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FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

PHD THESIS

**CAPITAL MARKET – EVOLUTIONS AND
INVOLUTIONS. AN INTERNATIONAL
COMPARATIVE ANALYSIS**

-Summary-

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KEY-WORDS: capital market; stock exchange; oil crisis; securities; great depression; financial crisis; price per share; earnings per share; effects of the Ukrainian war.

INTRODUCTION

Over time, international economic systems have faced numerous periods of economic instability and crisis, which arise at certain time intervals and feature different intensities (Tucker, 2009). The factors at the origin of such crises are internal and external, and the degree to which they act depends on managerial decisions and the macroeconomic conditions considered when choosing the strategies to be implemented.

The particularities of the recent COVID-19 crisis, as well as the evolution of the capital markets, represent the general coordinates that fueled the choice of the research topic **Capital market – evolutions and involutions. An international comparative analysis**. Reviewing and analyzing the crisis moments that have influenced the capital market worldwide will allow the identification of the factors that led to the appearance of such phenomena and the measures that can be taken to avoid them in the future.

A sensible investor cannot ignore what happens outside the capital market when looking at future capital investments. In the analysis of capital markets, the macroeconomic evolution of countries around the world is perceived as an important factor that substantially influences the future evolution of financial markets, being considered indicators of the stock market evolution, “mirrors” or “barometers”. Also, the influence of the state cannot be ignored because it has the power to use certain means, for example fiscal levers, to encourage a certain behavior among investors, or on the contrary, to discourage it. An obvious example is the non-taxation of profits from the capital market in the year 2009.

Content of the PhD thesis

This PhD thesis can be considered a *useful guide* for those who want to understand the unravelling and the solving of a financial crisis, as well as the comparison between an economic depression and an economic recession. The research is extensive, it is addressed to economics students and specialists who want to familiarize themselves with the topic of the Great Depression and the topic of the global financial crisis, respectively. In this sense, this research is also a *basis for future studies* in the field.

The thesis includes an introduction, four chapters, case studies for each chapter and a conclusions section.

Chapter 1, titled *Conceptual delimitations regarding the capital market*, presents a series of aspects regarding the structure and role of the capital market, including the state of knowledge, followed by an analysis of the potential of this market at national and international level. I found it useful to also address the consolidation of the stock market in Romania, as well as the evolution of this market considering the European context and its prospects. I have analyzed the current economic situation of Romania and expectations regarding its future evolution. In the case study from this chapter, I have analyzed the links between the evolution of the economy in the context of the financial crisis and the evolution of the capital market.

In **chapter 2**, called *Historical landmarks impacting the scope of the capital market*, it was useful to address the following topics: the evolution of international financial markets across recent decades, capital demand and supply, participants and financial instruments traded on these markets. Moreover, I have tackled different approaches of investors on the capital market illustrated with a study on investments in companies from the financial sector, carried out on a sample of 26 banks from developed and emerging countries.

In **chapter 3**, titled *Fundamental analysis of the capital market. Empirical studies*, I have addressed the following issues: levels of fundamental analysis, indicators employed and their significance, evaluation models of the most well-known financial instruments. The case studies from this chapter compare investment opportunities offered before and during the pandemic crisis by the pharmaceutical, energy and automotive industries in various countries.

Chapter 4 tackles the topic of *Capital market – between certainty and conjuncture*. It contains a series of studies on the interdependence between the capital market and economic crises, with a comparative analysis between the Great Depression from 1929–1933 and the financial crisis from 2007–2009, a study on the effects of the financial crisis on the Romanian economy, as well as the impact that the war in Ukraine has on international capital markets.

Originality of the scientific endeavor, research aim, motivation of topic choice and research methodology

The originality of the thesis stems from the fact that it draws a broad and detailed parallel between the harshest economic crisis, known in history as the Great Depression from the period 1929–1933, and the last global financial crisis. The research aims to provide an explanation for the financial and economic crisis that is currently expected by means of the analogy between the

causes and effects of the financial crisis on the world economy and the characteristics of the Great Economic Crisis from the period 1929–1933.

On the one hand, the issues discussed here aim to analyze the origin, triggering factors, effects and solutions applied for the regulation and revival of the world economy in the period 1929–1933. The Great Depression started in 1929 for most of the world countries and it ended at different times in the 1930s, and for some countries the crisis ended only in the 1940s. The Great Depression appeared because of the interventionist measures, based on erroneous assessments, being also supported by a lack of collaboration between various US public organizations (Wheelock, 1995, 2008).

On the other hand, the thesis addresses the extent of the financial crisis from 2007–2009. The financial crisis of the late 2000s marked a slowdown in economic growth. It was considered the first major synchronized worldwide crisis, which confirmed that for the first time the world economies have contracted simultaneously since 1947.

Throughout the thesis, I have emphasized that this global financial crisis from 2007–2009 appeared after two decades of stable and low inflation, being also called the subprime crisis. This generated a sharp liquidity decrease for global credit markets and banks, being triggered by the bankruptcy of investors in high-risk subprime mortgages. The crisis causes had been visible ever since the end of the last century, but the tipping point of the financial crisis was reached between the years 2007 and 2008. Thus, the excess liquidity generated a series of causes such as securitization, financial disintermediation, erroneous evaluations of rating agencies and some deregulations that caused the global financial crisis (Casu et al., 2013; Hatzius et al., 2010). The main consequence of the international crisis was economic recession, which spread over the global economy through several channels: commercial, financial, exchange rate, trust.

In this PhD thesis I have shown the measures taken by the governments of the United States, Germany, France, Belgium, etc. for counteracting and limiting the effects of the crisis via adopting a series of regulations that generated liquidity on the capital market. Among these, one should mention the recapitalization of certain banks, the granting of government guarantees for loans, the purchase of toxic assets from the portfolio of certain banks, the reduction of interest rates, etc.

To develop this thesis, I have first analyzed the literature on the capital market. Therefore, I have identified and critically presented ideas from studies of authors from Romanian and abroad.

Then, I have conducted analyses of the performances of stock markets abroad and in Romania, emphasizing the relationship between the efficiency of capital markets and the conjunctural elements that acted on the market. Based on the findings, I have formulated some suggestions that could lead to the improvement of the activity on the capital market. The database used in the analyses refers to financial statements of banks and companies listed on the capital market. The analysis and data interpretation were done with the help of econometric models applied to panel data and modern methods of economic and financial analysis. The research results from the PhD thesis are included in articles published by journals indexed in databases such as Scopus, EBSCO, RePEc, etc.

The *motivation of this PhD thesis* stemmed from the indisputable reality that the mutations happening at the macroeconomic level and, above all, at the financial level, cause deep changes on capital markets to achieve the proposed objectives. The capital market represents a fundamental component of the economy. Hence, the context of the last decades, marked by the appearance of new risks and uncertainties, led me to expand the research to the current reality, to compare different crises, to identify their causes and identify solutions that the capital market could implement to prevent similar contexts. Thus, I have explored theories and concepts related to financial crises, the performance and stock market quotation of some banks, pharmaceutical, energy and automotive companies in the attempt to identify the connection between these elements.

The research has also been influenced by my personal experience, both as a doctor and as a businessman involved in the management of investment projects and stock market transactions.

The *research methodology* is focused on analyzing the dynamics of performance indicators of the capital market in the context of the economic crisis. The quantitative approaches used the analysis of indices and panel data with the help of regression, most studies focused on the capital markets during the period 2008–2021, with the aim of capturing the period of the financial crisis, but also the period of the health crisis that generated high economic instability.

CHAPTER 1. CONCEPTUAL DELIMITATIONS REGARDING THE CAPITAL MARKET

In the contemporary world, economies are not only interconnected and interdependent, but have at the basis of their operation and development a well-structured system of markets, starting with those of raw materials, continuing with that of the labor force and up to those specific to the financial system. One of the fundamental components is the market that ensures the connection between the parties requesting funds and the investors who provide them with the financial resources necessary for economic development. This way, a two-way financial flow is created: on the one hand, those in need of financing acquire resources necessary for operation and expansion; on the other hand, those who make necessary funds available participate in distributing a part of the profits generated by the former and have the chance to maximize their wealth. This happens when diversification can reduce the risks related to any investment (Blake & Cairns, 2021; Cocriș & Andrieș, 2010).

The capital market facilitates money flows between those with surplus resources and those with deficits and financing needs (Short, 2023). In the opinion of some Romanian economists, the capital market – also called the financial market – is the place where the demand and supply of long-term securities is centralized, in this case over 5 years (Kirițescu & Dobrescu, 1998). According to another view, the financial market is seen as one of issuing and negotiating long-term financial instruments (Pilverdier-Latrete, 2002).

Many specialists consider that a differentiation between the capital market and the financial market cannot be made. They argue that the financial market includes the market for securities, the money market and the insurance market. The first component is also called the capital market (Vosganian, 1999).

The term in which operations are carried out within these different but complementary markets is emphasized. Thus, the money market concentrates transactions with terms ranging from a few hours to one year, while long-term transactions are carried out in the capital market (Kemp, 2009; Mishkin, 2010). The influence of the time factor is also highlighted by other authors, who note the distinction between the money market dedicated to loans with maturities of less than 1 year and the capital market dedicated to capital instruments such as shares and debt instruments with a maturity of more than 1 year.

Other specialists believe that, regardless of the term for which the collection and then redistribution of existing funds at the society level is facilitated, the capital market is the largest, because the trading object is represented by securities that facilitate the circulation of capital from fund holders to those with financing needs (Tulai, 2003).

Since their content and role are the subject of divergent opinions among specialists, the capital market and the financial market being considered synonymous, the two categories complement each other: they are interdependent, closely related to the national regulations in force (Anghelache, 2009). It is also believed that the capital market incentivizes holders of available capital to share with many other investors a series of certain risks, favoring diversification and taking risks that could not be tolerated at the level of the individual investor (Fang, Huang, & Wierman, 2019; Halim, Riyanto, & Roy, 2022; Tan et al., 2023).

Regarding the scope of the capital market, some authors argue that this market also includes the insurance market, the foreign exchange market and the mortgage market, which overlap with the financial market (Anghelache, 2003). Other opinions present the capital market in a narrow sense, as a market for long-term capital (Stancu et al., 2017).

The money market and the capital market are financial markets, but they differ due to the nature and maturity of financial securities traded within them (Cardella, Kalcheva, & Shang, 2017; Davidson, 2009; Duflox, Miculescu, & Burlaud, 2002). Thus, the money market is the market for short-term debt instruments (less than 1 year), while the capital market is the market for long-term debt securities and shares.

In addition, some authors consider that operations that involve long-term investments in shares or bonds are carried out on the capital market, and those with short-term securities such as certificates of deposit or treasury are specific to the money market (Beju, 2004; Dalton, 2000; Wilson & Caldecott, 2023).

Regarding the legal approach for this issue, the 65 Directive of the European Commission known as MiFID II (2014) assumes that monetary instruments are traded on a market dedicated to them, having the same name. On the other hand, the national legislation implementing the European directive, i.e., Law 126/2018, defines money market instruments as a category of financial instruments that are negotiated “ab initio” on the capital market.

Also, the resolution adopted by the European Parliament in 2016 supports the creation of the C.M.U. (i.e., Capital Market Union), a unified capital market, as a solution for the emergence

of a market without borders and harmonized regulations. The Treaty on the Functioning of the European Union (2012) also uses the distinct concepts of money market and capital market as parts of the financial market.

Therefore, the concepts of *financial market* and *capital market* do not have rigorous definitions, the opinions of specialists being divided regarding their content and scope. Based on the existing literature, I have concluded that there are two views regarding the two concepts. A first one is the *Anglo-Saxon view*. The financial market is considered the most comprehensive economic category, with two elements in its structure:

- the *money market* or the *monetary market*, which ensures an intermediate transfer of resources from financial institutions, which applies in the short run.
- the *capital market*, which ensures the direct and immediate transfer of financial resources, which applies in the long run.

The second view appeared on the *European continent*, first in France, then it was enacted by most countries in the European Union, thus constituting a landmark of European directives in the field of financial market reform and harmonization (Martinez, Philippon, & Sihvonen, 2022). In this case, there is a unified capital market with two components:

- the *monetary or credit market*, considered a short-term capital market;
- the *financial market*, considered a long-term capital market.

In my opinion, the second view is better founded than the first one. This is because, disregarding the duration of financing or the controversial nature of securities such as T-bills (considered by some to be money market instruments or long-term securities), a market ensuring that the demand meets the supply of capital should naturally be called simply: capital market.

I have also addressed issues regarding the capital market consolidation and I have focused on the phases of capital market consolidation in Romania. At the end of the chapter, I have presented an empirical study on the capital market in Romania. According to the results, the market was influenced by the previous evolution of GDP, government expenditures and revenues from previous periods, being characterized by increased volatility.

CHAPTER 2. HISTORICAL LANDMARKS IMPACTING THE SCOPE OF THE CAPITAL MARKET

Since the 1970s, the evolution of the national and international financial systems and, within them, the capital markets have been strongly impacted by destabilizing phenomena in the world economy, such as the oil stocks of 1973 and 1979. These phenomena have caused an increased instability of exchange rates and interest rates. Under these conditions, the capital market entered a totally new financial climate, which determined rapid growth and profound institutional reforms.

The new climate, characterized by a wide variety of prices, exchange rates and interest rates, caused new risks and accentuated traditional ones (Zhang et al., 2022). To diminish, or at least to mitigate them, new techniques and financial instruments were designed by the banks. They addressed both financial intermediaries and investors on the monetary and financial markets, being called, generically, financial market innovations. According to their purpose, which is the basic criterion used to classify financial innovations, they are of two types:

- 1) *innovations that create liquidity*, also called credit instruments;
- 2) *innovations through which risks are transferred*, also called guarantee instruments.

The first category of financial innovations is characterized by the fact that borrowers **issue directly** short-term negotiable instruments, or convert non-negotiable claims (bank credits) into such instruments, the process being generically called “securitization”.

Innovations in the line of risk transfer arose from the need to ensure a constant flow for capital, considering the heightened instability of exchange rates and interest rates, which permanently generated risks (both for debtors and creditors) of losing the contracts.

More specifically, the increase in the oil price and other basic raw materials during the 1970s generated profound structural changes in the functioning of financial systems due to the involvement of all types of countries that made up the world economy: 1) developing countries - exporters and importers of oil; 2) economically developed countries (industrialized countries).

Considering the increase in oil price and the price of other basic raw materials, the exporting countries (usually developing ones) have recorded massive surpluses of US dollars in their balance of external payments. On the other hand, the underdeveloped countries (importers of

oil and basic raw materials) have recorded strong deficits in their balance of external payments. The reuse of surplus dollars, originating from oil export (i.e., oil dollars) aimed to cover the deficits of the importing underdeveloped countries, was carried out through the banking systems of industrialized countries. Obviously, in the form of granting bank credits to countries with deficits, on account of dollar deposits received from oil exporting countries. Credit beneficiaries paid interest that was used by the respective banks to reimburse dollar depositors, and the difference represented profit for the lending banks. Unfortunately, the liquidity of banks from the industrialized countries was constantly increasing, because: a) surpluses of oil dollars were increasing as the oil price increased; b) by granting accounts and repayments of short-term credits, a process of multiplication of US dollars was produced outside US borders. Hence, this process could not be controlled by monetary policy measures.

The size of the liquidity coefficient regarding foreign currency deposits is assessed by each bank according to its credit policy, without the influence of the credit policy implemented by the central bank, as in the case of deposits in national currency (Elul, 2008). I have noticed that the liquidity of commercial banks in developed countries increased not only with the increase in the oil price and the price of other basic raw materials, but also by increasing the number of such banks used to credit underdeveloped countries (Marz & Pfeiffer, 2023). Obviously, under these conditions, credit banks were no longer concerned with tracking the destination of loans granted in dollars. Their increased focus was on ensuring the placement through credits of a large part of the dollar deposits received for development. And if, at maturity, debtors could not reimburse credits because they had used them for consumption, banks also offered them the solution: they granted the debtor a larger credit, one part of it was used to repay the due loan, while the debtor was granted a new maturity for the entire credit.

It is easy to imagine that, sooner or later, this mechanism would create large debt accumulations, especially for oil-importing countries. But, over time, even oil-exporting countries, which massively imported manufactured products, began to run deficits. Because the load for the oil imported by countries producing manufactured products (industrialized countries) was included in the cost of the respective products. With the arrival on the market of manufactured products whose cost included the increased oil price, deficits in the balance of external payments were considerable for underdeveloped countries importing oil and manufactured products. To these elements one could also add the deficits of external payments balances of some oil-exporting

countries whose surplus decreased with the increase in the prices of manufactured products even to the point of disappearance. These countries began to register deficits.

In this context, on August 4, 1982, the crisis of external debts of developing countries was triggered. More precisely, Mexico (oil exporting country) announced its incapacity of paying foreign debts. However, this was only the beginning of the biggest crisis of the International Monetary System created in 1944 at Bretton-Woods, namely the crisis of external debts of developing countries.

At the end of this chapter, I have included an empirical study using data from banks listed on the New York Stock Exchange from countries such as Brazil, Argentina, Chile, the United States, France, Great Britain, Austria and Germany. According to the results, performance indicators positively influenced the price per share, earnings per share, determining investors to trust the prudence of the bank management. At the same time, the “cost-income” efficiency ratio had a negative impact on the share price, meaning that investors were more reserved about the lending decisions of some banks. Also, the indebtedness level of banks negatively influenced earnings per share, having negative consequences for investors.

Results have indicated that the dividend per share was not significantly influenced by performance indicators. Also, financing from cash flow was provided by increasing debt, a negative aspect that will affect the price of bank shares in the future. Moreover, the price per share of the cash flow was negatively influenced by the performance indicators and the efficiency indicators. Based on this result, bank management could consider that the lending activity does not generate enough cash to cover the non-performing loans granted. Therefore, a rigorous credit analysis and recovery of non-performing loans would be required.

CHAPTER 3. FUNDAMENTAL ANALYSIS OF THE CAPITAL MARKET. EMPIRICAL STUDIES

Fundamental analysis is not a well-known economic tool. Explaining the concept of fundamental analysis can be done by specifying: Which is the starting point of fundamental analysis? What is its object? What role does it play? What is fundamental analysis?

The answer to the first question is simple: the willingness to get as much money as possible. And investments represent the way in which this money can be obtained. Choosing the most suitable investment path can be a difficult process, due to the multitude and variety of available instruments, the instability experienced by certain markets, the transition period, etc. Because of decreasing bank interest rates, more and more people are looking for investment alternatives for their available cash. For example, investing in shares. Every investor wants to maximize his gain, but under acceptable risk conditions.

Investing in shares does not guarantee gains since this is influenced by a number of factors. However, investors choose stocks for:

- **value storage**: those who are concerned about this aspect invest mainly in non-speculative shares and in the so-called “blue chips”. For these investors, the quality of the title is important.

- **capital accumulation**: investors consider long-term investments, they buy shares with growth potential, which offer a constant and consistent dividend, to increase wealth.

- **income source**: for these investors, the existence of a constant and safe flow of dividends is important, for this reason, they prefer securities with a high yield.

The decision to buy shares is not made randomly. Before making the decision, the investor must be prepared to take certain risks, in other words to lose. The criteria underlying the selection of securities are the following:

- **safety**: represents the minimum risk of losing, the profitability of the investment is directly proportional to the risk taken.

- **risk**: it is one of the “key mechanisms” of the evolution of the economy. Every decision made in everyday activity involves risk. There are several types of risk, and each of them must be analyzed separately:

- **inflation risk:** specific for economies in transition (Vosganian, 1999), such as the Romanian one. Inflation risk occurs when the inflation rate is different from the anticipated one; there is a danger that the benefits from the investment will not keep pace with the inflation rate.

- **interest rate risk:** it appears especially with preferred shares and bonds and it is related to the change in the interest rate of the economy. If interest rates skyrocket, investors can earn more in the bond market. Consequently, investors sell shares and transfer their funds to the bond market, but these transfers lead to a decrease in share prices. When interest rates fall, the opposite occurs.

- **business risk:** due to company management, non-competitive products, etc. earnings are not the anticipated ones, which leads to lower dividends;

- **market risk:** caused by general movements in the capital market. All companies are simultaneously affected by certain events, for example war, recession, inflation. Investors expect a compensation for assuming this risk;

- **income:** refers to how much the investor earns compared to the incurred risk;

- **growth:** refers to the increase over time in the value of the share; the difference between the titles is mainly due to the growth rate;

- **liquidity:** refers to the ease with which the title turns into money (Djebali & Zaghdoudi, 2020).

Fundamental analysis is therefore based on the processing, analysis and interpretation of information found in financial reports, as well as on information and forecasts concerning entire industries, the state of the national economy and the macroeconomic context. The purpose of this analysis is to determine the *intrinsic value* of a stock, that is the theoretical value it should have. To determine the intrinsic value, financial analysis uses a range of information, forecasts, methods, techniques and models to substantiate the theoretical value that a stock has, taking into account a variety of aspects.

Technical analysis is based on the study of the evolution of stock prices and the trends they follow. Thus, making the decision to sell or buy shares depends on these aspects. Unlike fundamental analysis, technical analysis only uses information provided by the market. The premise is that there is no better evaluation tool than the market itself. Analyzing macroeconomic, sectoral and issuing company-level factors is not necessary because the market provides the most

valuable information regarding the future course of a stock (Han & Song, 2012; Reilly & Brown, 2002: 626).

In other words, fundamental analysis aims to establish a theoretical value at the level of a share to compare it with the market value, based on a series of useful information. The objective of fundamental analysis is to select those stocks for which maximum return will be obtained in the context of market correction. Technical analysis aims to determine the future evolution of the course, based on the trend provided by the market. Therefore, both technical analysis and fundamental analysis aim to determine the future evolution of the course of a stock. Fundamental analysis aims to explain this evolution in a logical and structured way, and technical analysis aims only to predict the evolution.

Fundamental analysis is essential for choosing a stock portfolio. Thus, the investor makes decisions depending on: the information from the financial statements; information regarding the field in which the company operates; share price. In addition to the fact that it uses a wide variety of economic indicators, fundamental analysis also requires intuition on the part of the analyst who ventures into its realization. Within fundamental analysis, macroeconomic analysis has a special place. Analyses of the economy at the macro level are used to determine whether the situation in a country provides an appropriate framework for the capital market and, in particular, for the stock market. At this stage, it is necessary to answer several questions such as:

- Is the inflation rate increasing?
- What is the consumption level in a country?
- Is the balance of external payments registering a deficit?
- Does the state budget have an excessive deficit?

The answers to these questions indicate how macroeconomic conditions act on the stock market. Economic analysts and other specialists consider that certain state institutions (e.g., the Ministry of Finance, the National Bank) have a major impact on the economy because they control monetary and fiscal policy (Vosganian, 1999). In fact, these “economic forces” act on all industries and companies.

Fiscal policy can encourage or discourage investment. Also, the economy can be influenced by the increase or decrease in expenses with defense, social protection, etc. All these changes have a direct impact on those concerned, but at the same time they also act on those who provide goods and services.

The same consequences can occur following major changes in monetary policy. A restrictive monetary policy may have the consequence of reducing funds granted to companies, individual consumers, funds intended for investments or the purchase of goods and services. It can be said that monetary policy affects all segments of the economy. The objective of monetary policy is to control inflation.

Another macroeconomic factor that is connected to the interest rate and the way economic agents spend or save money is inflation. This has a major impact on interest rates because it reduces purchasing power and generates a decrease in the real rate of return on investment (Halpern et al., 1998). In addition to the elements already mentioned, wars, riots, changes in international monetary policy, major changes in the environment, etc. also influence the economy at large.

Since the analysis of macroeconomic conditions is a rather complicated process, when analysts study the impact of the national economy on the company's evolution, they use estimates made and published by the government or specialists in the field, rather than carrying out these analyses themselves. Macroeconomic factors must be considered before the industry is subjected to analysis. By analyzing the industry, one determines the impact that the economic cycle has on the industry to which it belongs, and one also assesses the influences that new directions of action have on the performance of a certain economic branch.

The general state of the industry is determined both by the state of the economy and by the factors specific to each individual sector. Anyone deciding to invest in a particular industry must pay close attention to the general economic climate to see whether favorable economic conditions necessary for the investment exist or not. Customer base, market share compared to other companies, growth rate of the entire industry and the comparison regarding the development of the analyzed business are some of the elements that assist in positioning the company in the economic segment in which it operates. Industry analysis generally aims for:

- correlating the evolution of the industry with the evolution of the economy as a whole;
- discovering new "trends" within the industry;
- positioning the company within the industry.

The factors to be considered in this analysis are:

- the phase of the economic cycle to which the industry belongs;
- the previous evolution of the industry;
- the demand-offer ratio;

- the nature of the products;
- the relationship between industry sales and income level;
- industry capacity;
- competition;
- cost elements;
- regulations in the field;
- exposure to social changes and political events, etc.

In this chapter, I have shown the fact that the vision of the Bucharest Stock Exchange refers to increasing the performance, competitiveness and efficiency of this market in the context of joining the European Union. The legislative landmarks in this regard were the Law 297/2004 on the capital market, which took into account all European directives in the field, as well as the new Stock Exchange Code.

In the context of the accession of states to the European Union, one of the most difficult objectives to achieve is related to the integration of the European financial markets. Financial integration therefore does not refer to the unification and merger of markets, but it refers in particular to the harmonization of legislation and the way the markets function, to the existence of an effective communication system between markets, as well as to the existence of supervisory bodies. The advantages of financial integration are numerous. First of all, boosting economic growth, increasing the competitiveness level between financial operators, which generates an increase in the offer of services and products for consumers and a greater efficiency of the system. Also, an efficient system reduces the cost of capital for companies, favoring investment growth, economic growth and last but not least the labor market. In addition, integration gives investors a greater opportunity to diversify risk from a geographic standpoint.

The process of financial integration of the European capital markets is not complete yet, there are still important differences from country to country regarding the taxation of financial products or the establishment of the rights and guarantees for consumers of financial products (Taylor & Obstfeld, 2005). In this context, the positive impact of the accession on capital markets and stock exchanges is obvious, there is an “integration effect”. For the states that joined in 2004, the first influences on stock exchanges appeared as early as 2001 when the European Commission announced the names of the candidates. The expansion announcement coincided with a sharp

increase in shares, between November 2001 and July 2004 their price increased by an average of 90%, while the global market index increased by only 8% during the same period.

At the end of this chapter, I presented three empirical studies on the behavior of some companies operating in the pharmaceutical industry, the energy industry and the automotive industry.

Results showed that in the case of pharmaceutical companies, the medium and long-term equilibrium indicators negatively influenced the share price, while the financial performance indicators contributed to the increase in the share price. From an economic point of view, the negative influence of the working capital and the rate of long-term loans is explained by the over-indebtedness of these companies in the conditions of the COVID-19 health crisis due to the expansion of vaccine manufacturing. At the same time, the positive influence of performance indicators on the share price indicates that the production of companies in the pharmaceutical industry has become one of the most profitable (Li, 2022; Spicer & Grootendorst, 2022).

In the case of companies in the energy industry, I have noticed that their working capital positively influenced the share price. At the same time, the operating profit negatively influenced the price per share, which means that these companies reported significant operating costs compared to operating income, with the immediate consequence being the world energy crisis of the year 2022. Companies in the automotive industry recorded a significant increase in the price per share especially in the capital market from Europe and America, as a result of the positive influence of the operating profit from the period 2013–2021. At the same time, I have concluded that the equilibrium indicators did not have a significant influence on the stock portfolio.

CHAPTER 4. CAPITAL MARKET – BETWEEN CERTAINTY AND CONJUNCTURE

The chapter presents an analysis of the economic and financial crises that negatively influenced the capital market. First of all, I have started the scientific approach from the Great Depression (1929–1933), which constituted the premise for the outbreak of the Second World War. The Great Depression, although it started in the USA, quickly generated a sudden increase in prices and unemployment worldwide, as a result of the economic relations and special agreements concluded between the USA and the European states after the First World War. Thus, the USA provided substantial financial resources for European states in need. Once the American economy collapsed, and European states could no longer benefit from loans and investments on behalf of the US, the prosperity in Europe declined. The economic crisis affected more severely the states deeply indebted to the US, such as Germany and the United Kingdom.

During 2008–2009, most industrialized states experienced recession generated by the financial crisis, which was caused by reckless lending practices regarding the origination and distribution of mortgage debt in the United States. As losses mounted, panic grew and intensified in the field of interbank lending. The risky financial situation became much more difficult amid the sudden increase in oil and food prices. The extensive rise in asset prices, associated with the increase in economic demand, is considered a result of the practice of accessible credits, inadequate regulations and supervision, and inequality increase. The global recession was followed by the collapse of international trade, the rise of unemployment, sudden and prolonged drop in commodity prices.

In this chapter I have also made a brief presentation of the effects of the financial crisis for the Romanian economy. I have noticed that, although the Romanian banking system can be considered more stable than the system of states with high exposure to “toxic assets”, the consequences of the financial crisis in Romania can be summarized by the following aspects: a decrease in GDP; decrease of investors’ wealth and countless bankruptcies; increase in unemployment and consumption; decrease in external and internal demand; mitigated or postponed investments in the economy; lack of trust in the financial system; considerable budget deficit.

I have also emphasized that a prolonged war translates into increased uncertainty among Western leaders. Thus, macroeconomic indicators around the world have registered considerable decreases immediately after the outbreak of the conflict between Russia and Ukraine, decreases that can be easily observed: a drastic reduction in the global GDP growth rate, an increase in consumer price indices and inflation rate, rising unemployment and sharply raising interest rates to a level not seen in decades.

With the invasion of Ukraine by Russia on February 24, 2022, many analysts predicted the economic collapse of Russia. But six months after the start of the conflict, they had to revise their predictions. Western countries issued economic sanctions on oil and natural gas imports, cut off the access of Russian financial institutions to international financial markets by disconnecting them from the SWIFT banking system (Huang, Shao, & Wang, 2023). Despite these sanctions, although financial analysts estimated that the GDP of Russia would fall by 35% in the second quarter of 2022 compared to the previous year and record the biggest contraction since the dissolution of the USSR, the results showed that the GDP of the country fell by only 4% in mid-2022.

The conflict in Ukraine also has geopolitical consequences for actors in the North Africa and Middle East region. Focused on the conflict in Ukraine, the international community has not paid much attention to the regional crises in Yemen, Syria or Libya. At the same time, the power vacuum triggered by Russia in Syria and Libya, the gradual changes and uncertainties related to the priorities of the Middle East, the US and the European states made other countries (e.g., Turkey, Iran) enter a new struggle for supremacy in this region.

At the end of this chapter, I have emphasized the fact that the economic situation of the EU members is difficult because many states are still dependent on Russian energy resources. When and how the war between Russia and Ukraine will end cannot be predicted, but its consequences are visible worldwide.

CONCLUSIONS

The doctoral thesis addresses the concept of *stock exchange*, which is by definition a market, as it represents a meeting place between demand and supply. However, it is a market that stands out by the characteristics of its organization, operation and trading object.

The stock market can be considered as the most advanced stage of market development, defining the very concept of the market and the exchange relations underlying this concept. The specificity of the stock market stems from certain characteristics, which differentiate it from other markets. Therefore, the stock market is primarily a **market of goods and values**. However, in order to be traded through the stock exchange, goods and values must be quantifiable, substitutable, have a low level of finishing, allow uniform division and storage. The **representative feature** of the stock exchange refers mainly to the importance given to the “stock market quote”, which represents a real point of reference when conducting all commercial and financial transactions.

From the analysis undertaken, it can be stated that the stock market also has an **abstract character**. This feature resides in that the rapid development of transactions on this market first generated a reduction of actual goods to mere samples. Later, the latter were replaced by simple documents attesting the ownership of the goods in question or, in other words, titles concerning goods. Therefore, the stock exchange differs from other markets by the fact that it registers the transfer of goods only at a conceptual, theoretical level, but not on a physical, material level.

Last but not least, another specific feature of the stock exchange is its regulated operating nature. Therefore, laws, rules and restrictions that regulate the structure and operation of the stock exchange create an **organized and free character** since they facilitate the exclusive trading of securities issued only by publicly listed companies. The evaluation of stock market investments involves a challenging problem: is the stock market an efficient market or not? If it is not, what are the reasons for its lack of efficiency ? If the market is efficient, this means that the prices of securities correctly estimate the value of investments in a company, they have an optimal level, and the process of stock evaluation becomes one of justifying this price. If the market is inefficient, the security price deviates from the ideal equilibrium level, and the security valuation process

becomes one of determining a reasonable estimate of this value (Devos & Li, 2021; Wu & Xue, 2023).

Market inefficiency can cause stock market players to constantly seek out those securities that are undervalued in the market in order to obtain gains. Efficiency does not imply the need for the price to register the equilibrium level at every moment. The requirement is that deviations from the ideal price be random. These random deviations imply that there is an equal chance that securities are undervalued or overvalued at any given point in time, and that deviations are not correlated with any observable variable. If stock price deviations from the true value are purely random, then no investor would be able to consistently identify undervalued or overvalued securities, no matter what investment strategies they use.

However, an efficient stock market does not imply that the price of securities cannot deviate from the optimal value. In reality, deviations can be quite large (but they must be random). In addition, stock market efficiency does not mean the investor's inability to beat the market at any given time. On the contrary, about half of investors have this possibility. In addition, taking into account the considerable number of players in the financial market, the laws of probability suggest that a fairly large number of them will be able to beat the market for a long time not because of the investment strategies used, but for the simple fact that they are lucky. In the same vein, in the case of an efficient market, one should consider that the profit expected after an investment will be correlated with the risk of the respective investment in the long term, even if there may be short-term deviations from the expected level.

Obviously, stock markets cannot become efficient automatically. Factors that make markets efficient include the actions of investors in search of the most profitable securities. Within commodity exchanges, for values with a relatively constant and solvent demand, the number of bidders is sufficiently large and the competition is free, thus avoiding the possibility of monopolies.

The factors influencing the course of a certain value do not appear at the same time (at least theoretically) but only very rarely and regarding other values. So, normally, different categories of titles vary in terms of the evolution of their stock exchange rates in different directions or with different intensities. This makes both the risks and the chances to be diluted (if the portfolio is comprehensive enough). The *chance-risk* duality is not completed by a perfect compensation, the relative variation of the total portfolio being smaller than the variation of a

single value, which “decreased” or “increased”, thus triggering a reduction of losses due to assumed risks (similar to the earnings that can be acquired when the evolution of the courses is favorable).

The chance-risk duality generates a second duality, namely *speculation-investment*. The first purpose of the stock exchange as a market is to give sellers and buyers of securities a possibility to confront their requests, their offers and to ensure *investment fluidity* required by the economic activity, this being the investment aspect. From the moment the buyer of a security hopes to resell it at a higher price within a reasonable period, he will lose interest in the dividends that the respective title can provide, and therefore in the activity of the issuing unit. Concerned about earning from resale, he even accepts the risk of losing as a result of a price drop.

The movement of stock exchange rates is based on an important number of causes and factors. As a rule, the causal links between certain phenomena and economic, political processes, etc. and the options to sell or buy on the stock market (which generate the movement of rates) are very weak. The correlation coefficients between causes and effects have, in the case of stock exchange operations, very small values. For this reason, it can be stated that the science of stock exchange operations is primarily probabilistic. This does not mean, however, that the stock market evolves only under the rule of chance. No matter how strong appearances that can generate such an impression seem, the stock market is a market whose activity is carried out according to very exact and precise rules (Kabbach-de-Castro, Kirch, & Matta, 2022; Murgu, Lazăr, & Isărescu, 1982; Negomireanu, 2005).

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