

OPINION

by Prof. Atanas Georgiev Lyondev, PhD – Higher school of security and economics

of a dissertation for the award of the scientific degree "Doctor of Sciences"
in the Field of Higher Education 3. Social, Economic and Legal Sciences
Professional Field 3.8. Economics

Author: Bozena Barbara Kush, PhD

Topic: "Economic efficiency of agricultural farms in Poland depending on economic size"

1. General description of the presented materials

By order No. 85 of 21.02.2025 of the Rector of the Higher School of Insurance and Finance, Prof. Boris Velchev, PhD, I am appointed as a member of the scientific jury for ensuring a procedure for the defense of a dissertation on the topic: "Economic efficiency of agricultural farms in Poland depending on the economic size", for the acquisition of the scientific degree "Doctor of Sciences" in the field of higher education 3. Social, economic and legal sciences, Professional field 3.8. Economics. The author of the dissertation is Bozena Kush, PhD - candidate at the Department of Finance

The materials submitted by Bozena Kush, PhD include documents according to the presented list: (dissertation, abstract, reference minimum requirements with publications and citations, etc.)

The candidate has submitted two author's monographs and one co-authored monograph, 4 sections in collective monographs, 10 publications in global databases: Skopus and Web of Science and 23 articles in scientific journals.

2. Characteristics and evaluation of the dissertation work

The dissertation consists of 234 pages and includes a title page, table of contents, three sections, conclusion, and bibliography.

The relevance of the study is justified by a better understanding of the differences between farms in terms of the level of efficiency of their economic activities and the factors that determine the efficiency of use of land, labor and capital resources, improving the competitiveness of small family farms for the transition to larger ones, developing appropriate agricultural policy instruments that allow for effective restructuring and modernization of agriculture, especially agriculture with structural defects.

The subject of the study is the assessment of efficiency and the analysis of the determining factors in farms, and the object of the study are farms of different economic classes in size.

The aim of the work is to analyze the level of efficiency of farms in Poland and the factors that determine it in farms of different economic classes. To achieve this goal, three hypotheses have been formulated.

The analysis of the economic efficiency of farms was carried out using various indicators in accordance with the FADN (Farm Accountancy Data Network) methodology through input equations and dependent variables of economic efficiency and profitability of production factors and non-parametric methods based on the productivity index and efficiency dynamics.

The structure of the dissertation is divided into the following parts: introduction; theoretical part, including a review of the literature in the field of agricultural efficiency; empirical part, containing the results of own research, conclusion and bibliography.

The theoretical part includes the diversity of approaches to understanding the essence of efficiency, which stems from the different ideological foundations inherent in different areas of economic theory. Efficiency itself is considered from various aspects - economic, social and environmental; both dynamically and statically, which allows for a multi-faceted assessment of the effect of the activities of business entities, as well as the need to take into account many factors determining its level when analyzing efficiency.

The empirical part of the study was carried out using econometric and survey methods for farms differentiated by economic nature to determine the factors. The analysis determines the differences in the efficiency of the economic activity of the studied farms in the individual economic classes and the importance of economic size in the formation of the efficiency of economic activity in agriculture.

The conclusion of the dissertation summarizes the findings and conclusions from the empirical research.

3. Contributions and significance of the work for science and practice

I accept the indicated contributions of the candidate, which prove the formulated hypotheses, but I pay special attention to some of them:

Scientific contributions:

- agricultural and rural development policies should introduce instruments that encourage farmers to seek non-agricultural sources of income;

- the dominant source of financing is equity, which indicates the reluctance of farmers to use foreign sources of financing for their entrepreneurial activity, which may limit the processes of development and modernization;

- in combination with the positive impact of growing economic size, this points the way to increasing economic efficiency through concentration of production and increased technical equipment of the workforce.

Scientific and applied contributions:

- It was also found that throughout the study period, the differences in technical efficiency between the considered classes of economic sizes deepened, which indicates an increase in the disparities between farms of different economic sizes;

- the models developed for individual years do not allow for the possibility of reducing the participation of the land factor in the production process. This emphasizes the importance of land in the development processes of farms.

The evaluation of the scientific results and contributions of Kush's, PhD developments shows that they have scientific and applied significance and relate to the enrichment of existing knowledge and further development of theory in the field of higher education 3. Social, economic and legal sciences, professional field 3.8. Economics.

5. Assessment of publications in the dissertation

The publications with which the candidate Bozena Kush, PhD participates in the procedure for the doctor of sciences can be classified according to various characteristics. The list of publications presented in the Reference on the minimum national requirements for the scientific degree "doctor of sciences" in Professional field 3.8 Economics, are: two author's monographs and one co-authored monograph, 4 sections in collective monographs, 10 publications in world databases: Skopus and Web of Science and 23 articles in scientific journals and 79 citations, including in world databases.

The research in the dissertation has scientific novelty, practical, economic and social significance and belongs to the author. Of the monographs, scientific articles, published and co-authored, only those that are the result of personal scientific research are used in the dissertation. The author's contribution to the collective scientific work is indicated in the list of publications. All publications of Bozena Kush, PhD are devoted to research in the field of agriculture and, in particular, to the economic efficiency of agricultural farms in Poland depending on economic size. From the in-depth analysis of the candidate's submitted publications, it is a pleasant impression that he demonstrates extensive professional and academic experience in presenting and presenting his scientific theses. The general analysis of the scientific output shows that it contains a variety of scientific and applied scientific developments and achievements, assessed in totality. In their unity, they objectively reflect the candidate's research abilities and capacity, meeting the requirements of the PPZRASRB, which gives me reason to confirm the conclusion that Bozena Kush has fulfilled the condition for a doctor of science in professional field 3.8 "Economics".

5. Assessment of compliance with the minimum national requirements

The submitted Certificate of fulfillment by the candidate of the minimum requirements for acquiring the scientific degree "Doctor of Sciences" in the professional field 3.8 Economics fully meets the requirements for the application of the ZRASRB.

6. Abstract

A 32-page abstract in Bulgarian is attached to the dissertation. The content and quality of the Abstract are prepared in accordance with the requirements of the relevant regulations and reflect the main results achieved in the dissertation.

7. Critical remarks and recommendations

My critical remarks are mainly technical and do not affect my assessment. The Reference for Minimum Requirements lists **10 publications in global databases, but it is not noted in which databases they are exactly - in Skopus or in Web of Science, and in the dissertation work and the abstract it is not noted that Bozena Kush is a doctor, which is mandatory.**

CONCLUSION

The dissertation *contains scientific, scientifically-applied and applied results that represent an original contribution to science and meet all the requirements* of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for the Implementation of the ZRASRB. The presented materials and dissertation results *fully comply* with the specific requirements of the Rules for the conditions and procedure for acquiring the scientific degree "Doctor of Sciences" at the Higher School of Insurance and Finance. The dissertation work shows that the candidate Bozhena Kush *possesses* in-depth theoretical knowledge and professional skills in Professional Field 3.8. Economics, *demonstrating* qualities and skills for independent conduct of scientific research.

Due to the above, I confidently give my *positive assessment* of the conducted research, presented by the above-reviewed dissertation, abstract, achieved results and contributions, and *I propose to the esteemed scientific jury to award the scientific degree "Doctor of Sciences" to Bozena Barbara Kush*, in the Field of Higher Education 3. Social, Economic and Legal Sciences; Professional Field 3. 8. Economics.

30.03.2025 г.

Prepared the opinion:

(Prof. Atanas Lyondev, PhD)