

OPINION

by Prof. Teodor Sedlarski, PhD

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Regarding: Competition for the academic position of Associate Professor in the professional field 3.8. Economics (Application of computational methods in finance and economics (financial crises and fintech) for the needs of the Faculty of Economics and Business Administration

Grounds for the opinion: Member of the Scientific Jury by Order RD 38-275/06.06.2022, issued by the Rector of the Sofia University St. Kliment Ohridski

Information about the competition and the candidate

The competition is for the academic position of Associate Professor in the professional field 3.8. Economics (Application of computational methods in finance and economics (financial crises and fintech). The competition is announced in the State Gazette, issue 30/15.04.2022, for the needs of the Department of Economics of the Faculty of Economics and Business Administration at Sofia University St. Kliment Ohridski.

Only the documents of Assistant Prof. Deyan Vasilev Radev PhD, have been received for participation in the competition.

The submitted documents have been prepared in accordance with the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria and the Rules on the Conditions and Procedure for Acquiring Science Degrees and Holding Academic Positions in Sofia University St. Kliment Ohridski.

Dr. Deyan Radev completed his bachelor's studies in "Economics" at the Faculty of Economics of Sofia University "St. Kliment Ohridski" in 2006. He holds a Master's degree in international economic relations from the University of Konstanz, Germany (2008). In 2013 he defended a dissertation with 'summa cum laude' on the topic "Systemic Risk and Contagion in the European Union" at Goethe University - Frankfurt.

Dr. Radev teaches courses in corporate finance, banks and securitization, corporate banking, fintech and e-banking, etc. at the University of Bonn, Goethe University in Frankfurt, Johannes Gutenberg University in Mainz, Germany and at the Faculty of Economics of Sofia University St. Kliment Ohridski".

Dr. Radev has numerous specializations, won research grants and research honors in EU countries and the USA.

He is an established and respected young teacher and researcher in the field of economics and finance with authority among his colleagues in Europe and the country.

Meeting the minimum national requirements under Article 26 of the Act on Development of the Academic Staff in the Republic of Bulgaria According to the report on the fulfilment of the minimum national requirements under Article 26 of the Act on Development of the Academic

Staff in the Republic of Bulgaria in the professional field 3.8. Economics for the academic position Associate Professor Assistant Prof. Deyan Radev, PhD meets the quantitative criteria.

Of specific interest is the list of publications related to the announced competition. The publications total 5 in English language and are described as follows:

- 1 monograph (120 pages) on the topic "Economic Crises and Financial Contagion" (University Publishing House "St. Kliment Ohridski");
- 1 monograph (94 pages) on "Measuring Systemic Risk: A Probabilistic Perspective", published by the prestigious scientific publishing house "Springer";
- 2 articles in scientific journals, referenced and indexed in the world scientific information database Scopus, focused on the cross-border effects of banking activity and regulations;
- 1 chapter from a collection published by Routledge-Giappichelli Publishing House, analyzing aspects of the digital euro in the context of monetary policies in the euro area and their effects beyond.

The candidate submitted proof of several citations in Scopus/Web of Science.

Evaluation of the scientific contributions of the candidate

The contributions of Assistant Prof. Deyan Radev, PhD, to the competition for the academic position of Associate Professor are in two main directions – scientific-theoretical and scientific-applied.

Among the more significant of them are:

Contributions of scientific-theoretical nature

- Application of multivariate copulas to identify episodes of financial contagion between Western European and Central and Eastern European (CEE) stock markets between 2006 and 2015 (Publication 1 of the list under item 10b)
- Introduction for the first time in the literature of a dynamic variant of the above methodology and output of time series of dependence indicators in the tails of multidimensional distributions (Publication 1 from the list under item 10b)
- Application of the derived indicators to identify a new channel for the transmission of shocks from global banks to CEE economies (Publication 1 from the list under item 10b)
- Introduction of a set of new indicators for systemic risk based on multidimensional probabilities of bankruptcy of banks and countries (Publication 2 of the list under item 10b);
- Comparison between the new systemic risk indicators and existing indicators in the literature. Analysis of the advantages of the new indicators. (Publication 2 from the list under item 10b);
- Formulation of an empirical model to estimate the effect of negative capital and liquidity shocks at the level of the parent bank on the loans granted by its foreign subsidiaries. The study included parent banks from the OECD and subsidiaries from around the world between 1997 and 2012. (Publication 3 of the list under item 10b)
- Formulation of an empirical model to assess the impact of bank liquidity regulations on the transmission of liquidity shocks at the level of the parent bank on loans granted by its foreign subsidiaries. The influence of different monetary regimes such as currency board and dollarization in the host country is also investigated. OECD parent banks and subsidiaries from around the world are included in the study. (Publication 4 from the list under item 10b).

Contributions of scientific-applied nature

- Proposals for innovations in banking regulations and the work of national and international banking regulators have been formed based on the theoretical and empirical analysis (Publication 3 from the list under item 10b)
- Motivating the need for a digital euro in the context of rapidly developing digital forms of payment and crypto-assets that reduce the volume of physical euro payments. (Publication 5 from the list under item 10b)
- Motivating the need to embed international transactions at the heart of the digital euro design as an extension of the ECB's initial plans to make digital euro payments only within the Eurozone (Publication 5 of the list under item 10b)
- Motivating the need for "minimally invasive technology" championed by the Bank for International Settlements, which does not allow disruption of the role of banks as main intermediaries in the European financial system and the resulting risks to financial stability in the Eurozone (Publication 5 of the list under item 10b)
- Derivation of more than 15 indicators of systemic risk in the Eurozone based on multivariate probabilities and credit default swaps. The indicators reflect two-dimensional, three-dimensional and multidimensional unconditional and conditional probabilities of default, as well as a family of conditional probability difference measures (Publication 2 of the list under item 10b). The indicators underwent a technical assessment in May 2012 and have been used in the daily work of the European Central Bank as part of the systemic risk measurement toolkit for more than 10 years. (Publication 2 from the list under item 10b)

Notes and recommendations

The candidate's monographic works can be used as a means of establishing a modern way of teaching important economics and finance disciplines. They could be expanded with case studies with application in the relevant topics of individual courses, which would significantly contribute to the understanding of the most current theoretical approaches by students in economics and finance specialties in the country.

Conclusion

The scientific contributions of the candidate in the publications submitted for review in the competition, as well as the quality and volume of her pedagogical activity, give grounds for the conclusion that all the requirements of the law and the procedures for acquiring scientific degrees have been met. Deyan Radev, PhD meets the relevant quantitative requirements for holding the academic position "Associate Professor" in the Faculty of Economics at Sofia University. I propose to the Scientific Jury to select Deyan Radev, PhD for the academic position of "Associate Professor" in the competition in professional field 3.8. Economics (Application of computational methods in finance and economics (financial crises and fintech), announced in State Gazette, no. 30/15.04.2022.

25 August 2022,
Sofia

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