

## REVIEW

**By Prof. Silvia Trifonova Trifonova-Pramatarova, PhD, University of National and World Economy (UNWE), Sofia** of a dissertation for awarding the scientific degree “Doctor of Sciences” in the area of higher education 3. Social, economic and legal sciences, professional field 3.8. Economics, Higher School of Insurance and Finance (VUZF), Sofia

**Автор: Katsiaryna Volkava, PhD**

**Тема: „Theory and methodology for the development of the overall financial and economic potential of organizations in the agro-food sector in the conditions of digitalization“**

### **1. General description of the submitted materials**

By Order № 268/27.06.2023 of the Rector of the Higher School of Insurance and Finance (VUZF), Prof. Boris Velchev, PhD of Law, I have been appointed as a member of the scientific jury to ensure the procedure for the defence of a dissertation on “Theory and methodology for the development of the overall financial and economic potential of organizations in the agro-food sector in the conditions of digitalization” for the acquisition of a scientific degree “Doctor of Sciences” in area of higher education 3. Social, economic and legal sciences, professional field 3.8. Economics. The author of the dissertation is Katsiaryna Volkava, PhD – a candidate for the “Finance” Department of the VUZF University.

The materials submitted by the VUZF University include all necessary documents for the procedure, namely: CV in English, dissertation in Russian, abstract in Russian, abstract in Bulgarian, list of publications and annotations, the scientific publications themselves on the topic of the dissertation, declaration for fulfilment of the national minimum requirements for obtaining of a scientific degree “Doctor of Sciences” in professional field 3.8. Economics, scientific jury order, reference of contributions in Russian, declaration of authenticity and originality.

According to the list of publications, the candidate has attached a total of 17 publications on the topic of the dissertation, including 2 collective monographs and 2 individual monographs. Other publications are articles and papers in scientific journals, refereed and indexed in world-renowned databases of scientific information, and in non-refereed peer-reviewed journals or published in edited collective volumes.

### **2. Brief biographical data about the candidate**

Katsiaryna Volkava is a PhD of Economics. She obtained the educational and scientific degree “doctor” at Mogilev State University of Food Technologies, Mogilev, Belarus, in 2015. She completed

her master's degree in economics at the same university in 2011. Since 2011, she has consistently worked at Mogilev State University of Food Technologies, Mogilev, Belarus, as an assistant professor – until 2013, then as a senior assistant professor – in the period 2013-2014, and from 2015 to 2021 – as an associate professor in the Department of “Economics and Organization of Production” at the university.

### **3. Relevance of the topic and appropriateness of the set goals and tasks**

The topic of the problem developed in the dissertation is relevant and interesting from a scientific and scientific-applied point of view. The candidate clarifies the theoretical and methodological foundations for the development of the overall financial and economic potential of organizations in the agro-food sector based on a systematic approach. This is due to the fact that the increase in the economic efficiency of production and the competitiveness of the production of the agro-food sector in the world market presupposes the sustainable functioning of all its units and subsystems. The assessment of the economic potential is a complex characteristic of the results of the production activity, as it is formed under the influence of many internal and external factors, it characterizes the state and the use of various resources of the organizations in the food sector. The problem of the formation, development and evaluation of the general financial and economic potential of organizations in the agro-food sector is relatively poorly studied in the literature.

### **3. Knowing the problem**

Katsiaryna Volkava is well acquainted with the problems of scientific research.

The purpose of her dissertation is to develop theoretical and methodological foundations for the development of the overall financial and economic potential of organizations in the agro-food sector based on a systematic approach with its inherent goals, tasks, subject, object, principles, criteria, methods, models and aimed at increasing the efficiency and sustainability of production in the context of digitalization.

To achieve this goal, a number of 15 research tasks have been formulated:

1. Development of theoretical foundations for the development of the total financial and economic potential of the organizations;
2. Study of the genesis of the category “potential” in the economy;
3. Revealing the essence and content of the concept of “total financial and economic potential of the organizations” as an integral characteristic of the development of the agro-food sector;
4. Development of theoretical-methodological approaches for determining the economic essence, structural elements and evaluation of the digital transformation of the economy;
5. Study of the connection of digitization with the modern innovative development of the economy;
6. Modeling of the methodology for multi-criteria assessment of the digital development of the total financial and economic potential of the organizations in the agro-food sector;

7. Systematization of the information base for analysis of the economic potential of agricultural enterprises and its stages;

8. Analysis of the current state and development of trends in the development of the potential of agricultural business;

9. Assessment of modern main trends in the development of the processing industry;

10. Determination of the conditions and factors for ensuring the growth of the overall financial and economic potential of the agro-food sector based on an integrated systematic approach;

11. Development and testing of a methodology for assessing the general financial and economic potential of organizations;

12. Development of conceptual approaches for innovative development of the general financial and economic potential of organizations in the agro-food sector;

13. Development of predictive models for sustainable development of the economic potential of the agro-food sector (for example, the world production of meat and meat products);

14. Justification of the global trends for sustainable global production of dairy and plant products and the prospects for growth of the economic potential;

15. Development of recommendations and a mechanism for sustainable innovative development of the general financial-economic potential of the agro-food sector in the conditions of digitalization.

The object of the dissertation is the processes of formation and development of the aggregate financial and economic potential of the organizations in the agro-food sector based on a systematic approach, multi-criteria evaluation and modern management technologies.

The subject of the dissertation is the theory and methodology for the development of the overall financial and economic potential of organizations in the agro-food sector in the conditions of digitalization.

## **5. Research methodology**

The dissertation of Dr. Katsiaryna Volkava has a theoretical and empirical character. The chosen research methodology in the dissertation work is very diverse and includes: method of analysis and synthesis, abstract-logical method, comparative analysis, empirical analysis, statistical analysis, critical analysis, method of economic-mathematical modeling, correlation analysis, statistical analysis, cluster analysis, prognostic method, graphical and tabular analysis, etc. Statistical processing of empirical data was carried out using Microsoft Excel (2010) software.

## **6. Characterization and evaluation of the dissertation**

The dissertation of Dr. Katsiaryna Volkava has a total volume of 440 pages. It is structured in an introduction, five chapters, a conclusion, a bibliography and 2 appendices. 168 figures and 168 tables are

presented. The bibliography includes 475 literary sources (including books, articles, periodical and non-periodical statistical and other publications, papers and online sources).

The first chapter of the dissertation is devoted to the theoretical and methodological foundations for the development of the overall financial and economic potential of the organizations. The genesis of the category “potential” in the economy in theoretical terms and the essence of the aggregate financial and economic potential of the organizations as an integral characteristic of the development of the agro-food sector have been clarified. An analysis of the methodological approaches for evaluating the total financial and economic potential of the organizations was made.

The second chapter of the dissertation is dedicated to the methodological tools for evaluating and developing a business model for digital development of the total financial and economic potential of organizations. Emphasis is placed on the digital economy and digital transformation – their essence, structural elements, classification and evaluation, as well as on digitalization and its connection with the modern innovative development of the economy. On this basis, a multi-criteria model of digital development of the general financial and economic potential of organizations in the agri-food sector was derived.

In the third chapter, a complex economic analysis of the overall financial and economic potential of the agro-food sector in the Republic of Belarus is made. The current state and trends in the development of the potential of agriculture and the processing industry have been studied, and the main conditions and factors for increasing the efficiency of using the financial and economic potential of organizations in the agro-food sector have been identified. On this basis, a methodology was formed for a complex assessment of the overall financial and economic potential of organizations in the agro-food sector.

In the fourth chapter, predictive models for the sustainable growth of the potential of the agro-food sector have been drawn up on the example of the following types of activities – the production of meat and meat products, the production of milk and dairy products, the production of vegetables and fruits, potatoes.

In the fifth chapter, conceptual guidelines for innovative development of the overall financial and economic potential of organizations in the agro-food sector in the conditions of digitalization in the Republic of Belarus are presented. Recommendations for sustainable development of global and national food production, as well as a mechanism for sustainable innovative development of the overall financial and economic potential of organizations in the agro-food sector of the Republic of Belarus, have been formulated. In the conclusion of the dissertation, the main results of the research are presented.

## **7. Contributions and significance of the development for science and practice**

The dissertation of Dr. Katsiaryna Volkava is distinguished by important scientific and scientific-applied contributions, among which I can single out the following:

1. The concept of development of the overall financial and economic potential of the organizations in the agro-food sector in modern conditions is substantiated, and the place and role of the potential and the business model to ensure sustainable innovative development of the organizations is determined.

2. A categorical and conceptual apparatus on the problem of the development of the potential of organizations in the agro-food sector in the context of digitalization has been developed, and the level of its use has been determined, so that it becomes possible to increase the monitoring tools and to increase production efficiency.

3. A set of measures and recommendations has been developed, which are aimed at forming, evaluating and increasing the effectiveness of the use of the total financial and economic potential of the organizations and for sustainable innovative development of the agro-food sector of the Republic of Belarus.

4. A methodological approach has been developed for a comprehensive analysis of the formation and development of the overall financial and economic potential of organizations in the agro-food sector from the position “resources-maximum opportunities-result-evaluation-monitoring-forecast”.

5. The methodological toolkit for assessing the digital development of the overall financial and economic potential of organizations in the agro-food sector has been improved, with attention being directed to improving the efficiency of their activity using information and communication technologies.

6. The methodological toolkit for constructing trend models for identifying trends in the dynamics of the overall financial and economic potential of organizations in the agro-food sector and for forecasting their growth in a strategic perspective has been improved.

## **8. Assessment of dissertation publications**

In the list of publications, the candidate has attached a total of 17 publications related to the topic of her dissertation. Publications are both independent and co-authored. Publications are in the form of 2 collective monographs, 2 independent monographs, and articles and papers in scientific publications, referenced and indexed in world-renowned databases of scientific information, and in non-refereed peer-reviewed journals or published in edited collective volumes. The mentioned publications of the candidate show a sufficient degree of dissemination of the obtained results of her dissertation research in the scientific literature.

## **9. Assessment of compliance with the minimum national requirements**

From the presented Reference for the fulfillment of the minimum national requirements for awarding the scientific degree “Doctor of Sciences” in the professional field 3.8. Economics, that the candidate has applied, can be seen that there is an over-fulfilment of these requirements.

## **10. Personal involvement of the candidate**

I believe that the dissertation is the work of the candidate herself, the result of her research on the relevant scientific issue.

### **11. Abstract**

The content and quality of the abstract correctly reflects the content of the dissertation and the main results achieved as a result of the dissertation research.

### **12. Critical remarks, questions and recommendations**

I have only one remark regarding the presented dissertation of Dr. Katsiaryna Volkava, namely that the research thesis of the work has not been formulated. The purpose of the research and a large number of research tasks are formulated. In my opinion, the mentioned research tasks are too many and it would be good to consolidate them.

I have a remark more on the preparation for the defense of foreign candidates. Nowhere in the entire documentation of the candidate is it clear what the exact translation of the subject of her dissertation is in English. It is best that the candidate himself/herself defines the title of his/her paper in English, rather than all the reviewers translating it in their own way. It was also difficult to find out exactly how the candidate's name translates into English! Let the VUZF administration take action on this matter, as well as on the translations into Bulgarian of the foreign candidates!

I have a question for the candidate: What are the results of the implementation of the cluster approach in the agro-food sector in the Republic of Belarus, are they entirely positive or do they also contain certain risks for organizations in the sector?

### **13. Personal impressions**

I do not know the candidate and I have no personal impressions of her.

### **CONCLUSION**

Katsiaryna Volkava's dissertation is a complete and thorough scientific study, it contains contributions to science and practice and **meets** the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for the Implementation of ZRASRB. Due to the above, I give my *positive assessment* of the research conducted, presented by the above-reviewed dissertation, abstract, achieved results and contributions, and ***I propose to the honorable scientific jury to award the scientific degree „Doctor of Sciences“*** to Katsiaryna Volkava in the area of higher education 3. Social Sciences, Economics and Law, professional field 3.8. Economics, at the Higher School of Insurance and Finance (VUZF), Sofia.

1.09.2023

Sofia

Reviewer:

(Prof. Silvia Trifonova Trifonova-Pramatarova, PhD)