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The second issue contains articles by scientists from different countries, prepared on the basis of their scientific work. It is designed for university teachers, graduate students, undergraduates, practitioners in economics, finance, accounting and auditing, as well as other branches of economics.

CONTENTS

CHAPTER 1
CURRENT TRENDS IN ECONOMIC DEVELOPMENT

MODELING THE IMPACT OF ECONOMIC INDICATORS ON FOOD SECURITY

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Abstract. *The article considers the methods of economic modeling to ensure the security and sustainability of the food supply system. It is justified that this allows to ensure the complementarity of the activities of different entities and to create an appropriate basis for the development of the industry as a whole. It is proved that the quality of the formation of such a base largely depends on the quality of the selected indicators and their compliance with the factors of success in ensuring food security. An integrated approach to the study of food security is applied, its properties, principles and elements as a complex multi-level system structure are disclosed. It is proved that a systematic approach, as a direction of scientific methodology, should be used to study food security problems, since they are complex and non-standard. It is established that theoretical and methodological approaches to the study of food security should be based on two general scientific approaches such as systemic and integrated. The main parametric criteria level of food security of the country as whole and individual regions is defined. The assessment of agricultural production using the tools of economic-mathematical descriptive modeling is evaluated. At the methodological level, nine components of food security have been identified as a complex system that affect food security. Using the Statgraphics XVII Centurion statistical data analysis software package, a multi-factor model is constructed, the presence and type of relationship between independent variables is verified and established. It is established that due to forecasting agricultural production, linear models are often used. A predictive multi-factorial regression model of the relationship of food security components is built. An ANOVA analysis has been carried out, a hypothesis has been proved on the correlation between changes in agricultural production and household incomes, consumption of bread and bread products, meat and meat products and budget expenditures of the Ministry of Agrarian Policy and Food. The article outlines the benefits of using the methods of economic modeling.*

Keywords*: economic modeling, food production, food security, forecasting production, national economy.*

JEL Classification: C52, E19, F52, Q19

Formulas: 3; fig.: 1; tabl.:4; bibl.: 19

Introduction. The development of long-term forecasts for the development of agro-industrial production should become a permanent and extremely important area of activity of the Government of Ukraine. Overcoming the consequences of long-term decline in food production and consumption of basic foodstuffs, achieving expanded reproduction and functioning of agricultural producers in a market economy requires the formulation and implementation of large-scale and multifaceted tasks of socio-economic development. The process of harmonizing the parameters of agricultural policy, planning and forecasting economic growth is becoming

increasingly complex. Therefore, an effective tool for achieving long-term priorities and goals of state development should be modeling the main activities.

The importance of analysis and forecasting of resource, technological and financial constraints and barriers in the conditions of uncertainty of long-term prospects increases. All this determines the relevance of the study of this issue and the need to improve and develop methods and model tools in the development of long-term forecasts, possible alternatives and scenarios in agriculture.

Recently, the construction of such systems is based on a cognitive approach that combines formalized scientific knowledge with the experience of experts and the creative potential of decision makers. Given the complexity of studying the problem of food security of the national economy, it is advisable to proceed to a qualitative analysis of the interrelated factors that affect the development of production and overall welfare.

Literature review. For a long time in different countries of the world experience of development of models of the analysis of an economic situation and scenario forecasting of economic dynamics was accumulated. Such tool systems typically include pre-processing and short-, medium- and long-term forecasting models.

The peculiarity of econometric models is that the evaluation of their parameters is carried out using statistical methods, which allows the use of standard hypothesis testing procedures to verify the correctness of the model specification in accordance with the normality of the distribution. In addition, for qualitative modeling it is necessary to have information about the data of all values of input variables for a long period of time [1, p. 110].

In order for the solution of the problem of determining the parameters of the model to exist and be unique, a number of constraints must be met that combine the number of equations and their form with the number of endogenous variables in the model [2].

Therefore, there are many works in which new methods are proposed or existing ones are improved [3]. Thus, most modern long-term macroeconomic econometric models have three key blocks of equations: equilibrium conditions, description of expectations, and description of the transition of the model to a new equilibrium when changing parameters [4-7].

The methodology of cognitive modeling, designed for analysis and decision making in difficult to predict situations, was proposed by Axelrod R. [8]. Later this question was developed in the works of Roberts FS. [9], and Simplicial Analysis and the Chains of Connection method of the cognitive map have been examined in detail by such well-known researchers as Atkin R. and Casti JL. [10].

Analysis of domestic developments in cognitive modeling shows that the vast majority of scientific papers are related to the development of theoretical research based on foreign methods of evaluating complex systems using dialogic management decision-making systems [11-16].

A prominent contribution to the development of these methods was made by the prominent Ukrainian mathematician Mykhailo Ostrogradsky, who in the middle of

the XIX century formulated the basic ideas of statistical control over the quality of production [17, p. 5].

Therefore, the use of modeling in research on food security and the choice of the optimal development scenario is an extremely important task that requires the use of appropriate theoretical and methodological approaches and methods for solving problems of complex systems under uncertainty.

Aims. Investigate the methods of economic modeling of complex economic systems to ensure food security of the national economy.

Methods. The main research methods were scientific abstraction, logical generalization, graphic, economic and cognitive modeling for identification the impact of economic indicators on food security, visual reflection the system of food production for future periods and for the development of a food production model.

Results. Among the models directly related to agricultural production, the key is the model of forecasting production and its efficiency. In modern conditions, ensuring high efficiency of economic research requires not only original highly effective solutions, but also the development of various models of economic relations in almost all areas of production, processing and sale of agricultural products, including related areas [18].

Basic data analysis procedures are most often implemented using modern computer technology. At the same time, researchers either build calculation algorithms themselves and write appropriate computer programs, or use existing software.

Successful solution of food security problems as a complex socio-economic system also involves multidimensional statistical analysis using special mathematical packages. To conduct such research, we use the statistical analysis program Statgraphics XVII Centurion. The statistical package provides many opportunities for in-depth, visual analysis of data from socio-economic systems, which are described by various features measured on metric and non-metric scales.

The task of the study of food security as a complex system using multidimensional statistical analysis is to verify the presence and type of relationship between independent variables chi (predictors, factors), the values of which may vary and have a predetermined error, and the dependent variable (response) z.

Our analysis of components and their importance in ensuring food security as a complex system (19) allowed us to identify those indicators that have the greatest impact on its level. These include:

ProdAgro – production of agricultural products, per person per year, kg;

IP – disposable income per capita per year, UAH;

CBread – consumption of bread products, per person per year, kg;

CMilk – consumption of milk and dairy products, per person per year, kg;

CMeat – consumption of meat and meat products, per person per year, kg;

TaxF – tax freedom, %;

InvF – investment freedom, %;

BusF – business freedom, %;

Budget – budget expenditures under KPKV 2800000 of the Ministry of Agrarian Policy and Food of Ukraine, in % of all expenditures.

Thus, it is possible to formulate a hypothetical model consisting of factors (predictors), which, according to our assumptions, significantly affect the studied characteristics of the food security system.

Let us test our assumption using the Multiple Variable Analysis capabilities for the selected eight predictors (IP, CBread, CMilk, CMeat, TaxF, InvF, BusF, Budget) and the main variable ProdAgro (Table 1).

Table 1. Matrix of correlation coefficients for all variables

	ProdAgro	IP	CBread	CMilk	CMeat	TaxF	InvF	BusF	Budget
ProdAgro		0,9396	-0,8389	-0,3830	0,6873	0,3414	-0,4492	0,5180	-0,7738
		(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)
		0,0000	**0,0000**	0,1056	**0,0011**	0,1525	0,0537	**0,0231**	**0,0001**
IP	0,9396		-0,9195	-0,5190	0,7496	0,4135	-0,4976	0,4060	-0,7787
	(19)		(19)	(19)	(19)	(19)	(19)	(19)	(19)
	0,0000		**0,0000**	**0,0228**	**0,0002**	0,0785	**0,0302**	0,0845	**0,0001**
CBread	-0,8389	-0,9195		0,4519	-0,8996	-0,5675	0,7185	-0,1402	0,7556
	(19)	(19)		(19)	(19)	(19)	(19)	(19)	(19)
	0,0000	**0,0000**		0,0521	**0,0000**	**0,0113**	**0,0005**	0,5669	**0,0002**
CMilk	-0,3830	-0,5190	0,4519		-0,2431	0,2281	-0,0668	-0,2497	0,3732
	(19)	(19)	(19)		(19)	(19)	(19)	(19)	(19)
	0,1056	**0,0228**	0,0521		0,3160	0,3476	0,7859	0,3026	0,1155
CMeat	0,6873	0,7496	-0,8996	-0,2431		0,6490	-0,8148	-0,1632	-0,6531
	(19)	(19)	(19)	(19)		(19)	(19)	(19)	(19)
	0,0011	**0,0002**	**0,0000**	0,3160		**0,0026**	**0,0000**	0,5043	**0,0024**
TaxF	0,3414	0,4135	-0,5675	0,2281	0,6490		-0,6227	-0,2938	-0,2318
	(19)	(19)	(19)	(19)	(19)		(19)	(19)	(19)
	0,1525	0,0785	**0,0113**	0,3476	**0,0026**		**0,0044**	0,2221	0,3395
InvF	-0,4492	-0,4976	0,7185	-0,0668	-0,8148	-0,6227		0,1579	0,5461
	(19)	(19)	(19)	(19)	(19)	(19)		(19)	(19)
	0,0537	**0,0302**	**0,0005**	0,7859	**0,0000**	**0,0044**		0,5186	**0,0156**
BusF	0,5180	0,4060	-0,1402	-0,2497	-0,1632	-0,2938	0,1579		-0,3129
	(19)	(19)	(19)	(19)	(19)	(19)	(19)		(19)
	0,0231	0,0845	0,5669	0,3026	0,5043	0,2221	0,5186		0,1921
Budget	-0,7738	-0,7787	0,7556	0,3732	-0,6531	-0,2318	0,5461	-0,3129	
	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	
	0,0001	**0,0001**	**0,0002**	0,1155	**0,0024**	0,3395	**0,0156**	0,1921	

Source: author's development

In the table 1 calculated Pearson instantaneous correlation coefficients between each pair of variables. These coefficients range from -1 to +1 and measure the strength of the linear relationship between variables. The number of pairs of data values used to calculate each coefficient is indicated in parentheses. Then comes the value of P-value (third number), which checks the statistical significance of the calculated correlations. If the P-value is lower than 0.05, it indicates statistically significant non-zero correlations with a probability of 95.0%.

In our investigation, the values of P-value below 0.05 have the following pairs of variables:

ProdAgro and CMilk – 0.1056; correlation coefficient – -0.3830;

ProdAgro and TaxF – 0.1525; correlation coefficient – +0.3414;

ProdAgro and InvF – 0, 0537; the correlation coefficient is -0.4492.

In addition, there is a weak relationship between other pairs of variables:

IP and BusF – P-value <0.05 and is 0.0845;

CBread and BusF – P-value <0.05 and is 0.5669;

CMilk and BusF – P-value <0.05 and is 0.3026;

CMeat and BusF – P-value <0.05 and is 0.5043;

TaxF and BusF – P-value <0.05 and is 0.2221;

InvF and BusF – P-value <0.05 and is 0.5186;

Budget and BusF – P-value <0.05 and is 0.1921.

Given the P-value and the low correlation coefficient, which indicates a weak relationship between pairs of variables (less than 50%) with a probability of 95%, these variables can be further discarded for a reliable statistical analysis.

Construct a matrix of estimation correlation coefficients with four variables that remained after the preliminary analysis to check the statistical significance of the calculated correlations, and the main variable ProdAgro (Table 2).

Table 2. Correlation matrix for selected variables

	ProdAgro	IP	CBread	CMeat	Budget
ProdAgro		0,9396	-0,8389	0,6873	-0,7738
		(19)	(19)	(19)	(19)
		0,0000	**0,0000**	**0,0011**	**0,0001**
IP	0,9396		-0,9195	0,7496	-0,7787
	(19)		(19)	(19)	(19)
	0,0000		**0,0000**	**0,0002**	**0,0001**
CBread	-0,8389	-0,9195		-0,8996	0,7556
	(19)	(19)		(19)	(19)
	0,0000	**0,0000**		**0,0000**	**0,0002**
CMeat	0,6873	0,7496	-0,8996		-0,6531
	(19)	(19)	(19)		(19)
	0,0011	**0,0002**	**0,0000**		**0,0024**
Budget	-0,7738	-0,7787	0,7556	-0,6531	
	(19)	(19)	(19)	(19)	
	0,0001	**0,0001**	**0,0002**	**0,0024**	

Source: author's development

The calculated new instantaneous correlation coefficients of Pearson between each pair of variables indicate a fairly close relationship between agricultural production per capita per year (ProdAgro) and household income per capita per year (IP) – density + 93.96% , as well as with the consumption of bread and bread products per person per year (CBread) – density -83.89.

The average density of communication found by us between the pairs of agricultural production per capita per year (ProdAgro) and budget expenditures for KPKV 2800000 of the Ministry of Agrarian Policy and Food of Ukraine – -77.38%, as well as the consumption of meat and meat products per person per year (CMeat) – density 68.73%.

The "+" sign of the correlation coefficient indicates a direct relationship between the pairs, and the sign "-" – the inverse.

The value of P-value for all pairs of variables is lower than 0.05, which indicates the statistical significance of the calculated correlations with a probability of 95.0%.

To check the normality of statistical data, we analyze two most important indicators: standardized asymmetry and standardized excess, which can be used to determine whether the studied variables meet the conditions of normal distribution. If the values of the statistical data are outside the range from -2 to +2, it indicates a significant deviation from the norm, that is the distribution is not normal. In this case, many performed statistical operations on such data are not reliable (Table 3).

Table 3. Summary Statistics

	ProdAgro	*IP*	*CBread*	*CMeat*	*Budget*
Count	19	19	19	19	19
Average	3492,28	19148,6	114,437	45,8526	2,97368
Median	2219,6	14373,0	111,7	50,6	2,9
Standard deviation	2149,4	16020,3	10,0103	8,48386	1,7779
Coeff. of variation	61,5471%	83,6629%	8,74743%	18,5025%	59,7879%
Minimum	1584,0	1760,6	99,5	31,1	0,3
Maximum	8659,7	58442,0	131,2	56,1	6,6
Range	7075,7	56681,4	31,7	25,0	6,3
Lower quartile	1909,0	5704,1	108,4	38,5	1,4
Upper quartile	5595,0	26782,0	124,5	52,0	4,5
Interquartile range	3686,0	21077,9	16,1	13,5	3,1
Stnd. skewness	1,74928	1,8275	0,247099	-1,14769	0,460764
Stnd. kurtosis	-0,161368	0,494483	-1,02321	-1,07164	-0,71542

Source: author's development

As can be seen from the table. 3, standardized asymmetry (Stnd. Skewness) and standardized excess (Stnd. Kurtosis) outside the range -2 to +2 do not go beyond all analyzed variables. This indicates their compliance with the normal distribution and the reliability of the following statistical actions.

Based on the results of the analysis of statistical significance and compliance of the selected variables with the normal distribution, we can assume that the general model of growth of agricultural production per capita (ProdAgro) from our selected four independent variables can be represented as a system of equations:

$$ProdAgro = f(IP, CBread, CMeat, Budget) \quad (1);$$

$$ProdAgro = \varepsilon + C_1 \times IP + C_2 \times CBread + C_3 \times CMeat + C_4 \times Budget \quad (2);$$

where ε – magnitude of random deviations; C (1,2,… n) – regression coefficients of independent variables.

To test our assumption about the possible type of dependence of Y on X1,2… n, we construct a multifactor regression model of the growth of agricultural production per capita per year (ProdAgro). This model makes it possible to predict one variable taking into account the values of several other variables (Table 4).

Table 4. Multiple Regression – ProdAgro

Dependent variable: ProdAgro				
Method: Ordinary Least Squares				
Number of observations: 19				
		Standard	*T*	
Parameter	*Estimate*	*Error*	*Statistic*	*P-Value*
CONSTANT	-8056,65	11921,8	-0,675789	0,5102
IP	0,143847	0,0350285	4,10657	**0,0011**
CBread	70,6093	80,5691	0,876382	0,3956
CMeat	25,1778	56,5214	0,445455	0,6628
Budget	-148,068	169,727	-0,87239	0,3977

Analysis of Variance					
Source	*Sum of Squares*	*Df*	*Mean Square*	*F-Ratio*	*P-Value*
Model	7,4395E7	4	1,85988E7	29,71	**0,0000**
Residual	8,76317E6	14	625941,		
Total (Corr.)	8,31582E7	18			

R-squared = **89,462** percent	Mean absolute error = **518,076**
R-squared (adjusted for d.f.) = **86,4512** percent	Durbin-Watson statistic = 0,993526 (P=**0,0007**)
Standard Error of Est. = **791,164**	Lag 1 residual autocorrelation = 0,472683

Source: author's development

The parameters of the model were estimated using the least squares method, because according to our preliminary calculations, the variable Y (ProdAgro) corresponds to the normal distribution.

The initial data of table. 4 show the results of the selection of a multifactor linear regression model to describe the relationship of ProdAgro with four independent variables. The equation of the model is as follows:

$$ProdAgro = -8056,65 + 0,143847 \times IP + 70,6093 \times CBread + 25,1778 \times CMeat - 148,068 \times Budget \quad (3);$$

The value of P-value in the ANOVA table is less than 0.05 and equal to 0.0000, so we can conclude that there is a statistically significant relationship between the studied variables with a probability of 95.0%.

The R-Squared indicator shows that in this form our model explains the change in agricultural production per capita per year (ProdAgro) by 89.46%, which is a high value.

The adjusted R-Squared, which is more suitable for comparing models with different numbers of independent variables, is 86.45%, which is also quite a high value for our model. The standard estimate error shows a standard deviation of the residuals of 791,164.

The average value of the balances shows the average absolute error (MAE), which is equal to 518,076.

Durbin-Watson statistics (P-value = 0.0007 <0.05) from the verification of residues show that with a probability of 95.0% there is a significant correlation based on the sequence in which they occur in the model.

Discussion. Based on the data of the multifactor regression model (Table 4), construct a forecast schedule of agricultural production per person per year (ProdAgro) (Fig. 1).

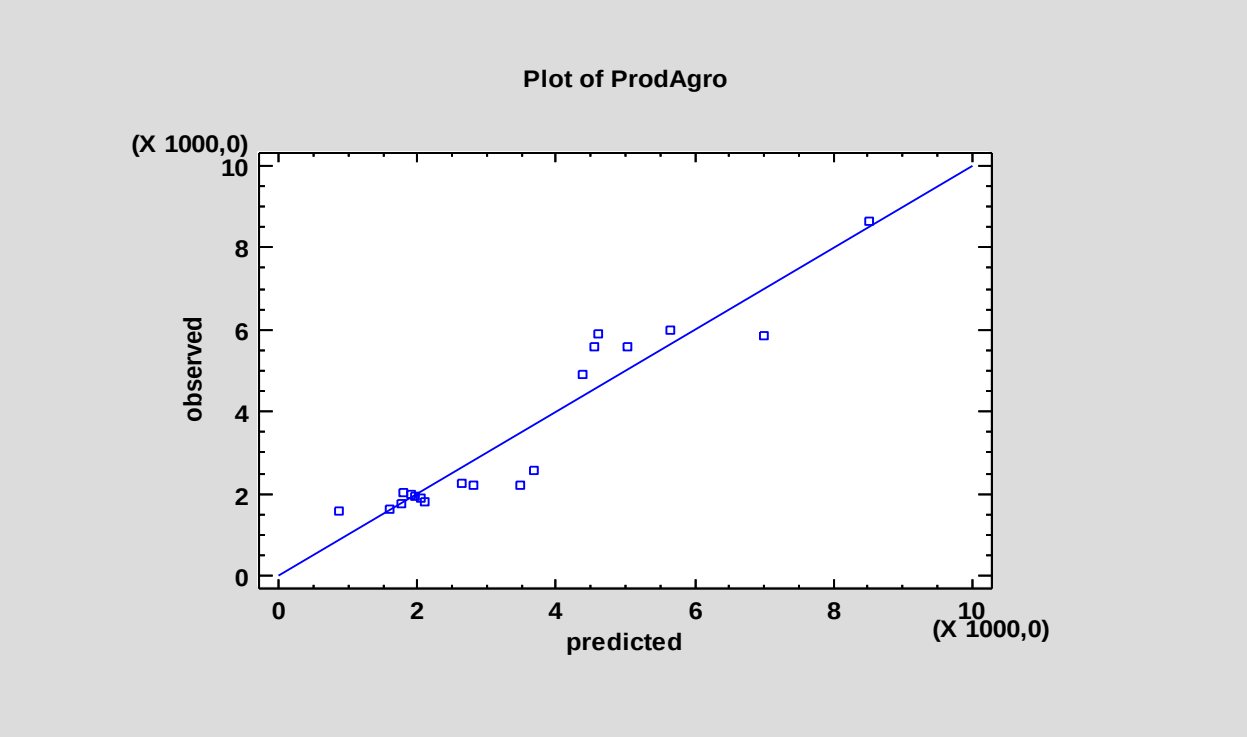

Figure 1. Forecast of agricultural production

Source: author's development

According to this graph, we can conclude about the relatively high quality of the ProdAgro model. This is evidenced by the predicted values of ProdAgro in comparison with the values predicted by our chosen model – the closer the values (marks) are near the diagonal line, the better the model for predicting the studied variables.

Conclusion. Thus, the results of investigation can lead to a number of important conclusions.

1. In determining whether the model can be simplified to the form of a linear equation of dependence between only two variables ProdAgro and IP, it should be guided by the fact that the largest value of P-value for the studied independent variables 0.0000 belongs to IP. Since the value of P-value <0.05, the statistical significance of the variable is achieved at a confidence level of 95.0%. As a result, it is not advisable to discard other variables from the studied model, because the deviation from the values of the coefficients of the best model is quite small.

2. According to the results calculated in table 1 Pearson's instantaneous correlation coefficients from the selected eight predictor factors (IP, CBread, CMilk, CMeat, TaxF, InvF, BusF, Budget) four variables were discarded due to the low level of correlation coefficients (less than 50%). Among the four variables that were left (IP, CBread, CMeat, Budget), the correlation coefficients ranged from 68.73% to 93.96% when all variables corresponded to the normal distribution of standardized asymmetry and standardized excess.

3. The lack of heteroscedasticity of the selected model according to Durbin-Watson statistics indicates that the analyzed residues are random variables and the application of the proposed model is appropriate.

4. Testing the model for adequacy according to the ANOVA method (Table 4) showed that the selected model according to R-Squared, Adjusted R-Squared, MAE, Fisher's statistics (F-Ratio), the value of P-value is adequate and different combinations of variables of the proposed model with four independent variables are quite suitable for forecasting ProdAgro.

Thus, our model is statistically significant and has high rates of multifactor statistical analysis. The forecast model of growth of agricultural production ProdAgro with four independent variables is confirmed (formula 3).

The model built by us in the form of such an equation explains 89.46% of the change in agricultural production per capita per year.

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DEVELOPMENT OF INTEGRATION PROCESSES OF THE DAIRY SUBCOMPLEX OF UKRAINE IN THE CONTEXT OF GLOBALIZATION OF THE WORLD ECONOMY

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Abstract. *The article analyzes the current state of the world market of milk and dairy products. It was found that trade in dairy products is developing faster than its production. The rating of producing countries and Ukraine's place in the foreign market are determined. In the process of analysis of world consumption, the potential of dairy products in the domestic market was determined.*

The most noticeable modern structural trend in the production of livestock products, including dairy, is the growing importance of intensive vertically integrated formations located near large cities. Thus, from horizontal integration (cooperation and consolidation of production, sales and other opportunities), large companies are increasingly moving to vertical integration, which involves the diversification of their activities in relation to basic production. In addition, the world leaders in the dairy industry are increasingly seeking to merge.

It is revealed that the food supply system at the global level is undergoing large-scale changes. In this regard, the process of integration of the Ukrainian dairy subcomplex into the world system is possible both through the creation of Ukrainian transnational corporations (TNCs) and through the entry into the Ukrainian economy of foreign TNCs. It is studied that on a number of grounds, Ukraine belongs to those countries in which some conditions for civilized business have already been created, but a stable national socio-economic system of modern technological structure has not yet been formed. Such countries are of particular interest for foreign direct investment, as they have the necessary infrastructure, skilled workers and other established factors necessary for the functioning of TNCs. The combination of created and natural factors brings double benefits to TNCs.

Research has shown that TNCs in the context of globalization are the driving force of many key processes in the world and national economies. Acting as a basic player in the process of international competition, they compete with each other, as well as small and medium-sized businesses, transform the institutional environment, structure and boundaries of the national consumer market, form new consumer standards.

Foreign multinational corporations are ready to operate in Ukraine, but are hampered by factors such as unstable and excessive regulation, lack of a sustainable strategy and appropriate national action plan in Ukraine, imperfect national legislation, unclear legal system, instability of economic and political situation, high level of corruption in all spheres of economic activity and inability of the judiciary to perform its functions properly, critical situation in the sphere of independence of the judiciary, low effective demand of Ukrainian consumers, difficulties in communicating with government and privatization bodies, regulatory overload and complexity of the tax system tax burden. Crisis processes are increasingly deteriorating Ukraine's position in the world economy in the medium term.

Keywords: *dairy products, integration, market, transnational corporations, production, consumption, world economy, perspective, development, globalization.*

JEL Classification: E02, F50, O10

Formulas: 0; fig.: 6; tabl.:1; bibl.: 4

Introduction. In the conditions of intensive development of processes of globalization of economy the main task of agrarian and industrial complex is the decision of one of global problems of the present - a food problem, that is satisfaction of growing needs of the population in foodstuff. In fact, the threat to the food security of the country arises when the integrated aspect of the agro-industrial complex begins to be ignored, namely when the interests of all major areas of agriculture are not taken into account in the processes related to food production and circulation. Abuse in recent years by buyers and suppliers of machinery and materials of their monopoly position in the food market in relation to agricultural producers, their discriminatory prices and conditions of purchase and sale of goods have led to a sharp decline in agricultural production, deteriorating financial condition of agricultural producers.

This, in turn, has had a negative impact on suppliers who have lost significant markets and buyers, in particular on processing plants, which, without receiving sufficient raw materials, are forced to work underutilized and lose potential markets.

Literature review. Foreign and domestic economists have made a significant contribution to the development of the theory and practice of integration processes of economic entities: M. Adelman, G. Bakker, P. Gohan, G. Dinz, S. Seisel, L. Roy, F. Krueger, D. Helmink, M. Hendon, V. Andriychuk, P. Borshchevsky, L. Deineko, A. Zainchkovsky, P. Sabluk, Y. Lupenko, M. Pugachev, O. Kovalenko, M. Sychevsky, O. Shpychak.

Aims. The aim of the article is to study the prospects for the development of integration processes of the dairy subcomplex of Ukraine in the context of globalization processes.

Methods. The following research methods were used to solve the tasks: systematic and logical approach, which allowed to generalize scientific concepts, developments and proposals of leading domestic and foreign scientists on the problem of agro-industrial integration and integration processes in the milk product subcomplex; graphical analysis - for visual display of empirical data; systematic and comprehensive analysis in the generalization and evaluation of factual materials; abstract-logical analysis to identify promising areas of integration processes in the context of food and energy security of the state; calculation-constructive and economic-mathematical methods - to substantiate the strategic directions of development of the dairy industry.

Results. Globalization processes are a comprehensive and extremely powerful phenomenon, so the question of the place of the nation-state in the modern global environment is extremely important [1].

The results of the analysis of significant scientific achievements of domestic experts prove that globalization and integration are closely interrelated, as both processes are forms of internationalization of economic, political and cultural life of society. Globalization is considered by researchers as a stage of internationalization widely, and integration as a result of its development - deep [2].

Dairy products are also the most supported export goods, which in different periods accounted for from one third to more than half of total world export subsidies. At the same time, it should be noted that the current situation on the world

dairy market is recognized as so favorable that for the first time in 40 years of the EU's common agricultural policy, the European Commission suspended export subsidies on these products from July 1, 2007. The growing demand for milk powder in recent years, especially in Asia and North Africa, has led to its rise in price on the world market and provoked a rapid increase in relevant exports from the European Union. This, in turn, led to a shortage of dairy products (and rising prices for them) in European countries, which could not fully prevent them and the abolition of export subsidies.

World milk production has grown steadily over the past decades, adding an average of 2% annually. Already in 2015, it reached 800 million tons, according to the OECD-FAO Agricultural Outlook 2016-2025 [3]. The largest producers are the EU, India and the United States, which all three produce half of the world's milk. China produces only 5% and shares 4th and 5th place with Pakistan.

Prior to 2018, Ukraine was in the top ten largest producer countries with a volume of 10.6 million tons and had a share of 1.3% in world production.

According to statistics, Ukraine, producing 10 million tons of milk in 2018, ranked 18th in the ranking of producer countries, in the 90-s, Ukraine ranked 6th (Fig. 1 and Fig. 2.). As of 2020, Ukraine ranks 22-nd in the ranking.

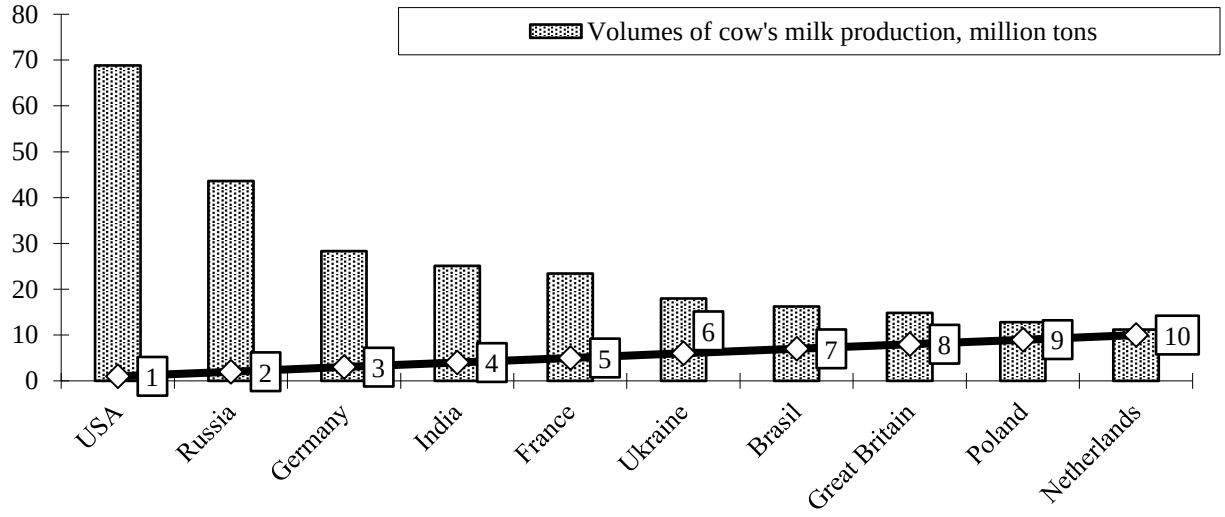

Figure 1. Ranking of cow's milk producers in the period 1991-1995

Source: OECD-FAO Agricultural Outlook 2016-2025

The production of skimmed milk powder in the world in 2019 was 5.4 million tons. Interestingly, the production of this product has recently grown at the fastest rate among other dairy products - an average of 5% per year during 2015-2019. Top 5 producers - the EU (34%), USA (23%), New Zealand (12 %), Australia (5%) and India (5%). The highest growth was observed in the EU and India (on average 9% per year during 2010-2015). Ukraine, according to OECD-FAO Agricultural Outlook 2016-2025, ranks 8th among the largest producers of SPM and has a share of 2.5% in world production, but domestic statistics, unfortunately, do not confirm this. According to the statistics of the State Statistics Committee, it is impossible to

separate skim milk from whole milk powder, and their total volume in 2019 was 64 thousand tons.

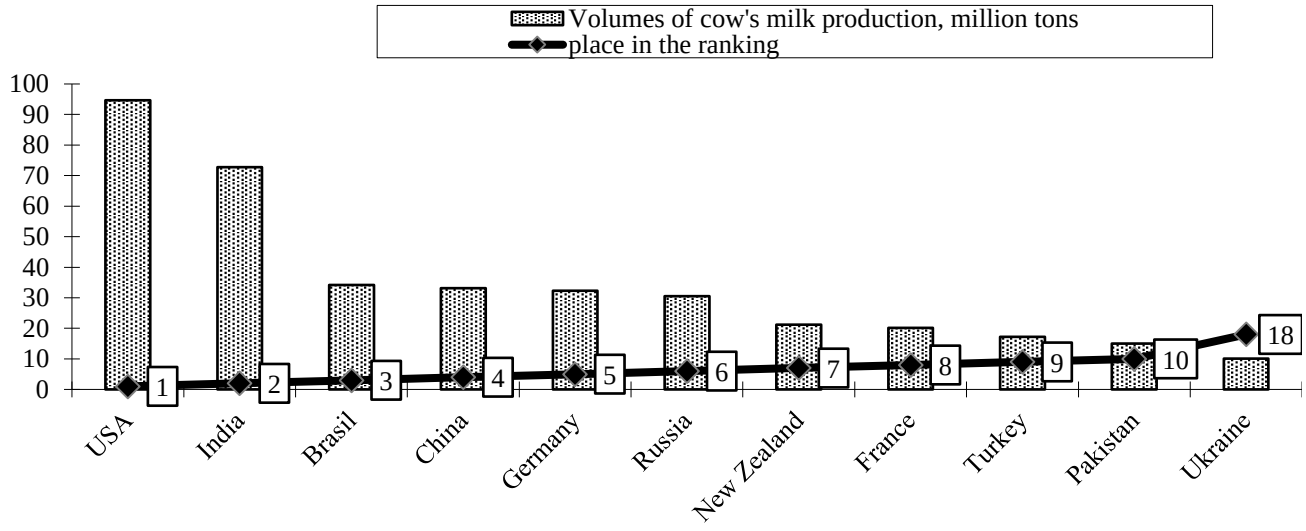

Figure 2. Ranking of countries producing cow's milk in the period 2013-2018
Source: OECD-FAO Agricultural Outlook 2016-2025

World production of whole milk powder amounted to 6.2 million tons in 2019. Leaders - New Zealand (34%), the EU (19%), Brazil (14%), Mexico and Argentina (7% each). Ukraine, according to OECD-FAO Agricultural Outlook 2016-2025, ranks 17th in the world with a share of 0.3%.

The largest cheese exporters in the world - the EU, the US and New Zealand - together accounted for 56% of all sales in 2019. Ukraine entered the top 10.

New Zealand is the sole leader in butter exports, accounting for more than half of global sales of this product. Ukraine's share was 1%, and ranks sixth in terms of supplies in the world. The EU, the US and New Zealand account for 75% of skimmed milk powder exports. For this product, demand on the world market has grown at the fastest pace in recent years, adding an average of 7% per year. Ukraine also significantly increased supplies, rising to sixth place in the top exporters (table 1).

According to the global forecast, today's largest international milk-exporting regions are expected to be able to increase supplies by only 36 million tons by 2040, with a demand of 45 million tons. That is, the projected deficit of milk will be 9 million tons. It is these global needs of the world dairy market that can provide Ukraine with a much higher level of export capacity, and give Ukrainian producers the opportunity to increase exports.

According to IFCN analysts [4], about 70% of the 1,282 million tons of milk produced in the world will go to processing, which will increase by 388 million tons. On average, its annual growth will be 2.6%. At the same time, by 2024, 83% of milk will be consumed at the place of its production, although supplies to foreign markets will increase by 17%. At the same time, world consumption of dairy products by 2040 will increase by 20% and will be about 140 kg per capita.

Table 1. Ukraine's place in the foreign market, 2019

Top exporters of butter			
Countries	**Export volume, thousand tons**	**World share (%)**	**CAGR (Compound Annual Growth Rate) (%)**
New Zealand	410	45	2,1
EU	151	14,3	2,5
Australia	45,3	6,1	-5,4
USA	43	3,2	-14,2
Ukraine	**14,6**	**1**	**42,1**
Argentina	10	1	-13,9
India	9	1	-3,2
Mexico	7,2	1	32,1
Saudi Arabia	6	1	9,0
Top cheese exporters			
EU	824	31	2,6
USA	315	13	12,7
New Zealand	303	12	1,7
Australia	159	6	-1,5
Saudi Arabia	119	4	-13
Egypt	114	5	-9,4
Argentina	73	3	3,2
Iran	52	2	14,2
Turkey	38	2	10
Ukraine	**11**	**0,4**	**-2,8**
Top exporters of skimmed milk powder			
EU	676	31	12,4
USA	545	25	7,3
New Zealand	449	20	0,8
Australia	186	8	8,2
Malaysia	51	2	50,5
Ukraine	**34**	**2**	**19,9**
Uruguay	28	1	19,8
Argentina	26	1	12,3
India	15	1	-3,3
Canada	14	1	7,0
Top exporters of whole milk powder			
New Zealand	1363	55	8,6
EU	386	16	-2,8
Argentina	131	5	-8,6
Australia	69	3	-5,3
Uruguay	**62**	**3**	**0,3**
Brazil	30	1	42,4
Saudi Arabia	26	1	-3,3
Malaysia	22	1	10,6
USA	20	1	14,9
Chile	14	1	9,6
Ukraine (17)	**2**	**0,3**	**-16,5**

Source: OECD-FAO Agricultural Outlook 2016-2025

In the context of globalization, each subsequent model of world development must become more perfect and adapted to the new conditions formed as a result of transformational changes in society, the modernization of its obsolete elements with

the establishment of new structural interconnections. At the same time, an important condition for social development is the implementation of the main criterion - stability, which is ensured by the modernization of public administration systems.

Although the volume of milk consumption per capita in Ukraine lags behind physiologically justified standards, and even more so, the level of developed countries, national dietary characteristics suggest that the domestic market of milk and dairy products is quite saturated. This gives grounds to predict a slow growth in demand in the future in most market segments, mainly under the influence of increasing incomes, expanding the range of products. In terms of consumption of dairy products, Ukraine is not among the ten largest consumers in any of them in terms of volume, but a comparison of consumption per capita can show the potential of certain products in the domestic market (Fig. 3-5).

For example, the consumption of factory-made cheeses has significant growth potential when looking at the performance of developed countries in Europe and America. Butter also has potential, but much less, as Ukraine already has a fairly high rate.

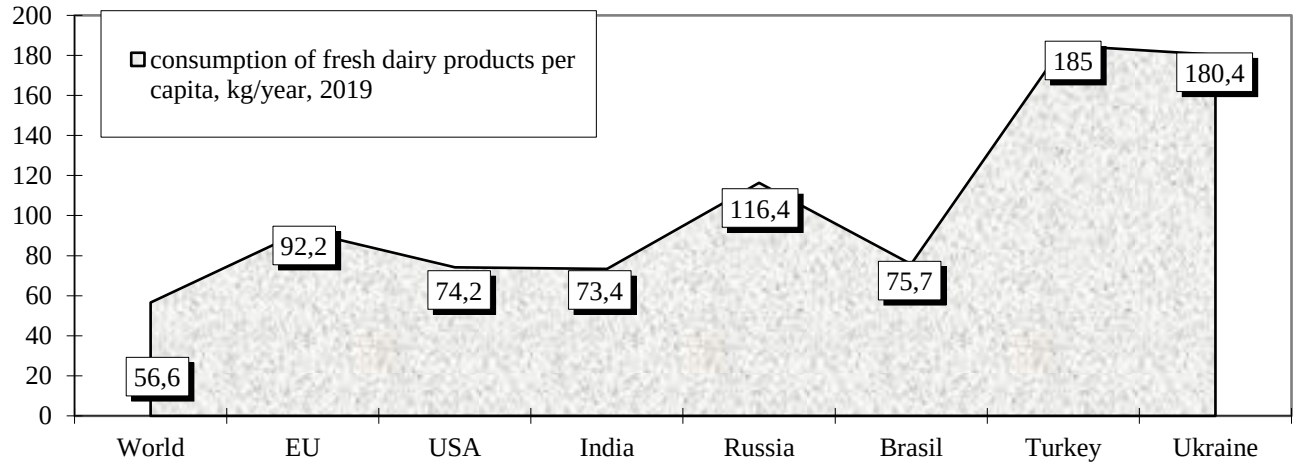

Figure 3. Consumption of fresh dairy products per capita, kg/year, 2019

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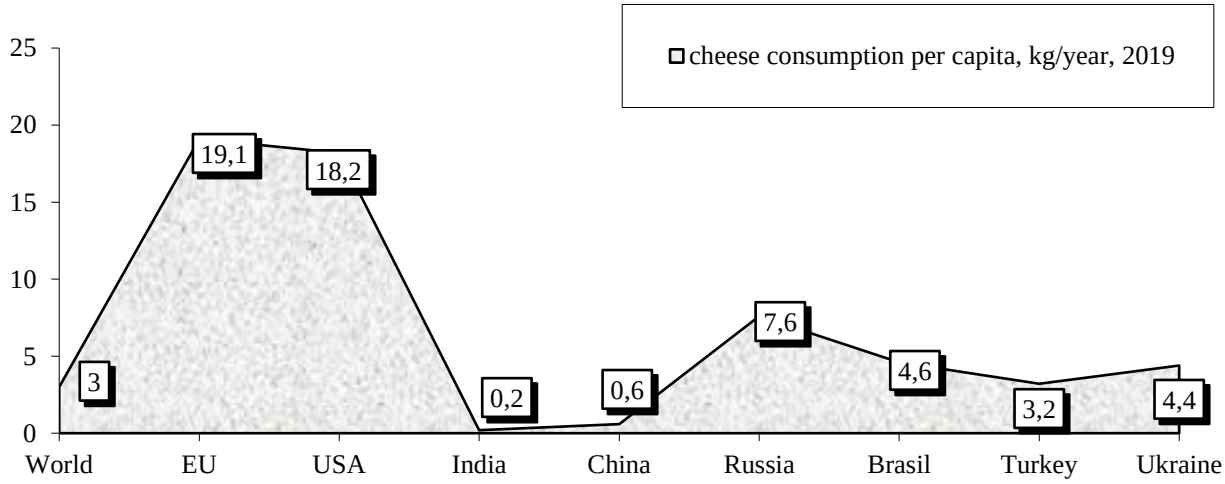

Figure 4. Cheese consumption per capita, kg/year, 2019

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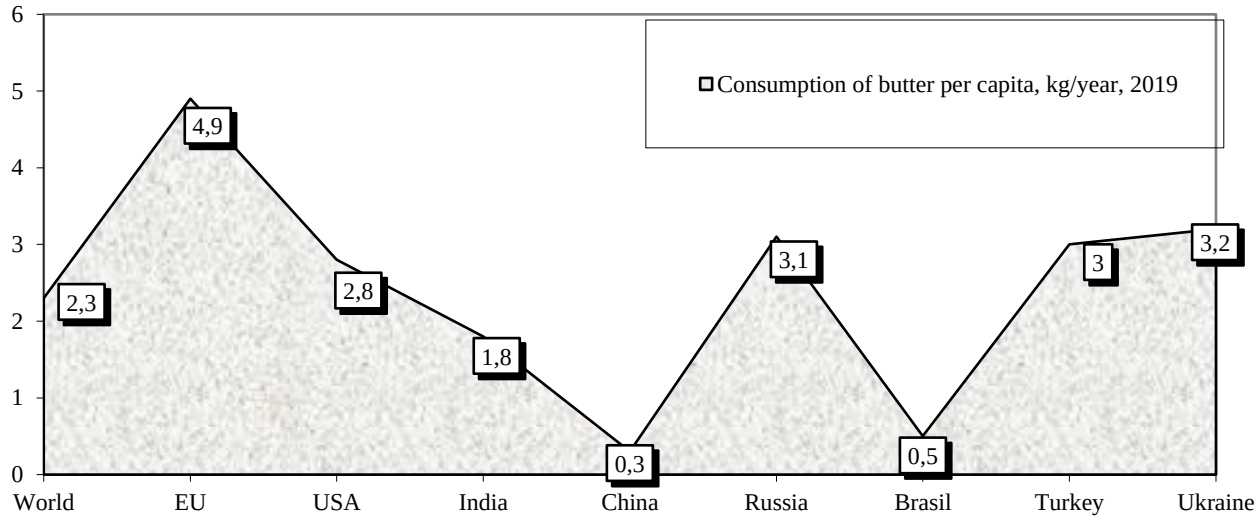

Figure 5. Consumption of butter per capita, kg/year, 2019

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It should be noted the constant fluctuations of the Dairy Price Index, which according to the FAO as of January 2021 increased by 0.9% due to high demand for imports of butter, cheese and skimmed milk powder (Fig. 6). The index was calculated on the basis of 8 price quotations for 4 groups of dairy products (butter, cheese, skimmed milk powder and whole milk powder in two representative markets. prices for dairy products were determined in proportion to the average share of groups in total exports for 2014-2016.

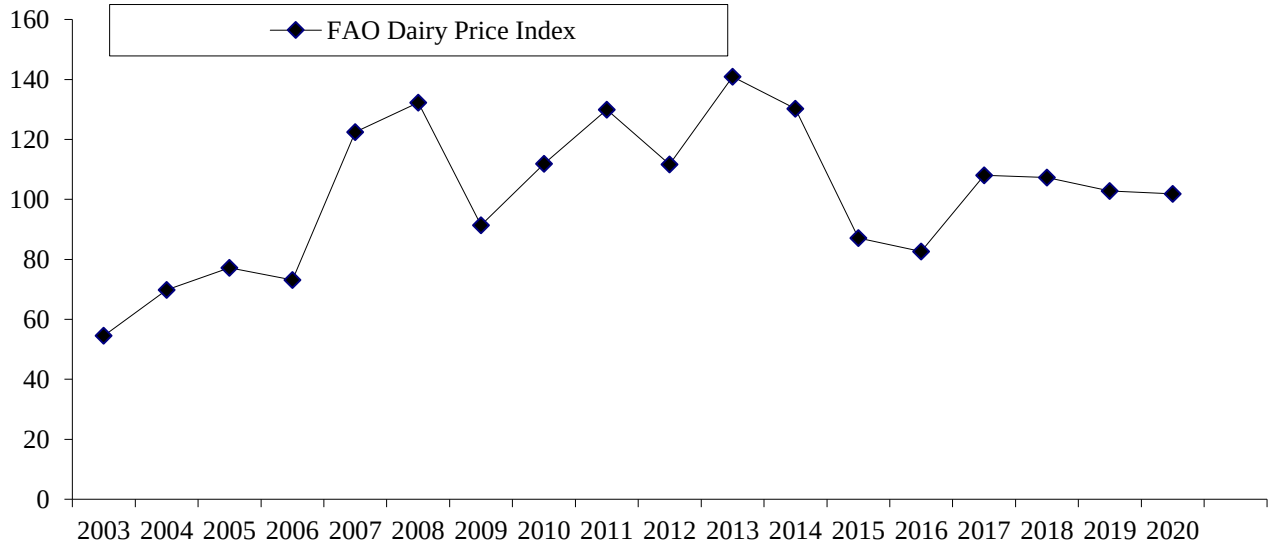

Figure 6. FAO Dairy Price Index 2003-2020

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The food security system at the global level is currently undergoing changes, including:

- the capacity of the world market expands by simultaneous deterioration of resource formation conditions (instability of production and imbalance of markets);
- reduced stability of markets;
- globalization of the food industry and new rules of world trade increase competition in the market, promote expansion of application of regulatory measures;
- priority in the formation of world resources remains with export-oriented countries;
- deteriorating world market conditions and rising prices provoke a food crisis in import-oriented countries;
- a number of countries (developing and transition economies) are becoming net importers of food with limited opportunities for export procurement;
- in the agricultural market, the focus on innovative production development, multifunctionality of agriculture and product quality is growing.

The dominant type of food systems at the global level has become high-tech transnational food production and distribution chains, which include vertically integrated producers of goods, processing plants, supermarkets and catering companies.

Conditions for the emergence of such systems arose as a result of: 1) the opening of domestic markets for international food trade and foreign direct investment; 2) expanding the influence of multinational food companies on the world market. As a result of these changes, the concentration of corporate business is increasing, and control over food production is increasingly passing into the hands of multinational agri-food and retail companies.

Theoretically, the process of integration of the Ukrainian dairy subcomplex into the world system is possible both through the creation of Ukrainian TNCs and through the arrival of foreign TNCs in the Ukrainian economy.

In practice, the transnationalization of Ukraine's agro-industrial complex follows the second scenario. When studying TNCs from the standpoint of the host party, it is important to keep in mind that the consequences of foreign investment depend on the stage of socio-economic development of the recipient country. According to the World Bank classification, Ukraine belongs to the group of emerging market countries, which necessitates additional study of the specifics of the presence of non-residents' capital. In any case, the universality of the causal link: «foreign TNCs - foreign investment - national development» requires significant clarification.

Our study focuses on the processes of transnationalization of the dairy subcomplex of Ukraine in the context of the presence of foreign TNCs. This choice of topics is due to the lack of study of international integration of capital at the meso level, the significant diversity and features of food subcomplexes, among which, it is the dairy sector that focuses on the collision of national and transnational capital in agriculture.

This is due to the fact that the dairy subcomplex differs: the severity of the conflict of interests of dairy farming and the dairy industry; the affiliation of dairy

farming to the "particularly sensitive industry", which is of particular importance in the context of rural development; high social significance of the final product - milk and dairy products; the biggest, in relation to other large subcomplexes of agro-industrial complex, problem of development, especially at the expense of lag of dairy cattle breeding; difficulties in achieving government-defined food safety parameters for milk and dairy products; intensification of transnationalization processes in this subcomplex.

To develop an effective policy in this area requires a comprehensive analysis and evaluation of the process of transnationalization of agriculture, including milk product subcomplex of the country. This approach allows us to look at the applied tasks of development of a particular segment of the agro-industrial complex of Ukraine through the prism of global processes of capital internationalization.

In the context of financial globalization, the main goal of the largest TNCs in the real sector is not so much the production of material goods and profit from their sale, as the growth of the value of the company's shares on international stock exchanges.

As mentioned above, according to the classification of a number of international organizations, Ukraine is part of countries with emerging markets. The emergence of this rather vague term is primarily due to the needs of financial analysts (including the World Bank Group), who are studying the possibilities of the most effective international investment by multinational companies and financial institutions in the economies of developing countries. Grouping countries according to the degree of market formation helps global investors to choose a country and a way to use capital that will maximize profits while minimizing risks.

On a number of grounds, Ukraine is one of those countries in which some conditions for civilized business have already been created, but a stable national socio-economic system of modern technological structure has not yet been formed. Such countries are of particular interest for foreign direct investment, as they have the necessary infrastructure, skilled workers and other established factors necessary for the functioning of TNCs. The combination of created and natural factors brings double benefits to TNCs.

Discussion. The study of existing theories of TNCs allowed to generalize the motives for the movement of foreign direct investment, which underlie the strategies of companies. These include:

1. Continuing the life cycle of goods created in the donor country, expanding sales. At the stage of standardization of goods and saturation of the domestic market of its country of origin, in order to prolong the life of the product, production through foreign direct investment is transferred to developing countries, where goods are exported to other countries (including the country where the product was previously created) .

2. Achieving savings through economies of scale. The increase in production on an international scale is carried out by TNCs in search of reducing production costs per unit of output by saving on fixed costs. By placing foreign direct investment around the world, TNCs seek to reduce prices, change the structure of markets in the direction of oligopoly and monopoly.

3. The presence of three determinants: the desire to extend the company's advantages to foreign markets; establish market control in more than one country; reduce market risks through commodity and geographical diversification. All risks from foreign investments are offset by increased return on investment.

4. Search for effective geographical location and effects of internationalization of innovations within one company. Creation of a managed internal corporate internal market, which uses transfer prices, internal corporate loans and other instruments, the value of which differs from the level of the external (external) market.

5. Combination of three factors: competitive advantages of ownership over competitors in the host country (O); local factors that give benefits to the company's activities (L); advantages of internalization of the company (I). OLI-advantages determine the choice of company strategies, the breadth of which largely depends on the scale of the company. Incentives for TNC investments are: the desire to gain access to natural resources, the desire to enter new markets, the restructuring of existing foreign industries through the rationalization of created assets.

6. Achieving competitive advantages of companies, the main determinants of which are: corporate strategy, structure, level of competition; state of factors of production (supply); state of demand; as well as government monetary, fiscal, trade, currency, FDI policy and risk minimization factor. Geographically dispersed divisions of companies are "looking" for components of their competitive advantage in other countries.

Conclusions. Currently, the countries of the world are covered by transnational food chains, which include all technological stages of creating a finished food product: from agricultural production to the final consumer. The internal contradiction of this chain is that the core of creating the consumer value of food is agriculture, and the bulk of profits are formed in subsequent sectors of the chain (processing, wholesale and retail trade, catering).

Due to the uneven economic development of countries, the distribution of resources and capital, some fragments of the international agri-food chain have a special interstate distribution. Agriculture, in fact, is concentrated mainly in the bosom of national economies, while all other links, with the help of PPI, can be transferred to areas with local advantages in terms of foreign TNCs.

Leading TNCs operating in the first and third spheres of the agro-industrial complex (in the production and marketing chain above and below agriculture) have parent companies exclusively in developed countries. In the host countries, TNCs carry out production on the basis of: purchase of agricultural land, long-term land lease. The most widespread form of contractual relations with farmers without the share of the latter in capital.

Agriculture is much less involved in the process of financial globalization than other related industries. TNCs in manufacturing and trade, as a rule, have passed the IPO (Initial Public Offering) and are listed on world stock exchanges, have access to cheap international loans, in their assets a large share of the intangible component. National agriculture, in turn, is tied to the productive process of creating real goods

and, as a rule, lacks financial resources, it is no coincidence that agriculture is, in the terminology of the World Trade Organization, a "particularly sensitive" industry.

Unlike related industries, it has a limited market character. This is due primarily to the high natural and climatic dependence in the reproduction of living organisms, multifunctionality, limited opportunities to intensify production, concentration and centralization of capital in relation to other sectors of the economy, the inertia of production. These features are combined with the high social significance of products that ensure food security of the country, low price elasticity of demand. This fully applies to the milk food subcomplex, the basis of which is dairy farming. Moreover, this industry has an increased "sensitivity" associated with longer than in other subsectors of animal husbandry, payback periods of investment, which leads to even greater inertia of response to market signals.

During the global financial crisis, against the background of a significant decline in global foreign direct investment flows, it is developing countries and emerging markets that have become the center of gravity of more than half of total foreign direct investment. The factor of intensification of the investment process in the agro-industrial complex is the presence of actively growing economies with large populations, such as China, India, Brazil, the Republic of Korea, where along with economic success remains the problem of food security.

Potential investors are not only developed countries, but also those developing countries, where high effective demand for food is combined with severe restrictions on agricultural land and a shortage of fresh water (especially Arab countries).

In the world for all types of milk and dairy products there is an excess of effective demand over supply, which is a factor in the growth of world prices for these products against the background of their high fluctuations. The predominance of the growing price trend is a positive signal for international investment in dairy subcomplexes of emerging markets, unsatisfied demand and favorable conditions for the successful operation of enterprises in the dairy industry and dairy farming.

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METHODS OF SCIENTIFIC RESEARCH OF THE MEAT PRODUCTS MARKET IN THE CONDITIONS OF GLOBAL COMPETITION

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Abstract. *Subject of research - methods of scientific research of the meat products market of Ukraine in the conditions of global competition. The purpose of the work is to systematize and generalize the main methods of scientific research of the Ukraine meat products market in conditions of global competition. Applied methods: system generalization, comparison, analysis and synthesis, analytical. Research results. The article analyzes the concept of "scientific research", its characteristics. The sequence and stages of research work were systematized and generalized. Three main levels of general scientific methods and their components were described in detail: methods of empirical research, methods of theoretical knowledge and general methods and techniques of research. It was noted that for the implementation of reliable, accurate and comprehensive research it is necessary to apply different scientific methods and approaches in a complex, because they complement each other and ensure the completeness and logic of the study. In addition, methods should be selected according to the specific characteristics of the object under study. Based on the considered approaches and own researches, the general scheme of research of the market of meat products in the conditions of global competition was developed. Scope of application of research results. The results are intended for specialists in food and processing industries, specialists of authorities, scientists, teachers, post-graduate students and students of higher educational establishments. The research results has a scientific and practical value and can serve as a source of background information on the methodology of research of the meat market in conditions of global competition and be the basis for further research.*

Keywords: *scientific research, scientific research methods, meat products market, competition, competitiveness.*

JEL Classification: C18, Q10, Q18

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Introduction. Despite the favorable natural and climatic conditions, land and labor resources, the meat processing industry and stockbreeding of Ukraine are in a difficult situation. As of January 1, 1991, there were 24.6 million cattle in Ukraine. During the years of independence, this number has critically decreased - to 3.1 million heads (7.9 times). The number of pigs in 1991-2019 decreased 3.4 times (to 5727 thousand heads). Lack of stability and systematic state support for agricultural producers, depreciation of production base, unpredictable pricing policy, low profitability of cattle and pig breeding, underdeveloped export potential and, consequently, lack of markets - all this has negatively affected the industry and does not increasing the investment attractiveness of stockbreeding.

Assessment of the dynamics of the meat market in global competition is the basis for substantiation and management decisions on the forms and methods of its regulation, economic forecasting, determining strategic directions of its development, taking into account the influence of dominant internal and external factors. For individual market participants, the results of its evaluation form the basis for the development of tactics and development strategies, analysis of the competitive environment, forecast, market conditions, etc. Thus, the availability of an effective

research methodology is an important tool for ensuring the productive development of the meat and meat products market in Ukraine.

Literature review. Methodological approaches to conducting research on the food market in general, and the meat processing market in particular, are the subject of research by many scientists, namely: G.O. Birta, Yu.G. Burga [1], S.E. Vazhinsky, T.I. Shcherbak [2], D.M. Stechenko, O.S. Chmyra OS [3], A.E. Konversky [4], P.R. Pucenteilo [5], L.O. Yashchenko [6], M.T. Bilukh [7], V.V. Kovalchuk [8], I.S. Pyatnytska-Pozdnyakova [9], V.K. Sidorenko [10], I.Z. Dolzhansky , T.O. Zagorna [11], T.V. Swede, I.S. Bila [12] and others. However, methodical approaches to scientific research of the meat products market in the conditions of global competition at the branch level are insufficiently researched and need thorough study.

Aims. The aim of the study is to systematize and generalize the main methods of scientific research of the Ukraine meat products market in conditions of global competition.

Methods. The study used methods of systematic generalization, comparison, analysis and synthesis, data from the State Statistics Service of Ukraine, scientific publications, regulations, etc.

Results. Scientific research is a process of purposeful research of a certain object, process or phenomenon with the help of scientific principles and methods, which is carried out to establish the laws of its origin and development, as well as to obtain and implement useful results [1].

Characteristic features of scientific research are: the orderliness of the research process, the achievement of a specific defined goal, clearly defined tasks; systematicity, namely orderliness and bringing to the system both the research process and its results; consistent substantiation of the made conclusions and generalizations, strict provability; search for new original ideas to cover the tasks.

There are six main stages of research (Fig. 1). The sequence shown in the diagram is typical for all research work, including the study of the meat market in conditions of global competition.

A method is a way to achieve a goal. It combines subjective and objective aspects of cognition. The method is objective because it allows you to reflect reality and its relationships. At the same time it is subjective as it is an instrument of thought of the researcher and includes its subjective features [4]. Methodology is a system of methodological and methodical principles and techniques, operations and forms of construction of scientific knowledge.

Research of the meat processing market, as a component of the food market, can be carried out using a wide range of parameters depending on the purpose of the study, the amount of available information base, the range of information users, etc.

Theoretical and methodological basis for the study of the meat market in conditions of global competition were general and specific research methods, economic theory, the main provisions of the market economy, scientific developments of domestic scientists on the formation and development of the meat market of Ukraine, state programs of agro-industrial complex, in particular stockbreeding, etc.

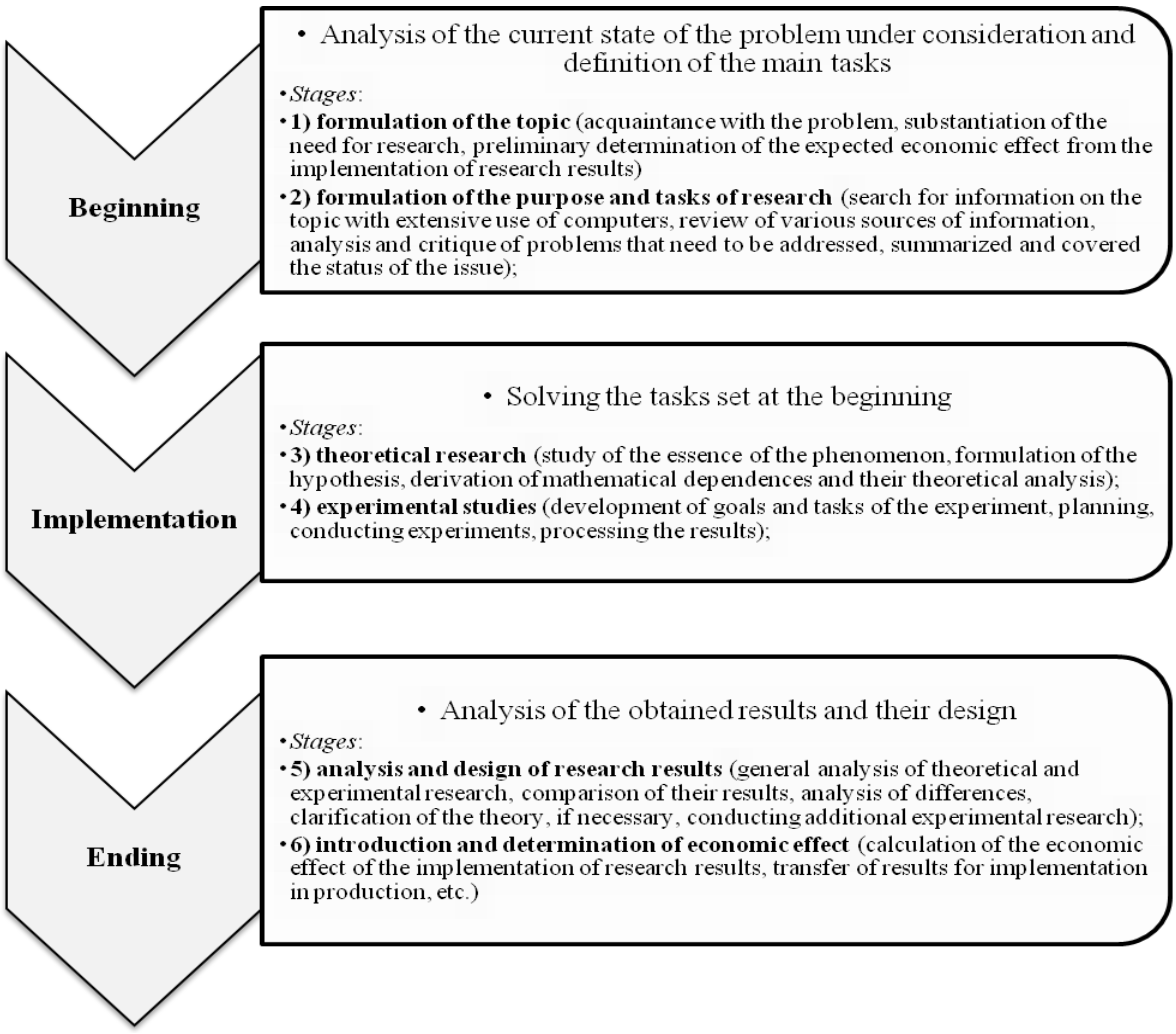

Figure 1. Sequence and stages of research work

Sourses: formed by the author using [2, c. 19-21], [3, c. 45–46]

The information base for meat market research is the data of the State Statistics Service of Ukraine, Ministry of Agrarian Policy, Ministry of Economic Development, Ministry of Finance of Ukraine, Laws of Ukraine and other regulations, industry reports of associations of enterprises, annual reports of enterprises, FAO reports, etc.

To ensure a systematic approach to the study of the object of study, in addition to general logical scientific methods operating in all fields of science, to study the meat market are also used specific methods - economic and statistical, linear regression, monographic, abstract, logical, balance, regulatory, economic-mathematical, experimental, sociological survey, etc.

There are three main levels of general logical scientific methods: methods of empirical research, methods of theoretical knowledge and general logical methods and techniques of research. The methods of empirical research include observation, comparison, measurement, experiment, description [4].

Observation is a purposeful study of objects, which is mainly based on the data of the senses (sensations, perceptions, impressions). Knowledge is obtained not only about the external aspects of the object of knowledge, but also about its essential properties. Comparison is a cognitive operation that underlies the inferences about

the similarity or difference of objects (or stages of development of the same object). This method allows you to identify and compare the changes that have occurred with the object of study, to determine trends in its development. Measurement is a set of actions performed with the help of measuring instruments in order to find the numerical value of the measured value in the accepted units of measurement. An experiment is a purposeful and active intervention in the course of the studied process, making appropriate changes to the object or its reproduction in specially created and controlled conditions. In this method it is possible to detect the influence of one factor on another. The experiment has two interrelated functions: experimental testing of hypotheses and theories, as well as the formation of new scientific concepts. Description is a cognitive operation that consists in recording the results of an experiment (observation or experiment) with the help of certain systems of notation accepted in science.

Empirical research methods were actively used at all stages of the study. They are the basis on which all research is based. Almost at any time when using other methods, observations, measurements, comparisons, descriptions and experiments in their various forms are carried out.

Methods of theoretical cognition include formalization, axiomatic method, hypothetical-deductive method and ascent from the abstract to the concrete.

Formalization is the reflection of knowledge in a sign-symbolic form (in the form of formulas). Formalized (artificial) languages are designed for more accurate and clear expression of meanings. The axiomatic method is a method of constructing a scientific theory, in which it is based on some initial positions - axioms, from which all other statements of this theory are derived in a purely logical way, by proof. The hypothetical-deductive method is a method of scientific cognition, the essence of which is to create a system of deductively related hypotheses, from which statements about empirical facts are derived. The ascent from the abstract to the concrete is a method of theoretical research and presentation, which consists in the movement of scientific thought from the original abstraction through successive stages of deepening and expanding knowledge to the result - a holistic reproduction in theory of the object under study [4].

The methods of theoretical cognition in the research were used in the formation of theories and later on the basis of experiments, the use of other scientific methods were confirmed or refuted. The study of the meat products market we have considered is more practical, so the methods of theoretical knowledge were used less than the methods of imperial research or generally logical methods and techniques.

The general logical methods and techniques of research include: analysis, synthesis, abstraction, idealization, generalization, induction, deduction, analogy, modeling, systems approach, probabilistic (statistical) methods.

Analysis is the division of an object into its component parts in order to study them independently. Analysis can act as a mechanical division and determination of the dynamic composition, identifying forms of interaction of the elements of the whole, finding the causes of phenomena, identifying the level of knowledge and its structure, and so on.

Synthesis is the union, real and mental, of different parties, parts of an object into a single whole. In scientific research, one group includes those information that correspond to the main, defining features.

Analysis and synthesis are meaningfully related. Analyzing the phenomenon, decomposing it into components and studying each separately, they should be considered as part of a whole. This means that the analysis must be intertwined with the synthesis, ie to correlate the analyzed part with the whole, to establish its place in this whole, for which it is necessary to investigate the parts in their essence as components of the whole.

Abstraction is a process of mental distraction from a number of properties and relations of the phenomenon under study, with simultaneous selection of properties (first of all, essential, general) that interest the researcher.

Idealization is a mental procedure that involves the creation of abstract (idealized) objects that are actually fundamentally impossible, but are those for which there are prototypes in the real world.

Generalization is the process of formation of general properties and features of objects. The epistemological basis of generalization is the categories of general and individual. The general reflects similar, repetitive features and characteristics that belong to several single phenomena or all objects of this class, and the single - expresses the specificity, originality of this phenomenon (or group of phenomena of the same quality), its difference from others [4].

In the process of cognition, the methods of induction and deduction are inextricably linked. Induction is the leading factor in generalizing empirical material and making a hypothesis. That is, at the initial stage of the study it is necessary to use the inductive method, which involves the collection, systematization and generalization of reliable facts related to practice and involved in the formation and development of the food market, including the meat products market. After that by means of deduction the substantiation of theories, generalizations, economic principles is carried out. Deduction allows you to logically organize experimental data and build a theory based on the logic of their interaction. Deduction helps to complete the study.

An analogy is the establishment of similarities in some properties and relationships between non-identical objects. On the basis of the revealed similarity the corresponding conclusion is made – inference by analogy.

Modeling is a method of studying objects on their models. Forms of modeling are diverse and depend on the use of models and the scope of modeling.

Probabilistic-statistical methods are based on taking into account the action of a plurality of random factors that are characterized by a stable frequency [4].

A systems approach is a set of general scientific methodological principles (requirements), which are based on the consideration of objects as systems. Thus, according to this approach, the meat products market is considered as a holistic system that combines a set of interconnected and interacting elements into a single whole (markets of products from cattle, pork, poultry, sausages, etc) is also a subsystem of the system higher level (food market). The set of interacting elements

and the way they are combined determine the structural construction of the meat products market system.

Thus, we can conclude that for a reliable, accurate and comprehensive study it is necessary to apply different scientific methods and approaches in a complex, because they complement each other and ensure the completeness and logic of the study.

The most effective in terms of assessing the opportunities and reserves of the meat processing market in global competition, in our opinion, are methodological approaches, which include:

1) study of the theoretical foundations of the formation and development of the meat products market in conditions of global competition;
2) study of the impact of state policy on the operating conditions of the meat market;
3) assessment of market conjuncture and its infrastructure
4) study of tools for regulating the meat products market;
5) analysis of safety and quality of meat products, as well as state mechanisms of their control;
6) study of sectoral features of formation and development of the meat products market;
7) factor and criterion assessment of the market according to the selected indicators;
8) analysis of market capacity and adequacy of food consumption;
9) assessment of the export potential of meat market products;
10) analysis of competition in the meat products market and the level of competitiveness within the country and abroad.

In order to properly select methods for assessing market conditions and mechanisms for managing the competitiveness of the food industry enterprises, which are individual for each of its industries, it is necessary, first of all, to make a general description of the industry: determine the number of enterprises; describe the products and their characteristics; establish the main relationships of the industry with suppliers of raw materials, consumers of finished products; determine the level of competition and its type; identify key competitors. Based on the information obtained, apply the above general and special research methods, so the most common special methods used to determine the competitiveness of various objects (goods, enterprises, industries) are analytical (methods of differences, ranks, expert evaluation, etc.), index (integrated valuation method, method based on determining product competitiveness, effective competition theory, etc.),graphical (graphs of comparisons, charts, cartograms), matrix (matrix "Boston Consulting Group" (BCG), McKinsey matrix, matrix of competitive advantages M. Porter, SWOT analysis).

Discussion. Based on the above approaches and our own research, a general scheme of meat products market research in the conditions of global competition was developed (Fig. 2).

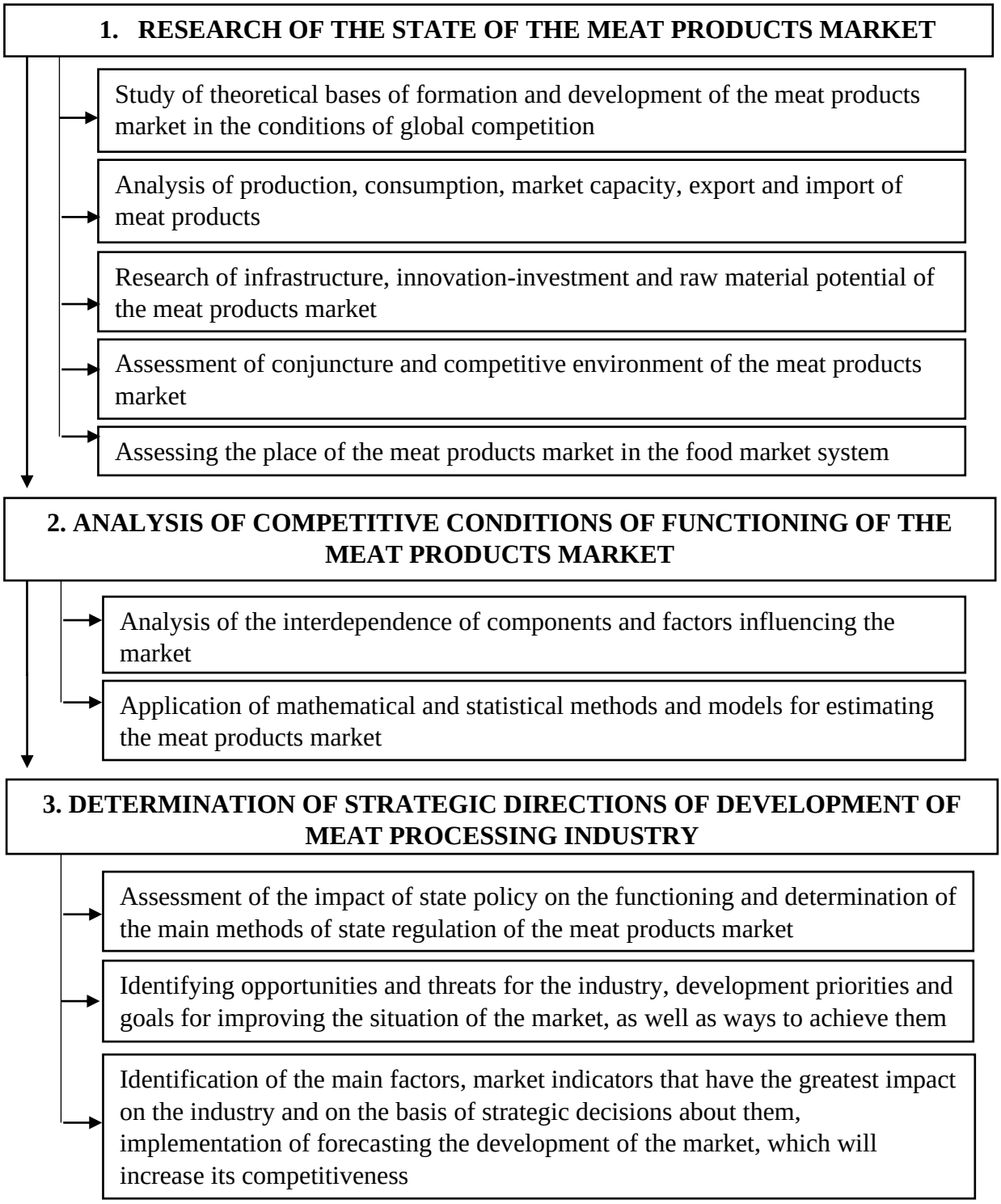

Figure 2. Method of scientific research of the meat products market in conditions of global competition

Sourses: formed by the author

Conclusions. Therefore, it can be concluded that in order to obtain correct and comprehensive results of meat products market research in conditions of global competition, it is necessary to apply general and special methods of assessing

competitiveness in the complex and select them according to the specific object under study.

Scientific research should be conducted systematically, in an orderly manner, with the implementation of clearly defined tasks, subject to strict evidence and logic. It must be objective, ensuring the unity of the historical and the logical. Research should be based on a single principle that must be followed throughout the study. All structural parts of the study should be logical, consistent and interconnected. Also, the principle of scientific ethics should be followed, which is to use a system of references to primary sources in order to clearly distinguish between existing scientific achievements in a particular area of research and personal achievements of the author of the study.

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ECONOMIZATION OF POLITICAL PROCESSES IN INDONESIA

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Abstract. *This article reveals the essence of the economization of political processes, the impact of government regulation on economic resources and relations between the political elite and businessmen, explains the conspiracy and involvement boss mine (coal) in several provincial elections (regents and governors) in South Kalimantan. The political processes related to election financing, features of local budgeting and regulation of the impact on economic resources are studied. Eighth, using funding sources of publications of local government activities covered in the activities of various agencies, especially public relations by installing advetorial or news paying the prospective incunbents in print media, electronics to online, paid at the rate per news or per month, with holding a mass media that provides space or duration for imaging or raises the popularity and electability. As is known, the political landscape of post Soeharto New Order government that gave birth to democracy and radical change in the institutions of power, namely from the centralized power-authoritarian system to a democratic system of government has spawned a democratic transition which was prolonged until today. In the midst of a prolonged transition to democracy at this time, the arena of democracy has been hijacked and the stage of political and economic power has been controlled by entrepreneurs or local and national capitalist power by doing pesekongkolan between candidates authorities or local authorities that one of them through the local election process. The businessmen are involved as a supplier of funds to the local authorities candidate to win as a form of money politics and transactional politics. In some cases the local elections in South Kalimantan, such as the election of the regent and the governor, political practice is utilized with clarity and has already become a political culture that is structured within massive post-New Order government. Therefore, democracy is being woken up in Indonesia after the New Order.*

Keywords*: capitalism democracy, local election, natural resorces exploitation. political patronage networks, local actors.*

JEL Classification: F02, F42

Formulas: 0; fig.: 0; tabl.:0; bibl.: 10

Introduction. Historically, the study of the relationship between state and capital in thehistory of political power in Indonesia, especially under Suharto's government era is a reality of conspiracy between the state capital during past 32 years. The reality of this conspiracy is established through the use of a mutually beneficial institution of power, regulation, and patronage relations to dominate economic resources and political power. Under the Suharto's government era with the political authoritarian power structure the economic resources and political power are in the hands of actor groups who have patronage relationships with those within the bureaucracy of government to accumulation and monopoly of economic

resources who have economic and political patronage relationships within the government bureaucracy network.

Literature review. The rise of Suharto's cronies behavior by Kunio (1991), is described as an erzast capitalism, Hadiz (2004), and Winters (2011) called it oligarchy- predatory who were born to obtain facilities and protection from the authorities. Entrepreneurs appear as strategic groups that can influence state policy through conspiracy, which places institutions of power and regulation that are engineered in such a way as to legally control state's economic resources.

The fall of the Suharto's government in May 1998 that led to the transition of democracy has changed the current political order. Although the formal regime had collapsed but the heritage disease grew at the local government, such as the practice of political corruption and nepotism. The political actors who occupy the current stage of power have not undergone much change from the mental oligarch-predatory. The oligarchs are increasingly finding their habitat at the local level with decentralization and local autonomy era to be as an opportunity for these local oligarchs.

In the democratization, local autonomy era has changed the structure of power and new designs on democratic institutions more open and democratic through contestation of Regional Head Election (Pemilihan Kepala Daerah/ Pilkada). Democratic capitalization and political pragmatism is increasingly fragmented political behavior of the people, the political choice of the people is increasingly not easy to localize the political choices of the politicians. The politician in various modes display the patterns of money politcs and the make people lose political rationality. The political logic of the people has been caught in the vortex of political pragmatism and has no power to avoid all that. Meanwhile, political party which is actually a symbol instrument of articulation of political aspirations becomes the cartel and practice of political mafia in the arena of Local Head Election (Pemilihan Kepala Daerah/ Pilkada). The political market has been colored by political transactional and conspiracy issues between political elites and market (capital) and educating the mentality of the people into political absurdity in the black market of democracy.

In the political pragmatism, local Head Election is to be made and fomulation of strategies by local actors to influence political choices of the people. One of the strategies for influencing local actors is use of capital (money politics) and patronage networks played by political elites. The high cost of democracy in local elections making political gambling behavior, that is political mafia by mobilizing economic and political resources, conspiracy, and design by local actors to gain economic and political advantage.

The politics transactional, vote buying, money politics, patronage and clientelism as discribed by some political experts like (Allan, 2012, Aspinall, 2013, Aspinall, 2014, Aspinall and As 'Ad, 2015; Aspinall and As'ad, 2016; Hutchcroft, 2013; Stokes, 2013; Choi, 2011; As'ad, 2016). Therefore, the real owner of the contest stage of Local Head Elections is to be political gambler contestation.

Political actors do not operate individually in Local Head Elections but rather collaborate in a structured manner with other actors. All that can be effectively done

because of the abundant funding support in the Local Head Elections is an instrument of selecting and giving birth to political elites or local authorities for credibility, but the Local Head Elections instead shifted the meaning of being the arena of democratic decay. The Local Head Elections requires a lot of money by political parties or candidates who fight in the elections.

The Local Head Election after political reform, actually just only represent the interest of political parties in a formalistic democratic constellation and the Local Head Elections loses substantive meaning with manipulation and conspiracy. In other side, elections are vulnerable to being used by bureaucratic elites, especially by incumbents with some modes: First, through the provision of social assistance (Bantuan Sosial) and grant funds. Second, make populist programs. Third, provide financial assistance to the regency/municipality which is the base of supporting the incumbency. Fourth, increase the salary allowance of bureaucrats or Civil Servants in the regions. Fifth, allocate for the development of infrastructure such as road construction. Sixth, misappropriation of village funds. Seventh, infiltrate the interests of incumbents in preparing the Budgeting Allocation for Local Developmen (Anggaran Pendapatan dan Belanja Daerah/APBD). Eighth, using funding sources of publications of local government activities covered in the activities of various agencies , especially public relations by installing advetorial or news paying the prospective incunbents in print media, electronics to online, paid at the rate per news or per month, with holding a mass media that provides space or duration for imaging or raises the popularity and electability.

In the case of Local Head Election in Barito Kuala (Batola), Hasanuddin Murad, two priods of Head Government of Barito Kuala (2007-2017) who was openly supportive of his wife, Hj Noormiliyani Aberani Sulaiman and his nephew Rahmadian Noor to be candidate of Head Governmenet (2017-2021). This information comes from journalists or media activists, especially Media Kalimantan in South Kalimantan. As a comparison of the District Government of Hulu Sungai Utara in the run-up to the 2017 elections, it has allocated publication funds for bupati-vice regent activities of Rp 10 billion, much higher than the average, such as Hulu Sungai Selatan (HSS) 2 billion in APBD 2017.

Aims. The purpose of the article is to establish the impact of state regulation on economic resources and relations between the political elite and businessmen.

Methods. The research methodology involves the use of comparative analysis, general methods of analysis and synthesis, as well as other methods to achieve the goal of the article.

Results. The political processes related to election financing, features of local budgeting and regulation of the impact on economic resources are studied.

Local head election of barito kuala (batola) under the shadow of mine and oil palm plantation entrepreneurs. South Kalimantan is known as the region having the second largest mining resource potential in the country and has the potential of mining resources, now shifting to oil palm plantations that have surrounded 9 districts in South Kalimantan. Citing the news reported by jejakrekam.com on March 8, 2017, from the statement of the Chairman of the Indonesian Palm Oil Association South

Kalimantan Totok Dewanto stated that now there are 9 districts that have transformed into a palm plantation center on an area of four hundred thousand (400,000) hectares. These oil palm plantations are spread in Barito Kuala, Hulu Sungai Selatan, Hulu Sungai Utara, Tapin, Tanah Bumbu, Kotabaru, Balangan, Tabalong and Tanah Laut.

Well, the big players in the palm oil business is a national and international network, especially from Malaysia which mostly has mastered the area of productive land and swamp in Barito Kuala District, such as Sinar Mas Group, Astra Graha Lestari Group, Minamas Group and others. In addition, local entrepreneurs joined by Hasnur Group, Jhonlin Group and others also played, including Batola Hasanuddin Murad Regent in the palm oil business of producing cooking oil (CPO) and soap industrial raw materials and others, amid the mine business melasunya Coal due to price fluctuations from export destination countries such as China, India, Japan and others.Such a position ultimately leaves local actors no longer relying on mine potential but also targeting large-scale plantation enterprises as one of the pundi to generate multiple profits.

They are involved in local political rituals (see Pilkada), especially supporting figures or candidates for regional heads who will ensure their business networks and businesses in the area. At that time the mines power and oil palm plantations had been in the power of local oligarchy in line with the policy of decentralization and regional autonomy. The dynamics of local politics in South Kalimantan in every democratic event is always related to the issue of natural resources. The Local Head Election as a process of democratization has been captured by the power of capital through a conspiracy between the ruling candidate and the entrepreneur.

Involvement of entrepreneurs in elections as a supplier of funds to build patronage with local authorities who succeeded in disaggregating is in order to expand the business network while collaborating with local authorities. The involvement of a number of entrepreneurs as funders is difficult to avoid, because between entrepreneurs and potential rulers alike have an interest. It is not even possible that funders play on two legs to fund the local ruling candidates. The issue of natural resources becomes a hostage and an arena of economic and political interest struggles among local actors. It is not surprising, therefore, that the political scene in South Kalimantan is controlled by the strength of capital or dominated by politicians with mining entrepreneurs.

In the political capitalization and pragmatism era, politicians with entrepreneurial backgrounds will have opportunity win of political power through political ransactional. Therefore, only large capital owners who have a certain opportunity or person who has a patronage relationship with capital domination can appear as a fighter in the elections. Meanwhile, for people who do not have capital, although they have integrity, social capacity and political capacity, but do not have the political belief to win the struggle for political power in the arena of elections. This condition became phenomenon in political landscape in some elections in South Kalimantan.During election, the possibility of bartering permit mining business, oil palm plantations, and others, without seeing the law and regulations process is very slim.The conspiracy of interests between candidates (regents, mayors,

governors) in the electoral process and in post-election will ultimately have implications for *elite capture corruption, rent seeking,* and mining mafia including large-scale plantations.

South Kalimantan position in the global economic trend has strategic value in the mining economy and oil palm plantations. The economic activity of coal mining, including oil palm plantations, is mostly enjoyed by oligarchs, both actors who are in the center who have business networks with rulers and entrepreneurs in South Kalimantan. The activities of coal mining and oil palm plantations are not only seen in the perspective of economic activity, but also in the context of political business networks or political interests far ahead.

This patronage network was born through activities as a mining entrepreneur who became part of a successful team or funding supporter in the election process (As'ad, 2013).The electoral process is colored by political conspiracy and business networks have tend to become predatory oligarchs.As a result, political actors who play their role as financiers during the election process take place, then post elections will present themselves as a *shadow political figure and business manager*.

The actors involved in the election will eventually appear as rent-seekers. The issuing of mining permits and palm oil plantations will be easier for business clients as a form of political repayment for winning public officials in political or electoral contests. In view of the development of economic and political dynamics, particularly in relation to the existing coal mining management policy in South Kalimantan, the meaning of decentralization in the context of natural resource management does not necessarily eliminate the predatory patronage and oligarchy patterns that are inherited from the New Order, The emergence of a number of local actors in the political stage of entrepreneurial background, not just rely on social capacity, political capacity, no less important must have financial capability.

This of course can only be owned by people with entrepreneurial background and at the same time have a chance to win in the struggle for political power as in case with some areas in South Kalmiantan. As'ad research (2013) on *Local Election: Mining and Local Bossism in South Kalimantan* shows a number of facts about the involvement of a number of coal mining businessmen into political brokers in local elections in a number of areas in South and Central Kalimantan. The involvement of a number of mining entrepreneurs into political brokers in Pilkada in the hope of obtaining political remuneration from elected rulers in elections, particularly related to the management of regional economic resources or infrastructure development projects.

Therefore, post election of various policies made by elected officials then the policy will be in favor of the interests of political patronage.

Local head election of barito kuala regency: arena for political effect of local actors. The couple of Noormiliyani-Rahmadian Noor excel with 48.11 percent voice managed to surpass her rivals in the elections namely Hasan Ismail-Fahrin Nizar (34.61 percent) and Bahrian Noor-Suwandi (17.28 percent). Regent elected Noormiliyani paired with Rahmadian Noor is the wife of Hasanuddin Murad who has served as Regent Batola two periods. While Ramadian Noor as Vice Regent elected

none other than Hasanuddin Murad's nephew. The appearance of Normiliyani-Rahmadian Noor as the winner in the Barito Kuala election has allowed the politics of the dynasty of Hasanuddin Murad's ethnic group on the local political scene in Barito Kuala.

The Normaliyani-Rahmadian Noor pair promoted by the Golkar and Democrat parties, the Bahrianoor-Suwandi couple were supported by the National Awakening Party and Gerindra Party, while the Hasan Ismail-Fahrin Nizar pair was supported by the Prosperous Justice Party, Partai Amanat Nasional (PAN), Partai Unity of Development, Indonesian Democratic Party of Struggle, Hanura Party, and Crescent Star Party

When observed by the Chairman of the Political Party, the bearers of couples candidate are persons with entrepreneurial background, local officials, or former local officials. Like Golkar Party as a bearer of the couple Normaliyani-Rahmadian Noor, one of the important members of the Golkar Party is Hasanuddin Murad who carried his wife as a candidate for Regent Barito Kuala. PKB and Gerindra Party carrying the couple Bahrianoor-Suwandi as it is known that the Chairman of the PKB South Kalimantan Zahirullah Azhar former Regent Tanah Bumbu two periods that have a network with the mining entrepreneurs, while Chairman of the Gerindra Party of South Kalimantan is H. Abidin who is known as an entrepreneur or owner Port of coal mine.

Meanwhile, the support of political parties for the couple Hasan Ismail-Fahrin Nizar, in the Indonesian Democratic Party of Struggle for the Regional Leadership of South Kalimantan is Mardani H. Maming who still serves as Regent of Tanah Bumbu two periods, National Mandate Party (PAN), Chairman of South Kalimantan Muhidin (former Mayor of Banjarmasin, with a background of mining entrepreneur), United Development Party (PPP), its central figure is Rudy Ariffin (former governor of South Kalimantan), although operatively run by his son, member of Commission II of DPR RI from FPPP, HM Aditya Mufti Ariffin.

The three candidate fighting in Barito Kuala election each behind him are the people or the oligarchs with the background of businessmen, local officials, or former rulers who have networks with mining entrepreneurs. Hasanuddin Murad as Regent Barito kuala two periods have managed to deliver his wife as the winner. In the process of socialization or campaign periods of mass mobilization are very clear and massive structure at all points of the location ranging from remote villages to the sub-district level with the direction of the land and river transportation fleet.

Mass mobilization at the time of the campaign as an arena of strength performances difficult to see by other candidates. The Golkar Party that is in charge of the local political universe in Barito Kuala District is certain that the more solitary network of organizations and added by the funding support of the Golkar Party elites that owns the mining business network has become an unmoved force during the campaign period. Not only that, funding support for the couple Normaliyani-Rahmadian Noor came from local businessmen (Barito Kuala). A local entrepreneur who is engaged in a renowned contractor named H. Inab.

According to the Leadership Ethnicity Bakumpai, Mr. Budiman, that H. Inab has provided funding of Rp 5 billion for the couple Normaliyani-Rahmadian Noor in Pilkada. Understandably, during this network of infrastructure projects such as roads, bridges, markets and others controlled H. Inab group and includes Rahmadian Noor with a background of local contractors. Because, in the ranks of the bureaucracy, especially in the Public Works Agency Batola and wetlands filled with people Hasanuddin Murad.

Meanwhile, the Bahrianoor-Suwandi couples carried by the National Awakening Party (PKB) and Gerindra Party can not do much in political gambling. Chairman of the Gerindra Party of South Kalimantan, H. Abidin, who was originally expected to provide funding support is not exactly what the couple expected. In fact, according to information circulated and reinforced by a number of respondents, for example Abdul Sani (NGO) activist and tansmigrant resident organization from Java Island) explained that at the time of open campaign and public applying Prabowo Subianti's presence was not present and without confirmation about the absence of the Chairman of the Grindra Party. Similarly, H. Abidin as Chairman of the Gerindra Kalsel Party also did not attend during the open campaign and according to information left for Germany. According to Abdus Sani, there is a political concession between the number one couple, Normiliyani-Rahmadian Noor that H. Abidin does not need to be active to win the second pair of Bahrianoor-Suwandi by accepting a two-billion-dollar compilation as a silent fund. The key figure behind Bahrianoor-Suwandi's nomination is H. Jahrian Noor.

Barito Kuala election is actually a battle of oligarchs to control political and economic territories. As mentioned before, although this area does not have a coal mine but this walayah is a traffic place for coal barges that cross the Barito River which is included in the territory of Barito Kuala Regency. Call it for example, Barito River source of economic income from coal barge crossings at any time but never get clear how much revenue generated from barges that pass through Barito River Flow from the royalty sector or other income sectors. When confirmed from a number of local officials on royalty or other concerns from Barito River's economic activity, almost all of them are silent and unable to explain clearly.

During the election process, the negative issues circulating among the people that the Batola Hasanuddin Murad district received funds from the national mining company PT Adaro Indonesia owned by Boy Tohir cs group, a coal mining company operating in Tabalong and Balangan districts, as well as several districts In Central Kalimantan Province. Transportation activities from this mine production cross the Barito River Flow. Therefore, during the election process, the Bupati of Hasanuddin Murad received Rp 15 billion as a royalty fund. In the midst of the oblique issue, the Bupati gathered the village chiefs of Barito Kuala District to clarify the issue of Rp15 billion.

Where are the positions of h. Sahbirin noor (governor of south kalimantan) and handi syamsuddin in barito kuala elections? At first H. Sahbirin Noor gave support to the couple candidate, Hasan Ismali-Fahrin Nizar before Sahbirin Noor was elected by acclamation to become Chairman of Golkar Party of South Kalimantan.

Over the course of time in the elections there seems to be a signal from the Central Golkar Party Leaders to shut up. That is, take it silent so as not pro active or involved directly support the partner Hasan Ismail-Fahrin Nizar. Must do the backs of the cats supporting the number one pair Normaliyani-Rahmadian Noor who was promoted by Golkar Party H. Sahbirin Noor who has been elected as the Chairman of Golkar Party of South Kalimantan, should give support and win the number one pair Hj Noormiliyani AS-Rahmadian Noor.

This political situation is very detrimental to the political mate of the number three, Hasan Ismail-Fahrin Nizar who had hoped for H. Sahbirin Noor to support the victory in Pilkada. Pada future scenario, has been circulating political calculations in which in the next period, H. Sahbirin Noor will appear again Nominated himself as South Kalimantan Governor for the second time by holding Mardani H. Maming as a candidate for Vice Governor where Mardani H. Maming is currently the Regent of Tanah Bumbu and Chair of PDIP of South Kaliumantan. Barito Kuala elections have become the arena of political calculation of local political elites to measure their power, loyalty, and at the same time build political concessions of local actors or local oligarchs.

H. Syamsuddin or known H. Isam in Barito Kuala election is also barely audible. In the case as always in some elections in South Kalimantan always appear as supporters or supporters of funds or set political calculations for candidates who supported. As is known, H. Isam currently as PAN Council Advisory South Kalimantan and Chairman of DPW PAN South Kalimantan is Muhidin former Mayor of Banjarmasin and former political rival H. Sahbirin Noor in South Kalimantan Governor Election. H Isam is the nephew of H. Sahbirin Noor as the main supporter of political funds in the elections of South Kalimantan Governor since 2015.

Barito Kuala election is like a proxy war of local actors to dominate political and economic territory. For political design in the future the actors always try to keep some territory to make the ruler in the region through the support line of Political Party. By placing people from politically-led parties it will make it easier to build political and economic concessions. The involvement of mine actors behind the Pilkada capitalization, as a political broker or supporting financier, and a strategy for building power relations or patronage with a potential ruler of the region.

The capitalization of Local Head Electons as process democracy in the local political landscape in South Kalimantan, especially in Barito Kuala, the issue of natural resource management always color political marketing among actors involved in power struggle. The phenomenon of mining entrepreneur involvement behind the capitalization of Pilkada becomes the arena of conspiracy and economic patronage. Most local rulers are elected in elections behind a mining entrepreneur or the ruler of that area backed by mining entrepreneurs and supported by fund from mine operators with mine business connections.

This is the fact designed by local capitalist groups, not even close possibly also get funding support from capitalist in Jakarta. Therefore, capitalization and political pragmatism have led Citizens into the game politics (money politics) or buying and selling votes (vote buying) that actors play in Pilkada to influence the people. Do not

be surprised if Pilkada gave birth to local rulers berwatak Predatory oligarchs amid issues of democratization (Didi Gunawan, Journalist, Interview, 6 Peberuari in Banjarmasin, 2017).

Discussion. The power relations will give birth to a business cartel which is predatory, where the local economic resources are only on Groups of such predatory oligarchs. The mine has become part of the arena of economic and political interest struggles among local actors. Therefore it is not surprising that the political scene in South Kalimantan is controlled by force Capital or dominated politicians with entrepreneurial background mine. Amidst the capitalization and political pragmatism, the politicians whose Entrepreneurial background or capital owners, will have great opportunities to win political power struggles through political and transactional concessions. Not strange if the mining resources Become hostage and dominated by local oligarchs as instruments Conspiracy of interests, as stated by local political observer Setia Budi (Interview, 11 Peberuari 2017 in Banjarmasin).

Conclusions. Since the death of one of the central political and business leaders in South Kalimantan, H. Leman, automatically only two forces affect the political map in South Kalimantan. That is, the financial strength and support of government that is now controlled by H. Isam (Jhonlin Group), although on the one hand must be opposed with silent movement or openly from Binuang Group with the main actor, H. Izai and H. Ciut. However, when H. Isam was able to gain political and governmental means proven by the control of South Kalimantan Provincial Government held by H. Sahbirin Noor, including political party networks such as PDI Perjuangan, PAN, Golkar Party, PKS, and Hanura Party and others. H. Isam has incarnated and took the position left by H. Leman, after his death.

With that position, H. Isam has also built a strong and influential political network in almost all major political parties. Although Rudy Ariffin, a former governor of South Kalimantan, is able to control the United Development Party (PPP), but essentially debt service or politics to the success of the child, HM Aditya Mufti Ariffin during legislative elections 2014. This further indicates the dominance of the main actors in business and political networks in South Kalimantan is still held by H. Isam. Meanwhile, the concentration of H. Izai and H. Ciut is only in the local level, especially Tapin regency which is ahead of the succession in 2018, after being pressed by Jhonlin Group with power and law networks supported by Police and Military.The phenomenon that occurred in the 2017 Batola Election has shown that financial power, business and political networks including law enforcement officers controlled by H. Isam with a leading figure who appeared to the public, South Kalimantan Governor H. Sahbirin Noor has become the actor of determining the way of political direction in South Kalimantan. Although not appearing publicly, H. Isam hands still gripped strongly in politics and business in South Kalimantan. Whether later in elections in 2018 which will take place in four districts of Tanah Laut Regency, Tabalong Regency, Tapin Regency and Hulu Sungai Selatan Regency (HSS). Even so, out of the four regions that will hold elections of Regent's Regents in 2018, Tanah Laut District will be an exciting battle, and the patterns applied in the 2017 Regional Elections can be repeated again.

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EUROPEAN UNION EXPERIENCE IN REGULATING CUSTOMS OPERATIONS OF ENTERPRISES

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Abstract. *After choosing the European integration vector of development and ratification of the Association Agreement with the European Union, Ukraine faced many obligations to bring key areas of the state in line with European standards and norms, significant functions of the state. The purpose of the article is to substantiate the principles of reforming the national customs system and analyze foreign experience in regulating customs operations of enterprises. After all, in the context of the spread of integration and globalization trends of world development, there is a need to unify national customs systems that will unite with a common idea of functioning, focus on the same principles and standards of activity, use common approaches and methods of work. Such unification in any case will not level national customs interests, but, on the contrary, will contribute to solving existing internal problems and ensuring the progressive development of the customs sphere and the state as a whole. Together, the proper fulfillment of all the tasks outlined forms the competitiveness and investment attractiveness of the country at the international level, strengthens its image as a profitable stable partner among other countries and a reliable participant in international organizations, provides progressive socio-economic development. Such functional versatility of the customs sphere clearly separates its place in the structure of the state and identifies a priority role in the implementation of state policy and entrepreneurship.*

The article analyzes the main stages of customs regulation in the EU countries. The main provisions of the European Economic Commission are considered. The characteristic features and ways of implementation in the practical activities of customs administrations of software (bases) ASYCUDA were studied.

Keywords: *customs system, customs policy, international standards, basic subsystems, reform, expert rating, European integration.*

JEL Classification: A11, B26, D78, F13, F21

Formulas: 0; fig.: 0; tabl.:1; bibl.: 27

Introduction. In any country in the world, the customs system outlines its state borders, thereby forming territorial integrity; it is a kind of barrier to the movement of dangerous products across the border, thus forming national security; it acts as a litmus indicator for checking the quality of goods, protecting society from harmful and poor-quality products;is the conduct of legitimate international trade in enterprises, simplifying customs procedures for crossing the border; intensifies foreign economic activity of business entities, increasing the level of financial and economic development of the state. Together, the proper fulfillment of all the tasks outlined forms the competitiveness and investment attractiveness of the country at the international level, strengthens its image as a profitable stable partner among other countries and a reliable participant in international organizations, provides progressive socio-economic development. Such functional versatility of the customs sphere clearly separates its place in the structure of the state and identifies a priority role in the implementation of state policy.

Unfortunately, as evidenced by the practice of functioning of domestic customs authorities, today the national customs system is at the stage of stagnation,

characterized by considerable problems in various areas, does not ensure the proper implementation of basic functions, does not reflect international and European standards. In the context of European integration, this situation is unacceptable and requires large-scale reform of the customs system of Ukraine on the basis of taking into account the best foreign customs experience, the implementation of the world-wide customs principles, rules and standards of work, harmonization of customs legislation with the international and European regulatory framework.

Literature review. Theoretical and practical aspects of simplification of customs procedures, world experience of their introduction into the practice of customs control and registration have been studied by domestic and foreign scientists.

Thus, according to I. Berezhnyuk [4], the formation of customs policy public perception of customs regulation and customs in connection with the economic interests and goals of the state affect the definition of guidelines (framework standards) of customs regulation. Within the framework of defining the customs policy, a system of customs regulation is formed, which, in addition to the mechanisms of customs-tariff and non-tariff regulation, includes the customs system. The influence of the state in the person of customs authorities and other subjects of customs relations involved in the movement of goods and vehicles, in order to subordinate its actions to their economic interests launches a mechanism of customs regulation, which is implemented through customs, and customs authorities begin implementation of customs policy .

T. Ruda [11] notes that customs regulation is a reflection of the tasks that the state has in order to implement it, so it is constantly changing.

O. Desyatny [13] believes that the goals of customs regulation should be to ensure the national customs interests of the state and their security. Customs regulation is based on basic national interests and relevant aspects of state national security policy and is carried out through the implementation of relevant doctrines, strategies, concepts and programs in various spheres of state activity (both internal and external) in accordance with current legislation and international legal acts and customs. . Means of customs regulation are used mainly when individuals and legal entities move goods across the customs border of Ukraine.

Scientist I. Ivashchuk [14] defines customs regulation as a system of measures regulating the import, export and transit of goods and other items moving across the border of a given country, their customs taxation, registration and control. However, the author notes that customs policy is not limited to the technique of customs, in fact, to customs measures at the border or in connection with its crossing (inspection and release of goods, customs duties, etc.), but is much broader.

However, issues related to the coverage of current trends in improving the efficiency of customs regulation, the prospects for further development of the partnership, need more detailed study.

Aims. The purpose of the article is to substantiate the principles of reforming the national customs system and analyze foreign experience in regulating customs operations of enterprises.

Methods. In the course of the study, such methods were used as: causal method – in the process of analyzing the state of customs regulation in the EU countries; streamlining – during the systematization of the main provisions on customs affairs; comparison - the main provisions of the European Economic Commission; methods of system-structural analysis to determine the features and ways of implementation in the practical activities of customs administrations of software (bases) ASYCUDA; method of scientific generalization, which made it possible to formulate conclusions.

Results. Modern national customs policy is closely connected and is directly dependent on the customs policy of foreign countries, customs unions, international organizations, belongs to the activities of the state, which have a cross-border direction, need to be brought to international legal norms for the convergence of national legal systems in the field of customs.

In addition, the image of the state is a multifaceted structure that takes into account the system of values of the state, the activities of state institutions, human rights bodies, the economy, etc. In any country in the world, the customs system outlines its state borders, thereby forming territorial integrity; it is a kind of barrier to the movement of dangerous products across the border, thus forming national security; acts as a litmus indicator for checking the quality of goods, protecting society from harmful and poor-quality products; promotes the conduct of legitimate international trade in enterprises, simplifying customs procedures for crossing the border; intensifying foreign economic activity of business entities, increasing the level of financial and economic development of the state [1].

The last century is characterized by the active creation of economic integrated groups. An example of uns analogue economic integration was the European Union, which combines 27 European countries in a single customs, trade, legal and economic policy. The formation, in accordance with EU treaties, was the starting platform for the process of European integration and the beginning of the creation of a united Europe.

At the same time, in the world practice of the existence of integration groups, the most common types of economic integration are the free trade zone and the customs union.

The development and formation of EU customs regulation is directly related to the creation of a customs union at the EU level, which provides for a common space in which the free circulation of goods and persons is carried out. At the same time, it is glorified by the common eu actors in order to take measures in the field of trade, tariff and non-tariff policy towards third countries. EU legal acts define the boundaries of the customs territory of the Union, where, in addition to some cases, a single customs legislation is applied.

The formation of customs regulation in the EU countries can be divided into four main stages (Table 1).

Addressing the EU customs regulation, it should be mentioned its connection not only with national but also with international law, because the activities of international organizations and their bodies, in particular the WMO, GATT-WTO, the UN Economic Commission for European Economic Affairs, which is associated

with the establishment of new standards and the development of norms aimed at regulating customs relations, significantly influenced the development of EU customs law.

Table 1. Stages of customs regulation in the EU countries

Stages	Description
First stage	The beginning of the creation of the customs union, which began with the signing of the Treaty on the European Coal and Steel Association. Subsequently, in 1957, all customs duties on imports and exports and equivalent fees were abolished, as well as quantitative restrictions on the import and export of certain goods and products.
Second stage	Signing of the Treaty on the European Economic Community (1957), in accordance with Art. 9 which proclaimed the creation of a customs union. The former art.. 13 and 14 of the Treaty obliged member states to gradually abolish duties and fees, which had an equivalent effect during the transition period - from January 1, 1958 to December 31, 1969, which was completed ahead of schedule, namely July 1, 1969 However, it took more than 20 years to eliminate by decisions of the Council, Commission and Court reasons that prevented free trade between member states.
Third stage	The new stage is related to the adoption of the Council Regulation (EPP) of July 23, 1987 on the tariff statistical nomenclature and on the Unified Customs Tariff. At this stage, the Council Regulation No. 918/83 of March 28, 1983, which establishes a system of exemption from EU duties, was also adopted.
Fourth stage	The main stage in the formation of EU customs law is related to the adoption of the Council of the European Economic Community Regulation of 12 October 1992 on the approval of the EU Customs Code and the adoption of the so-called Implementation Provisions approved by Commission Regulation No. 2454/93 of July 2, 1993.

Source: generated by the author based on [3-8]

Thus, the activities of the World Customs Organization are aimed at harmonization of customs affairs by member states. An important component of this work is the recommendation unification of customs legislation. One of the main functions is the preparation of draft conventions and amendments to the convention, as well as the development of recommendations that ensure the monotonous interpretation and application of conventions. All EU member states are members of the World Customs Organization, as well as parties to international agreements concluded under its auspices, the consent to be binding on which was granted within the framework of the EU's unified customs policy.

It is worth mentioning that the GATT/WTO rules contain provisions on customs affairs, in particular:

- customs-tariff regulation;
- customs evaluation;
- anti-dumping and compensatory duties;
- customs unions and free trade zones;
- Fees and formalities related to import and export; prohibition
- Import and export
- contingent of imports and exports, etc. [9].

At the same time, there is still a special body – the Working Group on Customs Affairs of the European Economic Commission, which operates in Geneva as an auxiliary body of the UN Economic and Social Council.

The European Economic Commission is one of five regional economic commissions, which consists of all European states. It has 15 main bodies, one of them is the Committee on Inland Transport, which deals with road, rail and river transport. The Committee prepared a glossary of international customs terms, which unifys customs terminology and definition of the customs operation of European countries [10-13].

It consists of working groups on various types of transport and the Working Group on Customs Issues (Group of Customs Experts). This group is a practically specific body for handling customs issues within the framework of the European Economic Commission. It was organized in order to create an active international apparatus, which should be engaged in the development and implementation of unified customs systems, the development and improvement of customs equipment, customs legislation of states, as well as simplification of customs formalities at the borders.

In its activities, the Working Group on Customs Issues made a great contribution to the development of more than 13 international customs conventions and other international treaties, in particular the Customs Convention on the Transportation of Goods with the Application of the TIR Carnior (TIR Convention) of 1959 and 1975, the Customs Convention on Container Transportation of 1972 and the International Convention on the Harmony of Conditions for The Control of Goods at the Borders in 1982.

Since the norms of international agreements do not have a direct effect in the system of EU law, in order to implement these norms within the framework of the law and order of the European Union, measures for their implementation into EU law were necessary.

The implementation can take place at the council level, if necessary , by the Parliament and the Commission. It should be noted that only an individual transformation leaves no doubt about the effect of the international norm in EU law, that is, when the norm of the agreement is reproduced in each case in the binding act of the EU body, such implementation provides for the transition of the norm from international law to European law, allows to assert the existence of rights and obligations affecting the international agreement, as well as the existence of judicial protection of such rights in national courts and the EU Court of Justice. At the same time, it leaves no possibility for any restrictive interpretation of it by the EU Court.

When performing a comparative analysis, it is worth distinguishing two main components:

- the EU customs regulation system solves two main tasks that pre-state the specifics of EU customs law: ensuring the monotonous application of the Single Customs Tariff and ensuring the freedom of movement of goods through the Community;
- customs union as a form of economic integration of states is a prerequisite for further integration processes, for the successful development of which an independent system of legal regulation should be created, because the usual combination of international legal and national legal means of legal regulation does not ensure the

effective implementation of the goals of the customs union, and therefore the possibility of transition to the next stages of integration [15-17].

It is advisable to note that the customs union was one of the first on which the EU was based. With its advent, duties on internal borders were abolished and the general import taxation system was established. Customs control at the internal borders simultaneously disappeared. Currently, customs control and customs services are only found at the external borders of the EU. They are entrusted not only with the function of controlling the commodity flow, but also the functions of environmental protection, protection of cultural values and much more.

The Customs Union is the replacement of two or more territories with one customs territory in such a way that duties and other restrictive means of regulating trade are abolished in relation to the bulk of trade in goods passing from such territories, as well as conduct a unified customs policy regarding the trade in goods not included in the union. The common market provides, in addition to the free movement of goods within the customs union, and the free movement of production factors - labor, capital, enterprises [18].

In general, the customs union is a single trade zone in which all goods are moved freely regardless of whether they were produced directly in the EU or were implemented.

In addition, the work of customs services is quite complex. the European Union sets tariffs for imports in accordance with the provisions of international agreements (mostly those concluded by the World Trade Organization). which are economically developed. These countries include the countries of the European Economic Area, such as Isladiyah, Liechtenstein, Norway, Switzerland, former British, French and Portuguese colonies in Africa, the Caribbean and the Pacific basins, as well as some Mediterranean countries.

Customs control is carried out with the direct participation of customs services. They control the compliance of goods crossing the border with international standards and EU standards.

Customs services control the crossing of the border, thereby protecting biological species that are on the verge of extinction. In addition, through customs control procedures, national cultural values are protected.

Control is carried out in accordance with the transportation of certain types of technical means, thanks to customs services it is also controlled by copyright compliance (for example, customs removes millions of counterfeit and pirated disks every year). All this, of course, requires a high level of professionalism of customs officials.

Customs authorities also perform statistical functions by concentrating information on foreign trade statistics. For example, they must maintain a register of goods on which quotas can be imposed, for the reasons that these goods do not correspond to the level of goods of the European Union. Information collected by customs services during the study of commodity flows helps in understanding the economic trends that are necessary to determine customs policy [22].

Another task of the EU customs services is to control the crossing of the border by individuals with large amounts of money, both in cash and checks, in order to prevent money laundering. Customs services control and prevent the process of illegal border crossing. Customs services regularly fight organized crime and cooperate with the border police (immigration services).

An interesting fact is that by 1988, EU customs services used about 150 different forms of documents and declarations during the execution of goods. To date, this procedure is simplified and there is only one form of declarations – the Unified Administrative Document. The EU plans to spend a significant amount of money on automating all customs procedures, including the use of cargo scanning devices, which will significantly speed up the work of the customs service and save customs inspection time.

Customs administrations of many European countries are now actively serviced by the ASYCUDA system and its national modifications. ASYCUDA automated customs data processing system is a universal automated customs data management system through which all customs clearance processes can be processed.

Transaction data and management are stored in a relational database management system. The system takes into account all international norms and standards relating to customs clearance in accordance with the procedure established by ISO, the World Customs Organization, the United Nations. An important characteristic of ASYCUDA is its flexibility, that is, the ability to adjust in accordance with the national characteristics of individual customs regimes, tariffs, customs rules and legislation.

This created the preconditions for the installation of this automated customs data processing system in more than 90 countries of the world. A significant sector among ASYCUDA users [26] is made up of European countries such as the Kingdom of the Netherlands, France, Lithuania, Latvia, Moldova, etc.

The use of ASYCUDA in the practice of customs administrations should ensure:

– facilitating trade through normalization of forms and documents, standardization of data, simplification and automation of customs procedures to speed up the execution of goods;

– increasing the level of efficiency of customs control through the use of modern tools and methods, the introduction of reliable procedures and ensuring a full audit and mechanisms for controlling customs operations;

– improvement of customs management and control by providing governments of ASYCUDA member states with accurate and timely statistical information on foreign trade and income, which can later be used for trade policy purposes and management decisions [27].

The ASYCUDA system provides an opportunity to reduce the time required for customs control and customs clearance of goods moving across the customs border by water modes of transport. This, in turn, leads to a reduction in the time of the vessel's stay in the port, simplifies the work of customs administrations, facilitates and accelerates compliance with customs formalities by declarants and ship administrations. In addition, ASYCUDA creates a wide range of opportunities for

international cooperation of customs administrations, including information exchange, acts as actually a platform for unification of customs procedures of customs control and customs clearance at the international level.

Conclusions. Taking into account the above, the use of the experience of European countries, that is, to use the ASYCUDA system, through which customs control and customs clearance of goods moving across the customs border by water modes of transport will be carried out.

At the same time, customs regulation in the EU is not directly regulated by the EU Customs Service, as there is no separate section, such as the ICU. Thus, in the section 3, the EU ICC stressed the importance of customs control over goods brought to the customs territory of the EU. Separately, Section 2 regulates the procedure for the presentation of goods for customs control, and Section 3 regulates the regulation of the procedure for declaration of goods. Customs control by customs depends on the origin of the goods and is possible only if the goods, person or vehicle of the external eu border cross. Customs control is not carried out at the internal borders of the European Union.

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CHAPTER 2
DEVELOPMENT OF FINANCE, ACCOUNTING AND AUDITING

THE PROBLEMS FACING FINANCE IN THE ARAB COMMUNITY: ONLINE EDUCATION

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Abstract. *The evidence based study investigating the financing procedures in the higher education institutions in the Arab communities works to identify the challenges and constraints to the education financing. On the other hand, the evidence based study investigates the possible solution to the challenges and constraints that hinder educational development in the Arab nations. The study comes up with recommendations that help the Arab and the developing nations improve their education systems through different strategies. In the current world there is a challenge due to the changes in technology that every nation is trying to adopt. The developed nations have successfully incorporated technology in their education systems, which has improved learning, especially during the current world COVID-19 pandemic. Online learning is safe and has played a significant role in curbing the spread of the virus. The Arab nations are also affected by the pandemic, which has resulted in changes in the education system resulting in increased dependence on technology. The Arab nations have a great income source since they produce the highest percentage of petroleum products in the world. However, these nations are associated with political instability and wars, which negatively influence education and technology. The key factors that influence the financing of education in the Arab world include brain drain, financial crises increased wars and terrorism, deference between education outcomes and labour market, shortage of government resources, political instability and differences poor private sector participation, reliance on policy learning and poor technological advancements. The Arab nations, however, need to consider the challenges mentioned above and constraints to ensure that the financing and budgeting sector prioritizes education systems. Collaboration with other nations and joining world education treaties will ensure education among the Arab nations.*

Keywords: *Higher education institutions, the Arab world, Sources of income in the Arab nations, Education financing, constraints, higher education, online learning.*

JEL Classification: F02, G29, I25

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Introduction. The higher education, secondary and primary education institutions offer the best education to improve literacy in a nation. Though every nation has a different education system, it is important to note that different styles ensure that the students effectively and efficiently acquire the education (Alkubaisi, 2020). Since the development of technology in education, many nations have adopted different teaching methods based on the country's available technology. The developed nations have higher levels of technology which has played a significant role in improving learning. On the other hand, the developing nations are struggling with the absorption of technological techniques to ensure that education levels are improved. The emergence

of the COVID-19 pandemic has shown how technology plays a significant role in learning (unsdg.un.org, 2020). As some of the nations indefinitely closed their institutions of physical learning, others changed from physical learning to online learning, which was highly supported by technology advancements.

Literature review. The Arab nations were not left behind since they were also highly influenced by the pandemic. They also employed different teaching and learning methods to ensure that they acquired the best form of education from their curriculum. The Arab nations play a significant role in developing the world economy since most of the nations are the biggest source of petroleum products. Therefore, these nations earn a lot of money. Regardless of the increased earnings from petroleum sales, these nations are highly influenced by war which negatively influences development (Eze, Chinedu-Eze, Okike, & Bello, 2020). As a result, technological development levels are low due to tension in the nations and mass destruction during wars. Education is, therefore, highly affected.

Technology plays a significant role in the line between social and economic changes. It creates a force that destroys human existence and links the human to machines. Virtual learning, for instance, ensures that there is not physical learning, and the students call to learn from different corners of the world through videos and online lectures. Students' examination is also achieved online, which reduces costs and helps nations reduce the increased spread of the world pandemic; COVID-19. Different factors are associated with the differences in education levels among the Arab nations with the European nations. This paper is based on analyze the factors that have influenced education financing in the Arab nations (Wu, Garza, & Guzman, 2017).

The paper is based on literature research and findings from other researchers from the same topic. The key factors that influence the financing of education in the Arab world include brain drain, financial crises, increased wars and terrorism, deference between education outcomes and labour market, shortage of government resources, political instability and differences, poor private sector participation, reliance on policy learning and poor technological advancements.

Aims. The aim of the article is to study the financing of education and online learning.

Methods. The research methodology involves the use of comparative analysis, general methods of analysis and synthesis, as well as other methods to achieve the goal of the article.

Results. Since the last 30 years, the Arab world has seen tremendous change and advancement in education after the nations worked towards liberation by taking education as a strategic investment. The demand for labour in the markets employment industry has increased growth in private, public and public-private institutions that offer advanced education. The growth is evident from 1953, when there were 13 public and private institutions that offered higher education (Eze, Chinedu-Eze, Okike, & Bello, 2020). Currently, there are over 750 higher learning institutions in the region. More developments are experienced as many are under construction and expected to be completed by 2050, forecasting the number to be above 1000 higher learning institutions. Regardless of the positive trends shown by the increased numbers of

higher learning institutions, there are underlying challenges that have resulted in the delays in construction, opening and delivery of the required education in the region. When comparing the education systems in the Arab nations with the developed nations and the nations in Europe, the education system in the Arab world is low and requires many changes and adjustments. Therefore, many challenges to education financing have resulted in delays and poor education systems in some regions (Wu, Garza, & Guzman, 2017). As a result, most students tend to seek higher education in the European nations and other developed regions to meet the world labour market criteria.

Higher education is highly accepted in the Arab world and plays a significant role in preparing the citizens to meet the demand in the labour market. Education in this section of the world has created a link between the outputs and the employment industry's skills. Increased education levels are a positive indication in the countries' development and the Gross Domestic Product (GDP) since there is enough skilled labour to work in the industries. Therefore, the production in such nations is increased. For instance, China and the United States are some of the nations that have capitalized on education to create enough skilled labour. The availabilities of learning modules for the students and the working has helped increased the employment required skills. Therefore, these nations have high levels of productivity. The U.S. and China are the biggest production rivals, resulting from the increased education levels. The Arab nations have highly depended on foreign labour in some sections due to limited and challenged educational financing systems.

Education Financing in the Arab Communities. The source of funding of any government project is based on the government's revenues and taxes from its projects and the public. The primary source of funding for Arab education is the government and public money. Ninety per cent of the higher education funding, for instance, is from government projects (Kirdar, 2020). In this case, the government subtract some amounts of funds from the national projects and subjects the funds to education; in cases where there is political instability, the percentage that the government subjects to education are limited. As a result, their development in the education industry is constrained. The rest of the funds (10 per cent) is catered for by the students' fees. In the Arab nations, there are few students as the population is low in these nations. Therefore, the number of students who manage to the universities and other post-secondary learning institutions is low. The government, therefore, tends to borrow and depend on the developed nations to finance education. Other than the fees and the government contribution to the education system in the Arab nations, foreign aids, scholarships, individual self payments, and NGOs' contributions have played a great role in supporting education.

Higher education in the Arab nations constitutes major institutions; the Universities comprise 65 per cent of the institutions. On the other hand, the number of private institutions has increased, which has improved the delivery of education in the region. However, the increase in public and private institutions has posed a challenge in the funding between the two sectors of education (Kirdar, 2020). Even though the government, in collaboration with the private sector, has tried balancing the conflict between the private and the public institutions in terms of financing, communication

between the two sectors is evident. However, the major issue is the amount of money generated by the private institutions and the public funding for the government institutions. The government sets taxation fee for the private sectors, which means that it is still taxing the private institution.

On the other hand, the institutions depend highly on the government project to ensure that the smoothly run in the Arab world. Therefore, there exist conflicts resulting in the closure of some of the private learning institutions. On the other hand, increased taxation has resulted in increased fees in the private sector to ensure that they offer the required quality of education.

Commercial and private organizations are the key contributions to higher education's private funding in the Arab areas (Badran, Baydoun, & Hillman, 2019). These sectors are not related to government budgeting and do not participate in any way towards government agencies' administration. As a result, they work towards identifies ties and links to the world donating bodies and the international non-governmental agencies for funding. These organizations, however, have limitations towards their educational funding. Some of the financing institutions aim at helping needy students. Therefore, the funds are subjected to a specific category in the institutions, and some donate to the institutions that offer advanced education to the people living with disabilities (Aẓmah & David Bond, 2019). As much as these organizations play a great role in finding education in the Arab nations, they are highly influenced by political instability. Private institutions are considered expensive and meant for rich people. Therefore, the private institutions may not get the funds from these NGOs since they aim at supporting the needy students in the public institutions of higher learning. The increased wars and political instability also restrict the non-government and the private sector from participating in the financing since learning takes longer than expected.

Key Sources of Funds for Higher Education. The Arab nations have wealthy since they are the greatest producers of petroleum products. However, four broad themes are considered the key financiers of higher education in the Arab region. Petroleum products top the sources of funding as they make the major exports from these nations. The gulf states ensure effective and efficient secondary education through stipends offered to the secondary school citizens within the region. Nations like Syria, Egypt, Yemen and Algeria do not take education as a priority. Therefore, they took the strategy of free primary, secondary education and higher education, which has attracted many students in the region (Azzi, 2018). However, the higher education finding becomes a challenge after the government keeps reducing the subsidized support. The third theme used in finding education in the Arab world is free general education for nations with limited resources like Lebanon, Jordan, and Palestine. Finally, the nations support the private institutions by ensuring that the government and privately funded license them. However, the private institutions are allowed to charge different fees compared to the public institutions, which has helped them raise funds from the students and individual contributions. The world tycoons and wealthy businesspeople have contributed to the institutions' funding through monetary and material support.

The Research Findings. Various constraints are limiting the efficiency of funding education in the Arab nations. Major variables have contributed to poor and ineffective higher education financing strategy in the Arab nations (Fardoun, Downing, & Mok, 2018). They include brain drain, the gap between the education outcome and the labour market, dependency on others and policy learning, financial crises, shortage of government resources, poor participation of the private sector, and civil society.

Brain Drain. Brain drain is the "migration" of highly skilled students to western university. The Arab nations are highly affected by the bright students' movement in the universities who go abroad to the western universities for further learning (Eze, Chinedu-Eze, Okike, & Bello, 2020). Due to the limited resources in their nations, these students apply for scholarships and seek higher learning in the developed nations. Most of the times, migration occurs from developing nations to the developed nations. When these students graduate from the westernized universities, they are offered job opportunities in these nations. There are optimal job opportunities, increased social status and quality education in western universities, which increase the number of students seeking scholarship from the Arab nations. These students can increase creativity and improve their homeland's well-being but are absorbed by the developed nations; some of these students end up changing their citizenship. Online education enables the students to also learn from their countries which helps the students who cannot migrate learn from their countries.

The gap between education outcomes and the labour market. The Arab nations have high rates of unemployment rates. The unemployment rate in the Arab world was 9.6 per cent in 2016. The rate has remained stagnant for years and reduced to 7.3 per cent in 2018. It means that more than 4 million people in these nations are seeking employment (Aẓmah & David Bond, 2019). When the people in these regions released an increased rate of unemployment, they work on lowly paying jobs, which has reduced the nations' productivity. There are many graduates in the Arab nations living below the level of poverty. As a result, there is no motivation to schooling, which has reduced the number of students in the universities. Therefore, the students' financial support in private and public institutions has reduced (Kirdar, 2020). When students and the community assume that secondary education serves no purpose, they tend to seek education in other nations and employment.

Policy learning and dependency on others. The Arab nations are characterized by increased dependence on other nations for financial support in the private sector and relevant education skills. The Arab nations highly depend on educational skills, including borrowed curriculum from the developed nations. They are, therefore, not able to easily adapt to the borrowed curriculum, which results in low-quality education (Alkubaisi, 2020). The Arab nations highly depend on imported knowledge and skills from the developed nations. The other nations have values, standards and cultures that are difficult to incorporate in the Arab nations. The transfer of the westernized culture in the Arab nations has failed the delivery of quality education.

Financial Crisis. Financial crisis negatively affecting government budgeting. The limited budgeting has limited the Arab nations from investing in technology that could help foster online learning. When the government is unable to meet its financial

obligations, there are chances of increased borrowing. The amount allocated for financing higher education and technology reduces, which results in low-quality education and limited chances to online learning. On the other hand, the higher institutions staff gets underpaid, resulting in strikes and absenteeism. The Arab community is associated with increased people who learn and increase their job-seeking ability to reduce the increased unemployment rates (Badran, Baydoun, & Hillman, 2019). However, the government, on the other hand, cannot financial the increased number of students due to the increased financial crisis.

Limited Government Financial Resources. The Arab nations are the biggest producers of crude petroleum. However, they are characterized by limited resources that could finance their education (Eze, Chinedu-Eze, Okike, & Bello, 2020). There are other government issues, including the importation of foods and the basic needs, which reduce the amount allocated for education purposes (Azzi, 2018). The majority of the Arab nations are located along with the world's biggest deserts; therefore, there is a limited supply of food and basic needs. The government lacks the resources that could be converted into cash to finance education. As a result, the budgeting is based on food and basic amenities. The nations, therefore, do not consider education a priority. As a result, there is also no need to capitalize on technology learning which fosters online learning. Physical learning is supported in such nations. Due to the increased spread of the COVID-19 virus, these institutions have closed indefinitely.

Participation of the Private sector and the Civil society. The private sector in the Arab world is still developing. Considering the number of private and public schools, most schools are owned by the government (Eze, Chinedu-Eze, Okike, & Bello, 2020). The private sector focuses on improving people's living standards, which reduces the focus on education. Insome of the nations, the private sector works towards land reclamation to grow agricultural products. Therefore, there is little focus on education, reducing the amount of private sector budgeting on education. The situation is different in developing nations where private funding plays s significant role in financing education and other sectors (unsdg.un.org, 2020). The high standard of living in the developed nations enables the parents to pay for their children education, reducing the government burden on fees. The institutions are, therefore, not able to support online learning.

Conclusion. The role of the government in financing higher education in the Arab nations is critical. One of the strategies is ensuring political instability that will attract private investors, which will improve these nations' economy. It is also critical to increase and improve land reclamation strategies to increase agricultural production. Such strategies will reduce government spending on food and basic needs, improving the higher education allocations.It is also critical for the government to establish a higher education fund that will help the public and private sector's participation n financing higher education. The fund will help in the creation of capital contributions to support the public and private institutions. On the other hand, the establishment of a national private fund will play a significant role and encourage the private sector and the civil community. The government should come up with an education system that fits the Arab world. Such strategies will train the citizens for the available jobs, and the

rate of unemployment will be reduced. When there is increased support for higher education, the citizens can understand the need and easily employ the technology available to get every detail of the lecture. Supporting technological advancements in school, learning technology classes will increase the knowledge and skills required for the students to adapt to online learning.

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CHAPTER 3
MODERN MANAGEMENT TECHNOLOGIES

ANALYTICAL EVALUATION OF THE CONFLICT MANAGEMENT EFFICIENCY UNDER THE CONDITIONS OF THE PJSC ARCELORMITTAL KRYVYI RIH

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Abstract. *This article summarizes the arguments and counterarguments within the scientific discussion on the issue of the analytical evaluation of the conflict management efficiency under the conditions of the PJSC AMKR. The main purpose of the research was to develop ways of preventing conflicts in the administrative management. The systematization of the literature sources and approaches to resolving the problem of conflicts in the administrative management has shown that this issue is widely dealt with by both Ukrainian and foreign scientists. The relevance of solving this scientific problem lies in the fact that diagnosing conflicts will make it possible to develop more specific measures to eliminate existing conflicts and prevent new ones from occurring. The methodological basis of the research was general scientific and special methods of cognition. The methods of theoretical generalization, grouping and comparison have been used in the paper. The bibliometric and bibliographic methods were used in identifying problematic issues related to the evaluation of the conflict management efficiency. The methods of concretization, analysis, synthesis, abstraction, and the dialectical method formed the basis for improving the system of conflict handling in the administrative management. The graphical method was used for the visual representation of statistical data. The years 2012 until 2019 were selected as the research period. PJSC ArcelorMittal Kryvyi Rih was selected as the object of the research.*

The results of the research lie in the fact that the recommendations developed for resolving conflict situations can be used in the practical activities of the company under research. In order to enhance the company's profitability and operational efficiency, the managers of PJSC ArcelorMittal Kryvyi Rih need to demonstrate their professionalism in anticipating, analysing and handling conflicts. The level of relevant knowledge, creative approach, strategic thinking and analysis of the situation by the company's managerial staff are the key components of successful conflict resolution and managerial decision-making. The scientific novelty of the results obtained lies in the development of efficient methodological tools for diagnosing conflicts, which will make it possible to develop more specific measures to eliminate existing conflicts and prevent new ones from occurring.

Keywords*: analytical evaluation, administrative management, management, conflict management efficiency, managerial conflicts.*

JEL Classification: H10, H73, O10, R20, R28

Formulas: 0; fig.: 7; tabl.: 3; bibl.: 10

Introduction. The management system of a modern company can exist in at least two incarnations: on the one hand, it generates managerial conflicts, and on the other, it is a way of resolving conflicts, not only managerial, but also any organizational and economic ones. Therefore, conflicts, on the one hand, can be an obstacle to the development of the management system, and, on the other, contribute to such development. It will depend on two factors: the ability to manage conflicts obtaining functional consequences, and the environment for the emergence of managerial conflicts.

In fact, a conflict either slows down the development of the company or becomes a kind of accelerator for its development. A conflict also either brings additional problems to the company and forces it to spend additional resources, or becomes a kind of filter to clean the company from a number of managerial problems, and contributes to their solution. In general, conflicts occur directly in all fields of human life without exception, and managerial conflicts occupy a prominent place among them, often dominate, and are fundamental, i.e. they can create a number of conflicts in other spheres of life's activity. Conflicts cause significant damage to efficient interaction in groups, bring about loss of production resources and time, so the study of ways to prevent conflicts is a very relevant subject.

Literature review. The issue of studying and analysing conflict situations in organizations is widely represented in the modern literature, but remains relevant given the impact of such situations on both the performance of staff and the moral, as well as psychological climate in the team. At the same time, conflict situations identified and resolved in a timely manner can become a means of solving urgent problems. Problems of conflict studies have been actively researched since the mid-1980s by N. Pilat, Y. Sukiasyan, T. Lovkova, V. Borodina, V. Minkina, S. Peshkina, Y. Khimich, O. Markova, O. Skuratska, T. Branitska [3] and others.

The set of problems related to the conflict management and the prevention of negative consequences of the conflicts' impact are considered in the papers of domestic and foreign authors, viz. L. M. Herasina, M. I. Panova, T. V. Dutkevych, L. M. Yemelyanenko, M. V. Prymush, N. V. Grishyna [1]. The authors consider various aspects of conflicts and conflict situations, viz. conflicts that occur during negotiations, psychological aspects of conflicts in managerial activities, and the theoretical foundations of the conflict management.

Despite the availability of significant achievements in the field of the conflict management, the present-day scholars have not worked out a unified approach to solving that problem, and the subject therefore needs further refinement and development.

Aims. Purpose of the article is to develop ways of preventing conflicts in the administrative management.

Methods. The methodological basis of the research was general scientific and special methods of cognition. The methods of theoretical generalization, grouping and comparison have been used in the paper. The bibliometric and bibliographic methods were used in identifying problematic issues related to the evaluation of the conflict management efficiency. The methods of concretization, analysis, synthesis,

abstraction, and the dialectical method formed the basis for improving the system of conflict handling in the administrative management. The graphical method was used for the visual representation of statistical data.

Results. The main conflicts that occur at PJSC ArcelorMittal Kryvyi Rih are divided into two groups:

- between the management and the employees (trade unions);
- between the management and other companies.

That said, internal conflicts are more acute: between the staff, including trade unions, and the owners over the impossibility of normal social security for the employees. The company's management tries to resolve all conflicts quickly and democratically. At the same time, the severity of conflicts tends to become high-profile at the societal level, which requires finding ways to resolve them.

There are also positive aspects in the company's activities indicating the efficient conflict management at the PJSC AMKR in recent years. This is reflected in a decrease in the number of lawsuits and claims filed by the company's stakeholders (Table 1).

Table 1. Information regarding the number of claims filed, penalties paid and lawsuits, in which the PJSC AMKR and its officials are a party

Indicators	Years							
	2012	2013	2014	2015	2016	2017	2018	2019
Number of pending lawsuits, in which claims are considered in the amount of 10 per cent of the assets or more	0	0	0	2	0	0	0	0
Number of lawsuits, in which claims against the issuer's officials are considered	0	0	0	0	1	0	0	0
Number of claims filed, including:	35	29	85	78	63	72	38	45
- regarding the reimbursement of the cost of weight shortages of the products;	7	0	0	0	0	0	0	0
- regarding the delivery of low-quality products;	0	0	0	0	0	0	0	0
- regarding payments;	10	10	25	21	11	9	16	10
- regarding claims for the recovery of losses caused by the company because of its violation of environmental standards;	5	12	11	11	12	8	9	4
- regarding the collection of penalties and fines;	4	1	1	29	11	4	2	5
- other.	9	6	48	17	29	51	11	26
Amount of claims filed, thousands UAH	9859.5	8565.6	62062	37145	35120	42156	27452	19215
Number of recognized claims, including:	5	8	30	22	16	24	14	13
- regarding the reimbursement of the cost of weight shortages of the products;	0	0	0	0	0	0	0	0

Indicators	Years							
	2012	2013	2014	2015	2016	2017	2018	2019
- regarding the delivery of low-quality products;	0	0	0	0	0	0	0	0
- regarding payments;	3	2	17	12	4	3	10	4
- regarding claims for the recovery of losses caused by the company because of its violation of environmental standards;	0	6	6	2	5	2	2	3
- regarding the collection of penalties and fines;	0	0	0	6	2	0	0	0
- other.	2	0	7	2	5	19	2	6
Amount of recognized claims, thousands UAH	93.9	117.2	9213.9	1108.4	2142.5	1845.3	921.2	1025.6
Number of lawsuits filed against the company, including:	134	133	156	127	112	102	124	98
- regarding the reimbursement of the cost of weight shortages of the products shipped by the company;	12	0	0	0	0	0	0	0
-regarding the delivery of low-quality products;	0	0	0	0	0	0	0	0
- regarding payments;	5	9	6	0	0	2	4	0
- from natural persons;	62	83	80	68	38	42	35	27
- claims arising from labor relationships;	17	18	47	9	11	21	7	14
- regarding claims for losses caused by the company;	29	18	0	2	4	0	5	2
- regarding the penalties and fines declared;	7	0	0	7	0	0	0	1
- other.	2	5	23	41	59	37	73	54
Amount of lawsuits filed, thousands UAH	373385	66050	73048	68664	51230	45128	58412	38124
Number of sustained lawsuits, including:	34	14	11	48	33	50	30	18
- regarding the reimbursement of the cost of weight shortages of the products shipped by the company;	6	0	0	0	0	0	0	0
- regarding the delivery of low-quality products;	0	0	0	0	0	0	0	0
- regarding payments;	3	4	1	0	0	0	1	0
- from natural persons;	22	6	6	44	24	39	19	12
- claims arising from labour relationships;	0	1	0	3	3	6	1	4
- regarding claims for losses caused by the company;	2	3	0	1	0	0	1	0
-other	0	0	4	0	6	5	8	2
Amount of penalties paid, thousands UAH	515.5	2475.9	4470.3	1668	217.9	287.3	79083	1138.7

Source: developed by the authors

As can be seen from Table 1, the number of lawsuits against the company decreased from 134 in 2013 down to 98 in 2019 during the analysed period.

However, the amounts of lawsuits and claims against the company are growing. The amount of lawsuits increased from UAH 373,385 thousand to UAH 381,241 thousand, which is an insignificant indicator of growth. However, the amount of claims increased sharply, viz. from UAH 9,859.5 thousand in 2013 up to UAH 19,215 thousand in 2019.

The general model of conflict management typical of PJSC ArcelorMittal Kryvyi Rih is shown in Figure 1.

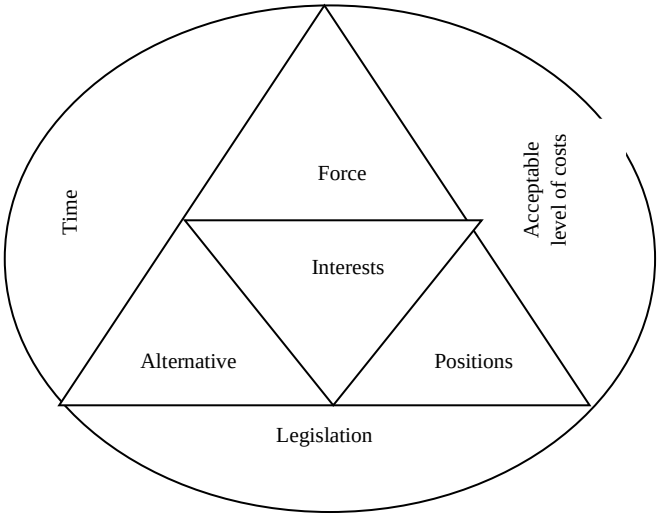

Figure 1. The model of the combination of factors influencing the process of the conflict resolution at PJSC ArcelorMittal Kryvyi Rih

Source: developed by the authors

Participants in a conflict at PJSC ArcelorMittal Kryvyi Rih operate under the conditions of, on the one hand, restrictions and, on the other, opportunities. The limiting factors are the time and the level of costs that the parties to the conflict are willing to bear, as well as the legal framework, within which they operate. The potential of a conflict participant lies in assessing their strong points, searching for alternative ways to resolve conflicts, etc.

Conflicts at PJSC ArcelorMittal Kryvyi Rih are resolved only with the participation of the management. The management represented by the authorized structural divisions is therefore the main participant and at the same time the main body for conflict resolution. That said, conflicts concerning the issues and rights of workers are addressed through the local branch of the Trade Union of Steel- and Mineworkers as well as the Department of Personnel Management. Conflicts that interfere with the corporate interests of the owners are addressed through the corporate governance bodies, viz. the Supervisory Board, the Board of Shareholders, the Audit Committee, and the Board of Directors.

As an entity of a conflict, the management of PJSC ArcelorMittal Kryvyi Rih finds itself in the role of one of the opponents, who defends their point of view, certain interests and positions in relationships with people subordinate to them or business partners from other divisions (organizations). Most often, the manager

becomes a direct participant in the conflict confrontation in cases of violation of professional ethics, deviations from the norms of labour legislation, and when allowing unfair evaluation of the work and behaviour of their subordinates [2].

For a more complete picture of the conflict management efficiency at PJSC ArcelorMittal Kryvyi Rih, it is advisable to evaluate such efficiency using a number of methods.

One of the most common methods for evaluating managerial conflicts is a survey using a questionnaire. Such a survey was conducted under the conditions of the PJSC AMKR. The respondents were 35 employees of the integrated plant, of which 15 belonged to the middle-level managerial staff, while 20 were part of the lower-level management. This survey was about identifying the facts of harassment (mobbing) of managerial employees in the workplace with a view to replacing them. The results of the survey showed that most often harassment in the workplace manifests itself in the following forms: unfair criticism from colleagues (40%), excessive workload and unfounded criticism of the results obtained by the superiors (34%), purposeful misinformation and creating barriers to work (30%), denunciations and complaints (28%), ridicule and jokes "behind the back" (28%), open aggression and animosity (27%), and gossip and fabrications about the "victim" (25%). There are also cases of ignoring the employee in the team (21%), provocations from those around (20%), and petty mischief against the "victim" (21%).

When asked what the cause was and what provoked the beginning of harassment, most respondents said that it was personal animosity towards and misunderstanding of a colleague, which was found to be the case in 32 % of the respondents. That is, there occur, above all, interpersonal conflicts. The survey also revealed that managers quite often ignore the need to form and develop a system of corporate culture at the company, which would help prevent the manifestations of negative phenomena in the form of conflict, risk, uncertainty, mobbing, etc. This conclusion was drawn from the fact that 24 % of the respondents noted that most managerial conflicts occur as a result of negative phenomena at the top level of management (Figure 2).

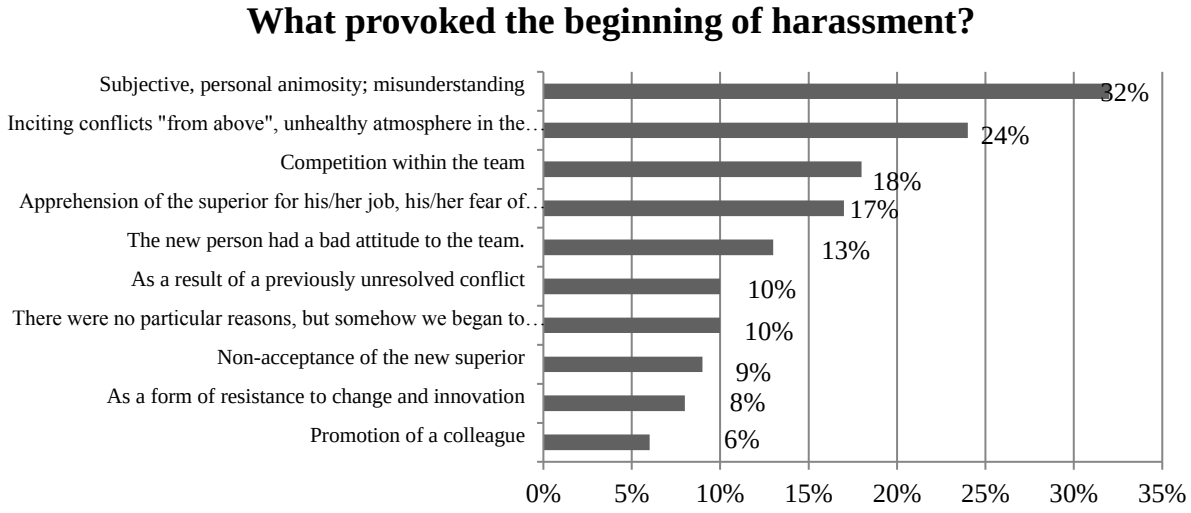

Figure 2. The causes of mobbing at the PJSC AMKR

Source: developed by the authors

To the question: "Does the propensity for conflict affect the likelihood of managerial conflicts?", 77 % of the respondents answered positively (Figure 3), while 23 % did so negatively. We therefore conclude that the socio-psychological characteristics of the employee and the moral and psychological climate in the team of the PJSC AMKR are decisive in the conflict formation.

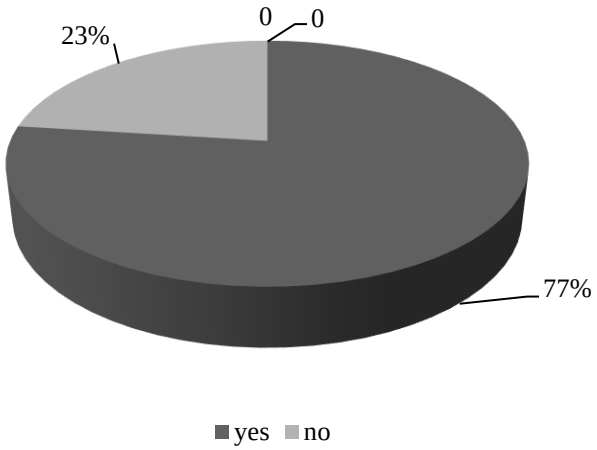

Figure 3. The results of the answers to the question: "Does the propensity for conflict affect the likelihood of managerial conflicts?"

Source: developed by the authors

The answers to the question: "What types of managerial conflicts most often occur during the activities of the PJSC AMKR?" were distributed as follows: interpersonal – 60 %; intergroup – 23 %; between an individual and a group – 11 %; intrapersonal – 6 % (Figure 4).

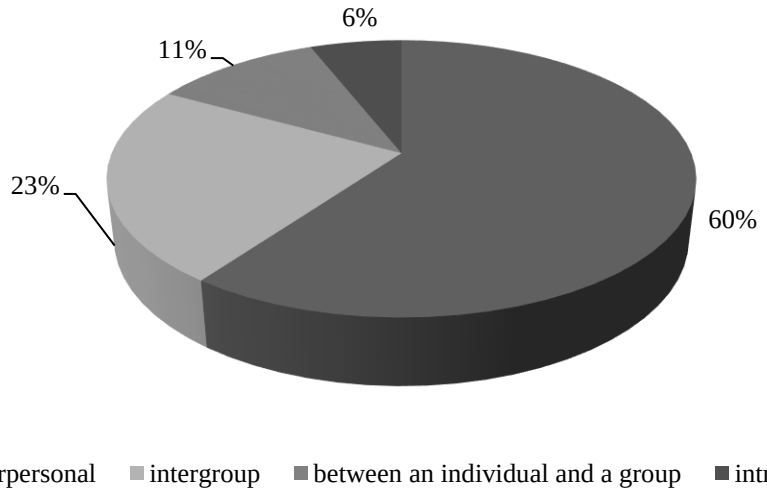

Figure 4. The results of the answers to the question: "What types of managerial conflicts most often occur during the activities of the company?"

Source: developed by the authors

We therefore again receive confirmation that interpersonal conflicts dominate in the managerial activities of the PJSC AMKR. That said, it was important for us to find out just how interpersonal conflicts arise in certain areas, i.e.: whether between managers at the same level, or between a manager and a subordinate, or through

functional relationships. Therefore, the question "What varieties of managerial conflicts most often occur depending on the geometrical type of relationships?" produced the following results (Figure 5).

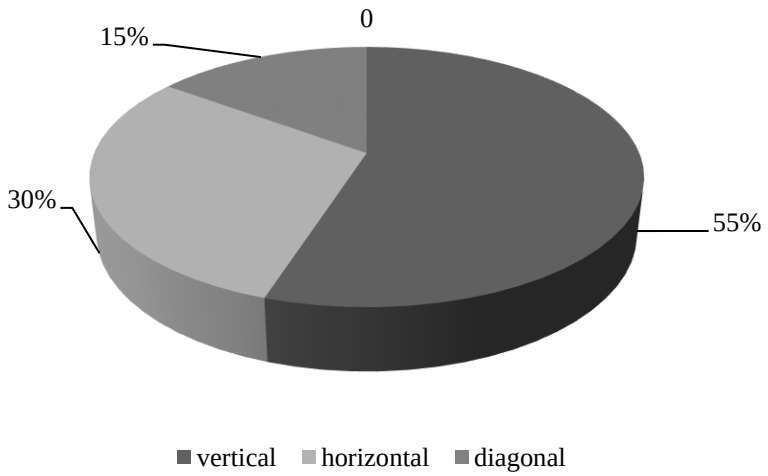

Figure 5. The results of the answers to the question: "What varieties of managerial conflicts most often occur depending on the geometrical type of relationships?"

Source: developed by the authors

The research was also used to identify external or internal causes of managerial conflicts at the PJSC AMKR. The majority of respondents noted that internal causes dominated (Figure 6).

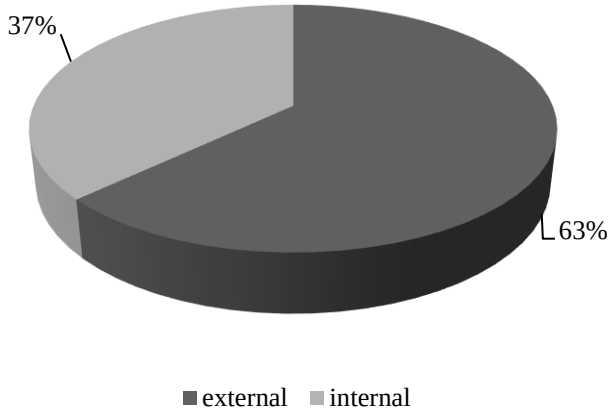

Figure 6. The results of the answers to the question: "What causes dominate in the emergence of managerial conflicts?"

Source: developed by the authors

It was also important to establish what types of consequences of managerial conflicts are observed during the activities of the PJSC AMKR. It turned out that negative consequences were insignificant in number, but still prevailed (Figure 7). That may be due to the traditional stereotypes prevailing in the minds of working people that any conflict is a negative phenomenon.

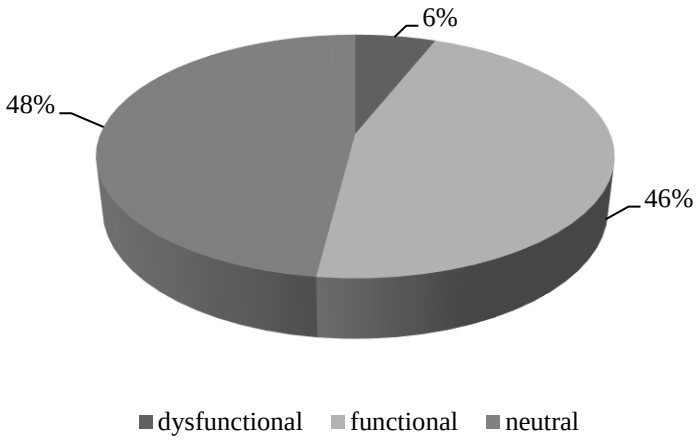

Figure 7. The results of the answers to the question: "What are the types of consequences of managerial conflicts?"

Source: developed by the authors

The research has therefore shown that due to a number of both internal and external negative factors in the activities of PJSC AMKR, managerial conflicts often occur in the relationships of the company's managerial staff, while the virtual lack of up-to-date methods of conflict management causes the dominance of negative (dysfunctional, destabilizing) consequences of those conflicts.

The next area of the analysis of managerial conflicts at PJSC AMKR was the study of their relationships with other types of conflicts, which was also performed by involving experts. The experts were 35 employees of the integrated plant, of which 15 belonged to the middle-level managerial staff, while 20 were part of the lower-level management.

For an expert evaluation, a 5-point scale was used to determine the level of managerial conflicts: 1 point means the lowest level of managerial conflict, 2 points mean the minimum level, 3 points mean the medium level, 4 points mean a level above the medium one, while 5 points mean the maximum level. The types of conflict were evaluated during a selected period, viz. a month. In order to construct the input sample, a preliminary analysis of the data was performed, viz. all values that exceeded the sample average by more than 35 %, the so-called "tails" of the sample set of values, were discarded.

The input data array generated from the expert evaluations was processed using the Statistica 6.0 statistical package (the Correlation matrices submodule of the Basic Statistics/Tables module). After the evaluation had been done, the levels of the correlational relationships between managerial conflicts for PJSC AMKR were summarized in Table 2.

The research primarily shows that there is a direct correlational relationship between all managerial conflicts at PJSC AMKR. That is, the appearance of one of the managerial conflicts provokes the emergence of a group of other conflicts in the company's activities.

Among the conflicts studied, there were no mutually compensating ones. The emergence of such conflicts would reduce the level of other managerial conflicts.

Table 2. The correlation matrix of coefficients of relationships between managerial conflicts at PJSC AMKR

Managerial conflicts	Top level of management			
	intrapersonal	interpersonal	individuals and groups	intergroup
Top level of management: intrapersonal	1	0.543928	0.320256	0.3669
interpersonal	0.543928	1	0.509525	0.778312
individuals and groups	0.320256	0.509525	1	0.763763
intergroup	0.3669	0.778312	0.763763	1
Middle level of management: intrapersonal	1	0.539906	0.538537	0.374634
interpersonal	0.539906	1	0.600481	0.507072
individuals and groups	0.538537	0.600481	1	0.805556
intergroup	0.374634	0.507072	0.805556	1
Lower level of management: intrapersonal	1	0.423415	0.759284	0.756686
interpersonal	0.423415	1	0.422581	0.411086
individuals and groups	0.759284	0.422581	1	0.601432
intergroup	0.756686	0.411086	0.601432	1

Source: developed by the authors

The calculated results of the availability of correlational relationships between managerial conflicts at PJSC AMKR suggest that the emergence of one type of conflict inevitably entails the emergence of other conflicts or an increase in their level, if they already exist. Conversely, the weakening of one of the conflicts leads to the lowering of the level of the existing conflicts or the preventing of other types of managerial conflicts from emerging.

The interaction between the management levels gives grounds to formulate a hypothesis on the existence of correlational relationships between the conflicts of different levels of management at PJSC AMKR. In order to test the validity of that hypothesis, we interviewed experts to identify latent relationships between conflicts that occur at different levels of management.

Table 3 shows the values of the correlation coefficients between managerial conflicts of different levels of management at PJSC AMKR.

Table 3. The matrix of coefficients of correlational relationships between managerial conflicts of different levels of PJSC AMKR management

Managerial conflicts	Managerial conflicts		
	top	middle	lower
top	1	0.777714	0.730297
middle	0.777714	1	0.667355
low	0.730297	0.667355	1

Source: developed by the authors

Consequently, there is a direct and fairly strong correlational relationship between managerial conflicts at all levels of management at PJSC AMKR, since the values of the correlation coefficient range from 0.67 to 0.78. The highest level of correlation was recorded between the conflicts of the top and middle levels of the integrated plant's management, viz. the coefficient of correlation between them stands

at 0.78. Conflicts of the top and the lowest levels of management occupy the second place in terms of mutual influence. The lowest level of correlation, although quite significant one, is the level of conflicts at the middle and lower levels of management.

It can be concluded from the above that the manager who manages conflicts and chooses the method of mitigating, strengthening or avoiding conflicts, respectively, should take into account the fact that the consequences of his/her decisions will impact the other two levels of management. The positive consequences of his/her decision to manage conflicts at one level of management can at the same time be also negative for and do more harm to the other levels of management. It is especially important to adequately select conflict management methods for handling managerial conflicts with dysfunctional consequences.

In order to increase the level of competitiveness and efficiency of the company, the managers of PJSC ArcelorMittal Kryvyi Rih need to anticipate, analyse and be able to handle conflicts efficiently. Successful conflict resolution requires of the manager the appropriate knowledge, creative approach and developing a strategy that would take into account all aspects of the conflict.

Discussion. The management system and the principles of business ethics at PJSC ArcelorMittal Kryvyi Rih are based on the best modern practices, as the company is part of a large international group with a global reputation. High standards of business ethics and management are the foundation for ArcelorMittal that operates in more than 60 countries, has more than 209,000 employees and works with thousands of suppliers and customers.

The management system pays great attention to the development of the corporate responsibility strategy. The corporate responsibility strategy focuses on four aspects:

- investing in our employees,
- producing safe environmentally friendly steel,
- environmental protection,
- local community development and strong corporate governance [3, 4, 10].

The main conflicts that occur at PJSC ArcelorMittal Kryvyi Rih are divided into two groups:

- between the management and the employees (trade unions);
- between the management and other companies.

Participants in a conflict at PJSC ArcelorMittal Kryvyi Rih operate under the conditions of, on the one hand, restrictions and, on the other, opportunities. The limiting factors are the time and the level of costs that the parties to the conflict are willing to bear, as well as the legal framework, within which they operate. The potential of a conflict participant lies in assessing their strong points, searching for alternative ways to resolve conflicts, etc.

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Conclusions. As an entity of a conflict, the management of PJSC ArcelorMittal Kryvyi Rih finds itself in the role of one of the opponents, who defends their point of view, certain interests and positions in relationships with people subordinate to them or business partners from other divisions (organizations). Most often, the manager becomes a direct participant in the conflict confrontation in cases of violation of professional ethics, deviations from the norms of labour legislation, and when allowing unfair evaluation of the work and behaviour of their subordinates.

Author contributions. The authors contributed equally.

Disclosure statement. The authors do not have any conflict of interest.

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ONLINE NEWS CONSUMPTION AND THE GRATIFICATION LEVEL OF ITS USERS: A FOUNDATION FOR A MEDIA LITERACY ACTION PLAN

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Abstract. *News consumption methods are changing with more traditional media taking their back seat to personal, portable, and other connected devices. This instant access also leads to more news-fueling time for local, national, and international news. This study looked at online news consumption and five gratifications among two hundred and seventy-seven communication, and journalism university students in Metro Manila, Philippines. A quantitative method was used to confirm five motivations based on past research and to find new gratification. Results show that the respondents confirmed four uses and gratification of previous research (identify signaling, social relationship, escape, entertainment) and found one new gratification, "infotainment." Results also revealed that online news websites were statistically relevant. Significant relationships exist between respondents and demographics about online news consumption and demographics are statistically significant. Demographic information and online news consumption are relevant to communication and journalism students. However, the user's level of uses and gratifications is a predictor of online news consumption. Only surveillance can predict the online news consumption of students. Also, this study finds that reading online news by students is often more motivated by amusement and pleasure infotainment as a form of dissemination of information. It was argued that online news consumption contributed to the existing body of literature with a specific audience of 18-year-olds. Infotainment is a dominant factor in online news consumption throughout the results and discussions.*

Keywords: *online news consumption, uses and gratification, communication and journalism students, Manila, Philippines.*

JEL Classification: F15, F36

Formulas: 0; fig.: 0; tabl.: 18; bibl.: 25

Introduction. The history of journalism in the Philippines can be traced from traditional media newsrooms until online journalism takes the stage of technological advancement and reshape the ordinary routine of Filipino journalists. More research on uses and gratifications was conducted related to the Internet and a new gratification framework has been proposed but no research has been published relevant in this study.

Literature review. Online news consumption sets a trendy engaging activity among young adults. According to [1] media convergence around the world is the norm of online journalism. Online news websites in the Philippines operated separately from traditional media and embraced the online medium. The context of communication can be approached through the understanding of uses and gratification to the intrinsic value of the Uses and Gratifications Theory in identifying communication patterns of any social concept. This theory has been used for more than 60 years to study the public perceptions of gratifications sought and obtained in mass communication across a variety of constructs such as television programs, phone usage, and print media [2] [3] [4].

According to a scholar [5] newspaper was capable of bringing technological advancement which can be altered between media and its respective consumers. [6] explains that newspaper creates a reading habit, differentiates people reading, the art of learning, and a repository of knowledge among readers in any creed of people in the society we live in; reading for young adult needs to keep abreast for world news [7]. Among social networks, Facebook is the most important social network for searching, reading, viewing, and sharing the news online [8]. According to [9] the consumption of the Internet has become one that characterizes online news and the size of the audience to a large extent. [10] fostered that newspapers help to enrich newspaper reading habits, knowledge, and awareness and could serve as a study habit among students. In the Philippines, newspaper readership has declined gradually because the Philippines have more than thirty online news publications [11] [12] with more than fourteen broadsheets in the daily circulations [13]. This study will examine the relationship between reading online news websites and online news consumption using uses and gratifications. The measures for news are adapted from a study in terms of consumption and theory [14].

Aims. The main objective of the study is to investigate online news consumption and the gratification level of its users among communication students. The general objective is two-fold: (1) to investigate online news consumption and (2) to develop a media literacy program for communication students. Specifically, this study investigated the demographic profile; the respondent's level of online news consumption; uses and gratifications level in terms of identity signaling, surveillance, social relations, escapism, and entertainment. It also determined the relationship between respondents' level of uses and gratification and demographic profile such as sex, age, and course of study; determined the relationship between online news consumption, and uses and gratification; differences among online news consumption, level of uses and gratification and demographic profile; and the relationship between respondents' online news consumption and uses and gratification level. Lastly, it aimed to propose a plan of action in media literacy.

Methods. The study is a descriptive-quantitative with a total sample of 277 communication students in Metro Manila, Philippines. Majority are females (210) (75.70%) and (67) (24.20%) are males. A self-structured questionnaire was administered. A letter of request was addressed and sent to the Office of the President, Chancellor's Office, VP for Academic Affairs, deans, and associate deans. The data were then tallied, tabulated, and analyzed. This study was approved by the Committee on Research in the College of Arts and Sciences, University Research Coordination, Office of President, and Chancellor's Office in the University of the East Caloocan, Metro Manila, Philippines. Data analysis was conducted using SPSS. Descriptive statistics such as mean, percentage, the standard deviation was used to rank the order of the demographic profile while the Likert scale was used in scoring respondents in online news consumption. Table 1 shows the demographic information of respondents who were three HEIs (*N=277).*

The majority of the sample is 16-20 years old; age is a factor that influences the news platform. The majority of respondents are BA Journalism composed of 115 or

41.50%; while the majority of respondents were reading online news 251 or 90.60%, implies that internet access among students has a huge impact on communication.

Table 1. Demographic Information

Profile of Respondents	University/College	Frequency	Percent
School	University A	120	43.30
	University B	115	41.50
	College C	42	15.20
	Total	277	100.00
Gender	Male	67	24.20
	Female	210	75.80
	Total	277	100.00
Age	16-17	171	61.70
	18-19	87	31.50
	20 & above	19	19.00
Total		277	100.00
Level of Education	Freshmen	95	34.30
	Sophomore	87	31.40
	Junior	37	31.40
Senior		58	13.40
Total		**277**	**100.00**
Course of study	BA Communication Arts	80	28.90
	BA Communication	82	29.60
	BA Journalism	115	41.50
Total		**277**	**100.00**

To interpret the mean scores, the following value scales were employed. Reliability and validity of the study were tested; identity signaling (Cronbach α=.81); surveillance (Cronbach α=.79); social relations (Cronbach α=.84); escapism (Cronbach α=.74); entertainment (Cronbach α=.75). Table 2 shows the scale used to interpret online news consumption and the gratification level of its users.

To gather data from respondents, a survey questionnaire was administered. Part I dealt with demographic profile consists of 12 attributes; Part II focuses on the online news consumption of 12 attributes, and Part III focuses on the gratification level consists of 20 attributes, Part IV focuses on reading online news websites with 6-attributes.

Table 2. The scale used to interpret online news consumption and the gratification level of its users

Scale	Interpretation	Mean Range	Interpretation
5	Strongly Agree	4.50-5.00	Very often/Very relevant
4	Agree	3.50-4.49	Often/relevant
3	Neutral	2.50-3.49	Sometimes/fairly relevant
2	Disagree	1.50-2.49	Rarely/relevant to a little extent
1	Strongly Disagree	1.00-1.49	Never/not relevant at all

Chi-square was used to test the significant relationship between the level of users and gratification, demographic profile (age, sex, course of study). Pearson's coefficient was used to test if there is a significant relationship between a reading

news website and online news consumption obtained by respondents, online news consumption and uses and gratification level and ANOVA was also used in the study.

Results. Table 3 illustrates online news consumption obtained by respondents: local news *(M=3.61) (SD=0.96)*; arts/culture *(M=3.52) (SD=0.89);* weather news *(M=3.55) (SD=0.89)* with *WM=3.52; SD=0.62*, interpreted "sometimes".

According to [15] students in the Gulf region are active users of local news online even published on Twitter, following Internet discussion platforms, links via email, and even commented on the local online news.

Table 3. Online news consumption

Indicators	Mean	Std. Dev.	Description
1. I read national news	3.33	0.81	Sometimes
2. I read the weather news	3.55	0.89	Often
3. I read world news	3.34	0.92	Sometimes
4. I read business news	2.78	1.02	Sometimes
5. I read science and technology news	3.39	0.98	Sometimes
6. I read development news	3.25	0.90	Sometimes
7. I read sports news	3.28	1.04	Sometimes
8. I read local news	3.61	1.04	Often
9. In enjoy computer work.	3.52	0.96	Often
10. I read health news.	3.43	0.89	Sometimes
11. I read the traffic updates	3.36	1.13	Sometimes
12. I read entertainment news.	3.55	1.05	Often
Overall Mean	**3.42**	**0.62**	**Sometimes**

Legend: 4.50-5.00-Very often; 3.50-4.49-Often; 2.50-3.49-Sometimes; 1.50-2.49-rarely; 1.00-1.49-Never

The majority of the respondents prefer to read politics, entertainment, sports news, crime stories, education, and business news, thus, men have a slightly stronger interest in political news, sports news, crime, business, and defense news than women, whereas, women are ahead for reading entertainment, development, health, education and feature news stories [16].

Table 4. Uses and gratification level of respondents

Gratifications	Mean	Interpretation
Identity signaling	2.92	Neutral
Surveillance	3.77	Agree
Social relation	3.72	Agree
Escapism	2.57	Neutral
Entertainment	3.69	Agree
Uses and gratification	3.33	Neutral

Legend: 4.50-5.00-Strongly agree; 3.50-4.49-Agree; 2.50-3.49-Neutral; 1.50-2.49-Disagree; 1.00-1.49-Strongly Disagree

Table 4 summarizes the five factors and contents of uses and gratification level of respondents: surveillance gratification *(M=3.77*, agree); social gratification (*M=3.72*, often) and entertainment gratification (*M=3.69*, agree) and overall gratifications (*M=3.33*) describes as neutral. [17] mentioned that Qatari young adult's online news consumption boosts their confidence using different news media platforms. The data in this study were grouped as follows: (1) demographic information; (2) level of online news consumption; (3) uses and gratifications level in terms of identity signaling; surveillance, social relation, escapism, entertainment; (4)

relationship between sex, age, course study; (5) relationship between a reading news website and online news consumption; (6) relationship between online news consumption and uses and gratification; (7) difference between online news consumption, level of uses and gratification, demographic profile; (8) relationship between respondents online news consumption and uses and gratification.

Table 5. Uses and Gratification Level of Users on identity signaling

Indicators	Mean	Std. Dev.	Description
1. I feel important.	3.39	0.93	Neutral
2. I impress others.	3.13	0.83	Neutral
3. I pretend to be popular.	2.25	0.95	Disagree
Overall Mean	**2.92**	**0.71**	**Neutral**

Legend: 4.50-5.00-Strongly agree; 3.50-4.49-Agree; 2.50-3.49-Neutral; 1.50-2.49-Disagree; 1.00-1.49-Strongly Disagree

Table 5 illustrates that identity signaling or personal function in U&G indicates overall mean *(M=2.92) (SD=0.71)* describes as neutral. Diversion, personal relationships, social relationships, personal identity, surveillance, imagination, stimulation, and mood changing were gratification found in using the Internet [18].

Table 6. Uses and Gratification Level of Users on surveillance

Indicators	Mean	Std. Dev.	Description
1. I keep track of the international news.	3.62	0.85	Agree
2. I keep track of the local news.	3.89	0.80	Agree
3. I keep track of the political news.	3.70	0.86	Agree
4. I stay informed of occasions and events.	3.89	0.81	Agree
Overall Mean	**3.77**	**0.65**	**Agree**

Legend: 4.50-5.00-Strongly agree; 3.50-4.49-Agree; 2.50-3.49-Neutral; 1.50-2.49-Disagree; 1.00-1.49-Strongly Disagree

Table 6 illustrates that the U&G level of users are abreast in reading news and information posted on Internet (M=3.77) (SD=0.65) describes as "agree'.

Table 7. Uses and Gratification Level of Users on social relation

Indicators	Mean	Std. Dev.	Description
1. I let people know I care about their feelings	3.67	0.94	Often
2. I stay in touch with a person who understands me	4.09	0.77	Often
3. I encourage other people	3.90	0.87	Often
4. I comfort a person	3.87	0.92	Often
5. I talk about my problem	3.33	1.00	Sometimes
6. I feel involved with what happens with others	3.27	1.03	Sometimes
Overall Mean	**3.79**	**0.63**	**Often**

Legend: 4.50-5.00-Strongly agree; 3.50-4.49-Agree; 2.50-3.49-Neutral; 1.50-2.49-Disagree; 1.00-1.49-Strongly Disagree

Table 7 illustrates that social relations were interpreted "often". Social relation connotes a special function that reflects social relation through the medium and obtained an M=4.09 and SD=0.77. Social relation means creating or maintain links with other individuals or groups.

The result of the analysis for the distribution of respondents U&G of users (escapism) is shown in Table 8 were interpreted as "neutral" with overall mean=2.57 and SD=0.89.

Table 8. Uses and Gratification Level of Users on escapism

Indicators	Mean	Std. Dev.	Description
1. I escape from what I am doing	2.75	1.03	Neutral
2. I escape from my responsibilities	2.26	1.07	Disagree
3. I postpone the task assign to me	2.44	0.98	Disagree
4. I forget my daily tasks	2.46	1.04	Disagree
Overall Mean	**2.57**	**0.89**	**Neutral**

Legend: 4.50-5.00-Strongly agree; 3.50-4.49-Agree; 2.50-3.49-Neutral; 1.50-2.49-Disagree; 1.00-1.49-Strongly Disagree

Table 8 illustrates the distribution of respondents' uses and gratification level of users of entertainment. The average M=3.69 with SD=0.67 was described as “agree”. The researcher [20] revealed that young adult Chinese were keen on entertainment programs while the behavior of Malaysian young adults was engaged also in entertainment news regardless of the medium used online. Entertainment function is very encouraging and paying more attention in the entertainment media program through Internet.

Escapist function enabling a flee from daily worries in diversionary tactics free from all worries and chatting with others on the net. Internet usage has obtained escapism, transaction, privacy, information, interaction, socialization, and economic motivations [19].

Table 9 illustrates respondents uses and gratification level on entertainment, with *(M=4.18)* and *(SD=0.79)* described as "agree".

Table 9. Uses and Gratification Level of Users on entertainment

Indicators	Mean	Std. Dev.	Description
1. I amuse myself.	3.32	0.93	Neutral
2. I have a good time with friends.	4.18	0.83	Neutral
3. I feel relax reading an online newspaper during my free time.	3.57	0.95	Disagree
Overall Mean	3.69	0.67	Agree

Legend: 4.50-5.00-Strongly agree; 3.50-4.49-Agree; 2.50-3.49-Neutral; 1.50-2.49-Disagree; 1.00-1.49-Strongly Disagree

Table 10 illustrates that reading online news is described as relevant with an overall mean=3.93 and SD=0.57. Researchers [21] found that newspaper readers prefer the digital channel when searching for news updates.

Table 10. Relevance of reading online news

Indicators	Mean	Std. Dev.	Description
1. Credibility of the news sites.	3.68	0.76	Relevant
2. Popularity of the websites.	3.63	0.81	Relevant
3. Content of the websites	3.95	0.76	Relevant
4. Quick updates of news and information	4.14	0.73	Relevant
5. Website construction is attractive	3.71	0.88	Relevant
6. Connectivity of Internet and wifi.	3.90	0.87	Relevant
Average Weighted Mean	**3.93**	**0.57**	**Relevant**

Legend: 4.50-5.00-Strongly agree; 3.50-4.49-Agree; 2.50-3.49-Neutral; 1.50-2.49-Disagree; 1.00-1.49-Strongly Disagree

Table 11 illustrates the relationship between respondents' uses and gratification and demographic profile. The null hypothesis is rejected with (*p<0.017*), other variables such as school, age, sex, level of education, course of study, and frequency

of internet users have no significant relationship between U&G and the null hypothesis is accepted and no significant relationship is established.

Table 11. Relationship between respondents uses and gratification and demographic profile

Profile	Chi-Square	df	p-value	Decision
School	11.573	6	0.072	No significant relationship
Age	2.848	3	0.416	No significant relationship
Gender	8.836	12	0.717	No significant relationship
Level of education	12.078	9	0.209	No significant relationship
Course of study	4.741	6	0.577	No significant relationship
Reading online news	10.159	3	0.017	There is significant relationship
Frequency of internet use	7.053	9	0.632	No significant relationship

**p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

The researcher and company [23] found that reading online newspapers such as features, international, national, regional, or local news preferred by Indian librarians.

Table 12 illustrates the results of chi-square and p-value of the samples carried out to determine the relationship obtained in U&G and demographic profile (school). Result reveals that both social relation *(p<0.029)* and entertainment *(p<0.047)* have a significant relationship, the null hypothesis is rejected.

Table 12. Relationship between respondents uses and gratification and school

Gratifications	Chi-Square	df	p-value	Decision
Identity signaling	6.639	8	0.576	No significant relationship
Surveillance	11.93	6	0.064	No significant relationship
Social relation	14.042	6	0.029	There is significant relationship
Escapism	12.078	8	0.148	No significant relationship
Entertainment	12.766	6	0.047	There is a significant relationship

*p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

Table 13 illustrates the relationship between respondents' uses and gratification and age. The null hypothesis is accepted with (*p<0.073*), and entertainment has no significant relationship in U&G and demographic profile. Studies show that with age, people consume more news and show more interest in the news online [22] [23].

Table 13. Relationship between respondents uses and gratifications and age

Gratifications	Chi-Square	df	p-value	Decision
Identity signaling	15.995	4	0.003	There is significant relationship
Surveillance	1.088	3	0.078	No significant relationship
Social relation	14.535	3	0.002	There is significant relationship
Escapism	6.981	4	0.137	No significant relationship
Entertainment	6.968	3	0.073	No significant relationship

*p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

Table 14 illustrates the relationship between respondents' uses and gratification and gender. The results reveal that entertainment *(p<0.034)* and gender have both significant relationships; the null hypothesis is rejected.

Table 14. Relationship between respondents uses and gratifications and gender

Gratifications	Chi-Square	df	p-value	Decision
Identity signaling	21.716	16	0.153	No significant relationship
Surveillance	12.275	12	0.424	No significant relationship
Social relation	15.483	12	0.216	No significant relationship
Escapism	18.007	16	0.324	No significant relationship
Entertainment	22.288	12	0.034	There is significant relationship

*p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

Table 15 illustrates the relationship between respondents' uses and gratification and the course of study. Every gratification was recorded with no significant relationship with the demographic profile. The results reveal that only surveillance *(p<0.025)* has a significant relationship, and the gratification dimension is based on the past studies of U&G including surveillance.

Table 15. Relationship between respondents uses and gratifications and course of study

Gratifications	Chi-Square	df	p-value	Decision
Identity signaling	7.221	8	0.513	No significant relationship
Surveillance	14.475	6	0.025	There is significant relationship
Social relation	10.831	6	0.094	No significant relationship
Escapism	9.711	8	0.286	No significant relationship
Entertainment	8.320	6	0.216	No significant relationship

*p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

Table 16 illustrates that there is no significant relationship among the variables of uses and gratifications on reading online news.

Table 16. Relationship between respondents uses and gratifications and reading online news

Gratifications	Chi-Square	df	p-value	Decision
Identity signaling	7.068	4	0.132	No significant relationship
Surveillance	4.848	3	0.183	No significant relationship
Social relation	0.661	3	0.882	No significant relationship
Escapism	4.539	4	0.338	No significant relationship
Entertainment	6.290	3	0.098	No significant relationship

*p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

Table 17 illustrates the respondent's U&G and if there is a significant relationship in the frequency of internet use and reveals that there is no significant relationship among variables for internet use.

Table 17. Relationship between respondents uses and gratifications and frequency of internet use

Gratifications	Chi-Square	df	p-value	Decision
Identity signaling	12.594	12	0.399	No significant relationship
Surveillance	16.248	9	0.062	No significant relationship
Social relation	6.137	9	0.726	No significant relationship
Escapism	14.768	12	0.254	No significant relationship
Entertainment	13.018	9	0.162	No significant relationship

*p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

Table 18 illustrates the results of chi-square and p-value of the samples to determine the relationship between demographics and reading online news, not level of education *(p=0.012)* have a significant relationship among variables, the null hypothesis is rejected. Researchers [24] found that there was no correlation between the credibility of the news source, type of news source, organization, and type of information, reputation, and presentation of news.

Table 18. Relationship between respondents' demographic profile and reading online news

Profile	Chi-Square	df	p-value	Decision
School	4.613	4	0.329	No significant relationship
Age	0.414	2	0.813	No significant relationship
Gender	12.396	8	0.134	No significant relationship
Level of education	16.433	6	0.012	There is significant relationship
Course of study	2.886	4	0.577	No significant relationship
Reading online news	0.410	2	0.815	No significant relationship
Frequency of internet use	6.241	6	0.397	No significant relationship

**p<.05 (Ho=Rejected); **p>.05 (Ho=Accepted)*

Based on the result, among all factors of U&G, only surveillance can predict students' online news consumption. This study confirmed the most important gratification in online news consumption which is carried out at the U&G level of users, Internet is the provider of a variety of information and communication in the different media platforms [25]. Also confirmed that those who belong to the new generation of Internet users are called interacting.

A Foundation for a Media Literacy Action Plan. To improve media literacy among communication students, the following action plan was developed. (1) Integrate digital and media literacy competencies in teaching online journalism for BA Communication Arts, Communication and Journalism and other major subjects; (2) Integrate media literacy in the summer learning program of BA in Communication Arts, Communication and Journalism and allied field and research-oriented program; (3) Promote media literacy in public schools local government units, NGO's, libraries, information offices, (4) Support media literacy in higher education institutions to have an interface between teachers and students to give media literacy experience and (5) Develop online video documentation of digital media literacy to build expertise in communication program.

Conclusions. This study confirmed with the greater growth of online news consumption among communication students and the higher level of gratification was obtained from online news consumption. Therefore, this study of online news consumption extends and has become a contribution to the existing body of literature of U&G with an audience of 18 years old. Most importantly, this study found a new gratification on Internet news called "infotainment".

With this, the researcher recommends that since communication students are engaged in reading online news, it is recommended that administrators of higher education institutions may look for ways on how to improve the Internet use in the classroom instruction to guide students. Because reading online news is a practice among communication students, it is recommended that duplication of study will be

created to enrich the analysis of news websites and other media platforms to support the scarcity of literature on news consumption research & U&G in the Philippines.

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IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT COMPONENTS IN LIBYAN IRON & STEEL COMPANY "LISCO"

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Abstract. *Quality is usually considered as a combination of characteristics of an object, which testifies to its ability to satisfy identified needs, the author's proposed definition of the concept of quality management for a company as the system of management, aimed at planning, implementation, improvement and quality control of the company in accordance with the established policy and objectives of the company, with the participation of all its units. Customer satisfaction depends on the fact that the company has an effective quality management system. Thus, an integrated quality management system is created and implemented as a means of ensuring the implementation of specific policies and the achievement of quality objectives set by top management. Therefore, special attention is paid to the formation and documentation of the company's management policy on the quality of products provided to consumers. Manufacturing companies in Libya face difficulties to introduce Total Quality Management system. The original result indicates that lack of skilled labor, employee culture resistance to change, and lack of management commitment and leadership are correlated with a variety of factors that hinder advancement. A lack of benchmarking and employee resistance to change were found to be the top two obstacles. Proper training should be provided to workers to reduce employee resistance and there should be more participation in different stages of implementation. Real problem for the construction sector in Libya is the implementation of quality projects. The main factors influencing the implementation of quality management systems in construction projects are top management commitment, communication, teamwork, employee involvement, and work environment and culture. Following a comprehensive review of several studies on TQM and also considering the importance of critical effecting factors of manufacturing sector in Libya, this study proposed 12 components or factors of TQM for LISCO. A questionnaire made to help finding out the factors and components those affecting implementation of TQM system in the company and identifying correlation between these variables (components). Descriptive statistics and SPSS analysis were employed to indicate the TQM effective components for best implementation which can be applied in order to achieve quality performance.*

Keywords: *management, quality management, operational management, manufacturing, Total Quality Management (TQM), TQM components, TQM Implementation.*

JEL Classification: F20, J01, M10, M11, M12, O10, L15

Formulas: 0; fig.: 5; tabl.: 5; bibl.: 17

Introduction. The industrial sector in many countries faces great challenges to local and international competition. The LISCO company has made several efforts to maintain its position in the market through the concern for quality development, as the company has received many quality awards, the most important of which is ISO certification, and with rapid and continuous development of modern management tools and systems in the field of quality where the total quality system TQM is one of the most important of these programs. The company is working hard to adopt such system and apply it within the company despite the presence of many difficulties of culture and environment as well as other technical issues related to the integration and development of workers and since studies on this topic are considered insignificant in Libya in general and in the company in particular, so more studies

have to be done in the field. And focusing in this topic to find out the most important factors on which the application of the total quality management system depends on the company and try to provide the main guidelines that managers and decision-makers in the company may benefit from in order to develop the quality standards and plan and build appropriate strategies for that.

Literature Review. Libyan companies have established their quality platform by gaining the ISO 9000 certificate which is useful for implementing the TQM. Some TQM dimensions, including management, communication, training and development, employee involvement and recognition, and culture. Nowadays, applying quality management system in Libyan companies will be a difficult challenge due to current approaches to management. The adoption of TQM for the company is a major culture and job change, where employees are used to a more conventional method [4]. It's more effective of TQM Knowledge in developing economics such Libya, to establish researches those focusing on practical work rather theoretical reviews, therefore, any study to investigate affecting factors are essential for successful implementation of total quality management (TQM) in Libyan companies [5].

Daniel I. Prajogo and Christopher M. McDermott [6] explore the relationships between TQM and culture. Different subsets of TQM practices are defined by different types of cultures, such as; group-developmental-hierarchical-rational culture. It has been found that hierarchical culture has a significant relationship with some TQM activities. The efficiency of these cultures in assessing organizational output is another important issue. [6]

LISCO, which is considered as a largest steel manufacturing company in the country, has been certified the ISO-9001:2000 award, even though applying TQM tools are still essential to the company in order to improve quality and production operations. [7]. Also, LISCO, owned by the Libyan Government is one of the largest industrial companies in the region and produces a range of iron and steel products. It employs nearly 7000 people distributed in different sectors and facilities [8].

The management structure in means of hierarchical positions for executives in LISCO [9], this structure takes the vertical form in sequence. Top management is representing general manager, managers, and head of departments; together they plan and decide company's policies whereas, other units at lower levels help in these tasks by feeding back to top levels. Cooperation between all levels and people in the company has the potential to ensure implementation and practicing TQM system, where communication of exchanging information clearly and effectively is likely to support and coordinating activities and solving conflicts by several steps or procedures that may include defining problems, selecting and applying options, and reviewing the results of these options prior decision making. TQM is a bulk of either dependent or independent components. According to the literature, these components are: critical factors, tools, techniques and practices. These components can be classified into two dimensions: the management system such as (leadership, planning, human resources, etc.), and the technical system which are (tools and techniques (run charts, control charts, Pareto diagrams, brainstorming, tree diagrams, histograms, scatter diagrams, flowcharts, etc.)) [10]. A study proposes a mathematical model, and

artificial neural networks ANNs, to study and analyze the implementation of TQM and its dimensions towards improving organizational performance. [11]

There are several reasons for educating and training inside the company for continuously improving the employees which would reflect in culture of change, the change that may cause as a result of internal and external conditions or circumstances. This proves that, companies should train their employees in order to improve their expertise and methods that will keep the employees working better and enhancing strategic perspective of the company as well. [17]. Culture of Change or transition is one of the most difficult aspects of TQM to implementation in the culture of an organization. The intrinsic essence of avoiding transition by persons and the anxiety of the unknown. Many people can fear like improvements would put them in the redundancy situation, particularly managers. This apprehension is not readily resolved yet, but can be minimized by engaging them in the course of transition, sincerely considering their recommendations, and develop their basic skills, and constantly sharing these aims [18].

Aims. This study aimed to investigate the critical components for the successful implementation of TQM in Libyan iron & steel company LISCO.

Methods. To solve this goal, the following research methods were used: observation and generalization; ordering of all basic elements; method of scientific generalization, which made it possible to formulate conclusions.

Results. A review of literature on TQM system was carried out to determine the objectives of this research, so then 12 factors including 36 items were considered along the survey. A 50 questionnaires of selected sample were received to obtain a primary data for testing the responses of total quality management implementation effects on LISCO. After verifying, the data then subjected to processing and analysis. SPSS software was applied as the method of analyzing data results. Validity is used to ensure the measure is within actual parameters. The questionnaire items have been examined by number of academics and experts in the field to test them to ensure that the measure covers the all intended areas within the intended study. Some questions were subsequently modified to provide better descriptions of the dimensions of the questionnaire.

Table 1 shows the reliability statistics of the TQM Scale and its subscales. Cronbach's alpha of 0.964 indicates a high level of internal consistency for the TQM scale with a specific sample of 36. Implying that the TQM scale had good reliability. There was a high level of internal consistencies among the sub-scales; leadership and top management, training and education, continuous improvement, supplier focus, customer focus, communication and information system, evaluation, and reward. According to Gliem [15], this is because the Cronbach’s alpha coefficients were 0.7 or higher, which is considered “acceptable” in most social science research situations. Subscales such as; the role of quality management, employee involvement, and satisfaction, culture change, vision, and plan statement of TQM did not meet the threshold of 0.7. From the Cronbach’s and Shavelson’s [13] article, Cronbach's alpha coefficient was not considered to be "acceptable," given a sample size of 3.

Considering the Cronbach's alpha coefficient and the Mean Inter-Item Correlations [12] argued that, given the sub-scales have reached a threshold of at least 0.7 or when their Mean Inter-Item Correlations are between 0.2 and 0.4 and the Cronbach's alpha coefficient is less than 0.7, the scales can be deemed to be reliable. Thus, the results indicate that the scale and the sub-scales can be used to measure the predicted variable. Therefore; the instrument developed to measure effective components to TQM implementation within the case study is considered to be reliable.

Table 1. Reliability Statistics of TQM Scale and its Subscales

Scale and Sub-scales	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Mean Inter-Item Correlations
TQM Scale	0.964	0.963	36	0.419
Leadership and top management commitment	0.861	0.861	3	0.673
Role of quality management	0.598	0.588	3	0.322
Training and education	0.755	0.756	3	0.508
Continuous improvement	0.766	0.770	3	0.528
Employee involvement and satisfaction	0.640	0.639	3	0.371
Understanding TQM practices	0.691	0.692	3	0.428
Supplier focus	0.764	0.762	3	0.516
Culture to change	0.652	0.663	3	0.396
Customer focus	0.824	0.827	3	0.615
Communication and information system	0.790	0.802	3	0.574
Vision and plan statement of TQM	0.532	0.542	3	0.283
Evaluation and Reward	0.706	0.699	3	0.436

Source: compiled by the authors

Table 2 shows frequencies and percentages of study sample for job description, qualification, and work experience.

Table 2. General demographic information of the Study- frequencies and percentages

Profile	Respondents	Category	Frequency	Percentage
Job description	50	Quality manager	1	2%
		Project manager	2	4 %
		Chief department	13	26%
		Quality control/ assurance professionals	3	6%
		Financial & marketing	2	4%
		Senior engineer	9	18%
		Supervisor	14	28%
		Technician	6	12%
Qualifications	50	Postgraduate	5	10%
		University degree	27	54%
		Higher diploma	7	14%
		Diploma holder	11	22%
Work experience	50	1 – 10	8	16%
		11 – 20	15	30%
		21 – 30	20	40%
		> 30	7	14%
Total =	50	----------	50	100%

Source: compiled by the authors

From the survey done on 50 respondents, 28% of the respondents were supervisors, 26% were departmental chiefs, 18% were senior engineers, 12% were technicians, 6% were quality control/ assurance officers, 4% were project managers and finance and marketing officers respectively, and 2% were quality managers (Figure 1).

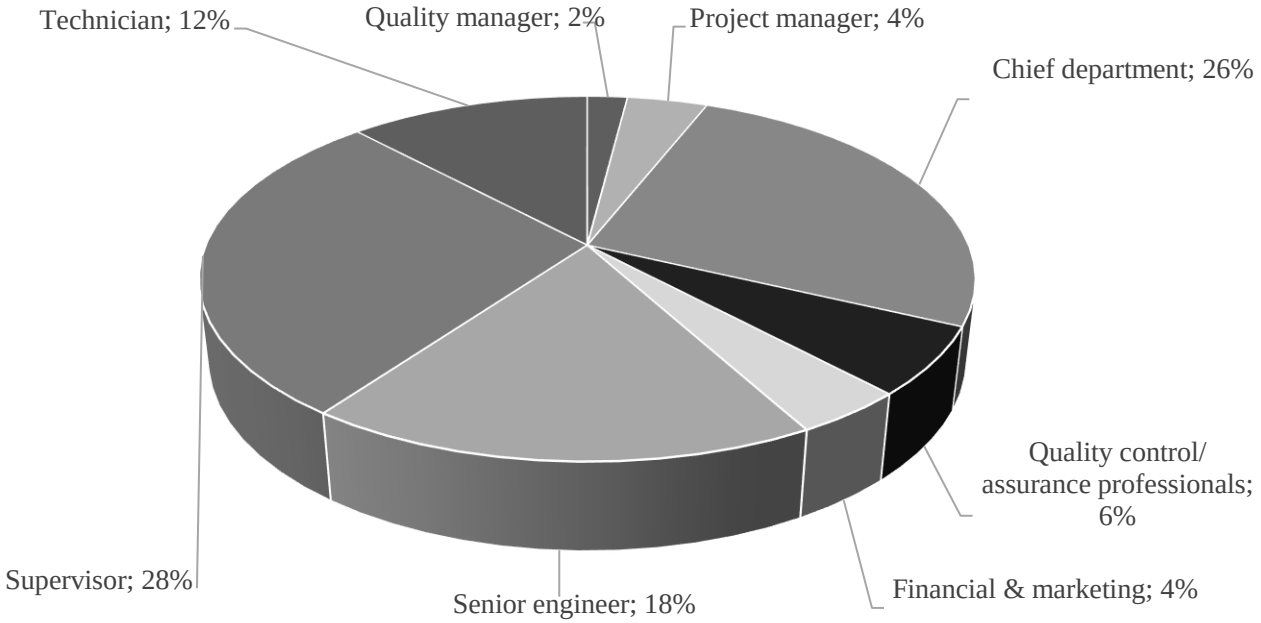

Figure 1. Job description percentages in LISCO

Source: compiled by the authors

Qualification is a significant determinant of the kind of job description and individual gets [16]. From the survey done on 50 respondents, the majority 54% of the respondents had university degrees, 22% were diploma holders, 14% had higher diplomas, and 10% had postgraduate qualifications (Figure 2). Quality top management is usually influenced by the amount of work experience an individual possesses [14]. From the survey done on 50 respondents, the majority (40%) of the respondents had 21 to 30 years of work experience, 30% had between 11 and 20 years of work experience, 16% had between 1 and 10 years of work experience, and 14% had over 30 years of work experience (Figure 2).

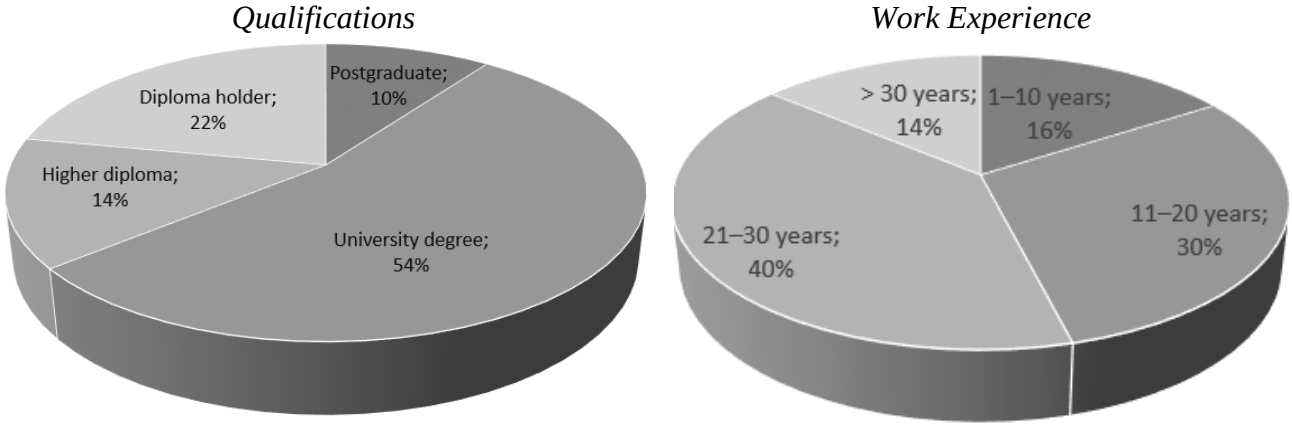

Figure 2. Work experience and qualifications analysis in LISCO

Source: compiled by the authors

Considering the dimensions of the study variable, leadership and top management commitment (LTMC) had a mean of 2.61, the role of quality management (RQM) had a mean of 2.21, training and education (TE) had a mean of 2.96, continuous involvement (CI) had a mean of 2.65, employee involvement and satisfaction (EIS) had a mean of 2.96, understanding TQM practices (UTQMP) had a mean of 2.48, supplier focus (SF) had a mean of 2.82, culture to change (CC) had a mean 2.83, customer focus (CF) had a mean of 2.62, communication and information system (CIS) had a mean of 2.19, vision and plan statement of TQM, (VPSTQM) had a mean of 2.45, evaluation and reward (ER) had a mean of 2.81 (Figure 3).

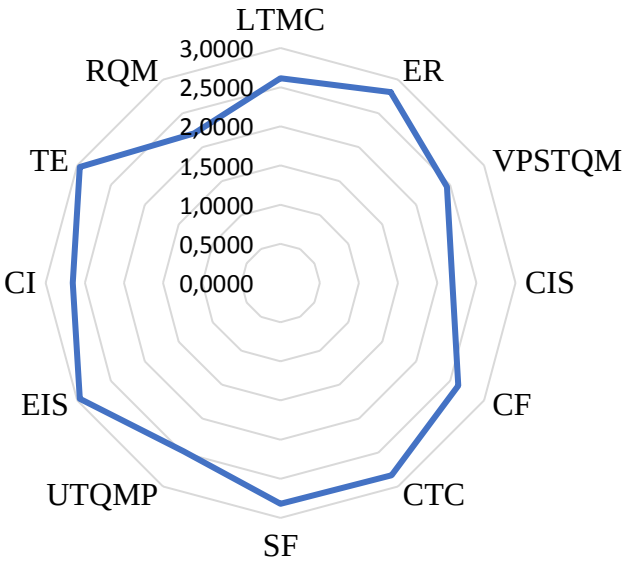

Figure 3. Mean radar plot for the TQM dimensions in the survey

Source: compiled by the authors

There were no significant differences in the means between the three dimensions in each sub-scale in the survey (Figure 4).

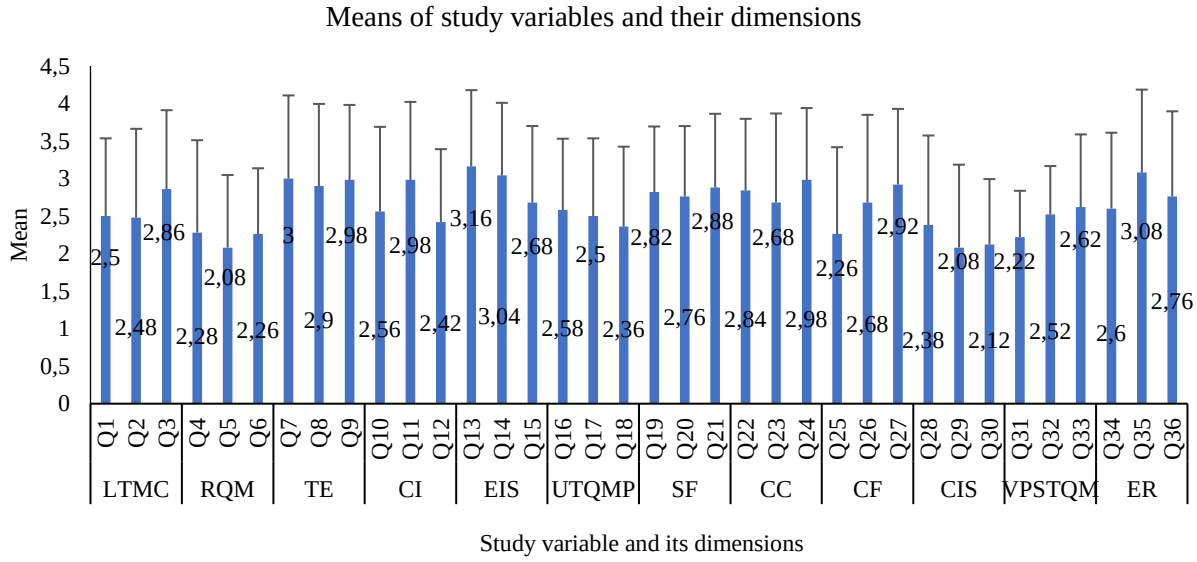

Figure 4. Means of the dimensions in the survey

Source: compiled by the authors

Pearson correlation was used in the survey to ascertain the relationships between the TQM dimensions. Leadership and top management commitment (LTMC) had a significant positive moderate correlation with; the role of quality management (RQM), vision and plan statement of TQM (VPSTQM), employee involvement and satisfaction (EIS), understanding TQM practices (UTQMP), and communication and information system (CIS). Furthermore, LTMC had a significant positive, strong correlation with; training and education (TE), continuous improvement (CI), supplier focus (SF), culture to change (CC), and evaluation and reward (ER).

RQM had a significant positive moderate correlation with all the other dimensions except for EIS, which had a significant positive weak correlation. TE had a significantly strong correlation with CI, SF, and ER. Furthermore, TE had a moderate correlation with EIS, UTQMP, CC, CF, CIS, and VPSTQM. CI had a significant positive, strong correlation with UTQMP, CC, CF, and ER but had a moderate correlation with EIS, CIS, and VPSTQM. EIS had a significant positive moderate correlation with UTQMP, SF, CC, CF, CIS, VPSTQM, and ER. UTQMP had a significant positive, strong correlation with CC and CIS but had a moderate correlation with SF, CF, VPSTQM, and ER. SF had a significant positive, strong correlation with CC and ER but had a moderate correlation with CF, CIS, and VPSTQM. CC had a significant positive, strong correlation with CF, CIS, and ER but had a moderate correlation with VPSTQM. CF had a moderate positive correlation with VPSTQM and ER but had a strong correlation with CIS. CIS had a significant positive weak correlation with VPSTQM but had a moderate correlation with ER. ER and VPSTQM had a significant positive moderate correlation between them (Table 3).

Table 3. Pearson correlations between dimensions of TQM variable

	1	2	3	4	5	6	7	8	9	10	11	12
1-Leadership and top management commitment	1											
2-Role of quality management	.592**	1										
3-Training and education	.809**	.649**	1									
4-Continuous improvement	.708**	.671**	.713**	1								
5-Employee involvement and satisfaction	.606**	.404**	.588**	.634**	1							
6-Understanding TQM practices	.604**	.671**	.628**	.711**	.563**	1						
7-Supplier focus	.751**	.505**	.742**	.614**	.644**	.674**	1					
8-Culture to change	.713**	.563**	.670**	.746**	.692**	.704**	.746**	1				
9-Customer focus	.704**	.662**	.613**	.725**	.658**	.631**	.654**	.795**	1			
10-Communication and information system	.635**	.642**	.524**	.655**	.520**	.762**	.560**	.775**	.758**	1		
11-Vision and plan statement of TQM	.507**	.581**	.561**	.676**	.577**	.618**	.582**	.521**	.588**	.416**	1	
12-Evaluation and Reward	.821**	.535**	.819**	.722**	.689**	.660**	.765**	.734**	.650**	.594**	.657**	1
**. Correlation is significant at the 0.01 level (2-tailed).												

Source: compiled by the authors

Do TQM Dimensions Fall Significantly Below the Benchmark Value (3) of a Five Points Scale (the "null hypothesis"), H_0: TQM dimensions, does not fall below the benchmark value (3) of a five-point scale. (the "alternative hypothesis"), H_a: TQM dimensions fall below the benchmark value (3) of a point scale.

One sample t-test is used to test the above hypotheses for the TQM dimensions. We can reject the null hypothesis from the survey because the p values are below 0.05, and imply that LTMC, RQM, CI, UTQMP, CF, CIS, and VPSTQM dimensions fall below the benchmark value (3) of a five-point scale. Furthermore, we can fail to reject the null hypothesis because the p values are greater than 0.05, and conclude that TE, EIS, SF, CC, and ER dimensions do not fall below the benchmark value (3) of a five-point scale (Table 4).

Table 4. One sample t-test for TQM dimensions

One-Sample Test						
	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Leadership and top management commitment	-2.833-	49	.007	-.38667-	-.6609-	-.1124-
Role of quality management	-7.281-	49	.000	-.79333-	-1.0123-	-.5744-
Training and education	-.323-	49	.748	-.04000-	-.2885-	.2085
Continuous improvement	-2.834-	49	.007	-.34667-	-.5925-	-.1009-
Employee involvement and satisfaction	-.370-	49	.713	-.04000-	-.2571-	.1771
Understanding TQM practices	-4.596-	49	.000	-.52000-	-.7474-	-.2926-
Supplier focus	-1.656-	49	.104	-.18000-	-.3984-	.0384
Culture to change	-1.478-	49	.146	-.16667-	-.3933-	.0600
Customer focus	-2.807-	49	.007	-.38000-	-.6520-	-.1080-
Communication and information system	-6.383-	49	.000	-.80667-	-1.0606-	-.5527-
Vision and plan statement of TQM	-7.078-	49	.000	-.54667-	-.7019-	-.3915-
Evaluation and Reward	-1.534-	49	.131	-.18667-	-.4311-	.0578

Source: compiled by the authors

A simple and brief guideline has been proposed to help managers and supervisors to design plans for effective TQM implementation. Major components found in the research were regarded to establish the auxiliary guidelines. Table 5 expose the findings of constructed components and their expected actions for each implementation element.

The guidelines to be put in practice for better implementation of TQM system reveal that; customer satisfaction, involvement of everyone in the company, and ensuring continuous improvement represent the main chamber for achieving the required performance for such management system implementation that mainly depend on Strategic planning, TQM behavioral culture, and organizational success in business.

Figure 5 shows a TQM Model for successfully implementation the quality system to assist in meeting organization objectives.

Table 5. Proposed guidelines of TQM implementation

Constructed components	Proposed actions to Implementation
Top management commitment	*Make a long-term commitment for top-management*
Role of quality management	*Discuss quality issues*
Training and development	*Make training and education a high priority*
Continuous improvement	*Define, standardize, and improve processes* *Remove barriers to improvement* *Develop a strategy for further improvement* *Analysis and actions based on facts* *Continuously monitor the process*
Employees involvements, satisfaction and recognition	*Involvement and participation of everyone in all activities in the company in different levels*
Understanding TQM practices	*Discuss TQM throughout the organization*
Customer/supplier focus	*Understand customer needs and expectations and meet requirements with quickly response* *Identify and involve supplier/customer relationship* *Develop a survey tool to gain feedback*
Work environment and culture to change	*Create culture inside the company and its surrounding environment*
Communication and information system	*Examine communication processes* *Share information and experience with others like companies and stockholders then contribute to development*
Vision and plan statement of TQM	*Establish a vision, develop a business strategy, and prepare a mission statement,* *Examine policies and practices* *Establish goals and objectives*
Evaluation, measurements, and Reward	*Evaluate and Measure performance* *Conduct cause-and-effect analyses* *Analyze root causes and eliminate errors* *Recognize and reward TQM behavior*

Source: compiled by the authors

TQM implementation as a dependent variable is a result of inputting independent variables represented by affecting factors those generated in this research. After processing the satisfied implementation can be measured by measuring a number of essential indicators including Customer/employee satisfaction, rate of defected products, and production rate.

Conclusion. This study has identified the vital components or factors of TQM implementation in LISCO which would help managers and decision makers to understand TQM practices and plan a better strategy for quality visions. It is challenging to implement a new quality management system in the company; this is due to the management structure and culture. The company has been awarded ISO 9000 certificate which is a good base of changing culture for implementing the TQM program.

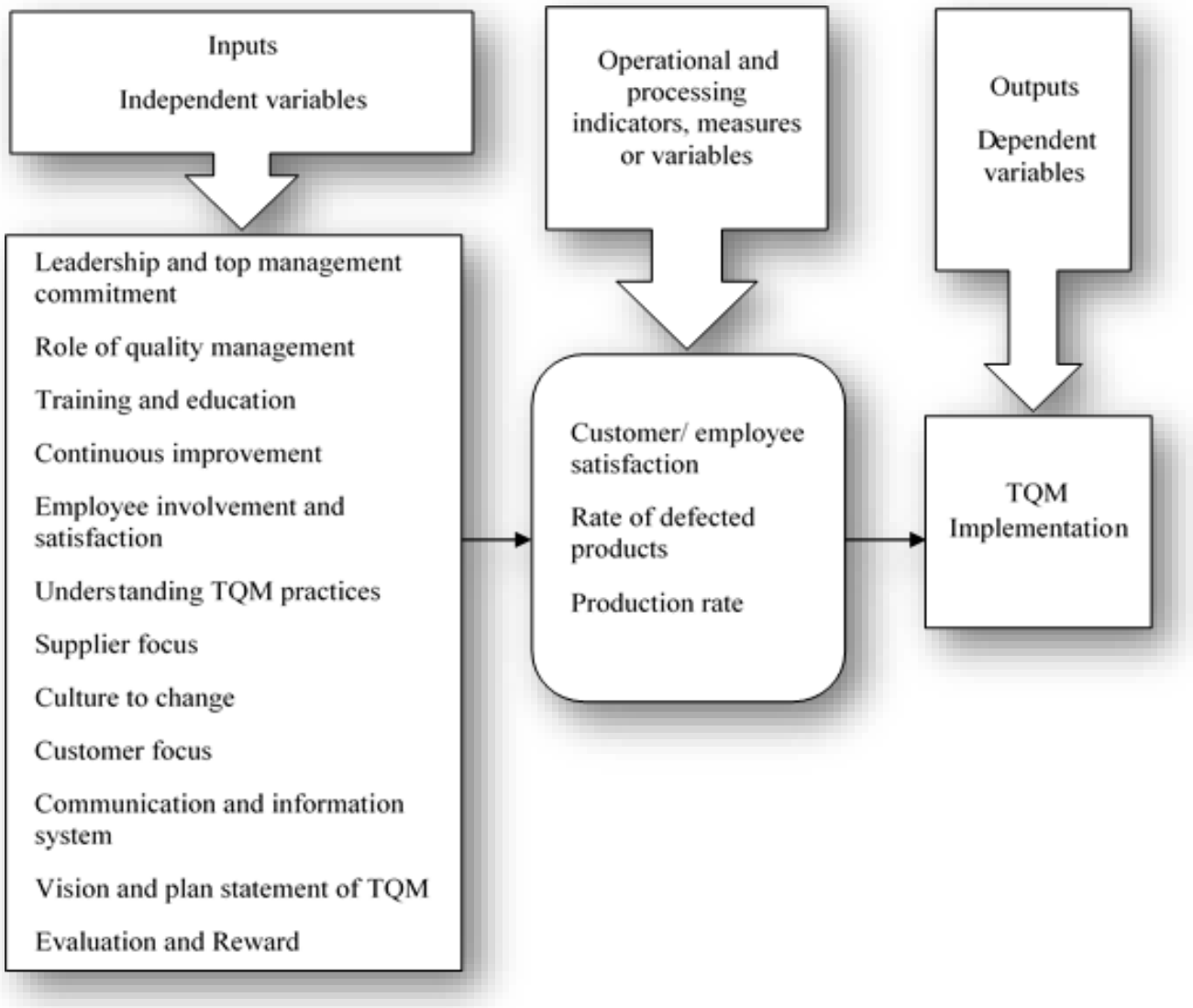

Figure 5. TQM Model for successfully implementation to help meeting organization objectives

Source: compiled by the authors

Author contributions. The authors contributed equally.

Disclosure statement. The authors do not have any conflict of interest.

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THEORETICAL APPROACHES TO FORMATION OF THE MECHANISM OF QUALITY ASSURANCE OF HUMAN RESOURCES OF THE MACHINE-BUILDING ENTERPRISES

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Abstract. *Theoretical approaches to improving the mechanism of quality assurance of human resources of the machine-building enterprises are formed. It is established that the basis of theoretical approaches to the mechanism of quality assurance of staff of the machine-building enterprises is the staff. A generalized definition of staff quality is provided. It is determined that the effectiveness of human resources quality management, the most complete implementation of the goals largely depend on the construction of a mechanism for staff quality assurance. It is proved that the goals of quality management should be taken into account in financial management from the standpoint of optimizing the cost of quality: staff performing processes and on which the work of the entire enterprise depends; resources purchased and used to manufacture products or perform services or works; management that affects the processes, projects and quality work of employees in the enterprise. The influence of the life cycle of staff quality assurance on the results of the enterprise, as well as on the state budget, internal and external labor market is studied. It is established that most of the analyzed methodological approaches to assessing the quality of human resources are based on the methodology of economic analysis of economic activity of the machine-building enterprises using such basic criteria as "effectiveness" and "efficiency". It is established that the comprehensive application of the basic principles of training and motivation in the organization is a defining prerequisite for staff development as a necessary component of quality assurance of enterprise management.*

Keywords: *machine-building enterprises, enterprise management, mechanism, management, quality of human resources.*

JEL Classification: J24, J50

Formulas: 0; fig.: 0; tabl.: 0; bibl.: 6

Introduction. In a market economy, the successful economic activity of enterprises directly depends on the quality of staff training. The radical changes that have taken place in the system of functioning of domestic machine-building enterprises of Ukraine have created a great need for new managerial knowledge, increased interest in the system of human resources formation with high professional and qualification characteristics, focused on achieving the ultimate goal.

The formation of a mechanism for training competent personnel capable of productive work in market conditions, its rational structural and spatial location, changing the culture of enterprise management, ultimately, depends on the effectiveness of human resources management and is the key to success of the machine-building enterprises. Without motivated and qualified employees, machine-building enterprises are not able to create well-functioning systems of marketing, sales, finance, or production activities. The formation of a mechanism for ensuring the quality of human resources of the machine-building enterprises becomes especially relevant in today's global competition, when products, technologies, operating methods and even organizational structures are aging at an unprecedented

rate, and knowledge, skills and ability to learn become the main source of long-term prosperity.

Literature review. The researched issues related to the formation of the mechanism for ensuring the quality of human resources of the machine-building enterprises are extremely relevant today, but insufficiently disclosed. Leading domestic and foreign specialists, in particular Ambler T., Backhaus K., Barrow S., Krykhtina Yu., Krushelnytska O., Melnychuk D., Palamarchuk I., Ryzhko O., Tikko S., Chen S., Yampolsky D. and others studied the mechanism of personnel quality assurance. A review of the scientific literature made it possible to show the ambiguity of approaches to determining the mechanism for ensuring the quality of human resources of the machine-building enterprises.

Krushelnytska O. V. interprets the term "quality of human resources" in the context of human adaptation to changes in the environment [4]. According to Ryzhko O. and Palamarchuk I., the mechanism of ensuring the quality of personnel is realized in the mutual adaptation of the worker and the organization, which is based on the gradual operation of the cooperative economic working conditions [6, p. 149]. From the point of view of Chen S., the process of cognition of branches of government, the process of achieving doctrines adopted in the organization, the learning process, awareness of what is important in this organization or its departments cognition of learning [3]. As Ambler T., Barrow S. emphasize, staff quality assurance is the ability of any system to respond to the environment and change its behavior for optimal functioning [1, p. 203].

Despite numerous studies by foreign researchers and the work of domestic scientists and practitioners, there is a need to improve the mechanism for ensuring the quality of human resources of the machine-building enterprises.

Aims. The aim of the study is to form theoretical approaches to improving the mechanism of ensuring the quality of human resources of the machine-building enterprises.

Methods. During the substantiation of theoretical aspects of the research the methods of generalization, analysis and synthesis were used; methods of economic and system analysis were used during the design and generalization of the conducted research and the obtained results.

Results. In a market economy, the problem of quality is the most important factor in improving living standards, economic, social and environmental security. Quality is a complex concept that characterizes the effectiveness of all stages of activity: strategy development, production organization, marketing, etc. The most important component of the whole quality system is the quality of production [2, p. 511].

The quality of the manufacturer and the consumer - the concepts are interdependent. The manufacturer must take care of the quality throughout the consumption period of the product. In addition, it must provide the necessary after-sales service. This is especially important for products that are difficult to operate, software products.

Let's move on to clarifying the concept of quality. In the literature, the concept of quality is interpreted differently. However, the main origin in the concepts of quality lies between its understanding in terms of command-administrative and market economy. In the command-administrative economy, quality is interpreted from the position of the teacher. In the market economy, quality is viewed from the standpoint of the consumer [4].

First of all, it should be mentioned that the quality of the enterprise depends on the quality of the project (often called the technical level), i.e. the level of quality requirements set (selected) by the developer or manufacturer in the design and technological documentation; business processes, their ability to implement the established quality requirements.

Business processes include the following processes: basic processes (planning, marketing, development, procurement, manufacture, supply and maintenance); service processes (installation, adjustment and repair of the equipment, transport, communication, power supply, work with the personnel, documentation, etc.); quality control processes (goods, production processes, personnel, resources, management). In order to be able to set a high level of quality requirements and use the necessary processes, staff and resources, it is necessary to have the appropriate financial capacity. Therefore, the objectives of quality management should also be taken into account in financial management from the standpoint of optimizing the cost of quality: staff performing processes and on which depends the work of the entire enterprise; resources purchased and used for the manufacture of products or services or works (raw materials, components, premises, process equipment, tools, measuring instruments, office equipment, software, subcontracting services and works, etc.); management that affects the processes, projects and quality work of employees in the enterprise. Thus, quality is a complex concept that reflects the effectiveness of all stages of the enterprise.

The need to ensure the life cycle of quality of employees of enterprises necessitates the development and implementation of programs to improve it. To solve this problem, it is necessary, in particular, to pay attention to the fact that the quality of employees depends largely on the state of each of its components and requires improvement of existing and development of new scientifically sound theoretical and methodological provisions, the implementation of which will contribute to this provision is more effective to do in stages, from training in higher education to retraining and its improvement, which will increase the economic development of the enterprise. Only under such conditions it is possible to achieve the creation of competitive jobs at the enterprises of Ukraine, which is a guarantee of attracting highly professional specialists [2].

The analysis of theoretical achievements of scientists and practice of work of the enterprises of mechanical engineering allowed to draw a conclusion that the question of a life cycle of maintenance of quality of human resources of the enterprise was not considered in general. It requires additional research, the sequence of stages of its formation and implementation.

The life cycle of staff quality assurance is the time during which labor resources go through successive stages (phases) of management, which affect the internal and external development of the enterprise for the economic and efficient functioning of the state in a competitive environment.

This definition makes it possible to understand what is needed (what stages) for the effective functioning of the enterprise or to increase its competitiveness. Thus, the life cycle of staff quality is the most important factor for the effective development of the enterprise, because effective management and investment in development, training and retraining is the key to profitability, not only economically but also socially, in terms of protection, motivation and employee incentives.

Life cycle management of the quality of human resources is not only an internal problem of the enterprise, although it ensures compliance with the current state of the internal environment to the established requirements (standards), the definition of which is the task of trade unions in state-owned enterprises. In turn, the state ensures the implementation of relations that arise in the process of implementing such standards through the regulatory framework (Labor Code of Ukraine) [1]. The impact of the life cycle of staff quality assurance not only on the results of the enterprise, but also on the state budget, internal and external labor market.

The paper substantiates the position that the quality of staff is one of the main factors of efficiency of economic activity of enterprises. The concept of "quality of human resources of the machine-building enterprises", which is interpreted in the work as a property (ability) of management activities related to human leadership, skillful use of their work, intellectual abilities, motives for defining business goals and objectives, creating a management mechanism for developing plans, formulating appropriate rules and procedures to ensure the maximum economic and social effect of the enterprise, as well as increase the welfare of employees.

It is established that most of the analyzed methodological approaches to assessing the quality of staff are based on the methodology of economic analysis of economic activity of the machine-building enterprises using such basic criteria as "effectiveness" and "efficiency". The key factor influencing the quality of human resources of enterprises are managers with their inherent professional and business qualities. Undoubtedly, the latter are acquired and improved in the process of practical work, but in modern conditions the basis of these qualities should be general and professional training, systematic training, the effectiveness of which is determined by the degree of employee interest in obtaining relevant knowledge. High quality of the final results of the employee's activity is possible under the conditions of conformity of his knowledge, skills and abilities of the work he would like to perform and is performing. It is established that the comprehensive application of the basic principles of training and motivation in the organization is a defining prerequisite for staff development as a necessary component of quality assurance of enterprise management. It is established that low quality of staff is one of the most painful problems of the Ukrainian economy and machine-building economy, in particular, which is the reason for insufficient intensity of investment processes and low indicators of economic growth.

The more effective the mechanism for ensuring the quality of human resources, the stronger its stimulating effect on the production process, the lower the cost of living and material labor satisfies market demand.

This is possible with such production management, which is able to ensure the rationality of the combination of administrative and socio-economic incentives. These incentives, on the one hand, should allow the independence of production units in setting goals, choosing and implementing the means to achieve them, as well as economic responsibility for the proper quality of production and the degree of achievement of the ultimate goal. On the other hand, the motivational mechanism and incentives should be flexible and focused on each employee, employee, manager.

In these circumstances, the task before management is to create such conditions in which subordinates working for the success of the enterprise can easily meet their needs or at least be confident in the possibility of doing so. Because as long as people think they are getting a fair reward, or at least related to the expected degree of satisfaction of their needs, they will work accordingly. It should be borne in mind that effective motivation, acceptable to all, is in principle impossible, because human values, needs and expectations are purely individual. One employee needs money, another - praise, the third - recognition, the fourth - self-expression and self-affirmation, and the fifth - needs all of the above and in large quantities [3].

Currently, when the majority of the population of Ukraine is in a difficult situation, the main stimulus is material interest. Moreover, the specifics of the situation now are such that a working person, even with a meager salary, is significantly different from a non-working person. The very fact of a person's employment significantly raises his prestige in his own eyes and in the eyes of the unemployed.

World experience shows that the reward should be directly related to the activities that lead the company to success. At the same time, each employee of the organization must explicitly and timely receive their predetermined part of the total amount of earnings, associated with public recognition. However, humanity has not yet come up with a comprehensive, integrated formula for motivation for all occasions.

Discussion. In modern research, one can find a large number of different interpretations of such macroeconomic categories as "labor resources", "human capital", "staff", "intellectual capital" and "labor potential". The essence of the concept of "staff", on the other hand, is not considered even by those modern scientists in whose works it is the subject of research.

Due to the above-described essence of staff, we will reveal the specifics of the mechanism of human resources management, which is a special type of activity that requires special functions and the presence of special qualities in those people who are engaged in this activity. People management requires a creative (rather than mechanical) approach, individualization and consideration of the long term in all decisions.

The essence of the human resources management mechanism is to treat people as a competitive value that should be directed, motivated, placed and developed

together with other resources in order to directly contribute to the achievement of the strategic goal. This definition successfully reproduces the importance of the relationship between human resource management and the goals of the organization. Human resources should be used to meet the needs of the organization to fulfill its purpose, not just to fill a vacancy [2].

Conclusions. That is, the basis of theoretical approaches to the mechanism of quality assurance of staff of the machine-building enterprises, which develop it and bring profit, as well as bring to the international market is the staff. Despite the fact that this category has a very large number of such concepts, this category is the broadest, and for the economic security of the enterprise and for its further operation use the category of human resources development. Summarizing all the above definitions, it is proposed to understand the "quality of staff" as an organized, managerial, innovative and motivational impact on changing and improving the structure of the labor potential of the enterprise, carried out using methods, tools and management principles and providing quality, targeted enterprises in order to bring it into line with its actual state. The effectiveness of human resources quality management, the most complete implementation of the goals largely depend on the construction of a mechanism for staff quality assurance.

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PRODUCT QUALITY MANAGEMENT AS A FACTOR IN THE INTERNATIONAL COMPETITIVENESS OF PHARMACEUTICAL ENTERPRISES OF UKRAINE

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Abstract. *Under the market conditions, each pharmaceutical products manufacturing company is forced to form a competitive strategy and tactics of behavior in the business environment in order to increase the competitiveness of products and activities. Pharmaceutical products are produced mainly by a small number of developed countries. The share of the largest manufacturers of pharmaceutical products, which include the USA, Japan, France, Germany, Great Britain, Italy, Switzerland, Spain, the Netherlands, exceeds 75% [14]. Ukraine also has its own pharmaceutical production; however, it is dependent on the foreign manufacturers of pharmaceutical products and does not fully meet the needs of its population. Ukraine imports most of the pharmaceutical products from abroad, and the country can provide about 38 % of the population with its own pharmaceutical products. However, in recent years, the share of imported pharmaceutical products has been gradually decreasing, and the export of Ukrainian pharmaceutical products (both absolute and relative, both quantitative and qualitative) has grown. In our opinion, this indicates an increase in the international competitiveness of Ukrainian companies, achieved through product quality management.*

The article is devoted to quality control issues affecting the sustainable business development and international competitiveness of enterprise. On the example of the pharmaceutical company "Farmak", researched domestic experience of production quality management system, and its affect on the international competitiveness of firm. Given the desire to integrate into the world economy, entrepreneurs should focus on changing targets global vector of development in the field of quality management as the sources of development of the enterprise. Concluded that the advantage of a systematic approach to quality management, which ensures improved consumer confidence in the quality and safety of manufactured products, market expansion, as well as improving the reputation of manufacturers of high-quality and safe products.

Keywords: *international competitiveness, enterprise competitiveness, pharmaceutical products, pharmaceutical industry, GMP, quality management.*

JEL Classification: D04, F10, L1, L65, M10

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Introduction. The competitiveness issue is universal in its nature and affects almost all business entities in all sectors of all countries, including manufacturers of pharmaceutical products of Ukraine. The development of the pharmaceutical industry and the pharmaceutical market is the basis for the steadiness and balance of the production and circulation of pharmaceutical products and, therefore, one of the elements ensuring the national security of the country, and largely the state of the economy. In modern conditions of direct interaction between Ukrainian and foreign entrepreneurs, the issue of the competitiveness of pharmaceutical companies in Ukraine has become central and real.

Literature review. A large number of publications, both foreign and Ukrainian, testifies to the urgency of the issue of ensuring competitiveness and analysis of the influence of various factors on it. Some aspects of the studied topics were displayed in the works of M. Porter [21], J.-J. Lambin [15], E.A. Beltyukov [1], M. Berdar [2],

A.R. Dunskaya [5], J. L. Zborovska [26], G. V. Kostiuk [14], V.S. Mazur [16], L.A. Pedorenko [20], G.M. Filyuk [7], G. I. Frolova [8] and others. However and despite this, the issue of the impact of quality management on the international competitiveness of pharmaceutical enterprises has not been studied enough, especially from the viewpoint of management.

Aims. The aim of the article is to estimate the impact of product quality management systems on the international competitiveness of enterprises in the pharmaceutical industry of Ukraine.

The aim of the article is, firstly, to show the importance of product quality management for the competitiveness of pharmaceutical companies, and secondly, to estimate the degree of influence of such management on the competitiveness and results of the company using the example of JSC "FARMAK".

Methods. The article uses logical, statistical, graphical, problem-oriented methods, as well as the method of comparative analysis.

Results. The international competitiveness of the enterprise is expressed by its ability to produce and sell products that meet all established requirements and are more attractive in price, quality and other non-price characteristics compared to similar products of competitors on the domestic and / or foreign markets. The main indicator of product attractiveness is the company's sales volume and its market share. The pharmaceutical market is one example of global markets that compete between local and international players [22].

Ukrainian companies are competing with foreign companies both on the domestic (domestically) and foreign (abroad) markets. Therefore, they are forced to take care of their own international competitiveness.

The competitiveness is the ability to compete and win the competition on the market [4, 21]. In the economic literature, authors often write about the competitiveness of an enterprise, industry, country. However, the direct subjects of competition are only business entities (mainly enterprises, companies). Such business entities make decisions on all issues related to competition on specific product markets, in particular, whether or not to enter into competition on a particular market, which competitive strategy to choose, how to implement the chosen strategy, and ultimately bear liability for such decisions, receiving profit or loss. At the same time, the competition of enterprises has the form of competition of the products themselves. Therefore, to ensure the competitiveness of enterprises, the properties and characteristics of the products they produce, and especially the quality of these products, are of great importance.

This is because pharmaceutical products are not quite ordinary goods. This king of goods has a direct impact on consumer health, therefore quality in the pharmaceutical industry is of particular importance and acts as an object of state regulation. If a manufacturer does not comply with state requirements for the quality and safety of products, then such manufacturer simply cannot sell its products on the market. Thus, in order to be competitive and at least have the opportunity to be present on the market, pharmaceutical companies need to manage product quality,

which is due, firstly, to the state requirements, and secondly, to the competitive pressure.

Nowadays all known world manufacturers of pharmaceutical products manage their quality at all stages of the product life cycle and have appropriate management systems certified according to the international standards ISO 9001 (quality management systems), ISO 13485, GMP, GLP, GCP, GDP.

The main standard from this list for the pharmaceutical industry is the GMP (good manufacturing practice) standard, which has become mandatory in Ukraine since 2009.

The pharmaceutical industry of Ukraine today is represented by 115 business entities that are licensed to produce pharmaceutical products under production-line conditions. Since the beginning of 2011, the number of licensees has decreased by 22 entities, which is precisely due to the fulfillment in Ukraine of GMP requirements for the production of pharmaceutical products adopted in the European Union. Not all Ukrainian manufacturers were able to reach the level established by the standards for the production of pharmaceutical products adopted by the European Union. Another reason for the reduction in the number of business entities was the occupation of part of the territory of Ukraine in 2014.

The pharmaceutical industry occupies a significant place in the economy of Ukraine, since it is an important segment of the national market, largely determines the national and defense security of the country, is notable for its high science intensity and developed cooperation. Over the past eight years, the industry has shown a steady upward trend in monetary terms at the level of at least 15 % per year (Fig. 1).

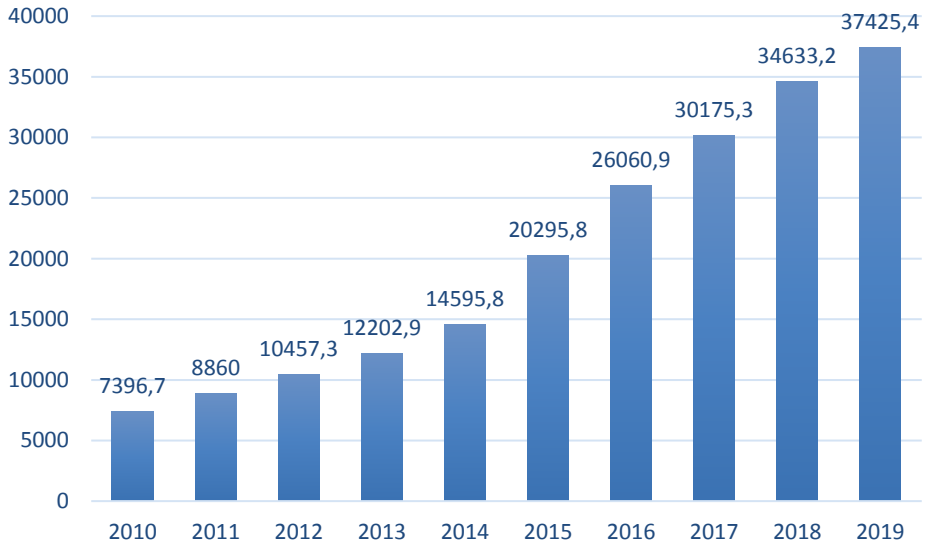

Figure 1. Manufacture of basic pharmaceutical products, 2010-2019 (in UAH million)

Sourse: calculated by the authors according to data (State Statistics Service of Ukraine, 2021)

According to the statistical data of the State Register of Medicines of Ukraine, which was formed by the state enterprise "State Expert Center of the Ministry of Health of Ukraine", as of June 2021, Ukrainian pharmaceutical companies produced 30. 7 % (4, 229) of the total number of pharmaceutical products registered in Ukraine (henceforth referred as the "pharmaceutical products" or "PP") (Table. 1.) [23].

Foreign pharmaceutical products accounted for 69.3% (9, 521). For comparison:

- 5 years ago (as of November 11, 2015) the ratio between the local and foreign pharmaceutical products registered in Ukraine was 29.9 % (3, 689) and 70.1 % (8, 648) respectively,

-9 years ago (as of November 01, 2011) (13, 889 pharmaceutical products) – 34 % and 66 %.

Table 1. Number of pharmaceutical products registered in Ukraine (as of June 8, 2021)

No.	*Pharmaceutical products groups*	*Local*	*Foreign*	*Total*
1	Finished pharmaceutical products (FPP)	3,637	7,156	10,793
2	Substance	346	1,802	2,148
3	In bulk	193	424	617
4	Packages in bulk	53	139	192
	Total:	**4,229**	**9,521**	**13,750**

**Sourse: calculated by the authors according to data (State Register of Medicines of Ukraine, 2021)*

As we can see, the number of pharmaceutical products of foreign production significantly exceeds the number of pharmaceutical products of local production in all years.

As for sales in Ukraine, according to the Limited Liability Company "Proxima Research", in 2019 the foreign-made pharmaceutical products occupied 62.3 % of the market in monetary terms, and pharmaceutical products of Ukrainian manufacturers - 37.7 %. In packages, on the contrary, Ukrainian pharmaceutical companies held the lead - 71.3 %, while pharmaceutical products of foreign manufacturers accounted for 28.7 % [19, 13]. This ratio is a completely natural result of the product portfolio of Ukrainian pharmaceutical manufacturers, which do not yet produce pharmaceutical products for the treatment of complex diseases, such as oncology, etc., but are concentrated in the segments of simpler and cheaper pharmaceutical products.

The group of leading Ukrainian manufacturers of pharmaceutical products includes JSC "FARMAK" (with a 5.9 % share in sales on the Ukrainian pharmaceutical market), PJSC "Pharmaceutical Firm "Darnitsa" (3.7 %), "Arterium" Corporation (4.2%), Pharmaceutical Company "Zdorovye" LTD, PJSC "SIC "Borshchahivskiy Chemical Pharmaceutical Plant" [11].

Mostly, the Ukrainian manufacturers specialize in the production of low-cost generics. The good price-quality ratio of generic pharmaceutical products produced by Ukrainian manufacturers is considered their main competitive advantage. Is it true or not, however, the share of foreign pharmaceutical products in sales on the Ukrainian pharmaceutical market has been declining in recent years. Five years ago, their share was about 70 % of the market in monetary terms. Now, as already

mentioned, it is 62. 3%. For Ukrainian companies, this is certainly a positive trend, which may indicate an increase in their competitiveness on the national market.

Positive trends for Ukrainian pharmaceutical companies are also observed in the export direction (see Table 2).

Table 2. Foreign trade in the field of pharmaceutical products in Ukraine, 2009-2020

Year:	Export			Import			Balance, millions, USD
	millions, USD	% in relation to the previous year	% in relation to the total export of Ukraine	millions, USD	% in relation to the previous year	% in relation to the total import of Ukraine	
2009	150.0	99.3	0.4	2,130.3	87.5	4.7	-1,980.3
2010	198.5	132.3	0.4	2,445.8	114.8	4.0	-2,247.3
2011	195.1	98.2	0.3	2,879.0	116.3	3.5	-2,683.9
2012	243.5	124.8	0.4	3,307.9	114.9	3.9	-3,064.5
2013	251.5	103.3	0.4	3,099.9	93.7	4.0	-2,848.4
2014	255.6	101.9	0.5	2,473.3	79.9	4.5	-2,217.7
2015	155.4	60.8	0.4	1,367.0	55.3	3.6	-1,211.6
2016	184.2	118.5	0.5	1,607.0	117.6	4.1	-1,422.8
2017	192.1	104.3	0.4	1,767.5	110.0	3.6	-1,575.4
2018	216.2	112.5	0.5	1,947.0	110.2	3.4	-1,730.8
2019	250.8	116.0	0.5	2,143.2	110.1	3.5	-1,892.4
2020	268.2	106.9	0.5	2,523.2	117.7	4.6	-2,255.0

Sourse: calculated by the authors according to data (State Statistics Service of Ukraine, 2021)

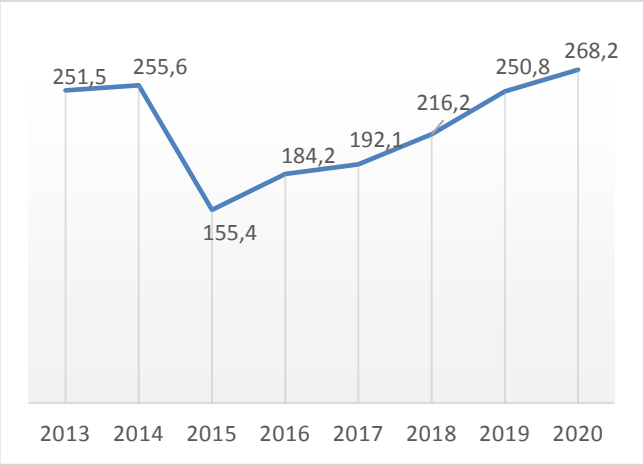

Figure. 2. Export of pharmaceutical products from Ukraine (millions, USD)

Sourse: calculated by the authors according to data (State Statistics Service of Ukraine, 2021)

As can be seen in Fig. 2 and from Table 2, the real shock therapy for Ukrainian pharmaceutical manufacturers was the closure of the Russian market after 2014. In 2015, PP exports from Ukraine decreased by 40 %.

However, already in 2016, export began to grow. In 2016, it amounted to 184.2 million USD, which is 18.5 % more than in 2015; in 2017 - 192.1 million USD, which is 4.3 % more than in 2016; in 2018 - 216.2 million USD, which is 12.5 % more than in 2017; in 2019 - 250.8 million USD, which is 16 % more than in 2018; in 2020 - 268.2 million USD [24].

At appropriate time, Russia accounted for the largest share of Ukrainian pharmaceutical exports in total sales. However, after deliveries to the aggressor country stopped, the companies were forced to start looking for other target markets for sales of their products.

Such behavior is characteristic of all Ukrainian manufacturers.

As the result, the share of post-Soviet countries (Uzbekistan, Russia, Belarus, Kazakhstan, Moldova, Azerbaijan, Georgia, Tajikistan and Kyrgyzstan) in the export of Ukrainian pharmaceutical products decreased from 88 % in 2009 and up to 66% in 2019, and in the structure of such export such countries as the Brazil, Iraq, Yemen, Libya, Cuba, Somalia, Colombia, the Philippines appeared [6]. Ukrainian enterprises significantly expanded the boundaries of export supplies (see Fig. 3). Shipments to Poland, Vietnam, Mongolia, and India (blood products) also increased significantly. Australia was added to the new markets in 2017 thanks to the efforts of the JSC "FARMAK".

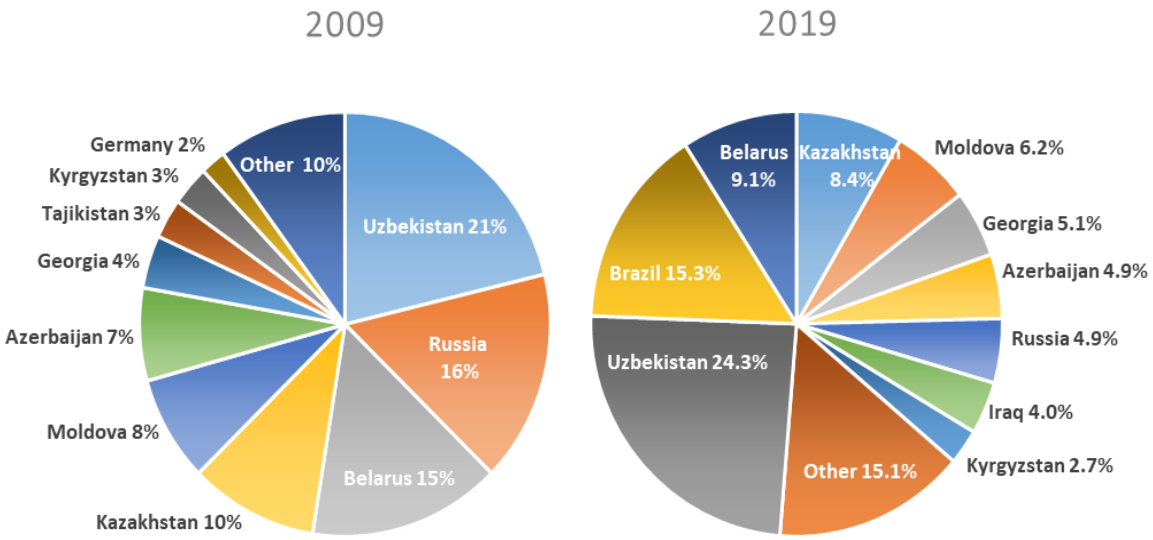

Figure 3. Countries of export of Ukrainian pharmaceutical products [6]

According to data of the research company Top Lead, in 2017 the products of Ukrainian pharmaceutical companies were bought in 50 countries of the world and in 2018 already in 81 countries [9].

Ukrainian companies are also making efforts to participate in international global tenders such as the WHO, UNICEF, UNFPA.

All this testifies to the increase in the international competitiveness of pharmaceutical manufacturers from Ukraine, which was made possible primarily due to their responsible attitude to product quality management.

A typical example in this regard is the JSC "FARMAK" (but not only this company).

There are no compromises for JSC "FARMAK" in quality matters. This is a joint philosophy of each employee and the company as a whole. Each year, the company undergoes about fifteen external inspections and audits. Nineteen

production sites of JSC "FARMAK" were certified for the compliance with the GMP requirements by the State Service of Ukraine on Medicines and Drugs Control. The systems were implemented and certified in accordance with the ISO 9001, ISO 13485, ISO 22000, ISO 14000, and OHSAS 18001 [17].

The integrated quality system operates at the enterprise and considerable attention is paid to quality control at the stage of development, testing and manufacture of products that are constantly being improved. JSC "FARMAK" has implemented a comprehensive quality control system in accordance with the GMP standards and the requirements of ISO 9001 (quality management system) and ISO 13485 (quality management system for medical devices). The quality control team is responsible for testing and ensuring that all substances, excipients, packaging materials and manufactured products are in accordance with approved specifications.

The key responsibility for quality in the company is assigned to the Service of the Director of Quality matters and provides for the regulatory compliance of all quality systems, independent control at all stages of production and certification of products by the Authorized person. The presence of such department does not reduce the role and liability of other employees, but rather is the central link in the multifunctional quality chain - from pharmaceutical products development to delivery to the consumer [17].

The pharmaceutical quality system built in the company over the past 23 years has gained European recognition. Today, all productions of finished pharmaceutical products of the JSC "FARMAK" have a national GMP certificate; fourteen of them are certified by the European regulatory authorities of Croatia, Poland and Germany. 95 % of the products of JSC "FARMAK" are produced at these certified production sites [18]. No other pharmaceutical company in Ukraine has such level of European recognition. In addition, quality management systems for medical devices and dietary supplements of the company comply with ISO 9001, ISO 13485, ISO 22000 standards and allow to develop these areas of activity. These systems guarantee product quality and form consumer confidence.

There are various methods with which the impact of quality management system on the state of affairs of the company can be evaluated [12, 25]. In accordance with ISO 9001, such impact on the competitiveness of the company is best assessed in two ways:

- by performance,
- by effectiveness.

In ISO 9000:2000 standard, the term "performance" is defined as the degree to which the planned results are achieved, and "effectiveness" is defined as the ratio between the results achieved and the resources expended.

Let us to assess the effectiveness of the quality management of JSC "FARMAK".

At the present-day stage of development, JSC "FARMAK" in its activity seeks to achieve the following strategic goals: (1) to become one of the influential regional pharmaceutical market participants, strengthening its leading position in Ukraine and increasing its presence on the markets of neighboring countries; (2) to increase the

effectiveness of all processes, and to increase the production capacity; (3) to expand the geography of exports; (4) launch on the market new products with significant commercial potential that are underrepresented on the local pharmaceutical market; (5) to introduce measures to increase the effectiveness of marketing and sales; (6) to deepen the cooperation with strategic partners; (7) to increase export to the markets, to expand the possibilities of representative offices on the main markets, including the opening of new representative offices or affiliates; (8) to develop partnership projects on export markets [11].

By the end of 2019, JSC "FARMAK" continues to maintain leadership in the ranking of sales on the domestic pharmaceutical market with a share of 5.9 %, among marketing organizations in terms of pharmacy-sold pharmaceutical products in monetary terms with a share of 6.1 % and with an increase of + 16.2 % in sales in monetary terms, in export with a share of 22.6 % of total sales of the company and 18 % in total exports of all companies of the pharmaceutical industry of Ukraine.

During 2012 - 2019, JSC "FARMAK" was one of the most active local pharmaceutical manufacturers of the Ukrainian market in the development, registration and introduction of new products on the market, based on the number of new unique commodity items launched on the Ukrainian market, according to the data of the Limited Liability Company "Proxima Research". At the end of 2019, the product portfolio of JSC "FARMAK" consisted of pharmaceutical products that are based on 177 INN (international nonproprietary name) and are represented by 401 nomenclature items in the company's price list. Each year, the company launches an average of 20 new pharmaceutical products on the market, and another 100 pharmaceutical products are in development [11].

The company supplies products to 28 countries, has been operating on the EU markets for more than 20 years, in particular: Poland, Bulgaria, Latvia, Lithuania, Hungary, Great Britain, Germany and Slovakia. In the EU, 37 pharmaceutical products of the JSC "FARMAK" are registered. Seven more are in the registration process. The JSC "FARMAK" is currently undergoing the FDA inspection to enter the US market - the toughest regulatory and most solvent pharmaceutical market throughout the world.

Now let us to assess the quality management system of JSC "FARMAK" in terms of effectiveness.

The main and essential feature of production efficiency at JSC "FARMAK" is achievement of the goal, provided that the resources are reduced.

Over the past 5 years, labor productivity in production increased by 20-40 %, labor intensity decreased by 12 %, losses of raw materials and supplies for 9 months of 2019 decreased by 6.4 million UAH. In addition, for the 9 months of 2019, due to the economical use of material resources and waste reduction, the consumption rates for raw materials and materials were reduced for 504 stock items, which gave an economic effect of 3.2 million UAH. The manufacturing departments are working on improving the methods and forms of organizing production, and thanks to this, it was possible to reduce the duration of the production cycle in 258 technological processes. Today, JSC "FARMAK" consists of six manufacturing departments,

nineteen production and packaging lines of finished pharmaceutical products that meet the requirements of GMP. These are modern and high-quality capacities that make it possible to produce annually up to 3 billion of tablets, 100 million of ampoules, 160 million packages of sterile and non-sterile pharmaceutical products in bottles, 6 million packages of embrocations, 53 million of soft gelatine capsules, 200 million of tablets (pills), 180 million of hard capsules, 10 million of sachets, 15 million of injectors (medical syringes), 140 tons of active pharmaceutical ingredients. Moreover, this is possible thanks to approximately 800 highly skilled employees motivated for success [3].

In December 2018, a modern FPP-2 was launched, the capacity of which allows producing up to 2 billion tablets (pills) per year. New high-tech equipment allowed to increase the productivity and reduce the complexity of certain technological processes on the production site up to 50 %.

Today, in the measure never given before, the competitiveness of production is determined by the use of key digital management systems and innovative technologies of planning, organization and control. In August 2019, the OR SOFT information system (Germany) was introduced at the production site, which significantly improved the organization of technological processes, analysis and accounting for implementation of the shift-daily tasks, established run times and time rates, reduced the response time to equipment and systems downtime [3].

As the part of efforts related to environmental protection, the company, based on past experience and work in 2018, decreased the gas consumption per UAH of released products by 3.14 % compared to 3 % of the planned; compared with the same period in 2017, by 0.94 % reduced the electricity consumption per UAH of released products. These and other results of the company's efforts in the field of quality management convincingly prove their positive impact on the competitiveness of the company [10].

Discussion. The results of the analysis show export of ukranian pharmaceutical product is increasing, and the sales geography is expanding. The share of imported pharmaceutical products on the pharmaceutical market of Ukraine is gradually decreasing. Such strengthening of the positions of Ukrainian products on the domestic and foreign markets indicates an increase in the international competitiveness of Ukrainian pharmaceutical companies, and the fact that this occurred after the transition of the pharmaceutical industry of Ukraine to European quality management standards allows us to say the main cause of increasing the international competitiveness of Ukrainian pharmaceutical companies is the efforts that companies are making in the field of quality management.

Thus, the results of the analysis confirmed the conclusion that the main factor of increasing the international competitiveness of Ukrainian pharmaceutical companies is product quality management.

Conclusion. As the performed analysis and the experience of the JSC "FARMAK" shows, a quality management system is the main factor on which the success of the pharmaceutical company is based and as the result, its international competitiveness is strengthened annually. At the same time, the main directions of

the continuous development of the quality management system are integration of quality management with other specialized management systems, automation of information collection processes, implementation of information technologies in staff management processes to increase the employee involvement in the company's affairs and a greater integration of the individual goals of employees with the general goals of the company, equipment modernization and investments in the creation and development of new products. Thanks to a modern approach to quality management, the companies increase efficiency and effectiveness, increase the share of exports and enter new markets.

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USE OF HOURLY RATE IN DETERMINING THE COST OF ENGINEERING SERVICES

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Abstract. *In 2017, a new profession with the code KP-2142.2 – Consulting Engineer (Construction) was officially approved in Ukraine. Construction customers additionally include in the construction cost up to 3% the cost of the services of a consulting engineer. The Ministry of Regional Development of Ukraine has approved an approximate form of contract for the provision of consulting engineer services. In world practice, there are three main methods of calculating the cost of engineering services in construction: hourly rate, interest fee, one-time fee. Each organization must choose for itself a convenient principle of calculating the cost of services of a consulting engineer as a business entity for different types of services. One of the types of engineering services in construction is a survey of the technical condition and operational suitability of buildings and structures. Existing regulations do not fully take into account the needs of the industry, in particular do not contain rules for the inspection of technical condition of structures: tunnels, subways, collectors, railways, ports, dams, canals, etc.*

In market conditions, serious difficulties that prevent the effective use of scientific developments, in terms of improving the operational reliability of buildings and structures, is the lack of regulatory framework for determining the cost of such works.

Keywords: *Consulting engineer, time rate, cost of services, time rate, inspection of technical condition.*

JEL Classification: L74, L89, M52

Formulas: 5; fig.: 2; tabl.: 5; bibl.: 12

Introduction. In 2017, a new profession with the code KP-2142.2 - Consulting Engineer (Construction) was officially approved in Ukraine. In this regard, according to the order of the Ministry of Economic Development of Ukraine dated 26.10.2017 № 1542, appropriate changes were made to the National Classification of Ukraine DK 003:2010 (2010). And also developed and approved according to the order of the Ministry of Regional Development, Construction and Housing of Ukraine from 08.08.2017 №192 qualification description of the consulting engineer (Handbook of qualification characteristics of occupations. Issue 64. Construction, installation and repair work. Section 1 Leaders Professionals, Specialists, 1999).

Amendment №2 to DSTU B. D.1.1-2013 “Rules for determining the cost of construction” from June 1, 2018 to Chapter 10 “Maintenance of customer service” (columns 6 and 7) of the consolidated estimate added the ability to take into account funds not only for maintenance customer, but also include funds for technical supervision, up to 2,5% of column 7, and funds up to 3% of column 8 for the provision of information and consulting services in construction by consulting engineers (individuals or legal entities).

If the cost of services of consulting engineers for project implementation is taken into account, the cost of these services should not exceed 5,5% of Chapters 1-9 of the consolidated estimate (Tereshchenko, Vakhovych & Demianenko, 2018).

The Ministry of Regional Development of Ukraine has approved an approximate form of contract for the provision of engineering consulting services used by the customer and engineering consultants in construction as a recommendation when concluding contracts for the provision of these services (Order of the Ministry of Regional Development №89 from 13.04.2020).

From now on, managers of budget funds, funds of state enterprises, institutions and organizations, as well as credit funds provided under state guarantees, customers and investors have additionally received a mechanism to involve consulting engineers in the implementation of construction projects at the pre-project stage. According to the resolution of the Cabinet of Ministers of Ukraine of August 12, 2020 № 704.

In particular, the Title for the performance of design and survey works for construction is supplemented by column 14, which justifies the possibility of involving a consulting engineer at the beginning of the design and survey work (Interstate Guild of Consulting Engineers, 2021).

The amount of funds for the services of a consulting engineer in case of his involvement at the design stage, as a rule, may not exceed 15 percent of the total limit of funds planned for the respective purposes in the consolidated estimate of the investment estimate of the construction object (FBM Ukraine, 2021).

Literature review. The vast majority of research, publications and documents on the cost of engineering services are carried out and developed in developed countries by national associations of engineering consultants, such as: Canada (Association of Consulting Engineering Companies British Columbia (ACEC-BC), & Association of Professional Engineers and Geoscientists of British Columbia (Engineers and Geoscientists BC), 2009, Association of Consulting Engineering Companies - Canada (ACEC), 2010, Ontario Society of Professional Engineers (OSPE), 2015, Consulting Engineers of Nova Scotia (CENS), 2017), United States of America (National Society of Professional Engineers (NSPE), American Council of Engineering Companies (ACEC), & Associated General Contractors of America (AGC), 2009).In Ukraine, there are currently no regulations and / or publications that systematically define approaches to determining the cost of services of a consulting engineer as a business entity, in particular when performing work using budget funds.

Aims. The purpose of the study is substantiation of the need to develop an effective mechanism for regulating the hourly rate indicator when determining the cost of engineering services.

Methods. The study used general and specific research methods, including the method of comparison, tabular method, coefficient method, graphical method, and other methods.

Results. In world practice, there are three main methods of calculating the cost of engineering services in construction: hourly rate, interest fee, one-time fee. When concluding a contract with a consulting engineer, the calculation of the cost of services can be performed by applying all these methods - for each of the services,

the pricing method is chosen that is most acceptable to the parties at the stage of its conclusion.

The first method is the interest fee - used in projects with a well-defined scope of services of a consulting engineer. The cost of consulting and consulting services of a consulting engineer is calculated on the basis of a percentage of the cost of work performed, for which the consulting engineer is directly responsible (Vakhovych, Demianenko, 2019).

The content of the interest method is that the cost of services is expressed as a percentage (%) of the cost of construction works. However, from our practical experience in determining the cost of services of a consulting engineer at the initial stage of the investment and construction project when the estimate documentation is missing or not developed in full, there is a problem in determining the reliable cost of construction work at this stage.

To this end, in order to determine the cost of consulting services, the Aggregate Indicators of Construction Costs of Different Levels of Detail and Percentages for Determining the Costs of Different Types of Services of Consulting Engineers are developed in detail.

The second method of determining the cost of services of Consulting Engineers is the "hourly rate", which involves expressing the cost of services based on the complexity of services in man-hours and the cost of one hour of services. The hourly rate can be calculated according to the following basic approaches:

Price for one hour of work of one specialist:

- the price for the key specialist, which includes the cost of the specialist team. That is, the salary of a specialist is equal to the salary of the team (the composition of the team is not disclosed);
- price for each specific specialist.

Price for one person-hour of service:

- based on the salary of each member of the service team;
- based on the average salary in the organization of a consulting engineer.

The method of calculating the cost of one person-hour based on the average salary in the organization does not allow:

- take into account the situation, the involvement of highly qualified highly paid professionals;
- take into account part of the labor participation of a particular specialist;
- take into account the harmful conditions of some works;
- determine different costs for different types of services in the same organization.

At the same time, currently in table G3 DSTU B D.1.1-7 (2013) different cost of one person-day is defined only for different types of design and survey works.

To calculate the cost for one hour of work of one specialist are allocated operations that are assigned to a specific group of performers. A time norm is developed for each operation, according to which it is clear what percentage of time or hours each executor is employed, which will allow taking into account different wages. The advantage of this method is to take into account different labor costs and the ability to calculate the average duration of all work.

The cost of one man-hour is determined based on the calculation of labor costs and economically justified elements of costs for the following items:

- salaries of performers;
- deductions for social events;
- total expenditures;
- administrative expenses;
- profit;
- taxes, fees and other mandatory payments.

The cost of one man-hour does not take into account:

- material costs (cost of purchased basic materials and raw materials, devices, equipment, reagents, etc.), which are necessary components in the performance of work (provision of services) and can be directly attributed to the object of costs (these works, services), etc.);
- business trip costs engineer-consultants;
- the cost of third-party services
- other costs are not included in the cost of one man-hour.

When calculating the cost of one man-hour based on the average wage, the average man-hour for the previous period of similar services is taken, not the potential salary. This method is more differentiated in terms of specific conditions for specific works and allows you to take into account the specifics of this service in terms of cost structure.

In our opinion, each organization should choose for itself a convenient principle of calculating the cost of services of a consulting engineer as a business entity for different types of services. In our opinion, the most practical approach is one that takes into account the labor contribution of various specialists who perform work as part of a team.

To calculate the cost of services required justification complexity of work and algorithm for its determination.

Own experience in assessing the technical condition and operational reliability of buildings and structures, allowed to identify guidelines for the same types of work. One of the types of engineering services in construction is a survey of the technical condition and operational suitability of buildings and structures.

As of 2020 in Ukraine, the list of current regulations governing the determination of the cost of work to assess the technical condition is:

1. Methodical recommendations for determining the cost of works on inspection, assessment of technical condition and certification of buildings and structures - 1999
2. SOU D.1.2-02495431-001:2008 "Standards of labor costs to determine the cost of work to assess the technical condition and serviceability of structures of buildings and structures."
3. DSTU B D.1.2-3:2016 “Procedure for determining the cost of works on inspection of metal structures of buildings and structures”.
4. SOU D.1.3-31223828-001:2016 "Labor costs for determining the cost of work to assess the technical condition of technological and storage bins";

5. SOU 42.1-37641918-097:2017 "Motor roads. Time norms for maintenance work".

6. SOU 42.1-37641918-071:2018 "Roads. Resource element estimates for maintenance work (Group 6-59 Inspection of the underwater part of bridge piers after floods and ice drifts)".

The above regulations incomplete volumes take into account the needs of the industry, in particular do not contain rules for the inspection of the technical condition of structures: tunnels, subways, collectors, railways, ports, dams, canals, etc. Based on this, there is a need to develop appropriate time standards.

Research method to substantiate the norms of time, an analytical-research method was chosen, which is based on normative observation (DSTU-N B D.1.1-6, 2013) and provides for the study of production processes by studying the duration and nature of working time to perform these works (Figure 1).

Discussion. Timing (Table 1) for the development of time norms was performed during the inspection of the technical condition of the structures of the South-Western sewer collector in Kyiv (Figure 2). Process meter of 100 m of reinforced concrete sewer collector with a diameter of 1860 mm, accuracy of measurements up to one minute.

The timing table consists of: individual labor operations, the duration of these operations (minutes), the number of employees for each operation and a certain complexity of man-minutes.

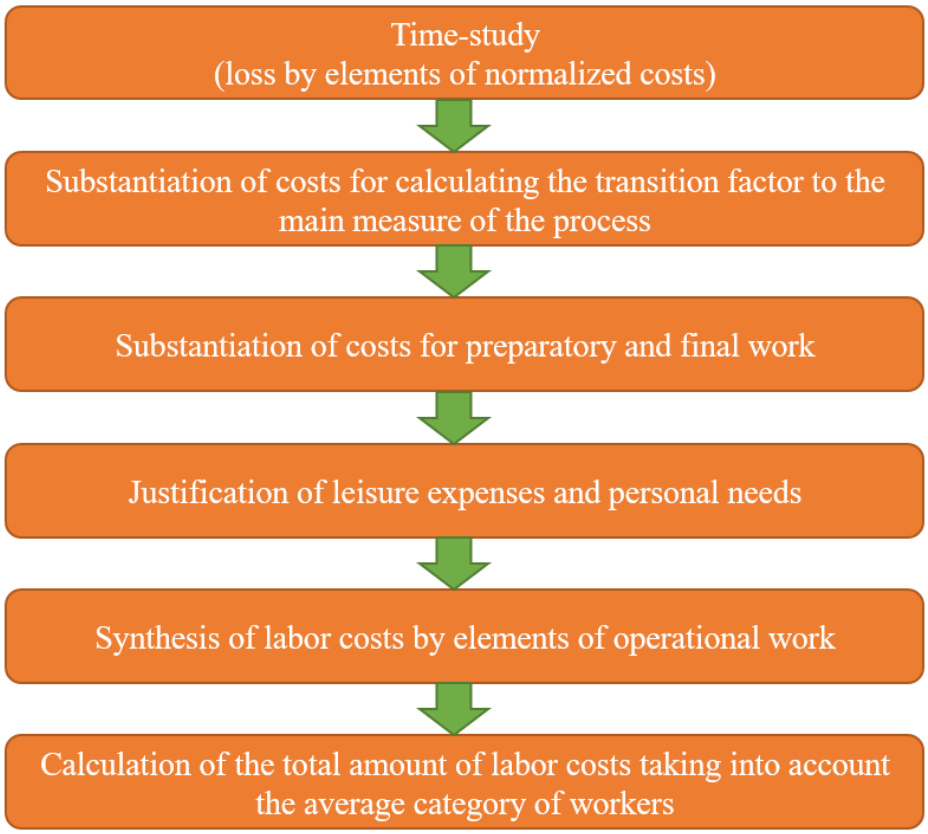

Figure 1. The main stages of development of time norms, analytical research method based on normative observation

Source: developed by the authors on the basis of (DSTU-N B D.1.1-6, 2013)

Table 1. Timing for the performance of normalized work

№	The name of the elements of the normalized process		Element meter	Duration, minutes	Labor costs, man-minutes	Quantity of finished products	Number of performers
1	Collection and analysis of technical documentation		1 sheet A4	4	24	3	2
2	Development of the program of inspections, the technical task for performance of works with definition of types of instrumental inspections and necessary measuring works		1 sheet A4	145	435	3	1
3	Detailed visual inspection with assessment of technical condition		100 r. m.	105	315	1	3
4	Defects and damage	Detection	1 defect	10	300	10	3
		Measurement	1 defect	5	100	10	2
		Sketching	1 sheet	7	70	10	1
		Photography	1 photo	1	10	10	1
5	Clarification of the calculation scheme and load collection schemes		1 sheet A4	62	124	1	2
6	Establishment of places for instrumental inspection		1 sheet A4	45	180	2	2
7	Analysis and processing of survey results		1 sheet A4 / photo	15	450	15	2
8	Determining the conformity of the arranged structures to the working documentation (if it is available)		1 sheet A4	10	60	3	2

Source: developed by the authors

Figure 2. Defects noted during the inspection of the sewer in Kyiv*

Source: photographed by the authors

After that, with the help of synthesis of labor costs and special calculations, additional consideration of rest time and personal needs in the amount of 10% of the time of operational work, the total labor costs of the whole process for measuring 100 meters of the collector are determined (Table 2).

Table 2. The results of primary data processing to perform a set of works on the inspection of the sewer

Ch.ch.	Name of elements	The total amount of time spent		Unit	Produced products per unit of measurement	Number of products in 60 minutes (one hour) $\frac{Coiumn\ 6}{Coiumn\ 3} \times 60$
		min	%			
1	South-West sewer in Kyiv	2068		100 r. m.	1	0.03
1.1	Collection and analysis of technical documentation	24		100 r. m.	1	2.50
1.2	Development of the program of inspections, the technical task for performance of works with definition of types of instrumental inspections and necessary measuring works	435		100 r. m.	1	0.14
1.3	Detailed visual inspection with assessment of technical condition	315		100 r. m.	1	0.19
1.4	Detection of defects and damage	300		100 r. m.	1	0.20
1.5	Measurement of defects and damage	100		100 r. m..	1	0.60
1.6	Sketching of defects and damages	70		100 r. m.	1	0.86
1.7	Photographing defects and damage	10		100 r. m.	1	6.00
1.8	Clarification of the calculation scheme and load collection schemes	124		100 r. m.	1	0.48
1.9	Establishment of places for instrumental inspection	180		100 r. m.	1	0.33
1.10	Analysis and processing of survey results	450		100 r. m.	1	0.13
1.11	Determining the conformity of the arranged structures to the working documentation	60		100 r. m.	1	1.00
2	Link composition: Expert Senior Engineer Engineer		 15 40 45			

Source: developed by the authors

The estimated productivity of the unit of specialists to perform a set of works on the inspection of reinforced concrete sewer collector with a diameter of 1860 mm is:

$$\mathrm{P_{spec}} = \frac{S_v \cdot \mathrm{T_n}}{\mathrm{T_{op}}} = \frac{100 \cdot 60}{2068} = 2{,}90 \text{ km/hour} \quad (1)$$

The norm of time (for 100 m) for a complex of works on check and adjustment of results of works on inspection of the reinforced concrete sewer collector with a diameter of 1400 mm will make:

$$\mathrm{N'_{часу}} = \frac{1}{\mathrm{P_{spec}}} \cdot 100 = \frac{1}{2{,}90} \cdot 100 = 34 \text{ hour} \quad (2)$$

Determine the norm of time in man-days based on the usual length of the working day 8 hours:

$$\mathrm{N_{time}} = \frac{34}{8} = 4{,}25\ \text{man} - \text{days} \quad (3)$$

The cost of inspection of a reinforced concrete sewer on the basis of estimated labor costs is determined by the formula:

$$C = (N_{time} \cdot \mathrm{V_{ch-d}}) + \mathrm{M} + V_v + \mathrm{I} \quad (4)$$

where V_{ch-d} - the cost of work per unit well, man-hour, set for the current period, UAH; M - material costs (cost of purchased basic materials and raw materials, devices, equipment, reagents, etc.), necessary for the direct performance of works, UAH; V_v - travel expenses of production staff, UAH; I - other costs, no taken into account in the cost per person-hour, UAH.

Below are examples of calculating the cost of a set of works on the inspection of the technical condition of the structures of the sewer using different methods.

Method 1. Calculation of the cost of a set of works in the case when the composition of the team is not disclosed (the salary of a specialist is equal to the average salary in the team, Table 3).

Table 3 Calculation of the cost of 1 person-day for a survey specialist

Position of the executor	Number of performers, people.	Number of people-days	Salary	
			For 1 day	Total (count 3 x count 4)
Examination specialist	1	1	1250	1250
1. Total salaries of contractors per 1 person-day, UAH				1250
2. Additional salary - leave (8.3% of row 1), UAH				103,75
3. Total labor costs (row. 1 + row. 2), UAH				1353,75
4. Deductions for social events (22% of row 3), UAH				297,83
5. Overhead costs (30% of row 3), UAH				406,13
6. Total cost of works (rows 3 ÷ 5), UAH				2057,70
7. Profit (8% of the cost of work)				164,62
8. Administrative expenses (25% of row 3), UAH				338,44
9. Total cost 1 person-day (row 6 ÷ 8), UAH				2560,75
10. Value added tax, UAH				512,15
11. Total cost of 1 person-day with VAT (row. 9 + row. 10), UAH				**3072,90**

Source: developed by the authors

Determine the cost of providing the service (in this case without material costs, travel expenses and other costs) for the inspection of the technical condition of the structures of the sewer (100 m):

$$C = 4{,}25 \cdot 3072{,}90 = 13059{,}84\ \text{UAH}$$

Method 2. Calculation of the cost of providing services in the case when the salary of each specific specialist is taken into account taking into account the time spent by each of the specialists in accordance with table 2 item 2 (table 4):

- expert - 4.25 x 0.15 = 0.64 man-days;
- Leading engineer - 4.25 x 0.4 = 1.7 man-days;

- engineer - 4.25 x 0.45 = 1.91 man-days.

Table 4. Calculation of the cost of providing the service, taking into account each specific specialist

Position of the executor	Number of performers, people.	Labor costs	Salary	
			For 1 day	Total (count 4 x count 5)
Expert	1	0.64	2000	1280
Senior Engineer	1	1.7	1000	1700
Engineer	1	1.91	750	1432,5
			Together	**4412,5**
1. Total salaries of contractors, UAH				4412,5
2. Additional salary - leave (8.3% of row 1), UAH				366,24
3. Total labor costs (row. 1 + row. 2), UAH				4778,74
4. Deductions for social events (22% of row 3), UAH				1051,32
5. Overhead costs (30% of row 3), UAH				1433,62
6. Total cost of works (rows 3 ÷ 5), UAH				7263,68
7. Profit (8% of the cost of work)				581,09
8. Administrative expenses (6% of row 3), UAH				1194,68
9. Total cost works (row 6 ÷ 8), UAH				9039,46
10. Value Added Tax (VAT), UAH				1807,89
11. Together with VAT				**10847,35**

**Source:* developed by the authors

Method 3. Calculation of the cost of providing the service as pre-design works and design works in accordance with DSTU B D.1.1-7:2014.

Calculation of the estimated cost of design work per 1 person-day at an average monthly salary for the category of complexity of construction work 3.8 - 11 000 UAH for 2021.

1. The level of average monthly earnings fees for the category of complexity of works in construction 3.8 - 7800 UAH according to DSTU B D.1.1-7:2014 change № 3.

2. The number of working days in 2020 is 250. The average number of working days in one month is 250/12 = 20,833 days.

3. The average salary for 1 day for the category of complexity of works in construction 3.8 = 7800 / 20,833 = 374,406 UAH.

4. The average salary for 1 day for the category of complexity of construction works 7.0 – 374,406×1.5864 = 593.9576 UAH.

where 1.5864 - the coefficient of transition from the category of complexity of work 3.8 to 7.0 (2,075 / 1,308 = 1,5864, annex A DSTU-N B D.1.1-2:2013).

5. The average salary, taking into account the SSC 22% – 593.9576×1.22 = = 724,6282 UAH.

6. Other components of the cost, in addition to wages, in the estimated cost per 1 person-day –1350-724,3718 = 625,3718 UAH. (ZVV, AB, profit).

For further calculation, we assume that only the increase in wages and the corresponding SSC will be taken into account, and the others - ZVV, AB and the profit will remain unchanged = 625,3718.

7. The level of average monthly earnings fees for the category of complexity of works in construction 3.8 – 11000 UAH.

8. The average salary for 1 day for the category of complexity of works in construction 3,8 – 11000 / 20,833 = 528,0084 UAH.

9. The average salary for 1 day for the category of complexity of work in construction 7,0 – 528,0084×1,5864 = UAH 837,6325.

10. The average salary taking into account the SSC is 22% = 837,6325×1,22= = 1021,9116 UAH.

11. The estimated cost per 1 person-day – 625,97 +1021,9116=1647,2834 UAH.

The indicator of the estimated cost of project works per 1 person-day at the average monthly salary for the category of complexity of works in construction 3,8 – 11000 UAH, which is 1647,00 UAH.

According to DSTU B D.1.1-7: 2014 the calculation of the cost of the survey is given in table 5.

Table 5. Calculation of the cost of providing the service examination in accordance with DSTU B D.1.1-7:2014

№ p/p	List of works performed	Performers		Number of man-days	Cost of 1 man-hour, UAH	Total cost of works, UAH
		Number	position			
1	Inspection of a technical condition of designs of a sewer collector (100 m)	1 1 1 1	Expert Senior Engineer Engineer Engineer	4.25	1647,28	7000,94
	Business trip of production staff:					0.00
	Total:					**7000,94**
	In addition, 0% VAT:					**0.00**
	Together:					**7000,94**

Conclusion. The proposed approach to the formation of a regulatory framework for assessing the technical condition of structures: tunnels, subways, collectors, railways, ports, dams, canals and others by resource method, namely the development of labor costs for different types of structures and the cost of one man-hour days), will allow more correctly economically justify the cost of different types of work, which is especially relevant in market conditions.

In the future, the developed standards will be refined, based on the statistical and analytical method of processing the source information on the actual work performed.

Without quality labor rationing and a reasonable price for the services of a consulting engineer, there can be no effective work planning, reliable evaluation and incentives for engineers, and ultimately it is impossible to achieve significant growth in productivity.

Author contributions. The authors contributed equally.
Disclosure statement. The authors do not have any conflict of interest.

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THE ORGANIZATIONAL AND ECONOMIC MECHANISM OF HUMAN RESOURCES MANAGEMENT AS A WAY TO INCREASE THE COMPETITIVENESS OF AN AGRICULTURAL ENTERPRISE

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Abstract. *The article covers and substantiates the need to build a model of the organizational and economic mechanism of the personnel management of individual enterprises of the agricultural sector of Ukraine's economy, which can function effectively due to several important components that interact with each other. The first component is the personnel policy of the enterprise, through which the implementation of a comprehensive system of measures involving the assessment, retraining and training of personnel is carried out. It consists of the following elements: planning, recruitment and training personnel, selection and additional recruitment of personnel, motivation and education of employees, organization of their training, retraining and advanced training, evaluation and placement of personnel according to their level of training and experience. The second component includes the real state of competitiveness of the enterprise, which consists of methods, ways and levers to achieve indicators of the appropriate level of competitiveness of an agricultural enterprise. It is formed from the following elements: indicators of the level of competitiveness (useful effect of service consumption, environmental and technological indicators, quality of providing services, sales revenue, profit, investment, forms of payment), effective levers to achieve competitiveness (motivation of all participants of the process: the staff, owners, consumers; proper use of the resource potential: financial, managerial, informational, labor, equipment and technology capabilities; conducting certification, training and retraining of personnel). Ways to achieve high competitiveness of the enterprise are diverse: taking into account the needs of the consumers, the use of the achievements of STP, namely: new technologies, modern equipment, tools of organization and marketing, improving the quality of services, the introduction of new services. Among the methods for achieving high competitiveness known to us, economic (price and non-price ones), organizational-administrative, socio-psychological, informational and technological levers prevail. The third component is the structural and economic mechanism of personnel management as a way to increase the competitiveness of the enterprise, which involves performing a number of functions: planning, organization, motivation and control, through which the functioning of the management mechanism is enhanced to increase the competitiveness of agricultural enterprises as a result of a synergetic effect of the interaction of components. These components of the organizational and economic mechanism of the personnel management of an enterprise in cooperation ensure the appropriate level of sustainable development and economic security of the agricultural enterprise, despite the negative impact of the competitive environment.*

Keywords: *management mechanism, staffing, enterprise competitiveness.*
JEL Classification: J24, J43, Q13
Formulas: 9; fig.: 2; tabl.: 5; bibl.: 19

Introduction. Achieving a stable state of an enterprise in a market economy, characterized by dynamism and uncertainty of many of its parameters, requires the solution of many complex problems. The most important of these tasks, in our opinion, is the development and application of the organizational and economic

mechanism of personnel management adequate to the market conditions. Quantitative and qualitative characteristics of the staff working at an agricultural enterprise, their ability to adequately respond to rapidly changing market conditions determine the efficiency of the staff's work, which, ultimately, underlies all strategic decisions made at the enterprise.

The human resources of an enterprise, the balance of all its elements determine both the ultimate goal of the economic policy of the enterprise, and the program of action, and ways to implement this program. The solution of these complex problems in the context of limited labor resources of the enterprise brings to the forefront the problem of economic measurement of available labor resources, all economic potential of the enterprise. The choice of strategy of economic behavior and the definition of concrete parameters of the economic activity of the enterprise depends on the completeness and validity of economic metrics of the personnel potential of the enterprise. The adoption of strategic and current decisions that allow, taking into account the dynamics of market conditions, to ensure positive results from timely reorientation of the production capacity, concentration of material and labor resources to produce goods and services in high demand, depends on the correctness of economic metrics and the accuracy of calculations, on adequate pricing policy, policy of economic relations with suppliers of seeds, fertilizers, fuels and lubricants, other components of agricultural production.

All this shows that the economic metrics of the labor potential of an enterprise become an effective management tool, so practicing entrepreneurs have the right to require scientists to provide a better methodological basis for a sound application of modern methods of measuring components of the economic potential of business entities.

Literature review. A large number of scientific works of both domestic and foreign researchers are devoted to the study of various aspects of staffing through the prism of the competitiveness of an agricultural enterprise.

The domestic scientists are: Herasimova, S.V. [1], Holovkova, L.S. [2], Danylenko, O.A. [3], Danylyuk, A.I. [4], Honcharova, L.A. [5], Volska, O.M. [5], Bukiashvili, V.O. [5], Dolha H.V. [6], Petrova, I.L. [7], Makarkina, H.V. [7], Teron, I.V. [7] and others.

The foreign scientists are: Day, E.A. [8], McNally, T.L. [8], Edens, P.S. [8], Robert E. Ployhart [9, 11], Williamson, I.O. [10], Lepak, D.P. [10], Gamage, A.S. [12], Phillips, J. [13], Phillips, P.P. [13], Sutanto, E.M. [14], Kurniawan, M. [14], Rau, B.L. [15], Adams, G.A. [15].

Despite significant creative achievements of scientists on theoretical and practical issues of staffing, in our opinion, it is necessary to create an effective organizational and economic mechanism for managing staffing of enterprises, through which one can increase their competitiveness. A model for constructing such a management mechanism is proposed by the authors in this study.

Aims. The purpose of the article is to substantiate the need to create (build) a model of organizational and economic mechanism of personnel management as a way to increase the competitiveness of the enterprise.

Methods. In the course of the research, the following methods were used: general scientific ones: analysis and synthesis - synthesis is used, since agricultural enterprises and their reaction economic property to the implementation of the organizational and economic mechanism of the personnel management are studied. In the process of scientific research, synthesis is associated with analysis, as it allows to combine certain departments, divisions, i.e., structural units, to establish a holistic connection and function as a cohesive whole using an improved organizational and economic mechanism.

Induction and deduction. Induction is used in the formation and construction of a model of the organizational and economic mechanism of the personnel management of an agricultural enterprise, which will help to effectively develop and operate. Deduction is used in the formation of a scale of differences to assess the scenarios of the functioning of the organizational and economic mechanism of the personnel management of agricultural enterprises of Ukraine.

Abstraction and concretization. Abstraction is used in the formation of factors to ensure the process of the development of the personnel of agricultural enterprises of Ukraine and the formation of their appropriate human resources, and specification is used in diagnosing the functioning of the existing organizational and economic mechanism of the personnel management of agricultural enterprises.

The method of scientific abstraction is used in determining the advantages of agricultural enterprises and their evaluation on the scale of T. Saati.

Special research methods: the graph-analytical method (graph theory): for the study of agricultural enterprises, it is proposed to use the organizational and economic mechanism of personnel management, which will increase the competitiveness of agricultural enterprises.

The method of economic modeling is a formed matrix of advantages (pairwise comparisons), which allows in the most general form to form the consistency index (CI) and the consistency ratio (CR).

Results. Describing economic metrics in the most general sense, one should bear in mind that such metrics are quantitative representations of the processes taking place in the economy. These metrics are objectively necessary at all levels of management, but if at the macro level it is enough to assess the state of reproduction processes, the most important trends in their development (GDP growth rate, national income growth rate, investment dynamics, budget deficit, inflation rate, etc.), at the enterprise level one needs other metrics that have a higher effective capacity. Here, we think, one needs to pay special attention to measuring effective use of labor potential as a whole and its individual elements, the degree of the involvement and actual use by an enterprise of its human resources.

A high qualification and educational level of the staff, the degree of adequacy to its requirements generated by the organizational and technical conditions of the functioning of an enterprise are the most important prerequisites for ensuring the competitiveness of manufacturers in domestic markets, and, as a consequence, the recovery of the national economy of Ukraine as a whole. Due to the fact that human resources in a market economy are becoming a strategic factor in the success of an

enterprise, personnel management should not be reduced only to performing a supporting function in the organizational process; rather, it should actively influence the development of the enterprise in the future.

World experience shows that, in an open market economy, the factors that determine the ability to achieve and ensure the quality of staff as a necessary condition for survival in the labor market and at the same time a criterion of economic performance, the ensuring of the welfare of society as a whole, are becoming increasingly important.

Sustainable development of Ukrainian enterprises and increasing their competitiveness in the world market require effective activities of hired managers. The most important factor in achieving this efficiency is the use of an effective mechanism for ensuring the quality of staff as a way to increase the competitiveness of the enterprise.

Making management decisions is an important component of the personnel work at an enterprise. The complexity of making such decisions is due to both environmental factors and the internal factors that determine the specifics of the business processes and affect the peculiarities of the formation of the personnel management of agricultural enterprises.

Human resource management is the main function of any enterprise, organization or institution. Within the framework of the concept of human resource management, the role of an individual is as important as the role of fixed capital. Therefore, expenses for personnel and their development should be considered as long-term investments of agricultural enterprises, organizations or institutions, the personnel planning of which is closely intertwined with production development, and their employees become an object of corporate strategy, which forms the strategy of the development of an agricultural enterprise inseparably from the strategy of formation of its personnel potential.

Thus, increasing the competitiveness of the personnel of agricultural enterprises objectively requires the development of an effective mechanism for managing their staffing, which will be based on using human capital effectively, developing it, increasing the level of material incentives, measures to motivate work, improve social security and protection of the workers, enhance their corporate culture, physical development and potential possibilities, attracting investment in lifelong professional training and staff advanced training [16].

Practical development and implementation of such a mechanism requires a detailed analysis of the factors that ensure the process of staff development (Fig. 1). However, a strategy of the personnel development of enterprises cannot be fully implemented only at the micro-level. It must include a number of measures at the macro-level. It is necessary to reform the state policy in the field of education and professional training, population employment and income, physical development and healthcare, social protection, adequate financing of human development at the meso-level, in the regions. This presupposes active participation in solving the outlined problems of all subjects of the labor market: the state, staffing agencies,

entrepreneurs, trade unions, employees, as well as educational institutions of the relevant specialization.

In other words, the formation of competitive personnel (human resources) of agricultural enterprises requires applying a comprehensive approach to their development and improvement of relations between all subjects of social and labor relations. Having analyzed the above factors to ensure the process of staff development, we can say that with their effective application, systematic implementation of modern agricultural technologies for growing and protecting crops, the work of agricultural enterprises will be competitive in the world market of agricultural products.

Detailed introduction of the mechanism of staffing as a way to increase the competitiveness of an enterprise can be presented in the form of consistent implementation of the following components (Fig. 2).

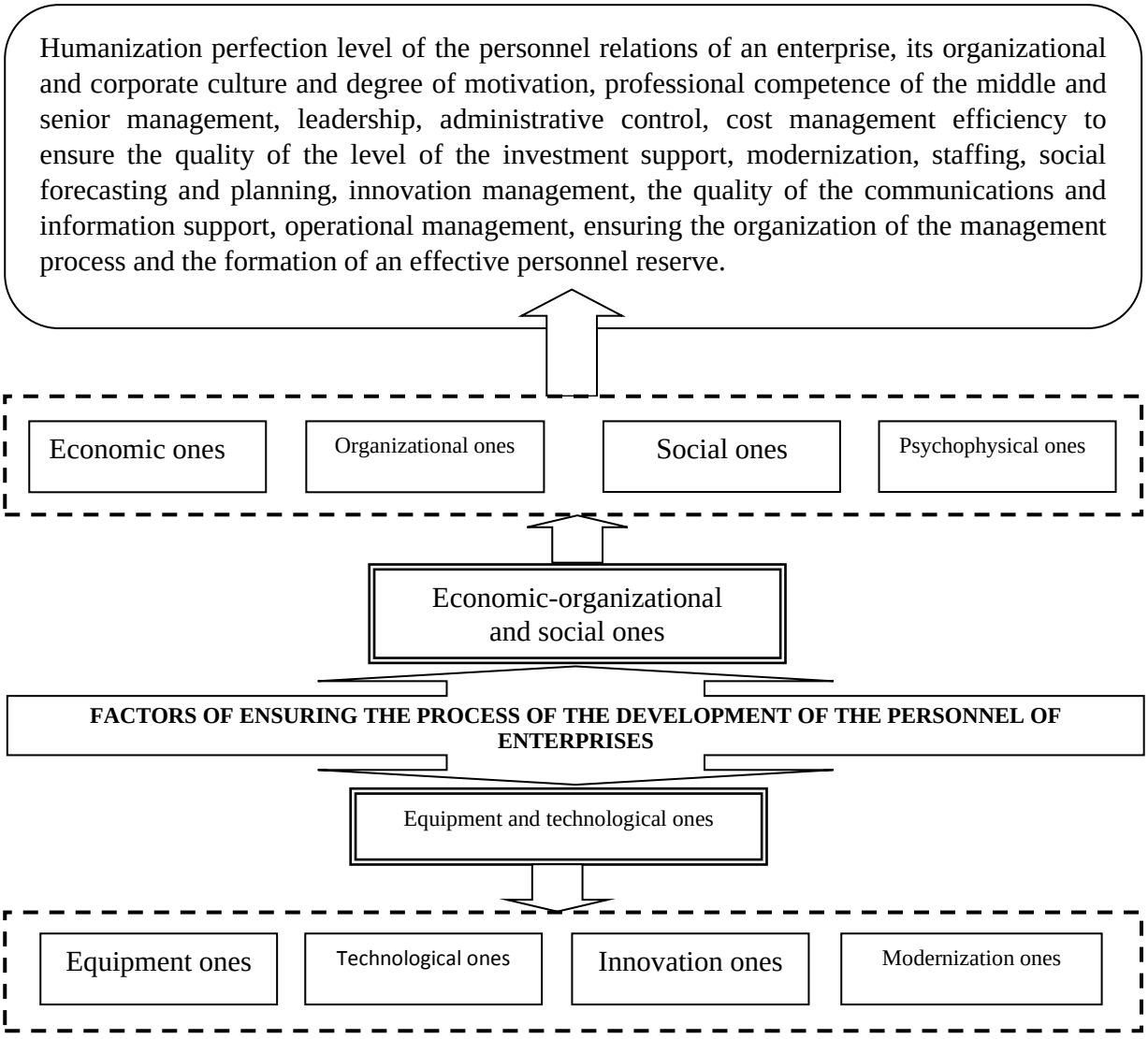

Figure 1. Factors of ensuring the process of the development of the personnel of agricultural enterprises of Ukraine and the formation of their proper human resources

Sources: developed by the authors

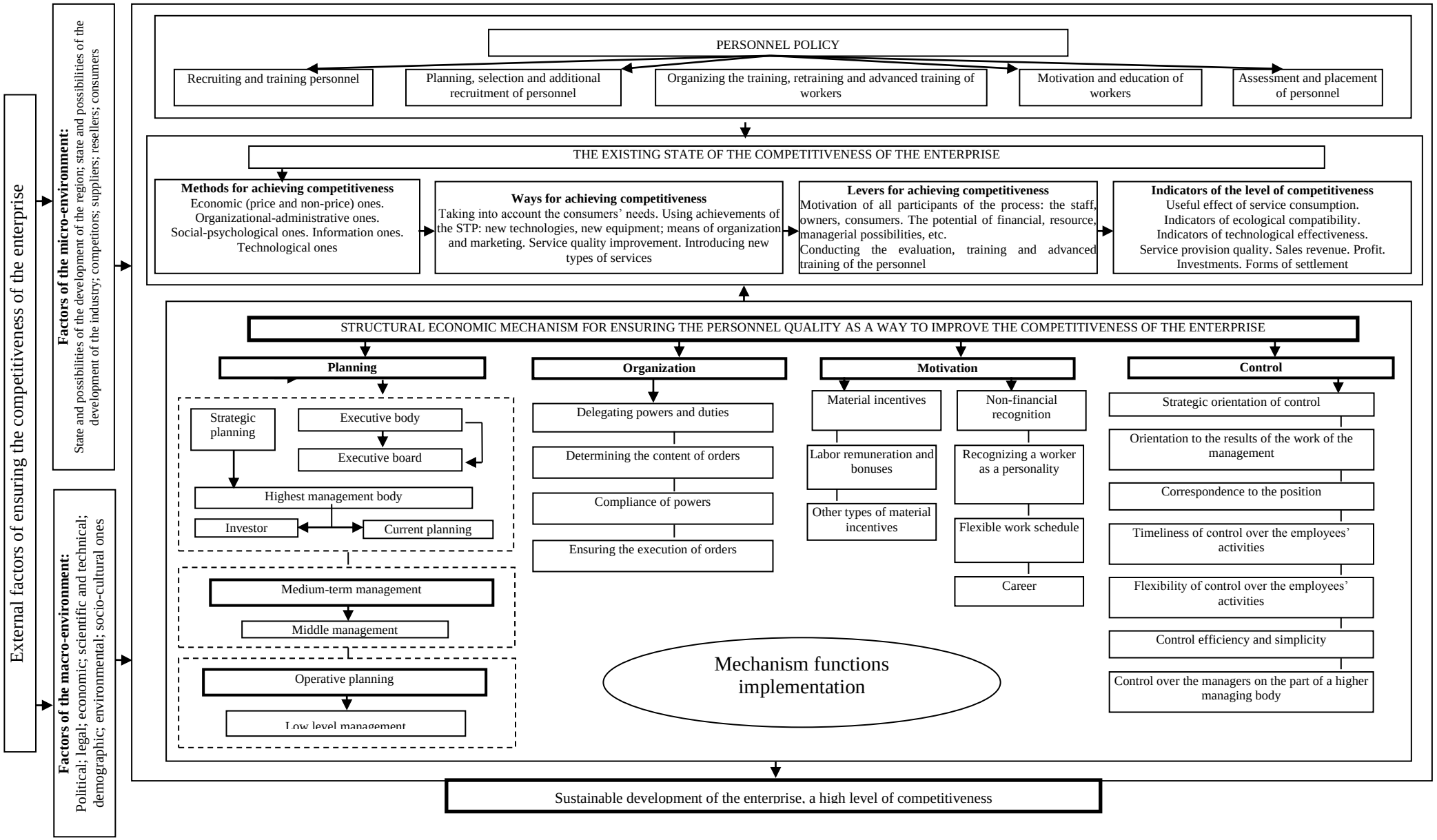

Figure 2. Block diagram of building a model of the organizational and economic mechanism of the personnel management of agricultural enterprises of Ukraine as a way to increase their competitiveness

Sources: developed by the authors

The first component - "Personnel policy" - is the component under which the implementation of a comprehensive system of measures involving staff evaluation, retraining and training is carried out. In agribusiness, there are certain types of work performed by hired workers. Hired labor is the labor of a person who works under a contract of employment at an enterprise of which he/she is not the owner. Their work ensures the production of agricultural products that have a consumer value produced for sale or exchange. As a result of the sale of goods or relevant services, the company receives income. Of course, this is income that the company received as a reward for production or as return on investment (rent or interest). In the proposed mechanism, using the labor of the personnel of an enterprise is income received by it in the field of material production, i.e., it is an economic benefit in cash or in kind, which takes into account the possibility of its assessment to the extent that such benefits can be assessed.

Even with the development of state-of-the-art technology, the value of each good or service includes the cost of labor invested in the production of goods or services by using for the needs of the production the acquired knowledge, skills and abilities acquired through training and retraining.

The second component of the structural scheme of the organizational and economic mechanism is the "Existing state of the competitiveness of the enterprise," which consists of methods, ways and levers to achieve indicators of the appropriate level of competitiveness.

Among the ways to achieve high competitiveness of an agricultural enterprise, we highlight the following ones: improving the quality of products, services, using the latest advances in engineering and technology, among which great importance is attached to the appearance of the product, its packaging as well as the means of organizing its delivery to the consumers and marketing.

Considering the methods of ensuring the required level of competitiveness, it is necessary, first of all, to single out the economic ones. Price competition is one of the most common methods of competition. It is common to almost all producers, but is most common to small agricultural enterprises. The activities of such enterprises are narrowly specialized; the main attention is paid to the price, because their products or services are aimed at consumers with a low level of purchasing power. In big cities, the products of such enterprises can be found in food markets, and the most common form of trade is their sale from trucks in places where population concentration is highest.

The organizational and administrative methods include the ability of the management to coordinate the financial and economic activities of the enterprise, effectively use available human resources, make strategic and operational plans and achieve goals set, organize systematic control over the production process.

The socio-psychological methods serve to better understand the needs of the consumers and to establish appropriate relationships with them. Each age group has its own understanding and requirements for the quality of products or services. So it chooses the product (service) that best meets its needs. Therefore, farmers should adapt to their main consumers, focusing on their tastes and preferences.

The information methods are designed to meet the needs of farmers and consumers for timely and reliable information about the market of goods and services. It is the formation of a modern information base about new solutions (technologies, environmentally friendly products) that allows a company to develop dynamically. Gathering the necessary information about the activities of the main competitors helps an agricultural enterprise to respond correctly and in a timely manner to their actions in the market of goods, works and services.

The technological methods ensure the achievement of the appropriate level in the development of research, production and telecommunications markets for goods and services. With the help of these methods, labor costs are reduced and staff skills are improved.

Considerable attention is also paid to the levers of formation and maintenance of high competitiveness. The income from this group of products depends on the price set for a product (service), and the profitability of an agricultural enterprise depends on the tax policy of the state and the level of taxes.

Here, the state tax policy should be flexible in the agricultural sector of the economy, providing support to domestic producers, because this affects the security of the state and the export potential of the country.

Determining the competitiveness of products (services) of an agricultural enterprise, it should be noted that a significant role in its formation is played by the useful effect indicator. "Useful effect is an integral indicator of the assessment of the quality of a product (service), its ability to meet the specific needs of the consumer" [17, p. 210].

The above ways, methods and tools to ensure competitiveness can implement their action through a competitive strategy chosen by the management of a company, which aims to maintain the competitive position of the company and to strengthen it.

The third component of the structural scheme is the actual "Organizational and economic mechanism of personnel management as a way to increase the competitiveness of an enterprise," which involves performing the following functions: planning, organization, motivation and control, through which the functioning of the mechanism is strengthened to increase the competitiveness of agricultural enterprises.

These components of this structural scheme also provide an appropriate level of sustainable development and economic security of an enterprise, i.e., its effective operation despite the negative impact of the competitive environment.

There are two groups of factors that shape the competitive advantages of enterprises. The first group is represented by factors of the macro-environment. These include such factors as: economic, legal, scientific and technical, demographic, environmental, socio-cultural ones. That is, these are factors that a company cannot influence, but only should take them into account and adapt to them.

Factors of the second group are ones of the micro-environment. They include factors that directly depend on the activities of an enterprise. In our opinion, it is the production capacity and feasibility of using to some extent the capacity of the enterprise, the quality of management decisions, the ability of technical staff to quickly implement innovations, staff access to information and other resources,

professionalism of the team, which allows them to respond quickly and competently to changes of the external environment. This should also include knowledge and skills of the staff, managers of the enterprise to organize effective activities, the company's image, the ability to create unique products or services, to ensure improving the quality of products (services), expanding the range of products (services), activity differentiation. These advantages can be used and the achieved level can be maintained for a longer period of time, as they are difficult to achieve by competitors who do not have them.

Thus, the main result of the functioning of the organizational and economic mechanism of personnel management of an agricultural enterprise is the creation of significant competitive advantages that make it possible to clearly distinguish the company's products from competitors' products and determine the competitiveness of the products.

"To maintain a competitive position in the market, the number of competitive advantages is of great importance. If the competitiveness of the products is based on one or more competitive advantages, competitors can quickly reach and nullify them" [17, p. 59]. Therefore, in order for its products to remain competitive for as long as possible, a company should strive to provide them with as many high-order competitive advantages as possible. Such advantages can be provided to the company by properly trained staff.

Table 1. Diagnosis of the functioning of the existing organizational and economic mechanism of personnel management of PJSC "Myronivskyi Khliboprodukt," "Agrogeneration Ukraine" LLC and "Agrotrade-Vyrobnytstvo" LLC

Indicators, status, recommendations	PJSC "Myronivskyi Khliboprodukt"	"Agrogeneration Ukraine" LLC	"Agrotrade-Vyrobnytstvo" LLC
The share of technology-oriented employees in the total number of employees, %	26	31	27
The share of gross commodity output in the total sales revenue, %	96,6	91,8	46,4
The share of exports in the total revenue from sales of gross commodity output (GCO), %	45,6	52,4	–
The share of research and development costs in the total sales revenue, %	10,9	–	–10,7
Carrying out the innovative activity of the enterprise	+	+	–
Production profitability, %	2,7	9,4	-20,0
Fixed assets suitability degree, %	22,0	69,0	69,4
Management effectiveness evaluation (E - effectively, S – satisfactorily, U – unsatisfactorily)	S	E	U

Sources: calculated by the author on the basis of the enterprises' reports

Having received a certain result from its activities, a company compares it with the tasks and goals set before it and assesses how well they have been fulfilled. This is where the effectiveness of the developed organizational and economic mechanism for ensuring the competitiveness of agricultural enterprises through the improvement of the organizational and economic mechanism for managing their staffing is manifested. Assessing one's own competitive position in the market in comparison with leading companies, it is possible to draw correct conclusions about the feasibility of applying a set of marketing competitive strategies in further activities or the need to review and develop new ones that would allow in the long run to achieve competitiveness.

This manifested itself in the fact that the personnel management mechanism did not achieve the goal of functioning, and this is undoubtedly the result of mistakes made in the use of structural elements of the personnel management mechanism.

An important indicator of such monitoring is the assessment of the priority structural elements of the current staffing management mechanism of agricultural enterprises, as the indicators and units of their measurement are different. For assessment, we used the scale of relative importance of indicators, which had been proposed by T. Saati (Table 2) [18]. In our opinion, it is quite effective, rational and practical in application and more objective than others.

Table 2. Table of advantages of research objects and their evaluation (on T. Saati's scale) [18]

Determining the advantage of one object over another	Extent of advantage (importance, significance)
The same degree of importance (significance), lack of advantage	1
Weak advantage in importance (significance)	3
Significant or strong advantage in importance (significance)	5
Very strong or significant advantage in importance (significance)	7
Absolute advantage	9
Intermediate grade for the degree of importance between adjacent values	2, 4, 6, 8

Sourse: develop by author

When comparing n objects (A1, A2, …, An), the results of their pairwise comparisons are entered into a quadratic matrix of advantages of order n: $A = (a_{ij})_{i,j=1}^{n}$, the elements of which are calculated as follows.

For weak scales: a_{ij} (or a_{ji}) is chosen from T. Saati's scale, a_{ij} shows an advantage of the *i*-th object over the *j*-th one.

For strong scales: if the extent of a property of the object A_i is equal to w_i, and $A_j - w_j$, then

$$a_{ij} = \frac{w_i}{w_j} \quad (1)$$

or

$$a_{ji} = \frac{w_j}{w_i}. \quad (2)$$

An element of the matrix A symmetric to the found one is found under the condition:

$$a_{ij} = \frac{1}{a_{ji}} \quad (3)$$

After receiving expert assessments by the method of pairwise comparisons, a question arises about the degree of consistency of the obtained assessments.

Two indicators should be recognized as the degree of consistency:

- consistency index (CI);
- consistency ratio (CR).

It is known from the theory of matrices that the complete consistency of an inversely symmetric matrix (a matrix of advantages belongs to this kind of matrices) is equivalent to the equality of its maximum eigenvalue λ_{max} and the number of compared objects $\lambda_{max} = n$).

Therefore, it is advisable to take as the degree of consistency the value called the consistency index (CI):

$$IY = \frac{\lambda_{max} - n}{n-1}. \quad (4)$$

To conclude whether consistency is acceptable, the CI is compared with the value of a random consistency index (RI), which is calculated for a square matrix of order n, which is positive inversely symmetric, the elements of which are directed randomly, evenly distributed over intervals (1, 9). For a fixed n, the index was calculated as the average value for a sample of 100.

Table 3 shows the values of the random index (RI) for *n* from 2 to 15 (for *n* = 1 and RI = 0).

Table 3. Random index (RI)

n	3	4	5	6	7	8	9	10	11	12	13	14	15
RI	0.58	0.9	1.12	1.24	1.32	1.41	1.45	1.49	1.51	1.54	1.56	1.57	1.59

The consistency ratio (CR) is fractions of the CI (according to formula (5)) and the RI, taken from Table 3 for the same order of the matrix:

$$CR = CI / RI \quad (5)$$

If the CR < 0.2, then the degree of consistency is considered acceptable. Otherwise, it is expedient to advise the expert to review his/her conclusions on the basis of a more in-depth analysis of the issue. The expert should identify those elements of the matrix that make the biggest inconsistency and change them. Having a matrix of advantages (pairwise comparisons), the method of analysis of hierarchies makes it possible to obtain a vector of priorities of the objects being compared [19].

The mathematical aspect of the problem is the calculation of the main (biggest) eigenvector of the matrix, the normalization of which gives the vector of priorities. The exact method of calculating the main eigenvector and the priority vector is to raise the matrix to an arbitrarily large power and divide the sum of each row by the sum of the elements of the matrix. In practice, it is expedient to use an approximate method that

gives sufficient accuracy [19]. To do this, the data (matrix and vectors) can be conveniently presented in the form of a table (Table 4).

Table 4. Results of pairwise comparisons and priorities

	A1	A2	…	An	Main eigenvector	Vector of priorities
1	2	3	4	5	6	7
A_1	a_{11}	a_{12}	…	a_{1n}	V_1	P_1
A_2	a_{21}	a_{22}	…	a_{2n}	V_2	P_2
…	…	…	…	…	…	…
A_n	a_{n1}	a_{n2}	…	a_{nn}	V_n	P_n

Approximately, the components of the main eigenvector of the matrix are the geometric mean of the matrix, i.e.

$$V_i \approx \sqrt[n]{\prod_{j=1}^{n} a_{ij}}, \quad i = 1,2,...,n. \tag{6}$$

$$\lambda_i = (\sum_{i=1}^{n} a_{ij} v_j) / v_i; \qquad \lambda_{\max} \approx (\sum_{i=1}^{n} \lambda_i) / n. \tag{7}$$

The components of the vector of priorities are obtained by the normalization of V_i, that is

$$P_i = \frac{V_i}{\sum_{i=1}^{n} V_i}, \quad i = 1,2,...,n. \tag{8}$$

Let us give formulas for accurate calculation of $P_i, i = 1,2,...,n.$ Let $B = A^m,$ where m is a big natural number (practically $m \approx 20$). Let b_{ij} be elements of B, then

$$P_i = \frac{\sum_{j=1}^{n} b_{ij}}{\sum_{i=1}^{n}\sum_{j=1}^{n} b_{ij}}. \tag{9}$$

To determine the state of focus of the hierarchy as the implementation of a generalized scenario, a set of criteria determined by experts is used. The values of the criteria for the generalized scenario are determined relative to its current state on a scale of differences (Table 5).

Table 5. Scale of differences for assessing scenarios of the performance of the organizational and economic mechanism of the staffing management of agricultural enterprises of Ukraine

Description of changes	***Difference in values***
The values do not change	0
A small increase (decrease) of a value	+2 (–2)
A big increase (decrease) of a value	+4 (–4)
A significant increase (decrease) of a value	+6 (–6)
Maximum increase (decrease) of a value	+8 (–8)
Intermediate increase (decrease) between adjacent descriptions given	+1 (–1), +3 (–3), +5 (–5), +7(–7)

Sourse: develop by author

Such an improved scheme for monitoring the organizational and economic mechanism of personnel management can be applied in practice for any enterprise.

Discussion. In the course of researching the organizational and economic mechanism of management of staffing of the studied agrarian enterprises, the following general conclusions concerning conformity to its specified parameters are formed: corresponds to the purposes and tasks of the researched agrarian enterprises; creates conditions of activity that have value for the enterprise.

Conditions in which the personnel of the enterprises can be motivated for effective work are as follows: it is necessary to be guided by the specified methods of management; there is potential for improvement and development, but there is a need to constantly adjust the human resources management mechanism due to changes in the systems of values, motives and interests that are not always predictable.

The existing management mechanism is based on the completeness and balance of the means of influence. This is the most important condition for effective use of the personnel management mechanism, which is most characteristic of PJSC "Myronivskyi Khliboprodukt", "AGROTRADE-VYROBNYTSTVO" LLC and "AGROGENERATION UKRAINE" LLC.

Conclusions. The structural elements of the model of organizational and economic mechanism of personnel management of agricultural enterprises considered above are a necessary basis for understanding the features of the problem identified in the study and finding ways to solve it. When using these elements, the specific combination of methods used is determined by the nature of the problem to be solved. A basic mathematical apparatus adapted to the specifics of the solved problems can be used for its realization. Introduction of generalized indicators of efficiency of the organizational and economic mechanism of personnel management of agricultural enterprises allows to reveal the dynamics of change of the results, to make a quantitatively proved forecast of the development of a situation in time, as well as to reveal interrelations between available and potential possibilities of the enterprises and the level of achievement of the goal by the applied organizational and economic mechanism for managing their staffing.

The conducted monitoring of the organizational and economic mechanism of the personnel management of agricultural enterprises allows to determine the range of benefits that arise as a result of the improvement, in particular, of the organizational, financial, production, economic and personnel components.

Thus, the study conducted confirms the possibility of implementing the changes proposed by us to improve the staffing management of agricultural enterprises. The approach based on practical calculations can, on the one hand, serve as a methodological basis for effective management of agricultural enterprises, and, on the other hand, be practically applied in their economic activities, because it takes into account and uses common factors, limitations, solves real problems and provides probable scenarios of further developments.

Author contributions. The authors contributed equally.

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AGRARIAN-CONSTRUCTION CLUSTERS OF POST-COVID RURAL ONTOGENESIS: ECONOMIC-RESOURCE REFLECTION AND REGULATORY-STIMULATING SUSTAINABLE DEVELOPMENT PRIORITIZATION

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Abstract. *The article formulates the methodological principles, develops and tests the methods of evaluation, at the macro- and meso-economic levels, the appropriateness of state support for construction initiatives of enterprises of the agrarian-construction cluster based on ranking and biological classification of respective infrastructure projects, which –the methods – differ from the existing ones by involving an additional criterial plurality in terms of the location of its implementation the availability of the economic-natural reserve, an impact of natural-anthropogenic factors with subsequent ranking of criteria by strength in order to make the respective decision at the territorial community's level. Moreover, a system of criteria includes both traditional (budgetary-financial and socio-economic) and ecological-infrastructural criteria, which are determinative in the algorithm of making a decision on state support of the implementation of village-saving projects by agrarian-construction clusters subject to the need for rural renovation and involving agricultural lands in a market model of their turnover. This has also allowed to extend an existing construct of catalyzation of mechanisms of state support (assistance) for agrarian-construction clusters, in general, and rural construction in the countryside, in particular, with national economic, social, food, construction and financial-budgetary priorities and capabilities of a specific rural territorial location incl. the same for further development of social dialogue institutions involving a public-private partnership.*

Keywords: *agrarian-construction clusters, economic-natural reserve, rural areas, project, state support (assistance), rural renovation, state catalyst.*

JEL Classification: C40, L74, Q11,

Formulas: 9; fig.: 7; tabl.: 3; bibl. 44

Introduction. In the world, much attention is paid to the issues of improving the tools of state regulation of activities of agrarian-construction clusters associated with the use of natural resources and their economic activities being carried out at various locations. Without dwelling separately on the world practice of the formation of the system of regulation, in general, and of state support, in particular, widely highlighted in the scientific literature, we will note that back in the end of the 1960s – at the beginning of the 1970s, the USA have first started to create a new organizational-financial mechanism of state regulation having built it based on recommendations of the modern theory of management and having transferred, to a large extent, to the programs financing according to goals set. Concentrating on the priority directions of sustainable development has enabled, within relatively short terms, to solve the acutest problems incl. ecological problems [8; 23; 27]. An issue of carrying out state support for ecologically-economically-oriented project approaches of agrarian-construction clusters and their interaction are topical for Ukraine, which economy is distinct in

resource-raw material orientation and high natural resource intensity [49; 230]. Establishing such system in Ukraine refers to the beginning of the 1990s only, when many developed countries have already had considerable experience and serious achievements in this sphere. In this study and subject to actualizing a process of sustainable rural development, a special attention is suggested to be paid to comprehensive evaluation of the economic-resource reserve of ecologically-economically-oriented investment projects to improve the tools of state support of agrarian-construction clusters and justify an implementation location for such projects as an integral part of their management processes.

Literature Review. Problems of reforming state support (assistance), its sociologization and construction-economic orientation under the conditions of globalization, regional integration and differently vectored regulation of world food markets, formation of agro-industrial infrastructure in the countryside subject to sustainability of development of economic systems are covered in scientific papers by: M. Kropyvka, D. Krysanov, P. Kulikov, Yu. Lupenko, V. Mesel-Veseliak, V. Moldovan, H. Obikhod, I. Prokopa, S. Stetsenko, N. Ushenko, M. Khvesyk, O. Shkuratov, I. Shtuler; researchers of authoritative world institutions such as the Food and Agriculture Organization of the United Nations (FAO), U.S. Department of Agriculture, – A. Atkinson, D. Vincent, T. Josling, T. Johnson, C. Zulauf, J. Kirkpatrick, S. v. Kramon-Traubadel, Z. Lerman, S. Robinson, L. Stoeckel, L. Shtrive et al.

Aims. The purpose of research is based on studying and justifying theoretical-methodological approaches to and practical recommendations on the direction and mechanisms of state regulation (stimulation) of the functioning of agrarian-construction clusters in rural areas under the post-COVID conditions.

Methods. The article uses a set of general scientific and special methods of scientific knowledge, namely: a logical-semantic analysis – to deepen studying the strength of the relationship of a scale of the rural and construction economies with transformational processes in them; an analysis and synthesis – to evaluate the dynamics, structure and efficiency of institutional-spatial changes in the agro-sector of the economy of Ukraine as well as set factors impacting orientation of institutional-economic leverages of the functioning and development of agrarian-construction clusters; statistical comparisons – to study the efficiency of specific tools of the mechanism of state support and selection of ecologically-economically-oriented investment projects of agrarian-construction clusters; economic-statistical modelling - to establish a trend of the indicative-criterial plurality of the efficiency of development of the agro-sector resulted from a regulatory impact and their relationship through an innovative approach to a combination of multi-mechanisms of state support of agrarian-construction clusters; an abstract-logical method – for theoretical generalizations and formation of conclusions.

Result. It is worth noting that natural specifics of rural territorial locations and their economic-resource potential available is of great importance [14; 39] for the formation of ecologically-economically-oriented project approaches to improve the tools of state support for agrarian-construction clusters. A project decision classification matrix is offered, depending on territorial specifics of their

implementation location (Tbl. 1) and continuing to have an impact on making a decision on state support for implementation of ecologically-economically-oriented projects of agrarian-construction clusters subject to their economic-resource reserve.

Table 1. Rural territorial location classification for formation of ecologically-economically oriented project approaches to improvement of tools of state support for agrarian-construction clusters

Economic-resource reserve of rural territorial location	*Natural-anthropogenic factors*	
It is possible to implement the poly-projects within the economic-resource reserve of the respective location. Creation of conditions of renovation projects of agro-industrial construction in rural areas	*Development of economically efficient production, with its vectorization on energy- and resource-saving subject to introduction of best technologies available*	It is possible to implement project decisions, which adverse impact on the environment can be neutralized by applying ecologically-safe production or by means of compensation
Development of energy-safe types of agro-activities with the use of local natural resources for energy- and resource-saving subject to implementation of best technologies available	It is possible to implement the projects not associated with agro-industrial and social construction in the countryside but providing ecological improvement of the environment	*Implementation of ecologically-economically-oriented projects is not recommended for state support. Post-crisis, post-COVID, renovation and rehabilitation projects are supported*
It is possible to implement the projects aimed at development of ecologically-economically-oriented projects with use of an economic-resource reserve of a certain location	*It is possible to implement the projects providing ecological improvement of rural areas*	Implementation of stabilizing rural development projects

Source: compiled by authors

An algorithm of the evaluation and selection of ecologically-economically oriented investment projects for state support of the functioning of agrarian-construction clusters subject to an economic-resource of a certain location provides the following steps [10; 26]: analyzing available investment ecologically-economically oriented projects according to the information presented in the public domain; developing a system of criteria, according to which such projects will be evaluated; conducting a ranking of criteria by their strength; making the evaluation of such projects by each of selected criteria; calculating a final rating and selecting economically-ecologically-rationally-oriented investment projects. A system of criteria covers both traditional criteria of financial, budgetary and social efficiency, and also economic-ecological criteria – Fig. 1 [11; 18; 29–30].

Financial efficiency of the project. As the criteria of the financial efficiency of the project, its net present value, internal rate of return and discounted payback period are selected [7; 21; 35]. A need for a simultaneous application of several criteria is caused by the fact that various criteria of the financial efficiency may give priority to different projects; a simultaneous application of criteria enables to evaluate a project more objectively.

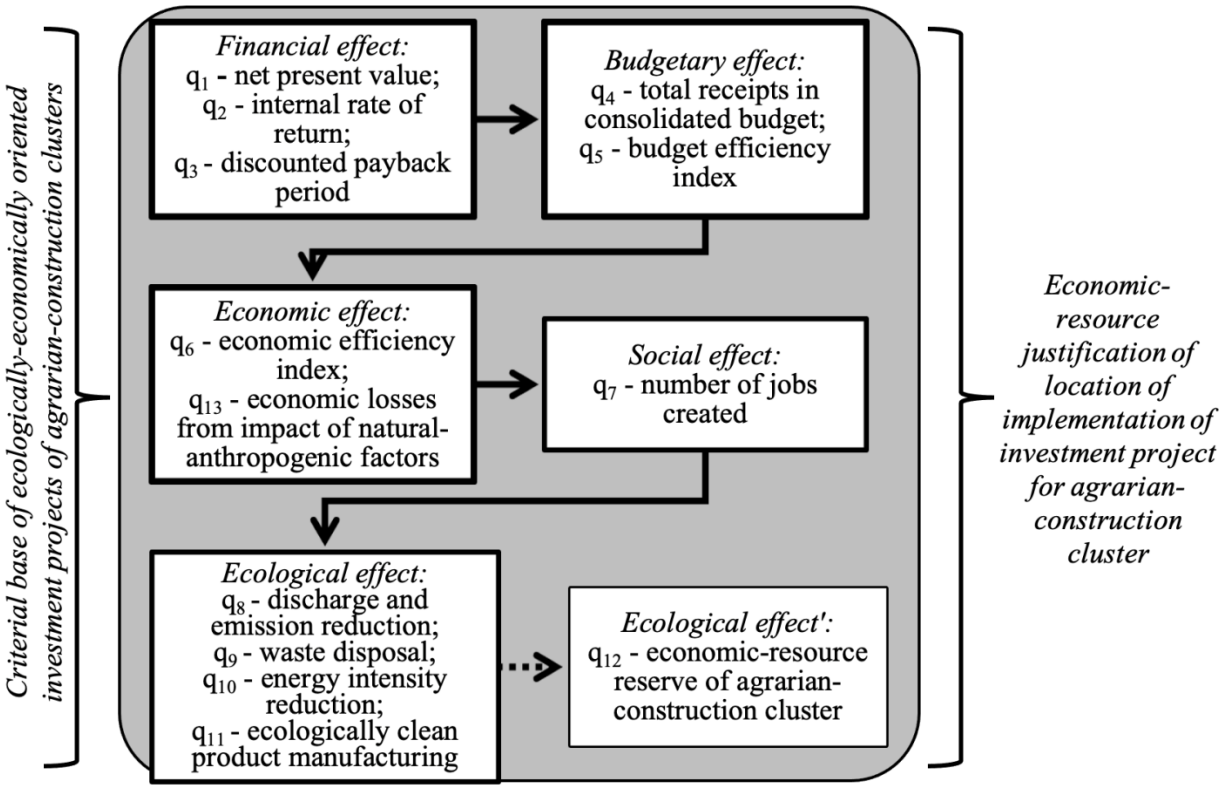

Figure 1. Criterial components of comprehensive evaluation of economic-resource reserve of investment projects for state support of agrarian-construction clusters

Source: compiled by the author according to [11; 18; 29–30]

The net present value (*NPV*) of the ecologically-economically-oriented investment project of agrarian-construction clusters is a sum of reduced-to-the-initial-point forecasted free project cash flows in the period of (*0...T*) and th terminal project value at the point of time *T*. Is calculated by the formula:

$$NPV = CF_0 + \sum_{t=1}^{n} \frac{CF_t}{(1+r)^t} \quad (1)$$

where CF_0 – zero period cash flow (initial investments); CF_t – period cash flow t; n – term of project (periods); r – discount rate.

The internal rate of return (*IRR*) of the ecologically-economically-oriented investment project of the agrarian-construction cluster is a discount rate, at which, with free cash flows of the investment project in the period of (0...*T*) and the terminal value of the project at the point of time *T*, the net present value of the project is equal to zero. For calculating, the formula is used:

$$NPV\ (IRR) = 0 \leftrightarrow CF_0 + \sum_{t=1}^{n} \frac{CF_t}{(1+IRR)^t} \quad (2)$$

It is provided that, with discount rate values exceeding the *IRR*, the net present value of the project is negative, and with values lesser than the *IRR*, it is positive. A discounted payback period (*DPP*) of the ecologically-economically-oriented

investment project of agrarian-construction clusters is such a period, for which a sum of discounted free cash flows of the investment project is equal to "0" (formula 3):

$$NPV\ (DPP) = 0\ \leftrightarrow CF_0 + \sum_{t=1}^{DPP} \frac{CF_t}{(1+r)^t} = 0 \qquad (3)$$

If a sum of discounted forecasted amounts of free cash flows of the project for the period *T* is negative, then the project payback period is not calculated, the value of the criterion is accepted as being "more or equal to 10 years, or not paid back".

Budgetary efficiency of the project. As the criteria of the budgetary efficiency of the ecologically-economically-oriented investment project of the agrarian-construction cluster, the net discounted revenue of the budget is selected. The net current value of the budget is calculated proceeding from the budget expenditures and revenues by a formula:

$$NPV_b = \frac{R_b}{(1+\kappa)^n} - \frac{\mathrm{P}}{(1+\kappa)^n} \qquad (4)$$

where R_b – budget revenues received from the project implementation; P – budget expenditures undertaken for the project implementation; κ – discount rate; n – period.

Economic efficiency of the project [9; 24]. By economic efficiency index of the ecologically-economically-oriented investment project of the agrarian-construction cluster is meant the indicator, from which it becomes clear whether a specific investment project has an impact on the gross regional product. This is a portion of the amount of the latter, which can be provided by implementing an ecologically-economically-oriented investment project. It is set as a ratio of the amount of the value added generated by the investment project in the prices of the previous year and the volume of the gross regional product of the previous year in the current prices under the conditions of the refusal to implement a project.

Social efficiency of the project [22; 36]. To evaluate the social efficiency of the ecologically-economically-oriented investment project of the agrarian-construction cluster, the authors offer a criterion characterizing the number of jobs in the agro-sector created at a certain rural location as a result of implementing an ecologically-economically-oriented investment project.

Ecological efficiency of the project [16; 37; 40]. Fig.2 presents the information needed to calculate the indicators of the ecological efficiency from the implementation of ecologically-economically-oriented projects. Evaluation of the ecological efficiency is conducted using a score method subject to opinions of competent experts.

A special place is occupied here by the "Economic-Resource Reserve of the Agrarian-Construction Cluster" indicator, which constitutes a ratio between an assimilating potential of a certain rural location and an actual anthropogenic load on the environment and shows additional opportunities for socioeconomic development in this area provided that an actual environmental load level is lower than an allowable impact level.

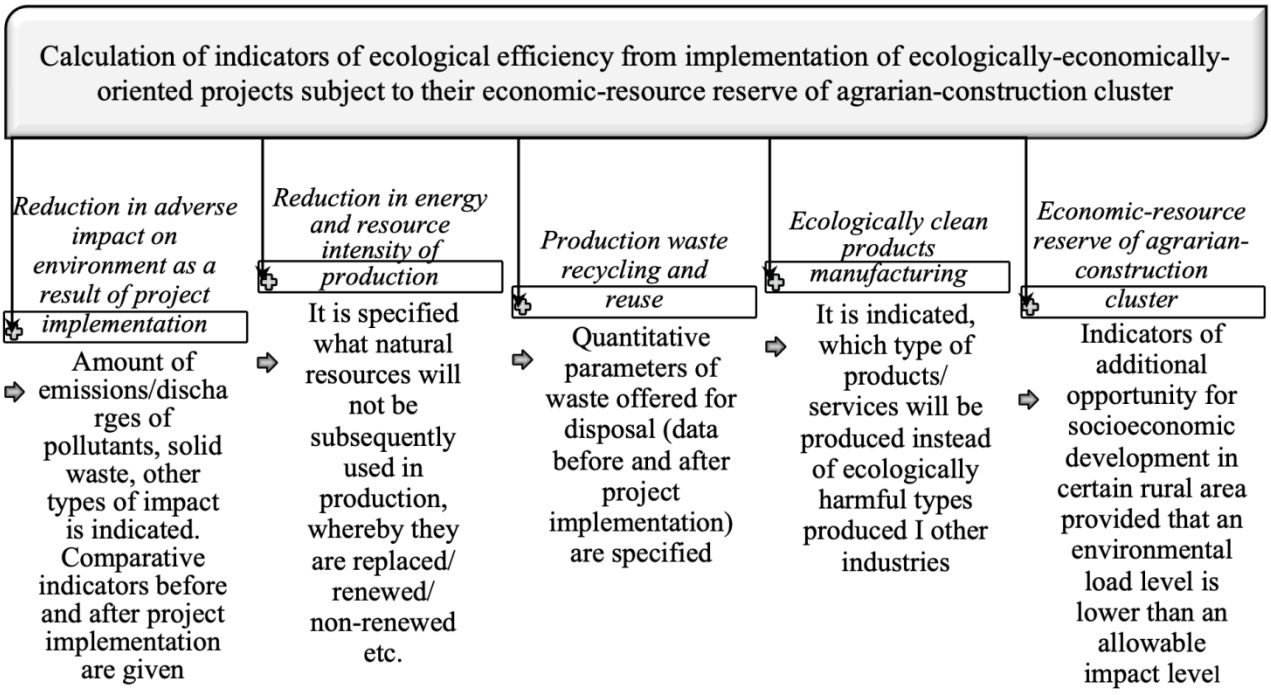

Figure 2. Calculation of indicators of ecological efficiency from implementation of ecologically-economically-oriented projects of agrarian-construction clusters subject to their economic-resource reserve

Source: complied by authors

For calculating, the formula is offered [4]:

$$ERRACC = \frac{AP}{AL} = \frac{\sum_{i=1}^{3} A_i X_i t_i}{\sum_{i=1}^{3} N_i k_i} \quad (5)$$

where ERRACC – economic-resource reserve of the agrarian-construction cluster, pcs.; AP – assimilating potential of a certain rural location, cond. t / year; AL – anthropogenic load on a certain rural location, cond. t /year; A_i *– evaluation of ecological-resource capacity of i natural environment, t / year;* X_i *– variation coefficient for natural fluctuations of major environmental substance content, t / year;* t_i *– pollutant mass to conditional tons conversion coefficient, cond. t / year;* N_i *– evaluation of i anthropogenic load on a certain rural location, t / year;* k_i *– anthropogenic load to conditional tons conversion coefficients (coefficient for ecological-economic harm of substance), cond. t / year.*

Evaluations of the efficiency of the implementation of the ecologically-economically-oriented investment project of the agrarian-construction cluster include a large number of criteria (Fig. 1), different in impact character and intensity.

To evaluate the final efficiency, it is needed to regard to both a separate impact of each factor and the same of certain groups of factors or all factors together. One of the options to solve a task is applying a systems approach providing a multi-criteria project evaluation [33]. Selecting an ecologically-economically-oriented investment project of the agrarian-construction cluster is an unstructured task for decision-making and is distinctive in that it is impossible to identify a mathematical relationship between parameters. In this case, we know the criteria and alternatives only. Multi-criteria methods meet the following requirements [15]: input information universality and processing, selection possibility by a lot of criteria, accounting for uncertainty. Relationships and ratios of projects offered for the selection are

established, by selected criteria, as a result of their pairwise comparison, criteria significance setting (by a utility function).

According to [1; 25], general setting a task consists in the following: given sets of projects $A = \{a_i\}_{i=1}^{n}$ and sets of criteria for their selection $Q = \{q_j\}_{j=1}^{m}$. Experts give grades x_{ij} (in scores, in unit fractions, within fuzzy logic) by each criterion under each project a_i. The result is the formation of a decision matrix (Fig. 3).

	a_1	a_2	…	a_n
q_1	x_{11}	x_{12}	…	x_{1n}
q_2	x_{21}	x_{22}	…	x_{2n}
…	…	…	…	…
q_m	x_{m1}	x_{m2}	…	x_{mn}

Figure 3. Decision matrix for selection of ecologically-economically-oriented investment project of agrarian-construction cluster subject to their economic-resource reserve

Source: calculated and compiled by authors.

Strength of criteria, one against the other, is established by a pairwise comparison procedure [5], which results are presented in Tabl. 2. The following relative significance scale is offered: from 1 – equal significance, 3 – medium degree of advantage, 5 – moderately strong advantage, 7 – very significant advantage, up to 9 – absolute advantage. To establish a significance of criteria, the so called pairwise comparison matrixes are formed, where a number in the interval from 1 to 9 is assigned to each criterion. Weights of criteria as results of expert evaluations show what fold a project is weightier than the other by a specified criterion.

Table 2. Evaluation of strength of criteria of ecologically-economically-oriented investment project of agrarian-construction cluster subject to their economic-resource reserve

-//-	q_1	q_2	q_3	q_4	q_5	q_6	q_7	q_8	q_9	q_{10}	q_{11}	q_{12}	q_{13}	Priority vector components	Criterion strength
q_1	***1***	5	5	5	5	7	7	0,3	0,3	0,3	0,3	0,2	0,2	1,8693	0,11064
q_2	0,2	***1***	2	2	2	2	2	0,3	0,3	0,3	0,3	0,2	0,2	0,97412	0,050037
q_3	0,2	0,5	***1***	2	2	2	2	0,3	0,3	0,3	0,3	0,2	0,2	0,87558	0,11064
q_4	0,2	0,5	0,5	***1***	2	2	2	0,3	0,3	0,3	0,3	0,2	0,2	0,78702	0,0407
q_5	0,2	0,5	0,5	0,5	***1***	2	2	0,3	0,3	0,3	0,3	0,2	0,2	0,70741	0,03658
q_6	0,1	0,5	0,5	0,5	0,5	***1***	2	0,3	0,3	0,3	0,3	0,2	0,2	0,61961	0,03204
q_7	0,1	0,5	0,5	0,5	0,5	0,5	***1***	0,3	0,3	0,3	0,3	0,2	0,2	0,55694	0,0288
q_8	3	3	3	3	3	3	3	***1***	0,3	0,3	0,3	0,3	0,3	1,66039	0,04528
q_9	3	3	3	3	3	3	3	3	***1***	0,3	0,3	0,3	0,3	1,96613	0,08586
q_{10}	3	3	3	3	3	3	3	3	3	***1***	0,3	0,3	0,3	2,13951	0,09667
q_{11}	3	3	3	3	3	3	3	3	3	3	*1*	0,3	0,3	2,13951	0,10167
q_{12}	5	5	5	5	5	5	5	3	3	3	3	***1***	0,3	2,8169	0,14567
q_{13}	3	3	3	3	3	3	5	3	3	3	3	3	***1***	2,225526	0,11507
-//-														19,6677	-//-

Source: compiled by authors

Investment projects from a formed list undergo a ranking procedure. At the first stage, the significance of the best projects by each criterion is established. A decision-making process scheme within this state is an ordinal procedure of expert's filling in pairwise comparison matrixes, which lines and columns are named after the projects' names. Then, for each project evaluation vector, a strength of projects is calculated, which represents the respective line of the decision matrix.

Each evaluation vector $\overline{x_i} = (x_{1i}, x_{2i}, \dots x_{mi})$ is established by a utility formula according to the formula:

$$U_i = \sum_{j=1}^{m} x_{ij} \times w_j \qquad (6)$$

The higher the value of the utility function is the better the project is. When making calculations of utility values, criteria strengths w_j [1; 25] may be taken into account.

The analytical hierarchy process developed by T. Saaty [31] is a variety of a factor model taking the strength of the economic-resource reserve into account. The analytical hierarchy process, from the methodological perspective, is a kind of a basis for solving tasks of the selection of alternatives by means of their multi-criteria ranking [34].

The process provides decomposing a problem and processing assertions of a person making decisions. A hierarchic decision-making model contains three levels: targets, criteria (factors) evaluated by their significance for the target, and alternatives evaluated by preference in respect of each criterion.

The result of calculations by this method is the ranking of all alternatives by all hierarchy criteria. The six multi-criteria selection models are divided: adaptive scheme – 1a, 2a, 3a; multiplicative scheme – 1b, 2b, 3b: "spatial pairwise comparison → weighted sum formation → analytical hierarchy process" (Fig. 4).

For each alternative option a_i, the evaluation x_{ij} is conducted by each of selected criteria $Q = \{q_j\}_{j=1}^{m}$. The evaluation is expertly conducted. Thereafter, through a pairwise comparison procedure, the strengths of criteria are established by a pairwise comparison of each alternative by each criterion. The next step is to convolve the vectors of evaluations to scalar evaluations of utility functions. Evaluations x_{ij} are given in scores (from 0 to 100).

To solve tasks within the analytical hierarchy process, pairwise comparison matrixes $A = (a_{ij})$ must be formed. To establish elements of these matrixes, it is needed to measure expert advantages in a certain ratio scale. The authors, subject to the Saaty's process [43], offered a special evaluation scale consisting of five major and four intermediary assertions (Fig. 5). To compare factors, it is needed to form a compatibility matrix and fill in it with values from a ratio scale. When the factor *i*, in comparing with *j* takes one of the above values, then factor *j*, compared with *i*, takes an opposite value ($\frac{1}{\text{value}}$).

I. Calculation of strengths of criteria by pairwise comparison according to pairwise comparison matrixes of decision alternatives under criterion q_j	*Ia. Establishment of strengths of criteria as an adaptive convolution:* $\frac{Sc_1}{y_{ij}} = 1$, if $a_i > a_j$, $y_{ij} = 0$, if $a_i < a_j$ and $y_{ij} = 0,5$, if $a_i \approx a_j$, $w_i' = \frac{w_i}{\sum_{k=1}^{n} w_k}$, where $w_i = \sum_{j=1}^{n} y_{ij}$ (7) *1b. Establishment of strengths of criteria as a multiplicative convolution:* $\frac{Sc_1}{y_{ij}} = 1$, if a_i equivalent to a_j, $y_{ij} = 3$, if a_i more significant a_j, $y_{ij} = 5$, if a_i substantially significant a_j, $y_{ij} = 7$, if a_i absolutely significant a_j, $y_{ij} = 9$, if a_i unconditionally significant a_j $w_i' = \frac{w_i}{\sum_{k=1}^{n} w_k}$, where $w_i = \sqrt[m]{\prod_{j=1}^{m} y_{ij}\ i,j \in [1.m]}$ (8)
II. Making expert evaluations of alternatives (projects) for state support by criteria in pairwise comparison procedures	*IIa. Establishment of strengths of alternatives as an adaptive convolution.* Calculating according to the ratio (7) of the strength value w_i' is evaluations of alternatives a_i by criterion q_i: $w_i' \rightarrow x_{ij}, i = 1, \ldots n$ (9) Values obtained according to the formula (9) represent the respective line of the decision matrix. After conducting a series of pairwise comparisons m (by a number of criteria) for each alternative, it is possible to establish, from a filled in decision matrix, the evaluation vectors $\overline{x_i} = (x_{1i}, x_{2i}, \ldots x_{mi})$, which convolve in a scalar evaluation of utility of the alternative according to the formula (9) *IIb. Establishment of strengths of alternatives (projects) as a multiplicative convolution.* Values of utility of alternatives are calculated according to the formula (8), where w_i are obtained from the procedure of pair-wise comparison of criteria and strength of their calculations under the formula (8). Evaluation of significance (strengths) of alternatives x_{ij} by each of criteria is established in the series with m pair-wise comparison procedures, in each of which the strengths are established by criterion q_i according to the ratio (8). In the ratio (8), the value m – a number of criteria – is replaced by n – a number of alternatives

Figure 4. Decision making in models of multi-criteria selection of mechanisms of state support of agrarian-construction cluster and industrial construction in countryside

Source: compiled by authors based on [34; 42–43]

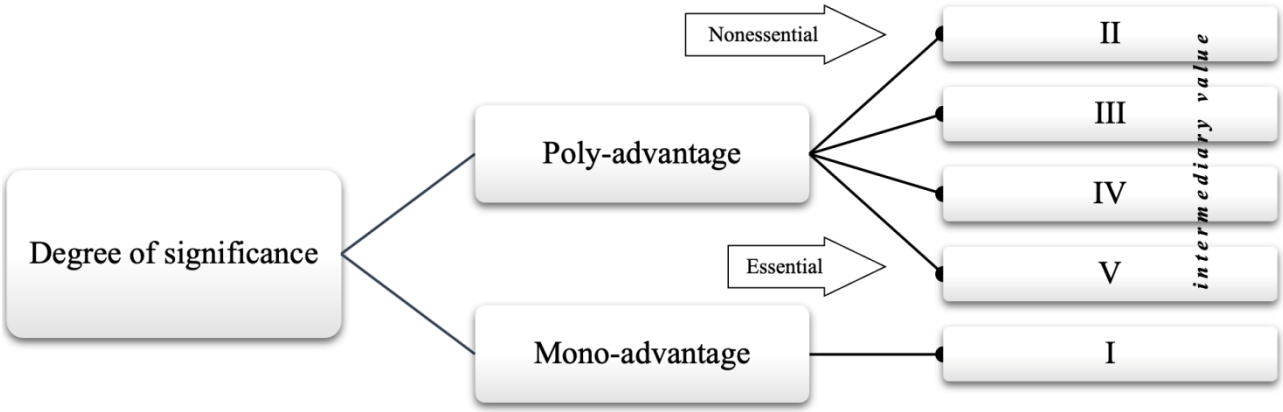

Figure 5. Ratio scale of selection of ecologically-economically-oriented investment project of agrarian-construction cluster subject to their economic-resource reserve

Source: compiled by authors based on [32]

After a pairwise comparison of factors, products are calculated by lines and then the root is found from the number of criteria – priority vector components. The strength of criteria is calculated by dividing the values of components of the priority vector of the criterion by the sum of the values of components of the priority vector. The hierarchy for the selection looks as follows (Fig. 6).

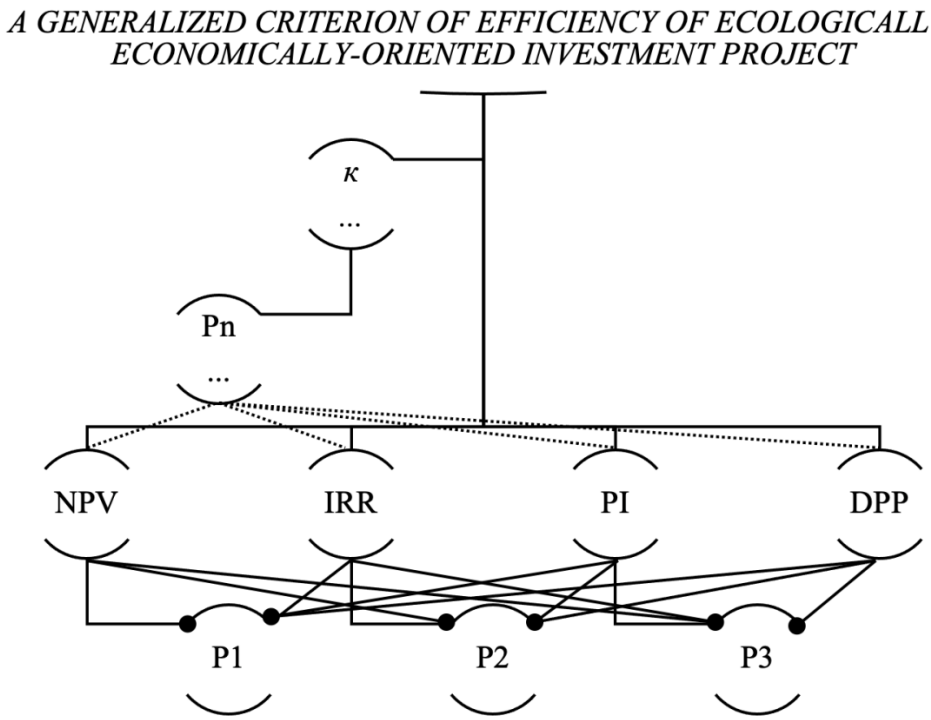

Figure 6. Hierarchy for selection of ecologically-economically-oriented investment project for state support of agrarian-construction cluster subject to their economic-resource reserve

Source: compiled by the author according to [32]

Similar to calculating the strength of criteria, the evaluations of alternatives by each criterion are calculated, whereupon, along with the strengths of criteria, the results are entered into a summary table where the global priorities of alternatives are calculated as a sum of products of the strength of the criterion by the evaluation of the means under the respective criterion. So, the analytical hierarchy process enables to make a decision having considered the alternatives from different perspectives, evaluate data inconsistency and minimize it through coordination procedures, conduct a synthesis of the problem of decision-making by calculating the final rating, evaluate the importance of taking each decision and factor having an impact on the decision priority into account. Basic advantages of the method are the simplicity of rating calculation and, most importantly, method's universality that manifests itself in its application in making decisions for state support in various industries of activities of agrarian-construction clusters.

Based on the results of testing a methodological approach developed by authors, it is found that, of 13 criteria of efficiency considered, the most significant criteria are: the ecological location reserve (14.6 %), an adverse impact of natural-anthropogenic factors (11.5 %), the net present value (11.0 %), the internal rate of return (11.0 %), clean products manufacturing (11.0 %). Ecological criteria of waste

disposal and energy saving reduction values of 9.7 and 8.6 %. The strength of the other six criteria is totally not more than 23 %. 444 investment projects [13] were included into a final list of significant ecologically-economically-oriented investment projects to provide state support for agrarian-construction clusters (on the regional principle) under the condition of the post-COVID reflection and reformation of local self-government and territorial organization of power in Ukraine, selected on the basis of the developed methods. A fragment of the final rating of priority investment projects grouped on the local-regional principle, is given in Tabl. 3.

Developing the methods was conducted according to the following basic principles:

– providing a systems and complex evaluation characterizing various aspects of implementing projects grouped on the local-regional principle;

– providing objectivity and unambiguousness of conclusions (expert evaluations) obtained on the results of the project analysis;

– providing comparability of evaluations of projects and possibility of their rating formation.

It arises from the analysis of the results that during ranking with the use of the methods developed by authors, the top ten priority projects include all directions of development of the water facilities construction, having raised, in this case, the ranks from 2 to 8 points as compared with an option of accounting ecological criteria and from 6 to 11 points as compared with an option of accounting traditional criteria only. Mineral-raw material complex projects are, as before, among the top twenty (but the number of projects reduced to 40), having decreased their ratings by 9 pointsв.

The number of projects of the agro-industrial direction, which, accordingly, are among the top twenty of the priority projects, increased to 70, having raised their ranking positions from 3 to 14 points as compared with an option of accounting ecological criteria and from 10 to 18 points as compared with an option of accounting traditional criteria only.

As to rural renovation projects, the situation has not changed.

Wholesale-food market construction projects decreased their ranking positions by 9 points as compared with an option of accounting ecological criteria and by 8 points as compared with an option of accounting traditional criteria only. Options are offered to evaluate ecologically-economically-oriented investment projects for the provision of state support of agrarian-construction clusters and meet three scenarios of development of respective rural locations [38]: a conservative scenario (meets capital contributions to investment projects selected subject to traditional efficiency indicators only); a moderate scenario (meets capital contributions to investment projects selected subject to traditional and ecological efficiency indicators); an economically-ecologically-rationally-oriented scenario (meets capital contributions to investment projects selected according to the methods offered by authors and having regard, inter alia, to the economic-resource reserve of agrarian-construction clusters developing under the influence of natural-anthropogenic factors).

Supporting priority directions of the implementation of economically-ecologically-rationally-oriented investment projects at the level of the efficient state

regulation will become a catalyst for the ecologically sustainable growth and development of agrarian-construction clusters (Fig. 7).

Table 3. Final priority rating of ecologically-economically-oriented investment projects for programs of state and regional support for agrarian-construction clusters (on regional principle)

Agrarian-Construction Cluster Projects	Number of Projects at Certain Location	Evaluation	q_{12}	q_8	q_{11}	q_1	q_{10}	q_9	q_2	q_3	q_5	q_4	q_6	q_7	q_{13}
Criterion Strength by Regions	–	–	*0,15*	*0,05*	*0,10*	*0,11*	*0,10*	*0,09*	*0,05*	*0,05*	*0,04*	*0,04*	*0,03*	*0,03*	*0,12*
Cherkasy	54	0,034	0,04	0,04	0,04	0,04	0,02	0,02	0,02	0,02	0,04	0,04	0,04	0,04	0,02
Vinnytsia	52	0,034	0,03	0,04	0,04	0,04	0,04	0,02	0,02	0,03	0,04	0,03	0,04	0,05	0,02
Poltava	51	0,028	0,04	0,02	0,01	0,04	0,02	0,02	0,04	0,03	0,03	0,04	0,04	0,02	0,02
Lviv	47	0,027	0,01	0,02	0,04	0,03	0,02	0,02	0,04	0,04	0,04	0,03	0,02	0,03	0,02
Kherson	30	0,027	0,03	0,02	0,04	0,02	0,02	0,02	0,03	0,04	0,02	0,03	0,03	0,03	0,02
Mykolaiv	27	0,026	0,03	0,02	0,04	0,02	0,02	0,02	0,00	0,05	0,05	0,02	0,04	0,01	0,02
Zhytomyr	22	0,026	0,03	0,02	0,04	0,04	0,02	0,02	0,00	0,01	0,04	0,04	0,04	0,04	0,02
Kyiv	22	0,026	0,04	0,02	0,04	0,01	0,02	0,02	0,03	0,03	0,03	0,01	0,03	0,04	0,02

Source: calculated by authors according to [13; 17; 32]

The ecological state of rural locations is of great importance in selecting investment projects. So, implementing investment projects in the rural area inclined to significant adverse impact of natural-anthropogenic factors can lead to disastrous consequences for the projects and, accordingly, for the development of agrarian-construction clusters, in general.

At the same time, the absence of the ecological reserve at the rural location precludes from implementing economically-ecologically-oriented investment projects associated with the industrial production having an adverse impact on the environment as the renovation potential of such rural area is exhausted.

Conclusion. Present-day realities are such that the conditions and principles of the provision of state support for an ecologically-economically-oriented investment project of agrarian-construction clusters must be changed. The main thing is not financing investment projects by the state but changing the business environment, by which the following is meant: in selecting projects for state support, the use of a project approach is welcome; financing from the state budget must be mainly applied for core infrastructure support; restructuring and expanding competitive selection mechanisms wherefore developing measurable criteria for the determination of the winners is required; projects with a high multiplicative effect for the economy must become the priority investment projects; the priority must be given to the public-private partnership projects as well as to other long-term instruments.

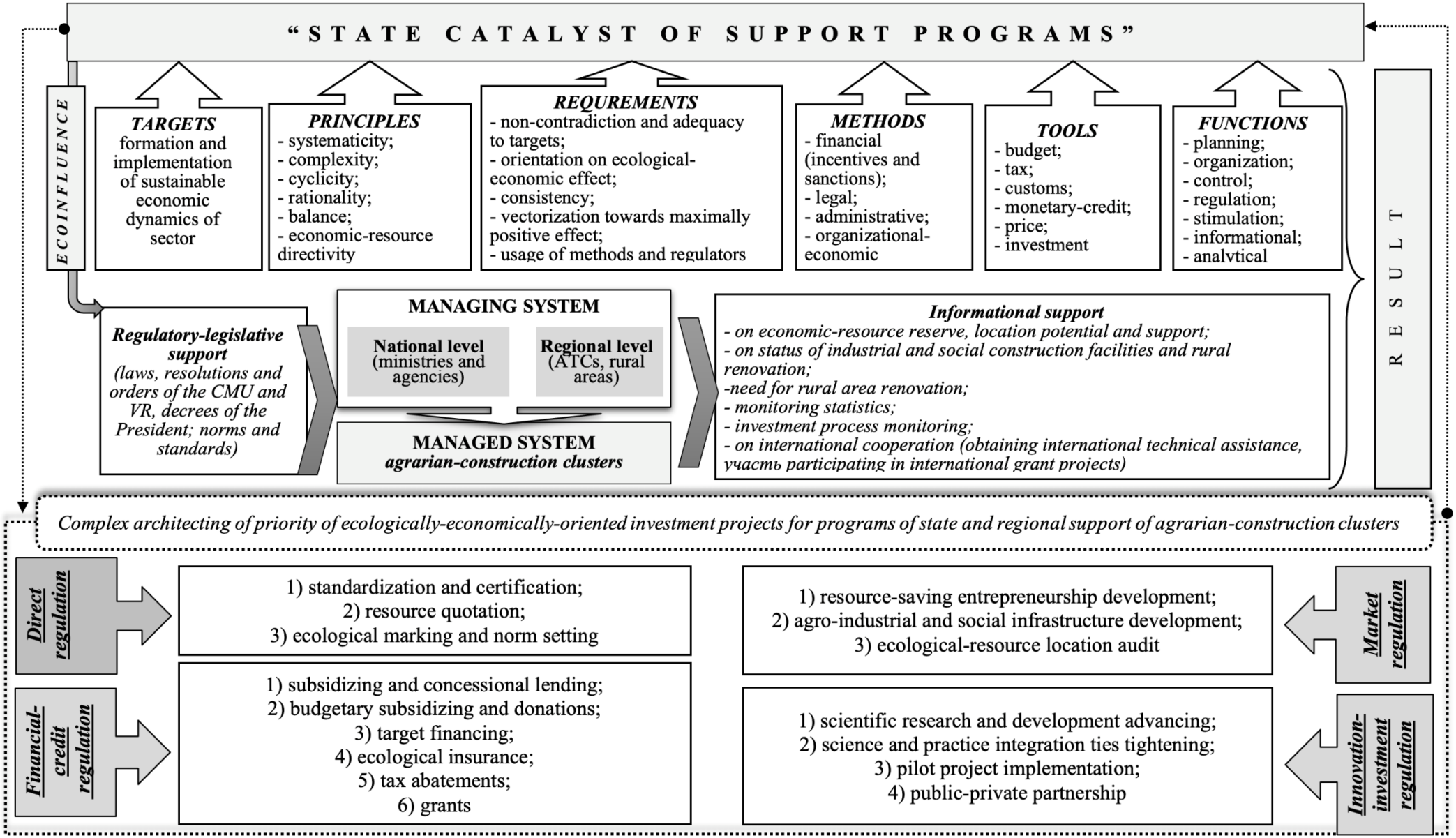

Figure 7. "State Catalyst" for programs of support of ecologically-sustainable growth and development of agrarian-construction clusters subject to their economic-resource reserve

Source: compiled by the author according to [2–3; 6; 19–20; 28; 44]

In addition to direct participation by the state and investment policy, an important direction of stimulating investor's ecologically-economically-oriented behavior may become: leasing payment compensation; tax payment deferral; special economic zone development; establishment of state funds for rural renovation development.

The first-priority thing in the formation of the priority of state support for agrarian-construction clusters subject to their economic-resource reserve is setting an aim, which in this study is formulated as follows: formation and implementation of mechanisms of state support of agrarian-construction clusters for sustainable rural development under the post-COVID reflection. This aim must meet the following requirements:

1) specific components of the "state catalyst" may not contradict one another and may not have a differently directed character;

2) all measures creating the prerequisites and incentives for introducing ecologically-economically-oriented investment projects must be adequate to the goals and tasks of sustainable development of rural areas, in particular, and the state, in general;

3) state support orientation on the economic-resource reserve;

4) agreement on a mechanism with objective inconsistency of interests of government and nongovernment entities;

5) stimulation to achieve the maximum possible result by attracting the minimum amount of investment resources;

6) use of economic management methods providing economic independence of management entities in establishing the goals, the ways and means of achieving the goals as well as economic and social responsibility for the results of their activities;

7) Application of organizational and economic regulators of the relationship between stakeholders of the ecologically-economically-oriented investment process at all management levels.

Functions of the "state catalyst" of support programs are the planning, organization, motivation, regulation and control, informational and analytical support in exercising which a wide range of legal, administrative, organizational, economic, financial (incentives and sanctions) and other methods is used. Complex architecting the priority of ecologically-economically-oriented investment projects for programs of state and regional support of agrarian-construction clusters must combine the elements of both state regulation and market self-regulation.

Author contribution. The authors contributed equally.

Disclosure statement. The authors do not have any conflict of interest.

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INSTITUTIONAL LIMITATIONS OF OUTSOURCING DEVELOPMENT UNDER THE CONDITIONS OF THE INFORMATION ECONOMY FORMATION

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Abstract. *The article analyzes the institutional and evolutionary constraints of outsourcing development and substantiates the directions for institutional regulation of outsourcing activities in the national economy. The theoretical and methodological basis of the study is a systematic approach to the study of institutional constraints on the development of outsourcing under the conditions of the information economy formation. The article states that the development of the domestic market of outsourcing and related services lags behind European practice, which imposes additional evolutionary constraints and requires the creation of favorable conditions to ensure the economic efficiency of outsourcing activities and the appropriate quality of services. The article determines the key principles of outsourcing activities. The article proves that outsourcing can be regarded as one of the organizational innovations, as this involves the formation of new economic and legal relationships between economic entities, as well as the usage of special management technologies. The article establishes the existence of institutional and evolutionary constraints for the development of outsourcing in the national economy. Lack of stability in the functioning of institutions and institutions of the basic level, limited credit and investment resources did not contribute to the implementation of outsourcing and overall innovative development of the national economy. The evolutionary limitations of outsourcing are related to the ontology of the process, technological backwardness, the significant impact of the shadow segment of the economy, the crisis in it. Institutional constraints were formed due to the inefficiency of basic institutions of the economy, unregulated legislation, lack of favorable fiscal and credit regulation, the presence of institutional dysfunctions. The article emphasizes that the institutional support of outsourcing requires the regulation of legal, economic, organizational, informational norms. It is significant to ensure a clear delineation of contractual relations and responsibilities of the parties, conditions, and legal aspects of information protection; definition and achievement of criteria of economic efficiency; introduction of fiscal and credit incentives for its implementation. Theoretical and methodological provisions deepen the practical principles of institutional support for the new forms of outsourcing relations development in the national economy.*

Keywords: *outsourcing, evolutionary constraints, institutional constraints, institutions, institutional support, information economy, formal norms.*

JEL Classification: D89, L26

Formulas: 0; fig.: 1; tabl.: 0; bibl. 8

Introduction. Outsourcing is a specific form of a business relationship that creates a new class of business systems focused on improving operational efficiency by minimizing administrative and transaction costs, increasing productivity, gaining access to market assets, and reducing the cost of supply. The volume and variety of specialized services being in demand in today's market are growing steadily, which demonstrates a tendency to expand the practice of outsourcing in all areas of activity. In the dissemination of outsourcing methodology, the development of the market of intellectual and information services in the late XX - early XXI century becomes of particular importance.

At the moment, the problems of improving the ways of solving economic tasks with the help of outsourcing tools remain understudied. Among the factors that influence its development are legislative irregularities, inconsistencies in regulation, and fiscal administration. Due to disregard for institutional and evolutionary constraints on the outsourcing relations development and regulation, this form of business organization has not yet become widespread in Ukraine.

Literature review. Studies on the outsourcing impact on the development of socio-economic relations mostly view it through the lens of conceptual foundations of the new management methodology, which is based on authority and responsibility delegation to external contractors, as well as developing practical aspects of outsourcing. These processes were studied by B. Anikin, I. Boychuk, J. Brian Heywood, A. Zagorodniy, J. Cross, O. Mykalo. A practical approach to outsourcing realization and its methodical grounds were studied by R. Aalders, A. Sloan, H. Sparrow, G. Mins, and D. Schneider.

Structural transformations in the national economy have led to the spread and diversification of research of the practical aspects and tools of outsourcing in the management of enterprises and organizations, which are different in scale and specialization. One of the obstacles to the development of scientific research in this direction is the controversy of the conceptual apparatus, the lack of a single methodological tool to determine the forms and types of this activity [see 1; 2; 5; 6; 7; 8].

Aims. The purpose of this article is to determine the institutional constraints on the development of outsourcing activities in the national economy.

Methods. The theoretical and methodological basis of the study is the institutional-evolutionary approach to the study of problems of institutional support for the development of outsourcing in the national economy. We apply structural and functional analysis to identify institutional and evolutionary constraints on the development of outsourcing activities under the formation of the creative industry.

Results. Outsourcing as a methodology for managing economic processes can contribute to the structural transformation of the scientific and production base and the activation of the innovation process in the economy. Thus, the first stage of the innovation process is impossible without basic and applied research bringing the country closer to the world innovation market leaders. The existing management system of the innovation process in the national economy does not create a proper organizational and economic basis for the commercialization of scientific achievements and their diffusion in the market. System integration based on tools and methodology of outsourcing can be considered as a prerequisite for the development of information and telecommunications technologies, micro- and nanoelectronics, nanotechnologies, nanomaterial, space technologies, energy and transport.

Outsourcing focuses on reducing resource constraints by expanding external relations, establishing relationships with organizations that have such factors, and, in particular, have the most important resource in the information world, which is

knowledge. Pursuing the goal of increasing the efficiency and competitiveness of production, outsourcing as a kind of management methodology is based on the use of resources of an external organization (partner) instead of involving internal resources in those activities that are not strategically important. This approach opens access to any technological, intellectual, information resource of the modern market.

The study of factors that underlie outsourcing implementation in world practice indicates some differences in approaches to this management methodology application. The development of the domestic market of outsourcing and related services has got significantly behind the European market, which imposes additional restrictions and requires favorable conditions to ensure the economic efficiency of outsourcing and the appropriate quality of services. The approach of Ukrainian companies' management to outsourcing is similar to the perception of the need to invest in innovation and low rates of innovation activity of producers in almost all industries affect organizational innovation. Outsourcing can be seen as an innovative process that determines the prospects of strategic development of the organization, its market position and changes the entire system of its internal and external communications, property structure, costs, and staff.

Outsourcing implementation requires a balanced approach and mandatory analysis of potential opportunities and risks. Experts usually attribute the reduction of costs as a result of outsourcing certain functions to a change in the cost structure (shifting the share of fixed costs to variables) and to a direct reduction in certain cost items, in particular, by reducing the staff of the organization. In turn, costs reduction should provide an increase in the economic efficiency of the producer. For the vast majority of structures in their transition to outsourcing, the criterion of economic efficiency (cost reduction) is decisive.

The key principles of outsourcing are the fundamental principles of management, which are the specialization of production and management processes, and integration within the economic mechanism of tangible and intangible results from the implementation of specific processes (cooperation). All abovementioned is caused by the fact that the origins of the practical implementation of outsourcing lie in management innovations, which were carried out in the thirties of the twentieth century by General Motors. Further practical application of outsourcing was carried out in the direction of improving relations with suppliers within the concept of value flow, the ontology of which was provided by Japanese managers. Integration of product development and production processes in a single stream of value creation, standardization of production processes and management processes, gradual transition to modular principles of product development and production have laid the foundation of modern high-performance production systems. The continuity of management innovations and the spread of outsourcing, technological integration, control over the processes of development and production have identified the main trends in the development of the science-intensive high-tech sector in the world economy. The high dynamics of changes in it indicates the relationship between the spread of

technological innovation and the development of outsourcing as organizational innovation.

Outsourcing can ensure the integration of results from innovation in the overall value creation, aimed at the consumer of an innovative product. The limits in the application of outsourcing in the innovative development of a certain structure are due to the need to attract external resources and the ability to create these resources independently.

Outsourcing as an organizational innovation can contribute to changes in the economy. Acceleration of changes in the information economy, expressed in the goods' life cycle reduction, is caused by the rapid changes in consumer preferences, increasing the pace of innovation and lowering market barriers to entry or exit. This requires achieving high adaptability (flexibility) of a company, which will be the key to achieving competitiveness. Flexibility or adaptability of the organization becomes the key task in changing circumstances. The degree of adaptability that reflects the speed of response to changes in the environment depends on two factors: the level of information support, and flexibility of a company's production and organizational structure.

Thus, a high-quality information system provides search and retrieval of information from the external environment, its analysis, high-quality management decisions based on it and their implementation. The adaptability of the structure causes a rapid restructuring of production processes while obtaining the necessary management impulses.

It is the outsourcing of business processes that contributes to the "relieving" of a company's structure in today's conditions, as the deepening and division of labor has reached its limits. The relationship between the customer and the contractor in outsourcing is more formal than within a company and requires virtually no significant investment in fixed assets. Therefore, a change in external relations can be done faster and at a lower cost than the renewal or liquidation of someone's unit or structure. From the point of view of legislative support, changes in relations with suppliers are more painless than with an employee, because the latter is much more protected. All this motivates the manufacturer to transfer ancillary business processes to the external environment and concentrate resources on key business processes on which competitiveness directly depends.

One of the trends in the information economy has been to increase the information "capacity" of goods and services. Goods are becoming increasingly intangible, which is a prerequisite for intensifying the development of outsourcing. So the purchase and consumption of information goods (services) do not depend on the geographical location of the producer and consumer. Instead, such benefits can be outsourced during production and not limit production to local performers and national borders. Such an expansion of the choice of contractors will increase competition between suppliers, and thus reduce their monopoly power.

The total cost of production of information services and products of each structure will be higher than the production of these products by one specialized company. Therefore, one of the most developed areas of outsourcing has become

the outsourcing of information systems or IT outsourcing.

The strategic evolutionary guideline of the world economy is the formation of the seventh technological class, where the main productive factor is creative intelligence. Innovation-oriented transformation of socio-economic systems is gradually manifesting itself in the growing number of integration associations of scientific, industrial, educational structures, infrastructure. This contributes to the systemic economic mechanism, the expansion of relationships, the increase of innovation structures, their interaction, the formation of new infrastructure. Integration processes contribute to the formation of new models of business processes and organization of production.

In contrast to the evolutionary constraints of world development, not the seventh, but the prospects of a slow transition to the sixth technological class is formed in the national economy; globalization, informatization, integration are carried out at a slow pace; the role and influence of the raw materials and energy sectors remains high, the resource- and import-intensive model of reproduction dominates; there are administrative and financial constraints for innovative development. We must state the existence of institutional and evolutionary constraints for the development of outsourcing in the national economy (Fig. 1).

Thus, evolutionary constraints are related to the ontology of the process, technological backwardness, significant influence of the shadow segment of the economy, crisis phenomena in it.

Thus, the lack of a stable basis for the functioning of the basic level institutions, a significant level of concentration of production, and opacity of existing sales flows, limited credit, and investment resources, in general, formed the main institutional constraints for outsourcing and innovation.

Institutional constraints are formed due to the inefficiency of basic economic institutions, unregulated legislation, lack of favorable fiscal and credit regulation, the presence of institutional dysfunctions or "institutional traps" [4, p. 17]. Such institutional traps were formed due to the inconsistency of the implemented measures with economic realities and initial conditions [3, 4].

Discussion. We regard outsourcing as a kind of organizational innovation. Outsourcing involves the establishment of special (new) economic and legal relations of economic entities, as well as the use of special management technologies.

In the formation of the information economy, outsourcing as an organizational innovation features the following specific characteristics:

1. Outsourcing provides the transfer of a business process, previously carried out independently, and responsibility for the result to the supplier.
2. Outsourcing involves the conclusion of a contract and necessitates investment in specific assets and the monopoly power in the seller. Outsourcing does not substitute the internal hierarchical relations with the horizontal market relations.
3. Outsourcing reduces transaction costs and requires mechanisms to limit the opportunism of performers.
4. The outsourcing process contributes to the standardization of business processes in the information economy.

5. The variability of the market environment and high competition leads to the development of adaptability of market participants (simplify their structure and get rid of ancillary business processes), which accelerates the development of outsourcing.
6. The growth of information capacity of goods and services contributes to the expansion of opportunities for outsourcing activities, while the acquisition and consumption of information goods cease to depend on the geographical location of producers and consumers.
7. The production of information-based goods and services involves economies of scale. It becomes more profitable for companies to buy them from a third-party supplier than to produce themselves.

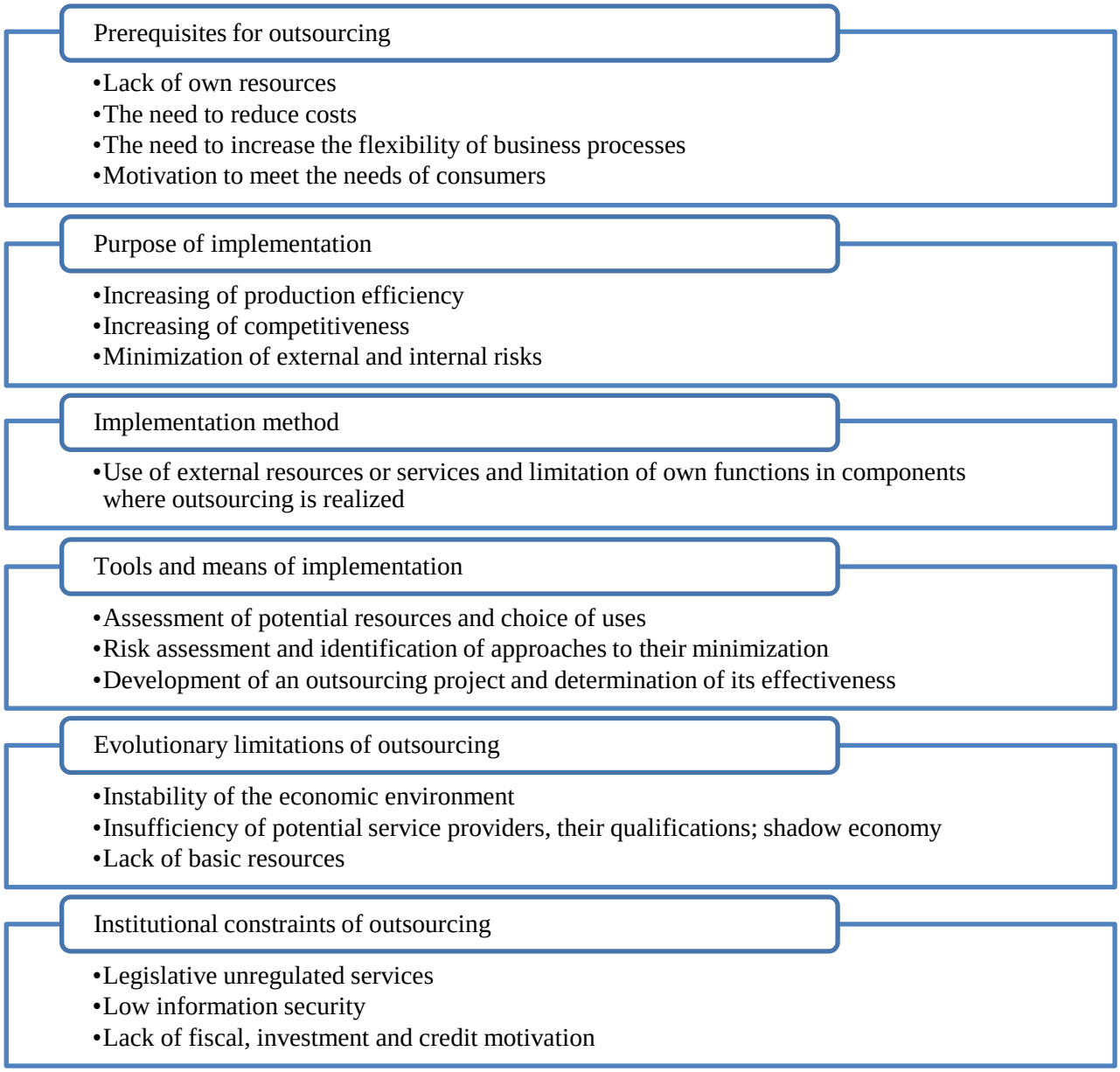

Fig. 1. Structural and logical scheme of outsourcing implementation and limitation

Source: proprietary solution

Conclusions. The problems of outsourcing development are mainly institutional ones. They are formed in the division between the objective need to form an innovation-oriented economy, taking into account global trends and a significant lag of the institutional environment in terms of development and quality of business processes while maintaining inefficient formal norms. Negative trends in the current economy, which affect the effectiveness of formal rules for the activation of modern business technologies, are the resource potential of producers; the existing forms and nature of the interaction between the governmental subjects of different levels; the existing forms of economic entities integration; the current system of motives and incentives (regulations; legal regimes; implementation of contracts; socio-cultural norms; institutional interaction and trust). The effectiveness of formal activation tools also depends on the internal macro-level conditions, the availability of alternative organizations, the existence of business infrastructure, and the development of domestic markets. The existing institutional constraints have led to the formation of a specific institutional environment of the national economy, the immanent characteristic of which was the ambiguous nature of the influence of formal norms on the motives of economic entities.

Undoubtedly, the general trend of development and transformation in the economy will be formed under the influence of globalization, competition, informatization of all spheres of the economy, and world trends; by limiting the influence of the raw materials and energy sectors, and by intensifying the exchange of technologies, which will largely motivate domestic producers to switch to innovative forms of business. To ensure the latter, an effective scientific and technological base that can perceive and generate innovations has been already formed on the world scale. An additional evolutionary constraint on development for domestic producers remains structural and transformational factors, such as the formation not of the seventh, but the transition to the fifth and sixth technological classes; the dominance of resource- and import-intensive model of reproduction; broken or weak economic, scientific ties between the regions of the country; administrative and financial constraints on development.

Institutional support of outsourcing requires regulation of legal, economic, organizational, informational norms. It is important to ensure a clear delineation of contractual relationships and responsibilities of the parties, conditions and legal aspects of information protection; definition and achievement of criteria of economic efficiency; introduction of fiscal and credit incentives for its implementation.

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CORPORATE SOCIAL RESPONSIBILITY ON THE TOURIST ENTERPRISES IN THE SYSTEM OF SUSTAINABLE DEVELOPMENT

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Abstract. *The article devoted to defining and analyzing of the role of corporate social responsibility and its impact on sustainable development of the tourist enterprises. The purpose of this article is to determine the role of CSR in the system of sustainable development of the tourist enterprises. The theoretical and methodological basis of the study is the institutional-evolutionary approach to the study of problems of influence corporate social responsibility for sustainable development of the tourist enterprises. We apply structural and functional analysis to identify tools of CSR which mostly applied in the process of achieving sustainability. The theoretical and methodological basis of the study is a systematic approach to the study of main tools of CSR ensuring the sustainability of the enterprise. The components which depict social and economic efficiency of corporate social responsibility of tourist enterprises are analyzed. Indicators of absolute values of social responsibility of tourism business characterizing CSR are determined. Interconnection between corporate social responsibility and sustainable development of tourism enterprises are defined. The expediency of applying the concept of corporate social responsibility is substantiated, which, in contrast to the existing justifications, is expressed in the need for business to be guided not only by financial indicators but also public interests and sustainable development, compliance with business ethics in tourism services. In the article main types of CSR are defined and described.*

Keywords: *corporate social responsibility, responsible tourism, sustainable development of tourism, sustainable development of tourism enterprises, stakeholders.*

JEL Classification: M14

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Introduction. The implementation of the principles of corporate social responsibility and its key goals in the strategy of the enterprise is a global trend due to the need to adapt to social and economic changes. Corporate social responsibility has become especially important, while the crisis in the economy has actualized the public demand for theoretical understanding of the concepts and the development of methodological tools for raising social standards and corporate social responsibility.

Literature review. Theoretical and methodological foundations of CSR as an economic phenomenon are revealed in the fundamental works of: G. Bowen, K. Davis, M. Friedman, R. Haywood and others. Ways of influence of CSR for sustainable development, formation and implementation of social responsibility of the tourist enterprises, theoretical and methodological principles of its implementation, in particular the development of the conceptual framework, the formation of a set of indicators for assessing the social activity of CSR and its factors are disclosed in the works of domestic and foreign scientists, among them: Brunland H. [2], Karpenko N.M. [3], Hall M. [4], Carrol A. [5], Kotler F. [6].

Aims. The purpose of this article is to determine the role of CSR in the system of sustainable development of the tourist enterprises.

Methods. The theoretical and methodological basis of the study is the institutional-evolutionary approach to the study of problems of influence corporate social responsibility for sustainable development of the tourist enterprises. We apply structural and functional analysis to identify tools of CSR which mostly applied in the process of achieving sustainability.

Results. Tourism is one of the most important areas of activity of the modern economy with a social orientation, which is focused on meeting the needs of society and improving the quality of life of the population. The socially responsible tourism initiative was launched by members of the World Tourist Organization (WTO, since 2003 – UNVTO; UNWTO – World Tourism Organization, an international intergovernmental organization in the field of tourism) in 1997 during a meeting in Istanbul and recognized as a tool for the development and advertising of tourist enterprises. In 1999, a document was published that recognized the value of tourist travels for both tourists and residents of the visited territories. The result was the formulating of the principles of responsible tourism in 2002 (Declaration on Responsible Tourism in Destinations)[1]. The document defines the way in which the tourism industry and the travelers themselves influence for sustainable development, indicates the preservation of the corresponding proportions between the economic and enviroment. Socially responsible tourism is a term that means the application of CSR principles in the functioning of tourist enterprises. For enterprises of the tourism sector, the system of corporate social responsibility is of particular importance. This is due to its dynamic development as a sector of the national economy and social orientation and social sphere.

The crisis associated with the Covid-19 pandemic has almost halted the consumption of tourist products around the world and led to a global crisis in the tourism sector. The total amount of losses for 2020 reaches $ 950 billion. For the first time in history, about 90% of the world's population now lives in countries with travel restrictions. Airlines, travel companies and the tourism industry as a whole are among the most affected areas of the business. Experts estimate that 25 million aviation jobs and 100 million tourist jobs are at the risk. Recovery in the tourism sector will be from five to seven years. The tourism sector, like many others, needs to be rebooted and launched into a completely new philosophy, the prerogative of which should be – full involvement of the principles of social responsibility and sustainable consumption in the strategy of its activities.

Characteristic of sustainable development implies a number of concepts: sustainable development, equilibrium development, environmentally safe, developing due to the slightest use of natural resources, etc. H. Brunland noted that sustainable development is a development that meets the current needs of a person and does not create a risk that the needs of future generations will not be provided [2].

Some of international and domestic organizations joined the interpretation of this term, since the very concept of sustainable development of the enterprise has gained particular important. The formation of corporate social responsibility in

tourism is a significant factor in the creation of a controlled mezzo- environment, the purpose of increasing the competitiveness of tourist enterprises and ensuring the achievement of the goals of sustainable tourism development. The scientific basis of the CSR concept is based on the concept of sustainable development, therefore, there is a need to study the concept of sustainable development of a tourist enterprise. One of the most global problems in the process of realization of corporate social responsibility of the tourist enterprise in the system of sustainable development is the solution of the problem of ecology. N.M. Karpenko argues that own tourism activities and the development of its infrastructure create threats to the natural environment, similar to those that occur as a result of the development of industry, urbanization or transport. Thus, according to experts, the share of tourism in environmental degradation is now 5-7% [2]. At the same time, the deterioration of the ecological situation leads to a decrease in the level of tourist attractiveness of the territory and a decrease in the demand for tourist products, which in turn is a deterrent to the development of tourist destinations. Thus, the global nature of tourism and the overwhelming focus on the rapid pace and results of economic growth of the tourism business harm the environment and contribute to the exacerbation of subject-object relations in the human-nature system [3]. And this, in turn, actualizes the need to implement the principles of sustainable development not only in the production sector, but also in the development of those industries that are relatively less resource-intensive and environmentally dangerous. To transform the tourism sector into an effective factor of socio-economic development of a country or region, its modernization is necessary taking into account environmental requirements and in accordance with the principles of sustainable development. The ecologization of tourism should not be limited only to the development of the most nature-friendly types of tourism, whether it is ecological and rural green tourism. It should be provided with a set of effective measures for all types of tourism, aimed at scientifically based, regionally adapted rationing of recreational load and mandatory compliance with established standards, zoning of recreational and tourist areas, application of environmentally safe technologies in infrastructure service of tourists (energy saving, water saving, disposal of hooters, application of environmentally safe detergents and packaging materials, etc.), carrying out various propaganda and educational activities aimed at improving the level of environmental awareness of tourists.

Management of tourism enterprises should be aimed not only at economic, but also at social and environmental consequences. The tourist enterprise should strive not only to make a profit, but also to create the consumers value of tourist products, to improve the living standards of the population, improve the ecological condition of the territory, etc. [4]. The consequence of the introduction of corporate social responsibility is to achieve the goal of sustainable development of the enterprise. Corporate social responsibility, as well as the concept of sustainable development of the enterprise combines three main components: economic, environmental and social (Table 1).

Table 1. Types of CSR in the process of achieving sustainability: economic, ecological and social

№	Type	Essence
	Ecological responsibility	Implementation – of the ecological management system integrated in all stages of activity of the enterprise which will allow to identify ecological threats, to define the ecological requirements fixed by operating regulations, to develop own ecological policy and the program of its introduction; – the environmental management system should cover two stages - stabilization of the environmental situation and its improvement. Stabilization should be the initial stage of environmental responsibility of the enterprise, which may include: a) providing of the price of ecological intensity of production for the purpose of deduction of a certain percent in branch funds of ecological intensity for compensation of the losses caused to the nature; b) control over observance of maximum permissible concentrations of polluted substances; c) monitoring the effectiveness of expenditures on environmental measures
	Social responsibility	– Cooperation with the local community and local authorities to create new jobs, support educational initiatives, develop scientific activities, maintain social infrastructure, support socially vulnerable groups; – ensuring the provision of quality services and the introduction of a quality assessment system. Quality control of services should be carried out at all stages of service provision; – compliance with the principles of good faith and completeness in the payment of taxes and other mandatory payments; – formation of a positive image among investors and creditors
	Economic responsibility	– Creating conditions to ensure financial stability and economic development of the enterprise, ensuring its high level of profitability. The economic approach is to make optimal use of limited resources and the use of energy and energy-saving technologies to create aggregate income that would ensure the preservation of the total capital with which it is formed. From an environmental point of view, sustainable development must ensure the integrity of biological and physical natural systems

Sourse: develop by author

Based on the above, it should be noted that the corporate social responsibility of the tourist enterprise is the main prerequisite for sustainable development of tourist enterprises and, as a consequence, sustainable development of tourist destinations and the industry as a whole (Fig. 1).

The principles of socially responsible business are the basis for the implementation of CSR and achieving sustainable development of the tourism enterprise. Among the standards, we distinguish GRI (Global Report Initiative) and ISO 26000. GRI standard – created to implement the concept of sustainable development that provides not only to meet the consumer needs of tourists, but also social responsibility in the context of commitments to nature conservation, environmental norms; providing non-financial reporting by tourism enterprises, which is one of the areas of CSR. IS0 26000 - used to maintain the quality of the tourist product, which is the basis of social responsibility of the tourist enterprise.

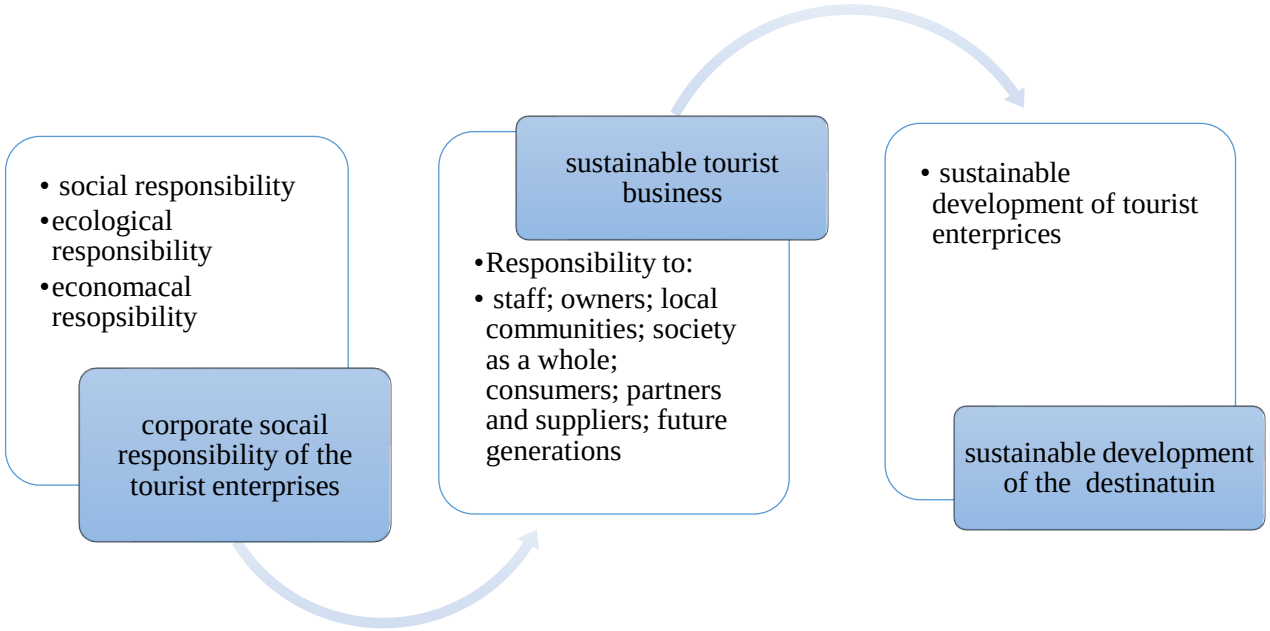

Figure 1. Interrelation of corporate social responsibility of a tourist enterprise and sustainable development of tourism

Sourse: develop by author

From 2020, a new approach to tourism has been introduced, including a number of requirements for the safety of travelers Safe Tourism Certificate, which will be further transformed into a standard that will guarantee the quality of the tourism product, the main component of which will be travel and leisure.

Discussion. We regard corporate social responsibility as a tool of achieving sustainable development of enterprises. The study of the concept of CSR allowed to identify its main characteristics:

- volunteering;
- integration into the company's business strategy;
- industry specifics - connection with the scope of the company;
- matching the expectations of all stakeholders;
- contribution to the sustainable development of the enterprise and society.

The main goal of the concept of corporate social responsibility, which has developed and gained increasing importance since the 1950s and today, both at the micro and global levels, is the ability of enterprises to include this concept in the enterprise development strategy to achieve competitive advantage in any which industry, as its implementation benefits both the company and society directly or indirectly implementing the goals of sustainable development of the UN Global Compact, which is an instrument for achieving sustainability.

Conclusions. Based on the results of the above studies, it was established that corporate social responsibility is one of the most important tools for achieving

sustainable development of a tourist enterprise and a result of sustainable tourism development. The implementation of the 17th sustainable development goal of the UN Global Compact is carried out through the implementation of the successful interaction of the company's stakeholders, which is the main characteristic of the concept of CSR. Corporate social responsibility is recognized as one of the most effective tool in the process of achieving sustainable development of a tourism enterprises, as it affects the financial results of the enterprises through the growth of reputational capital.

Corporate social responsibility in tourism should include a wide range of activities, including the following areas of social investment to compensate for possible negative environmental, economic and social consequences of tourism development: 1. Development and improvement of social conditions of staff. 2. Health and safety of the staff and safety of tourists. 3. Development of the local community. 4. Preservation of natural and cultural heritage. 5. Resource saving. 6. Availability of rest.

A very important item in the process of achievement sustainability is following to three components: ecologic, economic and social development of the enterprises. For the tourist enterprises we can highlight ecological one, while impact of this direction for achieving sustainability is very important because of global impact of travelers for tourist destinations. Sustainable consumption of tourist product can be provided due to systematic solutions of stakeholders (internal and external) which are also participants of formation of the tourist product. So, CSR provide sustainable development of the tourist enterprise by active cooperation of all stakeholders in the way of social, economic and ecologic development.

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ENSURING COMPETITIVENESS OF TOURIST BUSINESS ENTITIES BASED ON MARKETING APPROACH

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Abstract. *The processes of reforms in various sectors of the economy are taking place in the conditions of the economic crisis, and tourist enterprises are no exception. The development of the domestic tourism market and raising the level of competitiveness of tourist business entities are relevant tasks in the strategic perspective. Competitive advantages are formed on the basis of effective use of all types of resources available to it. The influence of marketing factors on the process of formation of competitive advantages of tourist business entities is the most important factor in its further effective development. Competitiveness in modern market conditions is considered from the point of view of consumers, so marketing activity is an important stage in increasing their competitiveness. It is in the problem of marketing an analysis of the market situation, the definition of a competitive position and the development of recommendations for improving the competitiveness of tourist business entities. The purpose of the study is to develop theoretical and practical mechanisms for increasing the competitiveness of tourist business entities and the definition of marketing factors for its formation. Against this background and taking into account the features of the transformation of the Ukrainian economy it is necessary to study the possibility of adapted use of marketing tools for ensuring the competitiveness of tourist business entities. The article examines the characteristic features of agricultural enterprises; The mission of tourist business entities and the basic principles of management were summarized; The peculiarities of the formation of a strategy for the development of tourist business entities based on marketing are substantiated; It is proved that in practical marketing, the abstract value of the market is not used; The necessity is substantiated separately consider in the structure of the tourist market on its scale small, medium and large markets; Proposals are submitted to the introduction of fixed means of communication policy in the activities of tourist business entities.*

Keywords: *marketing, marketing tools, subjects of tourism entrepreneurship, competitiveness.*

JEL Classification: F15; F52; P25; G34; M10; M11

Formulas: 0; fig.: 1; tabl.: 2; bibl.: 12

Introduction. In the conditions of globalization and exacerbation of competition in the market of tourist services, marketing becomes an instrument for supporting domination of tourist business entities, which is based on specialization and ability to create economic and cultural value. After all, in modern conditions, tourism is one of the developed branches of the world economy and forms of foreign economic activity and is the most dynamic branch in the world. The important and relevant tasks of the present are the outline of marketing tools to ensure the competitiveness of tourist business entities.

The strategic goal of the development of tourist business entities is the creation of a competitive tourist product that can maximally satisfy the tourist needs of the country's population, to provide a comprehensive development of territorial communities and the preservation of historical and cultural heritage on this basis.

In turn, the competitive advantages of tourist business entities are formed on the basis of effective use of all types of resources available. The influence of marketing factors on the process of forming competitive advantages of tourist business entities is the most important factor in their further effective development, and the competitiveness in modern market conditions is considered from the point of view of consumers, so marketing activities are an important stage in increasing the competitiveness of tourist business entities. It is in the problem of marketing. An analysis of the market situation, the definition of a competitive position and the development of recommendations for improving the competitiveness of the subject of tourism entrepreneurship and / or tourism product.

At the same time, during the period of a coronavirus pandemic, due to a number of obvious reasons caused by a deep crisis in tourism, there was a sharp decline in demand for tourist services to a critical level. Pandemic became a stress test, and forced all subjects of tourist entrepreneurship to seek new fundamentally different tourist products and has moderated their advancement both on both domestic and external markets.

That is why in the conditions of an unstable world economy, the issue of developing theoretical and practical mechanisms for increasing competitiveness The subjects of tourist entrepreneurship on the basis of a marketing approach led to a choice of research theme.

Literature review. The issue of marketing of tourist services are found both in the works of foreign authors, as well as among the works of Ukrainian scientists. Among them, this problem was disclosed: J. Khollovaya, I.Arankov, G. Bagiev, Yu. Ivanov, O. Zagorodnyuk, R. Phathutdinov, etc. In their works, it is necessary to use additional strategies for managing the marketing of a tourist product, namely the use of internal and interactive marketing tools. It should be noted that old marketing techniques often do not work, so representatives of tourist business are forced to show maximum flexibility in its activities, trying to diversify sources of income [1, p. 11].

The issue of the formation of competitive advantages of tourist business entities are also constantly in the focus of scientific and practical research. In particular, S. Gazuda characterizes the competitiventss as the benefits of a tourist product, may be associated either with higher quality of tourist services, or with lower prices on them, which is consistent with a market strategy within the enterprise [8]. According to S. Vasilchak and S. Semak, the formation of a competitive advantage serves as the basis of a marketing strategy, which will provide the enterprise of the tourist industry to achieve the level of growth and profitability of the highest than average on the market. In turn, this will provide a certain development of an enterprise in market conditions and its economic security [9]. At the same time, C. Grabovenka characterizes the competitiveness as a potential ability of the market in a certain period of time to meet the needs of consumers at a higher compared to competitors, which allows you to maintain / build a conquered market sector and provides an increase in the volume of the market as a whole. It is a competitive environment that forms the quality of a tourist quality, determining the volume and conditions of sale,

prices, advertising methods, sales stimulation, etc. [10]. S. Polkovnichenko in his writings proposes to consider the competitiveness of tourist services as a multifaceted category, which depends on both external and internal factors and is determined by the attractiveness of the tourism industry, its infrastructure and quality of the services themselves [11].

Consequently, most authors are compatible with the marketing strategy. Therefore, a modern market environment requires continuous improvement of theoretical and practical developments of increasing competitiveness on the basis of a marketing approach.

Aims. The purpose of the study is to develop theoretical and practical mechanisms for increasing the competitiveness of tourist business entities based on a marketing approach.

Methods. In the course of the study, such methods of research as: methods of induction and deduction; observation and generalization; ordering; graphic methods; methods of system-structural analysis; method of scientific generalization were used.

Results. The emergence and development of society is accompanied by the formation of the phenomenon of competition (from the late Latin Concurentia - to face, compete), which is one of the permanent factors of its progressive forward movement. Competition forces tourist business entities not to dwell on the achievement, but constantly self-improvement, to reduce production costs, improve the quality of products (services) offered in the market, to increase its competitiveness. The concept of competitiveness by various domestic and foreign scholars are interpreted differently, indicating its complexity and ambiguity, as well as the need for further research in this area of knowledge.

G. Bagiyev notes that competitiveness is a set of qualitative and cost characteristics of the goods that can create advantages in front of the competitor's goods and meet the needs of consumers [2, p. 23].

Competitiveness is complicated, but at the same time, a condition for successful functioning in a market economy is required. It should be noted that it is a concept relative and can only be detected among the group of enterprises. This group is formed with the presence of certain features: entry into a single regional market of activity or its certain segment; availability of the relevant structure and assortment of services; FAZ FAZ Life Cycle Phases and Basic Strategic Development Goals [3, p. 122]**.**

The competitiveness of tourist business entities at tactical and operational levels is characterized by: the effectiveness of the booking process, sale of tourist services and the proposed service; expansion of the assortment of services and providing the material and technical base; uniqueness of the tourist product; used forms of encouraging customers and influencing them.

Competitiveness affects the advantages in the warranty and post-warranty service, advertising, image, as well as market situation, fluctuations in demand. A high level of competitiveness of the goods indicates the expediency of its production and the possibility of advantageous sales [4, p. 11].

The actual problem of modern domestic theory and practice is the management of competitiveness of tourist business entities. International competition, globalization of markets, large-scale penetration of foreign goods to the Ukrainian market translate the problem of managing the competitiveness of tourist business entities to the number of priority managerial tasks, whose successful solutions will ensure survival and development of enterprises in a new environment. Lack of competition experience, a complex economic situation in the state, the unresolved number of methodological applications for the management of competitiveness of tourist business entities require additional research in this area.

The economic essence of tourist activity has an intangible nature. Subjects of tourism entrepreneurship offer a market its product in the form of a service, in production to which the consumer is involved. Thus, the source element in the interpretation of the term "competitiveness of tourist business entities" can be considered preferences and selection of consumers of tourist services.

In addition, tourist services are a system-forming element of the tourism industry, which gives grounds to assert - they have the ability to generate a multiplicative effect of influencing the related branches of the national economy.

Formation of competitive subjects of tourist business is possible only with the formation of a competitive market strategy by individual tourist enterprises of territorial communities, which contributes to increasing the competitiveness of the tourist potential of the region and the country. The behavior and success of a separate company depend on the identification of competitive advantages and development of a competitive strategy.

The only methodology for the analysis of competition and competitors to identify competitive advantages, comparing the competitiveness of tourist business entities and services (goods) today does not exist today [5].

Thus, it can be argued that the competitiveness of tourist business entities is the most important factor in ensuring the effective and profitable development of enterprises of hospitality. It is this category that determines the ability of tourist business entities not only in financial and economic and political conditions, but also in the financial and economic crisis. Management of competitiveness of tourist entrepreneurs on the basis of a marketing approach is a strategically necessary direction of development, which provides for a constant search for new types of advertising, new groups of potential customers and improving service.

The competitiveness of tourist business entities depends on the whole complex of factors that are classified by: external factors (macroduction and mesoservedes); Industry factors; factors of the internal medium (Table 1).

When forming the competitive advantages of subjects of tourism entrepreneurship, sectoral factors and factors of the internal environment of tourist entrepreneurs are most important. The state of development of the tourism sector has a direct and powerful impact on the level of implementation by the territorial community of its tourist potential.

Table 1. Complex of factors Competitiveness of tourist business entities

External factors of competitiveness of tourist business entities	Sectoral factors of competitiveness of subjects of tourism entrepreneurship	Factors of the internal environment of tourist business entities
1. International situation - military conflicts; International conferences, exhibitions, film festivals and other measures: tendency of life expectancy, level of integration; Availability of recreational and other technologies.	1. Competitors - quality, view, price of competitor services; image, advertising, level of service; organizational and technical level of production of major competitors; Financial position.	1. Market institutional environment - number of financial institutions and exchanges; the presence of a single regional information system; Structure of hotel services market.
2. Political situation - the stability of the political system in the country; criminal situation; level of democracy; Independence of the media; legislative activity; Bodies of tourism management and recreation, degree of their intervention.	2. Suppliers of products and services - sustainability; prices, pay conditions; form and delivery speed; the quality of resources.	2. Ecological state, recreational resources - quality of soil, water and natural resources; influence of ecology on the health of the population; Natural-climatic conditions.
3.Economic policy - the level of basic macroeconomic indicators (GNP, unemployment rate, inflation rate, real population incomes, country budget deficit).	3. Consumers (customers) are main consumers; constant consumers; The structure of consumers by gender, age, education, family, income.	3. Development of health - the progressiveness of medical equipment, personnel qualifications; Provision of health care services; Cooperation of health care institutions with means of accommodation.
4.Social-cultural policy - life expectancy; Life level of the population; fertility and mortality of the population, the structure of the population by sexual age, age, education, composition of the family, income; population density; Level of education of the population, provision of objects of culture (theaters, libraries, sports complexes, etc.); the attitude of people to the surrounding world; trends in the development of cultural values; Traditions of rest and treatment.	4. Marketing intermediaries (hotel brokers) - structure and strategy of intermediaries; terms of cooperation; reliability and constancy of intermediaries; Communication with credit and financial institutions.	4. Science and education - the level of education of the population of the region: the presence of special and higher educational institutions for the preparation and retraining of personnel in the area of hotel business.
5.New climatic resources are the main natural resources of the country; recreational resources; Characteristics of climatic factors of the country; Deficiency of resources by regions of the country .	5. Contact audience - attitude towards financial circles, media, state and municipal institutions, public organizations, population, etc.	5. Cultural environment - the degree of satisfaction of the needs of the population in cultural objects; availability of cultural and entertainment enterprises; Availability of a developed network of excursion objects
6. Legal and legal acts - legal acts on tourism and hospitality, taxation, development of entrepreneurship, foreign economic activity, legal acts regulating the relationship between the components of the country's economic system; region development programs; the quality of supervision of legal acts.	6. Associations, Alliances and Unions - Consulting, Joint Marketing Activity, Formation of Regulatory Legislation at the sectoral level.	6. Trade and public catering enterprises - progressiveness and demolition of trade equipment; equilibrium by skilled personnel; Value for money.
		7. Agriculture - the presence of own agricultural products; competitiveness of its own products; Quality and price of own products.
		8. Construction and industry - the rates of development of industrial and private construction; Pace of construction of hotel and tourist sectors.
		9. Economic and political situation - national, regional and urban legal acts in the field of hotel affairs and tourism, development of entrepreneurship and taxation.

Source: generated by the author based on [4-6,11]

The achievement of a sustainable competitive advantage of the tourist business subject is possible based on the implementation of the concept of internal marketing. In turn, the concept of internal marketing is to combine the motivation of employees and the formation of their professional knowledge, which is a source of high-quality services. The internal marketing system is aimed at considering the domestic market, which includes corporate culture, system, procedures, structures that exist within the tourist enterprise, personnel whose knowledge and skills, support and loyalty are needed to implement marketing strategies. Implementation of this concept of internal marketing will allow you to build the dependence of "Loyal staff - a loyal client - the profitability of tourism enterprises - sustainable competitive advantages", which requires, in turn, involve marketing assets of the subject of tourism entrepreneurship.

Consequently, the competitiveness of tourist business entities is formed under the influence of many factors, important belongs to marketing factors that make it possible to form advantages in a competitive struggle. Marketing factors form an individuality, that is, the ability of tourist business entities to have its own unique signs compared to competitors; Values - positive associations are important from the point of view of the local market [7].

Therefore, ensuring the competitiveness of tourist business entities on the basis of a marketing approach is the ability to create emotional commitment to consumers formed on the basis of individuality and value for consumers using marketing tools, better than competitors.

Another important and compulsory condition for increasing the competitiveness of tourist business entities is the correspondence of the quality of service and rational use of resources (minimization of expenses) while maintaining the required quality. Also, the service can not be competitive if it is not attractive to the consumer (Table 2).

Table 2 Basic parameters for assessing the competitive position of a tourist business entity from the point of view of the consumer

Factor	Characteristics of the criterion
Price	Ratio of price level with prices of major competitors. Pricing policy efficiency compared to competitors' policy
Quality	The degree of conformity of the structure. The degree of conformity of work. Staff qualification level. The level of safety of services provided. Degree of conformity of the content of buildings, structures, engineering and technical, etc. Equipment necessary norms, norms and rules operating in the tourism business.
Organization of service	Level of service. Level of interior design and exterior. Latitude of the spectrum of additional services. Availability and its services (booking system).
Marketing surroundings	The effectiveness of advertising events. Development and popularity of the brand. Efficiency of sales channels.

Sourse: develop by author

The main purpose of the tourist business entity is, with the help of thought-out strategic marketing planning, creating an effective brand that will increase the consumer segment and allow us to maintain profitability on a steadily high level. To date, this goal is implemented by introducing such a well thought out marketing, as creation and / or cooperation with network entities of tourist business. The network has many advantages. The most important ones are the high level of cognitive and large portfolio of unique proposals, high standards of service, advertising campaign or promotional actions apply to all network participants, and the positive image maximally promotes the promotion of tourism business.

However, the main task of business entities of the tourism industry remains the formation of a strategic marketing complex, which provides for preparation for the adoption of a managerial decision on commodity, price, sales and communicative policies. In practice, Ukrainian entrepreneurs do not use the entire set of marketing measures. They are developing a universal multi-mix marketing, and therefore it is expedient, in our opinion, there is an expert survey and on the basis of generalized indicators the priority of the elements of the strategic marketing complex within the territorial community is determined. The following indicators are used for monitoring: the quality of service, personnel competence, pricing policy, the image of the entrepreneurship, customer loyalty programs, internal atmosphere, preliminary experience of visiting enterprises, advertising politics (Figure 1).

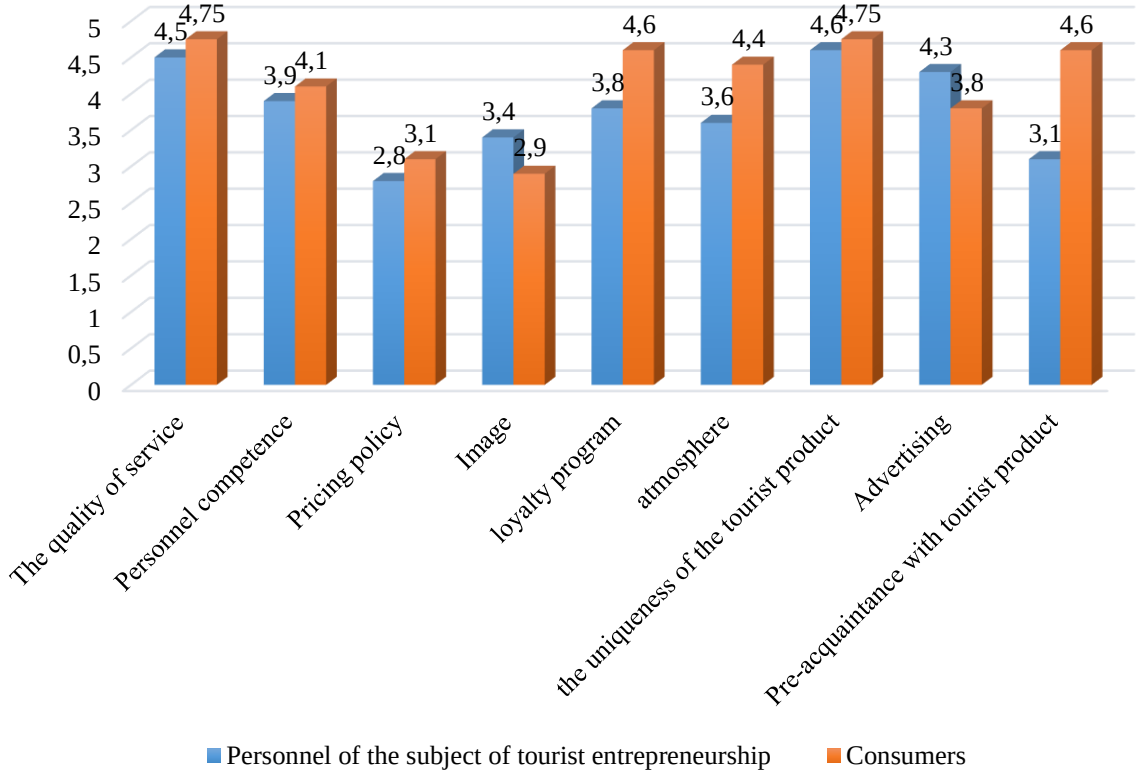

Figure 1. Evaluation of the priority of the indicators of the strategic marketing complex according to marketing research

** The evaluation was carried out in a 5-point scale*
Sourse: develop by author

Consequently, from Fig. 1, we can conclude that one of the important indicators in the opinion of consumers is the quality of service and the uniqueness of the tourist product, the loyalty programs took the second place, but advertising in the opinion of consumers does not play a leading role. Although it affects them. This analysis is appropriate to make every territorial community and each subject of tourist business in the form of a short questionnaire questionnaire. Because it is an effectively developed strategic marketing complex creates favorable conditions for the formation of successful marketing strategies, the implementation of which will ensure not only the acquisition of competitive advantages, but also the prosperity of the organization in general.

Conclusion. Consequently, today under the conditions of severe competition before subjects of tourism entrepreneurship, there is a rather complicated task: how to keep their positions in the market and maintain the effectiveness of their activities. Usually, the leadership of most organizations is held a series of measures to increase their share in the market, reducing costs for the purpose of realization of price competition and others. After introducing on the market of any product in the consumer, there is a certain impression - positive or negative, which is inevitable.

The competitiveness of tourist business entities is the ability to provide tourist services at the expense of competitive advantages. It acts as a major factor in ensuring the effective and profitable development of tourist enterprises and determines their ability to function not only in current financial and economic and political conditions, but also in the financial and economic crisis. It can be argued that competitiveness is the most important factor in ensuring effective and profitable development of enterprises of hospitality. In the course of the study, it was found that the competitiveness of tourist business entities depends on external factors (macroduction and mesoservedes); Industry factors; factors of the internal environment.

Reserves of growth of competitiveness of tourist business entities need to be sought in internal factors of development of enterprises that characterize production and economic activity; Features and specifics of hotel services; quality of consumer services; Marketing activities. The proposed ways of increasing the competitiveness of tourist business entities for each group of factors, namely: quality of service; uniqueness of the tourist product; Loyalty and advertising programs. But it should be noted that measures one of the directions will not increase the level of competitiveness, they must wear a comprehensive character.

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