IJER © Serials Publications 13(6), 2016: 2525-2540 ISSN: 0972-9380

ECONOMIC STABILITY OF AGRICULTURAL ORGANIZATIONS IN THE REGION: CONCEPTUAL-THEORETIC AND APPLIED ASPECTS

Nadezhda Konstantinovna Vasilieva, Sergei Mikhailovich Reznichenko, Vyacheslav Pavlovich Vasiliev, Aleksander Ivanovich Trubilin, Yuriy IosifovichBershitskiy

Abstract: The paper presents the substantiation of the significance and the role of achieving and improving economic stability of agricultural organizations in ensuring food security of the country and its regions in times of crises, geoeconomic and geopolitical instability. It contains the authors' interpretation of such definition as "economic stability of agricultural organizations", systematization of its varieties, structural-functional components, and classification of factors determining its maintenance. The authors validate the methodological approach to a comprehensive assessment of economic stability of organizations in the agrarian sector. This approach provides for the calculation of integrated and local criterial indices oriented to the market-institutional and sectoral peculiarities of commercial entities. A regional aspect of achieving economic stability is evaluated through agricultural organizations in Krasnodar Krai. The evidentiary basis is proved by the effective use of tools of the cluster and discriminatory analysis, ranking of regional objects of researchbased on the existing conditions, possibilities and limitations. The authors' recommendations on allocation of agricultural producer state support funds in the region provide for the differentiated approach enabling to improve budget resources management. It is summarized that enhancing efficiency of economic stability management of agricultural organizations can become a special catalyst of regional economicdevelopment and maintenance of food security of the country.

Key words: economic stability, agricultural organizations, assessment, reproduction type, management, state support.

1. INTRODUCTION

1.1. Urgency, level of knowledge of the issue

Increased world competition and current political and economic changes, with regard to sanctions against Russia inclusive, require accelerated development of the agriculture

¹ Kuban State Agrarian University Russia, 350044, Krasnodar, Kalinina Street, 13

that is able to provide the country with domestic foodstuffs within the shortest possible time. Enormous importance in solving this problem is taken on by agricultural organizations that remain the key agricultural producers in spite of radical changes in the institutional and economic reproduction basis, development of mixed economy, making a strong contribution to the national and food security of the country.

In an innovative-based market economy climate, Russian agrarians face the problem of prompt and fixed response to the internal and external environment instability, on the one hand, and formation of an appropriate complex economic strategy to ensure stable competitive advantages, on the other hand. The importance of ensuring long-term stable operation of agricultural organizations is stressed in the approved federal targeted program Stable Development of Agrarian Territories in 2014-2017 and till 2020. But, the remaining financial instability in the sectoramid a material and technical basis destruction, turnover of staff and financial instability show low efficiency of traditional measures and tools against negative developments.

In the modern period of geoeconomic and geopolitical instability, economic stability of agricultural organizations is determined, first of all, by solution of sectoral production, financial and social problems organically and objectively conditioned by both underutilization of their internal capabilities due to some reasons, macroeconomic ones inclusive, and subjective economic realia. Issues relating to the factors of economic stability, development of methods and tools ensuring high adaptability of agricultural organizations to the changing environment gain great significance. The differentiated approach to solution of specific social and economic matters depending on capabilities of each region and sectoral peculiarities of organizations is of prime importance. The arguments presented raise the importance of the scientific analysis and realization of the potential by agrarian organizations at achieving economic stability in the Russian context.

Many research teams and famous domestic and foreign scientists dedicated their works to solving the problem of achieving and increasing economic stability. Thus, creative understanding and development of the reproduction approach to study the cycles, wave dynamics and economic relations in works by J. Schumpeter, 1982 [34], N.Kondratiev, 1989 [13], W. Leontief, 1997 [17], M. Porter, 2000 [27], J. Keynes, 2002 [11], V. Deynega, 2004 [8], I. Petrov, 2005 [24], and others had a great influence on the formation of focuses of the system stability theory. The development of the system approach methodology by such economists as J. Kornai, 2002 [14], A. Prigozhin, 2003 [28], A. Polidi, 2005 [25], M. Shchepakin, 2005 [36], and others enabled, on the basis of the substantiation of the system-wide and specific rules for achieving stability of complex formations, to extend their search limits. Works by such economists as M. Mescon, 1994 [18], R. Nelson, 2002 [20], R. Popov, 2003 [26], E. Broilo, 2007 [4], O. Vikhanskiy, 2008 [7], and others contributed greatly to the strategic and crisis management of economic stability.

V. Obukhov, 1949 [22], N. Chetverikov, 1961 [32], V. Yastremskiy, 1961 [38], formed the basis for the conceptual ideas of agrarian sector stable development, which were

worked out by M.M. Yuzbashev, 1980 [37], I.B. Zagaitov and P.D.Polovinkin, 1984 [9], V.N. Afanasiev, 1996 [2], O.V. Inshakov, 2003 [10], and others. Their works are devoted to the adjustment of the stability measurement methods, assessment of synchrony and asynchrony of fluctuations of characteristics studied. Scientific studies by G.V. Bespakhotny, 2000 [3], A.V. Petrikov, 2001 [23], N.K. Vasilieva, 2008 [6], I.N. Buzdalov, 2006 [5], A.A. Shutkov, 2010 [35], I.G. Ushachev, 2011 [29], V.I. Nechaev, 2012 [21], S.M. Reznichenko, 2012 [30], and other domestic economists are devoted to the comprehension of effects of market modernization of the Russian agrarian sector on its development stability.

Nevertheless, in spite of plenty of scientific papers devoted to the problems of economic stability in the agrarian sector, problems of its comprehensive assessment and management are still underworked due to complexity and diversity of solutions.

1.2. Interpretations of organization "economic stability"

Nowadays, such concise and complex term as "economic stability" has no adequate and validated definition in the domestic literature. The analysis and systematization of different views of modern authors enable to distinguish several scientific approaches to interpretation of the definition under survey. Thus, some authors think that economic stability means capability of organization to ensure economic security, that is, to stand up to bankruptcy threats[12]. Others interpret economic stability through the stable extended reproduction and the long-term profit growth [31]. And still others say that each organization has the initial level of economic stability and determines its financial and economic balance independently [1].And there are some scientistswho think that results of economic stability mean society satisfaction (business entities) without prejudice to future generations [33].

The authors of this article think that "economic stability" of agricultural organizations cannot be interpreted only through a system capability to return to the balance ensuring safety and proximity to the set (reference) state after internal or external disturbing effects, and the stability target does not end here. It is also important to save the main structural bonds, that is, the stability of organizational structure, as well as to keep to the planned vector (trajectory) of development, in spite of the internal and external disturbances and the environmental changes. We think that such capability can be realized within the context of the system-reproduction approach enabling to interpret the studied category as a complex systemic characteristic and a special management object. So, economic stability of agricultural organizations should be understood to mean their capacities to adapt to disturbing effects of both general and specific factors of agrarian production, ensuring with improvement of structural elements of the system its balance and dynamic integrity, formation of stable competitive advantages to satisfy needs of present and future generations.

The study of economic stability from the perspective of the system approach enabled to structure identification characteristics of the definition under survey, including stability mode (visible, spurious, group, absolute, adaptive, external, internal); stability type (stability of the state, structure and movement); deviation from the trajectory of development (with low, average and high amplitude), and to broaden the idea on its variety. Thus, we think that it is important to emphasize the following types of economic stability of agrarian organizations in order to develop an effective mechanism of its management:

- based on the strategic components that unite organizational-economic, innovation-investment, financial and social structural-functional subsystems. The first subsystem characterizes capability of the organization to ensure a balance between "production efficiency, interaction efficiency and competitiveness". The second subsystem shows a balance between "risk and stable competitive advantages". The financial subsystem aims at a balance between "profitability-risk-solvency". The social subsystem characterizes the capability of the organization to resolve contradictions and to ensure a balance between "productivity of labour and social responsibility";
- based on the reproduction type from simple, restricted to expanded reproduction, and transitional types – generating and reducing. Maintenance of qualitative and quantitative parameters almost as they are is peculiar to the simple reproduction.Unbalanced parameters and cycle degradation are peculiar to the restricted reproduction. The expanded reproduction is characterized by development of qualitative and quantitative cycle parameters.Transitional types – generating and reducing – mean transition from simple to expanded, in the former case, and from simple to restricted, in the latter case, reproduction.

The study of the economic stability of agrarian organizations through the reproduction approach enabled to define its full reproduction cycle, including such stages as production, distribution, exchange and consumption. In the frames of each of them, both qualitative and quantitative changes of adaptive capacities of the control object take place based on successive completion and transition from one reproduction stage to another. Thus, the "production" stage defines formation of adaptive impulses and catalysts providing economic stability to overcome and neutralize dangers, threats and risks arising under unfavorable and destructive factors of the internal and external environment. The "distribution" stage is characterized by the development of adaptive capacities and relevant tools of the organization to overcome arising threats.The "exchange" stage means consolidation of impulses and catalysts of organization development, adaptation to the internal and external factors. The last stage of possible "consumption" of threats and risks includes application of relevant management tools and methods to reorganize adaptive capacities of the organization. It results in the formation of a complete structure of the cyclical reproduction process of economic stability ensuring a dynamic balance between the structural-functional subsystems through formation, distribution, fixation and reorganization of adaptive capacities of the organization on the managerial, monetary and regulatory bases.

1.3. Economic stability management of agrarian organizations

In the current context, the solution of the problem of achieving and improving economic stability of agrarian organizations becomes tough due to different internal and external factors. The key deterrents are as follows: imperfection of the price, financial, tax, credit systems and the legal basis, the weakening ruble mainly due to reduction in prices for the exported hydrocarbons, high risks due to WTO accession, difficult internal macroeconomic conditions that are worsened by the world political tension and the world food crisis, faults in production and management arrangement, turnover of staff, low labor motivation, etc. The factors promoting economic stability of agricultural organizations are as follows: insurance, credit, grant and agronomic regulation, activation of innovations, modernization and reconstruction of production, rise of business responsibility, high level of human resources, etc.

Formation of an effective management system of agriculturaleconomy, development of methods and tools improving adaptive capacities of agrarians to the changing environment based on a balanced adjustment of the market mechanism of economic management and government regulation are the requirements to ensure economic stability of agricultural organizations under the influence of these factors.

By economic stability management of the organization the authors of this article mean the totality of systematic, multicomponent and continuous process of a managerial cycle and forms of its organization, providing the internal and external balance of the structural-functional subsystems due to complex application and active development of existing adaptive capacities of the system. At that, the managerial cycle means continuous, successive provision of management functions: planning, arrangement, records, analysis, control, promotion and regulation ensuring the needed reproduction type of economic stability. It is possible through the realization of interdependent stages: condition monitoring; goal-setting and arrangement of activities, their planning and organization, regulation and motivation (stimulation); control, analysis and adjustment of the management system.

The study of the models of operational, tactical and strategic management of agricultural organization economic stability enabled to conclude that use of the strategic model solves the problem of ensuring the expanded reproduction based on formation of a surplus set of risk, threats and deterrents adaptation tools. At that, specificity of these tools depends on the management process technology or the stage. Based on scientific papers of domestic (O. Vikhanskiy, 2008; O. Korobeynikov *et al.*, 2002; Y. Lapygin, 2010) and foreign (M. Mescon *et al.*, 2002; G. Minzberg *et al.*, 2001) scientists [7, 16, 18-19] the authors identified the main stages of the strategic management process, among which the highest value was placed on the analytical and target stages, development and choice of the strategy, its preparation to implementation and realization, monitoring and control. Their realization ensures a balance of the reproduction cycle in real time according to the chosen strategy of agricultural organization development.

2. Methods of a comprehensive assessment of organization economic stability

2530

Objective assessment of the current situation is an important part of the management methodology of agricultural organization economic stability. A totally new socialeconomic situation in the Russian agricultural complex, characterized by, first, strengthening of globalization processes –WTO membership of the Russian Federation, formation of EAEU, BRICS, SCO strategic tasks; second, national food security, realization of the import substitution strategy that is strongly associated with international sanctions and retaliation of our country: food import embargo, stipulates a necessity in assessing economic stability of agrarian organizations in the format of developing a new updated agro-industrial policy.

The authors attempted to develop the methodological approach to a comprehensive assessment of the definition under survey, which, in contrast to the others, is multifaceted, takes due account of industry and market-institutional peculiarities of business entities at defining the system of specific indicators of structural-functional components (organizational-economic, innovation-investment, financial and social) and the integrated index, and provides for successive implementation of the following stages:

- formation of a balanced scorecard in terms of the structural-functional financial, organizational-economic, innovation-investment and social components;
- application of the cluster analysis tools to validate clusters in view of stability components based on laws typical of them;
- application of the discriminant analysis to construct discriminant functions, being linear combinations of selected values, in view of structural-functional components;
- construction of additive models in order to determine the parameters of the local and integrated index using the formulas (1-2), and reproduction area limits:

$$Z_i = \sum_{i=1}^n a_i \cdot x_i \tag{1}$$

$$Z_{es} = \sum_{i=1}^{4} Z_i = Z_{oec} + Z_{iic} + Z_{fc} + Z_{sc}$$
(2)

where Z_i - local index of the structural-functional component (organizational-economic (Z_{oec}), innovation-investment (Z_{iic}), financial (Z_{fc}), social (Z_{sc})); a_i - weighing coefficient of specific indicator; x_i - specific indicator of a structural-functional component; Z_{es} – general integrated economic stability index.

In order to determine the general variation range and limits of the economic stability reproduction area it is expected to follow the min-max principle between unsatisfactory,

industry average, standard and the best results of financial and economic activities of agricultural organizations. Thus, the expanded reproduction area shows the limits of recommended and the best results of business entities having a significant economic stability factor. The generating reproduction area determines the transition zone between the simple and expanded reproduction and unites organizations with good economic stability. The reducing reproduction area is the zone between the simple and restricted reproduction, which unites economically unstable agricultural organizations. At that, the simple reproduction area considers industry average results of financial and economic activity of agrarians and unites economically unstable organizations, and the restricted reproduction area unites economically unsound organizations.

The next stage provides for the assessment of economic stability management efficiency based on the analysis of adaptation of agricultural organizations to the changing environment. The adaptation coefficient (C_a), which characterizes stability of growth or reduction of the general integrated index, is to be calculated by the formula (3):

$$C_a = 1 - \frac{6\sum d^2}{n^3 - n}$$
(3)

whered–difference betweenranks of levels of studied series and ranks of number of years in series n – the number of pairs of observations.

Adaptation coefficient limits are -1 to +1. The closer parameters to +1, the higher level of adaptation and, thus, management efficiency, and vice versa. At negative parameters the adaptation level and the management efficiency reduce.

The efficiency of the implemented methods of agrarian economic stability and risk management will be reflected in a higher level of the studied definition, improvement of results of financial and economic activities in whole. The authors think that on this stage of research it is important to assess, on the one hand, interrelation between economic stability of agrarian organizations and the achieved level of their adaptation to the changing environment, and, on the other hand, contribution of separate structural-functional components to the general results and degree of their balance.

A map of ranking objects of research is to be constructed to solve the first problem. It is based on grouping of organizations by the level of risk (permissible, increased, high and critical) and adaptive management (threshold, average, low and deficit). Analysis of the ranking map will enable to determine the problems with regard to both separate components and organization as a whole, and, based on it, to substantiate management tools improvement and to recommend directions of development.

It is proposed to solve the second problem, as well as possible effect of implemented methods and management tools by the following formalized diagnostics models (formulas 4-7):

Nadezhda Konstantinovna Vasilieva, Sergei Mikhailovich Reznichenko...

$$E = Z \sum_{i}^{4} C_{gi} \cdot Z_{i} \text{ or }$$
(4)

$$E = C_{g(oec)} \cdot Z_{oec} + C_{g(iic)} \cdot Z_{iic} + C_{g(fc)} + C_{g(sc)} \cdot Z_{sc}$$
(5)

$$\Delta E = E_1 - E_0 \tag{6}$$

%
$$E = \frac{E_1}{E_0} \cdot 100$$
 (7)

where E – index that characterizes efficiency of organization economic stability and risk management; i – number of chosen components; C_{gi} –growth coefficient showing level of adaptation of decisions taken to the changing environment in the i-th component; Z_i –local index in view of the i-th structural-functional component; 0–base period; 1–reporting period.

The obtained results are interpreted, recommendations are drawn up and managerial decisions are taken on the last stage of a comprehensive assessment and agrarian economic stability management.

Thus, the application of the unified methodological approach to assessment of agricultural organization economic stability ensures comparability of calculations, higher reliability of obtained results on the management and efficiency level under existing conditions, possibilities and restrictions.

3. Results of the research

The offered methodological approach to a comprehensive assessment and the economic stability management of agrarian organizations, based on the multicriteria modeling of the studied definition, was evaluated as in the case of Krasnodar Krai. Its application enabled to get mathematical models of economic stability local components (formulas 8-11) based on the formed scorecard, the cluster, discriminant and additive analysis.

$$Z_{oec} = 0.261x_1 + 0.249x_2 + 0.015x_3 \tag{8}$$

$$Z_{iic} = 0.031x_4 + 0.019x_5 + 0.039x_6 + 4.375x_7 \tag{9}$$

$$Z_{fc} = 1.932x_8 + 0.601x_9 + 57.729x_{10} \tag{10}$$

$$Z_{sc} = 3.105x_{11} + 8.972x_{12} \tag{11}$$

where x_1 , x_2 , x_3 - level of profitability:fixed assets, human resources, sales, %; x_4 , x_5 , x_6 , x_7 - power-to-weight ratio, h.p./person; capital/labor ratio, thousandrubles/person; return on assets ratio, rubles;materials-returns ratio, rubles; x_8 , x_9 , x_{10} - ratios: current liquidity, working capital to current assets, financial stability; x_{11} , x_{12} , – ratios: staff labor motivation, efficiency of utilization of labor resources.

Economic Stability of Agricultural Organizations in the Region...

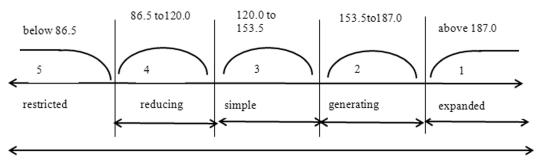


Figure 1: Threshold values of the economic stability reproduction area with regard to agricultural organizations of Krasnodar Krai

Based on the models of the structural-functional components, the authors calculated the general integrated index of economic stability by the formula 2, as well as determined threshold values of its level in five areas showing transition from one reproduction stage to another (Figure 1).

Testing of 70 large and average agricultural organizations in the central part of Krasnodar Krai with regard to interrelation of their economic stability with the existing mechanism of adaptive management resulted in a ranking map (Table 1). Its analysis enabled to validate vectors of improving management tools and to recommend strategic directions for organizations.

Thus, the approbation of the developed methodological tools for a comprehensive assessment of economic stability, which stages are shown on Figure 2, resulted in the conclusion that it can be used as the major element of formation of an effective management system.

4. Discussion of the research results

The study of the management mechanism used in the agrarian organizations of Krasnodar Krai resulted in the conclusion that one of their deterrents is a low level of applying methods and controls of the strategic management, lack of tools of the

| Adaptive management and risk ranking of agrarian organizations in Krasnodar Krai, 2005-2014 | | | | | | | | | |
|---|--|-------------|----------|------------|-------|--|--|--|--|
| Groups of organizations | Groups of organizations based on the risk level, % | | | | | | | | |
| based on the adaptive | 0 to 25 | 25 to 50 | 50 to 75 | 75 to 100 | Total | | | | |
| management level | (permissible) | (increased) | (high) | (critical) | | | | | |
| $(C_a), \%$ | | | - | | | | | | |
| to 25 (deficit) | 58.3 | 25.0 | 8.3 | 8.4 | 17.1 | | | | |
| 25 to 50 (low) | 40.0 | 33.3 | 6.7 | 20.0 | 21.4 | | | | |
| 50 to 75 (average) | 28.0 | 68.0 | 4.0 | 0.0 | 35.7 | | | | |
| 75 to 100 (threshold) | 11.1 | 61.1 | 22.2 | 5.6 | 25.8 | | | | |
| Total | 31.4 | 51.4 | 10.0 | 7.2 | 100 | | | | |

Table 1

| 1 st stage | To collect and to process information, to form a balanced score card, to determine the economic stability level | | | | | | | |
|---------------|---|---------------|-------------------------|-------------------------|------------|--|--|--|
| | | | ţ | | | | | |
| 2nd stage | Todeterminethe area of economicstability | | | | | | | |
| | 1 | 2 | 2 | 2 | 5 | | | |
| | 187 and above | 153.5 to 187 | 120 to 153.5 | 86.5 to 120 | below 86.5 | | | |
| | ţ. | ţ. | ţ. | Ť. | Ļ | | | |
| 3d stage | Todetermine the type of economics tability reproduction | | | | | | | |
| | Expanded | Generating | Simple | Reducing | Restricted | | | |
| | t I | Ļ | Ļ | ţ. | ļ. | | | |
| 4th stage | To determine the type of economic development | | | | | | | |
| | Innovation- oriented | Intensive | Intensive- extensive | Extensive- intensive | Extensive | | | |
| | Ļ | Ļ | Ļ | | 1 | | | |
| 5th | Todeterminethetype of organization economicstability | | | | | | | |
| stage | Absolute | Normal | Average | Unstable | Crisis | | | |
| | + | • | † | . | ļ. | | | |
| 6th stage | Todeterminethestage of organizationlifecycle | | | | | | | |
| | Growth | Maturity | Stagnation | Young | Aging | | | |
| | Ļ | Ļ | Ļ | • • • | Ť. | | | |
| 7th stage | Todetermine the risk of organization economic stability | | | | | | | |
| | Low | Permissible | Increased | High | Critical | | | |
| | Ļ | Ļ | ţ. | t | ļ. | | | |
| 8th stage | Todeterminemanagementadaptivecapacities | | | | | | | |
| | Proactive | Increasing | Inertial | Decreasing | Threshold | | | |
| | ţ | ţ | t | ţ | ţ | | | |
| 9th stage | To assese conomic status and development of the organization | | | | | | | |
| | Good | Above average | Average | Below average | Bad | | | |

Figure 2: Sequence of assessing economic development of the organization related to the management efficiency

organization-coordinating and information-analytic modules. In order to solve this problem and to transit to the expanded reproduction area, as well as to achieve its target indicators the authors think that it is necessary to implement the below mentioned measures.

Agricultural organizations within the permissible and adjacent to it risk zone, where the adaptive management reached its threshold level, are recommended to strengthen organization-coordinating and information-analytic management tools. For this purpose, in early stages it is needed to coordinate and stimulate preparations for planting, harvesting and postharvest operations, development of soil fertility innovations, increase in crop yield, formation of full fodder base and livestock productivity growth.Technical and technological modernization of production (implementation of high technologies, resource- and energy-saving equipment, etc.), improvement of organization-managerial conditions (updating of the system of sales, introduction of advanced forms of labor organization and payment, educational seminars, establishment of the information-consulting system, etc.), as well as improvement of social and economic conditions (labor hygiene and safety, new insurance, crediting, financing methods, etc.) play a big role in this process. It will give an opportunity to increase efficiency of production potential, quality and volumes of production, competitiveness of products and, on this basis, to reach a balance of structural-functional components and economic stability of agricultural organizations.

Agrarians with the average level of the adaptive management related to the simple reproduction within the increased risk area are also recommended to transit to the strategic management and improvement of organization-coordinating and information-analytic tools mentioned above. At that, special attention is given to a balance between parameters of the production, investment, financial and social-labor budget.

Agricultural organizations with the high risk level and low management adaptive capacities need the strategic management with the anti-crisis component. At that, the development of organization-coordinating, information-analytic and planned operating management tools ensures a balance of interests between structural-functional subsystems, long-term higher efficiency of the economic stability management.

The efficiency of economic stability management methods and tools in the agrarian sector can be enhanced by the formation of a specific organizational group (unit) in the general management system. For its functioning, it is offered to establish the organizational structure implementing both strategic and operating functions for the coordination of the management process. Agreeing to the objectives between the target-setting subjects and determination of the complex-economic strategies of development ensure economic stability of agrarian organizations in the unstable market environment.

It is impossible to realize measures aimed at agrarian economic stability effectively without a flexible agribusiness government regulation system. The results of the analysis showed a direct strong interrelation between return to budget funds and the economic stability reproduction level. Thus, return to budget resources increases in parallel with transition from the restricted to the expanded reproduction area.

The determined dependencies underline an exceptional importance of the differentiated budget allocation mechanism between individual agricultural producers. The authors of this article offer a general mathematic model for allocation of the agroeconomy government support funds between individual agricultural producers (formula 12):

$$S_i = S \cdot \sum_j k_j \cdot x_{ij} \tag{12}$$

where S_i – quota to the i-th agricultural organization from the total budget funds with regard to a certain type of the government support, rubles; S – total budget funds provided for the agricultural economy support, rubles; kj – specific j-th factor significance coefficients, X_{ij} – ratio of the i-th agricultural organization in the regional volume of the j-th factor.

The research resulted in a quantitative interpretation of this model, according to which the following factors are to be taken into account at allocation of the budget funds:ratio of the organization in gross production (x_1) , labor forces (x_2) and differential cost including improvement of livestock and crops genetic potential, soil fertility recovery, diversification and technical and technological modernization of production activity (x_3) in the industry regional figures (formula 13).

$$S_i = S \cdot (0.327x_1 + 0.034x_2 + 0.639x_3)$$

$$R = 0.971; D = 0.943$$
(13)

The offered budget allocation mechanism enables to increase the efficiency of the direct government support of individual agricultural producers based on its targeting,

Grouping of agricultural Average state support ratio, % organizations by economic Organization stability Z_{∞} (the reproduction type) ratio, % actual estimate below 86.5 (restricted) 13.4 12.4 7.9 86.5 to 120.0 (reducing) 33.3 14.012.6 120.0 to 153.5 (simple) 24.6 52.3 48.7 153.5 to 187.0 (generating) 12.5 4.2 12.4 above 187.0 (expanded) 17.2 16.2 18.3 Total 100 100 100

Table 2 Sampling observation of the budget allocation changes based ongrouping agricultural organizations in Krasnodar Krai by economic stability, 2014.

*Calculated as per the offered model (13)

to create conditions improving efficiency and competitiveness of the agrarian production (Table 2).

The practical application of economic stability management measures, aimed at increasing efficiency of decisions taken, will ensure its higher level, positive impact on the financial-economic condition of agricultural organizations, and, thereby, food and national security of the country.

5. CONCLUSION

- 1. A principally new socio-economic situation in the Russian agribusiness determines the importance and expediency of validating priorities and making practical recommendations to achieve and to improve economic stability of agricultural organizations based on updating the existing management system.
- 2. The formation of the effective economic stability management system for agricultural organizations increases the palette of regional factors, orients towards more effective application of the resource, production, scientific and technical potential of agrarians, thereby boosting the development of the agrifood complex, increase of investment opportunities, etc. As a result, it will give an impulse to solution of import substitution and food security problems.
- 3. The agricultural economic stability management mechanism is to be realized in the frames of the regional agrifood policy aimed at solution of specific regional agribusiness development targets.

Along with that, it is the state that plays the role of the chief financial booster and defender of the socio-economic changes in the agrarian sector, including economic stability of agricultural organizations.State support in the form of grants sufficient to eliminate the adverse effects of unequal inter-industry exchange, promoting fair remuneration of labor and establishment of an acceptable system for crediting technical and technological modernization of the agrarian sector, will encourage achievement and improvement of economic stability.

 The economic stability of agricultural organizations in Krasnodar Krai will enable it both to solve intraregional problems and to be actively involved in large-scale federal projects, including solution of key strategic tasks in the modern agrarian policy – food security and import substitution.

References

- Abryutina, M.S.,& Grachev, A.V. (1998). *Analizfinansovo-ekonomicheskoydeyatel'nostipred priyatiya: uchebno-prakticheskoeposobie* [Analysis of Company Financial and Economic Activities: Workbook]. Moscow: Delo i servis.
- Afanasiev, V.N. (1996). Statisticheskoeobespechenieproblemyustoychivostisel'skokhozyaystvenno goproizvodstva [Statistical Assurance of Agricultural Production Stability].Moscow: Finansyi Statistika.

- Bespakhotny, G.V., &Gordeev, A.V.(2000). Bezopasnost' Rossii. Pravovye, sotsial'noekonomicheskie i nauchno-tekhnicheskieaspekty. Razd. 1. Prodovol'stvennayabezopasnost' [Security of Russia. Legal, Socio-Economic and Scientific-Technical Aspects. Part 1: Food Security]. Moscow: MGF Znanie.
- Broilo, E.V.(2007).Postroenieeffektivnykhparametrovreorganizatsiikrizisnogopredpriyatiya [Effective Parameters for Reorganization of a Crisis Company]. *Menedzhment v Rossii i* zarubezhom,2, 96-111.
- Buzdalov, I.N. (2006). Problemyobespecheniyaustoychivogorazvitiyaagroprodovol' stvennoysistemy [Problems of Ensuring Agrifood System Stable Development]. Obshchestvo i ekonomika,6, 139-151.
- Vasilieva, N.K., &Vasiliev, V.P.(2016). Ekonomicheskayaustoychivost' sel'skokhozyaystvenny khorganizatsiy: monografiya [Economic Stability of Agricultural Organizations: Monograph]. Moscow: NauchnayaBiblioteka.
- Vikhanskiy, O.S.(2008). *Strategicheskoeupravlenie: uchebnik* [StrategicManagement: Textbook] (2nd ed., revised and enlarged). Moscow: Ekonomist.
- Deynega, V.P. (2004). Vosproizvodstvosobstvennosti v sistemekorporativnykhotnosheniy [Reproduction of Property within a Corporate Relations System]. Rostov-on-Don: Izd-vo SKNTs VSh.
- Zagaitov, I.B., & Polovinkin, P.D. (1984). Ekonomicheskieproblemypovysheniyaustoychivostisel' skokhozyaystvennogoproizvodstva [Economic Problems of Improving Stability of Agricultural Production]. Moscow: Ekonomika.
- Inshakov, O.V. (2003). Strukturnoeutochneniesoderzhaniyaekonomicheskoyteorii: potents ialmnogourovnevogopodkhoda [Structural Adjustment of the Economic Theory Content: Potential of the Multilevel Approach].*Rossiyskiyekonomicheskiyzhurnal*,3, 48-52.
- Keynes, J.M.(2002).*Obshchayateoriyazanyatosti, protsenta i deneg* [The General Theory of Employment, Interest and Money]. Moscow:Gelios ARV.
- Kovalev, D., &Sukhorukova, T.(2001). Ekonomicheskayabezopasnost' predpriyatiya [Economic Security of an Enterprise]. *Ekonomikapredpriyatiya*, 4.
- Kondratiev, N.D. (1989). Problemyekonomicheskoydinamiki [Problems of Economic Dynamics]. Moscow.
- Kornai, J.(2002). Sistemnayaparadigma [System Paradigm]. VoprosyEkonomiki, 4, 4-23.
- Korobeynikov, O.P., Kolesov, V.Yu., &Trifilova, A.A. (2002). Strategicheskoepovedenieotra zrabotki do realizatsii [Strategic Behavior from Development to Realization]. *Menedzhment v Rossii i zarubezhom*, 3, 88-99.
- Lapygin, Yu.N., &Lapygin, D.Yu. (2010). Strategicheskiymenedzhment: uchebnoeposobie[Strategic Management: Workbook]. Moscow: Eksmo.
- Leontief, W.(1997). *Mezhotraslevayaekonomika* [Input-Output Economics] (Trans. from English). Moscow: Ekonomika.
- Mescon, M., Albert, M., & Khedouri, F. (1992). Osnovymenedzhmenta [Management] (Trans. from English). Moscow: Delo.
- Minzberg, H., Quinn, J.B., & Ghoshal, S. (2001). Strategicheskiyprotsess [The Strategy Process]. Saint Petersburg:Piter.
- Nelson, R., & Winter, S. (2003). *Evolyutsionnayateoriyaekonomicheskikhizmeneniy* [An Evolutionary Theory of Economic Change]. Moscow: Delo.

- Nechaev, V.I.(2012). *Ekonomikapred priyatiy* APK: uchebnoeposobie [Agribusiness Economics: Workbook]. Saint Petersburg: Lan'.
- Obukhov, V.M. (1949). Ocherkdinamikiurozhaevza period 1883-1915gg. [Harvest Dynamics 1883-1915]. In Urozhaynost' i meteorologicheskiefaktory[Harvest and Meteorological Factors]. Moscow:Gosplanizdat.
- Petrikov, A. (2001). Ustoychivoerazvitiesel'skoymestnosti v Rossii i napravleniyanauchny khissledovaniy [Stable Development of Rural Area in Russia and Research Vectors]. *APK: ekonomika, upravlenie,12,* 12-16.
- Petrov, I.V. (2005). *Demonopolizatsiyarynkov v protsesseekonomicheskoybezopasnostimakroregiona: vosproizvodstvennyypodkhod: monografiya* [Market Demonopolizationin the Process of Macroregion Economic Security: Reproduction Approach: Monograph].Moscow: UNITY-DANA.
- Polidi, A.A.(2005). *Diversifikatsiyaproizvodstvakak forma agropromyshlennoyintegratsii* [Diversification of Production as a Form of Agro-Industrial Integration]. Moscow: Sputnik +.
- Popov, R.A.(2003). *Antikrizisnoeupravlenie: uchebnik*[Crisis Management: Textbook]. Moscow: VysshayaShkola.
- Porter, M.E. (2000). *Konkurentsiya: uchebnoeposobie*[On Competition: Workbook] (Trans. from English). Moscow: Vilyams.
- Prigozhin, A.I. (2003). *Metodyrazvitiyaorganizatsii* [Organization Development Methods]. Moscow: MTsFER.
- Ushachev, I.G., &Sandu, I.S. (Eds.).(2011). Razvitieinnovatsionnykhprotsessov v APK: voprosystimulirovaniya [Development of Innovation Processes in the Agribusiness: Incentives].Moscow: FGU RCSK.
- Reznichenko, S.M.(2012). *Problemyustoychivogorazvitiyaagrarnogosektoraekonomiki: monografiya* [Problems of Stable Development of the Agrarian Sector of Economy: Monograph]. Krasnodar: Prosveschenie-Yug.
- Shishkin, A.F. (Ed.).(1990). Ustoychivost' proizvodstva i adaptivnyesistemyvedeniyasel' skogokhozyaystva [Stable Production and Adaptive Farming Systems]. Voronezh: Voronezh Agricultural Institute Publishers.
- Chetverikov, N.S.(1963). *Statisticheskie i stokhasticheskieissledovaniya* [Statistical and Stochastic Investigations] (pp. 57-104). Moscow: Gosstatizdat.
- Shevtsov, V.V. (2004). Povysheniemikroekonomicheskoyustoychivostisel'skokhozyayst vennykhpredpriyatiynaosnovestrategicheskogopredprinimatel'stva [Increase of Microeconomic Stability of Agricultural Businesses Based on the Strategic Entrepreneurship]. SelskieZori, 1.
- Schumpeter, J.A.(1982). *Teoriyaekonomicheskogorazvitiya* [The Theory of Economic Development] (Trans. from German). Moscow: Progress.
- Shutkov, A.A. (2010). Sovershenstvovať sistemuupravleniya APK [To Improve Agribusiness Management]. *Ekonomikasel'skogokhozyaystvaRossii*, 1, 41-46.
- Shchepakin, M.B., Mishulin, G.M., &Kozhuba, E.A. (2005). Sistemoobrazuyushchiy faktorustoychivogorazvitiya [Strategic Factors of Stable Development]. Moscow: AkademiyaPromyshlennoyEkologii.

- Yuzbashev, M.M., & Popova, O.V.(1980). Statisticheskieizmereniekoleblemosti i ustoychivostiurozhaevsel'skokhozyaystvennykhkul'tur[Statistical Measurements of Crop Productivity Fluctuations and Stability]. *Vestnikstatistiki,9,21-27*.
- Yastremskiy, B.S. (1961). *Nekotoryevoprosymatematicheskoystatistiki* [Some Questions of Mathematical Statistics]. Moscow: Gosstatizdat.