



## REVIEW

of PhD thesis in 3. Social sciences, economics and law, 3.8 Economics,  
“Economics and management (agriculture)”

**PhD Thesis author:** Mirko Milan Milanovich, PhD student in extramural form,  
Department of “Economics”, Agricultural University - Plovdiv

**PhD Thesis topic:**

Management of innovations in the agricultural holdings in the Republic of Serbia

**Reviewer:** prof. Stanimir Ivanov Kabaivanov, PhD, FESS – Plovdiv University  
„Paisii Hilendarski“, 3.8 Economics (Finance)

*Appointed as a member of the scientific panel with order № РД-161078 /  
25.11.2020 of the Rector of Agriculture University – Plovdiv.*

### 1. Short introduction of the PhD candidate.

Mirko Milanovich graduated from high school in 1997 in the city of Podujevo. He then studied in Law faculty of Belgrade university. In 2016, he successfully completed a master programme in “Business, economics and entrepreneurship” at Belgrade university.

Professional experience of Mr. Milanovich includes working as a general manager at “Viva” tourist agency since 2003. From 2006 till 2011, Milan Milanovich worked as insurance agent at „Delta Generali Osiguranje”, Belgrade.

The professional experience of the candidate, as stated in his CV, is not directly related to the dissertation research. However, it is a proof of his business competencies and supports the study in generating results that are significant and applicable.

### 2. Relevance of the research.

Research topic is relevant and significant. Problems discussed and analyzed in the study are important and fully meet the expectations and requirements for a thesis research. Recent reports published by Eurostat indicate that in the Republic of Serbia the percentage of added value, as well as the share of people employed in agricultural-

related industries is significantly higher than the EU-27 average. If we take into consideration the EU accession process, the future of the agriculture sector is of primary importance and needs to be carefully studied.

Therefore, I believe that the results presented in the PhD study are of significance and would be of interest to experts involved in regulations, reforms and planning for sustainable development of agriculture in Republic of Serbia.

### **3. Research goals, hypotheses, and research methods.**

The main subject of the study are family farms or agricultural holdings in Republic of Serbia. It is defined in the introductory part of the thesis as „*the analysis of the impact of innovation and product quality on the sustainable success of agricultural holdings in the Republic of Serbia*”.

The dissertation is developed around the idea that innovation and product quality are important factors for the sustainable development of agriculture holdings. To validate this idea and to see how the long-term success of these economic entities depends on the introduction of innovations and quality improvement, five research tasks have been identified. Such approach also provides for studying the significance of individual factors, as well as their combined effect.

In accordance with the specified tasks five hypotheses (a main hypothesis and four auxiliary ones) have been formulated and tested in the study. As a recommendation I can point out that the auxiliary hypotheses could be modified and defined as independent statements. Considering the analytical tools used, it is better to clarify that the author may either support or reject a hypothesis, but not actually prove it.

Multiple analytical tools have been used to support the study, and their application is correct and adequate. It should be noted that Mr. Milanovich has comprehensively and precisely indicated which methods are used in theoretical and which in the empirical part of the study.

The introductory part of the dissertation contains information about some software products used, including those related to conducted surveys. It would be useful to provide details on the software used for the statistical and econometric models. This will allow the models to be replicated and will further contribute to the practical relevance of the research.

### **4. Results visualization and presentation**

The overall volume of the study is 188 pages, of which:



- 173 pages main body of the thesis;
- 3 pages of an appendix containing the questionnaire used to study expert opinion;
- 3 pages of an appendix containing the questionnaire used to study the opinion of agriculture holding representatives;
- 9 pages containing a list of references and thesis contents index.

There are 31 figures, 35 diagrams and 209 tables in the thesis. The large number of tables is due to the author's apparent desire to present in detail all the intermediate calculations. However, some listed tables are actually figures (for example, the correlograms on pages 162 and 166).

The dissertation consists of *six parts*, as follows:

- An **introductory part** presenting a brief justification of the importance of the analyzed problems, the main objectives, research tasks and analytical methods, as well as all hypotheses.
- In the **theoretical part** of the study, a critical review of the existing research is made, and the main concepts and dependencies to be used in the following parts are defined.
- The **third part** of the dissertation is dedicated to research methodology, and hypotheses are studied and analyzed in the context of the received expert opinion and feedback.
- **Empirical research** is the largest section of the thesis, presenting the results of factor analysis, testing theoretical models and new dependencies that can explain the impact of innovation and product quality on long-term success of farms. Given the large volume of work done, I would recommend dividing point 4.5 into several parts, thus improving the presentation and perception of the research results.
- The **fifth part** of the study contains a summary of the results obtained, with the author making references to their possible applications. In order to balance the volume of the separate sections of the study, these recommendations could be combined with some conclusions.
- The **last part** of the research presents the major conclusions from the discussed models, linking the results with the testing of previously defined hypotheses.

I would like to point that the exposition would achieve a better-balanced structure, if intermediate tabular results are presented in an appendix, and part five is supplemented with a short summary - a comparison between the individual models. This recommendation does not diminish the content of the study and the results obtained.

## **5. Discussion of the results and references.**

There are 58 sources referenced in the PhD thesis, most of them in English and Serbian language. Considering the good understanding of contemporary research in the area that has been shown in the second part, I believe that more publications should be referenced and cited. It is important to mention that not all references contain ISSN and ISBN or URL of the source.

Study results are presented in detail in the fourth part and discussed in the last two parts of the thesis. In addition to testing the identified hypotheses, of particular interest are the recommendations made by Mr. Milanovich. They are related to the steps necessary to facilitate the entry of innovations in agriculture and to improve product quality. These recommendations would gain even more attention and have higher impact, if they were systematized according to the type of stimulated innovations (process, marketing, production to name a few).

In order to improve the presentation of empirical study results, I would recommend elaborating further on the nature of identified dependencies and not only on their presence. This would allow making certain decisions, to develop dedicated policies as well as to plan the actions of individual agricultural holdings.

## **6. Research contributions.**

There are several research contributions, mainly related to application of the findings, that stand out:

- The author suggests an interesting adaptation of existing theoretical models in order to highlight the dependencies between innovation and sustainable development of agricultural holdings.
- Based on the conducted surveys, specific approaches have been proposed to assess innovations and quality. These suggestions can be further developed and used in various situations.
- Survey results suggest specific policies for improving the sustainable development of agricultural holdings in Republic of Serbia.

I believe that the research contributions are correctly described in the abstract to the dissertation.

## **7. Remarks and questions.**

The following remarks and question may be addressed to the thesis research:

- The output of all nine models should be presented in a table in order to facilitate



comparison and ease further analysis. The descriptive approach that is used requires much more effort to compare the output and draw conclusions.

- It is recommended to check specific terms and unify how they are used in different contexts. This is necessary as inside the study text there are some non-standard terms used (for example null hypothesis and as synonym zero hypothesis).
- For the sake of completeness of the study it would be better if linear regression models are checked to see if all assumptions are met.
- It would be particularly interesting to comment on research results in the context of accession of Serbia to EU and common EU agricultural policy.

The remarks and recommendations made do not reflect any significant issues found in the results and efforts made by the PhD student.

## **8. Research papers and citations.**

Mr. Milanovich has submitted for review five publications from the last two years (one of them is in print). Two of the publications are in scientific journals and the rest are from international scientific conferences. Thematically and content-wise the articles are related to the problems covered in the dissertation research.

The extended abstract of the thesis is of a total volume of 38 pages and represents in full the structure and most important findings of the research.

I am not aware of any facts that would question the personal merit and participation of the PhD student in describing, conducting and presenting the dissertation research and scientific publications. The required declaration of originality is included in the documents submitted for review.

## **CONCLUSION:**

Based on the research methods presented by the doctoral student, experiments conducted, summaries and conclusions, I believe that the presented dissertation complies with all national and university regulations and meets all requirements. Therefore, my review is POSITIVE.

I would suggest to the esteemed scientific panel members to vote positively and to award Mr. Mirko Milan Milanovic the educational and scientific degree "Doctor" (PhD) in 3. Social, economic and legal sciences, 3.8. Economics, Economics and Management (Agriculture).

**Date:** 08.01.2021  
Plovdiv

**REVIEWER:** .....  
(prof. S. Kabaivanov, PhD)