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*Mortgage crisis has affected indirectly three risk levels of the Romanian economy: the currency, external financing and the stock exchange. Foreign exchange market in Romania is of little depth, open to the speculation stormings. Romanian stock indices fell by over 50% in value in 2008, more harshly than those in mature European markets. This study investigates the impact of the financial crisis on the BET index, also on the companies that belongs to the index through a set of indicators.*

*Keywords: financial crisis, stock exchange, BET index*

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**Introduction**

Current financial crisis of unprecedented proportions, which has turned into a global economic crisis, became the dominant object and motivated concerns throughout the world.

The first sign of crisis was given by HSBC Holdings plc (the fourth bank in the world according to Forbes estimates in 2008 and most profitable bank in 2007) which announced very weak financial results in 2006.

Despite the massive interventions and lack of ambiguity, this time, of the European and the U.S. governments, the financial crisis is far from having a credible solution, which provides a clear perspective to economic actors. Moreover, panic appears to invade the market, although in global financial system were injected huge amounts, thousands of billions of dollars and euros, while EU Member States, the European Central Bank, EDF, U.S., Japan coordinates, closer and more transparent than ever, the policies and intervention way.

There are few people who believe that this crisis is not one of goods and services production, none of the research - development, none of the workforce, even one of crediting. There is not a crisis of the real economy. It is a crisis of virtual economy, of banks which have forgotten the basic mission and entered in the dangerous game of derivative products, decoupled from the daily realities of those who work in the real world.

**Evolution of the BET index**

The Bucharest Stock Exchange has not given signs, during 2008, that it will change the downward trend, but there were still moments in which seemed that decreases would moderate, because of macroeconomic data that showed a growth of 8,8% in the first six months of 2008.

Lehman collapse, old financial institution of 158 years, has scarred the basement of international stock markets and the shock wave arrived quickly in Bucharest too, where stocks, many of them considered cheap, after depreciation of more than a year from the triggering global financial crisis, its deep decrease. In just two days, the stock exchange lost 3.2 billion euros ([www.zf.ro](http://www.zf.ro)). Moreover, financial turmoil turned the Bucharest Stock Exchange in the number one loser of emerging markets.

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BET index fell from 8449.36 points on the 3-rd of January 2007 (the maximum being recorded on the 24-th of August 2007 at 10,813.59 points) only to 2901.1 on the 23-rd of December 2008 (a significant decrease of over 60%). Depreciation of the BET index is more drastic compared to other indices for the same period, the indices have recorded depreciation of 31% (DJ Industrial index), 37% (Nasdaq), 30% (FTSE 100) and only 29% (DAX index) (author's calculations).

### **Impact of financial crisis on companies**

Capital market is a barometer of the economy, here quantify not necessarily the actual results, but especially the future results anticipated by investors. This is why, although the financial results of several Romanian companies listed were very good, price evolution was a decline. At this time we talk about a downward trend over the medium term, and this trend will not change in one ascending the extent that prospects for a recovery of the global economy (are real and accepted by investors).

In 2008, the company Petrom S.A. appealed, for the first time since the privatization, at bank loans. Also, the management company decided that no longer paid dividends for the year 2008, and a significant reduction in investments in 2009. ([www.zf.ro](http://www.zf.ro))

In October 2008 S & P lowered the rating Transgaz for loans in foreign currency from BBB-, the negative perspective, to BB +, based on reduction of the country's rating. ([www.wall-street.ro](http://www.wall-street.ro))

Biofarm Company recorded financial losses of 33.4 million lei, in the context of reducing the market value of portfolio investment stocks (at end 2008, Biofarm made a provision of 35.1 million lei for depreciation of portfolio shares to listed companies on the Bucharest Stock Exchange). Thus, in 2008 the company recorded losses of 21.3 million lei. (Financial Situations of the firm)

Azumures company decided in January 2009 temporarily halt production activities and sending in technical unemployment 2000 employees against the economic problems related to global financial crisis, which have resulted in the recovery of products, both because they decrease the price on market and due to drastic decrease in demand for chemical fertilizer market. (administrators's report)

The vast majority of multipliers have decreased significantly as a result of decreasing the market price, the price of many shares were overvalued before the global financial crisis and following the events the price of securities listed on stock exchanges have come to their values true, then from 2008, the price of shares has depreciated significantly.

#### ***The price of shares***

The price of shares should be given only by the requirements of investors. Based on the information that they have in their possession or they buy it in the form of consulting, of investment profile and the experience gained by trading, investors take decisions to sell or buy. That is why the existence of unknown information to the majority (confidential information) and those are used in the market seriously distorts the price of a share until its publication. Easy, cheap and undifferentiated access to information is one that ensures market integrity, which virtually all market exchange can not develop. The evolution of market prices of 10 companies is presented in table number 1 (we took into account the adjusted prices).

Table no.1

Market price			
Ticker	2006	2007	2008
TLV	1.0100	0.9000	2.6200
SNP	0.5459	0.4779	0.1810
BRD	17.9080	27.4000	8.2500
TGN	N/A	262.3400	122.0000
RRC	0.0875	0.1090	0.0185
TEL	33.4400	39.6400	11.0000
BIO	0.6600	0.5900	0.0780
IMP	0.5800	0.5000	0.0300
BRK	0.7200	1.9300	0.0920
AZO	0.1450	0.1970	0.1550

Source: Author's calculations based on the financial situations of the companies

Decrease the price of profitable shares from the stock exchange is a consequence of the international economic crisis, which are felt by the listed companies, from autumn 2007, high inflationary pressures affecting performance of all companies, possibilities of financing the much more difficult business due the increasing of financing cost (in lei - as a result of increased interest in lei, euro - as a result of depreciation of Romanian currency and the increase of foreign exchange rates), a lower purchasing power of population, which will materialize in a lower consumer and, in small turnover of Romanian companies, the reducing of foreign investments in emerging markets (including Romania) etc. The price of many companies has come to be even below the nominal value

#### **Stock exchange capitalization**

Stock exchange capitalization is an indicator of the potential of a stock exchange.

Developments on the Romanian capital market are influenced by the rank of financial education of Romanian investors and namely that it is mostly a speculative side. Given that the current subcapitalization of the stock exchange is critical, with the consequence that many Romanian assets, from the stock exchange, are significantly underestimated on the Romanian stock market were changes in investment behavior. Foreigners buy at very low prices and Romanians sell of fear, which can be explained just by the degree of reduced financial education of Romanian investors. From this reason, the stock exchange capitalization of BET index dropped significantly in 2008. Evolution of equity market capitalization is illustrated in table number 2.

Table no.2

Stock exchange capitalization			
Ticker	2006	2007	2008
TLV	3,967,273,950	5,499,485,291	2,776,403,999
SNP	30,922,018,740	27,070,219,373	10,252,583,609
BRD	12,480,112,384	19,095,101,593	5,749,437,524
TGN	N/A	2,725,421,140	1,267,444,336
RRC	1,846,186,650	2,299,821,084	390,336,606
TEL	2,451,080,639	2,905,736,549	806,334,573
BIO	309,872,602	576,757,396	85,399,197
IMP	580,000,000	1,000,000,000	60,000,000
BRK	78,639,175	365,888,798	26,631,395
AZO	76,274,732	103,628,429	81,535,058

Source: Author's calculations based on the financial situations of the companies

#### **EPS – earnings per share**

Information on profit per share evaluates the theoretical value that will receive the holder of shares if we assume that the issuing company would distribute the profit to shareholders without anything to stop for investment and reserves capital. Basically this is the added value that a company generates in a year for each of his shares.

A high indicator reflects the confidence of investors in the company management. Instead, a low level indicates a lack of confidence in current management of the company, also the company is facing financial problems.

Evolution of EPS is more useful in characterizing the progress of the company, rather than simply annual trend of profits. The multiple for the 10 companies is presented in table number 3.

Table no.3

EPS			
Ticker	2006	2007	2008
TLV	0.042946	0.077294	0.043092
SNP	0.040515	0.031390	0.018049
BRD	0.940709	1.315995	1.942146
TGN	22.900673	21.562118	20.409244
RRC	-0.002178	0.000000	0.000000
TEL	3.830413	0.710006	0.536709
BIO	0.031712	0.025883	0.000000
IMP	0.020771	0.007095	0.004114
BRK	0.286704	0.312602	0.005541
AZO	-0.001971	0.105724	0.096147

Source: Author's calculations based on the financial situations of the companies

Financial crisis has affected the results of listed companies on stock exchanges. The companies entering the composition of BET index, Romanian Bank for Development is the only exception, the result of its action has doubled in 2008 (EPS = 1.94) compared with 2006 (EPS = 0.94). In 2008, the vast majority of companies have registered a subunitary result per share or even zero, because of reduced profits and losses recorded by the entity.

#### **PER - price earning ratio**

Coefficient of the stock exchange capitalization measures how often investors are willing to pay that profit what return for a share. Benefit per share indicates the potential of growth and the risk of a company. For businesses with better prospects for sale (in economic conditions and constant risk), the coefficient of capital stock exchange will be higher. Lower values will be recorded in the case of hazardous activities, which are expected to decrease in profits.

PER coefficient is very important in the economic and financial exchange analysis of multinational companies in the expeditions field of goods whereas it presents the number of years in which the investor recovers from result the amount of money that it has submitted to the acquisition of shares. If the coefficient is lower, the acquisition of these shares becomes more attractive for any investor. If the yield is the highest so PER is lower. Consequently, analysts recommend the buying of securities with lower PER (Alexandru Todea, 2005). PER multiple values are presented in Table 4.

Table no.4

PER			
Ticker	2006	2007	2008
TLV	33.00	16.18	8.17
SNP	13.53	15.22	10.03
BRD	19.04	20.82	4.25
TGN	N/A	12.17	5.31
RRC	N/A	N/A	N/A
TEL	8.73	55.83	20.50
BIO	24.37	42.68	N/A
IMP	31.71	135.12	7.29
BRK	4.21	9.54	19.57
AZO	N/A	1.86	1.61

Source: Author's calculations based on the financial situations of the companies

Under the influence of financial crisis, companies PER have decreased significantly (except SSIF Broker).

*PBR (price-to-book ratio)*

The multiple measures the value that the market adds to the management and organization way of the company, these two elements are factors that influences the business growth. The indicator is calculated as the ratio between the stock price and value of shares. A well managed company with a strong management and an organization that works efficiently, it will have a greater market value than the historical value of its assets.

Shares of companies with a low PBR is an investment with a low risk, through the fact that book value is a level which keeps the market. The book value is considered the level beyond which the market price will not fall, because the company will always remain the option to liquidate or sell its assets at their book value. A low PBR is considered to ensure a "safety margin", many analysts avoid shares with a high PBR in the process of portfolio formation. They get the idea that, as the other indicators remain the same for two shares, one with a low PBR is safer. In Table 5 we presented the PBR in the period 2006-2008.

Table no.5

PBR			
Ticker	2006	2007	2008
TLV	5.6509	4.5454	1.6200
SNP	2.5089	2.0532	0.7556
BRD	5.3529	5.5248	1.3076
TGN	N/A	1.7393	0.5763
RRC	0.7876	1.1142	0.2475
TEL	1.1031	1.2361	0.3421
BIO	4.3933	3.8190	0.6584
IMP	3.5476	3.0609	0.1799
BRK	0.9530	2.3210	0.1680
AZO	0.2878	0.3042	0.2084

*Source: Author's calculations based on the financial situations of the companies*

In 2008, PBR multiplier of companies has declined, reaching even subunitary at the entities from BET index. Theoretically, a low level of PBR would indicate a safe investment, but the current crisis conditions we can say that the multiplier can "induce" in error. The reduced value is given by the undervalued prices of shares's companies in the current period.

***Return on equity (ROE)***

The financial rate shall be determined by reporting the net profit to shareholders' equity of the company. ROE focuses on the efficiency of invested capital by shareholders. A low rate may lead to dissatisfaction for shareholders that enables the distribution of dividends on expectations, but may also express any overcapitalization. Another interpretation of the low level of this indicator may be the policy of the profits reinvested in increasing assets and future revenue flows.

If you take into account that many of these investments are made in research and development activities, that will bring profits, but not in the short term, it is possible that in the future to increase ROE, giving satisfaction to shareholders. On the other hand, a rate too high indicates a subcapitalization and therefore a high degree of indebtedness.

The financial rate of return on equity put in evidence the efficiency equity and the investment made by shareholders of a company by purchasing company shares. The profit, important source of financing the development of an activity, is an undertaking part of the capital of a company, paying, first, the shareholders participation through dividends. An increase of this indicator shows an efficient activity in terms of equity fructification. The rate values of return on equity registered by financial companies from the composition of the BET index are presented in table number 6.

Tabl no. 6

ROE			
Ticker	2006	2007	2008
TLV	17.123%	28.099%	23.156%
SNP	18.544%	13.486%	7.535%
BRD	28.119%	26.535%	30.783%
TGN	19.854%	14.296%	10.849%
RRC	N/A	N/A	N/A
TEL	12.635%	2.214%	1.669%
BIO	18.027%	8.948%	N/A
IMP	11.189%	2.265%	2.466%
BRK	22.634%	24.333%	0.859%
AZO	N/A	16.327%	12.928%

Source: Author's calculations based on the financial situations of the companies

The ROE indicator present oscillating values in 2008 compared to previous years. Companies such as Petrom, Transelectrica, SSIF Broker and Azomures present the lower values of ROE with negative impact on the level of dividends to be granted. Other two companies, Biofarm and Rompetrol Well Services, have negative values of profit, inducing a zero level of the indicator. Only BRD and Impact have higher values of ROE compared to previous years, which shows that companies produce an efficient activity of equity fructification.

#### **Dividend per share**

The indicator expresses the net remuneration that return to a share. A stable dividends policy is perceived as a safety and soundness sign. (Ioan Nistor, 2004)

A high level of this indicator attracts investors seeking safe returns in the short term. However low level of the indicator may mean a redirection of profits to the various investment projects, this is a good time to buy shares. The granted value dividends are presented in table number 7.

Always dividend policy of listed companies was one of the factors that an investor looks, one of the criteria that can even make the divide between companies on the list of purchases and ignored. Unlike other parameters that characterize the attractiveness of a company, more abstract, such as multipliers PER, PBR, indicators of profitability, liquidity or efficiency or hard quantifiable parameters, such as ownership structure, management, prospects for the sector, etc., dividend is something tangible, measurable and perfectly liquid.

Tabl no. 7

Dividend per share			
Ticker	2006	2007	2008
TLV	0.0000	0.0000	0.0472
SNP	0.0179	0.0191	0.0000
BRD	0.3672	0.5921	0.7283
TGN	11.6900	9.6600	10.4700
TEL	1.4700	0.3600	0.3000

Source: Author's calculations based on the financial situations of the companies

In the past they were a rarity the companies offering an attractive dividend yield, because earnings from growth stocks eclipse everything. But it might as dividend to regain the importance in the investment decision, the daily realities are totally different from those of a year ago or more, two years. Everything is to keep companies their dividend policy, is very likely to witnessing at changes this year, because the need for liquidity and funding sources is now a priority for the company.

## **Conclusions**

The great problem of emerging capital markets, such as Romanian market, was the withdrawal of foreign investors, investors who went in search of better returns.

In the actual context investors are very careful in investing their capital, and the market has no longer the attraction of taking into account the negative economic data that they present.

Given the conditions in which the current subcapitalization of stock exchange is critical, in consequence many Romanian assets are significantly underrated, also on the Romanian stock market there were seized some changes in investment behaviors.

In 2008, the vast majority of companies have registered a subunitary EPS or even zero, because of reduced profits and losses recorded by the entity. Consequently, the PER's companies declined significantly, too.

Also, the profitability indicators have worsened, which shows a decrease in capacity management companies to made profit.

The crisis was beneficial in terms of political dividends, as more companies have started to pay dividends to attract investors.

The vast majority of multipliers have decreased significantly as a result of decreasing the market price, the price of many shares were overvalued before the global financial crisis and following the events the price of securities listed on stock exchanges have come to their values true, then from 2008, the price of shares has depreciated significantly.

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