PEER REVIEW

by Prof. Georgi Ivanov Shopov, PhD,

Economic Research Institute at the Bulgarian Academy of Sciences

(High Education Field 3. Social, Economic and Legal Sciences;

Professional Field: 3.8. Economics (national economy)

The present peer review was prepared in relation with the announced competition for the academic position of "Associate Professor" by the Economic Research Institute (ERI) at the Bulgarian Academy of Sciences (BAS), for the needs of the "Macroeconomics" department, in professional field 3.8. Economy (poverty and social protection), published in the State Gazette, No. 44/19.05.2023.

By the decision of the Scientific Council (SC), protocol No. 7/12.07.2023 and according to the order No. 369/18.07.2023 of the Director of the ERI at BAS, under the procedure for the competition for the academic position of Associate Professor, I have been approved as a member of the Scientific Jury. I was selected as a reviewer by this Jury at its first meeting held on 25.07.2023.

The only candidate in the competition is Chief Assistant Professor, PhD, **Teodora Margaritova Peneva**, from "International Economics" department, ERI at the BAS.

The review was prepared in accordance with the requirements of Article 57a of the Regulation for the Implementation of the Law for the Development of the Academic Staff of the Republic of Bulgaria (RILDSARB), according to which "The Scientific Jury shall evaluate the candidates for the academic position of Associate Professor according to the fulfilment of the conditions under Article 53 and in accordance with the results of the reports under Article 54, par. 1", i.e. possession of a PhD degree, existence of a certain length of service as a chief assistant professor, presence of a published monographic habilitation thesis, compliance with the minimum national scientometric requirements and with the specific additional requirements contained in the Regulations for the Acquisition of Scientific Degrees and the Occupation of Academic Positions at the ERI at the BAS.

I. GENERAL INFORMATION ABOUT THE APPLICANT

Chief Assistant Professor, PhD, Teodora Peneva holds 2 Bachelor's degrees (on Chinese Studies at Sofia University (SU) and on Chinese Language and Economics at the Beijing University of Languages and Cultures), as well as 2 Master's degrees (on International Economics at Peking University and on Management of Social Work Institutions with a Master's thesis entitled "Innovative Model of Patronage Care in Bulgaria" (at SU). Her PhD thesis on "Analysis of methods for the study of energy poverty in Bulgaria" was defended at Sofia University.

During the period March 2018-April 2019 (over 1 year) she was a Senior Assistant Professor at the "Public Policies and Social Change" Department of the Institute of Philosophy and Sociology at the BAS, and since May 2019 (i.e. over 4 years) she is a Senior Assistant Professor at the ERI at the BAS.

Thus, Dr. Peneva exceeds the minimum requirement of the ERI of at least 3 years of experience as a "senior assistant professor", as 6 years of her professional career have been at the BAS, including more than 4 years at the ERI at the BAS.

Her main research interests are energy poverty, general poverty, vulnerable groups, social services, social policy and social protection.

In addition to her academic experience, the candidate has experience as a market analysis expert at EVN Bulgaria Ltd. and as a manager of EMIS Energy China - an analytical tool for monitoring energy sectors in the world's major producing countries. Last year (2022), she was Vice Chair of the National Energy Efficiency and Energy Poverty Alleviation Committee of the European Green Deal Advisory Board. This allowed her to throw a solid bridge between the results of her research and the national policy in the energy sector, the definition of energy poverty and the social protection of the energy poor.

Dr. Peneva has an excellent command of Chinese and English, and good knowledge of French and Russian.

Personal impressions. I have known Dr. Peneva since 2018, as we have jointly participated in 2 projects of BAS. My opinion is that she is an active researcher, with independent thinking and an undoubted capacity for scientific research, consultancy and training. She demonstrates a clear desire to develop her scientific research both in breadth and depth, and above all in the social field. Along with this, she is keen to transfer the results of her academic activity into the practice of social policy at the national, but also at the micro level. She has the skills and experience that ERI and the Macroeconomics Department need.

II. ASSESSMENT OF THE COMPLIANCE WITH THE MINIMUM NATIONAL REQUIREMENTS AND THE REQUIREMENTS OF THE ERI at BAS

Chief assistant professor Dr. Teodora Peneva has fulfilled, and by many indicators exceeded, the minimum national requirements and the requirements of the Institute of ERI at the BAS for scientific activity in the field of the "associate professor" competition, set by the RILDSARB and by the specific Regulations for the Acquisition of Scientific Degrees and the Occupation of Academic Positions at the ERI. More specifically, she:

- possesses a PhD degree;
- is a senior assistant professor for more than 5 years;
- participate in the present competition with 1 habilitation work a peer-reviewed monograph (in the field of energy poverty), which does not repeat the publications submitted for the acquisition of PhD degree, and with a number of other publications, such as:
 - o 1 monograph not submitted as a major habilitation work (in the field of social services and policies),
 - o 1 book based on the defended PhD thesis (in the field of energy poverty) this publication is not a subject of the present review,
 - o 5 articles and studies on social issues in scientific journals and papers in proceedings of national and international conferences;

- has 258 points in Group D (Publications), instead of 230 required, and in Group E (Citations) there are 130, against a requirement of 70; the total of all Groups A-D is 538 points, which exceeds the required 450 points by almost 20%;
- fulfils the specific requirement of the ERI to have at least 2 publications in scientific journals, refereed and indexed in world-renowned databases of scientific information.

III. SCIENTIFIC ACTIVITY

Teodora Peneva has participated in a number of scientific and scientific-applied projects directly related to the subject of the present competitive procedure. Among them, I would outline the project "Preparation of a National Strategy in the field of energy, with a focus on electricity" (2017-2019), assigned to the BAS by the Government; "Energy poverty in Bulgaria: dimensions and factors" (from the research plan of IERI-BAS, 2020-2022); the development of a Methodology for determining energy-poor households in Bulgaria (2022). She was the initiator, main organizer and key speaker of the Round Table at ERI-BAS on the topic "Energy poverty in Bulgaria: definition and policies" (March 2022).

The scientific production presented by the candidate includes 8 publications - of them:

- 3 independent monographs (No. 1 and 2, and No.3, which is not in the scope of this review).
- 5 other publications, of which:
 - o 2 studies in English (No. 4 and 5), which were published in a scientific journal indexed in SCOPUS (Journal of Economic Studies).
 - o 3 articles in Bulgarian in non-refereed peer-reviewed journals. One article (No. 6) is entirely written by the author (in the journal "Economic thought"), the other (No. 8) is co-authored and has a relevant separation protocol, and one article (No. 7) is in the proceedings of an international scientific conference.

All these publications have been peer-reviewed and - as is the case, for example, with the conference paper - their results have been subject to public scientific discussion. They date from the period after the award of the PhD degree and the academic post of senior assistant professor. They reflect active scientific work and present the candidate as suitable for the competition for the academic post of Associate Professor, fully meeting the scientific-metric requirements for this.

Systematized, the publications define scientific research that fully correspond to the theme of the competition. In the "poverty" part, the publications are mainly devoted to the energy poverty, but they also touch on general questions about poverty - this includes the habilitation monograph (No. 1), the two articles in scientific publications indexed in SCOPUS (No. 4, No.5) and the three articles in non-refereed peer-reviewed journals (No.6, No.7 and No.8). In the "social protection" part, a monograph dedicated to patronage care (No. 2) is presented, but issues related to social protection are also considered in almost all other publications - in the habilitation book (No. 1), in studies No. 4 and No.5, articles No.6 and No.7.

IV. SCIENTIFIC ACHIEVEMENTS AND MAIN CONTRIBUTIONS

The scientific researches of Dr. T. Peneva make an impression with their scientific conscientiousness, thoroughness, topicality and significance of the achieved results both in academic and practical-applied aspect. The publications are devoted to significant socio-economic

problems, most of all related to energy poverty (its measurement, definition, determining factors, possible measures and policies for social protection of the energy poor in the country), but also to social services (in particular, patronage care) as part of the social protection system. The analysis is based on extensive and rich statistical information - generally from the NSI or from own surveys. The data has been specifically organised, systematised and processed, using adequate methods and measures, most often adapted by the author for the purposes of the study. Some of these studies (especially in the area of energy poverty, where the monographic habilitation book No.1 stands out) can be characterized as innovative for our country in terms of focus, scale and depth. The scientific works present Dr. Peneva as a mature academic researcher with an affinity for contemporary, topical and under-researched scientific challenges, and for precision in the search for and application of scientific tools to maximize reliable results. Also noteworthy is the desire to seek and find applications of these results, i.e. - to be constructive and to address practical needs related to the modernization of social policy. In this way, the colleague's research searches and efforts are, as a rule, organized along the axis "description - analysis - prescription" as a prerequisite and a factor of complexity of her research.

All these parameters of Peneva's scientific research are also characteristic of her monographic habilitation work No. 1 "Energy poverty in Bulgaria: dimensions and factors". For it, I would especially highlight merits such as relevance, breadth and depth of the theoretical framework regarding energy poverty and its quantification, adequacy of the methodology, good approach in the processing of the statistical data used, objectivity of the analysis and conclusions, practical orientation of the proposals for social protection.

The scientific merits of Dr. Peneva's second monographic work "Innovative model of patronage care in Bulgaria" are similar, in which, based on an analysis and assessment of the state of social services in a home environment, a model for their optimization is proposed.

The submitted reference correctly reflects the contributions and the most important results in the scientific publications presented for peer review. On this basis I would structure and comment on the scientific achievements and contributions of the candidate T. Peneva in the following main directions:

Enriching existing scientific knowledge:

First, in the field of poverty, with a focus on energy poverty:

- 1. The clarification of key methodological issues for energy poverty (EP) quantification such as the use of actual or normative energy costs, the choice of income and energy cost thresholds, cost equalization with a separate equivalent scale, principles for normative energy quantification. Approaches to the treatment of statistical information and, consequently, the parameters of the final estimates of the energy poverty (EP) and conclusions on the scope of social protection depend on this.
- 2. The measured and estimated level of EP in the country according to 8 indicators of the *expenditure* approach, applied on specially processed data from the NSI Household Budget Survey for several years (2014-2019). This, in my opinion, is a unique scientific result with no previous analogue in the Bulgarian scientific literature.
- 3. On this basis, a view on the most appropriate EP measure for Bulgaria is justified the so-called "poverty after energy costs" indicator, measuring the share of households with energy-cost-reduced net total income below the official poverty line (OPL).

- 4. This, in turn, is the basis on which definitions of "energy poverty" and "vulnerable consumers" have been proposed, which can be used for the social protection of these parts of the population. This builds on existing knowledge expressed through the views of other authors and enables the formation of "enlightened, informed" social policy.
- 5. The proposed model for quantification of household energy needs, with the possibility of costing at regional level and monitoring the energy status of the population at national level. This is a step towards using the *normative* approach to determine the EB.

These are the points of contribution contained mainly in the habilitation work and in publications No. 7 and 8. In addition, in the other publications I would highlight:

- 1. The assessment of the effect on EP of the energy efficiency measures implemented in Bulgaria (No. 4).
- 2. The developed model for individual assessment of energy poverty (No.8).

Second, in the field of social protection:

- 1. The proposed definitions of "energy poverty" and "vulnerable consumers" (No. 1 and No.3).
- 2. The assessment of the current state of social services provided through the home social patronage (HSP) and public dining rooms in Bulgaria as of 2020, including the accessibility, efficiency and quality of these services (No.2).

Of a scientific and applied nature

In the field of poverty, with a focus on energy poverty:

1. The systematisation of the negative effects on EP of the administrative mechanism for the protection of energy consumers in Bulgaria (No.6).

In the field of social protection:

- 2. The suggested mechanism for reducing EP, which is based on a review of previous policies, proposals of other researchers and the author's views on the issue, in the context of her views on EP and its factor conditionality, as argued by empirical research (No.1).
- 3. The developed innovative model for patronage care by the DSP in Bulgaria, including the proposed strategy for the implementation of the model (No.2).

In my opinion, the achieved scientific results and contributions are a personal achievement of Dr. Peneva, and <u>I have not detected plagiarism</u> in the publications submitted for the competition. The results and achievements are a result of purposeful and conscientious scientific work, and together with this, an affinity for practical orientation and "operationalization" of the results and proposals stands out.

In this regard, I would like to add that, thanks to my colleague's activity in various working groups on EP and, in particular, the aforementioned Committee on Energy Efficiency and Overcoming Energy Poverty, her proposals on the definition of EP and vulnerable consumers, as well as on the parameters of the criteria for determining households in an EP situation, have been included in the draft Law on Amendment and Supplement to the Energy Act, as well as in the forthcoming Regulation on determining the criteria, conditions and procedures for assessing the determination of households in an EP situation. These are examples of direct 'deployment' of scientific results and personal influence on national social policy making.

V. CITATION FROM OTHER AUTHORS

According to the list she submitted, T. Peneva has 11 citations to 6 of her publications. Four of the citations are in scientific journals referenced and indexed in world-renowned databases of scientific information or in monographs and collective volumes. The remaining 7 citations are in peer-reviewed monographs and collective volumes. The points that are collected in this group E "Publications" total 130.

Additionally, my Google Scholar search (as of 31/07/2023) showed a higher number of citations than listed by the candidate. Without striving for completeness, I found that for only one of the publications in the list (index D.11.1 in the list), the citations are 10 and the h-index is equal to 3.

VI. CRITICAL COMMENTS AND RECOMMENDATIONS

I have no critical comments on the peer-reviewed scientific production of T. Peneva for the present competition for "associate professor". From an academic point of view, I would recommend her, as a habilitated scientist, to broaden her scientific search in the field of social protection, to show initiative as a project leader, as well as to seek opportunities for university teaching in addition to her research efforts in the ERI at BAS.

CONCLUSION

The scientific-metric indicators of Chief As. Prof. Dr. Teodora Peneva fully meet the requirements of the ERI at BAS for the academic position of Associate Professor. All the requirements and conditions of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria, as well as the specific additional requirements contained in the Regulations for the Acquisition of Scientific Degrees and the Occupation of Academic Positions at ERI at BAS have been met.

- 1. The candidate for the academic position "Associate Professor", Dr. Peneva presents a fully sufficient volume, content and contributions of scientific works.
- 2. The scientific contributions of the candidate are the result of serious own research in the field of poverty and especially energy poverty, as well as of the social protection of the population.
- 3. She has scientific contributions of theoretical-methodological and scientific-applied character in the study of topical and important for our country problems, related to the competition topic.
- 4. She writes competently, argumentatively and with own, personal views. The scientific results are original, and she also seeks to relate them to the processes of modernization of social policy.

All this gives me the reason with **full conviction** to propose to the distinguished members of the present Scientific Jury to strongly support the election of Dr. Teodora Margaritova Peneva **FOR the occupation of the academic position "Associate Professor"** in the "Macroeconomics" Department of the Economic Research Institute at the Bulgarian Academy of Sciences, in professional field 3.8. "Economics" (poverty and social protection).

26.08.2023 Signature:

(prof. Georgi Shopy, PhD)