



STATEMENT

Вх. №

220-499/23.03.2026

By Assoc. Prof. Dimitrina Georgieva Stoyancheva, PhD
Trakia University–Stara Zagora, Faculty of Economics,
Professional field 3.8 “Economics”,
Scientific specialty “Finance, Money Circulation, Credit and Insurance”

Regarding: dissertation for the award of the educational and scientific degree “Doctor” in the area of higher education 3. “Social Sciences, Economics and Law,” professional field 3.8 “Economics,” doctoral programme “Agrarian Business,” University of Economics–Varna

Grounds for preparing the present statement: participation as a member of the academic jury pursuant to Order No. RD-06-28/28.01.2026 issued by the Rector of the University of Economics–Varna

Author of the dissertation: Milen Veselinov Vlaev

Title of the dissertation: “Bank Financing of Business Processes in the Agricultural Sector in Bulgaria”

1. General Presentation of the Dissertation

The dissertation comprises a total of 223 pages and follows a classical structural format, including an introduction, three chapters, and a conclusion – 209 pages, a list of references – 15 pages, and appendices – 15 pages. The data and results presented in the exposition are illustrated with 39 figures and 42 tables.

The dissertation addresses a current and important scientific problem related to the inefficient functioning of credit markets in agriculture, emphasising the determinants of access to bank credit and its contribution to the financing of agrarian business processes. Bank credit is a traditional and often primary source of external financing for a considerable share of agricultural producers. Its significance for financing processes in the agricultural sector increases in the context of rising climate risks and the implementation of digital technologies that lead to changes in business models. The dynamically evolving regulatory requirements at the European and national levels intensify the need for adaptation of financial instruments, including bank credit. These and other ongoing processes in the agricultural sector necessitate an in-depth analysis of the instruments, levels, and factors determining bank financing in the sector, which constitutes the subject of the dissertation.

The objective of the dissertation is correctly formulated – based on clarifying the theoretical and methodological foundations of bank financing in the agricultural sector, to analyse the factors



determining the need for financial capital and to identify models and opportunities for improving the financing of agribusiness in Bulgaria. To achieve this objective, the research examines the key characteristics, actors, and specific risks in the agricultural sector, the interrelations among business processes and the influence of economic factors on them, as well as the existing approaches to assessing financial potential and creditworthiness.

2. Publications and Participation in Scientific Forums

The doctoral candidate has produced a total of 8 publications, including 2 single-authored articles in scientific journals and 6 conference papers (4 single-authored and 2 co-authored), published in scientific proceedings. The presented publications ensure, to the necessary extent, the dissemination of the obtained results within the scientific literature and are distinguished by scholarly value. The minimal scientometric requirements in accordance with the Development of Academic Staff in the Republic of Bulgaria Act and its implementing regulations have been satisfied.

3. Evaluation of the Structure and Content of the Dissertation

The dissertation is characterised by a clear logical structure and coherence, consistent with academic standards for scholarly research in the field of bank lending to agrarian businesses.

In the introduction, the author substantiates the relevance and importance of the topic, defines the object, subject, aims, and tasks of the study, and formulates the main thesis and research hypotheses. These elements are clearly delineated and, in terms of content, appropriately introduce the logical structure of the research.

The first chapter is devoted to the theoretical and methodological framework of bank financing of processes in the agricultural sector. Through an analytical review of the scientific literature, the scope and essence of financing processes are defined; a three-level model (micro, meso, macro) of agribusiness financing is presented as a basis for the conceptual research framework; factors for analysing bank lending (determinants) are introduced; classical models (Berger & Udell, information asymmetry) are discussed; and an original model, named CAP-Fin, is proposed.

Based on the outlined conceptual framework, the second chapter examines the role of bank financing in agrarian business processes, including an analysis of specific characteristics (organisational, structural, managerial) and the formation of an investment profile of agricultural businesses. External, internal, and macroeconomic factors influencing their investment decisions are discussed. An analysis of the state and sources of external financing is carried out through expert opinion, supported by statistical data from the BNB, NSI, FADN, and others. The results of an empirical study on the attitudes of agricultural businesses towards the use of bank loans and the testing of the research hypotheses are presented.

Practical guidelines for improving approaches to financing business processes in the agricultural sector through bank credit are developed in the third chapter of the dissertation. Specifically, the author attempts to systematise the determinants (key decision-making factors) of financing; develops an index for the scale of activity and a structural profile; and proposes a model for calculating the investment capacity of businesses. On this basis, an institutional model is formulated for sharing activities related to financing applications and creditworthiness assessment



between commercial banks and the State Fund Agriculture. In view of the specific nature of business processes in the agricultural sector, benchmark models for assessing the creditworthiness of agrarian businesses are developed and proposed for implementation. Throughout the exposition, the doctoral candidate summarises key results and formulates conclusions. A free expression of authorial judgement is observed. The exposition follows a concise and consistent scientific style.

The 199 cited literature sources indicate a high level of familiarity with the issues addressed in the dissertation.

The author's abstract, comprising 51 pages, accurately and sufficiently reflects the essential theoretical propositions and empirical results, as well as the main conclusions and scientific contributions of the dissertation.

In conclusion, the dissertation is presented in a form and volume that meet the specific requirements of Article 56, paragraphs 1 and 2 of the Regulations for the Implementation of the Act on the Development of the Academic Staff at the University of Economics–Varna.

4. Identification and Evaluation of the Scientific and Applied Scientific Contributions

Following the exposition of the research, I propose the following formulation of the scientific and applied scientific contributions:

- A conceptual framework for analysing bank financing in the agricultural sector has been developed, including a three-level model (micro–meso–macro) and the author's CAP-Fin model. The proposed framework allows for a more comprehensive understanding of the interrelations between business processes, risk, and access to capital, reflecting the author's effort to build upon existing models;
- The relationships between the size of agricultural holdings, managerial experience, and CAP direct payments, on the one hand, and the propensity to use bank credit, on the other, have been evaluated and systematised through statistical analysis. The preferences of agricultural producers for specialised banking products for agribusiness compared with standard commercial bank loans have been examined;
- Based on the results of the empirical study, key directions have been formulated for improving access to bank financing. The proposed measures can be applied to improve the creditworthiness of agricultural holdings;
- Key determinants of the demand for different sources of external financing in the agricultural sector have been systematised, including farm size, asset structure, owned land, alternative forms of financing, managerial capacity, and others. A formalisation of the determinants has been proposed through a model of investment capacity and an index reflecting the scale of activity and structural profile of the holding;
- An institutional model has been proposed whereby commercial banks should engage in activities related to preliminary assessment and business planning under investment measures of the RDP. Its successful implementation requires the simultaneous fulfilment of several conditions, such as economic incentives for banks, improved preparation of application documents, and an administrative environment enabling shared activities and assessment between the State Fund Agriculture and the banks. Within this framework,



benchmark models have been developed and proposed with the aim of reducing information asymmetry, accelerating credit assessment, and supporting the optimal structuring of financing in the agricultural sector.

5. Data on Plagiarism

No evidence of plagiarism has been identified in the dissertation, in the related publications, or in the author's abstract. No cases of incorrect data use or improper citation of other scholarly works have been detected.

6. Critical Remarks and Recommendations

I consider the dissertation to be a completed scientific research work, and no substantial critical remarks are warranted.

Regarding the future academic development of the doctoral candidate, I would like to note several aspects that could be further elaborated, which do not diminish the merits of the dissertation in its present form. Some conclusions in the text are based primarily on expert opinion. Although these are logically substantiated, certain points could be further supported by the author's empirical research or a broader discussion of contributions in the economic literature. Examples include the criteria used to determine the effectiveness and sustainability of a business model (Table 4, p. 73), as well as the classification of external and internal factors influencing the financial decision-making of farms and the strength of their impact on access to financing (pp. 95–97).

I believe the scientific contribution of the research would be strengthened by applying a more balanced approach when interpreting the results—one that includes both sides of the credit market: credit demand and credit supply. In this regard, Table 29 (p. 141) should be viewed as a comparative analysis of the organisational, investment, and financial characteristics of agricultural holdings interpreted from the perspective of the credit supply side, rather than the author's definition of a "good" and "bad" business model. Similarly, in Table 30 (p. 142), the individual elements of the SWOT analysis are systematised in the context of banking assessment criteria and do not fully cover the concept of a "business model."

7. Questions for the Doctoral Candidate

The achieved scientific results and identified contributions provide grounds to formulate the following questions:

- How can the hybrid institutional model you propose be practically integrated into existing banking policies, and which stakeholders would play a key role in its implementation?
- Which are the three critical determinants that, in your view, should guide the choice of financing approach, and how should they differ depending on the size and specialisation of agricultural holdings?

8. Conclusion

The dissertation demonstrates the doctoral candidate's ability to conduct independent research, analytical thinking, and the application of an integrated approach to studying the impact of bank financing on the dynamics of business processes in the agricultural sector. It is distinguished by



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theoretical soundness and methodological precision. The candidate has successfully achieved the main objective of the study by consistently accomplishing the four tasks set out. The dissertation presents genuine scientific and applied contributions that build upon existing models and practices in bank financing for the agricultural sector. The formulated conclusions and recommendations attest to the author's acquisition of the necessary skills for scientific work and interpretation of research results.

In conclusion, the achieved scientific level and quality of the presented dissertation give me firm grounds to recommend to the esteemed academic jury the awarding of the educational and scientific degree "Doctor" in professional field 3.8 "Economics" (Agrarian Business) to Milen Veselinov Vlaev.

20.03.2026

Stara Zagora

Dimitrina
Georgieva
Stoyancheva

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Вх. № РД 20-430 / 11.03.2026

OPINION

for obtaining the educational and scientific degree "Doctor" (PhD) following a procedure announced by the University of Economics - Varna

1. General information

- prepared by: Assoc. Prof. Lyubomir Dimitrov Lyubenov, DSc, University of Ruse "Angel Kanchev"
- grounds for writing the review: order № RD 06-28/28.01.2026 of the Rector for the appointment of a scientific jury and decision of the scientific jury
- author of the PhD thesis dissertation: Milen Veselinov Vlaev
- topic of the PhD thesis dissertation: BANK FINANCING OF BUSINESS PROCESSES IN THE AGRICULTURAL SECTOR IN BULGARIA

2. General overview of the of the PhD thesis

The PhD thesis consists of 236 pages, of which: introduction - 4 pages, exposition in three chapters - 195 pages, conclusion - 2 pages, bibliography - 14 pages, and two appendices - 14 pages. The main text includes 42 tables and 39 figures. The bibliographical list consists of 199 items, including literature and internet sources. The correct formulation of the structure of the dissertation has facilitated the research on its topic.

The introduction correctly justifies the significance, relevance and prospects of bank financing of business processes in the agricultural sector of Bulgaria. The object and subject of the study, research thesis, goal, tasks, four hypotheses, main limitations and sources of information are well formulated. The scientific requisites are specific and clear, which guarantees the quality of the dissertation.

3. Publications and participation in scientific forums

Presented are 8 publications (2 articles and 6 reports), which in terms of volume and thematic focus meet the requirements for obtaining the educational and scientific degree of "doctor" (PhD). They are related to the topic of the dissertation, and represent a successful attempt at research activity.

The publications related to the PhD thesis comply with the quantitative requirements under article 35, paragraph 1, items 1-4 of the Regulations for the Development of the Academic Staff at the University of Economics - Varna, as well as with the minimum national requirements for obtaining the educational and scientific degree "Doctor" (PhD), according to article 2b, paragraphs 2 and 3 of the Act on the Development of the Academic Staff in the Republic of Bulgaria. I am not aware of the PhD thesis being published as a monograph, which I recommend.

4. Assessment of the structure and content of the PhD thesis

Undoubtedly, the chosen topic of the dissertation and the results of the presented dissertation determine the well-argued relevance and significance of bank financing of business processes in the agricultural sector of Bulgaria. The positive results of the study justify the approval in principle as possessing the necessary qualities of a PhD thesis for obtaining an educational and scientific degree "Doctor" (PhD), as well as the alignment between its topic and content. The abstract of the PhD thesis reflects in a summarized form the main results of the study and gives a good idea of the theoretical and applied contributions of the author.



5. Identification and evaluation of scientific, and the applied and scientific contributions in the PhD thesis

The detailed familiarization with the PhD thesis allows the formulation of specific positive results and contributions, the most important of which are:

- An analytical framework for assessing the access to financing for agricultural enterprises which combines financial, production, management and institutional determinants, taking into account seasonality, climate risks and market volatility has been developed.
- The positive influence of the scale of the farm, the managerial experience, and the quality of financial reporting on better access to bank financing has been proven.
- The author has developed a model used to increase the efficiency of bank financing of business processes in the agricultural sector, which integrates the analysis of credit risk and the specifics of production cycles.
- Scientifically sound practical guidelines for improving the interaction between agricultural business and banking institutions have been formulated.

6. Plagiarism detected or not detected in the PhD thesis and its abstract

Although the main university unit has checked the PhD thesis for plagiarism, and the author has declared in writing that the PhD thesis is entirely the author's product and that no other publications and developments were used in its development in violation of copyright, I also do not detect plagiarism in the PhD thesis and its abstract.

7. Critical notes and recommendations

The negative assessment of farmers (NPS - 27) for the impact of direct payments on access to finance (Fig. 28) is in contrast to the correlation analysis, which demonstrates a positive correlation between them. This suggests that Hypothesis 4 could have been broken down into several parts. I ask the PhD candidate to provide additions and clarifications.

8. Questions to be addressed by the PhD candidate

Hypothesis 4 establishes a positive impact of direct payments under the CAP on access to bank financing, but recent research from Scopus-Q1 indexed publications reveals a negative impact of direct payments on the value of final agricultural production and GVA of the Bulgarian agricultural sector in its current structure with predominant low-value-added products - cereals and oilseeds. Accordingly, should banks revise their short-term and long-term financing of Bulgarian farms?

9. Conclusion

The stated positive results of Milen Veselinov Vlaev's PhD thesis titled "BANK FINANCING OF BUSINESS PROCESSES IN THE AGRICULTURAL SECTOR IN BULGARIA" provide sufficient grounds for an overall positive assessment of the research potential and capabilities for research activity of the PhD candidate. This allows me to vote reasonably and unequivocally positively for awarding Milen Veselinov Vlaev the educational and scientific degree "Doctor" (PhD) in professional field 3.8 "Economics", doctoral program "Agricultural Business".

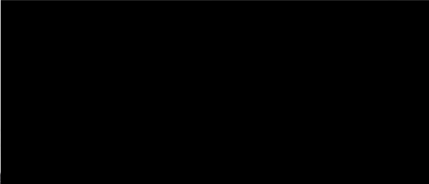


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Date: 11.03.2026

Lyubomir
Dimitrov
Lyubenov



Review prepared by
(Assoc. Prof. L. Lyubenov, DSc)

OPINION

Prepared by:

Assoc. Prof. Tanya Nikolova Georgieva, PhD
Department of Agricultural Economics
University of Economics – Varna

Regarding:

Dissertation submitted for the award of the educational and scientific degree “Doctor”
Higher Education Area 3 “Social, Economic and Legal Sciences”
Professional Field 3.8 “Economics”
Doctoral Programme “Agrarian Business”
Department of Agricultural Economics
University of Economics – Varna

Grounds for the Preparation of the Opinion:

Order No. RD-06-28/28.01.2026 issued by the Rector of the University of Economics – Varna for the initiation of a procedure for the public defense of the doctoral dissertation.

Author of the Dissertation: Milen Veselinov Vlaev

Title of the Dissertation:

Bank Financing of Business Processes in the Agricultural Sector in Bulgaria

General characteristics of the dissertation

The dissertation complies with the requirements of Art. 27, para. 2 of the Regulations for the Implementation of the Act on the Development of the Academic Staff in the Republic of Bulgaria, as well as Art. 56, para. 1 and para. 2 of the Regulations for the Development of the Academic Staff at the University of Economics – Varna.

The dissertation is presented in a structure and volume consistent with the requirements of the primary academic unit and includes a title page, table of contents, introduction, main body, conclusion, bibliography and appendices. The total length of the dissertation is 223 pages, allowing for a comprehensive and coherent presentation of the theoretical framework, methodological approaches, empirical analysis and conclusions.

The dissertation contains scientific and applied scientific results that represent an original contribution to the field and demonstrate the candidate’s ability to conduct independent research.

Assessment of the structure and content of the dissertation

The dissertation addresses a topical and significant issue for the national economy – bank financing of business processes in the agricultural sector in Bulgaria. The relevance of the research is associated with the need to enhance the efficiency of agricultural enterprises, their adaptation to dynamic market conditions, and the impact of regulatory and institutional frameworks. The study is developed in the context of the Common Agricultural Policy and changes in banking regulation, which enhances its practical relevance.

The research is based on clearly formulated objectives and research tasks and is characterized by logical consistency, well-argued analysis and proper citation practices.

Chapter One presents the theoretical and methodological framework. The author systematizes major theories of bank financing, including models related to information asymmetry and credit risk assessment. Particular attention is given to the three-level analytical model (micro–meso–macro), substantiating the complex nature of financing in the agricultural sector.

Chapter Two contains an empirical study based on a survey of 246 agricultural holdings, complemented by expert interviews and analysis of secondary statistical data. The combination of quantitative and qualitative methods increases the analytical validity of the findings. The hypotheses are clearly formulated and logically justified.

Chapter Three focuses on applied aspects and presents the author's proposals for improving bank financing approaches. A model for enhancing the efficiency of financing agricultural enterprises is developed, including a hybrid institutional model for managing investment support and a mechanism for integrating bank financing through a benchmark-based system. The practical orientation of this chapter is clearly expressed.

Overall, the dissertation demonstrates coherence between theoretical framework, empirical verification and formulation of recommendations. From a lexical and stylistic perspective, the work is written in a formal academic style typical for research in economics, with consistent and appropriate use of scientific terminology.

No evidence of plagiarism has been identified in the dissertation or the abstract. The abstract accurately reflects the content, scientific results and applied contributions of the dissertation.

Scientific and applied contributions

The following contributions can be identified:

1. The theoretical and methodological foundations of bank financing in the agricultural sector are systematized and further developed through a three-level analytical model (micro, meso and macro level).
2. An analytical framework for assessing access to financing of agricultural enterprises is developed, integrating financial, production, managerial and institutional determinants, while accounting for seasonality, climate risks and market volatility.
3. An empirical study among agricultural producers from the main subsectors is conducted, summarizing their attitudes and practices regarding bank financing.
4. The positive influence of farm size, managerial experience and quality of financial reporting on improved access to bank financing is demonstrated.
5. The role of direct payments under the Common Agricultural Policy is evaluated as a stabilizing factor for liquidity and creditworthiness.
6. An original model for enhancing the efficiency of bank financing of business processes in the agricultural sector is developed.
7. Scientifically grounded practical recommendations are formulated for improving interaction between agricultural enterprises and banking institutions.

The contributions have a scientific-applied character and are aimed at enhancing the efficiency and sustainability of the agricultural sector.

Publication activity and compliance with national requirements

The submitted publications and declarations demonstrate compliance with the minimum national requirements for obtaining the educational and scientific degree “Doctor”, pursuant to Art. 2b, para. 2 and para. 3 of the Act on the Development of the Academic Staff in the Republic of Bulgaria. Eight publications related to the dissertation topic have been presented, indicating consistent development of the candidate’s research interests.

Question to the doctoral candidate


In the integrated benchmark model using artificial intelligence that you propose, different weights of indicators and cluster adaptation are envisaged. Do you consider that, in practical implementation, the model would function equally effectively across different agricultural subsectors and enterprises of varying size, or would further refinement of the parameters be necessary?

Conclusion

The dissertation by Milen Veselinov Vlaev represents an independent scientific study with clearly formulated objectives, logical structure and well-argued conclusions. The research demonstrates solid theoretical preparation, analytical capability and practical orientation toward issues of bank financing in the agricultural sector.

Based on the above, I conclude that the dissertation meets the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria and the relevant implementing regulations. I therefore propose that the Scientific Jury award Milen Veselinov Vlaev the educational and scientific degree “Doctor” in Professional Field 3.8 Economics.

Date: 02.03.2026

Signature: 
Assoc. Prof. Tanya Georgieva, PhD