OPINION FOR DISSERTATION PAPER

By assoc. prof. Dr. Daniela Ventsislavova Georgieva International business school professional field 3.8 "Economics"

Regarding: Dissertation on the award of educational and scientific degree "Doctor" in professional field 3.7. "Administration and management" (Business administration) at International business school.

Author of the dissertation: Katerina Nikolova Pankova

The theme of the dissertation: Risk management for long-term projects in the

business environment with the help of real options and leasing

Reason for submitting the opinion: participation in the scientific jury following Order $Noldsymbol{0}$ 21 from 31.01.2022 by the Rector of IBS.

1. Information about the candidate

Katerina Nikolova Pankova has been trained under a Doctoral Program 3.7. "Administration and management" (Business administration) based on Order № 272 from 04.11.2019 by the Rector of IBS. The study was carried out in free form (self-preparation) during the period 04.11.2019 – 04.11.2022. The candidate is allowed to defend her doctoral paper based on Order № 20 from 31.01.2022 by the Rector of IBS.

The candidate has graduated with a Bachelor's degree in International Relations, with a professional qualification: Specialist in Diplomatic, Consular and Foreign Policy at the Southwestern University "Neofit Rilski" in 2008 and has a Master's degree in Business Administration in 2014 from the University of National and World Economy. From 2008 until now Katerina Pankova hold positions as office manager in "BIGLA III" Ltd.; Agent - work with clients in Sutherland Global Services and expert in Amgen Bulgaria EOOD. In addition, the doctoral candidate has completed an internship at the Diplomatic Institute of the Ministry of Foreign Affairs of the Republic of Bulgaria in 2009. The professional interests and career development of the candidate are related to the issues discussed in the dissertation and are indicative of focusing on the biography and scientific work of Katerina Nikolova Pankova in the field of

administration and management.

2. General characteristics of the doctoral thesis

The topic chosen by the doctoral student is dissertable, allowing to highlight significant problems in the management and the control of project activities based on risk management. The topicality of the analyzed issues stems from the need to make effective and efficient management decisions to develop, begin and invest in a long-term project when there is economic uncertainty. In addition, the risk assessment, as a result of changes in external and internal environmental factors at the stage of preparation of a project, is fundamental for its successful implementation.

Structurally, the thesis is logically presented and has a comparative balance between its individual parts. The dissertation covers a volume of 186 standard pages, distributed as follows: introduction (8 pages); main text, systematized in three chapters (154 pages); conclusion (7 pages); list of used literature (6 pages) and appendices (5 pages). The content of the dissertation is illustrated by 37 tables and 5 figures. The bibliographic references contain 142 sources, of which 37 are scientific titles by Bulgarian authors. There are no cited normative documents or information sources on the Internet. However, I encourage the candidate to make a more in-depth analysis of the legislation in the field, given the fact that the study addresses issues directly related to the applicable law.

In the introduction, Katerina Pankova justifies the importance of the chosen topic and clearly defines the purpose, research tasks, subject, object, as well as the research thesis limits. The main thesis of the dissertation is that "the risk in investment activity emerged in the new economic and financial realities of the early XXI century trends in the materialization of risk factors and circumstances in investment activity require finding new approaches to risk management in the long run. projects". Three hypotheses are derived for validation from the main thesis. The used research methods and scientific approaches allow being conducted more in-depth research on the selected issues, as well as reliable argumentation of the thesis and hypotheses set by the author.

The writing style of the thesis and the used terminology are at the required scientific level. There are references for the sources that the doctoral student used in the text. Based on the above, the structure of the thesis meets the requirements for the dissertation.

3. Dissertation's content evaluation

The first chapter of the dissertation is entitled "Theoretical foundations of risk management" and is devoted to the relationship between the categories "uncertainty" and "risk". The main emphasis of the theoretical review is on the risk factors and their types, risk management strategies, and methodological aspects and criteria for risk decision-making. A theoretically based conclusion is drawn that "risk decisions are not amenable to precise formalization and do not allow the creation of formalized criteria in the form of risk-utility functions or risk preferences. In most cases, these are subjective recommendations that can be taken into account in the risk-making process, based on the specifics of the nature of the manager, owner of the entity or other decision-makers". The in-depth analysis in the first chapter of the dissertation is in accordance with the first and second research tasks set by Katerina Pankova in the introduction, and they are the basis for upgrading the research study in the second chapter.

The second chapter of the dissertation is entitled "Analytical methods for reporting and justification of risks in long-term projects". It focuses on a more in-depth analysis of the methods for reporting and justifying risks in long-term projects. In detail it has been studied and summarized the following:

- Modeling changes in cash flow parameters and substantiation of net present value (NPV) sustainability estimates, which is linked to the methods of discrete analysis and Monte - Carlo.
- The sequence of calculations in the discrete analysis of the sensitivity of NPV for the investment project concerning changes in cash flow parameters and the base interest rate based on simulation modeling.

The made analyzes and conclusions in the second chapter of the dissertation correspond to the fourth research task set by the author.

The third chapter entitled "Possible practical approaches to risk management in long-term projects" is devoted to the presentation of a methodology for examining approaches to risk management by specifying each of the components. The operational risk management is studied with the help of the real options and leasing in a real entity - BioPharmG Int. The practical-applied analyzes made in the third chapter of the dissertation are in line with the third research task.

In conclusion, Katerina Pankova can clearly outline and scientifically argue her views on the issue, offering methodological solutions and proposals. In this context, the presented dissertation has evidence of scientific and applied results.

4. Evaluation of the scientific contributions of the dissertation

A thorough reading of the presented dissertation gives me a reason to accept the doctoral student's claims for scientific and practical contributions. However, they should be more clearly outlined at the dissertation.

5. Dissertation's abstract evaluation

The abstract is 37 pages long, incl. title page, publications on the topic and main text. The summary of the contributions presents the scientific achievements in the dissertation.

6. Publications and participation in scientific forums

Katerina Pankova presented 3 (three) scientific publications, of which 1 (one) report, 1 (one) article, and 1 (one) study in a yearbook of scientific papers. The scientific publications presented by the candidate are related to the topic and content of the dissertation and correspond to the required number of publications.

7. Critical remarks and recommendations

To a large extent, all my critical remarks and recommendations that I have made in the internal defense of the dissertation are faithfully reflected by the doctoral student in the current version of the thesis. I would like to recommend Katerina Pankova to continue her analysis of the problem, carefully using some foreign words which are not implemented in the Bulgarian language (for example p. 152).

To the author of the dissertation, I have the following question: How does the life cycle of the company, its legal status, and whether it is a family business or not affect the choice of risk management approach in long-term projects?

8. Conclusions

The dissertation thesis "Risk management for long-term projects in the business environment with the help of real options and leasing" contains scientific and scientific-applied contributions and meets the requirements of the law on the development of the academic staff in the Republic of Bulgaria, the Regulations for its implementation and the internal rules of IBS. The goal set in the dissertation has been achieved. The thesis's contributions enrich the existing knowledge and can support the practice in the researched field. On this basis, I support the award of the educational and scientific degree "Doctor" in a professional field 3.7. "Administration and management" to Katerina Nikolova Pankova.



By the requirements of the law, this opinion ends with a positive assessment of the dissertation.

06.04.2022 Γ. Assoc. prof. Daniela Georgieva Sofia Signature: