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OPINION

Submitted by Prof. Vanya Kuzdova Banabakova, DSc

in field of higher education 3 "Social, Economic, and Legal Sciences", professional direction 3.7 "Administration and Management", scientific specialty "Organisation and Management outside the Field of the Material Production",

National Military University "Vasil Levski", Veliko Tarnovo

regarding a dissertation paper by author

Radka Ivanova Vasileva

on the TOPIC: "Possibilities for Reducing the Ceding Company's Property Insurance Payments in the Context of its Reinsurance Programme"

submitted for the educational and scientific degree "Doctor",
in professional direction 3.8 Economics,
scientific specialty "Finance, Money Circulation, Credit, and Insurance
(Insurance and Social Security)"

Basis for writing the opinion: Order No. 626/27.06.2024 of the Rector of D. A. Tsenov Academy of Economics - Svishtov, appointing the scientific jury and Protocol No. 1 dated 01.07.2024 from the first meeting of the scientific jury

1. General presentation of the dissertation paper

The dissertation on the topic "Possibilities for Reducing the Ceding Company's Property Insurance Payments in the Context of its Reinsurance Programme" is focused on investigating significant and current issues related to property insurance.

The doctoral dissertation comprises 229 pages, of which 194 pages are the main text (including the conclusion), and includes an introduction, three chapters, conclusion, list of references, and 22 appendices. The dissertation includes 34 tables and 13 figures. It utilizes 74 sources in Bulgarian, Russian, and English languages.

The presented doctoral dissertation complies with Article 27, paragraph 2 of the Regulation for the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria.

2. Evaluation of the form and content of the dissertation work

The presented doctoral dissertation explores a current topic of national and international significance related to the necessity for scientific research aimed at seeking new solutions to real and potential issues in property insurance.

The introduction justifies the relevance of the topic and precisely defines the object and subject of the study, its aim, and four research tasks.

The author of the doctoral dissertation has drawn the **research thesis** that through correctly defined retention, within the framework of the established reinsurance programme, there exists significant potential for reducing payments and optimising the results of the insurance company operating in the field of property insurance.

In the introduction of the dissertation, the scope of the study is defined, which aims to identify the problems related to reducing payouts made by insurers and outlining opportunities to optimise these payments in property insurance within the defined retention, which is an important element of the reinsurance programme.

In developing the dissertation and achieving its goal, addressing the research tasks, and proving the research thesis, scientific research approaches and methods such as: analysis and synthesis, historical, comparative, and critical analysis, methods for gathering secondary and primary data — survey and interview methods, and observational methods, statistical methods for data processing and analysis, and others have been utilized. The conducted analyses are based on official statistical information obtained from publications of the Financial Supervision Commission and internal company data adjusted with approximate values. The theoretical and methodological foundation of the doctoral study relies on the works of leading Bulgarian and foreign scholars in the fields of insurance, management, and economic and statistical analysis.

The relevance of the dissertation topic and its development are shaped by various assumptions and established practices in property insurance, where the presence of risks necessitates insurers to seek ways to mitigate adverse effects, often through sharing risk with reinsurers via diverse reinsurance contracts; however, these practices encounter challenges effectively addressed not solely through individual reinsurance contracts but through a comprehensive approach, including the development of a comprehensive reinsurance programme; concerning the reduction of payouts and the assumption of a portion thereof by reinsurers, a key element in the reinsurance programme is the accurate definition of "ceding company's retention", enabling the quantitative assessment of significant potential losses that form the basis for determining the maximum amount of claims insurers can pay without encountering serious difficulties and others.

In the first chapter of the doctoral dissertation, the author conducts a comparative and critical analysis of the theoretical principles related to the essence, characteristics, and types of property insurance. She has investigated the peculiarities in the adjustment of claims and determination of the insurance indemnity in property insurance. The author has analysed the state and trends in the development of the insurance market in Bulgaria from 2018 to 2022 within the context of reinsurance relationships. She has focused the study on using the "coefficient of variation" as a tool for analysing the property insurance market and the necessity for additional reinsurance protection. In this regard, the author has conducted an in-depth analysis and drawn corresponding conclusions – pages 70-71.

In the second chapter of the dissertation, the author has conducted a historical, comparative, and critical analysis of theoretical frameworks with practical application related to reinsurance as a method for risk equalisation outside the insurance pool. She has developed and substantiated the need for developing a reinsurance programme within the insurance company, defining its essence, objectives, and advantages, and has presented an algorithm for its development and organisation. At the end of the second chapter, the author has drawn in-depth conclusions – pages 126-129.

The third chapter is of a scientific-applied nature and is aimed at deriving the main guidelines for minimising adverse payment deviations within the insurance pool (aggregate) for property insurance, within the framework of a developed reinsurance programme. To highlight these guidelines, the retention of the insurer has been analysed as a component of the cedant's reinsurance programme and the factors influencing it have been examined. Real and potential opportunities for determining the retention in various forms of reinsurance have been identified, and other possibilities for reducing insurer payments within their retention have been outlined. At the end of the third chapter, conclusions have been formulated and recommendations for improvement and development have been provided – pages 196-198.

In the conclusion of the dissertation, the achieved scientific and scientifically-applied results of the conducted research are summarised.

The content of the doctoral dissertation fully corresponds to its topic. The stated aim and research tasks have been completely achieved. The first chapter addresses the first and second research tasks, the second chapter addresses the third research task, and the third chapter addresses the fourth task.

The research thesis has been proven based on conducted empirical studies and statistical analyses.

The dissertation is developed consistently and logically in terms of methodology and structure. The author is highly proficient in the terminology related to the subject matter, has conducted empirical research, and has used statistical methods for data processing and analysis. Stylistically, the doctoral dissertation is presented very well. The author has provided innovative, scientifically substantiated proposals with practical applications for improving insurance activities in the field of property insurance and reducing risk in this area.

The dissertation includes significant scientific and practical results, which constitute an original contribution to science. The dissertation demonstrates that its author has deep theoretical knowledge in the scientific field and the capability for independent scientific research. I believe that the submitted dissertation fully complies with the requirement of Article 27, Paragraph 1 of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria.

The volume of the dissertation is optimal in terms of the completeness and thoroughness of the scientific research, as well as in terms of the requirements for a dissertation for obtaining the educational and scientific degree "Doctor".

The developed dissertation is the author's own work. No plagiarism has been found in the dissertation or the abstract, and I have no doubts regarding this. The abstract is developed in a volume of 42 pages. It accurately reflects the content of the dissertation on the topic "Possibilities for Reducing the Ceding Company's Property Insurance Payments in the Context of its Reinsurance Programme", and includes the required scientific and applied scientific contributions as well as a list of scientific publications on the topic.

3. Scientific and scientific-applied contributions of the dissertation

The submitted dissertation contains scientific and scientific-applied contributions. I accept the scientific and scientific-applied contributions formulated by the author of the dissertation.

The following scientific contributions stand out as the most significant:

• The scientific knowledge regarding the essence of reinsurance, its classification, methods, and forms, has been further developed and enriched based on historical, comparative, and critical analysis. The role of reinsurance as a tool for reducing the size and fluctuations of indemnity

- payments in property insurance and for ensuring the homogeneity of insured sums has been substantiated.
- The essence of the cedant's retention as an element of a developed reinsurance programme has been defined, and its importance for making a quantitative assessment of the main potential losses has been proven. Based on this assessment, the insurance company can determine how much of these losses it can cover without negatively affecting its financial results.

The following **scientific-applied contributions** stand out as the most significant:

- The necessity has been argued and demonstrated, and accordingly, a methodology has been proposed as an additional option for introducing and analysing the potential "need for reinsurance protection". This is based on calculating coefficients of variation of indemnities paid, loss ratios, and the probability of occurrence of an insured event for each individual property insurance. Data from the Financial Supervision Commission related to the state of the property insurance market in Bulgaria have been used and analysed in this process.
- Various approaches have been proposed for calculating retention levels based on the application of appropriate mathematical-statistical tools. These approaches will enable the cedant to reduce fluctuations in results within the formed insurance portfolio and, consequently, decrease the size of indemnity payments.

I accept the contributions thus formulated as significant for both science and practice.

On the topic of the dissertation, the author has presented 5 scientific publications, including 4 scientific articles and 1 scientific report. Of the presented publications, 4 are single-authored, and 1 is co-authored, with 4 in Bulgarian and 1 in English, published in a foreign scientific journal. From the presented publications, the doctoral candidate has accumulated 41.6 points, with a minimum requirement of 30 points.

The doctoral candidate participated in an international scientific-practical conference on the topic "Sustainable Development and Socio-Economic Cohesion in the 21st Century – Trends and Challenges", held at D. A. Tsenov Academy of Economics, Svishtov, in 2021.

With the presented scientific publications, Radka Ivanova Vasileva meets the minimum national requirements for obtaining the educational and scientific degree of Doctor in the field of higher education 3. Social, Economic, and Legal Sciences, professional direction 3.8. Economics, according to Article 2b, Paragraphs 2 and 3 of the Law on the Development of the Academic Staff in the Republic of Bulgaria.

4. Questions, critical notes and recommendations regarding the dissertation

Question: What are the insurance companies' attitudes toward implementing the methodology proposed by the dissertation author for applying the cedants' retention as a critical element of their reinsurance programme in property insurance, and do they perceive its benefits?

The dissertation on the topic "Possibilities for Reducing the Ceding Company's Property Insurance Payments in the Context of its Reinsurance Programme" represents a fully completed scientific work and contains in-depth research on the scientific and applied problems addressed.

I have no critical remarks.

As a recommendation and encouragement to the author of the dissertation, Radka Ivanova Vasileva, I suggest continuing her research work and publishing in international scientific journals. This will enable her to present the scientific and applied results of her research to a broader audience.

5. Summary evaluation of the dissertation and conclusion

Radka Ivanova Vasileva's dissertation and author's abstract fully comply with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, the minimum national requirements for obtaining the educational and scientific degree "Doctor" in professional field 3.8. Economics, and the requirements of D. A. Tsenov Academy of Economics, Svishtov.

I give a positive assessment of Radka Ivanova Vasileva's dissertation on the topic "Possibilities for Reducing the Ceding Company's Property Insurance Payments in the Context of its Reinsurance Programme". I recommend to the esteemed members of the scientific committee that Radka Ivanova Vasileva be awarded the educational and scientific degree "Doctor" in the field of higher education 3. Social, Economic, and Legal Sciences, professional field 3.8. Economics, and scientific specialty "Finance, Money Circulation, Credit, and Insurance (Insurance and Social Security)".

Author of the opinion:		
(Prof Var	ıva Banahakova, DS	C

16 July 2024 Veliko Tarnovo