

**SOFIA UNIVERSITY “ST. KLIMENT OHRIDSKI”**

**FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION**

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**OPINION**

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Scientific speciality “Statistics and Demography” (PhD, Professor),  
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Regarding: Application on Procedure for Academic Position of Associate Professor in  
Professional Field 3.8. Economics (Statistics, Econometrics and Economic  
Modelling), at Sofia University “St. Kliment Ohridski” (SU)

**1. Information on the Procedure**

The Procedure was announced for the needs of the Faculty of Economics and Business Administration, SU, according to the SU Faculty Council Decision no. 10/13/05/2022. I participate as a member of the Scientific Jury for this Procedure according to Ordinance no. RD-38-277/06/06/2022 of the Rector of SU.

**2. Brief information on the applicants in the Procedure**

One candidate has submitted their papers and has been admitted to the current competition, Andrey Andreev Vassilev, PhD. Mr Vassilev, PhD, has long experience as a part-time lecturer at SU (since 2003) and a researcher and this helped him in building the features needed for being awarded the academic position of an Assistant Professor.

**3. Fulfilment of the requirements for holding the academic position**

For his participation in this Procedure, Mr Andrey Vassilev, PhD, has submitted a total of 34 publications, all of them published in scientific journals, out of which 3 monographs (habilitation thesis, chapters from a multi-author monograph whose size meets the requirements for a stand-alone monograph, and a published co-authored university textbook), 7 articles and scientific papers in scientific journals, referenced and indexed in world-famous scientific information databases (in English, and co-authored), 11 articles and scientific papers in scientific peer-reviewed not indexed journals (10 in English, 10 co-authored) and 13 studies in scientific peer-reviewed not indexed journals (co-authored, out of which 9 in English). The publications submitted are beyond the subject of the dissertation and have been accepted for evaluation.

Familiarising with the papers and scientific publications provided by the candidate for this Procedure showed that they are beyond both the minimum national scientometric requirements and the supplementary SU’s requirements for the award of the academic position of an Assistant Professor. In quantitative terms, all academic products presented by Mr Andrey Vassilev, PhD, make a total of 627,1 points vs. 620 points needed according to regulatory requirements.

All publications presented for this Procedure may undoubtedly be evaluated as papers on high academic level. These were presented to the academic community and to the general public using highly credited academic journals, having been credited a number of positive evaluations from an array of significant university and academic institutions. The overall conclusion is that the evaluated scientific product mirrors the results achieved over this candidate's research and teaching activities.

#### **4. Evaluation of candidate's lecturing and teaching**

Mr Andrey Vassilev, PhD, has accumulated more than 19 years of teaching experience as a part-time lecturer at the Faculty of Mathematics and Informatics and Faculty of Economics and Business Administration of Sofia University. During all those years he gave lectures and seminars in a number of subjects in English, such as Econometrics, Macroeconomics I – part one and Macroeconomics I – part two (Faculty of Mathematics and Informatics), Statistical and Mathematical Methods, Applied Economic Modelling with Python, Applied Econometrics I – part one, Applied Econometrics II – part two, Macroeconomic Modelling and Microeconomic Modelling (Faculty of Economics and Business Administration), which boosted his formation as a lecturer with rich knowledge and pedagogical experience. In addition, Mr Andrey Vassilev, PhD, has developed a textbook and lecture classes for bachelor's and master's degrees for students on some of the topics in the curricula of these subjects, 2 websites with educational materials for the classes on Macroeconomics I – parts one and two in the Faculty of Mathematics and Informatics and 6 educational materials repositories for the classes on Applied Economic Modelling with Python, Statistical and Mathematical Methods, etc. in the Faculty of Economics and Business Administration of SU, with all of them complementing his qualifications as lecturer. Furthermore, the candidate under this Procedure has been an important and successful participant in 13 academic or educational projects (5 international, 7 national and 1 university-level), with all this supporting the expansion of his academic scope of interests and his establishment as an insightful and prospective researcher.

#### **5. Brief characteristics of presented academic works and publications**

For the purposes of this Procedure, Mr Andrey Vassilev, PhD, has submitted a stand-alone monograph, a co-authored university textbook, chapters from a multi-author monograph, as well as a number of scientific studies, articles and papers. Those publications stand out as going into some high-priority national topics and possibilities for modelling of complex present-day economic and social problems have been treated in them. These provide a supplemented and enriched conceptual framework to the issues researched, complemented by a critical analysis of some sources and international expertise standing out with its significant scope and volume.

The academic products presented by Mr Vassilev, PhD, may be classified in the following threads:

- Modelling of small open economies' reactions with respect to various shocks and studying of parameters combinations leading to general equilibrium (currency board arrangement, rules-based fiscal policy, existence of several monetary unions, equilibrium exchange rate, inflation and structural unemployment, etc.);
- Modelling of significant and topical problems of labour market functioning and efficiency in Bulgaria (level of discrepancies between labour demand and supply, key determinants influencing their development, labour market imbalances by basic

- socio-economic attributes, determinants of labour force participation, etc.);
- Macroeconomic impact assessment of economic policies conducted and analysis of their effects on the development of Bulgarian and EU economy;
  - Modelling of foreign trade issues in the presence of strategic relationships and under protectionism elements, deriving the conditions of the relations between output and financial resources for the existence of J. Nash equilibriums and the price dynamics mechanisms;
  - Developing and modifying dynamic optimizing models of consumption-saving and spatial relocation decisions, studying the conditions for existence of solution, deriving the necessary conditions for optimality and their properties, etc.;
  - Developing and studying of technical tools applicable to macroeconomic and financial modelling (methodology and principles for development of agent-based systems, possibilities for applying reaction network theory approach, etc.).

All mentioned threads fall within the scope of the announced Procedure. Mr Vassilev's publications in these areas reveals his integrity and determination as a scientist with a clear focus of scientific interests and research. The general conclusion is that the candidate participates with a sufficiently voluminous, diverse and up-to-date scientific products, whose types and content fully correspond to the theme of this Procedure.

## 6. Brief evaluation of scientific and applied scientific contributions

The scientific contributions indicated in the candidate's self-evaluation sheet are directly related to the publications indicated by him. They fully meet the requirements and the theme of this Procedure.

It is my belief that the main theoretical contributions found in this candidate's works are: **first**, in developing and refining of dynamic stochastic general equilibrium models for small open economy aimed at obtaining of more accurate and realistic results of modelling of the macroeconomic development; **second**, in developing a modular model theoretical framework for forecasting the labour demand and supply in Bulgaria; **third**, in the enrichment of knowledge about the behaviour of economic agents in trade in the presence of strategic element under various forms of protectionism and building a unified framework for the analysis of these relations; **fourth**, in the author's concept for analysis of simultaneous interaction of inflation, output and unemployment aimed at studying the cyclical evolution of output and unemployment and at identifying of the key determinants of inflation; **fifth**, in the suggestion of a research approach and a method for calculating exchange rates that do not allow arbitrage on the basis of graph-theoretic tools.

In my opinion, his main scientific and applied contributions are: **first**, approbation of developed variants of the dynamic stochastic general equilibrium model for a small open economy on data for the Bulgarian economy and analysis of the simulation scenarios for economic development; **second**, developed, updated and enlarged medium-term and long-term forecasts (to 2028, 2032 and 2034) for labour supply by age groups and educational degrees, employment structure by economic activities, structural imbalances by educational degrees at regional level, labour demand by economic activities and professions and economic activities and gender; **third**, the ex-post evaluation of the contribution of active labour market policy in Bulgaria in the period 2000-2011; **fourth**, in upgrading of the approaches used in presenting the basic macroeconomic models and in creation of interactive software applications aimed at accessible introducing of different models in university studies in economics and at better

understanding of economic interpretations by the students trained; and **fifth**, in ideas contained in a number of studies and publications of Mr A. Vassilev, PhD, for improving governmental strategies and public policies in the field of balancing of the labour demand and supply, improving the employment, determinants of increasing the labour force participation, budget deficits, government debt and others that can be used by governance bodies at national and regional level.

**7. Main critical remarks and recommendations**

I have no significant critical remarks to Mr A. Vassilev, PhD.

**8. Conclusion**

Based on the definite positive assessment of the overall activity of Mr A. Vassilev, PhD, as a lecturer and researcher, I would like to recommend to the members of the esteemed Scientific Jury to support this proposal for the appointment of Andrey Andreev Vassilev, PhD, to the academic position of Associate Professor in the in Professional Field 3.8. Economics (Statistics, Econometrics and Economic Modelling), at Sofia University “St. Kliment Ohridski”.

04 August 2022  
Sofia

Signature .....  
Prof. K. Borissova-Marinova