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SUMMARY

Emerging capital market volatility in the globalization context

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Disparities in terms of development of the nations and the world financial turmoil are a topic of great interest for economic research, which attempts to provide satisfactory explanations for them. The challenge is even greater, as for more than a century there have been significant changes in the international markets, the waves of financial globalization being associated with high inter-correlations.

The choice of research topic is motivated by the actuality and its obvious importance. In recent years, changes in the background of emerging capital markets and the succession of crises that spread with an astonishing rapidity in a conjecture in which "financialization essentially change the methods and results of the market economy" (Dolgu, 2009), requires further efforts and academic approaches.

So while concerns about developing capital markets are not recent, but rather on the subject has already been written enough, the interest for the study of this problem is just as vivid today. The central motif of topic actuality is the dynamics of the economy, mainly due to continuing financial innovations in the field, local and global economic reform and growing importance of institutional investors along with individual investors' decline. So, first, the presence of a large number of changes and events that occur frequently is a key element in emerging capital markets metamorphosis. Thus, product and institutional innovations represents a challenge for researchers and practitioners in the field in conjunction with various macroeconomic mutations such as booms, economic crises, the transition to a market economy, EU or Eurozone accession and other economic reforms.

The aim of our research is to identify dynamics' trajectory of emerging capital markets in the context of internationalization. To succeed in such an undertaking we have organized our work on the *following levels*:

- Completion of a rich literature to release the theoretical lines that configure the domain that is being analyzed;
- Appeal to econometrical and empirical analysis to find the extent of contagious and volatile behavior of emerging capital markets during the crisis and on the background of increasing interdependence between states.

Taking into account these restrictions and pursuing the general purposes, we have formulated the following **objectives**:

- Understanding the basic concepts that we used in the analysis (emerging capital market, volatility, contagion, globalization) in order to provide clarity and rigor necessary for speech;
- Capturing the main features of emerging capital markets in relation to capital markets in advanced economies;
- Presentation of financial globalization characteristics among emerging capital markets;
- Anatomy and physiology of liberalization of emerging capital markets, with all the consequences deriving from it, including the mutations in capital markets supervision in Central and Eastern Europe;
- Highlighting major turbulences caused by the global crisis on capital markets;
- Analyzing the behavior of investors in the capital markets in Central and Eastern Europe;
- Econometrical determination of capital markets volatility and contagion in emerging Europe.

Aiming to achieve these objectives, we considered appropriate *structuring* the work into four chapters.

In the *first chapter* we pointed out that the disparities in the development of emerging capital markets is a prerequisite for the impossibility of elaboration and acceptance of a universally accepted definitions and classifications. As we have found the sense of the relationship between capital market and economy is not free of controversy. Although periods of growth and decline of emerging stock markets are often regarded as key signals to economic status, it is difficult to quantify accurately the nexus in a predominantly banking system and as well as in any economic framework in which circular causality is felt. The clear proof is given by the multitude of studies that try to capture the manner in which the two are influencing. Therefore, pros and cons arrogantly display the elegance of mathematical models, but the reality is different, both, the nominal economy and the real one have developed and have been interconnected - valid thing among the heterogeneous group of emerging capital markets.

The starting point for the establishment of stock exchanges, the global and national, economic, political and social framework different from state to state, appear to be the premise of the existence of different characteristics of emerging capital markets. Nevertheless from the specific features of them we mention the vulnerability, lack of maturity, investor irrationality, inadequate regulatory framework, the low degree of liquidity, segmentation, and volatility. Despite the existing shortcomings in emerging capital markets, they have experienced an accelerated growth worldwide driven by both, the general economic and financial environment. The orientation of financial activity to these emerging markets comes amid increasing their effectiveness due to the stabilization of economic and institutional policies, diversification and increasing volume of securities and easing legislative framework.

Within the *second chapter*, we emphasized the role of eliminating financial barriers that helped reopening the globalization on emerging capital markets. Given the fact that international financial flows have experienced impressive growth in recent decades, financial globalization is an important link its entirety process. The impetus that led to the rapidity and extent of changes in the financial markets is represented by elements such as the liberalization of this sector, technology and financial innovation, supply and demand of participants. The complexity of this mechanism entails both benefits, as increasing the efficiency and transparency of financial markets, the emergence of new opportunities for portfolio diversification, reducing transaction costs, as well as threats like increasing vulnerability of financial system. Although are presented a series of controversies around this sphere, globalization is an objective trend that affects the modern world in different ways and degrees of magnitude.

If financial globalization has led to the development of capital markets, also form a subject of controversy. In order to bring a plus to the existing literature, we attempted to identify the relationship between financial constraints, the flow of investment capital and the level of economic development in emerging markets. We pointed out that there is a positive relationship between financial openness on the one hand and capital inflows from portfolio investment and economic growth on the other hand. However, comparison of portfolio investment inflows for advanced states, respectively, for developing ones outlines the net superiority of the former.

We can say that emerging capital markets continues the liberalization process began decades ago, but so far, their efforts have not determined the alignment to the amount of portfolio investment inflows related to advanced markets. Although the sequence of crises determined the modification and improving the institutional framework among emerging economies, still most of portfolio investment flows occur between developed. The hiatus which began in 2008 brought issues, despite best endeavors to open the capital account. Foreign investors face high risk aversion, justified situation, if we consider the failure of states to overcome the long and damaging recession.

However, although they went through a massive wave of successive crises, early twentieth century marked a period of accelerated growth record of emerging capital markets, enhancing their global importance. Analyzing the evolution of emerging capital markets regions highlighted the importance and the rapidly growing of Asia among them, its expansion causes being the improvement of legislation on corporate governance, political stability, the wave of acquisitions and mergers among exchanges. Noteworthy is the development of capital markets in other regions which constitutes real opportunities for investment and diversification portfolios.

Within the *third chapter* we made a brief historical incursion of economic crisis to highlight their impact on capital markets. Successive wave of financial crises in the last two decades have induced economists and national authorities that national, international and supranational financial architecture should be reconsidered. Thus, the implementation of solutions to improve existing multinational organizations was and is necessary given the accentuation of systemic risk due to the liberalization of financial markets. Having the necessary tools and mechanisms, the purpose of these institutions is to assist in preventing and treating imbalances occurring nationally and internationally, which contradict with the occurrence of economic and financial crisis increasingly severe in recent decades. Nationally, from the multitude of financial supervision scheme, the integrated one is gaining more and more popularity, supported by elements related to efficiency, effectiveness and the creation of financial conglomerates. Within the European Union, the start in the unification of financial supervision agencies was from Nordic countries, and until now, from a total of 27 acceding State, fourteen have integrated financial supervisory systems.

Emerging equity markets are in constant transformation, integration and interdependence, their importance in the process of globalization being significant since the financial conditions of a region propagates almost instantaneously on the other. In this respect, the study of changes in the short and long term links of the markets of Central and Eastern Europe and the developed, along with the impact of financial crisis is of great interest. The aim of the research was to investigate the mutations in the relations between emerging and developed equity markets before and after the global economic crisis.

The first hypothesis that we want to validate is that of increasing interdependence between capital markets in Central and Eastern Europe and the developed, namely, continental and regional leaders. The second hypothesis had as support the current economic crisis within the analyzed period. Thus, we wanted to confirm the phenomenon of contagion in the markets of Central and Eastern Europe.

The importance of this analysis, from our point of view, derives from the fact that it provides information about the determinants of volatility in emerging capital markets. Especially in the context of globalization, the co-evolution of the markets may be able to explain the excess volatility within a country.

Research motivations were multiple. First, the CEE markets are closely interlinked in terms of trade and geographical proximity. Second, are members of the European Union and aspire to join the euro area. Thirdly, the need of this study results from the perspective that researches in this area are contradictory.

The states which have been subject of the study are: Bulgaria, Czech Republic, Poland, Hungary, Romania, Austria, France, Germany, UK and USA. The five indices we considered representative for Central and Eastern Europe. The last five indices belong to developed markets and the reason for which we chose this was that of emphasizing the interdependence between stock markets in Europe and the largest emerging markets at regional, continental and global levels. The period of analysis is from January 2, 2003 - July 31, 2012.

The results of the study highlighted first, in the period that preceded the global economic crisis, that stock markets in Poland, Czech Republic and Hungary are internationally integrated, being less susceptible to shocks from the Austrian market. Second, the stock markets from Romania and Bulgaria are less susceptible to shocks from developed markets, which emphasize their international segmentation. These two findings refute our first working hypothesis.

The results for the post-crisis period have validated the second hypothesis, except for Bulgaria. Stock markets from Poland, Czech Republic, Hungary and Romania are considerably more sensitive to shocks from international developed markets. Conclusion: the existence of contagion phenomenon in Central and Eastern Europe.

The implications of the results reveals that the potential risk diversification in the markets of Central and Eastern Europe is limited to foreign investors, especially in the second period, except the stock market in Bulgaria.

In the literature is often cited the impact of investor irrationality on the volatility of stock market. In this sense, the objective of this study was to empirically examine the behavior of investors in cases of unexpected events. It is essential that we followed changes among their reaction before and after the 2008 crisis.

States which have been subject of the study are: Bulgaria, Czech Republic, Poland, Hungary, and Romania and the period of analysis is from January 2, 2003 - July 31, 2012.

The results, briefly shows that capital markets react under over-reaction hypothesis, except the Czech Republic. However, we could not emphasize that investors in the markets from Central and Eastern Europe have become riskier after the global financial crisis.

Overall, these results are related to the implications for strategies that can be adopted by investors in emerging Europe markets. Of interest to us, the implications of this study are related to the extent that stock market volatility is explained by investor behavior in Central and Eastern Europe. Over-reaction of investors is translated into higher volatility of stock indexes, both prior the global economic crisis and after its onset. The potential mimetic behavior explains therefore the volatility dynamics over time.

Within the *fourth chapter* we endeavored emerging capital market volatility and its determinants.

The encyclopedia of variables that have an impact on the volatility of stock prices is really substantial. Among these factors may be mentioned macroeconomic indicators such as, free movement of capital flows, crisis, contagion between markets, along with many other observable events. On this inventory, investor psychology and subjectivity are adjacent. But although many attempts to explain the complete causality of this phenomenon, this holistic treatment is far from satisfied.

Currently, at European level, capital market is facing a number of disturbances on the background of the economic crisis. Liberalization of the economy and hence financial markets, EU accession and entry into the "round dance" of globalization had several significant successes and failures. Thus, if some issues were resolved by the free movement of capital and goods, there were a number of new challenges such as the presence of contagion and systemic risks that lead inevitably to greater fluctuations among financial asset prices.

Starting from the idea that international factors exert a significant impact on stock market volatility, we nourished the belief that the launch of this hypothesis among markets in Central and Eastern Europe will be successful.

The analyzed stock indices are those related to markets in Bulgaria, Czech Republic, Poland, Romania and Hungary. On the other hand, the variables that explain the volatility are interest rate, exchange rate, industrial production index and a proxy to emphasize external causes - SP500 stock index. The analysis period is between October 2003 and July 2012.

The results briefly have validated our hypothesis and pointed out the following:

- Decreased number of national macroeconomic variables which explains stock market volatility, in Poland, Czech Republic and Hungary, after structural break;

- In both subperiods, U.S. stock index is the primary determinant of the volatility of indices WIG40, PX50, BUX and BET;
- The volatility of Bulgarian stock index is determined in both subperiods only by the American stock index.

Even within regions, disparities in the determinants of volatility in capital markets are pronounced. Perhaps the heterogeneity of the characteristics of the economy and financial system, investors' behavior, inherited informal institutional heritage and other issues affect different emerging capital markets, even in an increasingly integrated context.

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