

STATEMENT

From: Prof. Dr. Maria Vidolova, Sofia University "St. Kliment Ohridski", Department of Finance and Accounting, Scientific field 3.8. "Economics" / finance, money circulation, credit and insurance /"

Subject: Dissertation on a topic "The credit and financial cycle in Bulgaria, its interaction with the business cycle and the macroprudential policy" for the award of the educational and scientific degree "Doctor" in professional field 3.8. "Economics", scientific field "Political Economy".

Author of the dissertation: Tania Tsvetanova Karamisheva - part-time doctoral student in professional field 3.8 Economics (Political Economy) at the Department of Economics.

The presented opinion is in implementation of order RD 38-211 /28.04.2021 of the Rector of the Sofia University "St. Kliment Ohridski", on the grounds of Art. 4, paragraphs 5, 6 and 7 of the Law for the development of the academic staff in the Republic of Bulgaria, as well as of a decision of the Department Council of the Economics Department in connection with the competition for awarding the scientific degree "Doctor" to Tania Tsvetanova Karamisheva.

1. Information about the author

Tania Karamisheva is a part-time doctoral student at the Department of Economics, Faculty of Economics at the Sofia University "St. Kliment Ohridski".

The author holds a bachelor's and master's degree in economics, majoring in Business Administration from the Julius-Maximilian University, Würzburg, Germany, as well as a bachelor's degree in Business Economics from the University of National and World Economy, Sofia.

Since 2007 the author has been working at the Bulgarian National Bank, at the moment she is a chief expert at the Economic Research and Forecasting Directorate, Monetary and Financial Research Department. Her professional expertise includes preparation of analyses and forecasts for monetary and credit aggregates, interest rates and developments in the banking sector in Bulgaria, participation in the preparation of the BNB macroeconomic projections, in the publications Economic Review, BNB Semi-Annual Report and BNB Annual Report, summarizing and analysing the results of the Bank Lending Survey, conducted among commercial banks in Bulgaria, developing models for forecasting and simulation in the monetary sector and econometric modelling.

The individual plan for the dissertation is completed on time.

2. General characteristics of the dissertation

The dissertation of Tania Karamisheva meets the requirements of the Law for the development of the academic staff in the Republic of Bulgaria and the Regulations for its application, as well as the Regulations for the order and conditions for acquiring scientific degrees and holding academic positions at the Sofia University "St. Kliment Ohridski". The

required documents are attached to the materials for the competition.

The dissertation consists of an introduction, an exposition in five chapters, a conclusion, two appendices, a list of figures, a list of tables and literature /with a total volume of 200 pages/. The bibliography contains 158 sources of Bulgarian and foreign authors in the field of the development of the banking system and lending in Bulgaria, credit and financial cycles, as well as the policy of the BNB in the period after the introduction of the currency board. A wide range of data from the BNB monetary and interest rate statistics, balance of payments statistics, data from BNB supervisory statistics, NSI statistics, etc. are also used. The content of the dissertation is supported by a number of tables and graphs.

The dissertation is dedicated to an undoubtedly significant problem in terms of the role of bank credit in the economy, especially given the correlation between periods of credit growth and risk-taking in the financial system, as well as in cases of reversal of the cycle, which inevitably generates losses for most economic agents, and vice versa - in the case of more conservative credit policy on the part of banks, related to macroeconomic uncertainty - the presence of limited growth in investment and consumption and in gross domestic product accordingly. The problems considered in the dissertation are especially significant in the context of outlining credit expansion as a major factor for the outbreak of financial crises, studying the drivers of cyclical fluctuations in the financial system, as well as in-depth study of the relationship between credit, financial cycle and business cycle and anti-crisis measures and large-scale reforms of the economic and monetary union with a view to improving the profitability of banking intermediation. The debates caused by the 2007-2009 crisis arising from gaps in the market discipline, the adequacy and effectiveness of financial regulations and standards highlight the need for a new comprehensive reading and analysis of the evolution of the regulatory framework in the context of information asymmetry, volatility of markets, cyclical crises and, to a large extent, an "explosion" of systemic and specific risks.

The author sets the ambitious goal to bring to the fore the main factors influencing the dynamics of credit in Bulgaria. The analysis is conducted first at the macro level using aggregate indicators for the economy and then at the micro level, using individual data by banks and a distinction is made between factors on the demand side and on the supply side of credit. The dissertation derives an aggregate measure of the financial cycle in the Bulgarian economy by aggregating information from a wide range of macroeconomic and financial variables and then presents an assessment of the business cycle based on certain structural characteristics of the Bulgarian economy. The phases of the credit and business cycle in Bulgaria are traced for a relatively long period 1999 - 2019. In connection with the set goal, the author seeks answers to a number of questions, inclusive how the credit cycle assessment changes by using and aggregating information from a wide range of macroeconomic and financial variables, is there a relationship and synchronicity between the financial cycle and the business cycle in Bulgaria and last but not least, can the assessment of the financial cycle be used in the decision-making process on macroprudential policy.

According to the set goal, the author formulates the object and the subject of the research, as well as the specific research tasks.

In accordance with the main thesis that the aggregation of information from various macroeconomic and financial indicators and the derivation of a cumulative measure of the financial cycle excels the assessment of the credit cycle by using the deviation of the credit-

to-GDP ratio from its long-term trend and thus may indicate the accumulation of cyclical risks in the financial system, the author formulates the hypothesis for the existence of a relationship and synchronicity between the financial cycle and the business cycle, which is a prerequisite for timely action by the central bank to accumulate buffers in the banking system during the upward phase of the cycle.

The correct selection of methods for quantitative and qualitative analysis is performed, and for the purposes of the study Tania Karamisheva uses appropriate methods and models (an error correction model, panel regressions, HP filter - to measure the deviation of the credit-to-GDP ratio from its long-term trend, the bandpass filter, a structural unobserved components model, turning point analysis and measures of synchronization). Some limitations regarding the approaches used and the chosen time period are also shared.

The PhD student has made a successful attempt for a comprehensive analysis of the topic, which is based on an in-depth study of the literature, summarizing the approaches used to assess the credit, financial and business cycle, as well as the relationship between them and the macroprudential policy. Separately, in parts of the dissertation theoretical models for the relationship between credit and economic activity, as well as the available empirical studies of the factors influencing the dynamics of credit are presented.

The dissertation consistently examines the issues devoted to the theoretical analysis and development of the banking system and lending in Bulgaria, as well as the BNB policy after the introduction of the currency board. The tendencies in the development of the economic environment and the credit activity are outlined and an analysis of the indicators for the accumulation of cyclical systemic risk in the banking system is performed. The author makes a reasoned assessment for the presence of an ascending phase of the economic and financial cycle, which is considered a prerequisite for increasing the level of the countercyclical capital buffer.

The author thoroughly examines the dynamics of credit to the private sector, the main developments in the banking system and the policy of the BNB after the introduction of the currency board in Bulgaria. Further in the exposition the factors for the dynamics of credit in Bulgaria at the macro level are studied by using aggregate macroeconomic indicators, as well as at the micro level through the use of individual data by banks and results from the Bank Lending Survey. The author presents an assessment of the credit cycle in Bulgaria by measuring the deviation of the credit-to-GDP ratio from its long-term trend, as well as of the financial cycle by aggregating information from a wide range of macroeconomic and financial indicators. A separate assessment of the business cycle is presented by taking into account the relationship between GDP, inflation, unemployment and interest rates. The relationship and the degree of synchronization between the financial and business cycle are studied. In the last chapter, the author proposes for discussion the possible application of the results of the estimate of the financial cycle for macroprudential purposes and in particular for decision-making on the level of the countercyclical capital buffer.

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

I believe that the conducted dissertation research, the abstract, as well as the attached publications are personal work of the doctoral student. The formulated contributions and obtained results are also her personal merit and reliably reflect the set research tasks. The

research methodology chosen by the author, as well as the applied methods contribute to the achievement of the set goal, as well as give an adequate answer to the tasks set in the dissertation. The possibilities of comparative analysis, abstraction, induction and deduction, analysis and synthesis, predictive analyzes, etc. are correctly used. The serious number of references, as well as the clearly expressed author's opinion on the issues under consideration leave no doubt about the authenticity of the material.

As contributing moments in the dissertation can be highlighted:

1. The dissertation is devoted to a topical in terms of the state and prospects in the development of national banking regulations and macroprudential policy and at the same time insufficiently researched and adapted to the present problem, especially given the impact of financial crises and the inevitable evolution of the functions and responsibilities of the regulatory authorities.

2. The topic of the dissertation is well formulated. The research thesis is well developed. The main goal and tasks of the dissertation are precisely derived and reflect the research work of the doctoral student. The applied research methodology is distinguished by its complexity, as well as by its usefulness in terms of the requirements of practice. The research is thorough, well-argued and conscientious. The style of the dissertation is very good and precise in terms of specialized methodology. In structural terms, there is a logical sequence, as well as a large amount of work has been done in connection with the study. The analysis is correct, the recommendations are substantiated and arising from the results obtained in the course of the study. The doctoral student demonstrates skills for in-depth and reasoned analysis, summaries and critical thinking.

3. Within the framework of the carried out in-depth theoretical-methodological and comparative analysis, the role of the Central Bank for preserving the financial stability is outlined. The study of the factors for the dynamics of credit in Bulgaria at the macro and micro level has allowed the author to distinguish between factors of demand and supply of credit, which can serve to further develop the regulatory framework, the application of preventive measures of the macroprudential policy and to provoke an institutional discussion on the design of policies applicable over a long strategic horizon. In this sense, they are designed for a wide range of professional audiences. An impressive amount of scientific literature on the problem has been studied.

4. Of particular interest is the comparison of the estimated financial cycle and the business cycle for Bulgaria, which is derived using an unobserved components model. The main contribution indicated by the author can definitely be accepted, namely the derivation of an aggregate measure of the financial cycle, which exceeds the limits when using the deviation of the credit-to-GDP ratio from its long-term trend.

5. Certain theoretical and applied contributions are the conclusions related to the length and phases of the financial cycle that can be used in the implementation of macroprudential policy measures and in particular the decisions related to the levels of the countercyclical capital buffer in order to limit the concentration of cyclical systemic risk in the financial system and increasing its resilience to shocks.

4. Evaluation of the publications, related to the dissertation

Attached to the documents are four independent and one joint publication of the doctoral student in peer-reviewed scientific journals. Three of the publications are under print. The doctoral student has three participations with reports at international conferences. All publications are related to the topic of the dissertation and I believe that they contain some of the main contributions that are claimed in the dissertation.

5. Evaluation of the abstract

The abstract has a volume of 41 pages and includes a brief presentation of the main points of the dissertation. The abstract is prepared according to the requirements and reflects the main results achieved in the dissertation.

6. Critical remarks, recommendations and questions

As a remark to the author I can note the resulting unevenness (in terms of volume and content) between the individual chapters, giving precedence to the theoretical and comparative analysis at the expense of a more limited study of the current challenges to banks, lending and the BNB policy after the introduction of the currency board, the factors influencing credit growth and the application of the estimate of the financial cycle for macroprudential policy decisions. The scientific and scientific-applied contributions related to the results of the dissertation research can be successfully applied in further improvement and upgrading of the regulatory framework and in the improvement of the supervisory methodology.

7. Conclusion

The dissertation contains scientific and scientific-applied results, which represent an original contribution and meet the requirements of the Law for the development of the academic staff in the Republic of Bulgaria and the Regulations for its implementation. The dissertation shows that the doctoral student Tania Karamisheva has in-depth theoretical knowledge and professional skills for independent research.

Given the above, I confidently give my positive assessment of the study, presented by the dissertation, abstract, results and contributions, and I propose to the esteemed scientific jury to award the educational and scientific degree "Doctor" to Tania Karamisheva in professional field 3.8. "Economics" / "Political Economy" /.

Sofia,
June 25, 2021

Signature: 
/ Prof. M. Vidolova /