

OPINION

Submitted by: Assoc. Prof. Aleksandar Petrov Ganchev, PhD, member of the teaching staff of Department of Finance and Credit at D. A. Tsenov Academy of Economics – Svishtov

Regarding: a dissertation entitled "Investments in Mortgage Bonds"

Author: Borislav Krasimirov Kirov, doctoral student's No. D020217155, doctoral student at the Department of Finance and Credit at D. A. Tsenov Academy of Economics – Svishtov **Doctoral Programme:** Finance, Monetary Turnover, Credit, and Insurance (Finance)

Dissertation Advisor: Assoc. Prof. Valentin Milinov, PhD

Purpose of the opinion: to evaluate the merits of the dissertation for acquisition of the educational and scientific degree of Doctor of Philosophy

Grounds for submission of the opinion: Order No. 1036 of 02 Dec. 2021 of the Rector of D. A. Tsenov Academy of Economics

Date of submission of the opinion: 05 January 2022

I. Evaluation of the compliance with the formal, structural, and technical requirements pursuant to Art. 27, Para. 2 of the Regulations for implementation of the Law for Development of the Academic Staff of the Republic of Bulgaria

The dissertation includes a total of 176 pages. It complies with the standard formal, technical and structural requirements for a dissertation and comprises a title page, a table of contents, an introduction, a main body comprising three main chapters, a conclusion, a list of citation references, a statement of originality, a list of author's publications on the topic of the dissertation and seven exhibits. The main text includes 12 figures, 9 tables and 24 equations. The list of references includes references to 146 literary sources, 10 regulatory documents and 9 internet sites. The compliance with the standard formal, technical and structural requirements pursuant to Art. 27, Para. 2 of the Regulations for implementation of the Law for Development of the Academic Staff of the Republic of Bulgaria classifies the submitted scientific work as a dissertation.

- II. Evaluation of the scientific and applied merits of the dissertation according to Art. 27, Para. 1 of the Regulations for implementation of the Law for Development of the Academic Staff of the Republic of Bulgaria
- 2.1. Evaluation of its topicality, subject, object, aim, research tasks, and contents

Mortgage bonds investments have been the subject of increasing scientific interest since the outbreak of the financial and economic crisis of 2008-2009. This is largely due to the fact that they were identified as the main cause of that crisis. The topicality of the dissertation is also determined by the fact that the volume of mortgage lending is significant in all economies, including the economy of Bulgaria, and mortgage bonds are an important tool for acquiring bank loans. On the other hand, in recent years there have been attempts to regulate mortgage lending and the processes related to issuing and investing in mortgage bonds. All this determines the importance of any research that aims to analyze and evaluate the state of the mortgage sector and its regulation. Therefore, the

topic and content of the dissertation submitted by Doctoral Student Borislav Krasimirov Kirov can be defined as topical.

The object of research in the dissertation are mortgage bonds and the effects of modern international regulatory standards leading to the transformation of the mortgage bond market into a covered bond market. The subject of the dissertation research are the historical, diagnostic and forecast analyses of the mortgage market in the period 2010-2020 in the context of its transformation into a market of covered bonds.

The aim of the dissertation is to conduct a systematic study of investments in mortgage and covered bonds in the period 2010-2020 by analyzing the evolution of international standards regulating this process. To achieve this goal, four properly structured tasks are formulated. The main thesis defended in the dissertation is: "The optimal balance in the development of real estate and mortgages markets, their regulation and investments in mortgage/covered bonds is an important factor for achieving long-term financial stability of credit institutions, financial markets and the economy. That is why this process must be at the center of attention of international regulators and financial managers when making important investment decisions for global investments in mortgage or covered bonds".

The dissertation is structured as an introduction, three main chapters and a conclusion. The introduction presents the research problem and defines the main scientific characteristics of the dissertation – its object, subject, thesis, goals, objectives and methodology. Chapter One addresses the analysis of financial practices for mortgage collaterals. Chapter Two analyzes the impact of international regulatory standards on mortgage lending and investment in mortgage and covered bonds. Chapter Three examines the technology for managing the credit and investment risk of mortgage and covered bonds. The conclusive part outlines the main conclusions from the conducted research.

This gives the ground to conclude that the paper submitted for evaluation by Doctoral Student Borislav Krasimirov Kirov has the scientific characteristics of a dissertation which addresses an important, relevant and significant financial problem. The scientific aspects of the dissertation are formulated correctly and imply an adequate and in-depth research on the topic of the dissertation.

2.2. Scientific and applied contributions of the dissertation

Doctoral Student Borislav Krasimirov Kirov has outlined the following six main scientific contributions of his dissertation:

First. It proves that the structural securitization approach adopted in the US is wrong and cannot be a positive factor for the process of investment in real estates and mortgage/covered bonds.

Second. It reveals that after the adoption of the European Directive (EU) 2019/2162 on covered bonds, the interest in issuing and investing in mortgage and covered bonds will increase, which opens new opportunities for alternative financing of the credit institutions when the interest rates rise in the future.

Third. It identifies certain possible problems related to the policy of the European Central Bank and the national central banks to keep interest rates low, which is a factor in the growth of mortgage lending, but creates conditions for a new financial crisis on the scale of the one in 2008-2009.

Fourth. Institutional investors are advised that their covered bonds investment policies should take into account a range of financial, macroeconomic and investment factors, including the possibility of a new global financial crisis.

Fifth. It proves that the competition among credit institutions and the availability of aggressive mortgage lending drive the real estate market up, but if it reverses its direction,

this may reduce the value of asset-backed bonds and, therefore, central banks should monitor closely and regulate the activities of the credit institutions in order to ensure their financial stability, protect the interests of their depositors and the stability of the mortgage/covered bond markets.

Sixth. It proves that the sustainable development of the financial markets requires a balance between a stable banking sector, active mortgage lending, real estate price stability and optimal investment in mortgage/covered bonds.

The number and quality of the above contributions are sufficient for a dissertation which addresses investment in mortgage/covered bonds based on a systematic analysis.

2.3. Shortcomings of the dissertation

The submitted dissertation has certain flaws of technical and scientific nature, which can be summarized as:

First. Certain parts of the dissertation are quite descriptive.

Second. The author tends to resort to enumerations which could have been presented as analyses or comments.

Third. The main emphasis of the dissertation is on the processes related to mortgage lending and regulations related to mortgage/covered bonds, which to some extent diverts the attention from the purely investment aspect of the topic.

Fourth. The third section of the dissertation does not provide a clear link between the results of the analyses of the mortgage lending before 2010 and the research objectives.

Fifth. The text contains certain stylistic and technical inaccuracies.

III. Evaluation of the author's summary and the publications

The author's summary comprises 53 pages. It fully reflects the main points of the dissertation and its main merits.

Doctoral Student Borislav Krasimirov Kirov has submitted 6 publications for participation in the procedure for acquisition of the educational and scientific degree of Doctor of Philosophy, including 1 study, 1 article and 4 conference papers, all of which are either on the topic of the dissertation or are related to main points of its contents.

IV. Questions the author should answer during the dissertation defence

The applicant may be asked the following questions based on the contents of the dissertation:

First. How will the current high inflation levels affect the mortgage market globally, regionally and nationally? What are the risks and the possible negative consequences for the global, the European and the Bulgarian economies, if the inflation we are currently witnessing does not turn out to be transient, but remains at relatively high levels for several years?

Second. Do you think that the real estate market in Bulgaria is currently in a bubble and what are the possible risks for the commercial banks in Bulgaria? In this regard, do you consider the policy of the Bulgarian National Bank aimed at increasing the countercyclical buffer of commercial banks to be appropriate?

V. General conclusion and opinion

The dissertation entitled "Investments in Mortgage Bonds" is a study of a topical and interesting financial issue. The dissertation shows that its author has a good knowledge of the analyzed issue and is capable of drawing substantiated conclusions related to it. This provides me with the grounds to give an overall positive opinion regarding the dissertation and propose to the Scientific jury to confer the educational and scientific degree of "Doctor" in the doctoral program "Finance, Money Circulation, Credit, and Insurance (Finance)" to Doctoral Student Borislav Krasimirov Kirov.

05 January 2022 Svishtov D. A. Tsenov Academy of Economics

Assoc. Prof. Aleksandar Petrov Ganchev, PhD