



REVIEW

Вх. № Р220-111/23.08.2024

of a dissertation for the acquisition of the degree of Doctor

under an announced procedure by the University of Economics – Varna in the professional field 3.8 "Economics", PhD program "Economics and Management (Construction and Real Estate)"

1. General information

- Reviewer: **Prof. Dr. Rosen Nikolaev**
- Reason for writing the review: participation in a scientific jury appointed by order of **the Rector of the University of Economics-Varna No RD-06-93 / 27.06.2024** and a decision of the scientific jury taken at the first meeting on 28.06.2024.
- Author of the dissertation: **Miglena Stefanova Staneva-Todorova**
- Dissertation topic: **"Management of entrepreneurial risks in the implementation of investment projects"**

2. Data about the doctoral candidate

Miglena Staneva-Todorova has acquired a Bachelor's degree in Finance and a Master's degree in Economics of Real Estate at the University of Economics – Varna. Her choice to study in the educational and scientific degree "Doctor" in the doctoral program "Economics and Management (Construction and Real Estate)" is logical and predestined after her master's degree with a grade of excellent 6.00. This also explains the in-depth and theoretical knowledge and competence on the problems explored in the dissertation.

Miglena Staneva-Todorova is enrolled in a full-time PhD program with a three-year term of study from 01.02.2017 and is supervised by Prof. Dr. Stoyan Stoyanov.

During her doctoral studies, she strictly followed the implementation of her individual plan. She has successfully passed doctoral exams in "Internet and Office Applications in Scientific Research" with an excellent score of 6.00, "Construction Entrepreneurship" with a very good score of 5.25, "Economics of Enterprise" with an excellent score of 5.75 and "Methodology and Methods of Scientific Research" with an excellent score of 5.75.

The dissertation and the abstract on it of PhD student Miglena Staneva-Todorova were discussed at the Department of Business, Investments, Real Estate, and after taking into account the critical remarks made by the members of the department, on 11.06.2024 it was decided to make a proposal to the Faculty Council of the Faculty of Economics at the University of Economics – Varna to open a procedure for defending the dissertation.

Miglena Staneva-Todorova also has relatively extensive experience in practice, as she has worked in the fields of finance, real estate, project activities, etc. Her practical experience as a consultant in real estate management (4 years) and an expert in "Programs and Projects" (4 years) should be noted.

Miglena Staneva-Todorova, as a PhD student, has participated in three projects for applied research at the University of Economics – Varna and in one research project at the National Science Fund. She has participated in many different specializations and trainings, scientific conferences and governing bodies at the University of Economics - Varna from the quota of doctoral students.

I believe that education and work experience explain the presence of both theoretical and practical knowledge on the topic of the doctoral student's dissertation.



3. General presentation of the dissertation

The dissertation has a total volume of 280 pages. The main part consists of a title page, table of contents, an introduction (5 pages), three chapters (243 pages), a conclusion (3 pages) and references. Appendices of 16 pages have also been added.

The text includes 35 figures and 38 tables, 29 of which are the author's own development. The literature used includes 120 titles, of which 81 in Cyrillic, 23 in Latin and 16 websites.

4. Assessment of the structure and content of the dissertation, opinion on the correctness of the abstract of the dissertation and the lexical and stylistic characteristics of the text

The dissertation is devoted to topical and significant issues for theory and practice, and in the introduction of the study the author substantiates this fact with arguments. The object, subject and tasks of the study are correctly defined in order to achieve the set goal, namely to study and identify in a theoretical and practical aspect the entrepreneurial risks in the implementation of investment projects for residential construction and on this basis to formulate innovative strategies for improving the process of managing entrepreneurial risks, so as to minimize the negative impacts of the risks on the effective implementation of the investment projects for residential construction. The thesis defended by the author is that through successful management of entrepreneurial risks, construction entrepreneurs could solve to a greater extent various problems in the implementation of investment projects for residential construction. The main research methods and some limitations are indicated.

The first chapter of the dissertation is theoretical in nature and is related to the theoretical and methodological aspects of entrepreneurial risks in investment projects for residential construction. The first paragraph presents the essence of investments and investment projects for residential construction. Various definitions of the concept of investment, classifications and features are presented. The specifics of investments in real estate and investment projects for residential construction are outlined, as well as the life cycle of investment projects for residential construction is presented. In the second paragraph, attention is focused on the economic essence of entrepreneurial risks in residential investment projects. A retrospective and modern understanding of the essence of risk is presented, after which the author's attention is directed to clarifying the essence of the concept of "entrepreneurial risk". In the third paragraph, the author describes in great detail the methodology used in the dissertation to study entrepreneurial risks in investment projects for residential construction. In this paragraph, for the purposes of his research, the author adapts the well-known in the literature methodology "research onions". It also presents the essence of the concept of a 'relative impact index' applied to risk assessment and identifies some of its weaknesses. On this basis, it proposes a "modified relative impact index", which completely correctly eliminates the identified shortcomings. My impression from the first chapter is that the author has mastered the ability to research and correctly cite scientific literature and to extract the necessary information for his research. Everywhere, after studying the opinions of specialists on the topic, the author's opinion on the issue is presented. Author's definitions, classifications and views on the studied problems are deduced. All paragraphs end with summaries that lead to the research in the next paragraph.

The second chapter of the dissertation is of a research nature. It was developed on the basis of a survey designed and conducted by the author and aimed at investigating the entrepreneurial risks in investment projects for residential construction. For risk assessment in the study, the "modified relative impact index" proposed by the author was used. This chapter is logically structured in three paragraphs, each of which includes an analysis of entrepreneurial



risks affecting the budget, quality and timing of residential investment projects, respectively. First, an analysis of the data from the different phases of investment projects for residential construction has been carried out and on this basis 20 key entrepreneurial risks have been identified, which affect respectively the budget, quality and time for the implementation of the project. The survey, the results obtained and their analysis provide very valuable information about the current state of entrepreneurial risks in investment projects for residential construction. The paragraphs conclude with key conclusions and conclusions.

The third chapter of the dissertation has a research and practical nature and is dedicated to innovative strategies for managing entrepreneurial risks in residential investment projects. The first paragraph analyzes the results of a survey conducted among 50 construction entrepreneurs, representatives of 50 construction companies in Bulgaria. This analysis provides valuable data and an assessment of the effectiveness of existing project management practices in the residential sector, on the basis of which science-based recommendations and guidelines for construction entrepreneurs in Bulgaria are formulated. The second paragraph describes in detail and clearly presents the capabilities of the web-based platform for managing entrepreneurial risks in the implementation of investment projects for residential construction. This platform should be highly appreciated not only because of its real practical possibilities for risk assessment based on the "modified relative impact index", but also because it is the personal work of the author of the dissertation. The third paragraph presents the capabilities of artificial intelligence for managing entrepreneurial risks in the implementation of investment projects for residential construction. The author offers a guide to the effective use of ChatGPT 3.5 in the context of entrepreneurial risk management, formulating a sequence of actions and specific questions regarding the risks of the residential investment project.

In conclusion, the author has summarized the main results achieved in the dissertation and his vision of the theoretical and practical contribution points.

I believe that the dissertation is presented in the form of a monographic manuscript and contains significant scientific and applied results achieved on the basis of a study of a real practical problem, which can be considered an original contribution to science. The presentation is logical and consistent. The writing style is learned and readable at the same time. The literature sources used are correctly cited and the study clearly shows the author's opinion on the topic. The author has acquired in-depth theoretical and practical knowledge regarding the management of entrepreneurial risks in the implementation of investment projects for residential construction.

The abstract on the dissertation is 50 pages long and is developed according to the approved requirements. It presents correctly in an abbreviated form the content of the dissertation. The main contributions of the author are summarized and the author's publications on the topic of the dissertation are indicated.

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

In the dissertation of Miglena Staneva-Todorova, I find significant contribution points that I can divide into three groups – contributions of a theoretical nature, contributions of a research nature and contributions of a practical and applied nature.

- The contributions of a theoretical nature are mainly related to: the theoretical studies, analyses and conclusions made on the essence of the concepts of "investments", "investments in real estate", "investment projects for residential construction", "financing of an investment project" and "entrepreneurial risk"; the proposed two broad classifications of investment types and risks according to leading criteria; the proposed



'modified Relative Impact Index' specifically adapted for the purpose of the study, but applicable to other similar studies.

- The research contributions are mainly related to the surveys constructed, the surveys conducted and the summarized and analyzed results, which provides valuable information about the state of entrepreneurial risks in the implementation of investment projects for residential construction in Bulgaria and allows for the implementation of justified specific assessments and measures to limit the impact of risks.
- The contributions of a practical and applied nature are mainly related to the development of a really working web-based platform for assessing entrepreneurial risks in the implementation of investment projects for residential construction and the integration of artificial intelligence in their management.

6. Publications and participation in scientific forums

PhD student Miglena Staneva-Todorova presents three independent publications, two reports and one article, both of which are related to participation in scientific conferences "Construction Entrepreneurship and Real Estate", organized by the Department of Business, Investments, Real Estate at the University of Economics - Varna in 2017 and 2018. Journals included in the National Reference List of Contemporary Bulgarian Scientific Journals with Scientific Peer Review and therefore are evaluated with 10 points each. Thus, the minimum national requirements for awarding the educational and scientific degree of "Doctor" are met.

In the article "Economic Essence of Entrepreneurial Risk", the author traces the evolution of the concept of "entrepreneurial risk", for this purpose considering the concept of "risk" in retrospect, and then examines the modern concepts and understandings of this concept.

In the report "Risk Management through the ISO 31000 Series of International Standards", the author aims to study the existing standardization system and to study the ISO 31000 series of international standards and on this basis to present the general structure and current approaches to risk management in organizations according to the standards, with a view to future development of an up-to-date method in theory.

In the report "Entrepreneurial Risks in the Market Realization of Construction Investment Projects", the author identifies the entrepreneurial risks in the stage of market realization of construction investment projects and on this basis outlines the possible measures (recommendations) to construction entrepreneurs.

The publications are entirely related to the topic of the dissertation and also represent in-depth theoretical research that contains contributing points.

In addition to the three publications on the topic of the dissertation, Miglena Staneva-Todorova is the author/co-author of four more scientific publications, including one article, one report and one monograph.

7. Established or unestablished plagiarism in the dissertation and abstract

A plagiarism check was made in the dissertation with the help of StrikePlagiarism and this check gives me reason to assume that the dissertation and the abstract on it are the personal work of the author.

8. Critical notes and recommendations

I have two notes regarding the dissertation, which in no way detract from the efforts and results achieved by the PhD student.



- 1) In my opinion, paragraph 1.2 or 1.3 should explain more clearly why the author considers the impact of risks on the budget, quality and time of implementation of the investment project for residential construction.
- 2) Given the content of the dissertation, its title would be more specific if it contained the concept of "residential construction", i.e. "Management of entrepreneurial risks in the implementation of investment projects for residential construction".

9. Questions for the doctoral candidate

I was very interested in the innovative methods of risk management proposed by the PhD student in the implementation of investment projects for residential construction. With this in mind, I put the following questions:

- 1) The dissertation states that artificial intelligence is a system that is self-learning and developing. Given this, could you assess the risk of artificial intelligence giving inadequate or not entirely reliable recommendations at a given time for managing entrepreneurial risks in the implementation of investment projects for residential construction.
- 2) Could you present a specific scenario (approbation) during the defense of your dissertation, what recommendations can ChatGPT 3.5 give for risk management in a real or hypothetical residential investment project of your choice?

10. Conclusion

The set of documents provided to me contains everything provided for in the Regulations for the Development of the Academic Staff at the University of Economics – Varna. As a result of my acquaintance with all the details of the procedure for acquiring the educational and scientific degree of "Doctor", as well as the entire process of training in the doctoral program of Miglena Staneva-Todorova, I can confirm that all requirements have been correctly met.

The presented dissertation is a complete research in which there are significant scientific and applied contributions. I believe that the PhD student has successfully fulfilled the educational goal of the doctoral program and has mastered the ability to carry out independent applied research.

The opinion expressed in the review gives me grounds to express my positive assessment of the dissertation with full conviction and as a member of the Scientific Jury to vote FOR the acquisition by Miglena Stefanova Staneva-Todorova of the educational and scientific degree "Doctor" in the professional field 3.8 "Economics", PhD program "Economics and Management (Construction and Real Estate)".

23.08.2024

Reviewer:

Заличена информация съгласно
ЗЗЛД и регламент (ЕС) 2016/ 679

/Prof. Dr. Rosen Nikolaev/



REVIEW

By: **Assoc. Prof. Dr. Georgi Shinkov Zabunov**
Scientific specialty "Economics and management (real estate)"
University of National and World Economy - Sofia

Subject: dissertation for the award of the educational and scientific degree "PhD" in Economics and Management (Construction and Real Estate) at UE - Varna.

Author of the dissertation: *Miglena Stefanova Staneva-Todorova*

**Dissertation Topic: MANAGEMENT OF ENTREPRENEURIAL RISKS
IN THE IMPLEMENTATION OF INVESTMENT PROJECTS**

Reason for submitting the review: participation in the scientific jury for the defense of the dissertation according to the Order № RD 06-93/ 27.06.2024 of the Rector of IU - Varna and Decision of the Faculty of Economics (Minutes № 13/ 25.06.24).

1. Information about the dissertant

The dissertant was trained in the PhD programme at the Department of Economics and Construction Management (later renamed to Business, Investment, Real Estate) of the Faculty of Economics, Varna University, professional field 3.8. The training was carried out in full-time form during the period 01.02.2017 - 01.02.2020. She was discharged with the right to defend by the Order of the Rector of IU - Varna № RD 17-303/ 06.02.2020, and she should defend her dissertation by 03.02.2025.

The PhD student has successfully completed her individual plan and meets the minimum national requirements for the award of the educational and scientific degree "Doctor" in the field of higher education 3. "Social, economic and legal sciences", according to Article 2b, paragraphs 2 and 3 of the Academic Staff Development Act in the Republic of Bulgaria.

Miglena Stefanova Staneva-Todorova graduated from the Mathematical High School "Dr. Petar Beron" - Varna in 2007. In 2011 she graduated with a



Bachelor's degree in Finance from the Varna University of Economics. In the period 2014 - 2015 she studied for a Master's degree in Real Estate Economics at the same university.

While still a student, Miglena Stefanova Staneva-Todorova worked at Societe Generale Expressbank and at the Territorial Bureau of Statistics - Varna. The beginning of her real working career was in 2015, when she joined the ET "Stefan Stanev - Ace", Varna. Her duties include real estate management consultancy. In 2019, she started working at UE - Varna as a Programs and Projects Expert in the Project Management Sector. She held the position until September 2023. She has participated in the implementation of a number of research projects related to innovative practices in higher education and the labor market, sustainable construction and urban development, management of entrepreneurial risks in the implementation of investment projects, etc.

Miglena Stefanova Staneva -Todorova has successfully implemented a number of professional trainings in different areas - evaluation and selection of project proposals, urban development of the town. Varna, research funding, legal regime of electronic documents, computer and language training courses, etc. She is fluent in English.

2. General characteristics of the submitted dissertation

The dissertation has a total length of 280 pages. It includes the following required elements: an extended introduction, properly designated as an introduction to the subject, of 5 pages, a main text (consisting of three chapters) of 243 pages, a conclusion of 3 pages and 16 pages of appendices. The list of references used includes 120 references, of which 15 are official websites. The text is illustrated with 38 tables and 35 figures.

The topicality of the topic stems from the lack of similar developments in the Bulgarian economic literature and, accordingly, the need to create such.

As the object of research in the dissertation are indicated the investment projects for housing construction, and as the subject - the entrepreneurial risks in the implementation of investment projects for housing construction. It is noteworthy that the subject of study is quite broadly formulated. This requires a precise definition of the aims and objectives of the research.

The author herself defines her objective as follows: to investigate and identify entrepreneurial risks in the implementation of investment projects for housing construction and on this basis to formulate innovative strategies for improving the process of managing entrepreneurial risks. This is done both from the point of view in theory and practice. The expectation is that this will minimise the negative impacts of risks on the delivery of housing development projects. In order to achieve this goal, the following tasks are defined. They are



related to the nature of development risks and the possibilities for their identification and analysis.

The ultimate goal is to outline innovative strategies for managing entrepreneurial risks in the implementation of housing investment projects.

Methodologically, two levels of meaning are observed. Initially, the author creates a general methodological scheme. It is based on Saunders' concept. At the next meaningful level, this general concept is specified for the purpose of studying entrepreneurial risks in the implementation of housing investment projects. Historical approach, comparative analysis, qualitative and quantitative analysis, statistical methods, mathematical methods, etc. are used in the research.

Overall, the work is well structured and the style of presentation is clear and understandable. Despite the larger length, the content is easily perceived by the reader.

3. Evaluation of the obtained scientific and applied results

The following major scientific and applied results can be highlighted in the presented dissertation:

- The peculiarities of real estate investments and the nature of investment projects for housing construction are clarified.
- The sequence of essential stages in the life cycle of investment projects for housing construction as a basis for their effective management is presented.
- A historical analysis of the evolution of the understanding of the concept of entrepreneurial risk is made, and the conclusions are made specific to housing investment projects.
- A good hit is the classification of specific entrepreneurial risks in housing investment projects based on the life cycle of investment projects.
- Based on the above, a comprehensive methodology for the study of entrepreneurial risks in housing investment projects is developed and presented.
- With the help of the developed methodology, the entrepreneurial risks in housing investment projects are investigated and analyzed in terms of their impact on the budget, quality and project delivery time.
- For each impact aspect (budget, quality and lead time), 20 key entrepreneurial risks are identified and ranked for further management.



- Based on the described analysis, innovative strategies are proposed to manage entrepreneurial risks in housing investment projects. These strategies include the use of a web-based platform and artificial intelligence for risk management.

In practice, the analysis carried out, the development of the methodology and the proposal of innovative risk management strategies is a testimony to the implementation of the research plan and the achievement of the aim and objectives of the study.

4. Evaluation of scientific and applied contributions

Overall, I accept the scientific and applied contributions of the author. In order to make them clearer, I would restate them as follows:

1. The concepts of "investments", "real estate investments", "investment projects for housing construction", "financing of an investment project" and "entrepreneurial risk" have been clarified and creatively reformulated for the purposes of the research.

2. Two new classifications of investment types and risks by life cycle phases of housing investment projects are proposed.

3. Based on the adapted "Research Onion" approach of M. Saunders, a methodology is developed for the study of entrepreneurial risks in the implementation of housing investment projects. An essential point is the substantiation of the data analysis method "Relative Impact Index", which is adapted for the purposes of the research.

4. On the basis of empirical data from implemented housing investment projects in Bulgaria, key entrepreneurial risks for the three main project objectives - budget, quality, time - are identified.

5. Innovative strategies for managing entrepreneurial risks in the implementation of investment projects for housing construction in Bulgaria are outlined. These include the development of a web-based risk assessment platform and the integration of artificial intelligence in their management.

I define the first two contributions as scientific and the remaining as applied research.

5. Evaluation of the dissertation publications

Miglena Stefanova Staneva-Todorova has submitted three independent publications on the topic of the dissertation - one scientific article and two scientific reports. The publications were written within three consecutive years between 2017 and 2019. The article was published in a peer-reviewed scientific journal specialized in real estate. The papers have been presented at reputable



scientific forums in Bulgaria.

The presented publications are on the topic of the dissertation and present to the scientific community significant results achieved with the dissertation. In terms of quantity and quality, the publications meet the minimum national requirements for the award of the educational and scientific degree "PhD", in accordance with the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation.

6. Evaluation of the abstract

The presented abstract is 50 pages long and summarizes the content of the main structural parts of the dissertation. It is developed in accordance with the legal requirements for its formatting. It presents in good faith the content of the dissertation and the author's achievements.

7. Critical comments, recommendations and questions

Some critical remarks and recommendations can be made to the PhD student.

Regarding the volume of the presented dissertation, I would recommend the author to stick to a more compact presentation of the content in her future research works. The balance between quantitative and qualitative analysis also implies a balance between the level of theoretical abstraction in these two aspects.

The innovative strategies proposed by the author for managing entrepreneurial risks in the implementation of housing investment projects are more in the nature of strategic approaches than strategies. Let us not forget that a strategy is, by its very nature, a comprehensive plan for a single application aimed at solving a specific complex problem. Comprehensiveness is ensured by properly prioritizing interaction with the environment and effectively leveraging the organization's own strengths and weaknesses. In this case, both the tools proposed by the author, the web-based platform and artificial intelligence, are mainly focused on the internal environment of the organization. Moreover, the possibilities for their use are presented conceptually.

The criticisms I have mentioned in no way change the overall positive impression of the thesis. I address them as recommendations to the doctoral candidate to further develop her proposed conceptual model for the management of entrepreneurial risks in the implementation of investment projects for housing construction. In this context, I have the following question for the PhD student:

How does she see the possibilities to use her proposed tools (web-based platform and artificial intelligence) for an adequate analysis of the external



environment in the management of investment projects?

8. Conclusion

The presented dissertation "**Management of Entrepreneurial Risks in the Implementation of Investment Projects**" meets the requirements for the award of the educational and scientific degree "PhD" under the Law for the Development of Academic Staff in the Republic of Bulgaria and its Implementing Regulations.

On the basis of the above, **I give my positive assessment** and recommend to the distinguished members of the scientific jury to vote "FOR" the award of the educational and scientific degree "PhD" in the professional field 3.8. Economics, scientific specialty Economics and Management (Construction and Real Estate) at the Varna University of Economics to **Miglena Stefanova Staneva-Todorova**.

13.09.2024

Reviewer:

Заличена информация съгласно
ЗЗЛД и регламент (ЕС) 2016/ 679