

REVIEW

by Prof. Neno Pavlov, PhD in Economics
Professional field 3.8. "Economics", Scientific speciality
"Finance, money circulation, credit and insurance"

Subject: competition for the academic post of Professor in the professional field 3.8. "Economics", scientific specialty "Finance, money circulation, credit and insurance (insurance and risk management)"

1. Information about the competition

The competition was announced for the needs of the Department of Finance and Insurance by a decision of the Academic Council, promulgated in the State Gazette, issue 5 of 17.01.2025 and on the website of the Higher School of Insurance and Finance. I participate in the composition of the Scientific Jury of the competition by Order No. 151/13.05.2025 of the Rector Corresponding Member Professor, Doctor of Law Boris Velchev. By the decision of the first meeting of the Scientific Jury I have been appointed as an external reviewer for the competition procedure.

In the announced competition for "professor" only one candidate participated, Assoc. Prof., DSc Irena Nikolova Markova, academic lecturer at the Department of Finance and Insurance of the Higher School of Insurance and Finance.

2. General presentation of the materials received for review

The candidate for "professor" submits in full **a set of documents** in electronic form (more than 22 items) for consideration and evaluation of the candidate in the procedure of the competition for "professor", in the context of the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria (DASRBA) and the Internal Regulations for Academic Positions in the Higher School of Insurance and Finance. The scientific production submitted, and the official competition documents are legally elaborated for the decision on the procedure for the selection of the candidate to occupy the position of "Professor" in the (Higher School of Insurance and Finance). I have found no formal irregularities in the announced competition and no problems of compliance with the applicable legal academic rules.

3. General description of the applicant's activities

3.1. Brief biographical details of the applicant

Assoc. Prof. Irena Markova was born in Sofia. She is an academic lecturer at the Department of Finance and Insurance of the Higher School of Insurance and Finance. She graduated in higher education in the specialty of "Finance and Credit (1990) at the Academy of Economics - Svishtov. He holds a Doctor of Education and Science degree in Economics from 2000 and a Doctor of Science degree from 2023.

The candidate's academic career is associated with holding successively the academic positions of "assistant", "senior", "chief assistant" and "associate professor" at the Academy of Economics - Svishov (1994-2007), at the UNWE "associate professor" (from 2007 until present) and at the Higher School of Insurance and Finance (from 2005 to 2020 and from 2024 until present).

In the course of her career development, Assoc. Prof. Markova has successfully built on her rich academic and practical-applied profile through long-standing participation as a regular member of Academic and Faculty Councils (2009-2020) at the UNWE and the Higher School of Insurance and Finance, Dean of Academic Program, member of more than five University Editorial Boards of scientific journals and academic literature, a member of Professional Organizations in the field of education, marketing and management, independent member of the Board of Directors of MFG Ins EAD since 09.02.2023 and Independent Member of the Supervisory Board of UBB-MetLife Insurance Company 2012 - 2018), Scientific Secretary of the Department, member of more than 22 scientific juries on academic procedures in higher education institutions, specializations in prestigious institutions, including for translator of economic literature, internal auditor of quality systems in higher education institutions, participation in conference appearances of universities in Switzerland, France and Italy, member of program and organizing committees, moderator of scientific forums in the country, etc.

She possesses specialized computer skills for professional use of working general-purpose software products, organizational and communication skills, very good foreign language skills in English, French and Russian, as well as professional expertise in insurance risk assessment.

The scientific interests of Assoc. Prof. Markova's research interests are mainly in the following thematic areas: insurance marketing and intermediation, health insurance, environmental and marine insurance, cosmetic insurance, controlling and risk management in insurance.

The short biographical reference presents the candidate as a **proven, career-established and well-established academic lecturer with extensive experience, clear scientific orientations and research competences in the professional field of the competition procedure for the position of "Professor"**.

3.2. Compliance with the national minimum science metrics requirements for participation in the competition

The detailed analytical information submitted on the fulfilment of the national minimum science-metric compliance indicators referred to in Article 29(1)(5) of the Act on Development of the Academic Staff in the Republic of Bulgaria proves that the candidate Assoc. Prof. Markova fully fulfils their requirements for the desired university position of "Professor" in the Higher School of Insurance and Finance:

- Group "A" performance - 50 points with a minimum of 50 points;
- Group "B" performance - 100 points with a minimum of 100 points;

- Group D performance - 200 points with a minimum of 200 points;
- Group E performance - 355 points with a minimum of 100 points and
- Group F performance - 165 points with a minimum of 100 points.

The report shows the highest over-achievement of the minimum requirements in the group of "E" academic indicators.

3.3. Evaluation of scientific and applied activities

In the current procedure for "Professor" the candidate submits a **total of 20 publications** of different scientific genres, meeting the current academic standards of the school and the country.

Structurally, the scientific output includes: **monographs** - 1 pc. (peer-reviewed habilitation thesis) in the volume of 165 pages, independently developed; **article** - 1 pc., published in a scientific journal, peer-reviewed, and indexed in world-renowned databases; **articles and scientific reports** - 11 pc., published in non-refereed journals with scientific review; **studies** - 5 pcs. published in non-refereed journals with scientific review; **academic textbooks** - 2 pcs. co-authored, including for insurance education in secondary vocational schools. The submitted publications have clear scientific and applied orientations related to the scientific specialty of the competition.

In assessing the competence of the candidate for the position of professor, pursuant to Art. 29(1)(3) of the Act on Development of the Academic Staff in the Republic of Bulgaria, particular weight shall be given to the monographic work, or a peer-reviewed published monograph.

I believe that from the content point of view, the monograph "**Space Insurance (Challenges, Practices and Solutions)**" [in Bulgarian: „Космическо застраховане (предизвикателства, практики и решения)”, C., Sv. Grigorii Bogoslov Publishing House, Higher School of Insurance and Finance, C. 2025, pp. 165, is a comprehensive and complete interdisciplinary research devoted to a specifically formulated economically significant problem of scientific and applied relevance.

The text is 165 pages long, structured in an introduction - 6 pages, three thematic chapters - 103 pages, based on the results achieved in the author's research, a conclusion - 16 pages, annexes - 29 pages, a glossary and an extensive bibliography, including 85 works in Cyrillic and 31 in Latin.

It is the result of the author's focused work in recent years on the problems of space insurance and its theoretical and applied aspects, supporting the attempt to study the contemporary market demand and supply of space insurance coverage in the current conditions and environment.

With the necessary competence and academic insight, thoroughness, theoretical and scientific-empirical argumentation are formulated the relevant conclusions and generalizations, methodological and practical solutions to increase insurance coverage.

I take it as an in-depth scientific study of both the necessity and importance of insurance for the space industry and the challenges facing the insurance business regarding the future development of space insurance and reinsurance.

With the necessary competence, thoroughness and empirical argumentation, the author presents the specific scientific-theoretical, methodological and practical solutions based on meaningful scientific research potential, publications and practical-applied expertise of the candidate in the field of space insurance.

The first chapter analyses the legislative basis and regulations of the aerospace industry globally. *The second chapter* is oriented towards the genesis, profile, significance, identification and assessment of space risks, linking and integrating the insurance business in the space industry through the coverage of space risks.

The third chapter presents the opportunities and challenges for insurers, their strategic business orientations towards the future development of space insurance and reinsurance.

The research *aims and objectives* are fulfilled on the basis of the studied specialized literature in the field of space insurance, theoretical-methodological and empirical information on the insurance and reinsurance of space risks, in accordance with the previously accepted limiting conditions and framework of the monographic research.

The attempt to outline and justify the need for and importance of insurance activity for the future development of the aerospace industry, to present the perspectives and requirements for the insurance business regarding the formation and implementation of corporate policies, actuarial calculations, pricing and management decisions in the field of aerospace insurance is noteworthy.

A contribution point is contained in the attempt to construct a general conceptual model for the formation and regulation of the price of insurance protection policies in space insurance, based on the features and specifics of space risks, objects, subjects and activities in the modern space industry.

The specialized survey conducted among the students studying in the educational-qualification degree "Bachelor" and educational-qualification degree "Master" in the Higher School of Insurance and Finance, gives the author grounds and opportunities to validate to a certain extent the formulated research theses and sub-theses, as well as to make final generalizations about the impact of space insurance on corporate risk management of entities in the space sector. It is expected that more and more spacecraft and satellites, mostly in low earth orbit, will purchase insurance, and more and more insurance companies will participate in the market and offer satellite coverage.

With the necessary competence and academic insight, depth, theoretical and scientific-empirical argumentation, specific problems and challenges to insurance legislation and insurance protection in the field of space insurance, as well as to the future activity of so-called space insurers in the policy market are formulated.

The other publications submitted for evaluation, **outside the habilitation thesis**, cover important scientific-theoretical and applied aspects of the thematic area - *insurance and risk management*, within the scientific specialty of the competition.

First, the policies and practices in the field of economics and organization of space insurance, in the context of: the factors, opportunities and expectations for the intensification of transformations in the space industry, including the integration of insurance coverage of space risks in business companies; the theoretical and applied aspects of space insurance risks,

in the demand and supply of market insurance products/policies for space activities; the features, specifics and the diversity of space risks, which are a new addition to the insurance portfolio of companies, through their corporate governance of space risks;

Secondly, the series of publications highlighting and analyzing the problems of the insurance culture of the population as an indicator of consumer demand for insurance products and the development of the insurance business; the development of health insurance, including the professional liability of medical personnel; the innovation of the means, measures and programs of marketing policy and strategy in the implementation of marketing solutions for the development of the placement activity, as a guarantee of increased competitiveness and growth of insurance companies; analysis of the problems of insuring the risk of piracy in marine insurance, its nature and characteristics as an insurance risk, the insurance products offered on the market by marine insurers to cover losses from this risk.

Third, publications presenting in-depth analyses of the need for increasing investment in innovative insurance industry technologies, such as artificial intelligence, blockchain technologies, cloud technologies and big data analytics; the improvement of insurance in Bulgaria's tourism sector, offering flexible insurance services and adequate, competitive insurance products that meet the increased consumer valuation criteria in the market, for both tourists and tourism operators; proving the thesis that effective insurance management in a competitive environment increasingly depends on the successful implementation of operational controlling within the structure of the insurance company.

The presented scientific work of the candidate is related to dominant, respectively over 90% of independent research and publications and 25% of them printed in English.

Articles have been published in academic journals of repute, and conference proceedings with editorial boards, peer-reviewed and registered with the National Information and Documentation Center.

Assoc. Prof. DSc. Markova has actively participated as a member of the working teams in the implementation of a number of research and educational projects, including those on economic education in the country, funded by various programs. In recent years, the scientific supervision of three PhD students (including one foreigner) who successfully defended their dissertations and obtained the degree of Doctor of Education has been reported.

I accept as realistic, fair and objective the submitted **Report on the contributions to the overall research activity of the candidate for professor.**

The presented analytical information on the scientific research activity, including a variety of scientific and applied works, is evidence of authoritative public disclosure of the candidate's research results in the specialty of the competition among the scientific community in the country and abroad. Taken as a whole, they **confirm the fulfilment of the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria and the Rules on the Implementation of the Act on Development of the Academic Staff in the Republic of Bulgaria for holding the academic post of Professor in the profile of the competition.**

As of the date of the review, there is no evidence of plagiarism in the submitted scientific publications of the candidate.

3.4 Evaluation of teaching and learning activities

The teaching experience presents Assoc. Prof., DSc. Irena Markova as an undisputed and recognized academic author and lecturer of a series of topical and basic for the specialty academic disciplines, including "Fundamentals of Insurance", "Insurance Products and Insurance Market", "Internal Control", "Applied Insurance and Regulatory Risk Management", "Investment Policy and Capital Management of the Insurance Company", "Risk Management", "Property Insurance", "Insurance Marketing", "Reinsurance", "Controlling in Insurance", "Risk Management in the Insurance Company", "Analysis of the Insurance Company's Activity" and "Risk Management and Insurance of Cultural and Artistic Property".

My summative assessment is that with the professional experience gained working in a teaching-learning environment, the candidate, as a collegiate university professor, has authored and co-authored textbooks and syllabi, and lecture courses in a significant number of academic disciplines, objectively requiring the handling of rich and up-to-date empirical information, with the extensive use of interactive methods, digital skills and competences in teaching, **fully meets the adequacy, specificity and requirements of the scientific specialty of the competition** for the academic position of "professor".

4. Synthesized assessment of scientific and applied contributions

The specific results of the contributions of a scientific and practical-applied nature in the scientific publications under the competition procedure can be summarized in several major areas:

Firstly, the applied logical and interdisciplinary approach and toolkit for the study of the theoretical-conceptual and applied and foundations of the nature, specificity and peculiarities of the development of the emerging and growing segment of the insurance market in the global aspect - space insurance;

Second, confirming the validity of the author's thesis that the insurance of space risks as an element of corporate risk management influences the stabilization of the economics of space activities and increase the corporate security of the space industry.

Second, the launched author's idea of insurance companies developing new more flexible product and market strategies to meet consumer demand in the space insurance market through new business models.

Third, an important strategic focus is the proposal to further expand liability insurance in the aerospace industry, including through the timely inclusion of new aerospace technologies in insurance protection, as well as expanding their penetration into the scope and potential of the personal and property insurance market.

Fourth, the proposed organizational and methodological solutions to improve the pricing of insurance of space risks based on objectified quantitative and qualitative parameters in the assessment of risk affecting the cost of security guaranteed through the policies of insurance companies in insurance.

Fifth, the reference for the construction and maintenance of a systematically structured statistical database for making efficient expert assessments of the types of space risks, for

determining and predicting their magnitude and probability distribution of losses when they occur in the space industry.

Sixth, the working concept of the necessity, importance, peculiarities and significance of insuring the risk of "piracy" in marine insurance, supported by a model of insurance pricing, respectively the determination of the amount of the insurance premium, the necessary proactive preventive impact measures and policies.

Seventh, the proposed organizational and methodological solutions for a broader and more efficient application of the controlling approach in the management structure of insurance companies, in interaction with other types of management at the corporate level, in an environment of digital transformations and application of artificial intelligence in the insurance sector.

5. Main critical remarks and recommendations to the candidate

I have no significant criticisms in the evaluated scientific work that would change my final positive opinion on the competition. My recommendation is that the candidate should continue in the future his successful academic and applied work in the economics and management of insurance, including the segment of space risks and insurance in the new dynamic environment of change, flexibly dominant interdisciplinarity and integration of digital technologies in academic teaching and research.

Conclusion

With this positive review I express my categorical support for the candidacy of Assoc. Prof., DSc. Irena Nikolova Markova to occupy the academic position of "Professor" in the professional field 3.8. "Economics", scientific specialty "Finance, money circulation, credit and insurance (insurance and risk management)" for the needs of the Higher School of Insurance and Finance.

Sofia, 13.06.2025

Signature: