Market informational efficiency and investors' rationality: some evidences on Romanian capital market

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Abstract

Most of the studies concerning informational market efficiency focus on the fact that assets' returns follow a random walk and, as result, investors have no ability in predicting future returns, and, therefore, they could not obtain abnormal returns. This paper aims in revealing the fact that even if econometric tests confirm the random walk hypothesis, this is not sufficient for capital markets to be informational efficient. The evidence on Romanian capital market shows there are large differences between market capitalisation and intrinsic value of institutional investors' portfolios, and even though, empirical tests confirmed weak form on informational efficiency, this aspect could be rejected, and investors' rationality could be questioned.

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1. Introduction

According to Fama [1970] even if financial markets are not able to fulfil all the sufficient conditions which are implied by the informational efficiency hypothesis, still it is possible to state its efficiency due to *fair game model*. The three forms of informational efficiency defined by Fama (weak, semi-strong and strong) could be considered as different levels of investors' ability to correctly valuate shares. In consistence with Fama theory [1976], *in an efficient market the true expected return on any security is equal with its equilibrium expected value*. At this time, Fama's theory on informational efficiency represents, at least for emergent capital markets, a "corner-stone" for any discussion about shares pricing. Informational efficiency hypothesis does not recommend a model for stocks' price evaluation, but reveals investors' ability to evaluate stocks in a proper manner. Fama [1970] presented various empirical tests, which had been previously performed in order to analyze the possibility of obtaining abnormal returns due to historical information about stocks, or due to publicly available or private information affecting them (serial correlation, distributional evidence, events studies). Several years after, Fama [1991] reviewed his 1970 work and classified empirical tests of market efficiency in the following categories: (i) tests for return predictability; (ii) event studies; (iii) tests for private information, which follow the three forms of informational efficiency. Megginson [1997] completed Fama's classification with tests for rational fundamental valuation.

Most of the studies in Finance referring market informational efficiency hypothesis, express that it could be empirically tested by using some econometric methods based on random walk movements of returns. The significance of such tests is that investors could not forecast future returns of assets, if they follow a random walk. If the future price is not predictable, these tests confirm that each condition implied that no one could obtain abnormal returns is fulfilled. Practically, this statement represents the main stream in Finance literature (Megginson, 1997).

The econometric tests used in order to investigate efficient market hypothesis (EMH) reject the fact that returns are predictable. If it is a possibility to forecast assets' returns, there are investors which could use this capacity in order to obtain systematic

returns, and, obviously, there are investors which could obtain systematic losses. The main tests used to confirm EMH are : (i) tests of the serial correlation (see Kendall [1953], Alexander [1961], etc.); (ii) simple trading rules tests (see Alexander [1961], Fama and Blume [1966], etc.); (iii) overreaction tests (see, for example, Jegadeesh [1990], Jegadeesh and Titman [1993]); (iv) tests of long-horizon return predictability (see DeBondt and Thaler [1985], Poterba and Summers [1988], Fama and French [1988]). Other studies concerned to price adjustments after events (see the effect of the first announcement of dividends - Pettit [1972], Asquith and Mullins [1983], Michaely, Thaler and Womack [1995], etc.; the impact of a decrease/increase of dividends payments - Pettit [1972], Aharony and Swary [1980], Kalay and Loewenstein [1986], etc.). Finally, other tests try to confirm if some agents could obtain abnormal earnings (see tests of the capacity of the mutual funds managers to obtain an excess return - Sharpe [1966], Jensen [1968], Bjerring, Lakonishok and Vermaelen [1983], Ippolito [1989], Grinblatt and Titman [1989], Hartzmark [1991], Elton, Gruber, Das and Hlavka [1993] or tests of the profitability of insider trading – see Jaffe [1974] and Seyhun [1984]).

Based on the methods mentioned above, there were elaborated many studies regarding informational efficiency of emerging capital markets. On one hand these studied confirmed EMH its weak form (Branes [1986] – Kuala Lumpur Stock Exchange; Chan, Guo and Pan [1992] – major Asian financial markets; Cheung, Wong and Ho [1993] – Korea and Taiwan financial markets), and, on the other hand they rejected this hypothesis (Claessens, Dasgupta and Glen [1995] – 19 emerging markets). As well, capital markets of Central and East-European Ex-Comunist countries represent significant evidence for studies referring EMH (Nivet [1997] – Polish capital market, Chun [2000] – Hungarian capital market, Gilmore and McManus [2003] – Czech Republic, Poland and Hungary).

However, the absence of abnormal returns is not a sufficient condition to state the capital market is informational efficient. Fama [1970] states a market is informational efficient, if prices always fully reflect all available information. Stocks' price could follow a random walk but this random walk could be completely independent of available information. For instance, stocks' price could include diverse information, but incorrectly, and as a consequence, market will over or under-react to such information.

Finally, even if there is no investor which could obtain abnormal returns, still remains one major issue, if stocks' price fully indicates its intrinsic value. For instance, Shiller [1981], Grossman and Shiller [1981], Shleifer and Summers [1990] focused in their studies on the informational significance of stocks prices. Practically, such situation is depicted in Figure 1.
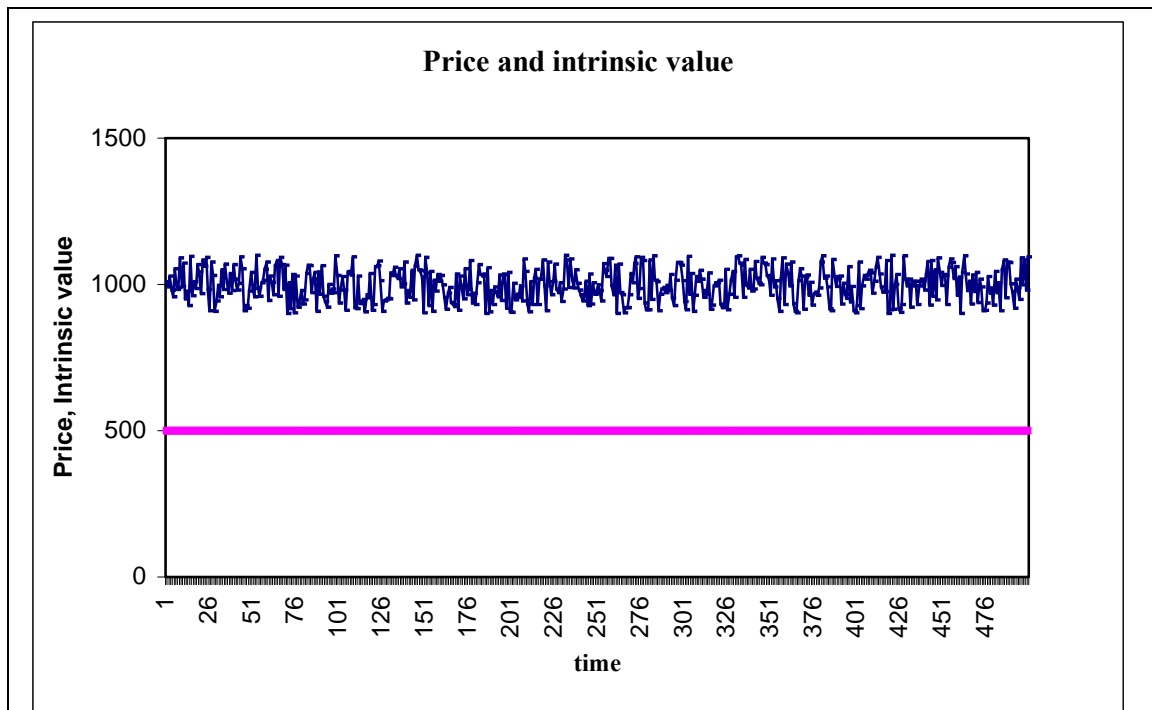

Figure 1: It is a permanent lag between price, which follow a random walk, and the intrinsic value (that is considered constant, for simplification).

The main issue in order to confirm if there is a large difference between stocks' market price and their fair value is given by the fact that the forecast model used is not an appropriate one. Under these conditions, we emphasize that the market price could reflect the "true" value, but due to the fact that the forecast model is not an appropriate one, the "true" value could not be identified.

The aim of this paper is to reveal that on an emergent capital market, specifically Romanian case, even if it were empirically found that assets price follow a random walk, there were observed some market anomalies. For instance, in many cases of bonus shares (shares issued by conversion of the reserves and surplus of the company into shares), shares prices increased, which confirms that Romanian investors' ability to valuate assets

could be questioned, and also the significance of econometric tests which have been run in order to prove market efficiency hypothesis.

This paper is organized as follows. In Section 2 we present the main characteristics of Romanian capital market. Section 3 is devoted to a short literature review referring to the most relevant studies concerning informational efficiency of Romanian capital market. The methodology used in order to reveal some anomalies of Romanian capital market and the empirical results are presented in Sections 4 and 5. The last Section, consists in concluding remarks.

2. Romanian capital markets: a short review

At the beginning of last decade, Mass Privatization Programme (PPM) had a significant influence on Romanian capital market. In 1991, according to the first law of privatization, were created five Private Property Funds (FPPs) to which were allocated 30% of the common stocks of State owned Romanian companies, except strategic and utilities companies. At the beginning of 1995, almost 15 millions peoples used the vouchers from PPM in order to receive some shares at over 5000 companies State owned, which become opened companies and their shares were traded, mostly, at Bucharest Electronic Rasdaq (BER). Those companies which fulfilled each condition imposed by Romanian National Securities Commission (CNVM) were traded at Bucharest Stock Exchange (BSE).

BSE had been re-launched in 1995, but in the first two years it had only a minor role for Romanian capital market. The first significant year of BSE since its re-launching was 1997, when all the shares prices increased, due to foreign investors' interest for Romanian companies. But, despite the optimistic expectations of that period, poor macroeconomic performances, as well as unsatisfactory issuers' financial statements, the lack of transparency for listed companies, and the disregard for minority shareholders' rights did not confirm the boom of Romanian capital market. Due to that situation, in 1998, shares' prices went down as well as investors' interest, until 2002, when it was confirmed a significant recovery of Bucharest Stock Exchange. In 2004 the turnover was

twice larger then the former year, and the returns achieved by investors were the biggest since BSE re-launching. But the most impressive year was 2005, when rising liquidity went to a daily average turnover about 8.7 million euros, almost four times larger then the level attained in 2004. At the end of 2005, BSE capitalization was over 15 billion euros, and turnover about 2.2 billion euros.

In 2006, after 10 year since BSE re-launching, there are still no traded the most important Romanian companies, and, as a consequence, Romanian capital market does not reflect GDP formation. For instance, an important percentage of BSE capitalization is represented by energetic field, a very low percentage is detained by services area, while there is still no issuer from the agriculture sector. As well, until now there was no initial public offer larger then 15 millions euros.

The most traded shares on BSE are those issued by companies from financial sector (e.g. the five Financial Investment Companies, former Private Property Funds – SIF, Romanian Development Bank Group Societe Generale - BRD, Transilvania Bank - TLV), from energetic area (e.g. Rompetrol Rafinare, Petrom), and from pharmaceutical field (e.g. Sicomed Bucharest, Antibiotice Iaşi) which, together, represented 80% of turnover in year 2006.

An interesting feature of Romanian capital market is represented by the five Financial Investments Funds (SIFs) which could be compared to other investments funds traded on financial markets, like "closed end funds" in US or "investment trusts" in UK. In 1996, FPPs, created at the beginning of Mass Privatization Programme (PPM), were transformed and they became the new SIFs. During PPM, almost 2.2 millions peoples invested their vouchers to SIFs, and by the end of 2005, more the half of them sold their shares. At the moment, an individual investor or a group of investors sharing the same interests could not detain more then 1% from SIFs common stocks. SIFs portfolios are heterogeneous, due to the fact that, during PPM, first it was transferred to peoples the 30% of the common stocks of State owned enterprises held by FPPs. After "spending" the 30%, in order to close the privatization process, there was used the rest of the shares, totally owned by state, and managed by State Property Fund (FPS). At the end of PPM, the new SIFs had no shares to the most important Romanian enterprises, and their portfolios were formed by compensating the lost shares with new ones from FPS' stake.

The result is that, at the moment, SIFs hold many shares, but more then half of them are those of unquoted, small size or having no development potential companies. The most important part of SIFs portfolios is represented by the shares detained at commercial banks, which were out of the lists at the time of privatization. Therefore, even until now, due to a poor portfolio management, the 6% held by each SIF on banking companies represents the most valuable. In 2005, it was observed a large increase of SIFs market index (BET FI), about 175%, compared to 2004, but despite this increasing, this paper finding is that SIFs shares' market prices do not reflect the value of their stake held at BCR and BRD.

According to official reported data, cumulated capitalization of the most traded Romanian eleven companies represented 88% of BSE total capitalization, and at the end of 2005, only two companies, Petrom and BRD, held a percentage of 48%, and, respectively, 17% of market capitalization, while blue-chips free-float capitalization (3 billions euros) represented less then 25% from those companies' capitalization (13.5 billions euros) (see Table 1):

Table 1: Market capitalization and liquidity of most traded listed companies on BSE (December, 2005)						
Issuer	Symbol	Free-float (%)	Turnover (mil. euros)	Turnover/ session (thousands euro)	Capitalization	Free-float capitalization
BRD Groupe Societe Generale	BRD	16	147.9	739.4	2,635.0	431.3
Banca Transilvania	TLV	69.24	268.7	1,138.5	810.1	560.9
Sicomed Bucuresti	SCD	19.6	35.5	153.6	158.8	31.1
Antibiotice Iasi	ATB	29.3	11.7	51.2	121.2	35.5
Petrom	SNP	6.2	198.7	856.4	7,372.1	459.3
Rompetrol Rafinare	RRC	15.7	270.0	1,173.8	634.7	130.1
SIF Banat Crisana	SIF1	88	167.7	707.4	371.1	326.6
SIF Moldova	SIF2	89.6	213.5	900.9	322.3	288.8
SIF Transilvania	SIF3	84.1	148.0	622.0	316.5	266.2
SIF Muntenia	SIF4	54.6	79.5	339.8	380.9	208.0
SIF Oltenia	SIF5	81.2	272.4	1,154.2	411.5	334.1
Blue chips (total)			**1,813.6**	**7,837.4**	**13,534.2**	**3,071.9**
BSE (total)			**2,152.1**	**8,712.8**	**15,311.3**	**n.a.**
Blue - chips/Total BSE (%)			**84.3%**	**90.0%**	**88.4%**	**n.a.**
All computations are based on official available data from BSE.						

Financial data reveal the small size, low liquidity of Romanian capital market, and, also, a number of investment opportunities for very few investors. At least due to these features, informational efficiency of Romanian capital market could be questioned.

3. Previous tests on Romanian capital markets informational efficiency

Regarding Romanian capital market, after 10 years since its re-launching, it has been investigated *rationality* of Romanian investors, and efficiency market hypothesis (EMH) represented a useful tool in order to achieve this goal. The tests suggested by Fama [1970] have been successfully applied by many authors. Therefore, for many Romanian researchers it was incentive to proceed on investigating informational efficiency of Romanian capital market. Most of these studies have focused on the weak form of informational market efficiency using in that sense autocorrelation coefficients, normality and stationarity tests (Augmented Dickey-Fuller and Phillips-Perron) in order to test random walk pattern for stock returns. A review of relevant literature on EMH on Romanian capital market is further discussed (see also Table 2):

Table 2: Empirical studies on EMH for Romanian capital market			
Author(s), year	**Sample, period**	**Tests**	**Conclusions**
Dragotă, and Mitrică [2001, 2004]	6 best liquidity assets listed for the first tier of BSE during April 9th, 1998 – October 10th, 2000	Serial correlation tests, stationarity tests, normal distribution evidence, filter rules Serial correlation tests, stationarity tests	Stocks returns follow a random walk. Romanian capital market is not efficient in weak form due to lack of liquidity. Doubts regarding differences between stocks' price and their intrinsic value, and regarding evidence for informational efficiency.
Dragotă, Dămian, and Stoian [2002]	18 assets listed for the first tier of BSE during April 1st, 1997- July 1st , 2002. Tests also included Romanian capital market indexes (BET, BET-C, BET-FI, RASDAQ – C)	Serial correlation tests, stationarity tests, normal distribution evidence	Auto-correlation coefficients are significantly different from zero. Romanian capital market is inefficient in weak form.
Dragotă, Dragotă, and Stoian [2004]	Assets listed on Romanian capital market during 1999-2003	Event studies	Relative rapid adjustments of stocks price to new information on dividends paid or equity incorporation.

Dumitru, Bucşa [2004]	Sample included Romanian capital market indexes (BET, BET-C, BET-FI, RASDAQ – C)	Normal distribution evidence, stationarity tests	Random walk hypothesis is rejected for Bucharest Stock Exchange Indexes. But there is evidence for an increasing efficiency of Romanian capital market along with institutional frame, and Romanian economy openness for foreign investors.

According to these studies, there is no clear evidence for informational efficiency on Romanian capital market. Dragotă and Mitrică [2001] have reached the conclusion, that stock returns follow a random walk, but they also emphasized their doubts on informational efficiency. They have highlighted that the lack of liquidity on Romanian capital market could distort econometric tests and, even if autocorrelation coefficients or stationarity tests reveal a random walk, capital market could not be efficient on its weak form. Further, Dragotă and Mitrică [2004] concluded that there are large differences between stocks' price and stocks' intrinsic value and even if random walk hypothesis is confirmed, it is possible that stocks prices do not entire reflect their intrinsic value. Dragotă, Dragotă and Stoian [2004] also revealed that the most part of the studies which have analysed informational efficiency of Romanian capital market have used classical tools of investigation (scatter representation, autocorrelation, normality or stationarity teste, filter-rules) but they have not paid enough attention to the relationship between stocks prices and their intrinsic values. As well, Dumitru and Bucşa [2004] rejected random walk hypothesis for Romanian Stock Index (BET), but they have expressed their confidence in an efficiency of Romanian capital market improvement.

Most of the studies have been focused on investigating the informational efficiency of Romanian capital market in its week form by using simple serial correlation tests or other similar techniques. However, some studies (Dragotă, and Mitrică [2001], Dragotă, Mitrică [2004], Dragotă, Dragotă, and Stoian [2004]) tried to reveal specific features of Romanian capital market (e.g. lack of liquidity) due to which EMH could be rejected. Moreover, there are studies which identify some anomalies on Romanian capital market that distort its efficiency (Căruntu [2005]).

4. Capital market anomalies: methodology

The methodology used in order to reveal the lack of informational efficiency of Romanian capital market is based on the fact that shares' price does not reflect available information. Therefore, we will test the correspondence between shares' price and their rational fundamental value. In other words, we will test the rationality of Romanian capital markets, but this methodology could be applied for other financial markets, too.

If one investor on capital markets detains investments portfolios, including shares listed on Stock Exchange, present value of his portfolio will be estimated based on market capitalisation of shares included in that portfolio. Practically, the present intrinsic value for a portfolio (IV), at one moment, would be estimated on equation (1):

$$IV = \sum_{i=1}^{n} q_i P_i - Debts \qquad (1)$$

with: i = type of assets included in the portfolio;

q_i = the quantity of i - type assets;

P_i = price of i - type assets (for unquoted shares it was considered the value of those shares).

In some cases, if the investors are larger (controller) shareholders, prices taken from the market could not be an appropriate approximation for their fair value as long as they quantify a minority interest. For this reason, the prices should be adjusted by applying a control premium, and then the price will be higher, at a P_i^* level ($P_i^* \geq P_i$). If we consider such adjustment, the present value for the portfolio would be:

$$IV^* = \sum_{i=1}^{n} q_i P_i^* - Debts \qquad (2)$$

On the other side, some institutional investors, like investment funds, are themselves listed to Stock Exchange. For an informational efficient market, investors, implicitly rational, would evaluate shares in a right way. In the case of an efficient market, market capitalisation for these investment funds (MC) will be equal to the present value of its portfolio itself, so:

$$IV^* = MC \qquad (3)$$

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On the other side, how time market capitalisation for these institutional investors (MC) will be considerable different than the present value of its portfolio itself (IV*), we can conclude that the market is not informational efficient.

5. Empirical results

On Romanian capital market it was observed the fact that SIFs market capitalization does not reflect the present value of their portfolios, and, therefore, informational efficiency of capital market, as well as investors' rationality could be questioned. In order to reveal that anomaly, we proceeded on evaluating the total assets of Financial Investment Funds according to Romanian National Securities Commission (CNVM) regulations, but with some adjustments, due to particularities of SIFs portfolios (see Table 3 and the notes below):

No.	Asset	SIF Banat Crişana	SIF Moldova	SIF Transilvania	SIF Muntenia	SIF Oltenia
	Table 3: SIFs assets value at December 31st, 2005					- mil euros-
1	Deposits and monetary investments (current accounts, treasury bills, deposits, bank certificates) [i]	10.9	28.1	11.8	9.9	4.6
2	Bonds (municipal and corporate) [ii]	3.4	1.0	0.6	1.7	0.0
3	Shares held at opened funds [iii]	0.2	0.3	0.0	0.3	0.2
4	BRD [iv] (each SIFs held at least 5% from BRD Group Societe Generale)	119.3	131.0	129.8	136.7	138.6
5	Other blue-chips (TLV, SNP, RRC, BIO, ATB, SCD) [iv]	42.9	44.1	13.3	16.5	137.6
6	Other BSE shares [iv]	111.2	2.4	20.9	0.8	20.7
7	BER listed and traded companies [iv]	18.1	17.3	68.8	41.6	42.6
8	BCR [v]	254.5	254.5	254.5	254.5	259.5
9	Other closed banks (Banc Post. Eximbank) [v]	4.7	4.5	4.5	0.0	4.8
10	Other closed companies [vi]	24.5	5.3	39.1	32.9	12.8
11	Other shares (unquoted traded companies at BSE. opened unquoted companies) [vi]	2.1	11.8	0.4	9.5	8.7
SIFs assets value		379.1	287.8	331.1	291.9	413.4

i) Assets no.1 were evaluated at market prices.
ii) Unquoted bonds were evaluated by taking into account daily interest from the investment moment and the principal. For the quoted bonds the evaluation was made at the market price plus interest.
iii) Assets no.3 was evaluated at unitary net worth value which is a market value.
iv) For assets no. 4, 5, 6, the evaluation was made by taking into account price per share from the last trading session in 2005 (their value is equal to market capitalization of the shares held by SIFs at

the moment of evaluation). We did not follow the methodology imposed by CNVM regulations. based on weighted average price from the last three months. But, for assets no.7, due to low liquidity on BER, we used the values, official, estimated for these shares.

   v) In December 2005, Romanian Government sold 61.88% from the shares of Romanian Commercial Bank (BCR) to Erste Bank at a price of 3.75 billion euros. Therefore, we considered it as an appropriate price in order to estimate the value of the shares held by SIFs. It was, also, took into consideration a control premium of 30% for majority stakes, and, thus, the value of a package of 6% from BCR shares was estimated at 254.5 million euros. We emphasize that the percentage of shares held by SIFs at BCR is 6%, excepting SIF Oltenia which detain a package of 6.12%.

   vi) In order to estimate the value for asset no. 9, it was used the regulation of National Bank of Romania (BNR).

   vii) Assets no.10 and 11 were evaluated according to CNVM regulations. SIFs detain many shares to unquoted or non-traded companies, and it was difficult to evaluate them to a market price. As a consequence, the value of those shares is estimated according to official methodology by using a correction coefficient applied on total equity of the issuer company, which depends on the percentage of common stocks detained by SIFs to that issuer. The percentage of common stocks held by SIFs is multiplied with total equity of the issuer company and then corrected with 15% if SIFs hold between 33% and 50% from common stocks, 25% if SIFs hold between 5% and 33%, and 50%, if SIFs hold less then 5%. In those cases where SIFs are the major shareholders or detain stakes to banking or insurance companies there is applied no correction coefficient. Basically, the evaluation of unquoted or non-traded shares held by SIFs is made at a book value.

   viii) SIF Moldova total debts comprise also potential debts out the balance sheet valued at 10 mil euro.

Based on our methodology, which is a cautious one, we can show the fact that at the moment of the estimation, SIFs portfolio present value did not fully reflect their assets value (see Table 4):

Table 4: SIFs market capitalization vs. intrinsic present value at December 31st, 2005						
						-mil euros-
Assets	SIF Banat Crişana	SIF Moldova	SIF Transilvania	SIF Muntenia	SIF Oltenia	SIFs (total)
1.Deposits and monetary investments	10.9	28.1	11.8	9.9	4.6	65.4
2. Municipal and corporate bonds	3.4	1.0	0.6	1.7	0.0	6.7
3. Shares held at opened funds	0.2	0.3	0.0	0.3	0.2	0.9
4. BRD	119.3	131.0	129.8	136.7	138.6	655.5
5. Other blue-chips(TLV, SNP, RRC, BIO, ATB, SCD)	42.9	44.1	13.3	16.5	137.6	254.4
6. Other BSE shares	111.2	2.4	20.9	0.8	20.7	155.9
7. BCR (evaluate at price paid by Erste Bank, including a control premium of 30% for majority stake)	254.5	254.5	254.5	254.5	259.5	1,277.6
8.Total debts	51.6	58.2	54.8	59.5	65.2	289.3
9. Total liquid assets= (1):(7)	542.4	461.4	430.9	420.4	561.2	2,416.4
10. Intrinsic present value=Total liquid assets (9) – Total debts (8)	490.8	403.2	376.1	360.9	496	2127.1
11. SIFs market capitalization	365.7	317.6	311.9	375.3	405.5	1,776.0
12. Intrinsic present value – SIFs market capitalization	125.1	85.6	64.2	-14.4	90.5	351.1

According to the estimation presented above, SIFs portfolios present value is larger than their market capitalization value (with one exception – SIF Muntenia) and also we can conclude that Romanian capital market could not be an informational efficient one. Indeed, only if there are added the first seven components of SIFs assets portfolios, the present value of these assets (corrected by the level if debts) is higher than SIFs market capitalisation. For SIF Muntenia, due to its particular portfolio there is a difference for 14.4 millions euros. However, if there were taken into account participations on BER listed and traded companies, other closed banks or closed companies (see Table 3), the situation will be the same as in the other four cases.

6. Concluding remarks

This paper reveals that it is not necessary that a market is informational efficient only if prices follow a random walk. In other words, this is a necessary condition, but not a sufficient one. For example, on Romanian capital markets, some studies reveal a random walk evolution of prices. However, our study proves that there is a significant difference between price and an intrinsic value for some assets, which represents a major feature of Romanian capital markets, because that anomaly is persistent in time (see Appendix 1).

Basically, the results of our study put in question investors' rationality on Romanian capital markets. It is not a paradox for emerging capital markets, how time Romanian capital markets history, even theoretically, has less by 10 years.

Moreover, even if the econometric tests based on impossibility of obtaining abnormal systematic returns can not reject efficient market hypothesis, financial market could be inefficient due to the large difference between price paid and fair market value of shares.

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Appendix 1

SIF's portfolios are represented at three different moments of time in order to emphasize de persistence of discussed anomalies in time. However, in these cases, the value of assets in BCR is considered the accounting value.

Table 1A: SIFs market capitalization vs. intrinsic present value at December 31st, 2002						
						-mil euros-
Assets	SIF Banat Crişana	SIF Moldova	SIF Transilvania	SIF Muntenia	SIF Oltenia	SIFs (total)
1.Deposits and monetary investments	22.9	25.2	10.5	12.6	9.8	81.1
2. Municipal and corporate bonds	0.6	0.5	0.3	0.4	0.0	1.8
3. BRD	26.0	26.2	25.9	27.3	28.1	133.6
4. Other BSE shares	4.4	1.3	9.1	2.3	29.4	46.5
5. BCR (accounting value)	32.0	32.0	32.0	32.0	32.6	160.6
6.Total debts	3.0	26.5	10.1	5.3	4.0	48.9
7. Total liquid assets= (1):(5)	85.9	85.2	77.8	74.6	99.9	423.6
8. Intrinsic present value=Total liquid assets (7) – Total debts (6)	82.9	58.7	67.7	69.3	95.9	374.7
9. SIFs market capitalization	47.9	37.9	45.4	61.2	42.4	234.8

Table 2A: SIFs market capitalization vs. intrinsic present value at December 31st, 2003						
						-mil euros-
Assets	SIF Banat Crişana	SIF Moldova	SIF Transilvania	SIF Muntenia	SIF Oltenia	SIFs (total)
1.Deposits and monetary investments	0.5	35.9	13.4	2.6	14.1	66.6
2. Municipal and corporate bonds	15.0	1.0	0.0	0.9	0.0	16.9
3. BRD	33.8	34.0	33.7	35.5	36.8	173.9
4. Other BSE shares	6.6	4.1	8.7	5.3	30.7	55.4
5. BCR (accounting value)	40.1	40.1	40.1	40.1	40.9	201.5
6.Total debts	4.4	29.5	37.2	9.2	4.8	85.2
7. Total liquid assets= (1):(5)	95.9	115.1	95.9	84.4	122.5	514.3
8. Intrinsic present value=Total liquid assets (7) – Total debts (6)	91.5	85.6	58.7	75.2	117.7	429.1
9. SIFs market capitalization	67.6	45.3	68.0	82.0	49.8	312.8

Table 3A: SIFs market capitalization vs. intrinsic present value at December 31st, 2004						
						-mil euros-
Assets	SIF Banat Crişana	SIF Moldova	SIF Transilvania	SIF Muntenia	SIF Oltenia	SIFs (total)
1.Deposits and monetary investments	6.4	43.8	30.8	11.8	14.4	107.1
2. Municipal and corporate bonds	3.6	0.7	0.6	1.3	0.0	6.1
3. BRD	70.0	75.1	74.4	78.4	81.4	379.4
4. Other BSE shares	22.7	12.4	27.7	9.9	100.0	172.6
5. BCR (accounting value)	52.7	52.7	52.7	52.7	53.7	264.3
6.Total debts	33.2	33.6	40.4	53.1	26.6	187.1
7. Total liquid assets= (1):(5)	**155.4**	**184.7**	**186.2**	**154.1**	**249.5**	**929.5**
8. Intrinsic present value=Total liquid assets (7) – Total debts (6)	**122.2**	**151.1**	**145.8**	**101**	**222.9**	**742.4**
9. SIFs market capitalization	**130.5**	**107.8**	**162.6**	**134.0**	**144.5**	**679.5**