#### **REVIEW**

Prof. Dr. Sc. Sonia Varadinova Mileva-Bojanova, SU "St. Kliment Ohridski", on the scientific works for participation in a competition for the occupation of the academic position "PROFESSOR" in the professional field 3.8. Economics (Financial reporting and analysis of financial instruments - innovative methods of training in accounting and finance - in Bulgarian and English), announced in the Official Gazette, no. 35 of 18.04.2023 with a single candidate - Associate Professor Nadia Georgieva Velinova-Sokolova

The review was prepared on the basis of Order RD 38-272/25.05.2023 of the Rector of SU "St. Kliment Ohridski", decision of the scientific jury (Protocol No. 1/26.06.2023) and is structured in six parts.

# I. Assessment of compliance with the minimum national requirements, the requirements of SU "St. Kliment Ohridski"

The candidate has fulfilled the requirements of Art. 29 para. 1 of ZRASRB, meets the minimum national requirements (Article 60 Item 5 of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria) and the additional requirements of SU "St. Kliment Ohridski" (art. 115 par. 1 and 2 of PUDSU). No plagiarism in the scientific works has been proven according to the law - no written notice of plagiarism has been received (according to Art. 6, Para. 1 of PUDSU and Art. 4 (11) ZRAS).

According to group A, indicator 1: Associate Professor N. Velinova-Sokolova holds a Diploma from VAK No. 33100, ed. on 21.04.2009 for the awarded educational and scientific degree "doctor" in the scientific specialty 05.02.08 "Application of computing technology in the economy" based on a dissertation on the topic "Research of models for managing derivative portfolios using modern software solutions" (50 points)

According to group B, indicator 3: A habilitation thesis was deposited - a monograph in English on the topic " Education 4.0 and Innovative Techniques in Teaching " (2022), UI St. Cl. Ohridski, ISBN:978-954-07-5414-7 with a volume of 159 pages (100 points).

According to group D, the candidate has 477.5 points out of the required 200. According to indicator 5, a published book (study) based on a defended dissertation work (75 points) is presented. By indicator 6, 2 articles (1 in co -authorship) are presented, both with upcoming indexing in WoS, which is why they are accepted with some conditionality at the time of preparation of this review. A total of 3 articles and reports published in scientific publications, referenced and indexed in other databases with scientific information (RePec, CEEOL, Crossref, ERIH PLUS, etc.) are presented, one of which is co-authored, for which a separator is presented protocol (total 120 points). According to indicator 7, 18 articles and reports are presented in non-refereed editions with scientific review or edited collective volumes, of which 3 are co-authored with correctly reduced author participation (170 points in total). According to indicator 8, 2 studies have been deposited, referenced and indexed, one of them being co-authored (with a separation protocol) and upcoming indexing in Scopus (total 67.5 points). According to indicator 9, 3 studies were deposited, published in non-refereed journals with scientific review or published in edited collective volumes (45 points in total).

According to group D, indicator 11: 2 reviews have been prepared, and the candidate's reference shows 13 citations (without self-citations) in scientific publications, referenced and

indexed in world-famous databases with scientific information or in monographs and collective volumes, all in English ( **total 225 points**). According to *indicator 12*, 3 citations were found in monographs and collective volumes with scientific review (30 points in total). According to *indicator 13*, 3 citations or reviews were noticed in non-refereed journals with scientific review (15 points in total). In total, for *group D*, the candidate collects 270 points (out of the required 100).

According to group E, indicator 16, associate professor N. Velinova-Sokolova has participated in 3 national scientific or educational projects (45 pts). According to indicator 17, the candidate participates in 1 international scientific or educational project (20 points). According to indicator 20, 1 university textbook (40 points) was published. According to indicator 21, 3 university manuals were published, in co-authorship of which separation protocols were presented (20 points in total). In total, for group E, the candidate collects 125 points (out of the required 100).

### In all groups, the candidate collects points that exceed the required minimum threshold.

The candidate meets all additional requirements of SU "St. Kliment Ohridski" (Art. 115 paras. 1 and 2 of PUDSU), holding the academic position of "associate professor" in PN 3.8 Economics (Accounting and Audit), Certificate No. SU 2017- 306/ 20.01.2017 In labor relations at SU "St. Cl. Ohridski" for over 10 years (Certificate No. 100/25.04.2022 of the Human Resources Department of "St. Cl. Ohridski"), having successively held the positions of chief assistant (2013-2016), associate professor (2016 - present).

Based on the evidence presented, it can be concluded that the candidate Nadia Georgieva Velinova-Sokolova meets the minimum requirements for occupying the academic position of "professor" according to Art. 29 para. 1 of ZRASRB, meets the minimum national requirements (Article 60 Item 5 of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria) and the additional requirements of SU "St. Kliment Ohridski" (art. 115 par. 1 and 2 of PUDSU).

#### II. Research activity and results

# 2.1. Evaluation of the monographic work, creative performances or other publications corresponding in volume and completeness to a monographic work, including an evaluation of the scientific and scientific-applied contributions of the author.

In the announced competition for "professor", the candidate is the only participant. Participated with a habilitation thesis (Group B, indicator no. 3), published as an independent monograph on the topic "Education 4.0 and Innovative Techniques in Teaching " (2022), UI St. Cl. Ohridski. The main contribution of Prof. N. Velinova-Sokolova is the in-depth analysis of the latest teaching models and techniques, as well as the challenges facing higher education institutions in the conditions of the COVID-19 pandemic. The need for research and evaluation of the model of "flipped classroom' in the context of accounting and finance education. An opportunity for a new interpretation of finance and accounting education in higher education institutions in the context of the features of Education 4.0 is presented.

The contributions can be summarized as scientific-applied and more specifically related to studying the development of finance and accounting education under the new conditions of Industry 4.0, impact of Covid-19. The practical-applied contribution is related to the proposed innovative method of teaching finance and accounting in higher education,

analyzing the effect of using the Internet of Things (IoT) and artificial intelligence (AI) on the quality of learning.

As **critical comments**, I would point out the lack of a clear distinction between the pedagogical aspects of education and training and the need for a clearer connection with the different types of target learners (OKS bachelor/master).

# 2.2 Evaluation of the scientific and practical results and contributions of the creative production submitted for participation in the competition

In the competition for the academic position of "professor", Assoc. Dr. Nadia Velinova-Sokolova presented the following publications:

Table 1. Publications presented by qualitative and quantitative characteristics

no	Post type	Authorship		Language of publications		Number	Numbering in the list of	Volume in
		Sole author	Co- authorship	Bulg.	Eng.		publications	pages
1	Monograph	1			1	1	1	159
2	Studios	6	1	4	3	7	2, 3, 4, 5, 6, 7	199
3	Articles and reports including:	18	5	8	15	23		234
3.1	In referenced and indexed	2	3	2	3	5	8, 11, 9, 14, 23	61
3.2	In non- refereed editions	16	2	6	12	18	10, 13, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31	173
4	Textbooks and handbooks	1	3	4		4	32, 33, 34, 35	777
	Total	26	9	16	19	35		1369

The publications submitted for participation in the competition for a professor are a total of 35, distributed between those in Bulgarian (46%) and English (54%), with the predominant part being independent publications (74%) of the entire production for participation in the competition.

Thematically, the production with which the candidate participates corresponds to the name of the announced competition. **The main contributions** of can be systematized in the following thematic areas:

1. Training in finance and accounting under the conditions of Training 4.0 (1, 3). Digitization and effects of the use of the Internet of Things ( IoT ) and artificial

# intelligence (AI) on the quality of finance and accounting education in higher education. (9, 12, 14, 18, 21, 8, 10, 13, 20)

This has been one of the most heavily advocated strands of the candidate's posts over the past few years. In addition to being a monograph, the topic is represented in a number of other publications. The main contributions are related to expanding knowledge regarding finance and accounting education under new conditions (Education 4.0, Covid-19), including new teaching models and techniques, the role of the university and the possibilities of the "flipped classroom" model. Special attention is paid to hybrid learning models, the effects of digitization and the new opportunities provided by the Internet of Things (IoT) and artificial intelligence (AI). A theoretical overview, good practices from the world were made, on the basis of which new interpretations and a model for teaching and learning in finance and accounting in higher education were proposed. The relationship between digitization, artificial intelligence and financial education is explored, as well as the challenges not only for educators, but also for learners. A SWOT analysis was prepared for the readiness of universities to strengthen the digitization process in teaching and implementation of new learning methods.

# 2. Methodology, control and risk assessment regarding the application of International Financial Reporting Standard 9 "Financial Instruments" (IFRS 9), (2, 5, 6, 29)

The contributions in this direction are related to the identification of the need for new methodologies and control in the assessment of risk in the application of IFRS 9. The specifics of the standard were studied and new programs for internal control, a risk management system and new information and database were proposed. , related to the application of IFRS 9. The practically applied contribution is the approach developed by the author for trading and obtaining lease receivables, allowing the recognition of expected credit losses throughout the life of financial instruments.

#### 3. Insurance sector (32, 23, 25, 27, 30, 31)

The characteristic features and specifics of all participants in the capital market, insurance market and supplementary pension insurance have been studied. Modern standards, legislative norms and regulations for risk and risk management, as well as various innovative techniques for the hedging process in the non-banking financial sector, are analyzed. The new regulations related to IFRS 17 for insurance companies and their potential effect on the insurance sector are explored in depth. The contributions are related to the identification of the readiness of the sector, as well as the derivation of the basic changes in the model of accounting of insurance contracts, as well as some main effects of the application of the standard in practice.

The practical aspects of the new requirements of the Solvency II framework regarding the analysis and assessment of the assets, liabilities and technical reserves of the insurance company, as well as the capital requirements according to the framework for capital adequacy of financial institutions (CRD IV), have been analyzed. Risk assessment mechanisms and a risk management system are proposed.

### 4. Green finance and green economy (11, 15, 16)

Potential causal relationships between green finance and the green economy are explored, as are the challenges facing green finance management in Bulgaria. A methodology for

assessing the impact of COVID-19 on the financial industry and the participation of green finance in post-pandemic economic recovery is presented.

All the candidate's publications are peer-reviewed and printed in university presses and other authoritative foreign publications.

### 2.3. Citation by other authors.

From the provided reference of observed citations, it is evident that the candidate has 13 citations (without self-citations) in scientific publications, referenced and indexed in world-famous databases of scientific information or in monographs and collective volumes, all in English. 3 citations in peer-reviewed monographs and collective volumes and a further 3 citations or reviews in non-refereed peer-reviewed journals were identified. This confirms that the candidate's creative output has some recognition and is cited by scholars, both in the country and abroad.

# 2.4. Evaluation of the results of participation in research and creative projects and application of the obtained results in practice.

Associate Professor Velinova-Sokolova has experience in participating in research and educational projects, including 3 national and 1 international, in the field of the scientific research field in which he works. The candidate has proven practical experience in the field of his professional realization with his participation in a total of 6 projects, incl. 3 national and 1 international research projects, as well as another 6 for expertise and practical applicability.

### III. Learning and teaching activity

educational employment includes workload in PN 3.8 Economics in the period 2017/2018 - 2021/2022 - an average of 288 hours of classroom employment in the Master's College.

Prof. Velinova-Sokolova *conducts lecture courses* at the Master's College of Economics - "Accounting in English", "Practical Course in Accounting and Finance", "Accounting of Insurance Companies", as well as lecture courses at the Bachelor's College of Economics - "Insurance', 'Introduction to Taxation' and 'Capital Markets, Risk Analysis and Derivatives' in English.

#### IV. Administrative and public activity

Assoc. Prof. Velinova Sokolova is the chairperson of the scientific research committee at the Faculty of Economics (Order RD 19-68/23.02.2023), a member of the Management Board, which will create conditions and order for the scientific research activities of Sofia University (Order RD 19-69/23.02.2023). Member of the commission for scientific research at the Faculty of Economics under the project "Summit" (Protocol of FS No. 1/17.01.2023).

Prof. Velinova-Sokolova's professional development goes through various activities and positions of responsibility, including as Director of the Regulatory Policy and Market Analysis Directorate, Director of the Procedural Representation and Market Analysis Directorate, Head of the International Cooperation Department at the Financial Supervision Commission.

#### V. Critical notes and recommendations.

Recommendation for publications in indexed and referenced publications, respectively greater international visibility and citation.

#### VI. Conclusion.

There is indisputable evidence of fulfillment of the requirements of Art. 2b, para. 2, Art. 29 para. 1 and 2, Art. 29b of ZRASRB, as well as Art. 60 par. 1 and 2 of the PPZRASRB, as well as the Regulations for the terms and conditions for acquiring scientific degrees and occupying academic positions at SU "St. Kliment Ohridski" for occupying the academic position "PROFESSOR".

This gives me reason with full conviction to give mine positive evaluation for the candidate Assoc. PhD. Nadya Georgieva Velinova-Sokolova for occupying the academic position "PROFESSOR" in PN 3.8 (Financial reporting and analysis of financial instruments - innovative methods of training in accounting and finance - in Bulgarian and English).

Sofia, 11.07.2023

Prof. DrSc. Sonia Mileva