



OPINION

for the needs of a competition for the academic position of “Associate Professor” in the professional field 3.8 Economics

Prepared by: Assoc. Prof. Dr. Eleonora Stancheva-Todorova, Faculty of Economics and Business Administration, Sofia University “St. Kliment Ohridski”, Department of Finance and Accounting

Legal Basis: Ordinance RD 38-94 / 07.02.2022 of the Rector of Sofia University “St. Kliment Ohridski” and Decision of the scientific jury for appointing reviewers (item 3 of Protocol № 01/18.02.2022)

1. General overview of the competition and the candidates

The opinion was prepared within the competition for associate professor in professional field 3.8 Economics (Corporate finance and behavioural finance – in Bulgarian, German and English), announced in SG, issue 103 of 10.12.2021 for the needs of the Faculty of Economics of Sofia University. The only candidate in the competition is Ch. Assistant Professor Dr. Bozhidar Nedev. Dr. Nedev has presented a full set of required documents under Art. 107, para. 1 of PURPNSZADSU, as the documentation is clear and correct. The presented reference for fulfilment of the minimum national requirements under Art. 2b of the Law on the Development of Academic Staff in the Republic of Bulgaria (ZRASRB) for higher education field 3. Social, Economic and Legal Sciences, in professional field 3.8 Economics shows that the candidate performs the minimum required number of points for holding the academic position of “Associate Professor”. At a threshold of 400 points, Dr. Bozhidar Nedev shows evidence of collected 417.5 points.

The candidate's profile is suitable for the needs of this competition. Bozhidar Nedev has a Bachelor's degree in Business Administration and a Master's degree in Economics from Sofia University, where he defended his doctoral dissertation on "Analysis of the momentum effect on the Bulgarian Stock Exchange AD in the period 2004 - 2017 from the viewpoint of behavioural finance" in professional field 3.8 Economics in 2019. He combines his teaching and research work with other activities that contribute to the development and good image of the Faculty of Economics and Business Administration. Impressive is his strong commitment and participation in various initiatives aimed at supporting the students of the faculty. He is the Technical Secretary of the Career Center of the Faculty and Vice-President of the Alumni club since March, 2021.

2. Valuation of the publications and the scientific contributions of the candidate

Bozhidar Nedev has so far in his scientific career 30 publications. 14 of them are presented for participation in this competition, including two monographs, 10 articles, seven of which are co-authored, and two studies. Four of the co-authored articles are indexed in Scopus. The scientific publications of the candidate are in the field of corporate and behavioural finance, incl. investment management, capital markets, investor behaviour and empirical finance.

Particular attention should be paid to both presented monograph entitled "Momentum effect on the Bulgarian Stock Exchange AD: analysis from the viewpoint of behavioural finance" (ISBN:978-954-9399-57- 8), which is based on a defended dissertation for the award of educational and scientific degree "Doctor" and „Behavioural Studies on international equity markets“ (ISBN:978-619-7121-43-8).

The subject of the first monograph is the returns of equity instruments traded on the BSE JSC as of 31 July 2017, with the sample covering the period from January 2000 to the end of July 2017. The main objective of the book is to present the current picture regarding the momentum effect of the analysed Bulgarian Stock Exchange JSC – Sofia (BSE JSC). To overcome the problem of missing historical prices of the considered equity instruments, interpolation by natural cubic spline functions is applied, to which a large part of the contributions in the monograph are due. The main contribution of practical application is the studied possibility to predict the return on equity instruments of BSE JSC as a border market within the next 12 months based on their performance in the previous up to 12 months (the momentum effect). The testing of the momentum effect of BSE JSC is performed based on the

entire studied period (January 2004 - July 2017), as well as within different sub-periods, taking into account the changes in the economic environment in the country and their impact on the Bulgarian capital market. The return of the so-called simplified momentum investment strategy compared to the traditional investment strategy is assessed.

The equity markets of the New York Stock Exchange, the American Stock Exchange, the Shanghai Stock Exchange, and the Bulgarian Stock Exchange JSC are the object of study in the second monograph. The subject of study in this book is the return of stocks traded on each of the four capital markets. The sample period for the three foreign stock markets covers the years between 1990 and 2018, while for BSE JSC it covers the years from January 2004 to July 2017. The presence of missing data in the US and Chinese capital markets is overcome by applying the “nearest neighbour” method, which is commonly used in financial markets with high liquidity. For the BSE JSC, interpolation using natural cubic spline functions is used due to market specificities. One of the main contributions of the work is the outlined specifics of the fundamental theoretical concepts in the behavioural finance from the standpoint of behavioural portfolio theory, behavioural model for asset valuation, the adaptive market hypothesis and the main market anomalies. The possibility of short-term predictability of returns (momentum effect) on the US and Chinese capital markets is tested by studying the simplified momentum strategy in the period from July 1997 to December 2018. Some characteristics of the market anomaly over time are outlined. The contrarian effect of BSE JSC (between January 2004 and July 2017) is examined, including through the study of sub-periods that take into account the development of the Bulgarian capital market.

The scientific contributions of Dr. Nedev in his other publications, incl. those co-authored, can be summarised as follows:

Theoretical contributions, mostly based on extensive literature reviews in the publications:

- 1) The Bulgarian experience in conducting behavioural financial research on the Bulgarian capital market on BSE JSC has been traced.
- 2) A systematic literature review has been performed in regards of the development of algorithmic and high-frequency trading in financial markets at international level in terms of its distribution, types of algorithms, legal factors and transaction costs.
- 3) In co-authorship, the possibilities that the wavelet transform offers as a relatively new method for performing time-frequency analysis of a given time series before other alternatives are highlighted.

- 4) The emergence of behavioural financial thought in historical terms has been traced. The genesis of the formation of the behavioural economics and finance from the 17th to the 20th century is highlighted.

Other contributions with practical applications:

- 1) The relationship between the documented momentum effect on the Bulgarian Stock Exchange in the period January 2004 - December 2007 and the cultural characteristics of Bulgarian society is analysed through the application of the 6-Dimensions Culture Model by Hofstede.
- 2) In co-authorship, a mental health analysis is performed in terms of geographical location in the population over 50 years of age in 12 European countries, including Bulgaria, based on wave 7 data of the SHARE (Survey of Health, Ageing, and Retirement) project. By employing factor analysis, two latent variables are derived, indicating a lack or presence of depression.
- 3) In co-authorship, the factors with the most significant effect on the deterioration of mental health and prevention of depression in the population over 50 years of age in 12 European countries, including Bulgaria, are identified, based on wave 7 data of the SHARE project.
- 4) An analysis of the possibility for e-trading of BSE JSC has been performed. The criteria, that should be met in order to establish the ground of the application of algorithmic and high-frequency trading on the Bulgarian capital market, are discussed.
- 5) In co-authorship, the time-frequency characteristics of the volatility in monthly closing prices of the S&P 500 index over a period of 65 years (between January 1950 and March 2015) are traced based on the performed one-dimensional analysis.
- 6) In co-authorship, the possibility of stock market crashes from the perspective of endogenous market instabilities is analysed through the lens of behavioural finance by using data from the New York and US stock exchanges in the period from January 1995 to April 2018.
- 7) In co-authorship, the volatility analyses of the raw profit series generated by winners-only trading strategies of the US capital market for more than 20 years (January 1995 - April 2018) is performed through the application of continuous wavelet transform. The applicability of this relatively new approach to the possibility of short-term

predictability of the return on traded capital assets in terms of investors' behaviour and their decisions to choose investment horizons over time is revealed.

- 8) In co-authorship, the potential macroeconomic effects that the transition to a low carbon economy would generate on investment activity and employment in the energy sector in Bulgaria are revealed. Global and European initiatives and regulations are revealed and summarised. Using the production function approach, the relationship between real GDP, on the one hand, and capital and employees in the energy sector, on the other hand, is modelled and estimated in 1997-2017, by taking into account its capital-intensive nature.
- 9) In co-authorship, the return of momentum trading strategies on the New York Stock Exchange from January 1995 till April 2018 is examined. The effect of financial crises on the return of momentum effect is revealed by studying five different sub-periods for estimating the performance of the trading strategy.
- 10) The electronic trading platforms, offered by the Bulgarian investment intermediaries, are analysed as well as their characteristics in order to outline the possibilities for electronic trading in Bulgaria.

Regarding the candidate's scientific activity, it should be also noted that during the period under review he took part in numerous national and international scientific and practical conferences with research on various issues in the field of economics and finance. He also participates as a member of the research team in seven research projects, some of which are funded by the Bulgarian Scientific Research Fund.

3. Overview of teaching activities

The candidate has started his academic career at Sofia University "St. Kliment Ohridski" in November, 2015 as a full-time Assistant Professor in the Department of Finance and Accounting. He was promoted to Chief Assistant Professor in November, 2019.

As his field of research interest is corporate and behavioural finance, Dr. Nedev is currently successfully developing training materials and leads a number of mandatory courses in the bachelor's and master's programs of the faculty – „Corporate finance“ (seminars), „Introduction to finance“ (lectures and seminars in English), „Introduction to behavioural finance“ (lectures and seminars in English), „Financial institutions and markets“ (lectures and seminars, in team),

Finance (public and corporate)” (lectures in English), which provide sufficient auditorium employment to occupy the position in this competition.

During the period under review, the candidate also participated in the development of the courses “Practical Course in Accounting and Finance”, “Behavioural Economics and Finance” and “Analysis of Financial Markets”.

Dr. Bozhidar Nedev is a director of the master programmes “Finance and Banking” and “Finance, Investments and Fintech” and is responsible for the cooperation of the faculty with the German universities, as of the academic year 2020/2021 onwards.

The fact that Dr. Nedev actively uses innovative educational methods (online training) and at the same time works on a number of educational and research projects, related to the development of the Faculty of Economics and Business Administration, deserves special attention. He participated in the accreditation process of the new bachelor's program „Accounting, Finance and Digital Applications in English“, by the Institute of Chartered Accountants in England and Wales (ICAEW), as well as in its accreditation by the international professional organisation Chartered Financial Analyst (CFA). We should also mention his contribution to the preparation of the self-assessment report for the accreditation performed by the National Evaluation and Accreditation Agency of the two doctoral programs at the Department of Finance and Accounting in 2019.

4. Critical remarks and recommendations

I would recommend Dr. Bozhidar Nedev to continue and expand his interdisciplinary research, focusing on publishing individual and co-authored papers in indexed journals. Given the foreign languages he speaks, he could also publish his works in German and continue to participate actively in international scientific conferences and forums. This would promote him as a specialist in corporate and behavioural finance.

5. Conclusion

The quantity and quality of the scientific developments and evidence for research and teaching activity presented in this competition fully meet the minimum requirements of ZRASRB and the Regulations for implementation of ZRASRB. The only candidate in the current competition, Dr. Bozhidar Nedev, convincingly demonstrates his suitability for the

academic position of “Associate Professor” at the Faculty of Economics and Business Administration at Sofia University and I believe that the faculty would only benefit from his promotion. In this sense, I express a positive opinion and propose to colleagues from the esteemed Scientific Jury to be awarded the title of “Associate Professor” in the field 3.8 Economics of Dr. Bozhidar Nedev.

Member of the Scientific Jury:

Assoc. Prof. Dr. Eleonora Stancheva-Todorova

Sofia, 30.03.2022