

REVIEW

by **Prof. Dr. Teodor Sedlarski**, Faculty of Economics and Business Administration at Sofia University "St. Kliment Ohridski", Department of Economics | Scientific area 3.8 Economics /05.02.01 "Political economy (Microeconomics and Macroeconomics)"/

for the scientific papers presented in the contest for the academic position of Professor in the scientific area 3.8 Economics (Accounting: corporate reporting; application of information technologies - in Bulgarian and English language) for the needs of the Faculty of Economics and Business Administration, announced in the State Gazette, No. 24 of 17.03.2023

of the candidate:

Eleonora Petrova Stancheva-Todorova, Associate professor in the scientific area 3.8 Economics

1. Information about the contest

The contest for awarding the scientific title Professor was announced for the needs of the Finance and Accounting department of the Faculty of Economics and Business Administration in SG, No. 24 of 17.03.2023. The composition of the Scientific Jury for the contest was determined by Order No. RD 38-217/27.04.2023 of the Rector of Sofia University St. Kliment Ohridski.

Assoc. Prof. Dr. Eleonora Stancheva-Todorova is the only candidate in the competition.

2. Evaluation of the candidate's pedagogical activity

Assoc. Prof. Dr. Eleonora Stancheva-Todorova completed her secondary education at the English Language High School "Geo Milev" in Burgas. She received a bachelor's degree in "Economics" from the Faculty of Economics and Business Administration of Sofia University St. Kliment

Ohridski, after which she graduated the Master's program "Macroeconomic Analysis" in 1998 (her graduation thesis, evaluated with an excellent grade, was on the topic "Comparative analysis of annual accounting reports regulated in IAS, US GAAP, The Fourth European Directive and the NSS").

In 2007, he defended a dissertation in economics with the code 05.02.07 (Accounting, control and analysis of economic activity) on the topic "Accounting and information assurance for the management of infrastructure assets in the water and sanitation sector in the Republic of Bulgaria". From 1999 to 2004 he was an assistant, from 2004 to 2007 - senior assistant, from 2007 to 2014 - chief assistant, and from 2014 he was an associate professor in the Department of Finance and Accounting at the Faculty of Economics and Business Administration. She taught the course "Analysis of Financial Statements" at the City University of Seattle in Bulgaria. In addition, she performed activities as a corporate analyst and accounting expert for the "Capital Markets" and "Capital Markets Regulation" projects respectively in Bulgaria of the American Agency for International Development (USAID).

She is currently giving lectures on fundamental accounting disciplines - introduction to accounting, financial accounting, financial reporting in Bulgarian and English in the Bachelor's and in the programs. Prof. Stancheva-Todorova is a lecturer at "AFA Academy", where she teaches International Financial Reporting Standards. Since 2000, she has participated as a leader or as a team member in a number of national and university projects.

She is the head of the Master's programs "Accounting and Auditing" and "Finance, Accounting and Big Data Analysis".

She holds several accounting trainer certifications.

The obtained educational and scientific degrees, along with the rich teaching experience of Associate Professor Stancheva-Todorova, testify to her excellent preparation in the field of the announced contest.

3. Fulfillment of the requirements for occupying the academic position

Assoc. Dr. Eleonora Stancheva-Todorova fulfills the quantitative criteria of the minimum national requirements under Art. 26 of the Law for occupying the academic position Professor in the scientific area 3.8. Economics.

According to the attached self-report on the fulfillment of the quantitative criteria, Assoc. Professor Stancheva-Todorova collects the following points in the individual groups of indicators:

- indicators from group A - dissertation work for awarding the title doctor - 50 points;
- from group B – habilitation thesis, monograph – 100 points;
- from group D – monograph, including one which is not presented as the main habilitation thesis and other publications (studies, articles, reports, etc.) in scientific journals of different rank and type - 282.5 points;
- from group D - citations and reviews in scientific publications - 650 points;
- from group E – scientific supervision of doctoral students, participation in scientific and applied projects and published textbooks and study aids – 104.5 points.

Documents for participation as a member of a scientific team in two and as a leader of three scientific research projects financed by the Scientific Research Fund at SU have also been presented.

All publications submitted for the contest and for the participation in projects are from the period after the acquisition of the scientific title of associate professor in 2014.

The long-term practice of teaching both basic and specialized lecture courses with a large semester load indisputably testify to the experience, skills and competences of Associate Professor Eleonora Stancheva-Todorova as a lecturer and expert in the field of accounting sciences. The aspiration for constant renewal and improvement of the taught material is visible through the participation in a large number of university projects with a methodological focus. Assoc. Prof. Stancheva-Todorova's long-term commitment as head of master's programs in accounting deepens her competence and professionalism as a lecturer.

4. General characteristics of the candidate's research activity

Prof. Stancheva-Todorova submitted a total of 23 publications for participation in the current contest, as follows:

- • 2 independent monographs in English, one of which is the main habilitation work;
- • 2 reports published in scientific publications, referenced and indexed in world-famous databases with scientific information - both co-authored;
- 4 studies published in non-refereed peer-reviewed journals or published in edited collective volumes - one co-authored;

- 11 articles and reports published in non-refereed peer-reviewed journals or published in edited collective volumes – of these, two publications are co-authored;
- 4 study aids, one of which is self-contained.

In the presented list of citations, 12 of the citations are in publications referenced and indexed in world-renowned databases with scientific information.

A large part of the publications of Assoc. Prof. Stancheva-Todorova is in English, which contributes to the confirmation of the international recognition of the author and the scientific unit.

To participate in the competition, Assoc. Prof. Stancheva-Todorova submitted predominantly independent publications in Bulgarian publications, entered in the National Reference List of modern Bulgarian scientific publications with peer review.

The scientific publications and educational materials submitted for review completely match the subject of the announced competition.

5. Main scientific results and contributions

Among the scientific contributions of the candidate in the publications submitted for the contest, the following can be highlighted, primarily in three main thematic areas:

- In the field of accounting - transformations in the accounting profession, corporate reporting, accounting education;
- In the field of technological innovation – the application of new innovative methods and technologies, artificial intelligence, large databases and blockchain in accounting analysis;
- On the topic of sustainability - related to the issue of sustainability reporting.

The contributions of Assoc. Prof. Dr. Eleonora Stancheva-Todorova in the publications submitted for participation in the contest for the academic position of Professor are of a scientific-theoretical and scientifically applied nature. The most important of these are contained in the two independent monographs in English. The scientific contributions in the monographic works "Modern problems of accounting. The Accounting education" and "Modern problems of accounting. The accounting profession" are a natural continuation of the direction of scientific research, followed since the beginning of her research activity and maintained during her academic career. Associate

Professor Stancheva-Todorova's research interests are in the field of accounting theory, financial accounting, international standardization of corporate reporting, the application of technological innovations in the accounting field, innovative methods in teaching accounting knowledge and sustainability reporting. As the leading direction of the publication activity of Assoc. Prof. Stancheva-Todorova can be defined the theoretical developments of the fundamental principles and the latest developments in the field of accounting analysis and their practical application, including in view of the immediate challenges facing the accounting profession and the development of new concepts of the present and the future, as well as in teaching accounting.

One cannot fail to note the pioneering nature of the work of Associate Professor Eleonora Stancheva-Todorova in recent years for the Bulgarian scientific literature in the field of accounting, related to the presentation to the scientific community of transformative developments with the significance of the Fourth Industrial Revolution, artificial intelligence, etc. in the context of the prospects for the development of the accounting profession and accounting education, found its final and complete expression in the monographic works presented for the competition.

The monograph "Modern problems of accounting. The Accounting Profession" analyzes a wide range of issues related to the current state and future development of the accounting profession. It outlines the profile of the accountant in terms of the necessary knowledge and skills required by the transformation of the company in the context of Industry 4.0. A comprehensive analysis of the impact of several recent technological advances (big data and data analytics, artificial intelligence, machine learning and blockchain technology) on the profession is carried out and future development trends in terms of required new job skills and competencies are highlighted. The research outlines the new role and required core skills of future accountants, sustainable business and finance professionals. New career opportunities are viewed through the lens of the drivers of change that will shape their role over the next decade at the heart of organizations as they strive to create sustainable long-term value. The book contains discussions of the basic ethical principles of professional accountants in a business environment shaped by technology and how technological innovations influence professional behavior and decisions.

In accordance with the developments summarized in the concept of Industry 4.0 and the various transformations in the competencies, functions and importance of the accounting profession, the new requirements and the need to upgrade traditional knowledge in the accounting profession are presented. The new type of interdisciplinary knowledge and skills that digitization and the big data environment require are proven and brought to the fore. At the same time, additional ethical and moral norms integrated into the new conditions of a technology-driven business environment are interpreted and substantiated.

The first of four chapters of the monograph presents the knowledge and skills profile of the accounting professional in the context of the implications of Industry 4.0 and the impact of current technological advances and their expanded applications on the accounting profession. The interdisciplinary skills and competencies required by accountants in the context of the "factory of the future" are analyzed to identify the missing knowledge and skills that must be acquired or developed by the profession due to the growing impact of Industry 4.0. Prof. Stancheva-Todorova focuses on the challenges of artificial intelligence (AI) for future accountants. It is argued that AI systems will replace accountants in some of their more routine functions, as they can perform them faster and are more accurate than humans. There is only a minimal risk of increasing unemployment in the profession if accountants are able to develop a new set of skills and competencies related to the changing role in the organization. A successful strategy will be to embrace the technological challenges and adapt to the new business environment and management conditions. Humans and machines can work efficiently and effectively together, and AI will never replace human intelligence, especially in more creative work tasks. Education will play a key role in preparing accountants for this new accounting field.

The second chapter sheds light on the potential implications of blockchain for accounting professionals, as distributed ledger technology appears to disrupt conventional accounting and fundamentally transform the organization and operation of accounting systems. There will be changes in work patterns, which will lead to new requirements of employers for the professional qualification of future accountants. The research focuses on some accounting and financial reporting issues that in recent years have called into question accounting theory and practice due to the lack of standards or other forms of accounting regulations for cryptocurrencies. They are analyzed based on their common and most recently studied characteristics and in the context of IFRS. Some recognition and measurement issues are outlined and possible solutions are discussed based on existing IFRS standards and the prevailing views and opinions of academics and practitioners. Original author views on the regulatory landscape are expressed and several of the pending regulatory issues that could lead to different accounting implications are identified. The findings and conclusions of several in-depth studies are used as the focal point of efforts to better understand the far-reaching impacts of blockchain technology on the accounting field. IFRS are used as a theoretical frame of reference to assess the appropriateness of existing and widely accepted definitions and recognition and measurement requirements applied to cryptocurrencies to explore and explain their unique nature and characteristics as a unit of account. As distributed ledger technology evolves and new uses and implications emerge over time, the newfound potential of blockchain technology can further impact the accounting field by improving accounting techniques, expanding accounting services, and providing innovative solutions to businesses.

Of a practical-applied nature are the contributions in the thematic direction related to the potential consequences of the introduction of blockchain technology and the change in the activity of accounting departments, the potential problem areas from the point of view of the accounting of cryptocurrency operations, with still unclear or even missing regulations and standards. These analyzes enrich the training practice of future specialists - accountants.

The third chapter of the monograph expands the analysis of the necessary skills of future accountants, professionals in the field of sustainable business and finance. ACCA's in-depth study *Professional Accountants at the Heart of Sustainable Organizations* is used as the focus of this research. The results of the study and the author's analysis support the conclusions drawn regarding the required skill set of future accountants in any sustainable organization. Recent challenges and trends in the development of sustainability reporting are outlined. This part of the monograph contributes to the existing literature by improving the periodization adopted in the field and building on it with two new phases that reflect recent and future trends in the development of sustainability reporting.

The fourth chapter argues that the fundamental ethical principles for professional accountants in the digital age are still relevant despite the challenges of new technologies and their expanded business application. Technology only changes the context in which an ethical decision must be made. As new threats and associated ethical violations may emerge, ethics will become even more important in the coming years. The five ethical principles: integrity, objectivity, professional competence and due care, confidentiality and professional conduct, remain relevant in the ever-evolving digital age. However, the context of their application is likely to change due to new information categories and data sources associated with recent technological advances. Artificial intelligence and big data analytics, which are currently changing the work environment of the accounting profession, are explored in this context. Cybersecurity, platform-based business models and distributed ledger technology are also considered ethical challenges in light of the expanding digitization of the economy. A review of the relevant literature was conducted in order to assess the relevance of the basic ethical principles for professional accountants. Special attention is paid to the accompanying conceptual framework as part of the Code of Ethics with an emphasis on future threats to ethical behavior. Special emphasis is placed on the prospects and opportunities for the accounting profession in the ethical and sustainable implementation of artificial intelligence in organizations in the context of the exponential growth of its implementation. It is believed that accountants will play a significant role in managing this process due to their commitment to ethics and ethical behavior in the performance of assigned tasks within the accounting and finance function.

In the cited literature, 185 used titles are indicated - articles in scientific journals, analyses, specialized documents and references.

The monograph "Modern problems of accounting. Accounting Education" explores the impact of some of the most recent technological developments on accounting education and the changes required related to the structure of the curricula and the content of the curricula of accounting courses. Two complete sets of teaching materials are presented, illustrating the implementation of the analysis of Big Data and Artificial Intelligence in the Accounting Curriculum. They consist of case scenarios, learning objectives, student assignments, implementation guidelines, and a description of the integration approach applied at the Faculty of Economics and Business Administration of Sofia University St. Kliment Ohridski.

The research provides an overview of innovative teaching methods currently used in university accounting courses, such as business simulations, educational films and the 'Colour Accounting' teaching system. The author shares her personal experience and several challenges in implementing Bissim accounting business simulations in a specific educational environment. The analysis is extended to highlight the importance of imminent developments in university teaching in the area of sustainability reporting and its ongoing standardization. Several new competencies required of accounting graduates have been identified that further expand the Framework for Accounting Education. In fact, an important aspect in more than one of the publications presented for review and a very serious challenge to the professional guild, which will lead to changes in the teaching of academic disciplines itself, is precisely sustainability, its accountability and reporting. In response to increased and increasingly complex regulations, companies must quickly adapt and implement the relevant new standards. Accounting experts are expected to take the lead in this process. The illumination of the above aspect in the scientific research of Assoc. Prof. Stancheva is of a significant scientific and applied nature. They are present in several of the scientific publications presented in the competition (2, 3, 7, 8 from the list under item 10b).

A serious analysis in a scientific-theoretical plan and in a scientific-applied aspect contains the critical study of the impact of artificial intelligence on the accounting profession. The need for a change in the training of accounting specialists and the integration of artificial intelligence and machine self-learning in this process is substantiated (Publications 2, 11 and 18 in the list under item 10b).

For the Bulgarian and international readers, the two monographic works systematize and present the most significant ideas in the field of knowledge about the Fourth Industrial Revolution, big data analysis, artificial intelligence and blockchain technologies from the perspective of the development of accounting analysis, the practice of the accounting profession and innovative methods of teaching in the immediate future. They are of interest to professional economists and financiers,

university professors, established experts in accounting who would like to deepen their professional orientation regarding the expected future developments in the field, practitioners from the business sphere and public administration. They can also be a useful reference for accounting students who want to improve their knowledge and understanding of the skills and attitudes of future accountants and the demands of employers from accounting graduates.

Contributory elements are contained in the theoretical interpretation of explanatory models basic to the analytical direction and in their application to specific problems of accounting practice and teaching. The role of her work in establishing a new way of thinking about the already emerging future of accounting analysis, which awaits its due wide scientific and educational reception in the context of the immediate experience of large-scale technological, organizational and institutional changes, is among the great merits of Assoc. Prof. Eleonora Stancheva-Todorova.

6. Notes and recommendations

The monographic works of Assoc. Prof. Stancheva-Todorova can be used as a means of confirming a modern way of teaching modern accounting and financial disciplines. In the future, they could be expanded with additional relevant cases with application in the relevant topics of individual courses and would contribute significantly to the understanding of the most current theoretical and practical approaches by students in accounting and finance majors in the country.

7. Conclusion

The scientific contributions of the candidate in the publications submitted for review in the contest, as well as the quality and volume of the pedagogical activity, give grounds for the conclusion that all the requirements of the Law, the regulations for its application and the Regulations for the terms and conditions for acquiring scientific degrees and tenured positions at Sofia University St. Kliment Ohridski have been met. Associate Professor Eleonora Stancheva-Todorova fulfills all the quantitative requirements for holding the academic position Professor at the Faculty of Economics and Business Administration. I propose to the Scientific Jury to elect Associate Professor Dr. Eleonora Stancheva-Todorova for the academic position of Professor in the contest – scientific field 3.8 Economics (Accounting: corporate reporting; application of information technologies - in Bulgarian and English language) for the needs of the Faculty of Economics and Business Administration, announced in the State Gazette, no. 24 of 17.03.2023.

**Jury member:
Prof. Dr. Teodor Sedlarski**

Sofia, 17/07/2023