REVIEW

By Prof. Dr. George Dimitrov Mengov,

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Professional Field 3.7. Administration and Management,

For a competition procedure for the position of full Professor

In Professional Field 3.8. Economics, announced in State Gazette No. 24/17.03.2023,

With candidate: Associate Professor Anton Antonov Gerunov, Ph.D., D.Sc.

I. Biographical data about the candidate

The only candidate in the competition procedure for full Professor is Associate Professor Anton Antonov Gerunov, Ph.D., D.Sc. He graduated from the First English Language High School in Sofia in 2006, after which he continued his education in Germany and received a bachelor's degree in integrated social sciences from Jacobs University in the city of Bremen. He has two master's degrees: (1) in Economics, since 2011, from Sofia University St. Kliment Ohridski; (2) in Computer and System Sciences, since 2019, from Stockholm University, Sweden. In 2015, he received his Ph.D. in Economics with a dissertation, defended at the Faculty of Economics and Business Administration at Sofia University St. Kliment Ohridski. In 2021 he became a Doctor of Sciences in Economics there again after defending a second (higher) doctorate. Since 2017, he has been Associate Professor at the Faculty of Economics and Business Administration, having previously been successively a Visiting Assistant Professor (since 2011), Assistant Professor (since 2013) and Senior Assistant Professor (since 2015).

For about one year, in 2011-2012, he was an advisor in the Council of Ministers of the Republic of Bulgaria with a portfolio of Innovations and Information Technology. In 2014–2017, he was Chief of Staff to a Deputy Prime Minister, whereby his work was related to e-government and administrative reform. From 2012 to the present, intermittently, he has held managerial positions in several private companies. Noteworthy is also his involvement with the Institute for Ethics and Data Analytics in Bulgaria.

Anton Gerunov is fluent in English and German and holds an international PMP project management certificate.

II. Compliance with the minimal national requirements

The Bylaws for the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria (amended and supplemented, in force since 06.07.2018) require all candidates for the academic position of full Professor in the professional field 3.8 Economics to have achievements exceeding a minimum number of points in six groups of indicators. The total number must not be less than 550 points. Anton Gerunov has provided documents, including a detailed reference, which show that his results significantly exceed the minima in all six groups, having achieved a total of 1187.5 points.

In particular, for the group of requirements A (A), B (B), and V (B), respectively Indicator 1, Indicator 2, and Indicator 3, he scored 250 points against the required 150. He holds the degree of Doctor of Philosophy (50 points), the degree of Doctor of Sciences (100 points) and has submitted a habilitation thesis – a monograph (100 points).

The publication requirement for a full Professor under Group G (Γ) (Indicator 4 to Indicator 10) of the Bylaws for the implementation of the Law on the Development of Academic Staff, (Table 1, Area 3. Social, Economic, and Legal Sciences) is that the candidate has accumulated at least 200 points. According to the submitted reference, the candidate claims a total of 317.5 points for his scientific works in the competition procedure. These points are correctly calculated both for each publication individually and for the total.

In accordance with the Bylaws for the implementation of the Law, the candidates for the position of full Professor are required to have at least 100 points from citations to their scientific works (Group D (\mathcal{I}): Indicator 11, Indicator 12 and Indicator 13). From the attached reference table is evident that the candidate has collected a total of 430 citation points for his publications, which exceeds the requirement by more than four times. The points are again correctly calculated.

Finally, in Group E (E), Indicator 14 to Indicator 21, the Bylaws require at least 100 points from the future full Professor. These are activities that show, in general, the candidate's involvement in various aspects of academic life, such as: successfully supervising doctoral students, participation in and leadership of national and international research projects, writing textbooks and teaching aids for various levels of university or school education. Here the candidate has provided evidence for a total of 190 points, nearly twice the required.

III. Scientific research and publications

Dr. Gerunov is the author of a total of 52 scientific publications, 20 of which are included in the present competition procedure. These are: a habilitation thesis – a single-authored scientific monograph; 7 studies (long articles), articles, and reports published in journals refereed and indexed in world-known databases of scientific information; 7 articles and reports published in non-refereed peer-reviewed journals or in edited collective volumes; 3 chapters of collective monographs; 2 teaching aids for university students.

1. Evaluation of the habilitation monograph

The leading publication of Dr. Gerunov is the book "Risk Analysis for the Digital Age", Springer, 2023, ISBN: 978-3-031-18099-6. This is a comprehensive scientific work that combines traditional with modern approaches to risk analysis in economics and finance. It addresses the issues of risk analysis and management at both the macroeconomic and microeconomic levels. In it, estimates of long-run risk premia in the financial markets across almost all of Europe are computed. At the same time, it examines the behaviour under risk and uncertainty of economic agents in a laboratory experiment. Of particular interest is the novel approach to risk assessment and management in cryptocurrency trading proposed by the author. The book is written in such a way that different parts of it can be used in the teaching process in master and doctoral programs in economics, finance and management.

2. Evaluation of the other publications

The research interests of the candidate, manifested in the above monographic work, are pursued in a number of other scientific publications [2, 3, 4, 5, 7, 11]. Dr. Gerunov has also dedicated several of his works [6, 12, 13, 14, 16, 17, 18] to the problems of e-governance, data protection

in IT systems, and the ethical dilemmas related. A distinct place in his works is occupied by research on the application of machine learning algorithms [1, 8, 9, 15] in various aspects of business, most often for the management of different types of risk. This line of work is a continuation of his second doctoral thesis, in which he developed impressive comparisons among dozens of algorithms in a variety of practical-application problems.

Two of the publications submitted for the competition procedure [3, 5] are in the field of experimental economics and were written jointly with other authors, of which I am one. Therefore, I find it necessary to give some useful clarifications here. First of all, economic experiments have been conducted at the Faculty of Economics and Business Administration since 2006. Initially, this work started with the help of Prof. Dr. Henrik Egbert from Germany (then Senior Assistant Professor at the University of Giessen). Subsequently, it developed with new ideas and new people from our Faculty. A strong impetus was given by the DASUN project (Doctoral Academy for Business and Management Sciences) in 2012–2013, when we received the opportunity to conduct economic experiments with payment to hundreds of participants according to the result achieved by each of them. Anton Gerunov was a doctoral student at the time and got actively involved in this project. It was his idea to introduce "macroeconomic" elements into the experimental design, such as the total production of the lab economic system, as well as a statistically unbiased forecast of this production in a future period. By doing so, the experiment became more complicated, much more interesting, and - perhaps most significantly much closer to the real problems of the economic system. Subsequently, Anton Gerunov, other doctoral students, and researchers analyzed the obtained empirical data from different perspectives, arrived at new findings and made interesting and prestigious publications. It is noteworthy that over the years he has continued to revisit these experiments and discover in them new facts about human economic behaviour. It is to these studies that he has chosen to devote the final, sixth chapter of his habilitation thesis.

3. Evaluation of the citations of the candidate's works

I already mentioned that the required citation scores of the candidate's scientific works exceed the required minimum by more than four times. From the citations list provided by Dr. Gerunov it can be seen that this was achieved due to 106 citations in international and Bulgarian scientific

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publications. I checked a representative sample of these and found correct reporting of the information on all occasions.

It is well known in the scientific community that, unlike some fields, most notably in the natural sciences, economics is considered a low-citation field. Other things being equal, the scholarly work of economists receives, on average, significantly fewer citations than their counterparts in other fields. Therefore, the three-digit result achieved by our colleague Dr. Gerunov is rather impressive.

4. <u>Research projects</u>

Dr. Gerunov has been the leader of three projects financed by the Research Fund of Sofia University St. Kliment Ohridski. Recently, a team led by him won a project within the SU SUMMIT project, funded by the National Recovery and Resilience Plan, Innovative Bulgaria Component, Investment 1 "Programme for Accelerating Economic Recovery and Transformation through Science and Innovation".

IV. Teaching activities

Over the years, Dr. Gerunov has lectured in a total of eight academic disciplines in the bachelor's and master's programmes of the Faculty of Economics and Business Administration, as well as at the Faculty of Philosophy of Sofia University St. Kliment Ohridski. Some of them are basic courses in the undergraduate curriculum, such as "Money, Banking, and Financial Markets", and others are specialized master courses, such as "Digital Business Models and Processes", "Economics of Artificial Intelligence", etc. Two of the courses are taught in English. In the last few years, the total teaching load of Dr. Gerunov at the University is about 1000 teaching hours per annum.

Since 2017, eight students from different master's programmes have defended their theses under his supervision. In 2022, Dr. Gerunov and I were joint scientific supervisors of Ms. Magdalena Vlahova-Veleva, who successfully defended her doctoral dissertation. At the end of the current academic year started the procedure for the official defense of the dissertation of Mr. Mikhail Veselinov Yanchev, whose scientific supervisor is Dr. Gerunov.

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In the current competition procedure he also participates as the author of two teaching aids published by Sofia University Press. These are, respectively, "Money, Banking, and Financial Markets", ISBN: 978-954-9399-76-9 and "Business Analytics with R", ISBN: 978-954-9399-77-6.

V. Personal impressions of the candidate

I have known Anton Gerunov since 2011, and in our first conversation he mentioned that he had research interests in the area of people's economic expectations and their relationship to the macroeconomic dynamics. To that I replied that this would be an excellent topic for a dissertation. I subsequently became his supervisor and in 2015 he brilliantly defended his Ph.D. in this area. Over the years, I have watched his remarkable professional growth, which led him to the current competition procedure. It should be known, however, that his success is due to his brilliant intellectual abilities, a broad professional and general education, a good command of computer science and applied mathematics, and a deep knowledge of economics and the social sciences more generally. Behind all this, in his case, lies an almost supernatural work efficiency.

VI. Conclusion

The candidate in this competition procedure for full Professor, Associate Professor Anton Antonov Gerunov, Ph.D., D.Sc., meets all the requirements for the position. His academic achievements exceed more than twice the minimum national requirements. His candidature is strong and convincing. My overall assessment of his work is entirely positive. I propose to the esteemed Faculty Council of the Faculty of Economics and Business Administration at Sofia University St. Kliment Ohridski to promote Associate Professor Anton Antonov Gerunov, Ph.D., D.Sc., to the academic rank of full Professor in Professional Field 3.8 Economics (Risk Management, e-Governance and Digital Economy - in Bulgarian and English).

Sofia, 28 July 2023.

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