RISK MANAGEMENT OF CUSTOMS LAWS VIOLATIONS IN THE ECONOMIC CRISIS

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In times of economic crisis it is need to develop a model of improving the risk management system for the risks of violation of customs legislation. This article outlines the author's model aimed to improve risk management system. According to the results of the analysis it was offered the author's method of assessing the level of economic crisis. Substance and content of this article is to use individual economic indicators and complex indicator. As a complex indicator an integrated indicator formed as a result of calculation the values of the individual indicators that assess the economic situation in the country.

Key words: economic crisis, risk management, model, method, algorithm, level of the economic crisis, functional modelling, integrated indicator, index of growth, index of fall, scale, phase, maximum values.

Nowadays, economic situation in the world characterized by a lack of stability. Developing at latter years world economic crisis have become a result of different external and internal factors the appearance of which led to the emergence of a variety of negative effects.

One of the main effects of the economic crisis is intensification and growth of the crime level and increasing the number of offences. In this way the task of replenishing of the federal budget in order to maintain the economic stability in the country has a strategic nature [1]. Considering that the Federal Customs Service provides more than 50 percent of payments to the federal budget [2], it is obviously that improving the risk management system of customs laws violations in conditions of the economic crisis is one of the priority issues.

In this connection, the authors developed presented in Fig. 1 the model of improving the risk management system for the risks of violation of customs legislation with the methodology of functional modeling and graphical notation also known as IDEFO, designed to formalize and describe the various processes [3].

In the center of the model, presented in Fig. 1, is a functional block. Each of the four sides of the functional block has a value (the role):

- the upper side is set to "Controls";
- the left side is set to "Inputs";
- the downside it set to "Mechanisms";
- the right side it set to "Outputs".

Through analysis of the Model it can be said that there are two factors that have the most important influence at the process of risk management system of the risks of violation of customs legislation – structure of the commodity circulation and the level of the economic crisis.

Changes in the structure of the commodity circulation can't have the paramount impact because it can be caused with different factors which in very often don't have anything in common with the economic crisis. For example, changes in the preferences of consumers, the appearance of a new product on the market, the emergence of new producers.

Therefore the most important factor is the level of the economic crisis which definitely allows identifying the appearance of the specific risks of violation of customs legislation.



Fig. 1. The model of improving the risk management system for the risks of violation of customs legislation

Mechanisms of controlling specific risks of customs laws violation in economic crisis are developed and actualized risk profiles which used to manage all process. Controls of mechanisms activity are carried out by normative documents which regulate the application of risk profiles.

The outputs of the model represent two effects that occur during the process of using the risk management system in the economic crisis. These effects are economic effect, which shows how the federal budget was replenished by applying risk management system for the risks of violation of customs legislation in economic crisis, and criminological effect, which represents the increasing number of initiated cases for violation of customs laws.

Author's model reflects the whole process of using the risk management system of customs laws violation, so it can be said that in conditions of economic crisis it is advisable to develop a method of assessing the level of economic crisis.

The analysis of the state of current researches in the field of the assessing the level of economic crisis revealed that experiments conducted by foreign scientists such as Stephen Fink and Ulrich Kristek [4,5], as well as by representatives of Russian science – Lomsadze M., Shohneh A. [6], don't consider the economic situation in the country. Thus, for example, Lomsadze M. offers to analyze the state of crisis processes with integrated indicator, but she considers only individual regions of the Russian Federation, not situation in the whole country.

On this basis, it is proposed to use the following algorithm [7] of assessing the level of the economic crisis in the country presented in Fig. 2, which is developed in view of analyzed methods and that includes the method for calculating the integrated indicator for the economic crisis across the whole territory of the Russian Federation.



Fig. 2. Algorithm of assessing the level of the economic crisis in the country

Under the conditions of applying the developed method of assessing the level of the economic crisis in the country, it is offered to use the following indicators for the calculation of the integrated indicator of the economic crisis:

 average per capita incomes in Russian Federation, rubles (data taken from the official website of the Federal State Statistics Service [8] from the section "Population – Living standarts"); retail trade turnover, mln. rubles (data taken from the official website of the Federal State Statistics Service from the section "Business – Retail trade and public services");

 population, thsd. persons (data taken from the official website of the Federal State Statistics Service from the section "Population – Demographics");

 average number of employed in the economy, thsd. persons (data taken from the official website of the Federal State Statistics Service from the section "Labor market, employment and wages – Workforce");

– consumer spending per capita, rubles (data taken from the official website of the Federal State
 Statistics Service from the section "Population –
 Living standarts");

investments in fixed capital, mln. rubles (data taken from the official website of the Federal State Statistics Service from the section "Business – Investments – Investments in non-financial assets");

– gross domestic product (GDP) per capita, USD
 (data taken from the official website of the World
 Bank [9] from the indicator «GDP per capita»);

 the average nominal exchange rate of the USD against the ruble for the year, rubles (data taken from the official website of the Central Bank of the Russian Federation in the section "Derivative indicators of dynamics of the ruble exchange rate")

- the average price for 1 barrel of oil (mark Brent),
USD (data taken from the official website of the
Index Mundi [10] from the section "Crude Oil (petroleum); Dated Brent");

the average rate of increasing the nominal value of the USD, the average price for 1 barrel of oil (mark Brent) (data obtained by statistical calculation of the index of growth/fall using the available data).

Process of calculating the integrated indicator is carried out in several stages. The sequence of stage's application is shown in Fig. 2.

Thus, the results of the calculations were used to obtain an integrated indicator of the economic crisis for each year, which is characterizing a reduction of the better results of total which were achieved.

However, after that when results were got, it is necessary to determine the interconnection between the numerical value of the integrated indicator of the economic crisis and the depth of the crisis processes in the country.

For the purpose of this ongoing research it is proposed to use the scale, developed by the authors, shown in Table 1.

Table 1. Scale of assessing the level of the economic crisis

The phase of the economic crisis (the level of the economic crisis)	Intervals of values of the integrated indicator, %
Phase 1	5-10
Phase 2	10-15
Phase 3	15-18
Phase 4	18-20
Phase 5	20-30
Phase 6	30-40
The lower stage of the economic crisis	> 40

Using the presented scale, we can conclude about the depth of the crisis processes in the country by value of the integrated indicator of the economic crisis. Because of implemented calculations and analysis, it was decided that a situation when the value of the integrated indicator of the economic crisis will be over 40%, is unlikely. Even in the hardest times of the economic crisis indicator didn't exceed 32-35%.

The developed method of assessing the level of the economic crisis in the country allows to evaluate the severity of the economic situation, to determine the depth of the crisis processes. Determination of the economic crisis at the early stages allows having more effective application of anti-recessionary measures of customs and tariff regulation, and will contribute to improve the risk management system for the risks of violation of customs legislation in conditions of future crisis processes.

Thus, the proposed author's model reflects the entire process of using the risk management system of customs laws violation, which implies that the presented by the authors method of assessing the level of the economic crisis, including the algorithm for calculating the integrated indicator of the economic crisis will have high result and will lead to increase performance indicators of customs operations. The presented model and method proposed sequencing for application of customs and tariff regulation in conditions of the economic crisis, which is a factor in the emergence of a favorable economic effect and criminological effect.

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