### **OPINION**

## By: prof. Angel Marchev, PhD

Subject: dissertation for the award of the scientific degree "**Doctor of Science**" in the professional field 3.8 Economics; Economics and Management (Industry) at Sofia University "St. Kliment Ohridski".

Basis for the presentation of the opinion: Order № RD 38-232 / 24.06.2020

Author: prof. Anton Antonov Gerunov, PhD

Topic: "Automated approaches to operational risk management"

#### 1. Information about the author

I know the author from his many public appearances and successful business ventures. I had the pleasure to be a member of the scientific jury for his habilitation. For several months we have been colleagues at the Faculty of Economics at Sofia University. I have also been a reviewer of his previous publications.

Professor Gerunov enjoys authority and respect among teachers and students at the Faculty, among non-governmental organizations and among specialists in empirical research in Bulgaria. His significant public presence in various government bodies, his work on important bills, successful innovative business and especially on the publication of data sets of great public importance are highly appreciated. With his overall teaching, research and management activities, Anton Gerunov has established himself as a leading author, lecturer, and specialist.

### 2. General characteristics of the presented dissertation

The dissertation is developed in a volume of 364 pages and includes an introduction, five chapters, a conclusion, used information sources and appendices. The structure of five chapters follows the need for a detailed consideration of separate theoretical and methodological aspects of the topic. Thus, the first two chapters are essentially of a theoretical nature, and the last three - of a methodological nature and include empirical research.

The actuality of the topic is presented in a separate section of the introduction and is gradually presented in the theoretical part. The goal is appropriately defined and well decomposed into tasks. The object and the subject of the research are clearly defined. The main author's thesis is achievable (although quite ambitious) and supported by the necessary preliminary definitions.

Used scientific literature is in volume of over 500 titles in English and Bulgarian, the vast majority are closely specialized and actual scientific articles,

including publications of the author. The used sources demonstrate the serious understanding of the author on the issues considered in the dissertation, as well as the huge research work done in the dissertation.

## 3. Evaluation of the obtained scientific and scientific-applied results

The dissertation presents nine claims for scientific contributions. I consider the contributions presented in this way to be achieved and correctly defined.

The main scientific and applied results are of methodological and applied nature. The methodological results are in two directions - developed algorithm and architecture for automated management of operational risks and conducted numerous tests and their summarization regarding the applicability of over 245 algorithms in the study area.

The applied results are related to the developed system for automated management of operational risks, together with its special criteria and definitions.

The authorship of the described results is not in doubt, and in addition to their detailed description in the dissertation, the author has described empirical results from a large-scale empirical study.

The tasks set in the introduction are achieved and considered in the dissertation, which in fact means that the set goal is fulfilled.

# 4. Evaluation of the dissertation publications

The author has presented ten publications on the topic, including: a monograph, a chapter from a book, three studies and five articles. The publications reflect important moments from the dissertation and develop in detail some of them. In this form and volume, they fully cover the needs for popularization of the ideas from the dissertation and for critical review of the most important ones.

#### 5. Evaluation of the abstract

The abstract is designed according to the normal technical requirements and reflects all the essential points of the presented dissertation.

### 6. Critical remarks, recommendations, and questions

It is very rare that I do not find ways to improve a written material, but this dissertation is such a case. The presented scientific work is performed at the highest level - including the academic style, the consistent terminology, the completeness of the tracing of the logical branches, the formatting, and the structure. In this sense, my only suggestion is to translate the presented material in English and to seek its publication through a prestigious publisher.

### 7. Conclusion

In conclusion, I believe that the presented dissertation has sufficient merits that give me reason to recommend to the esteemed scientific jury to award the degree of "Doctor of Science" professional field 3.8 Economics; Economics and Management (Industry) at Sofia University "St. Kliment Ohridski "by Assoc. Prof. Dr. Anton Antonov Gerunov for the dissertation on the topic:" Automated approaches to operational risk management".

Sofia,	Signature:
01.09.2020	Angel Angelov Marchev