

Vavdiuk Nataliia

Doctor of Economics, Professor
Head of Management Department
Lutsk National Technical University
75 Lvivska Str., Lutsk, Ukraine, 43005
n.vavdiuk@lntu.edu.ua

Rud Kateryna

Aspirant PhD programme «Management»
Lutsk National Technical University
75 Lvivska Str., Lutsk, Ukraine, 43005
rrrrrud@ukr.net

STRATEGIC ANALYSIS OF THE MANAGEMENT OF ECONOMIC OFFENSES IN UKRAINE

Abstract: The constant increase in the number of economic offenses leads to the acquisition of illegal advantages, which does not contribute to the sustainable development of the national economy. Given the danger of economic offenses, scientific analysis of their condition and methods of counteraction is relevant and deserves research. The content of the concept of economic offense is investigated and determined, the regularities of its management in the national economy are determined. The analysis of the level of economic offenses is carried out, the estimation and the prediction of efficiency of management of economic offenses is given. Hypotheses are formed: with the increase in the cost of economic offenses management, the level of economic offenses will decrease and vice versa; with the increase in the coefficient of disclosure and severity of sentences, the level of economic offenses will decrease and vice versa. The strategic analysis and generalization of the received results of research for correctness and reliability of the received results in practice is carried out.

Keywords: economic offenses, economic offenses management.

JEL classification: G18, D61, E71, E26

Introduction

The increase in the number of new forms of economic offenses leads to the acquisition of unfair advantages by economic entities, the manifestation of unfair competition, etc. Considering the dangers of economic offenses, a scientific analysis of their condition and counteraction is relevant and worthy of study. This requires the improvement of tools for

managing economic offenses in order to ensure the economic security of the state.

The process of managing economic offenses encompasses a set of actions to prevent intentional encroachment on economic relations, which are protected by the state regardless of the form of ownership and activities of economic entities that perform functions in the sphere of production, distribution, exchange, and maintenance of GDP.

Research results

The main purpose of economic offenses management according to the research of Phillips L., Votey H.L.Jr. (1981), Liska, Allen E. (1987), Eide, E., Rubin, P.H., Shepherd J.M., (2006), Cohen, M. A. (2004), is to optimize the regulation of the amount of resources needed to manage them: investigation of committed economic offenses, litigation, sentencing and execution of sentences. If the socio-economic factors and the cost of economic offenses managing are constant, sentencing offenders increases the probability of restraining the level of economic offenses. In order to study the management of economic offenses, we form the following hypotheses: Hypothesis №1: with increasing costs for the economic offenses management, will decrease the level of economic offenses and vice versa; hypothesis №2: with the increase of the coefficient of disclosure and severity of sentences, the level of economic offenses will decrease and vice versa. In the future, we will analyze and summarize the results of the study to verify the correctness and reliability of the results in practice and clarify the hypotheses based on the results of such testing.

To prove hypothesis №1, we analyze the indicators of the level of economic offenses and the cost of managing them. Estimation of the level of criminal offenses by type of economic activity will be carry out at the main stages of statistical research: observation; grouping and compilation; analysis. Table 1 presents indicators of the costs of economic offenses management for 2016–2019 to prove the hypothesis.

Table 1: Estimation of costs for management of economic offenses

Year	Recorded criminal offenses, units	Expenses for management of economic offenses management, thousands UAH	Costs on law enforcement activities, in% of GDP	Deviation of management costs		
				Absolute, thousands UAH	Relative, %	By structure to GDP, %
2016	47833	1358721	3,0	X	X	X
2017	52078	1586439	3,0	227718	116,8	0
2018	58606	2051163	3,3	464724	129,3	0,3
2019	58903	2371113	3,7	319950	115,6	0,4

Source: calculated by the author; Report on criminal offenses 2016-2019 [5]; Expenditures of the state budget by functions of 2016-2019 [6]

In total, in 2016, 92033 offenses were committed at enterprises and institutions, in 2017 their number increased to 102115, which is 11% (or 1008282) more than in the previous year. In 2018 – up to 113,752, which is 11.4% (or 11,637) more than the previous year. During the analyzed period of 2016-2018, the growth of criminal economic offenses amounted to 23.6%. Thus, the total number of economic offenses is growing.

In order to reduce the level of economic offenses, the state allocates more funds to combat them. During 2016–2019, we see an increase in economic offenses by 23.6%, and the cost of managing them increased by 50.1%. In fig. 1 using Excel spreadsheets we determine the dependence on the indicators of costs for the management of economic offenses and the number of economic offenses through the construction of a scatter plot and the definition of the trend line. The trend line is $y = 0.0046x + 51948$, and $R^2 = 0.9765$, which indicates a high value of the coefficient of determination.

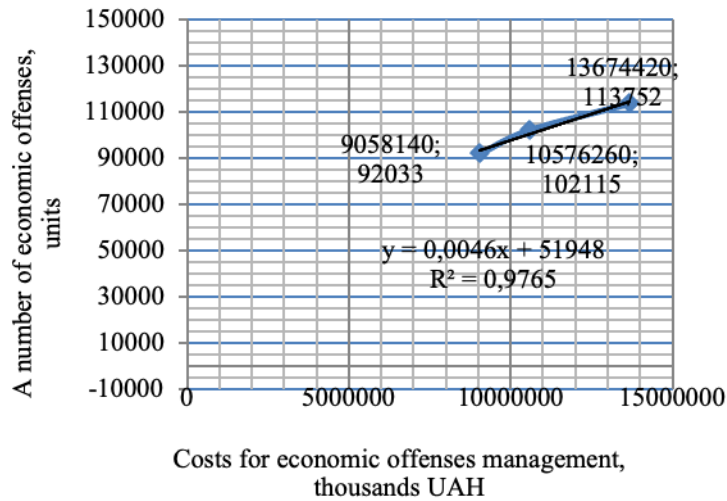


Figure 1: **Data to prove the hypothesis #1**

Source: calculated by the author; Report on criminal offenses 2016-2019 [5]; Expenditures of the state budget by functions of 2016-2019 [6]

The value of R^2 provides a measure of how well the observed results are reproduced in the model. The value of the coefficient of determination is close to 0.98, which means the functional relationship between the variables: the cost of managing economic offenses and the number of economic offenses. Thus, the hypothesis is not proven, as the costs of managing economic offenses increase, the level of economic offenses increases.

The optimal level of economic offenses determines their scope for the economic offenses management. It is necessary to reduce the cost of managing economic offenses, because there is an increase in the level of economic offenses.

In order to check the correctness of hypothesis №2, we should estimate the value of the coefficient of detection and punishment of economic offenses, which will investigate the mechanism of punishment.

The calculation of the coefficient of detection of economic offenses allows us to assess the so-called deterrent effect. The coefficient of detection and punishment of economic offenses is the correlation of the number of indictments to the number of registered economic offenses.

The value of the coefficient of detection of economic offenses depends on both the level of economic offenses and the resources, sent from the Ministry of Internal Affairs of the Department of Economic Protection of the National

Police of Ukraine. Accordingly, the level of economic offenses will increase with a decrease in the coefficient of detection of economic offenses.

In general, we observe an increase in the number of indictments for economic offenses, including under the agreement. The indictment is a document that completes the pre-trial investigation and indicates the accusations of the person of committing an economic offense, the amount of damage, etc. In 2016, the number of criminal offenses for which proceedings were sent to court with an indictment, including ones with the agreement reached 24,715 units, and in 2017 we monitor their growth by 10,574 units (or 42.8%), and in 2018 – an increase of 7,983 units (or 22.62%). The coefficient of detection and punishment of economic offenses in 2017 was 0.269, in 2017 0.346, and in 2018 0.38.

In order to reduce the level of economic offenses, the state allocates more funds to combat them. During 2016–2018, we see an increase in economic offenses by 23.6%, and the coefficient of disclosure and punishment increased by 41% (Fig. 2).

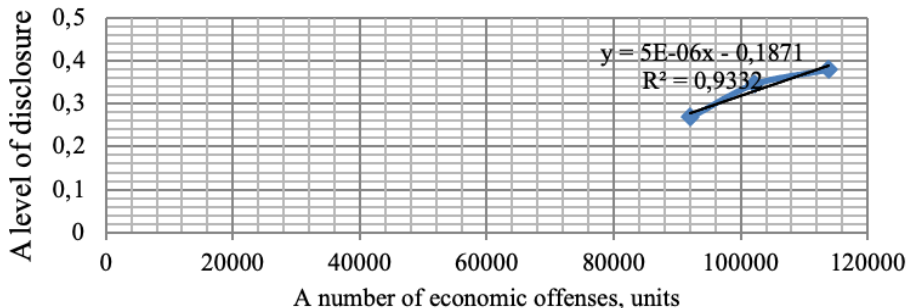


Figure 2: **Data to prove the hypothesis #2**

Source: calculated by the author; Report on criminal offenses 2016-2019 [5]; Expenditures of the state budget by functions of 2016-2019 [6]

However, the level of disclosure and punishment is extremely low, which does not motivate businesses to avoid committing economic offenses. The trend line $y = 5E-06x - 0.1871$, $R^2 = 0.9332$, which indicates a high value of the coefficient of determination, the observed results are well reproduced in the model, which means the functional relationship between the analyzed variables of the number of economic offenses and the level of disclosure and punishment. Thus,

hypothesis № 2 is proved, as with the increase in the number of economic offenses, the coefficient of their detection remains low.

While analyzing the level of economic offenses, the question occurs: what costs or loss of their counteraction and the amount of losses on the established but unreimbursed amounts of material damage to the national economy are optimal?

The state can reduce the cost of managing economic offenses, but in this case the losses from economic offenses may increase and vice versa. In order to optimize the level of economic offenses, it is necessary to keep the total cost of managing economic offenses, which includes losses to the national economy for unreimbursed amounts of material damage at a minimum level.

Table 2 compares the costs of managing economic offenses, losses from economic offenses, namely: unreceived amounts of material losses and calculates the total losses from economic offenses for 2016-2019, makes the estimated value of indicators for 2020 using the trend function.

Table 2: The losses of the national economy from economic offenses

Year	The level of economic offenses, units	Expenses for economic offenses management, thousands UAH	The losses from economic offenses (unreceived amounts of material damage), thousands UAH	Total losses thousands UAH
2016	92033	9058140	444445,19	9502585
2017	102115	10576260	26228458,63	36804719
2018	113752	13674420	913093,82	14587514
2019	112948	15807420	25315364,81	41122785
2020	130818	18115560	25549689,13	43665249

Source: calculated by the author; Report on criminal offenses 2016-2019 [5]; Expenditures of the state budget by functions of 2016-2019 [6]

Let's make the estimated value of indicators for 2020 using the trend function of Excel spreadsheets and analyze the results. The number of registered economic offenses will increase in 2020 by 9%, or 10,860 units, which may lead to an increase in uncollected established amounts of material damage by 14.6% (by 2308140 thousands UAH), an increase

in cumulative losses by 234324,315 thousands UAH, while the costs of managing economic offenses will increase by 6% (by 2542464 thousands UAH). It is known that in order to reduce the level of economic offenses, the state will direct more spending on their management, but the volume of economic offenses in 2020 will also increase.

A decrease in the amount of unearned amounts of material damage from economic offenses leads to an increase in the illegal profit of the entity and an increase in the number of economic offenses.

It is necessary that the costs of managing economic offenses to be equal to the losses from economic offenses: the amount of unreceived amounts of material damage should be minimal or equal to 0. The optimum of the management will be achieved at a certain point, at which the marginal losses from the realized economic offenses will be equal to the marginal costs of their management.

Conclusion

The general goal of managing economic offenses is not tactics to reduce or avoid the number of such offenses, but to deter them on optimal level in terms of losses to the national economy.

Thus, the developed measures are aimed at improving the process of managing economic offenses through the use of strategic planning and evaluation tools. The analysis and generalization of the received results of research are carried out, reliability of hypotheses is checked.

Hypothesis #1, which stated that with the increase in the cost of managing economic offenses, the level of economic offenses will decrease and vice versa was not proved: in 2016–2019 we see an increase in economic offenses and the cost of managing them.

Hypothesis #2 is proved: with the increase of the coefficient of disclosure and severity of sentences the level of economic offenses will decrease and vice versa: during 2016–2018 we observe an increase of economic offenses by 23.6%, and the coefficient of disclosure and punishment increased by 41%. $R^2 = 0.9332$, which means the functional relationship between the analyzed variables of the number of economic of-

fenses and the level of disclosure and punishment. As the number of economic offenses increases, the coefficient of their detection and punishment remains low, which does not motivate businesses to avoid committing economic offenses.

It is established that according to the predicted values, the number of registered economic offenses will increase in 2020 by 9%, or 10,860 units, which may lead to an increase in uncollected amounts of material damage by 14.6%, and an increase in total losses by 234,324,315 thousand UAH with an increase in the cost of managing economic offenses by 6%. The benefits and costs estimated by the amount of established and recovered material losses do not cover the costs of the national economy to manage them.

Bibliography

1. PHILLIPS, L., VOTEY, H.L.Jr. 1981. *The Economics of Crime Control*. Beverly Hills etc., p. 26–34.
2. LISKA, Allen E. 1987. A Critical Examination of Macro Perspectives on Crime Control. *Annual Review of Sociology*, vol. 13, pp. 67–88. *JSTOR*, <http://www.jstor.org/stable/2083240>. Accessed 26 Nov. 2020.
3. COHEN, Mark; COHEN, Mark A. 2004. *The costs of crime and justice*. Routledge.
4. EIDE, E., RUBIN, P.H., SHEPHERD J.M., 2006. Economics of Crime, Foundations and Trends® in Microeconomics, 2 (3), pp. 205–279. DOI: <https://doi.org/10.1561/07000000014>.
5. REPORT ON CRIMINAL OFFENSES COMMITTED AT ENTERPRISES, INSTITUTIONS, ORGANIZATIONS BY TYPE OF ECONOMIC ACTIVITY in December 2016 - 2019. [online]. [viewed 10 January 2021]. Available from: <https://gp.gov.ua/ua/posts/pro-kriminalni-pravoporushennya-vchineni-na-pidpriyemstvah-v-ustanovah-organizacijah-za-vidami-ekonomichnoyi-diyalnosti-2>
6. EXPENDITURES OF THE STATE BUDGET BY FUNCTIONS of 2016-2019. [online]. [viewed 10 January 2021]. Available from: <http://cost.ua/budget/expenditure/>