

REFERENCES

A THOROUGH MONOGRAPHIC STUDY OF THE INTERACTION BETWEEN FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN BULGARIA

The Bulgarian science was enriched with one of the most fascinating economic works, published in the last few years in Bulgaria.¹ The author Assoc. Prof. Statty Stattev Dr.Ec.Sc studied the interaction between financial development and economic growth in Bulgaria within the transition period for this country to an advanced market economy. Undoubtedly the problem is up-to-date, taking into consideration the specific features of the socio-economic development of our country since 1990^{ies}. Throughout this period the Central and Eastern European Countries have undergone a transition from semi-monetary to monetary economy, from one-tier to two-tier banking system and to intensive financial mediation. The issue on the mutual dependance between the changes in the financial system and economic growth is of paramount importance. Another important fact is, that the economic development of Bulgaria was influenced by two consecutive monetary systems (before and after the introduction of the currency board) having a different effect on the real economy and the financial system.

According to the research thesis of the author "there are permanent and sustainable 2-way interrelations between the financial development and the dynamics of the real sector of the Bulgarian economy, of variable duration, as well as with different directions of causality, whereas the long-term interdependences and impacts between the two sectors prevail".² In support of his thesis Assoc. Prof. St. Stattev tested a number of functioning hypotheses, reflecting the specific dimensions of the considered relation. His main aim was to derive and to provide arguments for the theoretical and methodological approach for studying the interaction between the financial development and the economic growth in Bulgaria and hence to analyze the dependence and causality between the dynamics of the financial and the real sector in the short run and in the long run, as well as within the two specified periods before and after the introduction of the currency board.

For this reason the author also elucidated some more specific research topics, such as: critical reconsideration of the main theoretical concept on the nature of the links between the financial development and economic growth; deriving, setting up and systematization of a system of financial and real indicators at different aggregation levels in view of functioning of both sectors; selection and argumentation of numerous econometric methods to study the relationship

¹ *Statty Stattev*. Financial development and economic growth (Bulgaria's way: 1991–2006). C.: University Publishing House "Economy (Стопанство)", 2009, p. 548. In reference to this issue, two important co-publications of the author could be pointed out: *Stattev, St.* Financial development and economic growth in Bulgaria, 1991–2006. (econometric analysis of the logics of the production function). The series "Discussion materials", BNB, Sofia, March 2009, 80 p.; *Stattev, St.* Financial intensity and economic growth. - *Izvestia. Magazine of the Economic university - Varna*, 2008, issue. 2, 26 p.

² *Stattev, St.* Financial development and economic growth..., p. 12.

between the financial and the economic development; outlining the main trends in the dynamics of the real sector and the banking mediation; deriving key short-term and long-term mutual dependences between the financial development and the dynamics of the real economy; quantitative forecasting the estimation of the contribution of each factor of the real economy and the financial system for the further development and assessment of the reaction of each one in view of eventual future macroeconomic shocks.

In his monographic study Assoc. Prof. St. Stattev successfully applied with arguments methods like: systematic theoretical and empirical approach; historical and logical analysis of the the fundamental theoretical concepts of the interrelation between financial development and economic growth; analysis and synthesis, considering theoretically the structure, the main functions and the decomposition of the financial system; induction and deduction in deriving the measurement tools of the analyzed dependences; a comparative analysis of the alternative theoretical views and the various real and financial indicators; a descriptive analysis of the autonomous dynamics of the real economy, the banking mediation and the financial system; econometric modeling, applying the vector-autoregression models; econometric estimation of the short-term Granger causality, if long-term Johansson dependences are available, etc.

The book of Assoc. Prof. Stattev consists of 548 printed pages, thereof main text - 334 pages and about 200 pages of annexes; covering: introduction, two parts, each of three chapters, conclusion, a list of references of 404 titles in Bulgarian and in English and 7 large annexes, each with a lot of tables.

The first part "Theory and methodology of the analysis of the interaction between finances and economy" is dedicated to the theoretical and methodological foundations of the mutual dependence between financial development and the dynamics of the real economy of Bulgaria. The three chapters therein focus: macroeconomics as an interaction between financial and economic development; methodology for measurement and analysis of the mutual dependence between the real sector and the banking sector; some other theoretical & methodological aspects of the analysis of finances and growth, providing arguments, systematization and setup of seven new groups of indicators for aspects of the banking sector, not covered in the previous chapters.

The second part "Interrelations between financial development and economic growth in Bulgaria" presents an empirical analysis of these problems. The three chapters deal with: the descriptive analysis of the financial and economic development in the period 1991–2006; the econometric analysis of the links between financial development and economic growth; of some other dimensions of the financial development and of their interaction with the economic growth, especially the trends and the interrelations with the economic growth of the market of government stocks and bonds, on the stock exchange.

The main deduction was made in conclusion, that the dependence between financial development and economic growth under the Bulgarian conditions is quite

complicated, in most cases – two-way, frequently contradictive dependence and quite specific under the different currency systems. The summed-up empirical result of the study is, that under the conditions of a currency board the interaction between the financial and the real sector demonstrates much more market-like and rational economic behavior compared to period before the introduction of the currency board.

The monographic research finishes with comprehensive annexes, illustrating successfully the analysis of the author, releasing the main text from additional details. The presentation is very well structured and logically bound, enabling the author to develop persistently his research thesis with arguments. The precise and intelligent layout of the text is remarkable.

The book is a considerable contribution to science and is very interesting for the Bulgarian and foreign economists, being a source for profound consideration of the researchers in their investigations. They are of special importance for the financial administration, including bank executives. The major contributions in my opinion are:

First. There is a critical reconsideration of the available theoretical concepts on the mutual dependence between financial development and economic growth and there is an expansion of the theoretical and the methodological scheme for examining such dependences. In general the theoretical analysis is concentrated mainly on the influence of the financial sector on the real sector, but here the analysis is extended considerably by the author in order to achieve a more in-depth view on the mutual and 2-way dependence between the two sectors in their different dimensions.

Second. The well grounded functioning system of a wide range of financial and real indicators, was selected by Assoc. Prof. Stattev in such a way as to carry out a long-term study by means of the available statistical information in Bulgaria. On the basis of 82 financial indicators a detailed characteristics was made on the behavior of the banking system, the non-banking financial institutions, the stock exchange and the overall financial system.

Third. An econometric methodology is proposed enabling to discover and to comment short-term and long-term interrelations between financial development and the dynamics of the real sector, to analyse their causal relations by means of production functions, to identify the basic transmission mechanisms and to predict the future interactions and reactions to economic shocks. An algorithm was developed to be applied on the selected class of econometric methods. The dependence between the financial development and the economic growth is structured and investigated on various levels, including also via internal decomposition of the financial variables in three groups – liquidity, credit and assets. Production functions have been used, structured on different levels and a methodology has been elaborated for assessment of the contribution of each growth factor.

Fourth. The short-term and the long-term Granger causalities between the economic growth and the dynamics of banking system have been identified and

explained in the study. The author reveals the available simultaneous short-term and a long-term causal relationship between them. The conclusion was made, that the development of the real economy and the banking system in Bulgaria during the transition period was irregular, but stepping up and with signs of more evident mutual dependence after the introduction of the currency board. Especially it was proven, that prior to the introduction of the currency board the impact of the financial development on the real economy was insignificant and the openness of economy was the basic transmission mechanism. For instance as a result of the quest for long-term dependences in couples of variables, for which there is a short-term causality in the first period, it was proven, that the financial development has a negative impact on employment and almost no impact on the changes in investments. After 1997 the influence of the financial development was considerably increasing, and the investments acted as transmission mechanism. As mentioned above, an important conclusion was made, that following the introduction of the currency board, the interaction between the real sector and the financial sector demonstrated a more market-like and economically rational behavior compared to the preceding period.

Fifth. In line with the numerous interesting conclusions, made by the author, I would like to point out, that when applying production functions, including and excluding in succession one real variable and one financial variable, the role of openness of economy was proven, as a channel to materialize effects in view of financial development towards economic growth. Assoc. Prof. Stattev has also made interesting deductions regarding the role of the banking system, the non-banking financial institutions and the stock exchange.

Sixth. The ratio between rules and discretions was reconsidered when elaborating the economic policies. The analysis demonstrates, that during the period prior to the introduction of a currency board, with less rules, the financial and economic development was less market-like, compared to the period of functioning of the currency board. Therefore when elaborating and applying the currency policies, the rules should prevail over the discretions.

Seventh. A general conclusion could be made, that the monographic study of Assoc. Prof. St. Stattev develops further the existing economic theory in the analyzed field, reveals new economic dependences, not investigated yet in the economic literature, further elaborates the current methodology on solving considerable economic problems with obvious practical application in the sphere of the macroeconomic policy, and develops an overall methodological set of instruments for solving such problems.

I would also like to focus on the following positive sides and merits of this monographic study:

1. The paper is not only up-to-date, but it is also very significant from methodological and practical points of view.
2. Reliable large-scale economic information was used correctly in this study, demonstrating the excellent economic knowledge of the author, due to his

exclusive research experience so far, and due to his activity as a Member of the Governing Council of the Bulgarian National Bank.

3. In his book Assoc. Prof. Stattev highlights a very important problem, which has not been solved yet – the causality and the priorities in the mutual dependences between the financial and the real sector in the Bulgarian economy.

4. The monographic study is a *successful mix* of economic theory and practice, of theoretical, methodological and empirical analysis, which is a rare phenomenon in our research practice, with arguments and conclusions, having cognitive meaning and playing a significant role in governance and regulation of the Bulgarian economy. The practical importance of the study is demonstrated in two aspects – it could be used not only to explain the current macroeconomic policy of Bulgaria, but also for macroeconomic predictions in the sphere of the financial development and the economic growth of the country.

5. The study was made entirely by means of econometric methods and models for data processing, providing a high degree of precision and reliability of the conclusions made on the mutual dependence between financial development and economic growth. Thus the author proves to be one of the best experts in Bulgaria in this sphere. After certain readjustments the used methodologies and methods could be applied for studying similar problems in other countries too. In my opinion, in his future studies the author could focus on investigating some of the directions of such an adjustment.

Assoc. Prof. St. Stattev also reasonably points out³ some trends in the analysis, which due to the nature of the formulation of the problem have remained beyond its scope, being a challenge for future research, such as: the role and the impact of the foreign direct investments in the financial system of the country on the financial development and hence on the real economy and the economic growth; the impact of the concentration in the financial system on promoting the growth of the real economy (i.e. the concentration of credits, and the concentration of the share market and the bonds market on the stock exchange); the significance of the legislation for the interrelations between the financial and the real sector for acceleration of the economic growth; the impact of the set of non-economic factors (political, ethnic, traditional, etc.) on the interaction between financial and economic development.

It could be definitely assumed, that this monograph of Assoc. Prof. Dr. Ec. Sc Statty Stattev is a novelty on our book market in terms of the subject-matter of the study, of the nature of the presentation and of the in-depth and large-scale features of the applied econometric methodology and is of considerable interest for the management circles and for the devoted research economists.

Kamen Mirkovich, Professor, Dr. Ec. Scs.

³ Stattev, St. Financial development and economic growth..., p. 333.