## **ATTITUDE OF REVIEWER**

by **Prof. Dr. Kremena Georgieva Borisova-Marinova**, Institute for Population and Human Studies at BAS, department "Demography", section "Economic and Historic Demography", member of Scientific Jury in the competition for academic position "PROFESSOR", approved by a decision of the Scientific Council minutes No 3 on 20.03.2019, and by an order of the Director No 78 on 25.03.2019, announced by Economic Research Institute at Bulgarian Academy of Sciences in SG, issue 8 on 25/01/2019

Candidate: Assoc. Prof. Dr. Irena Kirilova Zareva-Zafirova

#### I. General evaluation of the candidate regarding her research activity

The research activity of Assoc. Prof. Dr. Irena Kirilova Zareva-Zafirova, the only candidate for participation in the competition, includes the presented 21 scientific publications and work on many research projects, including 8 research projects, of which 7 are national and 1 international, after her being elected for Associate Professor. Six of these projects have been completed and their results have been published in monographs, and two are ongoing, one of which is managed by her.

Based on the documents and evidence, provided by Assoc. Prof. Dr. Irena Zareva-Zafirova, as well as my personal impressions of her, I can state the following main contributions of her research activity:

First, the research topics of Assoc. Prof. Dr. Irena Zareva-Zafirova in the period 2012-2019 fully cover the announced in the competition professional field 3.8. Economy "Human Capital – Education, Migration". The presented publications and scientific results show the active, rich and profound research activity of the candidate in the competition. Her participation in many research projects gives her the opportunity to be directly involved in the development of research teams dealing with the problems in practical and applied terms. The main publications on the projects in which she participated have been selected for significant achievements of ERI-BAS and are included in the Annual Reports of BAS for different years of the period 2013-2018, which is a high assessment of their scientific importance.

Second, in her development as a researcher Assoc. Prof. Dr. Irena Zareva-Zafirova contributes a lot to the timely and detailed study of the human capital in the field of education in the country – since it turns into a main driving force of the economic growth and the social progress nowadays. modernity. She works systematically and consistently on this and reflects the obtained results in her research works, examining various concrete problems of the forming, functioning or using the human capital in education, the factors and environment it functions in, the quantitative and qualitative characteristics of the product of the education system in the country. Particularly current and timely for the country are her studies of the relations between education and the migration processes, taking into account, on one hand, fast changing conditions and the complicating mechanisms of modern society, and on the other – the increasing competition between developed countries (and not only) countries to attract labor, and on the third – the tendencies of population reproduction of the country and the perspectives for its development in the future.

Third, the research studies of the candidate, including empirical studies, invariably have an orientation to the practical applicability of the obtained scientific results – concerning the state

and perspectives of the development of the human capital, its use, the education system, the effects and impacts of the applied policies in these fields.

Fourth, the scientific results and contributions of Assoc. Prof. Dr. Irena Zareva-Zafirova are methodological and scientifically applied and are achieved through the approbation and suggestion of appropriate methods and approaches in studying the studied phenomena and processes.

Fifth, the author has a clear and precise language, and the methodological and practicalapplied parts demonstrate the competence and scientific precision of the candidate concerning the studied and interpreted phenomena, processes and decisions.

Sixth, deserved significance should be given to the educational, expert and management work of the candidate – participations in training of doctoral students, post-doctoral students and students; expert evaluations, opinions and reviews; participation in many specialized working groups and expert councils; and others. Assoc. Prof. Dr. Irena Zareva-Zafirova has also extensive scientific, organizational and managerial experience as a Scientific Secretary of department "Macroeconomics" and of ERI-BAS, Deputy Director of ERI-BAS, member of Organizing Committees of scientific forums, member of the editorial board of a specialized scientific journal.

All this gives me reason to believe that the publications presented for evaluation fully cover the topics of the professional field "Human Capital – Education, Migration", on the announced competition.

### II. Quantitative assessment of meeting the minimum <u>science-metric</u> national requirements and the requirements of the Regulations of ERI-BAS

For the purposes of the competition, Assoc. Prof. D. Irena Zareva-Zafirova has presented for evaluation 21 scientific publications (which do not repeat the ones presented for the acquisition of the educational and scientific degree "Doctor" and for the occupation of the academic position "Associate Professor"). Of them: habilitation work (equivalent publication) with a volume of 125 standard pages, 2 monographs (equivalent publications) with a volume of 330 standard pages, 5 chapters in collective monographs with a volume of 153 standard pages, 10 studies (including 4 studies published in Economic Studies journal, indexed in SCOPUS) with a total volume of 251 standard pages, and 1 published book based on a defended dissertation with a volume of 386 standard pages.

Of the presented publications, 20 are individual and 1 is co-authored ( $N_{2}$  16 – study in nonreferenced scientific peer-reviewed journal), which is correctly and accurately reflected in the documents of the candidate. Five of the scientific works presented for evaluation ( $N_{2}$  5, 8, 8, 19, and 21) with a total volume of 177 standard pages are in English, and two are electronic editions ( $N_{2}$  3 in the ERI-BAS eBook series, referenced in RePec, and  $N_{2}$  21 with the respective DOI – in Switzerland), which gives opportunity for a wider specialized audience to get acquainted with the scientific results achieved by the candidate.

All monographs (equivalent publications) of the candidate are published by the Academic Publishing House "Prof. M. Drinov". All presented publications are in journals from the NACID List of Contemporary Bulgarian Scientific Editions or from the National Reference List of NACID or in monographs and collective volumes included in the National Register of Published Books in Bulgaria, and the publications, including electronic ones, have ISBN, respectively ISSN.

The publications submitted for evaluation are grouped by indicators 3-5 and 7-10, completely covering (group B – 100 points) or significantly exceeding (group D – 657.5 points with a requirement of 250 points) the minimum science-metric requirements and the requirements of ERI-BAS for the occupation of the academic position "Professor". The other groups of science-metric indicators also exceed significantly the minimum requirements: group A – 50 points, group D – 775 points with a requirement of 150 points, group E – 140 points with a requirement of 100 points. The significant number of citations – 88 in total, 18 of which are in SCOPUS indexed scientific publications, should also be noted.

Therefore, all groups of indicators as quantity exceed significantly the minimum sciencemetric requirements and the requirements of ERI-BAS for occupation of the academic position "Professor".

### III. Evaluation of the results and scientific contribution of the candidate

In my opinion, the scientific results and contributions of the candidate are an enrichment of the existing knowledge (proving with new studies of essential aspects of existing scientific fields, theories, problems and hypotheses, obtaining and proving new facts) and formulating reasoned recommendations for the formation and consistent application of human capital policies. The more significant contributions of the scientific production of Assoc. Prof. Dr. Irena Zareva-Zafirova are in three main directions:

In the field "Human Capital in Education":

- Made is a theoretical evaluation of the human capital state in the Bulgarian education system, outlining quantitative and qualitative characteristics, and are systematized the main imbalances in each phase of its reproduction.
- Established are dependances between the formulated problems of reproduction of the human capital in education and the factors determining it, and is reasoned the relationship between the environment in which it functions and the effectiveness and quality of its activity.
- Argued with the necessary evidences is the thesis that the conditions, in which human capital operates in education in Bulgaria, lead to not high enough results of its activity compared to its quality.
- Formulated are policies and concrete measures for development and preservation of the country's human capital in education based on evaluation of the legal framework that ensures the development of the human capital in education, the evaluation of the financial ensuring of the education system and of the system for the professional development of teachers.

In the field "Formation and use of human capital":

- Evaluated are the higher education systems in SEE countries and are identified their common features and specifics compared to the European Higher Education Area.
- Grounded is the thesis that the significant increase in the number of higher education institutions in SEE countries creates not only premises for expansion of the educational services, but also conditions for the decrease of the quality of education due to lack of teachers, inefficient use of teaching staff and inefficiency of the institutional structure of the education system.
- Evaluated is the activity of the human capital in education in Bulgaria by systematizing the positive and negative aspects of its formation and its use in European context and in terms

of the changing economic conditions, parameters of demand for labor force, the established trends of the development of the demographic processes and the conditions for mobility of students and people in the EU.

• Substantiated is the thesis for the inadequate use of the human capital in Bulgaria and are defined and systematized the main factors leading to the found inconsistencies. Formulated are main directions and concrete recommendations for improving the participation of young people and high age groups on the labor market, as well as for increasing the realization and adequacy of the obtained education of young professionals with higher education on the labor market.

In the field "External migration and human capital":

- Systematized are theoretical frameworks and concepts about the nature of the migration policies and their role and effects on the human capital and is proven that the migration policy is a general framework that significantly influences the choice of destination, the size and focus of the migration flows and the integration of migrants.
- Proven is the role of the migration policy as a determinant of the external migration, especially concerning the immigration, despite the determining importance of the social-economic factors.
- Identified are logical and cause-effect relations between social inequalities between countries and within the sending countries as determinants of the migration behavior and the emigration. Evaluated is the impact of the external migration in the country on the economic activity, labor force, labor market and the potential for innovative development of Bulgaria.
- Evaluated is the state's policy regarding immigrants (including the return of Bulgarian migrants) and their integration in the country. Developed is a concept to build a system of policies for keeping in the country and encouraging the return of Bulgarian emigrants.

The mentioned contributions in the publications of Assoc. Prof. Dr. Irena Zareva-Zafirova are a very good theoretical and methodological basis for further enriching the theory of human capital, for empirical analyses and for making recommendations in studying the formation and use of human capital in long-term plan and are suitable for use by scientists, researchers and Ph.D. students, as well as by politicians and leaders in the public administration institutions involved in solving problems in the human capital, education and external migration.

The complete scientific works of Assoc. Prof. Dr. Irena Zareva-Zafirova proves that she knows very well the subject area in the professional field, the topics are developed with the necessary scientific precision, and I fully accept the attached reference for the scientific contributions of the papers presented for evaluation.

# *IV. Evaluation of the originality of the presented works and the reliability of the presented scientific data*

In my opinion, the scientific works for participation in the competition, presented by Assoc. Prof. Dr. Irena Zareva-Zafirova, are original works of the author and do not contain plagiarism.

The scientific data presented by Assoc. Prof. Dr. Irena Zareva-Zafirova are accurate and reliable.

V. Critical notes and recommendations (including an evaluation of their impact on the quality of the presented scientific and applied production).

I have no critical notes and recommendations.

#### VI. Conclusion

The achieved significant scientific results, the substantial scientific contributions, the originality of the publications presented for evaluation and the reliability of the presented scientific data, as well as the overall research activity of the candidate in the competition, presenting her as an established scientist with high qualification and professionalism, are the reasons for my positive categorical assessment that Assoc. Prof. Dr. Irena Zareva-Zafirova fully meets the set of criteria and indicators for occupying the academic position "Professor" according to the requirements of the legislation and the Regulations of Economic Research Institute at BAS.

Date: 30.04.2019

Member of jury: ..... (Prof. Dr. Kremena Borisova-Marinova)