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METHODOLOGICAL PROVISIONS FOR THE MEASUREMENT OF SOCIO-ECONOMIC SECURITY OF THE INDUSTRIAL SECTOR

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МЕТОДОЛОГИЧЕСКИЕ ПОЛОЖЕНИЯ ПО ИЗМЕРЕНИЮ СОЦИАЛЬНО-ЭКОНОМИЧЕСКОЙ БЕЗОПАСНОСТИ ПРОМЫШЛЕННОГО СЕКТОРА

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Abstract. The presented problem was manifested and described in the 90-s of the XX century due to the rapid formation of transformation processes in Europe, accompanied by crisis manifestations in the economy. In accordance with its features, the measurement of the value of socio-economic security of production systems is aimed at the vector of the cascade escalation of crisis symptoms and the expectation of subsequent displacement to the worst side of the situation. As a result, the indicators of socio-economic security are fixed on the threshold States of life-supporting subsystems, which to some extent reflect the degree of effectiveness of the anti-crisis measures. In fact, the threshold indicators and their application in the level measurements of the direction of the deteriorating state of the production system (for example, pre-crisis — crisis — critical — catastrophic) in the total amount formed the instrumental basis for determining the lower limit (border) of socio-economic security of the industrial sector in relation to the stage of regression of production and decline. However, in the formation of the financial and economic model, providing for the connection of links in the production process of the country in the internationalization process, the replacement stage (phase) of industrial dynamics and the introduction during the rise, the value and objectives of the study of the problems of protection of state interests have changed. This is largely due not only to the results of changes in the structure of the internal and external environment, but also the trend of global industrial development, the evolution of methods of maintaining the priority sectors of the economy and society's resources to ensure the protection of the production system.

Аннотация. Представленная проблема проявилась и была описана в 90-х г. XX в. вследствие скорого становления трансформационных процессов на Европе, сопровождающихся кризисными проявлениями в экономике. В согласовании с ее особенностями, измерение значения социально-экономической безопасности производственных систем нацелено на вектор каскадной эскалации кризисных симптомов и ожидания последующего смещения в худшую сторону обстановки. Вследствие этого показатели социально-экономической безопасности фиксированы по пороговым состояниям жизнеобеспечивающих подсистем, которые в определенной степени отображают степень результативности проводимых антикризисных мер. По существу, пороговые показатели и способы их применения в уровневых измерениях по направленности ухудшающегося

состояния производственной системы (например, «предкризисное — кризисное — критичное — катастрофическое») в общем объеме составили инструментальную базу определения нижнего предела (границы) социально-экономической безопасности промышленного сектора применительно к стадии регресса производства и упадка. Впрочем, при формировании финансово-экономической модели, предусматривающей подключение звеньев производственного процесс страны в процессы интернационализации, замене стадии (фазы) промышленной динамики и введении во время подъема, ценности и задачи изучения проблем защиты государственных интересов поменялись. Во многом это обусловлено не только итогами изменения структуры внутренней и наружной среды, но и тенденцией глобального промышленного становления, эволюцией методик поддержания приоритетных секторов экономики и ресурсов общества по обеспечиванию защиты производственной системы.

Keywords: socio-economic security, government, society, enterprise, employee, threat, security, interests, economics, analysis, system.

Ключевые слова: социально-экономическая защищенность, государство, общество, предприятие, работник, угроза, защищенность, интересы, экономика, анализ, система.

The main estimated result of the forecast of socio-economic security is its level, which generally reflects the security situation of the industrial sector in a certain period of time. The reliability of determining the value of socio-economic security determines the choice of protective measures and methods of their implementation. This dependence is reflected in a variety of theoretical elaborations of problems of ensuring social and economic security of macroeconomic objects. The study of the most popular methodological approaches to the level measurement of socio-economic security provides an opportunity to establish that their provisions provide for most of the emerging in-country circumstances of the implementation of the reproduction process. The specificity of the impact of the external environment is reflected only through the assessment of various risks, including - country. This is explained by the fact that the conceptual basis of level measurement is based on the principle of priority raised problems of overcoming of crisis situations in the industrial sector in certain periods of social formation [1, p. 59].

The problem manifested itself and was described in the 90s of the XX century due to the imminent formation of the transformation processes in Europe, accompanied by crisis phenomena in the economy. In accordance with its features, the measurement of the value of socio-economic security of production systems is aimed at the vector of cascade escalation of crisis symptoms and the expectation of subsequent displacement for the worse [2]. As a result, the indicators of socio-economic security are fixed on the threshold States of life-supporting subsystems, which to some extent reflect the degree of effectiveness of the anti-crisis measures. In fact, threshold indicators and methods of their application in level measurements on the orientation of the deteriorating state of the production system (for example, "pre — crisis — crisis — critical — catastrophic") in the total amount formed the instrumental basis for determining the lower limit (border) of socio-economic security of the industrial sector in relation to the stage of regression of production and decline. However, in the formation of the financial and economic model, providing for the connection of links in the production process of the country in the process of internationalization, the replacement of the stage (phase) of industrial dynamics and the introduction during the rise, the values and objectives of the study of the problems of protection of state interests have changed [3, p. 29; 4, p. 82; 5, p. 38]. This is largely due not only to the results of changes in the structure of the internal and external environment, but also to the trend of global industrial development, the evolution of

methods to maintain the priority sectors of the economy and society's resources to ensure the protection of the production system.

Level measurements will need to take into account the transformation processes of the industrial sector structure. The essence of the problem lies in the fact that the initial prerequisites adopted in the level dimensions of socio-economic security are set by the likely escalation of the unfavorable conditions of the industrial sector, which are characteristic of not very favorable conditions and the phase of decline. Features phase industrial lift (sufficient for the expanded reproduction of resources "remoteness" of the current state from the critical values, the minimum number of hazards with possible negative consequences, etc.) in level meters only provide contour, by means of the generalized assessment of potential of becoming a production system and as a result, do not have clearly distinguished characteristics. Less developed is the procedure for establishing the contours of security-non-hazardous values and spectrum (upper and lower limits) of socio-economic security. This is explained by the fact that at all stages of industrial dynamics the normative indicator contains the opposite interpretation. For example, in case of decline, it means a criterion situation, the shift to the worst side of which leads to the structural destruction of the production system. The situation is characterized by threshold measurements and displays the lower limit of the unfavorable outcome of events. Following this logic, each positive change has the ability to be perceived as an achievement of security, because the upper limit is not defined and level measurements in the present case do not implement their own functions. Another state is formed at the stage of industrial recovery. The normative indicator shows the most non-dangerous position of the production system in the implementation of the positive scenario of its formation, i.e. the upper limit of socio-economic security. In other words, it displays some perfect situation of full security that is likely within a given period of time. But, if the level measurements carried out on the basis of the forecast of socio-economic security of the industrial sector in the criteria of the recovery phase, strengthen the values of characteristics below the normative indicator, it is definitely impossible to summarize the decrease in security. This means that the resulting methodological approaches to solving the difficulties of assessing the importance of socio-economic security of the industrial sector, aimed at the features of the phases of regression and decline in industrial dynamics, when they change, are of little use.

Based on the above, in order to solve the research task of carrying out level measurements of socio-economic security of the industrial sector, taking into account the stage of individual competitive rise of the state, the cyclical industrial dynamics and data of updated hazards, the following option is proposed. First of all, it is necessary to clarify the financial and economic circumstances that determine the formation of the industrial sector in the current period. This will make it possible to specify the level properties in relation to the stage-by-stage individuals of the competitive recovery of the state economy and the current phase of the industrial cycle. In-2, to note the extreme conditions of the industrial sector, which are accepted as reference points for the description of probable level data of socio-economic security. In-3, to form the scheme of carrying out level measurements of social and economic security of industrial sector based on the principles: observance of methodical integrity with the existing methodological approaches for determination of the integral (generalizing) indicator of social and economic security in the States which act as trading partners; the account of instability of dynamics of functioning of industrial sector and actually taking place to be restrictions in its development.

As confirmed in the previous sections of the thesis, the financial and economic circumstances of the formation of the industrial sector in any period of time are guided, as a rule, by these processes: the cyclical nature of industrial dynamics, the change in the stages of competitive growth of the state and the change in the proportion of technological structures in the economy. Taking into

account the probability of a different combination of sources of industrial sector hazards, which have all the chances to be formed under the influence of any of these processes, within the 1st and the same period of time it is possible to establish a certain amount of level data. For example, the level indicator in relation to the current stage of competitive growth, the phase of the industrial cycle, the resulting technological structure of the economy. The probability of ambiguity of level data complicates the resulting assessment of socio-economic security and leads to the need to structure the measurements and further differentiation on the symptom of extreme conditions of the industrial sector. Streamlining of measurements will be required to ensure elemental comparability with the current objectives of the socio-economic security forecast, its subject and object area. Effects, tools and procedures are subject to structuring, which make it possible in a certain case to prove the reference points of level measurements and the resulting assessment of socio-economic security. In accordance with this logic, it makes sense to note the following to a certain extent separate blocks and elements that determine the guidelines for the level measurement of socio-economic security of the industrial sector (Table).

Table.

COMPONENTS OF MEASURING THE LEVEL
 OF SOCIO-ECONOMIC SECURITY OF THE INDUSTRIAL SECTOR

<i>Block</i>	<i>The main components of the unit</i>	<i>Guidelines for level measurements and the resulting assessment of socio-economic security</i>
System task	Measuring the level of socio-economic security of the current and planned period; assessment of the regime (contour) of socio-economic security; identification of priority national economic interests through the industrial sector	Adequacy to the stage (stage) of economic development of society and industrial dynamics: reproduction conditions. Based on these conditions, a system of boundary indicators of the equilibrium functioning of the economy is introduced; relatively crisis-free functioning (excluding cyclical crises) of the industrial sector means its focus on expanded reproduction, i.e. on the fulfillment of two necessary conditions for balanced functioning and development: 1) conditions for sustainable simple reproduction of production assets on the scale of the national technological circuit, 2) conditions for balanced growth of fixed assets, providing a material basis for the growth of industrial sector products
Tool	Classification of threats (adverse factors) Methods: static state of the production system; dynamic and predicting the development of the situation Quantitative indicators of the current and expected state of the production structure Base mapping (indicators of production systems to similar and dissimilar characteristics; the regulatory level of security) Criteria table (scale), including "thresholds" and maximum possible values of indicators	Actualized threats and their causes To ensure the adaptability of evaluation in relation to static and dynamic objects, as well as changes in the external environment Take into account country characteristics (resource potential, its structure and sources of increment; sectoral, social and institutional structure, etc.) To establish the dialectics of the development of the production system and identify the causal relationships of its changes Identification of the results of socio-economic security assessment

<i>Block</i>	<i>The main components of the unit</i>	<i>Guidelines for level measurements and the resulting assessment of socio-economic security</i>
Procedure	Multivariate algorithm for calculating the integral (generalizing) indicator of the current and expected state of socio-economic security	The adequacy of the object specifics, as well as the format of the interpretation of each of the indicators and standardized conclusions
	Differentiated measurements of socio-economic security levels	Take into account the nature of industrial dynamics ("growth-decline"; "acceleration-slowdown"; "lag - advance") and identify critical links in the interaction of financial and economic processes that affect the economic situation

Source: author's development

The content of table 1. it was formed in accordance with the needs of evaluation technologies — setting of tasks, definition of tools and procedures for its application. Block "tasks" is designed to compare the level measurement of comparable features: stage (current and planned or upcoming period), contour characteristics that are updated for the estimated period, and implemented priority interests. With its support, there is a choice of important tools for measurement, which is allocated in an Autonomous unit. The tools are based on the principle of universality and taking into account the specificity of the probable danger in relation to the evaluated object. As a result, it includes: hazard classification and quantitative indicators of the production structure, which sufficiently make it possible to detect the essence of the probable danger, vertically and horizontally extended basis of comparisons (with single-level and multi-level objects), as well as a criterion scale that identifies the limits (lower and upper) of socio-economic security of the production system. The block "procedure" is aimed at multi-variant implementation of the tasks of level measurements of socio-economic security [6; 7]. In the formation of the method of calculation provides for such probable state of the industrial sector: "current", due to the formed and maintained in the current and short-term qualitative basis;" expected", with a constant in the long term qualitative basis;" uncertain", which appears in all periods and caused by qualitative changes of unknown nature. They are generally manifested in the procedure of implementation of differentiated measures of socio-economic security.

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