

REVIEW

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regarding: dissertation work on the topic “Financial management of
investments in the republican and cross-border transport network”
with author **Borislav Petrov Lazarov**, doctoral student at the Department of
Finance at D. A. Tsenov Academy of Economics – Svishtov

I present this review in connection with Order No. 680 of 08.07.2024 of the rector
of the D. A. Tsenov Academy of Economics – Svishtov and with Protocol No. 3 of
05.07.2024 of the Faculty Council of the Faculty of Finance of the Academy of
Economics.

The review is on a dissertation work for awarding the educational and scientific
degree “Doctor” to the doctoral student in the doctoral program “Finance, Money
Circulation, Credit and Insurance (Finance)”.

I declare that in the last five years I have not been in a labor-legal relationship
with D. A. Tsenov Academy of Economics – Svishtov.

I. General presentation of the dissertation work

The dissertation work of doctoral student Borislav Lazarov was developed in
compliance with the requirements of art. 27, para. 2 of the Regulations for the
Implementation of the Law on the Development of the Academic Staff in the
Republic of Bulgaria.

The presented dissertation is a wide-ranging and complete scientific work,
which examines the state and development of the transport infrastructure, as an
insufficiently developed issue in the scientific literature, but with a clearly expressed
social significance for all branches of the country's economy.

In *the introduction* of the dissertation, the subject, object and thesis of the
research are correctly stated. The topicality of the issue is substantiated, and the
conclusion is outlined that with its strategic location in South-Eastern Europe, the

republican road network of Bulgaria is the “gateway to the EU” and the role of the national transport network for commercial trade with Asia is outlined, including with the export-oriented neighboring economy of Turkey, as well as with the development of tourism in the Balkans and in particular with our southern neighbor Greece. In addition to the role of cross-border road flows, the author points out the need for the implementation of measures to improve the internal transport network in our country and the priority construction of routes, both at the level of the highway network and at the level of the high- and low-class road network.

In the process of developing the topic, the doctoral student successfully solves the set research tasks in the context of the formulated goal, which is “through the analysis and assessment of investment needs, projects and programs in Bulgaria and Europe to identify the problems and propose solutions for the development of an effective road republican infrastructure and its integration into the Trans-European transport network”.

The first chapter of the dissertation is dedicated to the challenges of investment planning in the field of the republican and cross-border transport network. The emphasis is placed on the role of investments in the construction of motorways and high-speed railways in Bulgaria. The sources of funding for the repair and maintenance of the road infrastructure in the country with a view to increasing road safety and security are indicated. The regulatory framework, respectively the regulatory mechanisms for targeted development of the transport network in Bulgaria and the European Union, are presented.

The author emphasizes the problem of the increasing intensity of car traffic related to domestic and international transport. The author's research is carried out on the database of the state automobile administration and the TOLL road system, and the trends in the intensity of automobile traffic in Northern Bulgaria are substantiated. The conclusion is drawn that with the construction of a new bridge near Svishtov-Zimnich, the ecological situation in the Romanian capital Bucharest will improve as a result of reducing air pollution and reducing the factors that cause traffic jams. The results of the empirical research give the doctoral student a reason to assert the opinion that the expansion of the transport network with new routes in Northern Bulgaria, as well as the construction of a potentially new bridge or bridges in the locations of the ferry complexes on the Danube River, will ease the load on the land network and reduce insurance claims arising from road accidents.

In *the second chapter*, the author's vision is defended regarding the construction of a new concept for a national transport network, providing a safe road

infrastructure for the movement of goods and people between the countries in and outside the EU. For the construction of the concept in the dissertation, the task is set to derive models, through statistical processing of monthly traffic data, for the load on the main transit routes within the integrated national road network of the Republic of Bulgaria in the Trans-European Transport Network (TEN-T)

In *the third chapter*, questions related to the construction of benchmark projects and cross-border programs to support investments in the transport network are posed. In this direction, the research hypothesis is formulated and successfully defended, that in order to achieve a direct positive effect on GDP and expand the capacity for transit traffic through the payment of relevant toll fees and vignettes, a benchmark approach should be justified and approved. This approach should be applied in the context of the effective and prospective financial management of investments in existing and new transport facilities and routes, taking into account technological and organizational limitations, as well as public conditions and needs. On this basis, the research focus is placed on cross-border cooperation between Bulgaria and Romania, which finds expression in the program for cross-border cooperation between the countries in the period 2021-2027.

The doctoral student's scientific interest is focused on the investment planning, design and construction of the "Ruse-Veliko Tarnovo" highway. The question of the financial provision of the strategic road projects, following the example of the "Hemus" highway, is also brought to the fore. During the construction of the new sections, the author justifies the need to position charging stations for the new electric cars.

The main author's conclusions and summaries are reflected in *the publications* on the topic of the dissertation work. During the research period, the doctoral student published a total of six publications, of which: one study, one article, one independent report and three co-authored scientific reports.

The abstract is structurally sound, and its content correctly reflects the main points of the dissertation work. With a volume of 35 pages, the abstract contains the main text of the dissertation in a synthesized form. It presents guidelines for the doctoral student's future research work on the topic. Attached is a report on the scientific and scientific-applied contributions in the dissertation, a list of publications, a report on compliance with the national requirements under the Regulations for the Application of the Law on the Development of the Academic Staff in the Republic of Bulgaria, as well as a declaration of originality and credibility of the dissertation.

II. Assessment of the form and content of the dissertation

The content of the dissertation work is distinguished by a high scientific writing style, correct handling of the normative base and use of the formula apparatus. In the dissertation, the author demonstrates in-depth theoretical training in the field of financial management and investments in the republican and cross-border road infrastructure.

The doctoral student successfully defends in his work the thesis that investments in the republican and cross-border transport network create sustainability and growth of the national economy and the transport industry, in the interest of economic operators and consumers, by providing logistical needs with corresponding transport costs. The author argues that ensuring a positive benefit/cost ratio and maximizing net public benefits is a function of developing and implementing a long-term strategy for the renewal and maintenance of the national and cross-border transport network.

In *structural terms*, the dissertation work is passed. It consists of: an introduction, three chapters, a conclusion, a list of figures, a list of tables, two appendices, a bibliographic reference, a list of publications on the subject of the dissertation, a declaration of originality of the dissertation work. The dissertation is developed in a volume of 193 standard pages. There is proportionality in the volume of the chapters as the points and subpoints in them are arranged in a logical sequence.

The research methodology includes the use of classic scientific research methods, such as: the inductive and deductive method, the comparative method, the method of analysis and synthesis, the method of observation. Statistical methods such as descriptive statistics and correlation matrix were used for the purposes of the empirical study. These methods allow the doctoral student to establish the strength and direction of the interrelationships between the road flows passing through the various border points of the country and to relate to the available road infrastructure. For the needs of the analysis, data on the traffic of motor vehicles by category through the main checkpoints in our country are used.

On the basis of the precisely used up-to-date statistical information and applied statistical methods in the empirical part of the study, 54 figures and 30 tables are formed in the dissertation work.

The bibliographic reference contains 90 literary sources, of which 60 sources are in English and 30 in Bulgarian. The used literary sources are correctly cited in the main text of the dissertation.

In *the conclusion*, the author forms conclusions and makes recommendations in connection with the achieved results of the research. The doctoral student defends his view that the construction and expansion of the road network in the country requires a variety of financial instruments, incl. financing from the republican budget, financing under Operational programs, as well as the use of loans.

III. Scientific and scientific-applied contributions of the dissertation work

The formulated scientific and scientific-applied contributions are the result of the in-depth and purposeful research work of the doctoral student in developing the dissertation work.

I accept the presented contributions and their systematization in the abstract and consider that they unambiguously reflect the precise analyzes and generalizations resulting from the empirical researches and the good theoretical training of the author in the field of his scientific interests.

The publication activity of doctoral student Borislav Lazarov deserves high praise, where the contributions presented in the dissertation are also reflected.

I believe that the author's empirical studies, which correspond to the theoretical statements in all three chapters of the dissertation, are the main contributing points, namely: the analysis of the intensity of car traffic in Northern Bulgaria; the analysis of the relationship between the regional GDP per capita and the density of the road network by district in Bulgaria; the developed Ex post financial model for the project route of the "Vidin – Botevgrad" highway.

A positive point in the work is the very good knowledge of the implemented and ongoing programs and investment projects for increasing the capacity of the national transport network as part of TEN-T.

The conclusions and generalizations made in the dissertation work allow us to claim that the working hypotheses have been validated.

IV. Dissertation critical notes, questions and recommendations

I do not find any critical comments on the content of the dissertation.

I recommend the PhD student to continue his research in the field of strategic management and investment policy in the transport industry, in order to apply his theoretical and expert knowledge in practice in the future.

My question to the doctoral student is: in what directions is the combination of insurance and prevention carried out in order to improve the road infrastructure, reduce the number of road accidents in the country and reduce the insurance

payments of car insurers in Bulgaria? In this sense, how does the PhD student see the importance of investments in preventative measures – at the micro and macro level – to increase road safety and security?

V. Summary Conclusion and Opinion

The dissertation work of doctoral student Borislav Petrov Lazarov is an up-to-date practical-applied research in the field of financial and investment management, in which the author formulates guidelines and recommendations regarding the effective functioning of the republican and cross-border transport network. The in-depth knowledge of the doctoral student in the field of the theory of finance, investments, strategic and operational management, the regulatory framework and the mechanisms of functioning of the transport industry, represent a solid basis for the development of the given topic. The main focus of the author's research work is the analyzes and assessments of investment needs, projects and programs in Bulgaria and Europe, as well as the identification of problems and the formulation of solutions for the development of a sustainable internal road infrastructure and the integration of the road network of the Republic of Bulgaria with Trans the European Transport Network (TEN-T).

The scientific research work of Borislav Petrov Lazarov is also presented through his publications related to the topic of the dissertation work, through which the author fulfills the minimum national requirements regarding his publication activity and reports a total of 44.50 points.

In conclusion, it can be summarized that the dissertation has the necessary scientific and scientific-applied contributions. This gives me the reason with full conviction to propose to the respected members of the scientific jury to vote **positively** and to propose to the Faculty Council of the Faculty of Finance the **awarding** of an educational and scientific degree “doctor” in the scientific specialty “Finance, monetary circulation, credit and insurance (finance)” by Borislav Petrov Lazarov.

30/07/2024
Sofia

Reviewer:
(assoc. prof. Irena Markova, D.Sc.)