

OPINION

regarding a dissertation thesis for acquisition of the educational and scientific degree of Doctor of Philosophy in the Doctoral Programme “Finance, Monetary Turnover, Credit, and Insurance (Finance)”

Submitted by: Prof. Rumen Yordanov Brusarski, PhD, Department of Finance, Faculty of Accounting and Finance, UNWE - Sofia

Grounds for submission of the opinion: The opinion is submitted on the grounds of its author’s capacity of a member of the Scientific Panel appointed with Order No. 52 of 20 Jan. 2023 of the Rector of D. A. Tsenov Academy of Economics – Svishtov and Resolution No. 5/19.01.2023 of the Faculty of Finance.

Author of the dissertation thesis: Kaloyan Dragomirov Pargov, doctoral student in independent self-directed mode of study in higher education area: 3. Social, economic and law sciences, professional field 3.8. Economics, Doctoral Programme “Finance, Monetary Turnover, Credit, and Insurance (Finance)”.

Title of the dissertation thesis: Energy Security and the Energy strategy of EU in Bulgaria: Financial and Economic Aspects and Challenges.

Dissertation Advisor: Prof. Stoyan Prodanov, PhD, Department of Finance and Credit, D. A. Tsenov Academy of Economics – Svishtov

This opinion was prepared in accordance with the requirements of the Development of Academic Staff in the Republic of Bulgaria Act, the Regulations for Implementation of the Development of Academic Staff in the Republic of Bulgaria Act and the Regulations for Development of Academic Staff in D. A. Tsenov Academy of Economics in Svishtov.

I. General characteristics of the dissertation thesis

The dissertation thesis includes a total of 217 pages and comprises:

- introduction (4 pages);
- body text (three chapters of a total of 172 pages);
- conclusion (5 pages);
- exhibits (8 exhibit of a total of 8 pages);
- list of references.

The introduction and conclusion have been prepared according to generally accepted requirements. The three chapters are well integrated and form a complete and logically substantiated discourse. Each chapter comprises 3 paragraphs and ends with conclusions. A suitable illustrative material of 5 tables and 95 figures is integrated in the text.

The dissertation thesis has clearly defined object, subject, purpose and scientific research tasks and hypothesis. *The subject* of the dissertation is the energy security of the EU and Bulgaria, and its *object* are the financial and economic aspects and challenges to energy security and the energy strategy of EU and Bulgaria. The aim of the dissertation is to discuss the evolution of the energy strategy of the EU and Bulgaria in terms of ensuring energy security based on multifactorial financial and economic analysis, energy balance trend modelling and assessment of energy mix dynamics. The PhD student defends the thesis that energy security is a key component of the energy strategy of EU and Bulgaria which should be justified by a financial and economic analysis assessing the various aspects and trend and force majeure challenges for the energy balance and energy mix dynamics.

The author has a deep knowledge of the problem area both theoretically and in purely practical terms. He has reviewed a large amount of specialized literature – the list of references comprises 158 titles (45 in Cyrillic and 113 in Latin) and used contemporary research methods and relevant statistics to make significant conclusions, assessments, recommendations and generalizations.

II. Evaluation of the format and contents of the dissertation thesis

The dissertation thesis addresses a significant and topical economic issue. Energy security is a key factor for economic, national and environmental security in the modern world.

The structure and presentation are at the required scientific level. At the outset, an in-depth analysis and assessment of EU energy policy in the 21st century is made (Chapter One). Next, financial and economic measures are presented as indicators for overcoming energy challenges (Chapter Two). Finally, the researcher outlines the main prospects and challenges for the energy sector in the EU and Bulgaria (Chapter Three). The narrative style is good.

The author has complied with the rules of scientific ethics – originality of the scientific product, correct citation and referencing, truthfulness of the presented information.

The author's summary consists of 32 pages and presents in a synthesized form the contents of the dissertation thesis.

The PhD student presents 4 publications (1 study, 1 article and 2 scientific reports), which exceeds the national requirements. All publications are related to the topic of the dissertation.

III. Evaluation of the scientific and applied contributions

The main scientific and applied contributions of the dissertation thesis are:

- original restatement of the concept “energy security”;
- modelling the components of the energy balance of EU and Bulgaria to substantiate the need for a thorough study of energy processes and their trends for effectively preventing potential negative consequences of disruption of technological processes in the energy sector;
- a proposal to establish a strategic energy security alliance among Sweden, Denmark, Great Britain, France, Austria, Germany, Hungary and Spain based on an assessment of the energy three-component rank and the rank of regional economic potential of these countries;
- establishing the quantitative interrelations among the prices of the main energy resources by means of a correlation analysis and deriving the geopolitical possibilities for adjusting the financial parameters of the main energy resources in Europe as well as the options for potential bilateral cooperation of EU member states;
- identification of practical opportunities for adding value for Bulgaria, given its strategic location in terms of major gas pipelines;
- critical assessment of the effects of the day-ahead market segment of the Independent Bulgarian Energy Exchange taking into account the price anomalies in 2022 in a situation where two national exchanges with different seasonal peak and rhythms of electricity supply and demand were interconnected.

IV. Questions to the applicant

„Efficiency is doing things right; effectiveness is doing the right things.”(P. Drucker) In this sense, which term is more relevant – “energy effectiveness” or “energy efficiency”?

V. General conclusion and opinion regarding the dissertation thesis

The dissertation thesis entitled “*Energy Security and the Energy strategy of EU in Bulgaria: Financial and Economic Aspects and Challenges*” is well-grounded, complete and practically feasible scientific work with clearly defined scientific and applied contributions. The dissertation thesis meets the requirements of Art. 6, para. 3 of the Development of Academic Staff in the Republic of Bulgaria Act, Art. 27 of the Regulations for Implementation of the Development of Academic Staff in the Republic of Bulgaria Act, and the Regulations for Development of Academic Staff in D. A. Tsenov Academy of Economics in Svishtov.

This provides me with the grounds to state my positive opinion regarding the dissertation thesis and to propose to the Scientific Panel to confer to Kaloyan Dragomirov Pargov the scientific and educational of “Doctor of Philosophy” in the scientific speciality of Finance, Monetary Turnover, Credit, and Insurance (Finance).

09 Feb. 2023

Reviewer:

(Prof. R. Brusarski, PhD)