

**REVIEW**

**on a dissertation submitted for the award of the educational and scientific degree  
“Doctor” in professional field 3.8 “Economics”**

**Prepared by:** Assoc. Prof. Maria Radoslavova Stanimirova, PhD, scientific specialty “Economics and Management (Agriculture)”, Department of “Agricultural Economics”, University of Economics – Varna (UE–Varna).

**Subject:** dissertation submitted for the award of the educational and scientific degree “Doctor” in professional field 3.8 “Economics”, field of higher education 3 “Social, Economic and Legal Sciences”, doctoral programme “Agrarian Business”, UE–Varna.

**Grounds for the submission of the review:** participation as a member of the Scientific Jury appointed by Order No. RD-06-28/28.01.2026 of 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”.

**I. Information about the PhD Candidate**

The PhD candidate Milen Veselinov Vlaev was admitted to full-time doctoral studies in the doctoral programme “Agrarian Business” at the Department of “Agricultural Economics”, University of Economics – Varna, by Order No. RD-18-182/29.01.2018 of the Rector of the University of Economics – Varna. The training was conducted within field of higher education 3 “Social, Economic and Legal Sciences”, professional field 3.8 “Economics”, state-funded, for a period of three years – from 01.02.2018 to 01.02.2021.

According to the admission order, Assist. Prof. Pavlina Lyubenova Ivanova, PhD, was appointed as academic supervisor, and subsequently the supervision was taken over by Prof. Teodorina Zhelyazkova Turlakova, PhD.

During the period of study, the PhD candidate fulfilled the activities предвидени in the individual study plan, including successfully passing the required doctoral examinations and participating in research activities. The training was conducted in accordance with the requirements of the Act on the Development of the Academic Staff in

the Republic of Bulgaria, its implementing regulations, and the internal нормативни acts of the University of Economics – Varna.

By Order No. RD-17-439/12.03.2021 of the Rector of the University of Economics – Varna, the PhD candidate was dismissed with the right to defend the dissertation, effective as of 01.02.2021, within the statutory period.

The candidate possesses substantial practical experience in the banking sector, with professional experience directly related to the financing of agribusiness. His professional career includes progressively responsible expert and managerial positions in established banking institutions, including ProCredit Bank (Bulgaria) AD, UniCredit Bulbank AD, and DSK Bank AD. Within these positions, he has accumulated significant practical experience in: managing portfolios of agricultural producers and agribusiness clients; developing and implementing specialised banking products for agriculture; analysing and managing credit risk in the agricultural sector; interacting with international financial institutions (EBRD, KfW, etc.) and participating in programmes for financing agricultural producers.

Particularly noteworthy is his experience related to the development of product solutions and participation in strategic initiatives for the development of the agribusiness segment, which gives the dissertation a clearly expressed practical orientation.

The educational background of the PhD candidate includes Bachelor's and Master's degrees in Finance from D. A. Tsenov Academy of Economics – Svishtov, which provides the necessary theoretical foundation for conducting scientific research in the field of financial intermediation and banking.

The combination of solid theoretical preparation and extensive practical experience in the banking sector, and in particular in servicing agribusiness, creates the prerequisites for the development of a dissertation with a high degree of applicability and scientific validity.

## **II. General Presentation of the Dissertation**

The dissertation of Milen Veselinov Vlaev is devoted to an extremely topical and increasingly significant issue – bank financing of business processes in the agricultural sector in Bulgaria. The research topic lies at the intersection of financial intermediation and agricultural economics, which determines its interdisciplinary character and high practical relevance.

The relevance of the study is determined by several key factors. First, the agricultural sector in Bulgaria continues to be strategically important both economically and socially, while at the same time being characterised by a high degree of dependence on external financing. Second, the specific features of agricultural production – seasonality, dependence on natural conditions, price volatility, and regulatory requirements – create particular challenges for banking institutions in risk assessment and the structuring of financial products. Third, the increasing influence of the Common Agricultural Policy (CAP) and support instruments further complicates the financial environment and requires an integrated approach to financing.

The dissertation comprises a total of 236 standard pages and is structured into an introduction, three chapters, a conclusion, a list of references, and appendices. The literature used includes 199 sources, which indicates a thorough review of the existing scientific literature, both in Bulgarian and in foreign languages. The work is illustrated with 42 tables and 39 figures, which support the analysis and facilitate the understanding of the presented results.

In the introduction, the author clearly defines the object, subject, objective, and tasks of the research, as well as the research thesis. A positive impression is made by the logical coherence between the formulated tasks and the structure of the dissertation, which is a prerequisite for a consistent and well-argued development of the study. The methodological toolkit is tailored to the specifics of the research problem and includes a combination of theoretical and empirical methods.

The first chapter has a theoretical and methodological character and is devoted to clarifying the nature of bank financing, the specific features of the agricultural sector, and the interaction between them. The author provides a systematic review of existing theoretical approaches, paying attention both to classical concepts of financial intermediation and to contemporary approaches related to risk management and the financing of specific economic sectors. Particularly valuable is the emphasis on the specificity of the agricultural sector as an object of financing, which provides a solid foundation for the subsequent analysis.

The second chapter is analytical and contains an empirical study of bank financing in the agricultural sector in Bulgaria. Here, the author uses a variety of information sources and applies appropriate analytical methods, including comparative analysis, statistical

methods, and interpretation of empirical data. The analysis covers the dynamics of lending, the structure of financial instruments, the behaviour of banking institutions, and the specific constraints on access to financing. In this part, the practical orientation of the research is clearly evident, based on the author's accumulated professional experience.

The third chapter has an applied character and is focused on the development of models and proposals for improving bank financing in the agricultural sector. The author proposes specific solutions, including models for assessing access to financing and opportunities for improving the interaction between banking institutions and agricultural enterprises. This part of the dissertation deserves particularly high evaluation, as it demonstrates the author's ability to transform theoretical and empirical results into practically applicable solutions.

The conclusion summarises the main results of the study and formulates conclusions and recommendations. These are logically derived from the conducted research and contribute to achieving the stated objective.

Overall, the dissertation represents a comprehensive, well-structured, and well-argued scientific study, in which the relationship between the theoretical framework, the empirical analysis, and the proposed practical solutions is consistently traced.

### **III. Assessment of the Form and Content of the Dissertation**

The submitted dissertation complies with the requirements of Art. 34, para. 2 and para. 3 of the Regulations for the Development of the Academic Staff at the University of Economics – Varna, and its content demonstrates a consistently developed research concept and a clearly expressed authorial position.

In terms of content, the study is characterised by a strong interconnection between its individual parts, as the theoretical analysis, empirical research, and proposed solutions are logically interrelated and subordinated to the main research thesis concerning the need to adapt bank financing to the specifics of business processes in the agricultural sector.

A particularly strong aspect of the dissertation is the clearly formulated research framework through specific hypotheses aimed at examining the relationship between farm size, managerial experience, the specifics of banking products, and the influence of the Common Agricultural Policy on access to financing. This provides focus to the analysis and allows for the verifiability of the conclusions drawn.

The theoretical part is characterised by a purposeful selection and interpretation of scientific concepts related to financial intermediation, information asymmetry, principal–agent relationships, and transaction costs. The author successfully relates these theoretical approaches to the specifics of the agricultural sector, identifying key features of financing arising from the sector’s production and institutional characteristics. A significant element is the development of an integrated model for assessing access to financing, which builds upon the theoretical framework and serves as a basis for the empirical analysis.

The empirical study is well structured and is based on a combined methodological approach. A structured survey among agricultural holdings in Bulgaria has been conducted, with a distribution by main agricultural activities (grain production – 52%, fruit growing – 29%, livestock farming – 27%, vegetable production – 15%), as well as an unstructured survey among experts from the banking sector. Secondary data from Eurostat, the National Statistical Institute, the Ministry of Agriculture, FAO, and the Bulgarian National Bank have also been used, providing a solid informational basis.

The analysis in this section goes beyond a descriptive presentation of data, seeking relationships between farm characteristics and their access to financing, including the influence of factors such as farm size, managerial experience, production structure, and the availability of subsidies. The use of statistical tests for hypothesis verification further enhances the reliability of the results.

In the applied part, the author demonstrates the ability to transform the obtained results into concrete solutions. Models and approaches for improving financing efficiency are substantiated, including better alignment of banking products with the specifics of agribusiness and strengthening the interaction between banking institutions and agricultural producers. Particularly valuable is the emphasis on the need for banks to position themselves not only as lenders but also as long-term partners of agribusiness.

The tables and figures are organically integrated into the exposition and perform an analytical function, supporting the identification of relationships and the substantiation of the conclusions drawn.

The literature used demonstrates good familiarity with the scientific research in the field and enables the author to position the study within the context of existing scientific knowledge.

The abstract accurately reflects the content of the dissertation and presents the main results and contributions in a systematic manner.

In summary, the content of the dissertation is characterised by analytical depth, the use of a diverse methodological toolkit, and a clearly expressed connection between the theoretical framework, the empirical study, and the proposed solutions, which defines it as a completed and well-argued scientific study.

#### **IV. Evaluation of the PhD Candidate's Publications**

In accordance with the requirements of Art. 35, para. 1, items 1–4 of the Regulations for the Development of the Academic Staff at the University of Economics – Varna, the PhD candidate has submitted a total of six scientific publications related to the topic of the dissertation, of which: four are single-authored; two are co-authored; two are published in English; and the publications appear in peer-reviewed scientific outlets.

The publications cover key aspects of bank financing in the agricultural sector and reflect major results of the conducted research, including issues related to access to credit, the role of financial institutions, and opportunities for improving financing.

The submitted scientific works meet the minimum national requirements pursuant to Art. 2b, para. 2 and para. 3 of the Act on the Development of the Academic Staff in the Republic of Bulgaria, covering the required number of points for the award of the educational and scientific degree “Doctor”.

The publications are thematically aligned with the dissertation and contribute to the dissemination and validation of its scientific and applied results.

#### **V. Scientific and Practical Contributions of the Dissertation**

The scientific and applied contributions presented by the author are well substantiated and correspond to the content of the dissertation. Among the scientific contributions, particular emphasis can be placed on the in-depth theoretical and methodological analysis of bank financing in the agricultural sector, as well as on the development of an integrated model for assessing access to financing.

Among the applied contributions, it is important to highlight the conducted empirical study among agricultural producers and banking experts, the identification of factors

influencing access to credit, and the formulation of proposals for improving bank financing and the interaction between financial institutions and agribusiness.

The contributions are the result of independent research work and have both theoretical significance and practical applicability.

## **VI. Questions on the Dissertation**

With a view to creating conditions for a more convincing defence of the dissertation and to further deepen the scientific discussion, I would like to pose the following questions to the PhD candidate:

1. To what extent can the proposed model for assessing access to financing be adapted and applied to other sectors of the economy?
2. What are the possibilities for developing partnership models between banking institutions and agribusiness in the context of the digitalisation of financial services?

## **VII. Overall Evaluation of the Dissertation and Conclusion**

The submitted dissertation represents an independent, in-depth, and relevant scientific study devoted to a significant problem of both theoretical and practical importance. It demonstrates solid knowledge in the field under study, skills in applying contemporary research methods, and the ability to formulate well-founded conclusions and proposals.

The achieved results, the formulated scientific and applied contributions, and the presented publications provide sufficient grounds to conclude that the dissertation meets the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria, its implementing regulations, and the internal нормативни acts of the University of Economics – Varna.

On this basis, I give a positive evaluation of the dissertation and propose that the esteemed Scientific Jury award Milen Veselinov Vlaev the educational and scientific degree “Doctor” in professional field 3.8 “Economics”.

19.03.2026 г.

Varna

Prepared by:  .....

(Assoc. Prof. Mariya Stanimirova, PhD)



## REVIEW

ИКОНОМИЧЕСКИ УНИВЕРСИТЕТ ВАРНА

Bx. No: P20-490/20.03.2026

### *1. General information*

**Reviewer:** Prof. Dr. Ivan Dimitrov Penov, field of higher education: 3. Social, economic and legal sciences; professional field: 3.8 Economics; scientific specialty: "Economics and management (agriculture)"

**Basis:** appointed as a member of the Scientific Council according to Order No. RD 06-28 /28.01.2026 of the Rector of the University of Economics - Varna

**Author of the dissertation:** MILEN VESELINOV VLAEV doctoral student in the doctoral program "Agricultural Business". Field of higher education 3. Social, economic and legal sciences; professional field 3.8 Economics

**Theme of the dissertation:** BANK FINANCING OF BUSINESS PROCESSES IN THE AGRICULTURAL SECTOR IN BULGARIA

### *2. Data about the dissertation candidate*

Milen Veselinov Vlaev was born on 13.12.1978. In 2002 he received a bachelor's degree, and in 2003 a master's degree in finance from the "Dimitar A. Tsenov" Academy of Economics - Svishtov.

He began his career in 2003 at ProCredit Bank (Bulgaria) AD, where he successively held the positions of Chief Agro Coordinator/Head of the Agribusiness Department/Head of Micro Enterprises. In the period 2014 to 2017 he worked at the bank's headquarters as an Expert in Management of the Agriculture segment.

From October 2017 to the present, he has been working at DSK Bank EAD (Central Management) as Manager of the Agribusiness Segment/Head of the Agribusiness Department/Chief Expert of Business Development.

Milen Vlaev was enrolled by order RD 17-182/29.01.2018 as a full-time doctoral student at the University of Economics - Varna, full-time doctoral studies, state order. He was discharged by order RD 17-439/17.03.2021.

### *3. General presentation of the dissertation work*

The dissertation work is 236 pages long with 42 tables and 39 figures: introduction - 4 pages; Chapter One (theoretical and methodological part) - 62 pages; Chapter Two (analytical part) - 88 pages; Chapter Three (constructive part) - 45 pages; Conclusion - 2 pages; Literature - 14 pages. 199 literature sources were used.



**Main thesis:** “the financial security of the agricultural sector in Bulgaria can be achieved by applying an approach to bank financing that takes into account the specific parameters and dependencies of business processes in the sector...”.

**Hypotheses:** (1) Larger agricultural holdings with higher annual turnover use bank financing more often than small and micro holdings, as it is mainly aimed at investments in fixed assets, while current activities and working capital needs are financed mainly with own funds and trade credit;

(2) Agricultural producers with longer management experience show a higher tendency to use investment and long-term bank loans, as the perceived high cost of bank financing has a negative impact on the intensity of their use;

(3) Specialized bank products for agribusiness are perceived as more suitable compared to standard loans due to flexible repayment plans and adapted collateral;

(4) Direct payments under the Common Agricultural Policy have a positive impact on access to bank financing, and the effect is stronger for farms that implement new technologies, develop sustainable practices, which also leads to higher investment activity.

**Research methodology:** (1) Structured survey aimed at agricultural holdings in Bulgaria (52% of the surveyed farmers are engaged in grain production, 29% - fruit growing, 27% - animal husbandry and 15% - vegetable growing); (2) Unstructured survey with specialists in the industry (18); (3) data from Eurostat database, NSI, MAFG, FAO, BNB. Statistical tests (comparison of averages) were also used to test the hypotheses.

**Structure:** The introduction clearly outlines the subject, object and purpose of the study. The main thesis, tasks and hypotheses are defined.

The first chapter is theoretical. It clarifies the nature, functions, and participants in the process of bank financing. The main business processes in the agricultural enterprise and the factors in the financing process are examined. Models and an approach for assessing the possibilities for financing the agricultural sector are discussed. The emphasis is on the theories of information asymmetry and institutional models for access to finance. Attention is also paid to models for assessing credit risk. This part ends with an integrated author's model for assessing access to finance.

The second chapter is empirical. A profile of good and ineffective business models is analyzed. Business models and their importance for access to financing for the agricultural business are presented. The legal framework and structure of financing for the agricultural sector are discussed. The financial needs of farms and productions of different sizes are revealed. The role of external and internal factors on the financing of processes in the agricultural business is studied.

The third chapter is constructive. The main factors in choosing an approach to financing processes depending on the business structure of the companies are presented. A model for increasing the efficiency of financing enterprises in the agricultural sectors is substantiated. The importance of communicating the approaches with stakeholders in agribusiness sectors is examined.

The conclusion summarizes the main challenges derived from the work and the guidelines for overcoming them. The conclusion that financial institutions must adopt



the role not only of creditors, but also of being long-term partners of agricultural producers is strongly impressive.

#### ***4. Assessment of the structure and content of the dissertation work***

The dissertation work is well structured and includes all the necessary elements. The abstract correctly reflects the content of the dissertation work. The need for individual sub-sectors for lending is revealed. The important role of bank lending for the development of an industry is shown and how better access for large agricultural producers leads to a distortion of competitiveness. The shortage of financing for small producers is clearly outlined. The author demonstrates deep knowledge of agriculture and the banking sector. Combines the specifics of production processes in agriculture and the behaviour of banking institutions.

The dissertation candidate demonstrates very good analytical abilities.

#### **5. Identification and evaluation of scientific and scientific-applied contributions in the dissertation work**

##### Scientific contributions

- The theoretical and methodological foundations of bank financing of business processes in the agricultural sector are presented in depth. The theories of principal-agent; asymmetric information; transaction costs are discussed and applied in the study.
- A methodology has been developed for assessing access to financing for agricultural enterprises

##### Scientific and applied contributions

- An empirical study among producers presented in the dissertation gives a clear idea of the financing used in agriculture. The limitations that agricultural producers encounter when borrowing from commercial banks are clarified. The needs of farmers for specific banking products are assessed.
- The role of farm size, management experience and financial accountability on access to bank financing is shown.
- Approaches to financing agricultural producers are developed, considering not only their advantages but also the accompanying limitations.
- The role of the Common Agricultural Policy for the creditworthiness of agricultural holdings is assessed.
- The need to improve the interaction between agrarian business and banking institutions is substantiated.



### 6. Publications and participation in scientific forums

Eight publications related to the dissertation work are presented – six independent and two co-authored. Two of them are in English. The publications fall into the category "Articles and reports in peer-reviewed journals".

Groups of indicators		Indicators	Requirements	Achieved
A	Dissertation for the degree of "doctor"	1	50	50
B	Habilitation thesis	3		
Г	Publications	4 to 10	30	70
Д	Citations	11 to 13		
E	Doctoral students, projects, teaching	14 to 21		
		Total	80	120

### 7. Plagiarism detected or not in the dissertation and abstract

I do not detect plagiarism in the work. The author has a clearly expressed writing style. The citations of other authors are clearly highlighted.

### 8. Critical notes and recommendations;

I have no significant critical notes. The doctoral student shows in-depth knowledge in both the field of credit and agriculture. It was a pleasure for me to read the dissertation. I have the following recommendation:

Credit to small agricultural producers is a challenge that exists to one degree or another in all countries. Ellis (Agricultural policies in developing countries 1992) presents an interesting summary of the credit policies applied by the banking sector in developing countries. This author believes that the solution to the problem should be sought in the creation of local financial institutions to support small businesses. This solution also has advantages and disadvantages. In this regard, my recommendation to the author is to continue to research the processes and this direction. The dissertation has an interesting section dedicated to credit cooperatives.

Lessons can also be drawn from the study on what the design of measures to support agricultural producers should be.

### 9. Questions to the dissertation;

- A positive relationship was found between direct payments and access to bank financing. To what extent is this relationship due to the fact that direct payments are used in some of the bank loans as a "guarantee for the loan" and to what extent to other factors?



- To what extent is the increase in lending to the agricultural sector due to the fact that there will be more large producers left in need of larger loans and a decrease in the interest rate (table 6, p. 75).
- To what extent are banks an appropriate organizational form for providing credit to small producers?

### **10. Conclusion**

Based on the various research methods applied by the doctoral student, the correctly conducted experiments, the generalizations and conclusions made, I believe that the presented dissertation meets the requirements of the Law on the State Research and Development of the Republic of Bulgaria and the Regulations on the Terms and Procedure for Acquiring Scientific Degrees and for Holding Academic Positions at the University of Economics-Varna, which gives me reason to evaluate it **POSITIVELY**.

Based on the above, I propose to award **MILEN VESELINOV VLAEV** the scientific degree "Doctor" in the field of higher education 3. Social, economic and legal sciences, professional field 3.8. Economics, scientific specialty 05.02.18 Economics and Management

Date: 25.08.2025

PREPARED THE REVIEW:



Prof. dr. Ivan Dimitrov Penov