VARNA FREE UNIVERSITY "CHERNORIZETS HRABAR"

STATEMENT OF OPINION

by Assoc. Prof. Mladen Dimitrov Tonev, PhD – Adjunct Associate Professor at Varna Free University "Chernorizets Hrabar" – Member of the Scientific Jury, regarding the acquisition of the scientific degree "Doctor of Sciences" in Professional Field 3.8 "Economics," following a procedure announced by the Department of Economics at the Faculty of Social, Economic, and Computer Sciences of Varna Free University "Chernorizets Hrabar".

Author of the Opinion: Assoc. Prof. Mladen Dimitrov Tonev, PhD, Adjunct Associate Professor at Varna Free University "Chernorizets Hrabar" – Varna.

Regarding: A dissertation for the award of the scientific degree "Doctor of Sciences" in Professional Field 3.8 "Economics".

Author of the Dissertation: Professor Sylwester Bogacki, PhD.

Dissertation Topic: "Economic determinants and methods of measuring fiscal stability of local government units".

Procedure Initiation: At the request of the Department of Economics, Faculty of Social, Economic, and Computer Sciences, Varna Free University "Chernorizets Hrabar".

Basis for Submission: Participation in the Scientific Jury, appointed by Rector's Order No. 316 dated June 18, 2026.

Dissertation Reviewers: Prof. Tanya Veselinova Gorcheva, D.Sc. (Econ); Prof. Stela Atanasova Todorova, PhD; Prof. Gancho Todorov Ganchev, PhD.

Opinion and Evaluation

1. Relevance and Significance of the Scientific Problem

The relevance of the dissertation by Professor Sylwester Bogacki PhD is driven by the fact that, at the local level, the fiscal sustainability of local government units is typically interpreted as the capacity of local authorities to provide public services at an adequate level while maintaining the ability to meet financial obligations without excessive growth in public debt. It is in the light of this perspective that Professor Bogacki's work interprets the importance of maintaining the allocative, redistributive, and stabilizing functions of fiscal policy under conditions that support long-term socio-economic development. The empirical research reflected in the dissertation confirms that the fiscal sustainability of local authorities depends on a wide range of determining factors, including demographic, economic, institutional, and political factors. Previous studies, according to the author, confirm the importance of population dynamics, labor market conditions, expenditure growth models, and fiscal equalization mechanisms for the quality of public financial management.

2. General Characteristics and Structure of the Dissertation

The dissertation by Professor Sylwester Bogacki, PhD on the topic: "Economic determinants and methods of measuring fiscal stability of local government units" is 319 pages long in computer type. It consists of a title page, table of contents, list of tables, list of graphs and charts, introduction, body structured into four chapters, summary, final conclusions, a bibliography, and four appendices (39 pages). The content of each chapter is presented in separate paragraphs. The dissertation structure contains 78 tables (23 in the body and 55 in the appendices), 8 figures, and four appendices as illustrative components of the work. The list of sources used includes 303 titles in Polish and English, correctly grouped into sections: regulatory and reference literature, monographs, book chapters, scientific articles, reports, analyses, and expert reviews.

3. Characteristics of Scientific and Scientific-Applied Contributions

In the introduction, Professor Sylwester Bogacki, PhD appropriately reflects the object, subject, and goal of the work, as well as the research methodology.

- **Object of Study** “comprises local government units at the basic (municipal) level, which constitute the most functionally and financially autonomous tier within the multi-level governance system. The empirical analysis covers all municipalities in Poland, representing a highly heterogeneous population differentiated in terms of size, administrative status, socio-economic potential, demographic structure, and spatial conditions.” (p. 9 of the Abstract to the dissertation of Professor Sylwester Bogacki, PhD)
- **Subject of Study** “concerns the fiscal stability of local government units, conceptualized as a multidimensional and dynamic phenomenon encompassing the capacity of municipalities to maintain financial balance, ensure the continuity and quality of public service provision, and support long-term socio-economic development while respecting the principle of intergenerational equity.” (p. 10 of the Abstract to the dissertation of Professor Sylwester Bogacki, PhD)

The subject is operationalized through a synthetic measure – the **Fiscal Stability Index (FSI)** – which integrates multiple diagnostic variables into a coherent analytical framework.

- **Methodology:** From a methodological perspective, the subject is further embedded in a two-stage research design combining **Multivariate Comparative Analysis (MCA)** with **econometric panel data modeling**.
- **Primary Objective** "is to demonstrate the multidimensional character of fiscal stability of local government units, to develop a comprehensive and operational framework for its assessment, and to identify the key determinants shaping its dynamics, with particular emphasis on municipalities as the basic units of local governance in Poland. This objective is realized through the construction of an original, theoretically grounded and empirically verifiable set of indicators enabling the measurement of fiscal stability in a manner that transcends traditional legalistic and creditworthiness-based approaches." (p. 4 of the Abstract to the dissertation of Professor Sylwester Bogacki, PhD)
- **Central Task:** The development of an original concept for measuring the fiscal stability of municipalities based on a multidimensional indicator system integrating elements from financial analysis, public sector accounting, and banking credit assessment methodologies. The developed framework encompasses fiscal stability as a composite phenomenon including liquidity, sustainability, flexibility, development capacity, and intergenerational equity.

Research Questions and Hypotheses The primary research question focuses on two closely related issues:

"ONE: How can the multidimensional fiscal stability of local government units be conceptualized, measured and empirically assessed using a comprehensive and transferable indicator-based framework?

SECOND: What are the key internal and external determinants shaping the level and dynamics of fiscal stability of municipalities, taking into account their structural diversity and institutional context?" (p. 11 of the Abstract to the dissertation of Professor Sylwester Bogacki, PhD)

The **Central Research Hypothesis (H0)** states: "The fiscal stability of local government units is complex and multidimensional, being the result of not only systemic conditions inherent in the public finance sector itself, but also factors coming from outside it, of a diverse nature and origin." (p. 11 of the Abstract to the dissertation of Professor Sylwester Bogacki, PhD)

Based on this, five specific hypotheses were tested:

- “**H1**: Maintaining long-term solvency is not a sufficient condition to ensure the fiscal stability of municipalities, because its guarantee requires a harmonious development of all dimensions of the phenomenon under study.
- **H2:** There is a relationship between the extent of fiscal stability and the administrative type and size of the municipality.
- **H3**: The fiscal stability of municipalities fluctuates over time, with the amplitude being different in different types of municipalities.
- **H4:** Changes in the scope of fiscal stability of municipalities, in particular types of municipalities, are caused to a varying extent by the influence of internal factors (originating from their endogenous potential) and external factors (originating from their environment).
- **H5**: The scope of fiscal stability in Polish municipalities is primarily explained by economic and demographic factors, with their impact varying across different types of municipalities. Analysis can be based on a proprietary set of indicators measuring fiscal stability.” (p. 12 of the Abstract to the dissertation of Professor Sylwester Bogacki, PhD)

Research Methods: The research methods used in the study are determined by the set goal and the adopted set of research hypotheses. In order to achieve the empirical goals set out in the research hypotheses, the research process is divided into two main stages. At the first stage, using multivariate comparative analysis methods, a synthetic fiscal stability index (FSI) was constructed, which allows assessing the fiscal stability of individual municipalities relative to their reference groups. At the second stage, panel data regression was used to identify statistically significant variables affecting the fiscal stability of Polish municipalities.

In the preparation of the dissertation, statistical analysis tools were used, such as: Mann-Whitney U-test; Wilcoxon signed-rank test; Kruskal-Wallis ANOVA test; $\chi^2\chi^2$ independence test; structural index tests; Pearson's r-covariance and correlation; Spearman's Rxy/rho correlation; and statistical regression modeling. Therefore, the study is limited to all Polish local governments, and the results obtained, including the methods for measuring fiscal stability, are universal in nature and can be applied in any country and region.

Evaluation of Scientific Results and Contributions

My assessment as the author of the opinion is that Sylwester Bogacki, PhD with professional skill, adequately, scientifically and impartially argues and evaluates the results obtained from the analyses of the identification and assessment of the fiscal stability of local authorities, which is influenced by a number of diverse factors, both dependent and independent of them. These factors have a direct or indirect, negative or positive impact on the level of revenues, expenses, results, debt and socio-economic potential of local authorities (including financial, income, investment and development potential).

His dissertation uses modern methods of statistical, econometric and factor analysis, which makes the results of the statistical and socio-economic methods implemented in the research process scientifically valid and significant.

The results obtained from the analysis of empirical data confirm that long-term solvency in itself is not a sufficient condition for achieving high fiscal stability. The analyses show that municipalities characterized by the highest levels of fiscal stability do not derive this stability from the fact that they maintain low indebtedness. Rather, their stability is the result of a balanced configuration of multiple dimensions, including budget flexibility, operating surplus generation, financial autonomy, service delivery capacity, and intergenerational equity.

The study shows that municipalities with the highest fiscal stability are characterized by a relatively balanced contribution of all dimensions of stability, while municipalities with lower fiscal stability show dependence on only a limited number of dominant fiscal characteristics.

A very important contribution of the dissertation of Sylwester Bogacki, PhD is the practical conclusions of an applied nature after each of the chapters of the dissertation.

4. Evaluation of the scientific results and contributions of the dissertation work

The scientific contribution of Professor Bogacki in the dissertation he developed is multivariate and can be sought both in the theoretical framework of the study and in the analysis of the basic principles of financial management of local governments, based on a thorough description of the conditions: institutional, economic, resulting from the economic situation of the country and the internal potential of individual local self-government units; demographic, social and ecological-spatial determinants of the fiscal stability of local self-government units.

The dissertation of Sylwester Bogacki, PhD contains the following theoretical, key and applied contributions:

Scientific-Theoretical Contributions:

The dissertation contributes to the development of the theory of local public finances by providing new empirical evidence on the nature, structure and determinants of the fiscal stability of local self-government units.

One of the most important original findings is the empirical confirmation that long-term solvency alone is not a sufficient condition for achieving high fiscal stability. The analyses show that the municipalities characterized by the highest levels of fiscal stability do not derive this stability primarily from low indebtedness, but from a balanced configuration of multiple dimensions, including budget flexibility, operating surplus generation, financial autonomy, service delivery capacity and intergenerational equity.

A second important contribution concerns the identification of the internal structure of fiscal stability. The study shows that the municipalities with the highest fiscal stability show a relatively balanced contribution of all dimensions of stability, while the municipalities with lower fiscal stability depend only on a limited number of dominant fiscal characteristics.

The thesis also provides new empirical evidence on the hierarchy of determinants affecting fiscal stability. The results show that budgetary sustainability, budgetary flexibility and intergenerational equity have a stronger impact on overall fiscal stability than long-term debt solvency. Therefore, the ability to generate operating surpluses, maintain low fiscal flexibility, ensure effective revenue collection and limit excessive debt burden emerge as more important than debt indicators themselves.

Another original finding is the demonstration that the determinants of fiscal stability differ significantly across administrative categories of municipalities. The study confirms that fiscal stability is not determined by a universal set of factors.

The study further contributes to the literature by empirically confirming the existence of a strong relationship between the size of the municipality, administrative status and fiscal stability. Larger municipalities and cities with county rights systematically achieve higher fiscal stability than smaller local self-government units.

Finally, the dissertation develops and empirically tests a comprehensive conceptual framework linking fiscal stability to local development capacity. The findings show that fiscal stability should not be treated solely as a financial outcome, but as a prerequisite for maintaining long-term development potential, resilience to external shocks, and sustainable public service delivery.

Key Scientific Contributions:

It is demonstrated that a high level of fiscal sustainability is not primarily determined by a low level of debt, but rather by a balanced configuration of multiple dimensions of the financial performance of municipalities.

The study reveals the limited diagnostic value of long-term solvency as a stand-alone measure of fiscal sustainability, thus challenging the dominant debt-oriented approach often adopted in the fiscal sustainability literature.

For the first time, based on a population-wide survey covering all Polish municipalities, it is empirically confirmed that budgetary sustainability, budgetary flexibility and intergenerational equality have a stronger impact on fiscal sustainability than overestimated debt indicators of a given self-governing unit.

The study demonstrates the heterogeneous nature of the determinants of fiscal sustainability, showing that the factors shaping fiscal sustainability differ significantly between county-level cities, urban municipalities, urban-rural municipalities and rural municipalities.

The existence of scale effects in local public finances has been empirically confirmed. This shows that larger municipalities systematically achieve higher levels of fiscal stability due to stronger revenue diversification, greater financial autonomy and broader development capacity.

The dissertation extends the theory of local fiscal stability by including a development perspective, demonstrating that fiscal stability should be understood not simply as a budgetary or accounting category, but as a fundamental prerequisite for long-term development capacity, effective absorption of external financing, resilience to economic shocks and sustainable provision of public services.

The study provides empirical evidence that endogenous local factors – in particular revenue autonomy, demographic potential, economic activity, investment capacity and the quality of financial management – play a more significant role in shaping fiscal stability than previously assumed in the specialized literature.

The study complements and develops the theory of fiscal stability by demonstrating that fiscal stability represents a multidimensional equilibrium state, including liquidity, budgetary sustainability, financial autonomy, service delivery capacity, development potential and intergenerational responsibility, and not simply a condition of solvency in covering the debt of the self-governing unit.

The dissertation establishes a new conceptual link between fiscal stability and fiscal sustainability, showing that financially stable municipalities are better prepared to adapt to economic crises, demographic changes and external institutional shocks.

The findings provide evidence that fiscal stability is a dynamic and evolving capability of local governments, reflecting their ability not only to maintain financial balance, but also to create conditions for sustainable socio-economic growth in the long term.

Scientific-Applied Contributions:

The dissertation adds a significant contribution to the practical development of local public finance management by developing a comprehensive and transferable fiscal governance framework that can support strategic decision-making, fiscal monitoring, risk management and performance assessment within decentralized public finance systems.

The main applied contribution consists in transforming the concept of fiscal sustainability from a descriptive analytical category into an operational management tool. Existing approaches used in many European countries focus primarily on statutory debt limits, budget balance requirements or selected financial indicators. The proposed framework allows for a significantly broader assessment of the financial performance of municipalities by integrating financial, developmental, demographic and institutional dimensions into a single decision-support architecture.

The main practical innovation consists in developing a standardized fiscal assessment methodology capable of assessing the overall financial capacity of local governments, not just their debt position. Fiscal stability therefore becomes a measurable management variable that can be included in strategic planning, investment programming and fiscal oversight procedures.

The study also provides a practical framework for building national and regional fiscal monitoring systems. The proposed methodology allows for continuous monitoring of changes in local government fiscal stability, identification of emerging vulnerabilities and prioritization of corrective interventions.

An important applied contribution is the development of a methodological architecture supporting evidence-based fiscal policymaking. The framework allows public authorities to distinguish temporary fiscal deterioration caused by cyclical shocks from structural weaknesses resulting from long-term institutional, demographic or economic conditions.

The dissertation further contributes to the modernization of local government performance assessment systems. The proposed approach creates a basis for integrating fiscal sustainability, development capacity and service delivery efficiency into a single assessment framework.

An additional practical innovation involves the development of a scalable benchmarking architecture applicable to local authorities of different sizes and administrative structures. The proposed methodology allows municipalities to assess their performance against comparable organizations, identify best practices, and support organizational learning processes.

The study also establishes methodological foundations for the creation of multidimensional fiscal early warning systems. The developed framework allows for the identification of fiscal vulnerabilities at an early stage of their emergence, thus supporting proactive interventions and reducing the likelihood of serious financial difficulties.

From an international perspective, the universal nature of the proposed framework is particularly important. The methodology is based on financial, budgetary, and socio-economic variables that are commonly collected within European statistical systems and public finance reporting frameworks. Therefore, the model can be adapted and implemented in municipalities operating under different legal, institutional, and fiscal arrangements, without requiring fundamental methodological changes.

Therefore, the dissertation provides not only a tool for assessing local fiscal stability, but also a comprehensive management model supporting strategic management, fiscal sustainability, sustainable development planning and improving the efficiency of the public sector.

The scientific and applied research results of Professor Sylwester Bogacki, PhD are based on the in-depth knowledge and professional attitude to the research issue for the improvement and refinement of methods for measuring fiscal stability, based on the entire local government sector through complex statistical data modeling tools.

The conclusions and summaries made, the implemented study of over 2,400 local authorities and the results obtained from it, as well as the references to the carefully selected set of diagnostic characteristics and the precisely reflected limitations of the study in the dissertation work give serious grounds to support the claims for contributions indicated by Professor Bogacki. These contributions, in my opinion, are significant for scientific knowledge and for the scientific clarification of the systemic conditions for fiscal stability of local self-government units in the Republic of Poland, together with the classification of stability factors and methods for measuring stability.

In terms of contribution, the proposals for future research in the field of measuring the fiscal stability of self-governing administrative-territorial units are also of particular value. According to Professor Bogacki, “future research should focus on extending the proposed Fiscal Stability Governance Framework beyond the national context and verifying its applicability across different European systems of fiscal decentralization. Such studies would enable the assessment of the external validity, robustness and transferability of the proposed model and contribute to the development of a standardized European methodology for measuring local fiscal stability.” (p. 50 of the Abstract to the dissertation of Professor Sylwester Bogacki, PhD)

As a member of the Scientific Jury, I accept the scientific (scientific-theoretical, key and scientific-applied) contributions of Professor Sylwester Bogacki, PhD proposed in the abstract and I am confident that they are even more serious and profound than in their current standard formulation.

5. Evaluation of Publications and Authorship

A significant part of the author's theses, ideas, research and assessments receive the corresponding publicity through the publications of Professor Sylwester Bogacki, PhD on the topic of the dissertation. In the autobiography attached to the documentation of the procedure for the defense of the dissertation, Professor Bogacki indicated that he is the author of more than 100 publications. Of these, 23 (nearly 1/4) are on the topic of the dissertation. The publications on the topic of the dissertation indicated in the abstract to the dissertation of Professor Sylwester Bogacki, PhD are grouped into two sections. The first section includes monographs on the topic of the dissertation - a total of 4. This is followed by articles published in scientific journals indexed in various databases - 19. Of the 23 publications on the topic of the dissertation indicated in the abstract, 19 are in English. The significant number of publications on the topic of the dissertation, as well as the author's overall scientific output, are proof that Professor Sylwester Bogacki, PhD is an established and recognizable scientist in his research field with well-deserved recognition and popularity, both in the Republic of Poland and abroad.

6. Opinion on the presence or absence of plagiarism.

The work of Professor Sylwester Bogacki, PhD is definitely original and, in my opinion, has minimal content of foreign text, mainly citations and references to used literature. The specificity, originality and relevance of the research problem, which is territorially and theoretically framed, practically exclude the possibility of borrowing foreign text and using foreign authorship.

7. Notes, Recommendations, and Questions

I recommend that Professor Sylvester Bogacki, PhD continues to work in his chosen scientific field with his characteristic scientific impartiality and diligence.

Question to the Candidate: *Should regulatory institutions, in their assessment and analytical practice for identifying fiscal vulnerabilities, shift the focus from budget indicators of debt liabilities to the budget sustainability and budget flexibility of individual units? Are the measures and indicators for budget sustainability and flexibility reliable enough to adequately serve management responses and the prevention of potential fiscal vulnerabilities?*

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8. Conclusion

The dissertation "Economic determinants and methods of measuring fiscal stability of local government units" by Professor Sylwester Bogacki, PhD is a complete, in-depth, and well-presented scientific work addressing a relevant problem with significant theoretical and practical results. It meets all legal and university requirements, which leads me to a positive evaluation.

Based on the legal requirements and established norms for awarding the scientific degree **"Doctor of Sciences,"** I propose with deep conviction that the Scientific Jury to award Professor **Sylwester Bogacki, PhD** the scientific degree **"Doctor of Sciences"** in Professional Field 3.8 "Economics".

DATE: July 6, 2026
Varna

Author of the Opinion:
(Signed)
Assoc. Prof. Mladen Tonev, PhD