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THE IMPACT OF REGULATORY POLICY FOR IMPLEMENTATION OF INTERNATIONAL SCIENTIFIC AND EDUCATIONAL PROJECTS TO THE COUNTRY INNOVATIONAL POLICY OF UKRAINE

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Introduction and goal of the research. In today's difficult economic and political conditions in the country, the project team's consideration of the political factor is a necessary requirement. Despite the fact that political problems have an indirect effect on national economies, they can have a significant impact on the activities of economic actors. **The purpose of this article** is to analyze the influence of the government sector on the development and implementation of international educational projects in the system of innovative development of the country; to determine the coefficients of elasticity and coefficients in order to determine the effect of regression factors on the resulting indicator, which allowed to define the formulation of scientifically substantiated proposals for improving the efficiency of innovation activity.

Methods of research. In this work, methods of statistical analysis were used to compare the development of innovation activity and the implementation of innovative projects in Ukraine over the past 10 years; economic-mathematical modeling to determine the accuracy of the forecast by calculating the relative error; calculation of the upper and lower bounds of the predicted interval by means of determining the half-width of the interval forecast.

Results of the research. In the course of the study, by substituting the values of the arguments into the equation, the author obtained the trend values of the volume of realized innovative products that grow in the last year of the study; the obtained data of the point forecast of regression factors, with the help of synthesized multifactor regression and the obtained data, determined the forecast volume of the realized innovative products for 2019–2020. Calculated the influence of each factor on the effective index, that is, determined the coefficients and parameters of the matrix of free members. From the above calculations, the author concludes that the second largest factor, the sum of the cost of research and development, has the greatest impact on the effective indicator (volume of realized innovative products).

Conclusions. It is evident from the data obtained that the share of own funds in financing research and development during the analyzed period decreased from 79.64% to 59.35%. The volume of state financing of innovation activity in Ukraine is insignificant due to the deficit of the state budget. Under these conditions and taking into account the tendencies of the active spread of globalization processes, the diversification of sources of financing for innovation is urgent and necessary, and separate – the attraction of foreign investments for the development and implementation of international scientific and educational international projects, the implementation of which facilitates the intensification of the innovative development of the national economy, which in practice can be manifested in the growth of volumes of realized innovative products.

Keywords: state support; innovative projects; economic and mathematical modeling; innovative products; multifactor regression.

Statement of the problem and its connection with important scientific and practical tasks. The problem of political instability is characterizing most of the modern countries of the world (including, for Ukraine). Thereby, the project team takes into account the political factor. Despite the fact that political problems have an indirect effect on national economies, they can have the significant impact on the activities of economic actors. The uncertainty in the political situation of the country leads to a high level of risk in terms of implementation of various activities within the boundaries of this country.

Of particular importance are political factors in the context of research on the implementation of international scientific and educational projects, which are represented by representatives from Ukraine. Implementation of the project involves implementation of the stages of developed plan. However, when it comes to the project activity in the territory of a foreign country, it is impossible to pre-design forecasts and plans that fully correspond to the realities of the country at the time of the immediate implementation of the project activity. Problems may be caused by the volatility of the country's political environment. Changes in the political course of the country may be accompanied by changes in executive bodies. Often, there is also a change in the priorities of development and directions of innovation, which will significantly complicate the project implementation process.

Analysis of the recent publications. Problems of the management of scientific and educational international projects at different phases of the project's life cycle are devoted to the works of N.I. Holyavko [6], L.M. Hanuschak-Efimenko, V.G. Scherbak [5] in their works, where it explores the peculiarities of innovative development of the country in the implementation of innovative projects, problems of higher education in the context of the national strategy for the development of international education devoted to the works of Y. Sulima [10]. In these works, it was emphasized that grants under the international cooperation programs are mainly provided for the implementation of projects coordinated by the EU countries. In particular, the leaders in terms of the number of grants received under the Tempus program are Germany, Italy, France. Instead, Ukrainian science and education organizations usually act as partners, not coordinators (grant recipients and key resource allocators) for projects. Moreover, the positive dynamics of the number of scientific and educational international projects that have been financed with the aim of their further practical implementation in the countries with stable (and, accordingly, predicted, unchanged over a long period of time) political situation is traced.

Unresolved parts of the study. Despite the considerable number of scientific publications in the field of management of scientific and educational projects, the issue of country regulation of these projects needs to be carefully studied, especially in today's complex political and economic situation in the country.

The purpose of the study. Investigation of the influence of political factors on the development and implementation of scientific and educational international projects, calculation of elasticity coefficients and β-coefficients in order to determine the influence of regression factors on the resultant indicator.

The summary of the main results and their justification. In our opinion, support and assistance from public authorities in the implementation of scientific and educational international projects is an important part of the successful work of the project team. If the main areas of activity within project framework meet the priorities of Ukraine's innovation development plan. In this case, country assistance will act as part of the process of practical implementation of the country innovation policy as a whole. In this context, we can talk about the influence of the political factor on the goals and subjects of scientific and educational international projects. It is meant that in order to obtain country support, the project team can develop projects whose practical implementation is aimed at achieving important goals of the development of the national economy (in the first place, the intensification of innovation activities within the country). The special role of the government in the management of international scientific and educational cooperation should stimulate domestic economic actors to participate in projects, to represent national interests and orientation of the project realization activity to the strategic goals of Ukraine's development. If the objectives of the project conflict with the priorities of the country's development, then its implementation becomes impossible or faced with a number of barriers and obstacles. It will necessarily be accompanied by a lack of country support or even disapproval from country authorities.

In this context, it needs to emphasize the importance of proper and consistent implementation of the principles and priorities of Ukraine's country innovation policy. In particular, the careless implementation by public authorities of innovation policy in practice can lead to significant problems in the application of international science and education projects. As a result, this can point to the significant slowdown in the pace of innovation of the national economy.

The tasks of the country's management in international scientific and educational cooperation in the system of country innovation policy of Ukraine, are reduced mainly to the intensification of international cooperation in the spheres of innovation, education and scientific and technical activities within Ukraine [3]. To control over the observance of the current legislation of Ukraine, to use sanctions against violators of the provisions normative legal acts, as well as systematization of statistical information on activities within the framework of scientific and educational international projects. The dynamism of the external economic environment necessitates thorough forecasting and planning of the development of international cooperation in the spheres of education, science and innovation on the basis of analysis of data accumulated by country's authorities. Public assistance to international scientific and educational projects should be oriented towards the achievement of budget, socio-economic efficiency of project implementation, obtaining effects from their introduction for the national economy, including through the development of domestic innovation infrastructure [3].

An importance on macro level motivation of domestic economic factors is to intensify innovation [2]. In particular, framework development and implementation of international scientific and educational projects aimed at introducing innovations into the practice of managing economic entities. At the same time, country authorities should represent and protect the interests of Ukrainian project participants, as well as create favorable conditions for the effective implementation of project activities within Ukraine. It is promising to stimulate the involvement of domestic young scientists and students in the development and implementation of projects within the framework of cooperation programs, increase the mobility of Ukrainian researchers.

The expansion of international cooperation highlights the need to preserve the national identity of the Ukrainian people. The success of the implementation of international scientific and educational cooperation will contribute to raise the level of recognition of Ukraine on international arena, accelerating the pace of integration into the international educational and research community, and will provide the development of the intellectual potential of the nation.

The development of international scientific and educational cooperation involves the ratification by Ukraine of international conventions and agreements in the spheres of education and science. And ensuring implementation of the undertaken commitments, including supporting the project form of cooperation of representatives of different countries in the direction of implementation of innovations developed in the course of joint scientific research. Thus, country's support in the development and implementation of scientific and educational international projects is necessary, but it is by no means an exhaustive condition for the activation of innovation activity in the country. Significant is the normal functioning of the country apparatus in the direction of implementing officially approved development priorities [5].

The political factor in the implementation of international scientific and educational projects can also be manifested in lobbying the interests of project participants in the legislative body of the country. It will contribute to obtaining additional assistance from the public administration from the project activity.

In our opinion, the consideration of the political factor for the implementation of scientific and educational international projects needs to emphasize the need to prevent the participants in the project from emerging conflicts of international scale, the opposition between the partners. The reasons for the latter may be differences in the approaches to professional activities and moral principles, due to the difference in mentality of the participants in the project activity.

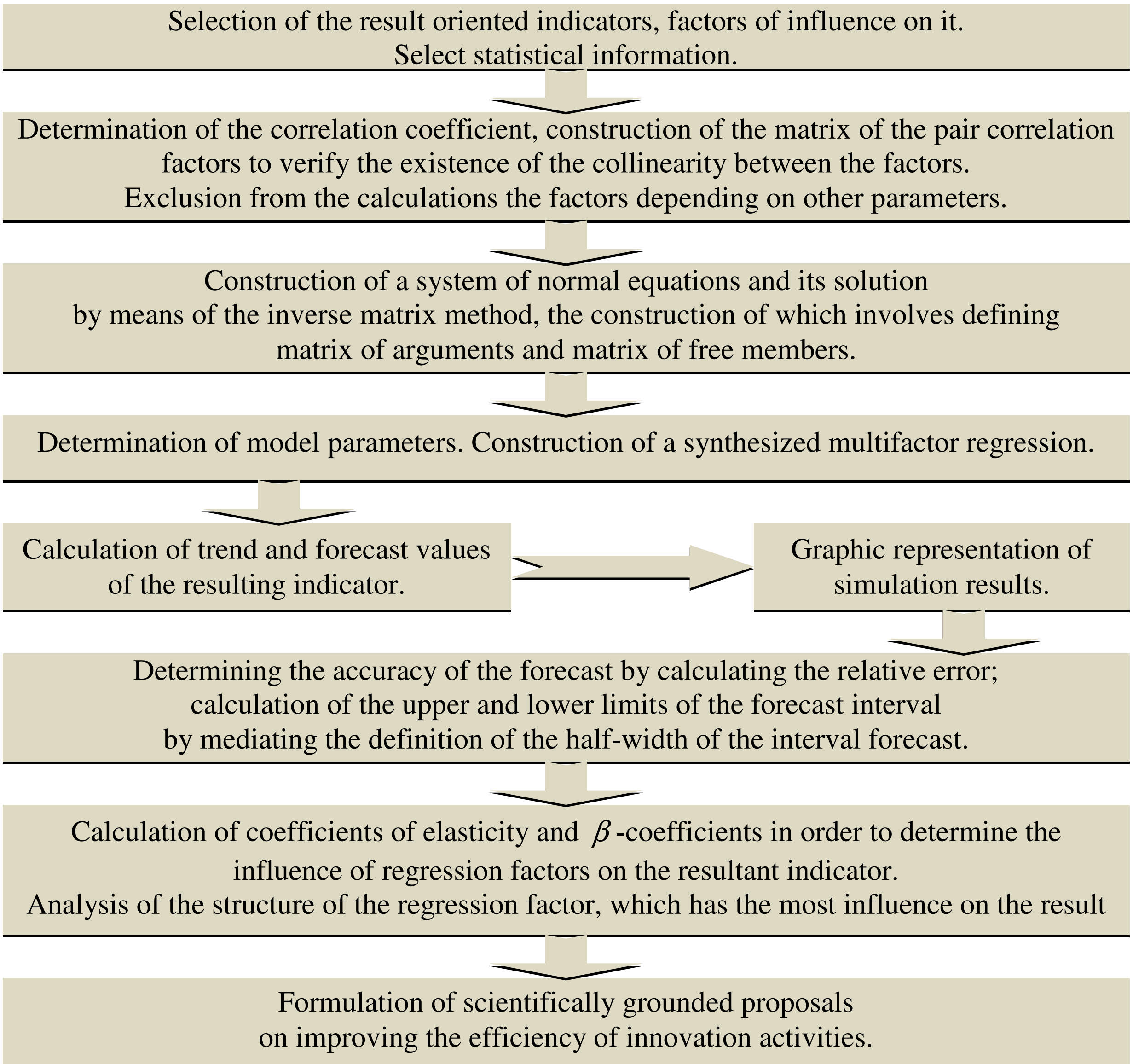
The legal factors for the effective implementation of international scientific and educational international projects are the need to comply with the provisions of the current legislation by all project participants (first of all, by the members of the project team, which are responsible for the development of the project as a whole). Moreover, the implementation of the project activity (coordination of all project activities) is important in the framework of the legislative norms of both the countries directly implementing the project, as well as the other involved participants. Political instability in some countries of the world (in particular, Ukraine) necessitates constant monitoring of legislative changes and making corresponding adjustments to the draft and plans developed for it in order to ensure the legitimacy of their practical implementation.

With the political factors that may affect the implementation of international scientific and educational projects. The socioeconomic factors of effective project implementation are exaggerated. Implementation of projects in different countries usually involves the local specialists who must thoroughly navigate in all the intricacies and nuances of the project activity within the respective country or region. Such a social problem as unemployment (which is characteristic of Ukraine) is quite capable of having a significant impact on the effectiveness of the project activity. It means that prolonged unemployment means a reduction in qualifications and the loss of professional skills and abilities of potential project participants.

Many problems within the project implementation are associated with planning factors: unprofessional, careless, irregularly designed, inaccurate, fuzzy (ambiguous) project plans will lead to a number of problems in the course of their direct implementation in practice.

It is worth noting that one of the key factors in the effective implementation of these projects is increased responsibility and interest of the public authorities in the selection and identification of promising innovative ideas with a view to their further development and practical implementation.

In general, the involvement of country authorities and non-governmental organizations in the project activity should be directed at the implementation of the strategic goals of the national economy, and in the first place – on the intensification of innovation development of Ukraine, which can be expressed quantitatively in the volume of implemented innovative products. Reasonable in this context, we consider the use of methods of economic-mathematical modeling (Fig. 1).



Source: Developed by author based on [1–3, 6].

Fig. 1. **Algorithm for modeling the volume of realized innovative products**

As a result of the regression indicator, the volume of realized innovative products is set. Taking into account the important role of the human factor in the implementation of international scientific and educational projects, which is substantiated in this section, we will consider founded the distinction as the variables of multifactor regression of the number of scientists, the number of organizations that unite them in order to carry out scientific research. It follows from the expediency of taking into account in the course of implementation of economic and mathematical modeling factors such as the volume of mastered production of innovative types of products and the extent of the introduction of new technological processes by the domestic organizations as a result of the activities of organizations for the implementation of scientific research. No less important, in our opinion, is the study of the impact of funding on the resulting indicator (the volume of sales of innovative products) [2].

An economic process that depends on more than one factor can be described using a multi-factor regression. Assuming that, $i = \overline{1,n}$ a linear factor model with n-variables has the following form (1):

$$y_i = b_0 + \sum_{i=1}^{n} b_i x_{it} = b_0 + b_1 x_{1t} + b_2 x_{2t} + ... + b_m x_{mt} + e_t, \qquad (1)$$

where x_{it} – given arguments;

b_i – unknown parameters of the model to be evaluated;

e_t – a random variable, which is a deviation from the theoretical functional dependence in the t-year.

The construction of a multifactor model requires the independence of the selected factors. In other words, the existence of collinearity (multicollinearity) between more than two factors is undesirable and unacceptable. One of the methods for checking the existence of a collinearity, which is chosen for further calculations, is to determine the coefficient of dual correlations (2).

$$r_{x_i x_j} = \frac{\sum_{i=1}^{n} \{(x_i - \overline{x_i})(x_j - \overline{x_j})\}}{\sqrt{\sum_{i=1}^{n} (x_i - \overline{x_i})^2 \sum (x_j - \overline{x_j})^2}}, \qquad (2)$$

where $r_{xi\,xj}$ – pair correlation coefficient between the i-th and j-th factors;

x_i, x_j – given arguments;

$\overline{x_j}$ – the average of the i-th independent variable;

$\overline{x_j}$ – the average value of j's independent variable.

If the obtained value of the coefficient of the pair correlation modulo exceeds 0.8, we can note that there is collinearity between the factors. To determine the collinearity, we construct an auxiliary matrix of pair correlation factors:

$$B = \begin{vmatrix} 1.00 & 0.84 & -0.71 & 0.45 & -0.52 \\ 0.84 & 1.00 & -0.84 & 0.71 & -0.02 \\ -0.71 & -0.84 & 1.00 & -0.73 & 0.37 \\ 0.45 & 0.71 & -0.73 & 1.00 & -0.56 \\ -0.52 & -0.50 & 0.37 & -0.56 & 1.00 \end{vmatrix}$$

Based on the matrix of pair correlation, we can conclude that the factor x2 (the number of scientists) is dependent on the factors x1 (the number of organizations performing research and development) and x3 (total cost).

To substantiate the results obtained at this stage of the implementation of economic-mathematical modeling results can be as follows. Such a factor of regression as the number of organizations performing research and development, is in its content wider than the factor x2 (the number of scientists). The latter is due to the fact that the number of organizations as a factor of regression includes the number of scientists as one of the components. After all, the functioning of any economic entity involves ensuring its activities by a team of workers (in the investigated context – the scientists). It follows that there is interdependence between the number of scientists and the number of organizations that carry out scientific research.

At the same time, attracting scholars to activities in the framework of scientific and educational international projects is always accompanied by certain expenses, aimed at paying their labor, social payments. In this case, the existence of interdependence between such regression factors as the number of scientists and the total amount of expenses is fully justified. Thus, in order to prevent the appearance of multicollinearity, we exclude the factor x2 (number of scientists) for further calculations. The calculations will be based on the factors and their values presented in Table 1.

Table 1

Input data for constructing multi-factor regression

Years	**Number of organizations that carry out research and development**	**Total cost, *mln UAH***	**The production of innovative types of products has been mastered**	**Introduced new technological processes**	**Volume of realized innovative products, *mln UAH***
	X_1	X_3	X_4	X_5	Y
2005	1510	5751.1	3152	1808	4818.6
2006	1452	6160.0	2408	1145	5354.6
2007	1404	10821.0	2526	1419	6700.7
2008	1378	11994.2	2446	1647	8538.9
2009	1340	7949.9	2685	1893	8653.7
2010	1303	8045.5	2408	2043	9867.1
2011	1255	14333.9	3238	2510	10349.9
2012	1208	11480.6	3403	2188	11252.7
2013	1143	9562.6	3138	1576	11781.1
2014	999	7695.9	3661	1743	10950.7
2015	978	13813.7	3152	1217	12611.0

Source: is compiled on the basis of the official website of the Country Statistics Service of Ukraine [9].

Unknown parameters of a model can be determined using the least squares method, that is, to minimize the sum of squares of deviations (3):

$$\min\sum_{i=1}^{n} e_t^2 = \min\sum_{i=1}^{n}(y_i - b_0 - b_1 x_{1t} - b_2 x_{2t} - .... - b_{et})^2, \tag{3}$$

where $b_1, b_2, \ldots, b_n$ – parameters of multi-factor regression;

$x_1, x_2, \ldots, x_n$ – given arguments;

e_t – a random variable that is a deviation from the theoretical functional dependence in t-th year.

To find the value of formula (3), we must equate partial derivatives of this function to zero. As a result, we obtain a system of normal equations, which solves the unknown parameters b, i.e.:

$$\partial\sum_{i=1}^{n} e_i^2 / \partial b_j = -2\sum_{i=1}^{n}(y_i - b_0 - b_1 x_{1t} - b_2 x_{2t} - .... - b_{et} x_{et}) x_{ji} = 0,$$

where j = 0, m.

Proceeding from the foregoing, the system of normal equations for the investigated factors will have the following form:

$$\begin{cases} b_0 n + b_1\sum_{i=1}^{n} x_1 + b_2\sum_{i=1}^{n} x_3 + b_3\sum_{i=1}^{n} x_4 + b_4\sum_{i=1}^{n} x_5 = \sum_{i=1}^{n} y \\ b_0\sum x_1 + b_1\sum_{i=1}^{n} x_1{}^2 + b_2\sum_{i=1}^{n} x_1 x_3 + b_3\sum_{i=1}^{n} x_1 x_4 + b_4\sum_{i=1}^{n} x_1 x_5 = \sum_{i=1}^{n} y x_1 \\ b_0\sum x_3 + b_1\sum_{i=1}^{n} x_1 x_3 + b_2\sum_{i=1}^{n} x_3{}^2 + b_3\sum_{i=1}^{n} x_3 x_4 + b_4\sum_{i=1}^{n} x_3 x_5 = \sum_{i=1}^{n} y x_3 \\ b_0\sum x_4 + b_1\sum_{i=1}^{n} x_1 x_4 + b_2\sum_{i=1}^{n} x_2 x_4 + b_3\sum_{i=1}^{n} x_4{}^2 + b_4\sum_{i=1}^{n} x_4 x_5 = \sum_{i=1}^{n} y x_5 \\ b_0\sum x_5 + b_1\sum_{i=1}^{n} x_1 x_5 + b_2\sum_{i=1}^{n} x_2 x_5 + b_3\sum_{i=1}^{n} x_3 x_5 + b_4\sum_{i=1}^{n} x_5{}^2 = \sum_{i=1}^{n} y x_5 \end{cases}$$

The calculations made allow to determine the following parameters of the multi-factor model:

b_0 = 53,982.18; b_1 = - 23.6; b_2 = 2.82; b_3 = - 0.3; b_4 = - 4.16.

The obtained synthesized multifactorial model has the following form (4):

$$y = 53{,}982.18 - 23.6x_1 + 2.82x_3 - 0.3x_4 - 4.16x_5. \tag{4}$$

By substituting the values of the arguments into the equation, we obtain the trend values of the volume of realized innovation products (Table 2).

Table 2

Trend values of the volume of realized innovative products

Year	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Trend values of the volume of realized innovative products, *mln UAH*	10414.2	10003.7	13146.7	16175.3	19874.7	23086.7	28703	41984.1	44948.6	33422.3	**36465.4**

Source: calculated by the author.

The accuracy of the forecast will be determined using the relative error (5):

$$E = \frac{\Delta}{y_{cp}} \times 100\% , \tag{5}$$

where Δ – half width of confidence interval;
y_{cp} – the average value of the dependent variable.

Using formula (5), we obtain: E = 5.3%, which is quite acceptable and satisfactory, justifying further use in the calculations of the synthesized multifactor model (4).

To verify the adequacy of the multifactor regression, we will use Fisher's F-criterion with $\nu_1 = n-1$ i $\nu_2 = n-m$ degrees of freedom (6):

$$F_{розр}(\nu_1 \nu_2) = \left[\frac{\sum_{i=1}^{n} (y_i - \bar{y})^2}{n-1} \right] : \left[\frac{\sum_{i=1}^{n} (y_i - y_{ti})^2}{n-m} \right], \tag{6}$$

where $F_{розр}(\nu_1 \nu_2)$ – estimated value of Fisher's criterion with $\nu_1 = n-1$ and $\nu_2 = n-m$ degrees of freedom;
y_i – the actual value of the function in i-th year;
y_{ti} – trend function values in j-th year;
$\bar{y}$ – the average value of the dependent variable;
n – number of periods;
m – the number of variables.

From the tables of the F-criterion, we find for the model under study the critical value of the F-criterion of Fisher, which is $F_{crit} = 3.22$. Arguing with formula (6), we find the value of Fisher's F-criterion: $F_{ret} = 27.3$.

So we got it $F_{ret} > F_{crit}$, to be rightly considered adequate and suitable for use in the prediction of a dependent variable.

The next step is to determine the determination coefficient (7):

$$R^2 = \frac{\sum_{i=1}^{n}(y_{ti} - \bar{y})^2}{\sum_{i=1}^{n}(y_i - \bar{y})^2}, \tag{7}$$

where R^2 – determination factor;

y_i – the actual value of the function in i-th year;

y_{ti} – trend function values in j-th year;

$\bar{y}$ – the average value of the dependent variable.

The application of formula (7) allows the following results: R^2 = 0.98 or 98%, which implies that the determination coefficient is directed to 1, and, accordingly, indicates that the regression equation is due to 98% dispersion, to the share of others the factors account for 2%. Taking into account the above calculations and formulated conclusions, it is quite justified and appropriate to consider the forecasting of the effective indicator for 2019–2020, for which we will construct an auxiliary Table 3.

Table 3

Data of the forecast forecast of regression factors

Factor	X_1	X_2	X_3	X_4
Estimated value for 2019	1284.3	8674.04	1116.5	**2107**
Estimated value for 2020	1265.6	9302.58	500	**2171**

Source: calculated by the author.

With the help of the synthesized multifactor regression (4) and the table data, we will determine the forecast volume of the realized innovative products for 2019–2020 (mln UAH):

$$y_{2019} = 53{,}982.18 - 23.6 \times 1{,}284.3 + 2.82 \times 8{,}674.04 - 0.3 \times 1{,}116.5 - 4.16 \times 2{,}107 = 34{,}097.1.$$

$$y_{2020} = 53{,}982.18 - 23.6 \times 1{,}265.6 + 2.82 \times 9{,}302.58 - 0.3 \times 500 - 4.16 \times 2{,}171 = 38{,}833.7.$$

In order to find the deviations and the upper and lower limits of the predicted interval, it is necessary to determine the half-width of the interval forecast using formula (8):

$$\Delta = t_{\alpha}\sqrt{\frac{\sum(y_i - y_{ti})^2}{n(n-1)}}, \tag{8}$$

where Δ – half width of confidence interval;
y_i – the actual value of the function in i-th year;
y_{ti} – trend function values in j-th year;
n – number of periods.

Using formula (8), we define the half-width of the confidence interval: Δ_{2019} = 560.36.

Calculate the upper and lower bounds of the forecast interval for the forecast period:

– upper limit:

y_{2019} = 36,465.4 + 1,325.25 = 37,790.7 (mln UAH);
y_{2020} = 38,833.7 + 1,325.25 = 38,833 (mln UAH);

– lower limit:

y_{2019} = 36,465.4 – 1,325.25 = 35,140.1 (mln UAH);
y_{2020} = 38,833.7 – 1,325.25 = 37,508.4 (mln UAH).

It is reasonable, in our opinion, to determine the degree of influence of each of the selected factors on the performance indicator, that is, the calculation of the elasticity coefficients and β-coefficients by formulas (9) and (10) respectively:

$$Є_k = b_k \frac{\overline{x_k}}{\overline{y}}, \qquad \beta_k = b_k \frac{\sigma_{xk}}{\sigma_y}, \tag{9}$$

where $Є_k$ – coefficient of elasticity of k variable;
$\overline{y}$ – the average value of the dependent variable;
b_k – model parameter for k-th variable;
$\overline{x_k}$ – the average of the k-th independent variable;
β_k – beta coefficient of k-th variable elasticity;
σ_{xk} – mean square deviation of k-th variable;
σ_y – mean square deviation of the dependent variable.

$$\sigma_{xk} = \sqrt{\frac{\sum_{i=1}^{n}(x_{k_1} - \overline{x_k})^2}{n}}, \qquad \sigma_y = \sqrt{\frac{\sum_{i=1}^{n}(y_i - \overline{y})^2}{n}}, \tag{10}$$

where x_k – independent variable;
$\overline{x_k}$ – the average of the kth independent variable;

n – number of periods;
y_i – actual value of the function in i-th year;
$\overline{y}$ – the average value of the dependent variable.

Using of formulas (9) and (10) we will receive the following results:

$$Є_1 = -25.6 \times \frac{67.93}{11{,}830.94} = -0.15, \quad Є_2 = 2.82 \times \frac{8{,}959.79}{11{,}830.94} = 0.79,$$
$$Є_3 = -0.3 \times \frac{3{,}320.55}{11{,}830.94} = -0.18, \quad Є_4 = -4.16 \times \frac{7{,}364.28}{11{,}830.94} = -0.1.$$

At the moment, we can calculate the impact of each factor on the outcome, that is, to determine β-coefficients, and parameters of the matrix of free members. In the end, we get the following values β-coefficients:

$$\beta_1 = -25.6 \times \frac{1{,}438.6}{25{,}077.8} = -1.47, \quad \beta_2 = 2.82 \times \frac{5{,}918.6}{25{,}077.8} = 0.67,$$
$$\beta_3 = -0.3 \times \frac{7{,}364.28}{25{,}077.8} = -0.09, \quad \beta_4 = -4.16 \times \frac{1{,}557.3}{25{,}077.8} = 0.26.$$

From the above calculations we can conclude that the greatest impact on the resultant indicator (the volume of realized innovation products) has a second factor – the sum of the cost of research and development.

The obtained results of the economic-mathematical modeling are completely scientifically proved, since any activity, and especially – innovative (including, within the framework of scientific and educational international projects, the implementation of which is accompanied by the development and implementation of innovations), investment is an essence. Later explains the definition of the key factor of influence (among selected variables) on the indicator results (the volume of realized innovative products) the value of the parameter x_2, that is, the indicator of the amount of costs for innovation activity.

Conclusions. An important consideration of the analysis is dynamic and structured research on funding in Ukraine. It is evident from the data that the share of its own funds in financing research and development during the analyzed period decreased from 79.64% to 59.35%. The volume of country's finance in innovation activity is insignificant due to the deficit of the Ukraine's budget. Under these conditions and taking into account the tendencies of the active expanse of globalization processes, the diversification of financial sources for innovation is urgent and necessary. The attraction of the foreign investments to develop and implement international scientific and educational projects, the implementation of which facilitates the increase of the innovative development of the national economy. On practice, it can be manifested into the growth of realized innovative products.

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