

TO

**The Chairman of the Scientific Jury,
Set by Order №366/18.07.2023
of the Director of the Economic Research Institute
at the Bulgarian Academy of Sciences
Sofia**

REVIEW

For assessment of candidates for the competition for the academic position "Associate Professor" in the "Regional and sectoral economy" Department in professional area 3.8 Economy - Investments and infrastructural development at the territorial and sectoral level

(published in State Gazette, issue № 44/19.05.2023)

Reviewer: Associate Professor Stefan Ivanov, Ph.D., Economic Research Institute at the Bulgarian Academy of Sciences, "Regional and sectoral economy" Department, member of the Scientific Jury

The present review has been assigned to me by the Scientific Jury, set by the above pointed Order of the Director of the Economic Research Institute at the Bulgarian Academy of Sciences. In making this review I have followed the provisions of the Regulation for acquiring scientific degrees and occupying academic positions (RASDOAP) of the Economic Research Institute at the Bulgarian Academy of Sciences, which is based on the The Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulation for its Implementation.

Senior assistant Dr. Yana Kirilova is the only candidate in the competition. She has been admitted to participate according to Protocol dated 21.07.2023 of the Admission Committee set by Order № 340/04.07.2023 and Protocol № 42 /25.07.2023 r. of the first session of the Scientific Jury.

1. Short biography

Senior assistant Dr. Yana Kirilova was born on 16.02.1974 in Pleven, Bulgaria. In 1998 she graduated the University of National and World Economy in Sofia with Master Degree in International Economic Relations. In the period 1999 – 2002 Dr. Kirilova was Ph.D. student in "Regional and sectoral economy" Department of Economic Research Institute at the Bulgarian Academy of Sciences. In 2008 she successfully presented her thesis in „Municipal investments in Bulgaria and sources of funding“ and acquired the educational and scientific degree „Doctor“ (Diploma № 32602/11.08.2008 of the Supreme Attestation Committee of the Republic of Bulgaria). Dr. Yana Kirilova is proficient in English language.

At the end of 2008 Dr. Kirilova started work as assistant in the "Regional and sectoral economy" Department of Economic Research Institute at the Bulgarian Academy of Sciences where she is presently working as senior assistant. In this position she has participated in a

number of teams that implemented scientific research and applied projects in the field of public finance and budgets of which: municipal budgets; financing of public expenditures including public investments; development and implementation of methodologies for integral assessment of the socio-economic disparities among the municipalities; elaboration and implementation of methodologies for municipal creditworthiness assessment methodologies; debt financing of municipal investments (loans, municipal bond issue, financial instruments, etc.); business planning and financial modelling of public investment projects; assessment methods for public investment projects; financial aspects of environmental management (water and waste management), etc. All these fields fall within the scope of the professional area of the competition for which she is applying.

Along with this, Dr. Kirilova is working in the above pointed areas as a team member and team leader of a number of projects, implemented by non-governmental organizations, as well as by international programs and institutions.

This short presentation outlines precisely the profile of Dr. Kirilova as a researcher in the field of **Investments and infrastructural development at the territorial and sectoral level**. These circumstances make her participation in the pointed competition as completely reasonable.

2. Accomplishment of the minimal requirements and the additional requirements of the Economic Research Institute at the Bulgarian Academy of Sciences

The next table presents: (1) the minimal requirements by indicator groups for the academic position "Associate Professor" in professional area 3.8 Economy according to the Regulation for implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria (LDASRB); (2) the additional requirements according to the Regulation for acquiring scientific degrees and occupying academic positions (RASDOAP) of the Economic Research Institute at the Bulgarian Academy of Sciences; (3) the accomplishment of these requirements by Dr. Yana Kirilova according to the presented evidence.

Indicator groups	Contents	Minimal requirements according to LDASRB (number of points)	Minimal requirements according to RASDOAP of ERI-BAS (number of points)	Accomplishment of the requirements by Dr. Yana Kirilova (number of points)
A	Indicator 1	50	50	50
B	Indicator 2	-	-	-
C	Indicator 3	100	100	100
D	Sum of Indicators 4-20 (Publications)	200	230 (of which at least 2 publications in refereed and indexed journal in SCOPUS and WoS)	284,17 (of which 3 publications in refereed and indexed journal)
E	Sum of Indicators 11 - 13 (Citations)	50	70	100
F	Sum of Indicators 14 to the end	-	-	-

The information from the submitted Reference and the review of the attached evidence material indicate that the candidate Senior Assistant Dr. Yana Kirilova fulfills the minimal requirements by groups of indicators for the academic position "Associate Professor" in professional area 3.8 Economy according to the Regulation for implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria (LDASRB), as well as the additional requirements according to the Regulation for acquiring scientific degrees and occupying academic positions (RASDOAP) of the Economic Research Institute at the Bulgarian Academy of Sciences. The Candidate's accomplishments regarding the indicators in Group D (Publications) and Group E (Citations) considerably exceed the requirements of both documents.

3. General characteristics of the presented scientific publications

The candidate has submitted a list of 12 titles that correspond to the topic and scope of the present competition - **investments and infrastructural development at the territorial and sectoral level**. Four (4) of the publications are single-authored, and the remaining eight (8) are co-authored, all of which have the respective separation protocols attached. In all collective publications, Dr. Yana Kirilova participates with equal shares with the other co-authors.

The total volume of the presented scientific production of 562 pages is structured in:

- Monographs – 3 (2 co-authored and 1 single-authored), containing 390 pages (69% of the total volume)
- Single-authored chapters in co-authored monographs – 2, containing 66 pages (12% of the total volume)
- Studies – 1 (co-authored), containing 29 pages (5% of the total volume)
- Articles – 6 (1 single-authored and 5 co-authored), containing 78 pages (14% of the total volume)

3.1. Evaluation of the habilitation work

The candidate's habilitation thesis "Financial instruments for the implementation of municipal investment projects" was published in 2023 by Club "Economika 2000", co-authored with Dr. Dochka Velkova. According to the attached separation protocol, the candidate Senior Assistant Dr. Yana Kirilova is attributed 119 standard pages, which meets the requirement for the number of standard pages for a monographic work.

The relevance of the work is indisputable and it is determined by its scope, purpose, structure, content and methodology. It is dedicated to an extremely important topic at the moment - the use of financial instruments for financing municipal investment projects, given the limited financial capacity of most municipalities in Bulgaria to finance investments with their own funds, their low creditworthiness, which makes it difficult to use debt funding, and the tendency to reduce grant funding in EU context during the 2021-2027 programming period.

The main objective and related tasks of the research are clearly defined. The structure is in accordance with the set goal, and the work presents the essence, content and development of financial instruments in the EU and Bulgaria. An empirical assessment was made of the position of financial instruments among the sources of financing municipal investments in Bulgaria - transfers/subsidies from the republican budget, own source funds of the municipalities, borrowed funds (loans from banks and issue of municipal bonds), national funds and operational ESIF funds programs. The empirical study is large in scale and covers: a thirteen-year period (2007-2019); the budgets of all 265 municipalities in Bulgaria; the cash flows of all other sources of financing municipal investments for the specified time period. Based on a methodology developed by the author, the position of each of the analyzed funding sources in the context of the general investment activity of the municipalities is evaluated. The barriers to the use of financial instruments by municipalities in Bulgaria are presented, with a special focus on creditworthiness as a key barrier.

Based on a methodology adapted by the author, the creditworthiness of all municipalities in Bulgaria was assessed for the period 2007-2019, and for each year the municipalities were ranked based on an integral score of their creditworthiness. At the end, generalized conclusions and recommendations are made for a more complete use of financial instruments as a source of financing of municipal investments in Bulgaria.

Conclusion on the qualities of the habilitation work. It is clearly focused on the topic of the competition and has important implications for municipal investments and their financing. The research has an outstanding scientific and scientific-applied focus. The structure is logical. Theoretical summaries gradually turn into practice analysis, evaluation of results, formulation of conclusions and proposals. The paper explicitly presents its author as a thorough researcher with clear and reasoned positions on the nature and financing of municipal infrastructure.

3.2. Evaluation of the other scientific work

The remaining 11 titles from the attached list of publications are grouped into the following subject areas, with some of the publications covering more than one area:

- Investment costs at the territorial and sectoral level - essential characteristics, assignment, planning, budgeting, implementation, development, their role in regional development, etc. (Publications № 2, 3, 9, 11, 12).
- Financing of investment costs at the territorial and sectoral level - specifics of the sources of financing, opportunities for combining, creditworthiness of the territorial units, etc. (Publications № 2, 3, 4, 5, 6, 7, 8, 10).
- Theoretical-methodological aspects related to the analysis and evaluation of investments at the territorial and sectoral level - development and application of systems of indicators, algorithms and methodologies for evaluation and ranking (Publications № 2, 3, 4, 5, 7, 11, 12).

Conclusion on the qualities of other scientific works. All publications fall within the scope of the competition, as Senior Assistant Dr. Yana Kirilova demonstrates erudition, in-depth knowledge of the subject, the ability to analyze and evaluate trends and problems, and to justify her own views and decisions on them.

4. Evaluation of the Candidate's scientific and applied accomplishments

I accept the Reference with the accomplishments of the Senior Assistant Dr. Yana Kirilova and I appreciate her approach of grouping them into: (1) theoretical-methodological accomplishments; and (2) scientific and applied accomplishments.

The theoretical-methodological accomplishments include: systematization of the essential characteristics of municipal investments and the sources of their financing with a special focus on financial instruments and debt financing; development of systems of indicators, algorithms, models and methodologies for assessing the state and development of various aspects of the studied issues. The scientific and applied accomplishments are related to the application of the developed systems of indicators, algorithms, models and methodologies.

It is my opinion that these accomplishments are sufficient and adequate to occupy the academic position of "Associate Professor".

5. Citations

With regard to citations (group of Indicators E), the candidate Senior Assistant Dr. Yana Kirilova presented a reference with 15 citations, which are distributed as follows: (1) citations in scientific publications, referenced and indexed in world-famous databases with scientific information or in monographs and collective volumes - 1 item; (2) citations in monographs and peer-reviewed collective volumes - 3 items; (3) citations or reviews in non-refereed peer-reviewed journals - 11 items.

I accept all these citations. The candidate's total number of points is 100 points with a national requirement of 50 points and a requirement of ERI-BAS of 70 points.

6. Critical comments and recommendations

I have no critical notes. I would recommend to the candidate to deepen her work in the study of investments in other sectors, beyond the environment (water and waste management) and energy such as e.g. education, healthcare, etc. Also, given Dr. Kirilova's work in the area of methods for evaluating investment projects, I would like to recommend deepening the work in the area of methods for assessment of the economic benefits for society from the implementation of public investment projects.

7. Personal impressions

I know Dr. Yana Kirilova since 2010 when she was a Ph.D. student in the Economic Research Institute at the Bulgarian Academy of Sciences. I have discussed with her a number of issues related to her thesis. It is my opinion that she is a researcher who is not afraid to stand for her position. She is very diligent and persistent in acquiring new knowledge which contributes in forming her as a good researcher.

CONCLUSION

Dr. Yana Kirilova participates in the competition with a serious scientific production in terms of volume and quality. It contains scientific and applied accomplishments that support the development of investments and infrastructure at the territorial and sectoral level and contribute to solving current problems in the specified area.

The candidate's scientific work and publications and their results fully meet the regulatory requirements for holding the academic position "Associate Professor" at the Economic Research Institute at the Bulgarian Academy of Sciences.

This gives me the arguments, with full conviction, to propose to the respected members of the present Scientific Jury to vote FOR awarding the academic position "Associate Professor" of the Economic Research Institute for at the Bulgarian Academy of Sciences in professional area 3.8 Economy: Investments and infrastructural development at the territorial and sectoral level of Senior Assistant Dr. Yana Tsvetanova Kirilova.

Reviewer:

Associate Professor Dr. Stefan Ivanov

Sofia, 15.09.2023