## East-European stock exchanges in the context of financial crisis

Cătălina Claudia SAVA

Bucharest University of Economic Studies claudiac\_2001@yahoo.com

**Abstract.** For the capital market, the crisis means, first of all, the decrease of the financial instruments quotations and of the trading volumes. These had occurred in conjunction with the modified investor's behaviour, which radically changes their investment options, withdrawing the money invested in the market in favour of investing in the banking deposits, art objects and precious metals.

**Keywords:** crisis; liquidity; market; investment; capitalization.

JEL Codes: G010, G200.

REL Code: 11B.

The financial analysts are considering the collapse of US Bank Lehman Brothers as the starting point of the "visible crisis" for the global economy and the moment when the lowest level of confidence in the financial markets was reached. Generally speaking, the financial crisis has started one year and a half before, but effectively, the crisis was more visible after the Lehman Brothers collapse; the Lehman Brothers was the instrument triggering the world economic recession. This moment was considered as a very debatable one, and, from now on, nothing could be hidden on the markets. Starting from now, the competent authorities have discussed about the rescue packages, about the infusion from public funds for the financial colossus considered "too big to fail" (Daianu, 2010). The decision of financing these big institutions was taken having in mind the impact of the collapse on the activities linked to the financial institutions around the world and the number of investors involved in. The immediate consequences were as follows: the increase of deficits and public debts, the risk of a liquidity crisis and an insolvency crisis.

If, initially, the denial of financing from public money was considered as unacceptable way because of the systemic risk to be involved, after the Lehman Brothers moment, the governments have reviewed their decisions and political positions entirely. One reason for this change was the position stated by the civil society vis-à-vis to the financial packages, compensatory or contractual, received by the board members of the banks and financial institutions in difficulty. If a financial giant in need is considered too big to be allowed to collapse, solutions at two major issues must be found: the moral hazard<sup>(1)</sup> and the access to the public founds.

The analysts consider that there is also a good side, namely the restoration of the economics to fair bases, the rethinking of the regulatory and supervisory financial system and the return to the issue of the financial groups. This means the recovery of the global financial system.

The consequences of the financial crisis at the global level are also manifested in Romania, especially through contagion. The effects of the crisis were manifested not only at the financial and capital markets level, but also at institutional level, namely at the central banks, supervisory and regulatory capital markets authorities level. Strengthening the prudential and transparency rules were the first measures adopted at global level and also in Romania.

First companies affected by the financial crisis were the investment firms, whose number decreased constantly during 2009-2011:

Number of investment funds in the period 2009-2011

Table 1

1 value of investment rands in the period 2007 2011					
Types of participants	Participants 2008	Participants 2009	Participants 2010		
SSIF (Investment firms)	70	61	54		
Credit institutions	5	8	7		

The market capitalization during 2007-2010 is not at all an encouraging sign, even if it is analyzed independently or in absolute terms. By comparison, as shown in the table below, Bucharest Stock Exchange begins with a lower capitalization than Bulgarian stock exchange, but it ends by doubling it, even though it has much lower values than the Polish and Hungarian stock exchange.

Absolute market capitalization

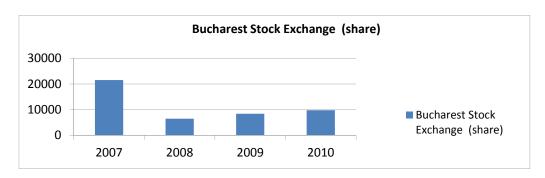
Table 2

(million Euro)

Market capitalisation	2007	2008	2009	2010	2011
Bucharest Stock Exchange	21,524	6,474	8,402	9,776	10,817
Budapest Stock Exchange	31,528	13,326	21,093	20,624	14,630
Warsaw Stock Exchange	144,323	65,178	105,157	142,272	107,482
Bulgarian Stock Exchange	41,821	6,371	6,031	5,498	6,358

Data: www. fese.be.

The market capitalization in absolute value (million Euros) recorded the highest level in Poland, the Warsaw Stock Exchange holding the first place through the analysed states, during a five year period. In 2007, Romania was on the last rank in relation with the market capitalization of the listed companies with a value of 21.524 million Euros, and in 2010, Bucharest Stock Exchange has succeeded to compete Sofia Stock Exchange, reaching the level of 9776, (approximately 45% lower than in 2007), before the global crisis onset. After the 2008 sudden fall, the slight increase of the market capitalization value shall be closely linked to the financial performances of the five financial investment companies and, also to the listing, at the beginning of 2011, of Proprietatea Fund.



**Figure 1.** Market capitalization during 2007-2010 – Bucharest Stock Exchange



Figure 2. Market capitalization during 2007-2010 – Warsaw Stock Exchange

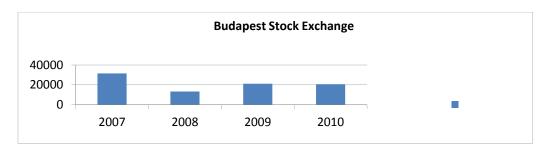


Figure 3. Market capitalization 2007-2010 – Budapest Stock Exchange

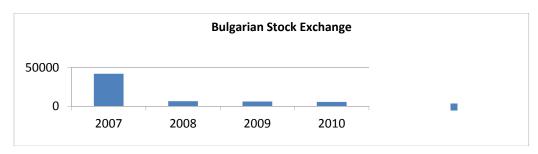
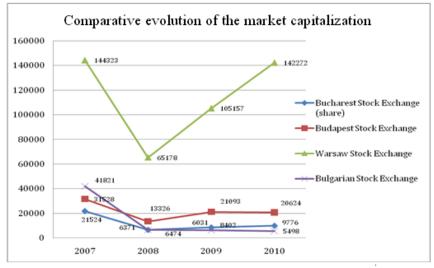


Figure 4. Market capitalization during 2007-2010 – Bulgaria Stock Exchange

Analysing the evolution of this indicator during the four years mentioned period, it can be noticed that 2008 was the crucial moment of that period, registering significant decreases of the market capitalization level in the above analysed four states, especially for Warsaw Stock Exchange. However, unlike the other countries, following that moment (during 2008-2010) the Warsaw Stock Exchange recovered the loss, reaching, in 2010, a similar level as in 2007. This was possible thanks to the consistent policy of the Polish government which very much supported the national capital market and the Warsaw Stock Exchange. However, the support given to the Polish stock exchange, mentioned whenever it is analyzed, either by itself or by comparison, represents, paradoxically, the element making impossible any comparison. This

is due to the fact that a state-owned exchange, whose shares and options are part of an economic state policy, consistent and watchful to achieve its objectives on a short and medium term, cannot be compared with any other stock exchange having fundamental different features: private company, circumstantial decisions, reduced state support. The privatizations of state-owned companies through the capital market increased both the confidence and interest of the retail investors, but also of the institutional investors in this market.



Data: www.fese.be.

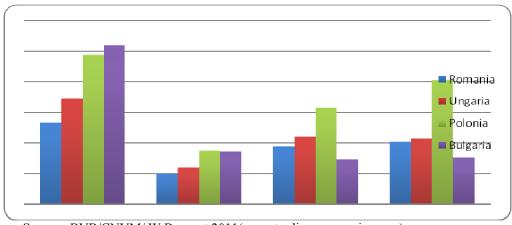
Figure 5. Comparative evolution of the market capitalization

As in the case of the absolute value of the market capitalization, also in the case of the market capitalization to GDP ratio, the highest value was registered in Poland (40.6% in 2010), followed by Hungary, Romania (21.25% in 2010) and Bulgaria.

Market capitalization to GDP ratio

Table 3

				(%)
Market capitalization to GDP ratio	2007	2008	2009	2010
Romania	26.54	9.96	18.82	20.4
Hungary	34.56	11.95	21.97	21.25
Poland	48.74	17.4	31.41	40.6
Dulgaria	51.75	17.00	1/162	15.25



Source: BVB/CNVM/ W.B raport 2011(www.trading economics.com).

**Figure 6.** The evolution of market capitalization to GDP ratio during 2007-2010

As it can be noticed, the economic growth registered in all areas of Europe in 2007 is reflected in the large share of market capitalization to GDP of the states analyzed. Consumption in that period was at high levels which generated a large gross domestic product, but doubled by the population appetite for investments on the capital market. The financial crisis triggered in 2007 led to a significant decline in investments and consumption, 2008 being a year of decline in all four countries analyzed as compared with the previous period. Although a significant decrease was registered in Poland, given the great advantage of this capital market to other markets, we have concluded the Warsaw Stock Exchange remains on first place in the region. Romania at a rate of 9.96% is still in the last position. The year 2009 showed a return of the entire financial sector but the level before the financial crisis is still far from being reached. The year 2010 has marked a stabilization trend. The year 2010 shows Poland as the largest share of market capitalization to GDP (40.6%) with a spectacular comeback, confirming the leading position in the region. Romania is ahead of Bulgaria in the share of market capitalization to GDP, with a share of 20.4%.

As regards the number of listed companies the first two places are occupied by Poland and, surprisingly, Bulgaria, that although it has a large number of companies admitted to trading, the market capitalization as shown above is small. Romania ranks 3 in this hierarchy.

Table 4

7871 1 4	• • 1		1 / 1	T 4
The number of	companie	licted on	hatelinaar	marzate
I HE HUHHDEL OF	COMBUALICS	usicu vii	ICYUIAICU	IIIAI KELS

Number of companies admitted to trading	2007	2008	2009	2010
Bucharest Stock Exchange	54	64	64	69
Budapest Stock Exchange	41	43	46	52
Warsaw Stock Exchange	375	458	486	585
Bulgaria Stock Exchange	369	399	399	390

Source: www.fese.be.

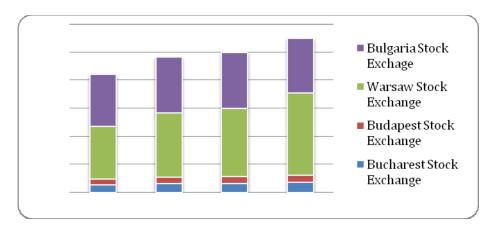


Figure 7. Number of companies admitted to trading

Analysing the figure and the data above, the Warsaw Stock Exchange spectacular comeback after the onset of the crisis in 2007 and the reach of market capitalization level before the crisis was due, mainly, to attracting new issuers to the market, overwhelmingly higher than in other countries from the analyzed region.

Compared to Romania, where on the Bucharest Stock Exchange were recorded, in the analyzed period, just two initial public offerings, on the Warsaw Stock Exchange were developed a number of 342 initial public offerings. Unfortunately, neither the other countries in the region have not achieved a sustained promotion of the capital market and the attraction of new companies to raise funds through this method, thus along with the crisis effects for the stock as a secondary market, the capitalization levels registered low values. Actually, the Warsaw Stock Exchange is the stock of Initial Public Offerings, thanks, as I have already said, to the Polish government's policy to conduct privatization operations using capital market mechanisms. The Polish Stock Exchange was ranked the second position after the London Stock Exchange, in terms of value of the initial public offerings (IPOs). For example, in 2009, the number of public offerings was 38, and their value reached approximately 1.6 billion Euros. A year before the one in which the world economy has seen strong contractions, the amount raised through public

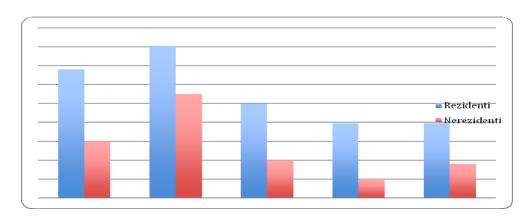
offerings was 2.5 billion Euros. It is true that these performances were achieved in a very good economic context, Poland recording an economic growth of 5.1 in 2008, 1.6 in 2009 and 3.9 in 2010.

Table 5
Size of new companies admitted to trading as a result of the performance of IPO

Size of new companies admitted to trading as a result of the		periorn	periormance of it o		
Number of new companies admitted to trading	2007	2008	2009	2010	
Bucharest Stock Exchange	1	2	0	0	
Budapest Stock Exchange	3	4	4	6	
Warsaw Stock Exchange	105	89	38	110	
Bulgarian Stock Exchange	9	7	10	0	

Source: www.fese.be, www.bse.hu.

With regard to the foreign investments situation in Romania, in the analysed period, the same trend as for other indicators, respectively a sudden drop in the purchases on the capital market in 2008, can be observed (the following year after the onset of the financial crisis) and a slight recovery in 2009 and 2010, though this recovery was insufficient for that the value of foreign investments to reach the reference value in 2007. In 2010 the value of foreign investments on the Romanian market increased by 23% from 2009, but below the level which is considered as reference in 2007, respectively 5.535 million lei.



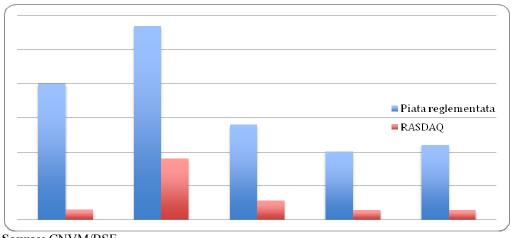
**Source:** Romanian National Securities Commission.

Figure 8. The evolution of foreign investments on the Romanian capital market

With regard to the analysis of the activity of the main stock exchange in Romania, Bucharest Stock Exchange, the indicators considered as relevant are:

- a) The average daily value of trading;
- b) The volume of shares traded;
- c) The fixed income instruments trading volume.

## A. The average daily value of trading on Bucharest Stock Exchange



Source: CNVM/BSE.

**Figure 9.** The evolution of daily average trading value on BSE

Regarding the daily average trading at BSE, linked to all other indicators, the record is reached in 2007, before the financial crisis, both on the regulated market segment and RASDAQ market. During 2008-2010, the average trading value is significantly lower, but there is a trend to stabilization at a level of approximately 20 million Lei.

In 2010, the average trading value on the BSE regulated market increased by 7.8% as compared to 2009, while on RASDAQ market the increase was only by 3%.

As demonstrated in all areas and in all previous financial crises, stopping the existing financial domino effect (subprime crises followed by the Greece and the Euro crisis) imposes severe and incisive measures. Restoring investors' confidence will be difficult and it seems that this would be achieved by EU convergent measures in the field of taxation and through a process of recapitalization of banks, thus offering the possibility to extend the short-term loans and to lower the refinance costs, refinancing being absolutely essential in these times.

All these measures will lead to fiscal discipline which must be maintained for a long period of time and sustained by competitiveness and productivity. There will be no situations in which the states register record public debt reported to the levels of productivity and competitiveness, proving that the economic models characterized by a balance between budgetary constraints and economic incentives have better dealt with the systemic shocks caused by global financial crisis.

## Note

(1) Moral hazard – encorgament of bad practices by eliminating the market exit risk.

## References

Anghelache, Gabriela, Nan, Sanda, Badea, Dora, Ioacără, Anca (2005). *Reglementări actuale pe piața de capital*, Editura Economică, București

Anghelache, Gabriela (2009). Piața de capital în context european, Editura Economică, București

Daianu, D. (2010). Când finanța subminează economia și corodează democrația, Editura Polirom, București

Dragotă, M. (2009). *Piețe financiare: structură, instituții, instrumente*, Editura ASE, București Prisacariu, Maria, Ursu, S., Andrieș, A. (2008). *Piețe & instrumente financiare*, Editura Universității Alexandru Ioan Cuza, Iași

Stoica, V., Corbu, I., Murariu, Ioana (2006). *Sistemul bursier internațional*, Editura Fundației România de Mâine, București

www.bvb.ro www.kmarket.ro www.capital.ro www.fese.be