STUDY ON THE STRUCTURE OF FINANCIAL MARKETS IN THE EUROPEAN UNION AND THE EVOLUTION OF EMERGING STOCK MARKETS

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Abstract *Any national economy is characterized by the functioning of specific markets of economic sectors, where the supply and demand for financial assets meet, generating resources necessary for the production development of goods and services, balancing freely or controlled. Based on this statement, this paper aims to analyze the evolution of financial markets at the level of the European Union, detailing in the analysis the stock markets of the emerging countries - Greece, the Czech Republic, Hungary, Poland and Romania.*

Starting from a summary of the conceptual aspects that create the theoretical framework of the financial market mechanisms and transposing them into the statistical reality of the indicators recorded at European level, the study analyzes the structure of the total assets of the financial sector, in terms of the share of different types of financial instruments in the total assets.

In order to detail the analysis in the direction of the stock markets, the paper includes the analysis of two other relevant indicators, the number of companies listed on the stock exchange, related to the capital markets of the members of the European Union, as well as the market value, deepening the analysis in the case of emerging markets.

Key words: *financial markets, European Union stock market, emerging countries, market value*

JEL Classification Codes : F36, G10, G14

1. INTRODUCTION

Financial markets are complex mechanisms whose classification can only be achieved by taking into account several aspects that define them. The term financial market is vast, covering different theoretical and conceptual dimensions. Given the complexity of the mechanisms involved in the macro-financial process, academia does not like a generally accepted definition of the financial market. The concept of the financial market is found in the literature in the form of several approaches. Thus, the financial market is a heterogeneous ensemble based on dynamic interactions and relationships, which generates and corroborates interdependently with the national, regional and global economies.

The financial market is made up of a structural mechanism that represents the optimal framework for trading financial assets, having in its composition the following elements: participants, shares, bonds, derivatives, currencies, bank deposits, stock certificates and other financial securities.

The financial system is defined by Faure (2015) as a set of commitments between the necessity and the provision of loans by institutions, supported by financial institutions acting as brokers, in order to facilitate the transfer of financial funds to cover a need. According to Spulbăr and Birău (2019), the main characteristic of financial assets is that of intangible or non-physical liquid assets whose value derives from a contractual clause. The fundamental role of financial markets is to stimulate economic growth at national, regional and global level. The close relationship of financial markets is generating increasingly complex cross-border financial movements. In parallel, the process of liberalization and integration of financial markets provides new investment opportunities based on minimizing the cost of capital transactions and foreign capital inflows.

2. FINANCIAL MARKET STRUCTURE

In his work, "The Stock Exchange and the OTC Market" (2000), G. Anghelache structures the relationships in which the capital market is involved, emphasizing that it can compete in making changes in the structure of an economy. Thus, the trading flows between the component entities are plotted as follows:

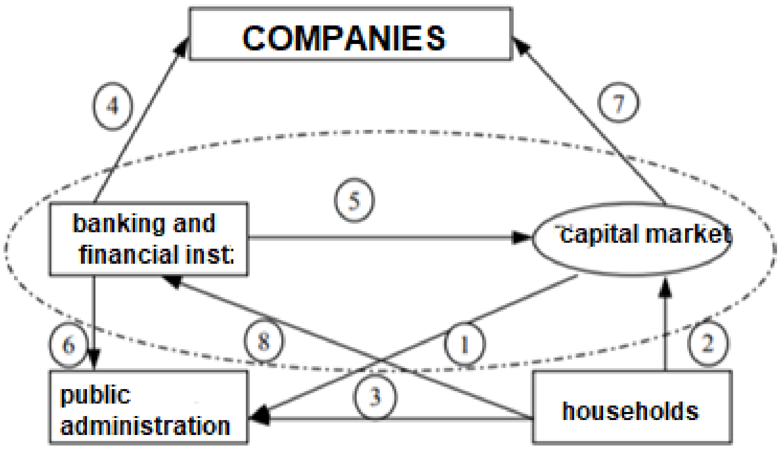

Figure no. 1. Trading flows on the capital market
Source: G. Anghelache, "*The stock market and the over-the-counter market*", Economic Publishing House

Flow 1 represents the capital placed by individuals on banking and financial institutions, which are made up of term investments, deposits at savings banks, sight deposits. Flow 2 traces the subscriptions of securities made on the financial market. Flow 3 is the purchase of bonds or government securities. Flow 4 means the loans that entrepreneurs ask for from banking institutions and flow 5 means the purchase of bonds and shares from financial institutions on the stock market. The interrelationship that flow 6 represents is achieved between banking and financial institutions and the public administration, materializing through subscriptions of treasury bills or loans granted to public institutions. In other words, the deepening of the capital market study is impossible to carry out without an analysis of it in the economic context of the state to which it belongs, of the demographic and economic region and of the moment at which it is carried out.

Given the type of financial assets to be negotiated and the mechanism by which they are introduced into the financial mechanism, the financial market has two structures in its composition. It should be noted, however, that the financial assets that define this classification derive from the maturity of the respective market, and there is a causality of their generation depending on the time interval in which they materialize.

A first structure is the money market. On the money market of a state, monetary transactions are carried out, in local currency, between residents of the same country. The money market is the market where banks lend to each other in the short term. The emergence of this market is due to differences in capital and the momentary needs of different banks in a time frame. This rule exempts some bodies, such as the CEC or mortgage banks, which, by the nature of the activity they carry out, are debtors. The money market therefore performs the function of offsetting the deficit with the excess liquidity in two ways: firstly, through the lending action carried out between banks and, secondly, through the purchase of money market-specific securities from other banks, amounts whose maturity is relatively close and which are certain as to their transformation into liquid money, with no losses. One component of the money market is the foreign exchange market, where the supply and demand of foreign currencies are found in a liberalized process. The money market can also be classified into short-term debt securities and banking instruments.

A second component of the financial market is the capital market. It specializes in the intermediation of transactions in financial assets that have maturities over medium (1-5 years) and long term (exceeding 5 years). It addresses the capital needs of the applicants with the capital resources of the bidders, with the ability to expand the financial possibilities. The capital market comprises medium- and long-term securities, shares and derivatives.

Depending on the form of trading, the financial markets integrate two inter-connected components. The primary financial market is the market on which securities (shares and bonds) are issued and sold or distributed, which confer rights on the holders and which are the ones who provide funds to the issuing applicants, thus financing the economic agents. In this process, short-term financial assets materialize in long-term capital.

The secondary market is a reliable support for the proper functioning of the first market, offering savings in liquidity and mobility while enabling investors to trade new securities and negotiate their quantity and price through securities exchanges. On the secondary financial market, those bonds and shares already issued, as well as derivative transactions, are subject to sale-purchase transactions. The secondary market also has the task of providing information (on the quantity and price of products, on the issuer, on the evolution of the traded assets), which is why it ensures protection for bidders by fulfilling the roles of supervision, regulation and transparency.

Depending on the services offered by intermediaries, financial markets may be structured in banking, insurance, investment and pension funds and regulated securities markets, the latter category being the subject of stock markets. The banking system is the set of institutions and of the relationships, regulations, infrastructures and techniques through which they interact in order to mobilize in the form of deposits and to distribute, in the form of loans, financial funds, in order to make available to the various economic agents or individuals facilitated who respond to the need for financial support over a certain period of time. The insurance market is the conceptual place where the demand for insurance from individuals and businesses that can be insured meets, who are eager to conclude various types of insurance offers, offers borne by organizations specially authorized to work in this sector and able under financial terms to execute such services. (Militaru, 2016). Investment funds, also known as mutual funds or collective investment institutions, are entities that attract and pool the money of several investors that they subsequently use to make different investments, with the aim of maximizing the multiplication of the amounts and thus generating such gains. The pension fund market manages the contributions of individuals in the long term, with the aim of maximizing profit by reinvesting them, being considered the strictest component of the financial markets, given the liability and risk limitations that market participants can assume.

The capital market is the totality of systems and intercorrelation through which funds are transferred from investors holding a surplus to those who require capital, respectively issuers of securities. (Troto, 2020). The stock market is the legal framework through which the trading of these capitals takes place, being one of the most important institutions in a market economy mechanism, being a segment of the financial market, an organized and regulated secondary market, which generates transactions of securities and their derivatives. Through the stock market, capital transactions lead to the interconnectivity of the markets and the use of capital in the most efficient way, being capitalized in the interest of profit by all the players involved. In a market economy, a company becomes important when it only exceeds its ability to generate profit at the individual level and manages to meet certain conditions imposed by the legislative framework so that its bonds and shares are admitted to be listed on the stock exchange. Extrapolating at macro level, a financial market becomes important at regional or global level from the moment it contributes to international financial markets. Consequently, the profitability and stability of the stock markets generate a favorable evolution of the economic and financial indicators and rank the national economies according to their level of development.

3. EVOLUTION OF FINANCIAL AND STOCK MARKETS AT REGIONAL LEVEL AND IN THE EMERGING MARKETS OF THE EUROPEAN UNION

From the very beginning of the formation of the European Union, the founding states have set out fundamental objectives of the European Economic Community, the most important of which are a common market, a concept later known as the 'single market', as well as a cross-border union between the member states. The Single Market involves the free movement of goods, capital, services and people at regional level, with the customs union aiming to standardize the freight tariff for all goods and services entering the market. Once placed in the common market, goods cannot be subject to customs duties and import duties or quotas. It is worth mentioning that there are currently also non-EU countries, such as Norway, Switzerland, Iceland and Liechtenstein that are part of the single market, but without being members of the Customs Union. Thus, half of trade in the EU is governed by legislation harmonized between states.

Given the roles of financial intermediaries, the European market has experienced a change in structure. Thus, by analyzing the assets of the financial sector and the proportions of different types of intermediaries in financial instruments, it is noted that in the 2000s the banking system enjoyed a dominant position, and subsequently other types of financial intermediation became increasingly important. Also, the analysis of the proportionality of the elements in the structure of the European financial market is also analyzed in the light of the relationship between the mixture of intermediaries and the financial markets that are part of the economic mechanism.

Ratio of assets to nominal GDP Total assets - percentage

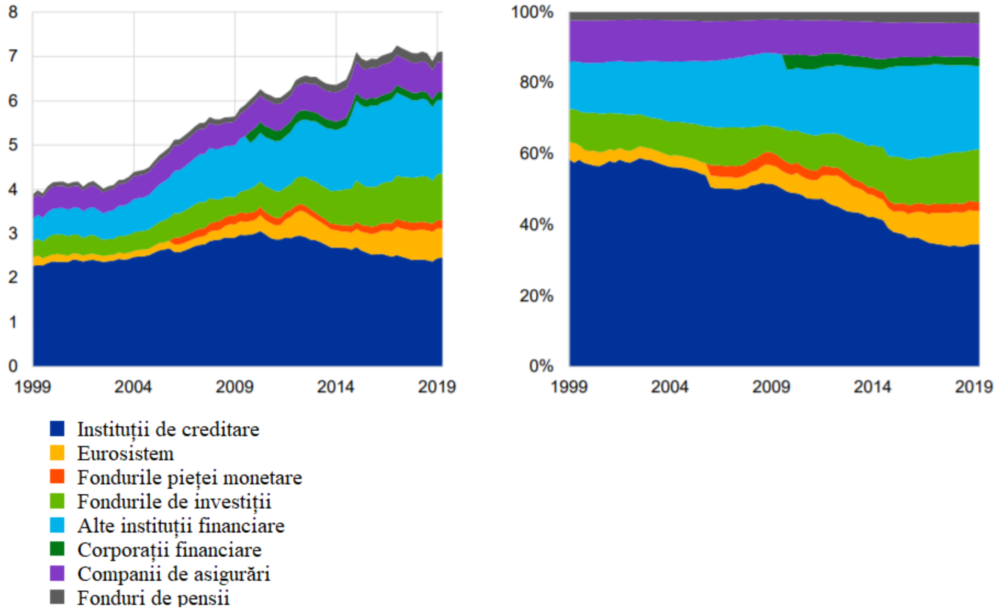

Figure no. 2. Total assets of the financial sector in the EU area and proportions by type of financial instruments intermediaries

Source: European Central Bank

As shown in Fig. 2, the share of the banking sector has registered a constant decrease in the last decades, from about 60% in 2000 to about 40% in 2019. In our opinion, this downward trend will continue in the coming years, with the main cause of the emergence of new financial instruments and the increase in users' confidence in them. Another reason that we are identifying in this structural change is the passage of the euro area through the crisis of the years 2008-2009, which, as can be seen, accelerated the downward development of the importance of the banking sector. The sovereign debt crisis of recent years can also be considered to be a cause of the decline in the percentage of the banking sector in the total assets of the financial sector. As a result, alternative financial institutions have experienced a development, through the development of new investment options, but also through a positive evolution of the trading volume. It is also worth noting that the insurance sector remains constant, keeping approximately the same percentage in the structure of financial markets at EU level.

As regards the EU-wide stock market, over the last two decades we have been witnessing a significant upward trend in trading volume, as well as in terms of integration of the Member States' markets. However, the total number of companies listed on the stock exchanges in the main EU has decreased during this period. From an analysis of the main European stock exchanges compared to the global evolution, as shown in Table 1, the European trend is in contrast to the Asian one and especially to the new Shanghai stock exchange, which recorded an unexpected expansion, well above the level of the other stock exchanges, even Asian ones.

Table 1. Number of companies listed on the main stock exchanges

	1990	2018	Net	%
EUROPA				
Amsterdam Stock Exchange (Euronext Amsterdam)	498	133	-365	-73%
Borsa Italiana	229	339	+110	+48%
Frankfurt Stock Exchange	647	514	-133	-21%
London Stock Exchange	2,559	1,166	-1,393	-54%
Paris Stock Exchange (Euronext Paris)	669	500	-169	-25%
NON-UE				
NYSE	1,774	2,285	+ 511	+29%
Nasdaq	4,132	3,058	-1,074	-26%
Hong Kong	299	2,315	+2,016	+674%
Shanghai	8	1,450	+1,442	+18,025%
Tokyo and Osaka	1,752	3,657	+1,905	+109%
Total	**12,567**	**15,417**	**+2,850**	**+23%**

Source: World Federation of Exchanges, Oxera for European Commission

Detailing at European Union level, as represented in Table 2, we can note as the first observation that the EU stock markets have in their composition a small number of listed companies. We can also notice a decrease in the number of listings in the case of the main stock markets (e.g. London, Frankfurt), but we do not conclude that this decrease is determined by an economic and financial involution of the states, but, as we say above, by the new opportunities that are within the reach of the players in the market.

On the other hand, the Warsaw and Stockholm stock markets saw increases in the number of companies listed on the stock exchange. In fact, we express the opinion that the stock markets of the Nordic countries have significant potential, a significant upward evolution being noted and being supported also by the opening of these markets for innovative financial instruments, but primarily by the government involvement to stimulate the entrepreneurial environment through tax incentives.

Table 2. Number of companies listed on EU-28 exchanges

	Number of companies		Years 2018/2010	
	2010	**2018**	**Net**	**%**
London Stock Exchange	1,817	1,439	-378	-21
Euronext Paris	893	764	-129	-14
Warsaw Stock Exchange	531	763	232	44
Nasdaq Stockholm	314	555	241	77
Frankfurt Stock Exchange	709	469	-240	-34
Borsa Italiana	271	323	52	19
Bulgarian Stock Exchange	313	192	-121	-39
Athex	266	173	-93	-35
Spotlight Stock Market	124	166	42	34
BME	133	158	25	19
Nasdaq Helsinki	129	157	28	22
Luxembourg Stock Exchange	267	141	-126	-47
Nasdaq Copenhagen	164	135	-29	-18
Zagreb Stock Exchange	247	124	-123	-50
Nordic Growth Market	26	117	91	350
Euronext Brussels	139	110	-29	-21
Euronext Amsterdam	124	105	-19	-15
Cyprus Stock Exchange	110	102	-8	-7
Bucharest Stock Exchange	74	87	13	18
NEX Exchange	161	75	-86	-53
Bratislava Stock Exchange	157	55	-102	-65
Vienna Stock Exchange	74	55	-19	-26
Euronext Dublin	59	54	-5	-8
Euronext Lisbon	52	49	-3	-6
Budapest Stock Exchange	52	43	-9	-17
Ljubljana Stock Exchange	64	28	-36	-56
Nasdaq Vilnius	37	25	-12	-32
Prague Stock Exchange	21	20	-1	-5
Malta Stock Exchange	17	17	0	0
Nasdaq Riga	29	17	-12	-41
Nasdaq Tallinn	15	13	-2	-13
Börse Stuttgart	3	7	4	133
Total EU-28	**7,392**	**6,538**	**-854**	**-12**

Source: World Federation of Exchanges, Oxera for European Commission

We also note a decrease in the number of companies listed on smaller exchanges, such as those of Croatia, Bulgaria, Slovakia; in our view, the negative inflections in these cases are caused by the interconnectivity and dependence of the evolution of these markets on the trend imposed by Europe's dominant markets.

In our view, those statistics should not be interpreted individually in the general context and in correlation with other indicators as well. For example, even if in terms of the number of companies listed on the stock exchange it seems that the evolution of the EU capital market is on a downward trend, we consider it necessary to point out that the total volume of the EU-28 stock exchanges increased, from 8.334.485 million Euros in 2010 to 10.257.399 million Euros at the end of 2018.

Detailing this indicator from the point of view of the emerging markets of the European Union, it is noted that they are also recording a negative evolution, the emerging markets of the European Union, with the exception of Romania (The Czech Republic, Greece, Poland and Hungary).

For an objective study, we introduce into the analysis the market value, also called market capitalization. This indicator represents the share price multiplied by the volume of shares in circulation for national companies listed on the stock exchange. From this calculation are excluded investment funds and intermediate companies, whose activity is the holding of shares of other listed companies.

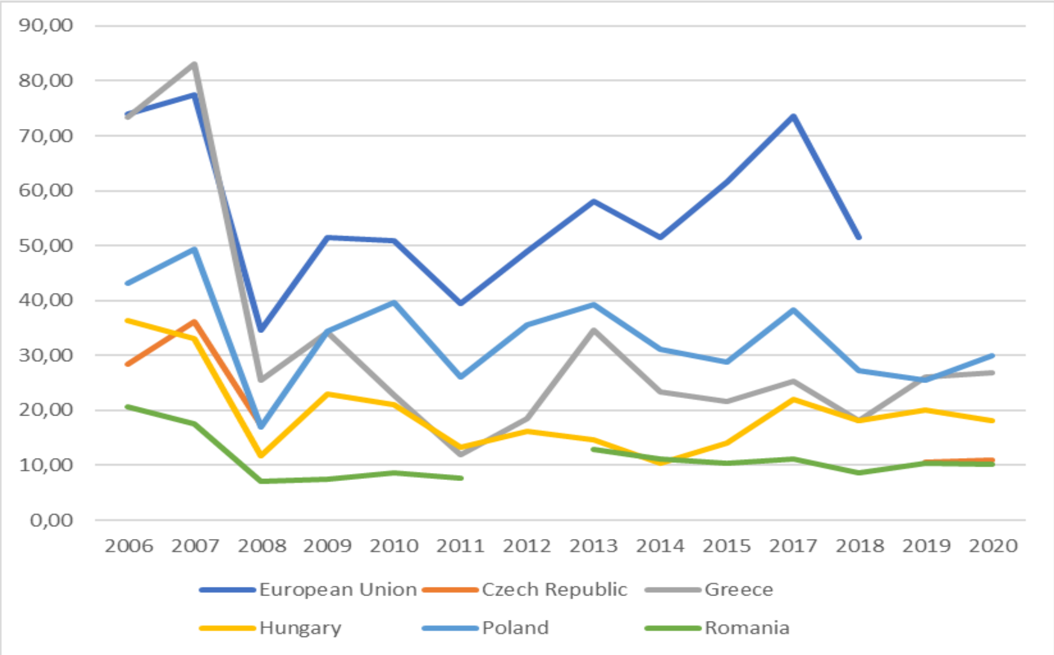

Figure no. 3. Market value of the European Union's emerging market exchanges in the period 2006-2020

Source: adaptation of the author, data provided by the World Federation of Exchanges

As shown in the graph in Fig. 3., the market value of the EU emerging market exchanges recorded values directly proportional to those recorded at European level. It is noted that the market values of the Polish and Greek stock exchanges closely follow the inflections recorded at the level of the EU area, while the Bucharest stock exchange has had a constant evolution. Taking as a reference moment the year 2006, we note that the stock markets of the emerging countries suffered in the period 2007-2008 the same dramatic rate of decrease similar to Europe as a whole, while Romania did not have as sudden fall, but the recovery in the following years was much slower.

4. CONCLUSIONS

In order to finance the business environment, the European Union has implemented a process based mainly on loans. As a result, developments in financial markets are significantly dependent on the banking sector. This situation has become a cause for concern after the great financial crisis of 2008, which is why the following years have brought novelties in the structure of the financial sector, the European Commission being directly involved since 2015, through an action plan whose objective is the establishment of the Capital Markets Union, a measure that has weighted the dominant position of banks in the EU's financial mechanisms.

At the global level, Asian financial centers have gained significant momentum over the last two decades, with the European Union no longer being able to consider itself in a clearly dominant position. However, the measures taken at regional level to integrate the financial markets of the euro area and the programme for the establishment of the Capital Market Union strengthen Europe's position and foster within it the development of capital markets and to provide alternative sources of financing for businesses, in particular small and medium-sized enterprises. In terms of the number of companies listed on the stock exchange at European level, a decrease in this indicator is identified; however, we note that the trading volume is increasing, which leads us to conclude that the measures taken at regional level for the integration of capital markets is overall with positive results.

From the perspective of the emerging capital markets of the European Union, their evolution recorded values closely related to the general trend at regional level. It should be noted that in the case of Romania, the market capitalization has a slightly different tendency. In our opinion, during the financial crisis of 2008, Romania behaved differently due to contradictory events that had a direct impact on the business environment and the financial sector. Thus, in 2006-2007, Romania finds itself under the direct influence of the accession to the European Union, an event that is statistically observed in the significantly positive developments of the macroeconomic and financial indicators of this period, but in the next period, Romania receives the shock wave of the financial crisis, which suddenly stops the positive evolution.

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