

OPINION

by Prof. Plamen Dimitrov, MD, PhD, National Center for Public Health and Analysis/South-West University "Neofit Rilski", professional field 7.1. Medicine, on the scientific papers for participation in a competition for the academic position of associate professor, in professional field 3.7 Administration and Management (Quantitative Methods in Management), announced in the State Gazette, issue 95 of November 8, 2024, with candidate Chief Assistant Professor Dr. Ekaterina Rumenova Tsvetanova-Georgieva.

Grounds for submitting the opinion: participation in the Scientific Jury of the competition in accordance with Order No. Z-RK-91/02.01.2025 of the Rector of NBU and decision of the first meeting of the Scientific Jury of 16.01.2025. The opinion was prepared in accordance with the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for its Implementation (RIADASRB) and the Regulations for the Development of the Academic Staff at NBU. The competition for "Associate Professor" in the professional field 3.7 Administration and Management (quantitative methods in management) was announced in accordance with the established legal procedure, for the needs of the Department of "Administration and Management" of New Bulgarian University.

I. Assessment of compliance with the minimum national requirements and the requirements of the New Bulgarian University

One candidate, Chief Assistant Professor Dr. Ekaterina Rumenova Tsvetanova-Georgieva, participated in the announced competition. The submitted documentation for the competition meets the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (Art. 2b) and the Regulations for the Implementation of the Act on the Development of the Academic Staff of the Republic of Bulgaria (Art. 1a, para. 1), as well as the requirements of NBU, set out in the Regulation on the Development of the Academic staff of NBU.

The candidate for Associate Professor, Chief Assistant Professor Ekaterina Rumenova Tsvetanova-Georgieva, meets and exceeds the minimum requirements for scientific, teaching and research activities for holding the academic position of Associate Professor, and the total mandatory amount of points for holding the position of associate professor has been met in all groups of indicators in the individual sections:

- Group of indicators A "Dissertation for awarding the doctoral degree - 50 points with a required score of 50 points;
- Group of indicators B "Habilitation thesis - monograph" - 100 points with a required score of 100 points;
- Group of indicators G "Additional scientific publications" - 246.13 points with a required score of 200 points;
- Group of indicators D "Citations in monographs and collective volumes with scientific review and in non-refereed journals with scientific review" - 120 points with a required

score of 50 points.

In addition, the requirements for internal candidates of the New Bulgarian University, set out in Annex 2 to the Regulation on the Development of the Academic Staff of NBU, are also covered, as follows:

- Group of indicators J – 70 points with a required score of 50 points.
- Group of indicators Z – 100 points with a required score of 70 points.
- Group of indicators I – 80 points with a required score of 50 points.

II. Research (creative) activity and results

Chief Assistant Professor Dr. Ekaterina Rumenova Tsvetanova-Georgieva participated in the competition for the academic position of "Associate Professor" in the professional field 3.7. Administration and Management (Quantitative Methods in Management) with:

- one monograph (habilitation thesis);
- 26 articles and reports in non-refereed publications with scientific review or editing of scientific volumes
- 2 studies published in scientific publications, referenced and indexed in world-renowned databases of scientific information
- 2 studies in non-refereed publications with scientific review

The presented scientific production does not repeat that for acquiring the doctoral degree and the academic position "Chief Assistant Professor" and has its own scientific and scientific-applied contributions. I am not aware of any plagiarism proven in the candidate's scientific works in accordance with the statutory procedure.

1. Evaluation of the monographic work, creative performances or other publications corresponding in volume and completeness to a monographic work, including an assessment of the author's scientific and applied contributions.

The habilitation thesis presented by the candidate, Chief Assistant Professor Dr. Ekaterina Rumenova Tsvetanova-Georgieva in the competition is on the topic "Indices of the Health Status of the Population in Bulgaria. Can Social Progress Preserve More Lives than Medicine?", Sofia: NBU, 2024, with ISBN 978-619-233-320-1.

The monograph presents a comprehensive study of the health status of the Bulgarian population. The process of creating the first index for assessing the health status of the population in Bulgaria by administrative districts is presented. They are classified and divided into groups, on the basis of which recommendations for improving the health status at the national and district levels are derived. Five chapters examine the process of creating the health status index and interpretations of the results obtained are made. An in-depth analysis of the various conceptual models is presented, covering the period from 1960 to 2024. The lack of a sustainable framework or model that would correspond to the results and conclusions obtained is established. Based on the analysis, the conclusion is made that the most adequate and convenient tool for work and assessment is the health status index. A separate chapter examines the main health indicators related to the four determinants of health (health behavior, clinical care, socio-economic and physical environment), as well as indicators assessing health status.

A significant contribution to the monograph is the presentation in the third chapter of the methodology for constructing the health status index - a new methodology, not applied in our country so far, is proposed for assessing health status. Its practical application is presented in the fourth chapter, by calculating an index assessment for each of the 28 administrative regions in Bulgaria for the period 2011–2023. The contribution of both each of the determinants of health and each of the health indicators is assessed. The comparative analysis along two axes - by region (geographic) and by year is presented in the final chapter, and it has significant value from a practical point of view for developing dynamic models at the regional level. The inclusion of social, economic status and environmental factors is extremely important, which contributes to outlining the specifics at the regional level and in this sense, the application of the index will be of great benefit for developing an adequate health policy that takes into account local specifics.

I believe that the monograph has significant scientific, practical and methodological contributions. It presents a comprehensive study of the health status of the Bulgarian population and the factors on which it depends. It has been established that the socio-economic environment (40%) and personal health behavior (30%) and the physical environment (10%) determine the health status of the Bulgarian population to a much greater extent than the factor clinical care (20%). It should be noted here that the weight of the factors determined in this study correlates with those made in other countries and cited in studies of the World Health Organization. So far, in discussions about the weight of the factors on which health depends in Bulgaria, foreign studies have been cited. For the first time in Bulgaria, factors based on national data have been derived. Without a doubt, this is the main contribution from my point of view of the monographic work.

The first index of the health status of the Bulgarian population constructed on the basis of various statistical methods gives statistically significant results, which is a key success for the applied methodology. This provides grounds for making reliable conclusions and recommendations for management. The contribution of the applied methodology is that it derives its results and conclusions on the basis of statistically accessible indicators and objectively established relationships between them.

The analysis of the state of health status at the district level is a basis for policy recommendations by group of districts. The most important conclusion from this part of the complex analysis is that each of the four groups of districts has a different health status and, accordingly, a different spectrum of health risks.

Motivated proposals have been made for the collection of additional statistical data, which are necessary for obtaining even more reliable assessments of the health status of the Bulgarian population.

In connection with the preparation of the monograph, four articles have been published in non-refereed publications.

2. Evaluation of the contributions in the other attached publications (creative performances) made after the appointment to the academic position of "Senior Assistant Professor" or the academic position of "Associate Professor" (for candidates for Professor). It also includes an assessment of the requirement for peer review of the publications.

All submitted publications that are relevant to the announced competition demonstrate consistency in the candidate's scientific interests and research in the chosen field.

They are mainly focused in the following areas:

Development of a model for predicting the risk of bankruptcy of Bulgarian non-public companies – two articles have been published on this topic. The author's contribution is the in-depth analysis of existing models for assessing the risk of bankruptcy; information about the companies participating in the sample has been collected and processed; discriminant analysis and principal component analysis have been applied to construct the model for assessing the risk of bankruptcy; the results obtained have been interpreted.

Development of a model for assessing the credibility of sociological assessments, which is unique in its essence, created for the Bulgarian reality and is aimed at the parliamentary elections in the country - 8 articles have been published on this topic. The contribution is the collection and processing of input data, analysis of the obtained quantitative results, as well as updating the methodology used (modification of indicators, addition of evaluation parameters, etc.).

Application of quantitative methods for solving macroeconomic problems – 2 articles and 1 study have been published on this topic. The analysis of the price elasticity of electricity and liquid fuel consumption is of a contributing nature.

Analysis of the macro environment and changes in the way companies are managed. The analyses made are of a contributing nature: Analysis of the potential impact of the development of artificial intelligence on corporate governance and in particular human resource management; Analysis of corporate practices in conditions of turbulence - COVID-19; Analysis of opportunities for companies and universities, especially in the field of continuing education

Application of quantitative methods in agribusiness. In connection with the candidate's participation in research projects, the application of various quantitative methods in the field of agribusiness is of a contributing nature. These contributions are reflected in 6 articles and 3 studies.

3. Citation by other authors.

The attached citations report certifies that the candidate meets the requirements of the competition. The publications of Chief Assistant Professor Ekaterina Rumenova Tsvetanova-Georgieva have been cited 19 times. One article has been cited in scientific publications, referenced and indexed in world-renowned databases of scientific information or in monographs and collective volumes. Three articles have been cited in monographs or collective volumes with scientific review, and 15 are the citations in non-refereed journals with scientific review.

The candidate has presented the results of his research at a number of national and international conferences and scientific-practical forums – 7 national and 11 international within the last 5 years.

III. Educational and teaching activities

Chief Assistant Professor Ekaterina Rumenova Tsvetanova-Georgieva began her teaching career as a full-time doctoral student at NBU in 2015. Since 2019, she has been a Chief Assistant Professor at New Bulgarian University in 3.7 Administration and Management

(Quantitative Methods in Management). Since 2018, she has been a Doctor of Business Administration.

Dr. Tsvetanova teaches in full-time and distance learning at the Bachelor's and Master's degrees in disciplines related to corporate risk management, quantitative methods in management, economic foundations of management, foundations of microeconomics, and modern economics. The courses in which Dr. Tsvetanova teaches are provided with teaching materials according to the NBU e-learning standard. Teaching texts, presentations, exercises, links to internet resources, etc. are updated every year.

Dr. Tsvetanova also teaches in the joint program of NBU with York – Business Statistics (bachelor's) and Econometrics for Finance (master's).

Dr. Tsvetanova actively works towards creating conditions for providing internships for students by providing practical activities for students that are not part of their program scheme. Also, in her capacity as an administrative person at NBU, Dr. Tsvetanova actively participates in conducting Sofia Business School, Management Academy, attracting students to implement projects at NBU. She participates in the organization of forums aimed at the practical training of NBU students, such as Vienna Economic Forum and All about Economy film days.

The candidate has supervised 20 successfully defended graduates in the last 5 years, is a reviewer of 26 diploma theses and has taken part in commissions for state examination and/or defense of diploma theses of 101 graduates.

The teaching activity of the senior asst. Dr. Tsvetanova is rated excellent by the students, according to the provided report - 4.56 with a maximum score of 5.00, and an increase is reported compared to the data submitted during the procedure for chief assistant professor.

IV. Administrative and public activity

From 2017 to June 2021, Dr. Tsvetanova was a program consultant at the Business Administration and Entrepreneurship Program. From July 2021 to September 2024, she was the director of the School of Professional and Continuing Education at NBU, where she was responsible for organizing continuing education at NBU. Since July 1, 2024, she has been the dean of the Faculty of Basic Education at NBU and a member of the Faculty Council of Law. She was a member of the Program Council and is an active member of the Department Council at the Department of Administration and Management, as well as a member of the Rector's Council and the Academic Council of NBU.

Dr. Tsvetanova was a member of the Center for Risk Analysis and Management (CRAM), NBU during the period 2013–2019. During this period, she significantly enriched her experience in applying quantitative methods in management at both the company level and the sector and country levels. The candidate is an active member of the European Geoscience Union and her career development includes consulting work at ASTOR BG, as well as the development of macroeconomic analyses.

V. Personal impressions of the candidate

I know Chief Assistant Professor Dr. Ekaterina Rumenova Tsvetanova-Georgieva from our joint work in connection with the preparation of the monographic work. My personal impressions are that she is a highly responsible, erudite, precise and proactive academic

researcher. I am impressed by her professionalism in the in-depth analysis of a huge volume of health information, in the preparation of the Index for the Assessment of the Health Status of the Bulgarian Population, in a way that surpasses similar analyses made by health experts.

VI. Opinions, recommendations and notes on the candidate's activities and achievements

I recommend that Dr. Tsvetanova be more active in disseminating her scientific results among the scientific community, including among health professionals, as well as among politicians who have the potential to make changes in our society.

A second, revised and supplemented edition of the monograph could also be considered, including in English, which would help disseminate the monograph among the international scientific community.

I recommend periodically updating the index of the health status of the population in Bulgaria with current data, which are reported on an annual basis.

Conclusion

Based on all of the above, I believe that the materials submitted by Chief Assistant Professor Dr. Ekaterina Rumenova Tsvetanova-Georgieva for the competition fully meet the requirements for obtaining the academic position of "Associate Professor" according to the Act on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its Implementation, as well as the Regulation for the Development of the Academic Staff at NBU. The scientific publications of the candidate for the competition contain important theoretical, methodological and practical-applied contributions to management science.

I strongly propose to the members of the Scientific Jury and the Academic Council of NBU that the candidate for the competition, Chief Assistant Professor Dr. Ekaterina Rumenova Tsvetanova-Georgieva, to be elected for the academic position of "Associate Professor" in the professional field 3.7 Administration and Management at NBU (Quantitative Methods in Management).

Date 23.01.2025

Signature