REVIEW

By Prof. Dr. Gancho Todorov Ganchev

ON THE DISSERTATION

ECONOMIC DETERMINANTS AND METHODS OF MEASURING FISCAL STABILITY OF LOCAL GOVERNMENT UNITS

By Dr. Sylvester Bogatsky

For the degree of Doctor of Science

1. Short biographical data

Sylvester Bogatsky is a prominent Polish economist. Bogatsky graduated from Marie Curie-Skłodowska University in Lublin, majoring in management. He subsequently specialized in business accounting and finance at Kozminski University in Warsaw. He later received a doctorate in economics from the Warsaw School of Economics. Sylvester Bogatsky also received a doctorate in social sciences from Jan Kochanowski University in Kielce.

Sylvester Bogatsky has held a number of responsible positions, including Vice-Rector for Strategy and Development at WSEI University in Lublin, Chairman of the Management Board of Polska Spółka Gazownictwa Sp. z o.o. Warsaw (Capital Group PGNiG), the largest Polish gas distribution company, and many other responsible positions in the private sector.

2. Brief description of the dissertation

The dissertation of Sylvester Bogatsky contains 318 pages, 62 reports and analyses are cited, 124 scientific articles, 13 chapters of monographs and 82 independent monographic works. In addition, the dissertation illustrates the author's views through 78 tables and 8 graphs. The dissertation is structured in 4 chapters, an introduction and 4 annexes.

This huge material is dedicated to the extremely important and topical topic of the financial stability of local government authorities.

The dissertation fills an important research gap in the literature on local government finances by proposing a multidimensional, dynamic and empirically tested model for assessing the fiscal stability of municipalities. Its main scientific contribution lies in going beyond narrow approaches based on statutory debt limits, banking criteria or simple financial ratios. Instead, the dissertation develops an integrated framework combining fiscal solvency, service capacity, financial autonomy, development potential, and intergenerational equity.

The main objective of the dissertation is to demonstrate the multidimensional nature of the 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 a particular focus on municipalities as the basic units of local government in Poland. More broadly, the aim is to improve the theoretical understanding, methodological robustness and practical applicability of the concept of fiscal stability of local government finances by proposing an integrated, multidimensional and universally applicable framework that reflects the complexity of the contemporary socio-economic and institutional environment.

The subject of the research is public finance and institutional economics, with a particular emphasis on the functioning of decentralized fiscal systems and the capacity of local government units to ensure long-term financial sustainability in conditions of dynamic socio-economic changes.

The object of the study covers the local government units at the basic level, which represent the most functionally and financially autonomous unit 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. This diversity provides a solid analytical basis for studying the variability of fiscal stability and identifying its structural determinants.

The subject of the study is further specified by developing a synthetic measure - the Fiscal Stability Index, which integrates multiple diagnostic variables into a coherent analytical framework. This approach reflects the assumption that fiscal stability cannot be directly observed or measured using single indicators, but rather requires a composite methodology capable of capturing its complex and multidimensional nature. The proposed index allows not only an assessment of the level of fiscal stability of individual municipalities, but also an analysis of its differentiation between comparable units and its evolution over time.

The main hypotheses of the empirical study can be summarized by the author in the following order:

H1: Maintaining long-term solvency is not a sufficient condition for ensuring fiscal stability of municipalities;

H2: There is a relationship between the degree of fiscal stability and the administrative type and size of the municipality;

H3: The fiscal stability of municipalities fluctuates over time, with the amplitude varying across different types of municipalities.

H4: Changes in the scope of fiscal stability of municipalities, in individual types of municipalities, are caused to varying degrees by the influence of internal factors (arising from their endogenous potential) and external factors (arising from their environment);

H5: The scope of fiscal stability in Polish municipalities is explained primarily by economic and demographic factors, with their impact varying across different types of municipalities.

The empirical study generally provides an affirmative answer to the hypotheses formulated in this way.

In preparing 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.

An interesting point in the empirical work in connection with the development of a synthetic indicator of financial stability is the use of Claude Shannon's theory of entropy and information, which allows the formation of the assigned weights of individual factors on an objective basis, in contrast to the so-called subjective weights, used quite often in the economic literature.

The author divides the contributions in the dissertation work into two groups - scientific and scientific-applied.

The author cites ten achievements as scientific contributions:

1. A high level of fiscal stability is not determined primarily by a low level of debt, but rather by a balanced configuration of multiple dimensions of the financial performance of municipalities;

2. Revealing the limited diagnostic value of long-term solvency as a stand-alone measure of fiscal stability;

3. Empirically confirming that budget sustainability, budget flexibility and intergenerational equity have a stronger impact on fiscal stability than debt indicators alone;

4. Demonstrating the heterogeneous nature of the determinants of fiscal stability, showing that the factors shaping fiscal stability differ significantly between county-level cities, urban municipalities, urban-rural municipalities and rural municipalities;

5. The existence of a scale effect in local public finances is empirically confirmed, showing that larger municipalities systematically achieve higher levels of fiscal stability due to stronger revenue diversification, greater financial autonomy and broader development capacity;

6. 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;

7. 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 literature;

8. The study 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 for debt solvency.

9. 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.

10. 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.

In general, the scientific contributions formulated in this way correctly reflect the real achievements of the doctoral student. However, in our opinion, contributions 1, 4 and 10 partially overlap.

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

3. Conclusion

In general, we can make the following summary.

The topic of the dissertation is extremely relevant. The author's assessment of the state of the analyzed issues is accurate and corresponds to the contemporary state of the issues. The research methodology is adequate. The empirical analysis is rich and allows for generalizations.

In addition to the dissertation, the author presents a list of 23 publications related to the issues of the dissertation. There is no doubt that the dissertation is the author's personal work. The scientific and applied scientific conclusions are of exceptional utility not only in managing the financial stability of territorial units in Poland, but also in other EU Member States.

The author can be recommended a more detailed analysis of the impact of EU structural funds on the financial stability of territorial units. It would also be of interest to apply the framework for analyzing financial stability developed by Sylvester Bogatsky in relation to individual regions and local territorial units in the EU as a whole.

In conclusion, it should be noted that the dissertation presented by Sylvester Bogatsky meets all legal requirements for obtaining the scientific degree of Doctor of Sciences. I strongly suggest that the esteemed scientific jury award Dr. Sylvester Bogatsky the scientific degree of Doctor of Sciences.

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Prof. Dr. Gancho Todorov Ganchev