Kharkiv Oblasts.

3. Group 3 – Sumy, Kherson, Transcarpathian, Ivano-Frankivsk and Rivne Oblasts.

The algorithm of the procedure for determining the number of candidate regions for participation in the distribution of state financial support can be represented by inequality (8).

Let us check the fulfilment of the given condition for the set of obtained values of q_i. The check is performed as long as condition (8) is satisfied.

The calculation results are presented in Table 5.

Table 5

Checking the fulfilment of condition (8)

Number of regions, n	q_i	$\sum q_i$ corresponding to n, Q_n	$Q_n/(n-1)$	Checking condition (8)
2	2.09440	3.72123	3.721234	$3.721234>q_2$
3	2.13310	5.85433	2.927168	$2.927168>q_3$
4	2.23895	8.09328	2.697765	$2.697765>q_4$
5	2.29833	10.39161	2.597906	$2.597906>q_5$
6	2.33897	12.73058	2.546120	$2.546120>q_6$
7	2.34252	15.07310	2.512187	$2.512187>q_7$
8	2.35721	17.43031	2.490049	$2.490049>q_8$
9	2.38860	19.81891	2.477368	$2.477368>q_9$
10	2.44940	22.26831	2.474261	$2.474261>q_{10}$
11	2.50048	24.76879	2.476883	$2.476883<q_{11}$

Since condition (8) was not met with n=11, the calculations were terminated. Ten regions for state financial support have been identified as follows: Zhytomyr, Donetsk, Chernivtsi, Dnipropetrovsk, Vinnytsia, Cherkasy, Mykolayiv, Kyiv, Odesa and Kharkiv Oblasts.

Further, the values of the share of funding were calculated in proportion to the obtained $Q_n/(n-1)$, and the results are presented in Table 6.

Table 6

Results of calculating the share of financing with K=1

Region	Share of funding if K=1
Zhytomyr	0.1382
Donetsk *	0.1087
Chernivtsi	0.1002
Dnipropetrovsk	0.0965
Vinnytsia	0.0946
Cherkasy	0.0933
Mykolayiv	0.0925
Kyiv	0.0920
Odesa	0.0919
Kharkiv	0.0920

*Note: * means data on the region controlled as the territory of Ukraine*

Thus, state financial support should be distributed according to the principle that "the weakest should have the biggest state support", which corresponds to the goal of the study – to eliminate the regional imbalance in the country on the way of its innovative development.

6. Discussion of the results of determining the state financial support for non-priority territorial units

A large number of funding methods have been proposed by researchers [19, 28–31, 33–35]. In contrast to them, where preference for financing is given to objects that have high investment attractiveness and, accordingly, high priority, the proposed innovative methodology is focused on determining financial support for non-priority territorial units (regions). This became possible by applying an integrated approach to determining state financial support for those regions (oblasts) that are not leaders in priority for the investor and have a high level of riskiness for investing funds. Comprehensiveness is provided by the use of factors of the IAR and risk. Based on statistical data on the factors presented in Table 1, which are in the public domain, using formulas (1)–(3), the calculation of the IAR was carried out. The results of calculating the risk were obtained according to formula (4), based on the results of which the regions were grouped by the level of risk. The generalized results of calculating the IAR and risk are presented in Fig. 1. A list of the regions eligible for state financial support was received. Further, the values of the share of financing were calculated in proportion to those obtained results that are shown in Table 5.

In contrast to the existing methods, the authors' methodology allows providing financial state support to regions that have the worst IAR and risk values, which allows eliminating the regional imbalance in the country on the way of its innovative development. Funding should be carried out according to the principle that "the weakest should have the biggest state support".

The results of the authors' study are a laconic continuation of studies carried out both at the local level [19, 40, 41] and abroad – in Africa [42] and Asia [43–45].

The main limitation is that this study is based on the existing methods for determining the IAR and risk regardless of the field or industry.

This study is of practical interest to government agencies in the determination and allocation of public funds, and it is of theoretical importance to researchers dealing with issues of financial security and public administration.

Further research should continue in the direction of estimating state financial support for a field or industry, which can act as an independent component of determining state financial support for non-priority territorial units.

7. Conclusions

1. The study has specified the conditions for classifying regions as non-priority in terms of state financial support. The defining factors are the following: the investment attractiveness of a region (IAR) and risk. In order to eliminate the regional imbalance in a country on the way of its innovative development, it was decided to provide financial state support to the regions that have the worst values of the IAR and risk.

2. The territorial units (regions) for financial state support in Ukraine have been determined as Zhytomyr, Donetsk, Chernivtsi, Dnipropetrovsk, Vinnytsia, Cherkasy, Mykolayiv, Kyiv, Odesa and Kharkiv Oblasts. The proposed procedure for specifying territorial units (regions) for financial state support is easy to use, since it is based on available, open statistical data. The possibility to change the set of factors when calculating makes it unique and adjustable for testing in other countries or other regions.

3. The share of funding was determined based on the factors of the IAR and risk. There are three groups of oblasts in Ukraine that are eligible for funding. Moreover, Group 1 includes the weakest oblasts. The distribution into groups is as follows: Group 1 – Zhytomyr, Donetsk, Chernivtsi, Dnipropetrovsk and Vinnitsa Oblasts; Group 2 – Cherkasy, Mykolayiv, Kyiv, Odesa and Kharkiv Oblasts; and Group 3 – Sumy, Kherson, Transcarpathian, Ivano-Frankivsk and Rivne Oblasts.

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