EVALUATION REVIEW

By prof. Dr. Radostina Telerig Bakardjieva, Economic Research Institute at Bulgarian Academy of Sciences

About:

competitive selection procedure for academic position associate professor in professional field 3.8. Economics, scientific specialty "Economics of transport" /maritime and air transport/

Basis for review:

- Order № 365/18.07.2023 of the Director of ERI at BAS
- A decision of the Scientific Council, Protocol № 7/12.07.2023
- Announced competition in the State Gazette, No. 44/19.05.2023

The evaluation review is written in accordance with the criteria and requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations to it, the rules of NACID and the internal institutional additional requirements, adopted by ERI at BAS.

- A panel of 8 compactly systematized official documents are presented by the candidate – an application form, CV, reference for the fulfillment of the national minimum requirements and of the requirements of the Regulations for the acquisition of scientific degrees and holding academic positions at ERI at BAS, reference from NACID database, certifying the acquired educational and scientific degree of Doctor and about the occupied positions of chief assistant professor, reference from the COBISS database, certifying the publication of two monographs, reference for the original scientific contributions of the candidate, list and copies of the publications, list of citations, a reference for completion of the additional requirements of ERI at BAS, abstracts of publications in Bulgarian and in English.

1. Biographical data about chief assist. prof. Dr. Petya Koralova – Nozharova

Chief assist. prof. Dr. Petya Koralova-Nozharova was born in town of Parvomay. In 2004 she graduated secondary education school with intensive study of English language,

informatics, mathematics and information technologies. In 2008 she graduated her higher education at the Faculty of Infrastructure at UNWE and she acquired bachelor's degree. Chief assist. prof. Nozharova has graduated master's degree at UNWE and at the University of applied sciences bfi in Vienna. In 2013 she successfully defended her PhD thesis, and she is a doctor in Economics of transport at UNWE.

For the period 2008- 2011 chief assist. prof. Nozharova was an expert at the Ministry of transport and communications. From 2014 to 2016 chief assist. prof. Nozharova was an assistant professor at "Todor Kableshkov" Higher school of Transport, for the period 2015-2018 she was also an expert at the department of "Scientific and international affairs", till 2019 she was a chief assist. prof. and deputy-head of the department of "Economics and accountancy of transport". Since 2020, chief assist. prof. Nozharova works at the Economic Research Institute at Bulgarian Academy of Sciences. In 2022 she was a key expert at CITUB and she represented the interests of the workers. Chief assist. prof. Nozharova is a member of the Monitoring Committee of the Operational program "Transport connectivity 2021-2027".

Chief assist. prof. Nozharova speaks fluently English and German language.

2. General presentation of the scientific works/publications.

a/Fulfillment of the quantitative requirements.

Chief assist. prof. P. Nozharova has fulfilled and exceeded the minimum national requirements of the Regulations for the acquisition of scientific degrees and holding academic positions at ERI at BAS. She has been awarded educational and scientific degree "Doctor" /50 p./, which she has published as a book /75p./.

Chief assist. prof. P. Nozharova has presented a habilitation work of 178 pages /100p./

She has presented articles and conference papers, published in indexed and refereed world-famous databases -2 /60p/ and articles and conference proceedings, published in non-refereed world-famous databases -14 / 100 p./, studies, published in scientific journals, refereed, and indexed in world famous databases - 45 p. / 1/, and in non-refereed journals with scientific editing -1 / 7, 5 p./

These quantitative indicators form the quantitative format of group G and they are a total of 297,5 p., which means fulfillment of the required criteria.

6/ Qualitative requirements

The presented scientific publications by chief assist. prof. P. Nozharova are devoted to an up-to-date and extremely dynamic research area, an intersection of the economics of transport and sustainable development with its mandatory dimensions - economic, social, and environmental. These problems in addition to being the focus of the theoretical-methodology studies, they are directly related to the applied aspects in the economics of transport, competition protection, corporate social responsibility, Green Deal, sustainable development. In these publications one can outline the application of interdisciplinary approach. It is noteworthy that most publications are in-depth, comprehensive and necessarily consist of both a theoretical part and a review of the literature, as well as a processed primary data base from empirical research, as a result of which specific recommendations for business practice are defined. Current formats - mathematical-statistical approaches, regression analysis, etc. have been successfully applied.

All the above makes the presented scientific materials unique, relevant to the society's agenda and generating added scientific and practical value both from academic and practical significance.

The main fields in the scientific work of chief assist. prof. Nozharova could be systematized in the following way:

- Scientific publications in the field of economics of transport with different directions
 - . waterborne transport 1.1., 6.3, 8.5., 8.6
 - . inland waterway transport- 2.1., 3.1., 4.1., 8.3, 8.8
 - . air transport- 4.1., 6.1,
 - . railway transport- 6.5.,
- Sustainable development and corporate social responsibility, including social and environmental problems in transport / Green Deal/- 6.2., 6.6,, 8.1., 8.2., 8.3, 8.4., 8.7.
- Digitalization and theoretical problems 5.1, 6.4., 8.2, 8.4, 8.7, 6.6

In the first direction of the scientific work of chief assist. prof. Nozharova, the most important is her monograph "Effective forms for competition protection and regulation of the business environment of the maritime transport in Bulgaria", 179 pp./ B.3./ In theoretical-methodological aspect in the first chapter, they are analyzed the nature of competitiveness at international and national level, competition policies, the market for freight carriages and the place of maritime transport at the national and European transportation system, based on an

in-depth literature review. $/ 1.1/^1$ It is made an objective evaluation of the business environment through various parameters, in which the maritime transport in Bulgaria is functioning:

-institutional environment - legislation /p.55/, environmental policy, including the achievement of zero emissions, mechanisms and instruments for internalization of the external costs / p.72/

- strategic framework for functioning of the maritime and port operators /pp-79-84/
- evaluation of the level of digitalization of the maritime transport in Bulgaria / pp.90/

Of high scientific and scientific-applied value is the empirical analysis in the third chapter of the monograph, which includes a complex economic evaluation of 6 maritime ports, analysis of the effectiveness of the port and transportation activity in the maritime transport.

In the second study, which is indexed in other international scientific databases, it is evaluated the impact of digitalization on the transport infrastructure in regard of human resource management and in the context of UN sustainable development goals in the case of air and waterway transport / 4.1./ The systematized relevant economic publications give the author a reason to link the digitalization processes with the transportation operations in the infrastructure sites /p.50-52/. It is made an objective evaluation of the economic and financial status quo of the transport infrastructure /based on statistically validated indicators by Eurostat such as gross added value, cargo turnover of the river and seaports, Sofia and Varna airports, number of employees and amount of the average monthly remuneration in the sector of Transport, warehousing, and posts for the period 2016-2020. They are formulated the necessary and practically applied recommendations for the business.

The purpose of publication G.2 .1. is the studying of inland waterway transport in Bulgaria and the multimodal transportation network in the context of its integration and the perspectives for development. They are studied the European and national policies in the field of inland-waterway transport / 8-18 pp./, as well as the European concept in the field of multimodal transportation services. It is made an economic evaluation of the port infrastructure and the navigation conditions in the Bulgarian section of the river Danube in comparison to seven countries. /54-57/ The evaluation of the possibilities for integration of the Bulgarian inland waterway transport to the multimodal transportation network is based on a conducted survey, which is structured in 3 modules amongst 27 respondents, with a priority

¹ The numeration used is done based on the list of abstracts of the scientific publications.

of the industrial and trade companies / 60-63/. The answers of the respondents allow to be made not only an evaluation of key aspects concerning the logistic services /pp 66/, the impact of infrastructure /pp 68/, assessment of the legislation framework / pp. 69/, the impact of climate conditions / pp. 70/, the technology level / pp 72/, but also for formulation of specific practically-significant recommendations to the institutions and companies.

In the highly indexed study 3.1. the specifics of the management of the Danube river fleet are analyzed. The European policy in the field of inland water transport is presented / pp 120-123/ and, based on current statistical information, the trends in the development of the inland waterway fleet for the period 2007-2015 is outlined. It is of extreme value the historical interpretation of the river fleet in Bulgaria since 1941 to present /pp.126-127/ For the same period, it is presented and analyzed rich statistical and empirical information about the carrying capacity of the fleet / pp.127/, the capacity of ships / p.128/, dynamics of the average stay of ships at ports / p 129/, dynamics of wages / p.131/, labor productiveness / p.132/, cargo turnover / p. 133/, investments / p.134/. It is made a comparative analysis between Bulgaria and another four countries concerning the applied information and communication services on the Danube / pp.140/. An original SWOT analysis of the strengths and weaknesses and the opportunities and threats of the Bulgarian river fleet is done/ pp.143-144/. Based on the empirical data, specific practical solutions have been formulated to improve the management of the river fleet in Bulgaria.

The competitiveness is studied in various dimensions – regional, sectoral, as special place is given to the competitiveness criteria in the transport sector. / 19-26/. The topic for competitiveness is skillfully linked to the corporate social responsibility in the sustainable development context. /p.23/ In full accordance with the author's definition for competitiveness of the maritime transport / p.25-26/ chief assist. prof. Nozharova outlines the contours of the maritime transport in the transportation system / pp .27-40/, as well as the normative regulations for its protection. It is made an objective evaluation of the business environment in which the maritime transport in Bulgaria is functioning /p 53-92/ with a focus on the institutional environment.....

In the article, indexed /5.1/ in world famous databases, they are discussed the digitalization processes in post-pandemic environment and their impact on the labor market in transport in South-eastern Europe. The process of workers replacement with digital technologies, despite the slow pace, is studied in the transport companies. Maintaining the competitive advantages of SMEs in the sector is a challenge especially in times of crisis and pandemics. In the article, through the tools of the statistical and descriptive analysis, it is

revealed the potential for a smooth digital transition while reporting the specifics of the technology changes and the social sustainability in the transport companies. The propositions for development of the road passenger carriages in intercity lines have practical significance.

In the conference paper, indexed and refereed in world famous databases /7.1./ the theoretical part is devoted to the problems and perspectives of the digitalization of the transportation services on the Danube. Through a correlation analysis, it is made a complex evaluation of the impact of digitalization on the transport of forest products, based on empirical data for the cargo flows of forest products on the Danube. In the paper, it is made an evaluation of the progress of forest industries in the way of digitalization, identification of the real barriers and obstacles, they are formulated specific recommendations to the business.

The publications in the fourth dimension are in the field of the green transition. In publication G.8.1. they are evaluated the factors for encouraging the green transition of European micro, small and medium-size enterprises in relation to the climate neutrality and circular economy. They are identified the drivers and barriers, as well as the challenges to the small and medium-sized enterprises for reaching climate neutrality / G.8.1- p.62/. They are proposed specific measures to support the green transition of SMEs./ pp.72-73/

3. Evaluation of the citations

The list of citations from group D, presented by chief assist. prof. Nozharova, indicates the completion of the normative requirements in this indicator with a total of 160 points. There are four citations in scientific journals, indexed and refereed in world famous databases. /60 p./ The citations in monographs and collective conference proceedings with scientific editing are six /60 p./ Eight citations are presented in non-refereed journals - /40 p./

A high rating is given to the fact that 51% of the citations are in English and they are in established international editions included in indexed databases. The results of the citations are proof that a large part of the scientific results of the candidate are presented at international scientific conferences at European level. 49% of the citations in Bulgarian are in high-valued scientific publications.

4. Evaluation of the scientific contributions

Chief assist. prof. Nozharova has formulated two groups of scientific contributions in her scientific work – theoretical and scientifically-applied. The listed contributions are constructed in groups – contributions in monographs and contributions in other types of

publications. In opinion of the reviewer, it is better the theoretical contributions to be systematized in one panel, no matter whether they are achieved in monographs or in other publications. In analogous way, there must be systematized the scientifically applied contributions without considering the type of publication.

In general, the reviewer accepts completely the presented scientific contributions of the candidate.

The reviewer would like to present the following formulations.

A. Theoretical contributions:

- It is made a complex systematization of the economic literature based on the relevant Bulgarian and European authors in the field of presenting the current status quo, dynamic trends, and perspectives for development of the maritime and air transport.
- . Based on Bulgarian and European economic literature, it is made an in-depth analysis of the competitiveness of the maritime transport in Bulgaria /in the conditions of imperfect competition/. It is made a comprehensive evaluation of the business environment, in which the maritime transport is functioning in Bulgaria, Greece, Croatia and Estonia. They are outlined the maritime corridors and the European initiatives; the ineffectiveness of the national regulations is criticized. /1.1./
- . They are systematized the European and national policy in the field of inland waterway transport, and they are derived the basic characteristics of the European policy for multimodal transportation services. It is accumulated and analyzed rich primary statistical data for 9 ports based on indicators, such as financial revenues, average wages, number of employees, revenues and others /5.1/, and as a result it is made an evaluation of the potential for establishment of a multimodal transport network /2.1/
- It is made a comprehensive assessment of the progress of the transport sector regarding the implementation of the economic, social, and environmental goals set out in the UN Sustainable Development Goals.
- An in-depth comparative analysis has been developed between maritime and air transport in Bulgaria and other European countries.
- The regulatory framework on which waterborne and air transport operate at the national, European and international level is presented in a panel.
- Each of the publications is established on the basis of the following construction theoretical analysis, author's definition of the problems, author's methodology, indicators and specifics of the problems, which allows an in-depth analysis and extraction of specific contributions to the real economic practice.

- They are identified the exogenous risks of health and military character on the economy, and in particular the transport sector. /6.2/ It is made an evaluation of the stages of implementation of the National Recovery and Resilience Plan and the new paradigm for changing the priorities in the transport sector. /8.2/
- They are systematized the requirements of the Green Deal to the transport sector. It is presented the experience in this field of six countries for achieving the climate neutrality for the period 2010-2019. It is evaluated the degree of implementing the CSR in the transport sector. /8.1/

B. The reviewer proposes the following scientifically applied contributions:

The top of academic competence of assist. Prof. Nozharova are empirical researchers.

- Based on empirical analysis, it is made a comprehensive evaluation of the status quo, the exploitation characteristics and specifics of 6 maritime ports Varna, Burgas, Tallinn, Thessaloniki, Rijeka, Constanta for the period 2016-2021 by comparing cargo volumes, export and import, coefficient for usage the capacity of ports, general, liquid cargo volumes, number of operated ships at ports, number of employed transport workers, labor productiveness, infrastructure investments and others. /3.1/ It is made a comprehensive evaluation of the effectiveness of the transportation activity in the maritime transport in Bulgaria for 6 years amongst Bulgaria and four other countries. They are formulated specific propositions for improvement of the competitiveness and the institutional environment of the maritime transport.
- .- Based on the developed empirical information through an author's methodology, they are interviewed 27 respondents, 10 of which are industry and trade companies. /2.1/ In the form of diagrams and graphs, they are presented the processed results, reporting the impact of the legislative framework, economic factors, technological level, type of cargos carried, the supplied logistic services and the infrastructure on the inland waterway transport. / 3.2./
 - Based on a regression analysis, through a methodology, pretending for universality, it is made an evaluation of the opportunities for digitalization of the air transport for the period 2016-2021 and they are formulated specific recommendations to the institutions and aviation operators.
 - Based on primary statistical information, it is developed a dynamic format for representation of the labor market in the transport sector for the period from 2000 to 2015, in a way that is tracking the dynamics of the average level of the average wages

in the Transport sector in comparison to the average wage levels in the country. They are presented also the dynamics in the number of enterprises in the transport sector, as well as the structure of the professional qualification of the transport workers. They are proposed four specific measures for qualification development of the workers. In publication 8.1. they are evaluated the potential opportunities of the 5 modes of transport /road, railway, maritime, inland waterway and air transport/ to be socially responsible. The CSR concept is interpreted in the most relevant way as an approach for considering the contribution of the companies for sustainable development of the economy./ 8.1., p.457/

5. Fulfillment of the additional requirements of ERI at BAS by the candidate

Chief assist. prof. P. Nozharova has rich scientific and expert background in different fields.

- Mrs Nozharova is a member of authoritative professional organizations such as the Union of Economists in Bulgaria and the Union of Scientists in Bulgaria.
- Mrs Nozharova has actively participated in international and national scientific forums in 2022, 2023, 2021, 2020. The presentations and her publications in the scientific conferences are in the field of corporate social responsibility in the transport sector, the relationship minimum wage unemployment, studying the institutional environment for development of the maritime transport, priorities of the Resilience and recovery plan and others.

Chief assist. prof. Nozharova has active expert activity as a member of the Monitoring Committee of the Operational program "Transport connectivity 2021-2027". She has been an expert in component 2, as well as in components 4, 5, 6 in the project "Partnership in digital environment" in operational program "Human resources development", managed by CITUB. It is presented a reference for excellent evaluation of the work done by the candidate by the Director of the Institute for economic and social analysis at CITUB.

Chief assist. prof. Nozharova has participated as an expert in the Danube transnational program, and she has also been a member of the Organizing Committee of an international scientific conference at ERI at BAS.

Evidence for the active activity of chief assistant professor Nozharova is the attached references from the Bulgarian Maritime Chamber, the European Commission and other

authoritative institutions. Chief Assistant prof. Nozharova is an active participant in current publications commissioned by the Economic and Social Council.

6. Critical remarks and recommendations

It is recommended the future publications of chief assist. prof. Nozharova to be published in international recognized databases, such as Scopus and Web of Sciences, with a priority in the Journal of ERI at BAS – Economic Studies Journal. It will be of great importance her research to be published in academic journals of leading European universities as a prerequisite for future scientific cooperation with them.

It is recommended amongst the publications to be published more studies (more voluminous materials to prevail), in which there is both an in-depth theoretical part and results of independent research and study of the experience (positive or negative) of real companies in Bulgaria.

Some difficulty arises in the classification of publications because there is incomplete coverage between the numbering of publications in abstracts, the NACID scorecard and the arrangement in the Document Inventory.

7. Questions to chief assist. prof. Nozharova

- 1. Is it possible for chief assist. prof. Nozharova to outline the current status quo of sector transport/maritime and air transport/, based on the updated data in NSI and Eurostat in key indicators.
- 2. What type of corporate strategies and policies could apply the managers of transport companies in the field of maritime and air transport in order to neutralize the conflict between financial results and the fulfillment of the environmental and social goals they have set?
- 3. Where do you see financial resources in the transport companies, which must guarantee the green transition?
- 4. What is your assessment for the Investment fund "Three seas" and what are the Effects for Bulgaria?

8. Conclusion

Based on the comprehensive evaluation of the provided documents by chief assist. prof. Petya Koralova-Nozharova and the in-depth review of the presented publications with such an up-to-date focus as the development of maritime and air transport in the context of

economic, social and environmental dimensions in a competition for the academic position of

Associate Professor in Professional field 3.8 Economics, scientific specialty "Economics of

transport /maritime and air transport/" at department of Regional and sector economy, it could

be made the conclusion that the requirements and criteria of Law on the Development of the

Academic Staff of the Republic of Bulgaria and the Regulations to it, are comprehensively

met by the candidate to the announced by ERI at BAS competition - chief assist. prof. Petya

Koralova-Nozharova.

Based on the mentioned above, despite the recommendations made, the scientific

contributions of the author are real, the scientific production is distinguished by a high level

of uniqueness, the analytical toolkit gives the research high added academic value. On the

basis of this, I publicly express my positive evaluation of the reviewed scientific publications

and I publicly state that I will vote positively for awarding the academic position "Associate

professor" in professional field 3.8 Economics, scientific specialty "Economics of transport

/maritime and air transport/" at department of Regional and sector economy at ERI at BAS to

Dr. Petya Koralova-Nozharova.

15.09.2023

Sofia

Reviewer:

Prof. Dr. Radostina Bakardjieva

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