OPINION

From: Assoc. Prof. Dr. Vanya Petrova Ivanova

University of National and World Economy
Scientific specialty Professional field 3.8 Economics (Political Economy)

Subject: dissertation work for the award of the educational and scientific degree "doctor" on scientific specialty in professional field 3.8 Economics (Political Economy)

Author of the dissertation work: Tania Tsvetanova Karamisheva

Topic of the dissertation: THE CREDIT AND FINANCIAL CYCLE IN BULGARIA, ITS INTERACTION WITH THE BUSINESS CYCLE AND THE MACRO-PRUDENTIAL POLICY.

Reason for presenting the opinion: participation in the composition of the scientific jury for the defense of the thesis according to Order RD 38- 211 / 28.4.2021, the Rector of the University.

1. Information about the doctoral student

The doctoral student was enrolled in a doctoral program at the *Faculty* of *Economics at* Sofia University "St. Kliment Ohridski" in the scientific specialty in the professional field 3.8 Economics (Political Economy) in part-time programme. The studies were carried out in the period 2016-2020.

2. General characteristics of the presented dissertation

The work has a volume of 200 pages, including literary sources - in total 158 (predominantly foreign) and annexes.

The dissertation is dedicated to a relatively well researched in the scientific literature issue related to the relationship credit cycle - business cycle, but giving rise to a new discussion in the last decade, caused by a reassessment of the existing theories and a search for new explanations and interpretations of the crisis of 2007-2008, analysis of the financial cycle-business cycle, accumulation of risks in the financial system and their control.

The topicality of the issue is indisputable. Growth rates and especially opportunities for such in long run in the post-crisis period raise again questions about the effects of using traditional monetary instruments policy, the explanatory power of common factors and the search for new ones, and for the role of the banking system in the control and analysis of the risk and the conducted macro-prudential policy by the central bank.

This study fits into the context of this discussion. The study of the driving forces of the cyclical fluctuations in the financial system and the way the financial and the business cycle interact, is essential. The author's goal is to clarify the nature, explore and empirically demonstrate the strength of this relationship and, on the basis of this analysis, propose a decision-making approach to the implementation of the macro-prudential policy of the central bank.

Structured in five chapters, the work follows a logical, up-to-date presentation. This construction allows the author to trace the scientific conclusions made in the literature review and based on them, to develop her own analysis of understanding the relationship between the financial and business cycle, based on a derived aggregate measurement of the financial cycle in the Bulgarian economy, through the aggregation of information from a wide range of macroeconomic and financial variables.

Modern, suitable econometric tools and reliable statistical information have been used in the dissertation.

In fulfilment of the set goals of the dissertation and the related research tasks, the doctoral student consistently clarifies in theoretical and empirical terms the essence and the factors of the credit cycle in Bulgaria for the researched period, presenting a credit cycle estimate by measuring the deviation of the credit-to-GDP ratio from its long-term trend. Based on the constructed by the author combined measurement of the financial cycle and the assessment of the business cycle, on the basis of certain structural characteristics of the Bulgarian economy, the author proves her leading hypothesis for the existence of synchronicity between the two cycles.

3. Evaluation of the obtained scientific and scientific-applied results

The dissertation is characterized by high information availability and the use of a wide range of theoretical and empirical sources. The author demonstrates in-depth knowledge of both the theory and a skilful interpretation of diverse empirical information. As more important scientific results and strengths of the dissertation can be indicated the following points:

- ➤ Development of the banking system and the credit activity in Bulgaria in the period after the global financial and economic crisis;
- Analysis of the factors influencing the dynamics of the credit in Bulgaria in long term and short term, both at the macro but also micro level, distinguishing between demand side and supply;
- ➤ In-depth study of the factors for credit growth in company crediting, based on individual results of the Survey of Credit activity for particular banks;
- ➤ Completion of the indicator deviation of the credit to GDP ratio from its long-term value with a set of additional indicators, used to assess the financial cycle in Bulgaria;
- Analysis of the degree of synchronization between the selected measurement of the financial cycle in Bulgaria (FC6) and the business cycle and the calculation of the respective index of synchronization between them.

I find that in the dissertation have been achieved not only scientific, but also practical-applied results, such as proposing a decision - making approach to the implementation of the macroprudential policy measures of the central bank.

Based on all of the above, I believe that the objectives of the study have been solved successfully, the research goals are fully realized, and the main thesis of the dissertation is convincingly proven.

4. Evaluation of scientific and scientific-applied contributions

From the six contributions of scientific and applied nature presented by the author, I fully accept the fourth, fifth and sixth ones. The first three are rather scientific results. Undoubtedly the most serious author's contribution to the dissertation is in deriving an aggregate measurement of the financial cycle and its use in the analysis of synchronicity with the business cycle. This allows a more accurate and timely formulation of measures for the macro-prudential policy in order to limit the cyclical systemic risk in the financial system.

5. Evaluation of the dissertation publications

The abstract is accompanied by a list of five publications of the author, four of which independent and one co-authored, which are related to the dissertation. Three of these publications are in process of publication in authoritative editions in Bulgaria. The specified

publications include significant parts of the dissertation, which gives me reason to believe that the achieved results are sufficiently popularized.

6. Evaluation of the abstract

The abstract contains all the necessary details and is developed at a good level. It reflects correctly and sufficiently the content of the dissertation.

7. Critical remarks, recommendations and questions

- 1. The dissertation would gain added value if in the first chapter at the literature review and the presentation of the scientific achievements so far at issues related to the financial cycle and its importance in the early stages diagnosing of the systemic risk in the economy, would be presented much more clearly and categorically the author's opinion and the support of the presented views.
- 2. In view of the real membership of Bulgaria in the European Banking Union and the impact of this membership on the stability of the banking system, what are the author 's assessment and expectations for the impact on the financial cycle and the synchronicity with the business cycle?

8. Conclusion

The presented dissertation is an independent, in-depth and complex scientific research on the selected issues, which is based on the application of modern methodological approaches and in which there are clear authorial contributions. Significant theoretical, methodological and empirical results are achieved, and the formulated research thesis is defended convincingly and with arguments.

The dissertation contains scientific, scientific-applied and applied results, entirely authorial analyses that represent an original contribution to science and meet all the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for implementation of LDASRB and the respective Regulations of Sofia University "St. Kliment Ohridski". The presented materials and dissertations results **fully** comply with the specific requirements of the Faculty of Economics in connection with the Regulations of Sofia University for application of LDASRB.

The dissertation shows that doctoral student Tania Karamisheva has in-depth theoretical knowledge and professional skills, demonstrating the qualities and capabilities of conducting the research independently.

Due to the mentioned above, I confidently give my **positive assessment** of the conducted research, presented by the above-reviewed dissertation, abstract, achieved results and contributions, and I invite the esteemed scientific jury **to award the educational and scientific degree 'Doctor'** of Tania Karamisheva in the professional field 3.8 Economics, specialty "Political Economy".

20.06.2021	
Sofia	Signature:
	(Assoc. Prof. Dr. Vanya Ivanova)