The Main Aspects of Implementing the Accumulation Function by the Financial Markets of European Countries

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Significant changes, which happened in the last decades in the structure of the society as a whole and in its economic and financial fields in particular, have determined the necessity of creating new modern analysis tools. In the article, using elaborated by the author indicative and functional method of assessment of financial market development, it is performed the analysis of realization of accumulation (mobilization) function by the capital market and banking sector institutions, both in terms of economic recovery, and in times of crisis.

Keywords: economic growth, financial market development, system of indicators, indicative and functional approach, commercial banks, capital market
JEL Code: G1, G2

1. Introduction

Research of any filed of economic activity, collection and analysis of full and objective information, which timely reflects both positive tendencies and negative processes, are impossible to perform without a scientifically based *indicator system*, which necessitates serious methodological and analytical studies and existence of relevant tools. This assessment must rely on the analysis of the market's structure and its dynamics, on the system of generalizing indicators of function, development, as well as on evaluation and management of corresponding risks.

In the last decades appeared a significant number of researches, dedicated to the assessment of the level of capital market development and determination of the degree of their influence upon the national economic growth [1, 4, 5]. The research of such scientific literature demonstrates the lack of a *single concept* on the analysis tools used by authors, which does not allow the performance of generalization and comparative analysis of the results obtained within these articles. This issue clearly appears especially in cases, when it is performed market analysis of countries, with different levels of economic development.

As Stiglitz J. etc. noted "There have been many attempts at building indicators of sustainable development… The situation therefore appears to be characterized by an excess bounty, rather than by scarcity. But this is not necessarily good news, especially when different indicators provide diverging messages" [9, p. 5].

2. Aims of research

The aim of this research consists in the elaboration, under existing analysis methods, of a new methodology of estimation of financial market development of developing countries, including the Republic of Moldova, and of evaluation of their influence upon the national economy, both in the conditions of its growth and in crisis periods.

3. Research theoretical aspects

The performance of study of modern empiric and theoretical researches has revealed that in order to solve this task, it is best to apply the approach, which allows with the help of the systemic methodology to bring to light the level of development of capital market and banking sector, through evaluation of the degree of their influence upon the development of economy, based on the estimation of realization by corresponding markets of their peculiar functions.

For the first time the possibility of evaluating the level of financial systems development through the study of realization by financial markets of their peculiar functions, was declared in the research of Levine R., where he has highlighted five basic functions of financial systems: facilitate the trading, hedging, diversifying, and pooling of risk, allocate resources, monitor managers and exert corporate control, mobilize savings, facilitate the exchange of goods and services [7, p. 697].

Subsequently, in his scientific researches this scientist has developed this direction of analysis. For instance, in the research from 2013, Levine R. and others have ascertained the functions of financial systems, which determine the level of their financial development: "At a broader level, financial development can be defined as improvements in the quality of five key financial functions: (1) producing and processing information about possible investments and allocating capital based on these assessments; (2) monitoring individuals and firms and exerting corporate governance after allocating capital; (3) facilitating the trading, diversification, and management of risk; (4) mobilizing and pooling savings; and (5) easing the exchange of goods, services, and financial instruments" [8, p. 6].

Also, an attempt was made during this research to highlight categories of indicators, allowing performing the evaluation of financial development. Particularly, the authors of the work have made this attempt "to construct measures of four important characteristics of financial systems: (1) depth; (2) access; (3) efficiency, and (4) stability" [8, p. 8].

But the indicator system, which could allow estimating the realization by financial systems of their peculiar functions, still was not proposed.

According to the author of this article, the main disadvantage of the abovementioned analysis methods was the fact that: 1) an entire range of main functions of financial systems was not set out; 2) financial development of financial systems was examined separately from the evolution of main indicators of economic development of the countries analyzed. Thus, it was impossible to objectively evaluate the degree of effectiveness of the researched financial systems' functioning, and the influence they have upon the national economic growth.

4. Proposed research method

The performed research of modern approaches to highlighting the main functions of the financial market as a whole and of the capital market, as one of its basic components [8, 11, 12], as well as the author's personal scientific researches [10], have allowed underlining (suggesting) the following functions of financial systems:

General market functions: price forming function; information function; commercial function; regulating function.

Specific functions: accumulation (mobilization) function; investment function; redistributive function (function of assuring the best capital allocation); function of influence on currency circulation; privatization function; anti-inflationary or saving function; function of speeding up of capital circulation; insurance function; regulatory (supervision) function; diversification function; function of corporate management upgrading and investors' interest protection; social function; integration function.

Taking into account the large range of financial instruments, circulating on the contemporary financial market and multitude of actors, who perform their activity there, which significantly adds complexity to the task of fulfilling the single aggregate evaluation, with the aim of ensuring the *comprehensive analysis* of the financial market under the *synthesis of instrumental* and *institutional* aspects of research, the author suggests using the *indicative and functional approach*, created by him [10], which allows *studying the level of development* of the financial market by means of *assessing the level of its influence upon the national economic growth*.

It is suggested to perform a research with such influence from two aspects:

- from the aspect of *quantity* or *quality* evaluation of the realization de facto by the market of any given function;
- from the aspect of evaluation of *existence* on the national open market *of objective assumptions*, favoring the realization of the function examined.

For the evaluation of realization by the financial market of its functions in the national economy, by using the *indicative and functional approach,* under the generalization of indicators, which are more examined in scientific literature, as well as of indicators, used within the analysis of financial markets by international organizations as the International Monetary Fund [6], Bank of International Settlements [3], European Central Bank [2] etc., it is proposed:

1. The evaluation of performance by the market of the *accumulation and investment functions,* must be executed by using:

- *absolute indicators,* like: number of emissions, volume of means, engaged in primary markets of financial debt and equity instruments, volume of engaged bank deposits and given credits, which can be analyzed additionally, depending on the aims of research. For example, within the performed analysis, the fulfilled emissions can be studied in the section: of sector profile of the issuer, way of distributing capitals (closed emissions, public emission), bank deposits can be studied depending on the terms of deposit (fixed deposits, recurring deposits, tax saving deposits etc.), types of banking credits (secured, unsecured etc.), earning power during distribution, credit interest rates. The structure of investors can be studied depending on: the country of their origin (national and foreign investors); ownership ratios (majority and minority owners); the type of investors (state, corporate, individual).

- *relative indicators,* allowing evaluating the participation of the primary capital market and banking sector in the economic growth, by means of determining their shares in the formation of any given macroeconomic indicator, like: ratio of volume of capital, attracted in stock and/or bond markets in GDP, volume of foreign investments in GDP, volume of capital obtained as result public initial offering (IPO)/GDP, as well as bank deposits/GDP, market capitalization + debt outstanding + domestic credit/GDP, domestic credit provided by the financial sector/GDP, domestic credit to private sector/GDP etc.

The perspectives of increase of volumes' growth engaged on the financial market of capital, can be evaluated through analysis of existence of: a wide range of financial instruments available for investment, effectively working financial intermediaries, total assets of credit institutions (MFIs)/GDP, evolution of market concentration (CR5 and Herfindahl index), developed infrastructure, legislative framework, which ensures protection of investors' rights, transparency and stability of market etc.

2. The realization by the national financial market of the *redistributive function (function of assuring the best capital allocation)* is proposed to evaluate:

- *by absolute indicators*: number and volume of exchange transactions performed in the section of separate types of securities, number and volume of contracts and transactions for derivatives, number and volume of signed agreements (contracts) for banking credits and deposits, number and value of daily (weekly) transactions in the different financial instruments, average bid–ask spread, intermediation costs liquidity of the financial market, number of companies included in listing, market tightness, speed of its reaction, dynamics of exchange capitalization and indexes, bank assets;

- *relative indicators*: volume of trades / GDP in the section of types of securities, market capacity (relation of the average daily number of sale-purchase operations to the total volume of securities, allowed for circulation on the market), share on the market of ten companies with a greater part of capitalization and transactions volume, share on the market of ten banks with a greater part of capitalization (operation volume), as well as bank assets/GDP, number of per capita banking operations (credit cards issued etc.), evolution of Lerner indexes of market power (relative banking margins) for different banking products (loans to non-financial firms, loans to households, consumer loans, overnight deposits, time deposits) etc.

3. Performance by the financial market of the *privatization function,* is proposed to be made, using the following indicators: volume of state auctions exposed for privatization, their ratio in privatized JSCs, types and methods of privatization (auctions, IPO), placement volumes, price relation – par value /offer price / market value etc.

4. Realization by financial market of the *insurance function* is determined by the existence of derivative financial instruments, as well as other modern innovation instruments, allowing transforming uncertainty into risk (for instance, security mechanism). Its quantity evaluation can be performed under the analysis of: number and volume of signed agreements (contracts) on derivatives, on secured requirements etc.

5. Fulfillment of the *anti-inflationary or saving function*, characterizes: the difference between the average revenue obtained by the investor from operations with securities, revenue from bank deposits and level of inflation, difference between the growth rates of the stock index and growth rates of consumer prices, cost to income ratio, as well as the correlation of earning power of debt and equity instruments, bank deposits to central bank's interest rates.

6. Realization of the *function of speeding up of capital circulation* can be evaluated through the level of depositing infrastructure development, calculations and clearance of funds, payments and settlements systems (for credit transfers, direct debt, cards payments, cheques, bank orders), number of ATM and POS per inhabitant.

7. Accomplishment by the market of the *social function* characterizes: structure of property on equity capital (share of individual investors and so on), the volume and types of households' funds deposited with the banks, the volume and types of households' banking credits (loans, credit card**,** installment credit, service credit, revolving credit etc.), number of branches of banks/thousand population, retail payments transactions per capita, the volume of loans to non-financial firms, loans to

households, consumer loans, loans for house purchase, effectiveness of institutional investors' work, level of investment culture and financial capability of the population etc.

8. Fulfillment of the *function of corporate management upgrading and investors' interest protection* can be determined by the level of institutional development of the financial market, its ability to ensure imminence of agreements' (contracts) respect, high degree of investors' rights protection. The performance of this function can be considered effective, if the managerial staff ensures the company's growth of income and its fair distribution, which characterizes: return on equity, payout ratio, investment yield in funds, price/ earnings ratio. The implied indicator can be the share fraction, freely circulating on the market (free float);

9. Realization of the *regulating and monitoring or supervision function* characterizes: the level of development of self-regulating and state regulating institutes, formal rules and non-binding norms, ensuring transparency and stability of the capital market, protection of investors from manipulations and fraudulent practices, in conditions of equal and just attitude towards all of the market's actors etc.

10. Accomplishment of the *integration function* can be evaluated under the progress: international debt issuances (liabilities) over total debt issuances, debt investments (assets) and debt issuances (liabilities) in total foreign debt, investment funds debt holdings issued by other countries, global indicator of financial integration (foreign assets+foreign liabilities)/GDP, breakdown by intra (Eurozone/EU-15) and extra (rest of the World), cross-country inequalities (standard deviation) in interest rates of different banking products (loans, overnight deposits, time deposits), cross-border banking activity as percentage of total banking activity (domestic + cross-border) in different products (noninterbank deposits, interbank deposits, loans to non-financial firms etc.), domestic presence (number of firms) in national markets of foreign financial institutions, market share of foreign firms, internationalization of the portfolio composition of investment funds, indicators of β- and σ-convergence etc.

5. Research empirical aspects

In order to ascertain the main aspects of implementing the accumulation and investment function by the financial markets of European countries, including the Republic of Moldova, it was calculated for the period of 2005-2014 the share of capital, engaged throughout bank credits, stock issues, and corporate bonds of European countries in national GDP.

Financial markets of European states with developed capital markets took part in the analysis: Austria, Germany, Great Britain, Spain and states with developing markets: Bulgaria, Czech Republic, Romania, Poland and Republic of Moldova (figure 1, 2, 3). The indicators of Great Britain were analyzed for the years 2008-2014, pursuant to the lack of open access to corresponding data for the previous years.

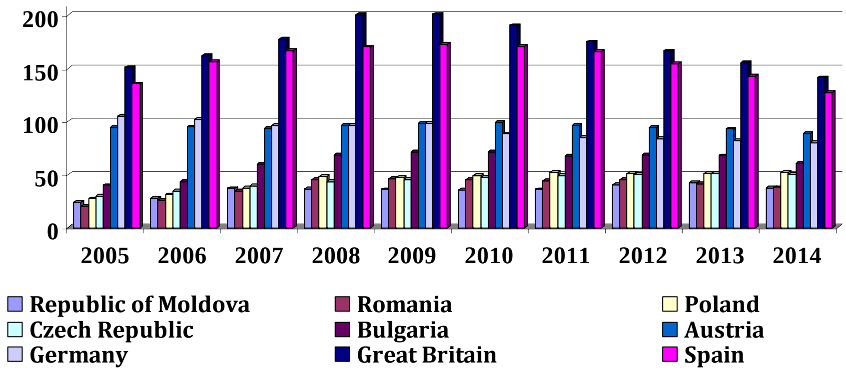

Figure 1. Capital share, engaged throughout bank credits in GDP, %
Source: developed by the author on the basis of [14].

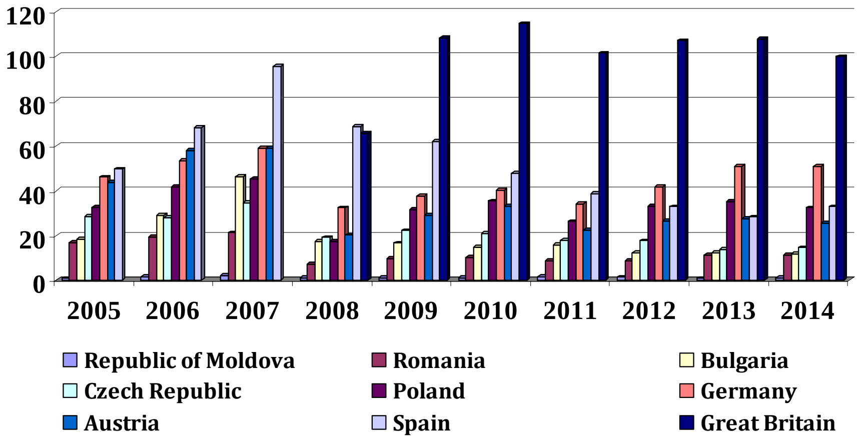

Figure 2. Capital share, engaged on stock markets in GDP, %

Source: developed by the author on the basis of [13, 15].

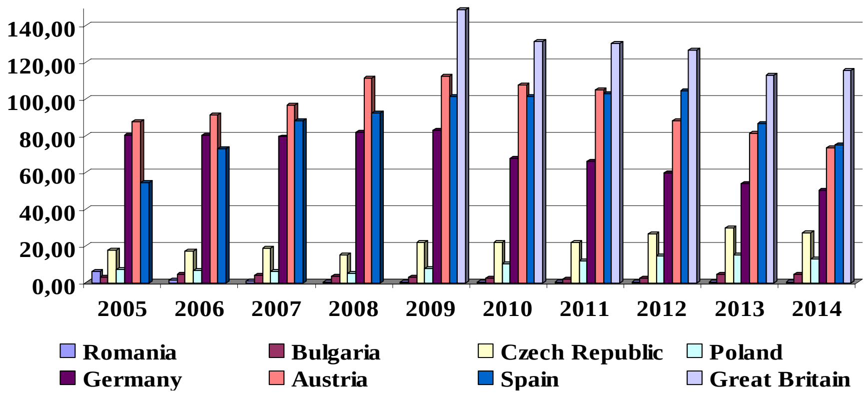

Figure 3. Capital share, engaged on non-state obligations markets in GDP, %

Source: developed by the author on the basis of [15].

The research on implementing the accumulation and investment function by the financial markets of European countries and Republic of Moldova demonstrates that the capital share, engaged throughput bank credits in GDP of the analyzed countries significantly exceeds the volumes of attracted capital on stock markets and non-state obligation markets, and reaches 150% in Great Britain and Spain, 100% in Germany and Austria, and in developing countries the figures of this indicator varies between 35% and 50%.

In this context, in the periods of financial crisis, in comparison with the markets of developed countries, the share of investments attracted in economy through bank credits in GDP of developing states has changed insignificantly. It should be noted that the meaning of this indicator for the Republic of Moldova weighs with indicators of other European developing states.

The capital share engaged on the stock market in the national GDP of the majority of European states is significantly lower than the share of bank credits, and even in the periods of economic growth it does not exceed 50%. Except Great Britain – a state where the capital market plays a traditionally important role in attracted capital in economy, and Spain, with maximum indicators of capital share, engaged on the stock market in GDP – 115% and 90%, respectively. In the Republic of Moldova the stock market share in GDP is insignificant and generally consists of no more than 1,5%.

The volume of capital, obtained by companies on the market of non-state obligations in GDP of European developed and developing countries significantly differs, and if during periods of economic growth in developed states this indicator exceeded 80%, in many developing countries it did not even reach 20%. If we take into account the fact that in the calculation also took part obligations, issued by financial corporations, it can be concluded that for corporate obligations this indicator is lower. There are no non-state obligations in the Republic of Moldova.

The results, obtained within the preparation of this article, in many aspects coincide with the results, obtained in the research [5], where it was determined that in the years 2000-2006 capital volume, attracted on the European market of corporate obligations has increased twice – from 797 billion US dollars up to 1500 billion US dollars. Although, after 2006 this indicator's decrease was recorded, which meaning in 2013 did not exceed 1000 billion US dollars. Altogether, the general number of European companies issuing obligations has increased from 623 in 2000 until 798 in 2013.

Germany's share in an aggregate volume of corporate bonds issued by European states, from 2001 to 2013 has decreased twice - to 19%, while the share of the Czech Republic and Poland has increased, and the share of Great Britain has changed insignificantly.

The volume of capital engaged during placement of bonds, issued by nonfinancial corporations in relation to financial institutes, has increased. The share of investments attracted by companies on stock markets in a general volume of the engaged capital in the economy of the majority of European countries, has increased, but in many countries it is less than 35% from the engaged assets.

Altogether, it can be noted that small and middle-size companies of European states suffer from the lack of possibility of engaging long-term debts on financial markets [5].

6. Conclusion

The analysis of main aspects of implementing the accumulation and investment function by the financial markets of European countries and Republic of Moldova demonstrates that the main share in attracted capital in the economy of the studied countries (except Great Britain) comes from bank crediting. The latter has an especially great impact upon the economic growth of European developing countries. The main factors establishing the dominant role of banks in the development of these countries' economy can be named the following: historically formed structure of the financial market, significant share in the national business of small and middle-sized enterprises, and the insufficient level of institutional development.

Among all the studied countries the minimal role in the implementation of the accumulation and investment function belongs to the capital market of the Republic of Moldova.

One of the main reasons of a low trust of potential investors (contributors) in the safety of performing investments on the financial market of the Republic of Moldova, are repeated violations, which took place on this market in the last years.

Taking into account the abovementioned facts, with the aim of recovering the trust of both large (including foreign) and retail investors (including medium-sized and small-sized enterprises and natural persons), we consider that it is necessary to accomplish in the very near future a range of activities, contributing to the increase of reliability, transparency and effectiveness of the national financial market. We recommend continuing improving the systems of regulation, supervision and control on the capital market of the Republic of Moldova in accordance with the legislative framework of the European Union, principles and recommendations of international designated organizations. During the fulfillment of the abovementioned activities, particular attention should be granted to the implementation of best practices of financial markets of European states with developing economy, which for a short period of time have worked their way up from planned to market economy, and have ensured the accordance of national markets with the requirements of the European Union.

More upgraded supervision and regulation will contribute to the stimulation of competence and transparency on the financial market, will ensure a more flexible and timely settlement of conflicts, will assist in the increase of quality of financial services and decrease of their cost, will prevent corruption in the distribution of loan capital, creating conditions for attracting significant volume of capital in the national economy.

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