#### REVIEW

By: Prof. Dr. Valentin Dimitrov Goev, Scientific Field: "Statistics and Demography", University of National and World Economy – Sofia

About: Procedure for attaining academic position "Associate Professor" on "Statistical and Econometric Methods", Professional Field "3.8. Economics", Scientific Area "3. Social, Economic, and Law Sciences", at "Economics of the Firm" Section, Economic Research Institute at the Bulgarian Academy of Sciences.

# 1. Information about the procedure

The procedure is announced in State Gazette No. 33 / 29.04.2022 for the needs of "Economics of the Firm" Section, Economic Research Institute /ERI/ at the Bulgarian Academy of Sciences /BAS/. My participation in the Scientific Jury on this procedure is according to Order № 281 / 27.06.2022 issued by the Director of ERI-BAS.

## 2. Information about the candidates for the position

The only candidate for the position to be attained under this procedure is Chief Assistant Professor Dr. Nedyalko Nestorov.

• Nedyalko Nestorov is appointed at ERI-BAS in 2015 as an Assistant Professor. In 2019 he is promoted to Chief Assistant Professor and currently occupies this position at "Economics of the Firm" Section of ERI-BAS. In 2012 he is awarded "PhD in Economics" by ERI-BAS, Scientific Field "Statistics and Demography". He has completed his secondary education in 2005 at Commerce High School, city of Stara Zagora, and his tertiary education at the University of Economics – Varna, attaining BA degree in "Statistics and Econometrics" and MA Degree in "Forecasting of Financial Markets".

- He has worked six years since 2005 to 2011 on positions Accountant and Head Accountant at Micro Account Ltd.
- N. Nestorov has worked also for non-profit and volunteer organizations. He is a member of Lindau Alumni (organization of the participants in workshops with Nobel Prize holders), the Union of Economists in Bulgaria, and the Union of Scientists in Bulgaria.

# 3. Meeting the requirements for attaining the academic position under this procedure

The candidate on this procedure Dr. Nedyalko Nestorov has fulfilled the minimum national requirements as well the requirements imposed by the Regulation of Procedures for Attaining Scientific Degrees and Academic Positions at ERI-BAS, as seen from the Statement on Scientific Indicators submitted by the candidate. He has covered the required number of points under Articles A and B. On Article G the achieved points are 250 with a minimum threshold of 230 for ERI-BAS. On Article D there are 115 points with a threshold of 70. This way the candidate fulfills all formal requirements – both national and local (increased thresholds for ERI-BAS by some articles).

#### 4. General overview of the submitted scientific worksции

<u>The outputs</u> of the research activity of Dr. N. Nestorov can be allocated by the following thematic areas:

A. Publications in the area of foreign trade and export of Bulgaria comprise the major share of his research output, including his habilitation work (monography) which I will consider in some detail further. This area includes publications enumerated as: B.3.1, G.6.1, G.7.1, G.7.2, G.7.4, G.7.5, G.7.7, G.7.9, G.8.1.

- B. Publications concerning the impact of major factors on GDP dynamics in Bulgaria: here publication enumerated as G.7.6 and G.7.12 may be allocated.
- C. Publications regarding economic sector "Mining and Quarrying" enumerated as G.7.3, G.7.8 и G.8.1.
- D. Publication that considers the utilization of ICT by Bulgarian companies: G.7.11.

These four thematic areas of the submitted publications can be categorized in further detail, but presented even in this way, they provide evidence for a wide thematic horizon of the candidate's research work. It also should be noted that these titles do not coincide with the publications submitted by the candidate on the procedures for attaining the position of "Assistant Professor" and awarding his PhD degree.

Dr. Nedyalko Nestorov has submitted one self-authored monography entitled "Sustainability of Bulgarian export 2008-2019".

The monography is of total size of 145 pages and is structured in three chapters, introduction and conclusions sections. The theoretical and methodological aspects of the study of sustainability are comprehensively reviewed, followed by the justification of a method for measuring the degree of export sustainability as well as the results from the application of this method in the empirical analysis section. This study presents an application of an original approach and a method for quantitative evaluation of the sustainability of export dynamics. It is implemented using data for Bulgaria for the stated period reflecting both macro and micro levels of analysis. An empirical analysis is performed on the basis of which meaningful conclusions are derived. Advantages of the Coefficient of Sustainability (CS) suggested by the author are presented in a comparative setting in respect of other analogous statistical indicators. Definitely, the suggested method is the major scientific contribution of the candidate.

All publications in the four major areas of the submitted research output provide evidence for the comprehensive character of the analyses performed by the candidate. This is also confirmed by the appropriate choice and application of statistical methods as well as the correct interpretation of results achieved and conclusions derived on the basis of these empirical results. There is no doubt to me that the candidate knows very well the statistical methodology for conducting economic analyses, implements it in a competent way, and derives comprehensive conclusions on the basis of the achieved results.

## 5. Assessment of the scientific and applied contributions

Dr. Nedyalko Nestorov has defined 12 contributions in the respective Statement. Some of them are split in unnecessary detail and seem to be rather results from his studies than contributions. For example, the first three can be combined and one contribution to be formulated as: "an original method has been developed for assessment of the sustainability where a specific 'sustainability coefficient' is suggested and implemented for the assessment of Bulgarian exports". The next two contributions are identical – obviously, this is a technical mistake. I accept and confirm in general the contributions of the candidate under the condition that they could be formulated in a clearer and synthesized way. I find them significant and acceptable for the aspired position of "Associate Professor" at ERI-BAS.

#### 6. Critical notes and recommendations

In general, I do not have any substantial remarks and recommendations to the publication record submitted by the candidate. I would mention one point which I find at least debatable. On page 50 in his monography the author writes that "sustainable is an economic process

that systematically follows a linear pattern". This statement seems controversial. For example, if we consider a process that follows a trajectory very close to the quadratic function, isn't it a sustainable one? Moreover, if a process is described better by some other elementary mathematical functions, wouldn't it be of sustainable character? For example, the software system IBM SPSS suggests 11 basic mathematical functions which are used for detecting trend in particular time series. This makes possible easily to be found which of them provides a best model for the existing trend. There are many phenomena whose dynamics is presented by models different from the linear, and these models are sustainable in the time span, e.g. regardless whether the initial time series shortens or expands.

I have two recommendations to the candidate Dr. N. Nestorov:

- 1. In his further research he should adopt a wider concept towards the sustainability patterns, in the sense mentioned above.
- 2. The method for quantitative evaluation of sustainability should be further developed towards implementation in other area studies, e.g. economic growth, unemployment, inflation, and other economic phenomena.

#### 7. Conclusion

On the basis of the above statements, without any doubts I vote by "Yes" for the candidate Dr. Nedyalko Nestorov to attain the academic position "Associate Professor" at ERI-BAS.

Sofia,	
21.08.2022	Signature:
	/Prof. Dr. V. Goey/