

**Ioana Ancuța IANCU**  
Universitatea Tehnică din Cluj Napoca, Cluj-Napoca, România

# INVESTING STRATEGIES OF ROMANIAN RETAIL INVESTORS BEFORE AND DURING CRISIS (2006-2009)

Case study

---

## Keywords

Investments  
Strategies  
Stock Market  
Crises

---

## JEL classification

G24

---

## Abstract

*There are plenty empirical studies in international literature, which investigate decision-making strategies of retail investors (Gelos & Wei, 2002, Lucey & Dowling, 2005, etc.). The majority of this studies include: fundamental analysis, technical analysis, a combination of technical analysis and fundamental analysis, brokers recommendations and financial reports. Using some elements investigated in the literature, our experience in stock markets and an enquiry over the investors behavior, our study shows what strategies increased the efficiency of the portfolio, in a period of maximum volatility on the Bucharest Stock Exchange (2006-2009). Basically, we note that, regardless of the economic cycle, those who used fundamental analysis in the decision making process, have been more successful than the rest.*

## 1. Introduction

To get a clear picture of the level of knowledge necessary in using one or more strategies in investment making decisions on Bucharest Stock Exchange (BSE), we consider necessary a description of each term.

Fundamental analysis is the method of determining and evaluating a company based on economic factors, that may affect the share price, considering prerequisites of economic growth (financial situation by accounting documents, financial assessments, etc.) and macroeconomic conditions (Dechow et al., 2000). Basically, with this method, the investor tries to predict the future value of an investment (<http://www.markets.com/ro/education/fundamental-analysis/what-is-fundamental-analysis.html>).

Technical analysis is the study of a share using graphs, in order to determine future price. In other words, the investor tries to "guess" the behavior of other investors in the market, using share price history (Beyoglu & Ivanov, 2008).

Fundamental analysis and technical analysis although seemingly different, are used together by many investors. On one hand, investors who analyze shares from a fundamental perspective can use technical analysis to decide the optimal time to buy or sell (Yeoh, 2010). On the other hand, those who frequently use technical analysis may use fundamental analysis to increase the likelihood of acquiring a "good" share. A study by Emir et al. (2012) shows that the combined method is the second in popularity among individual investors. It is obvious that all three strategies for decision-making require solid knowledge of technical and fundamental analysis.

The recommendations of others, is a strategy used by retail investors who don't possess the knowledge or the self confidence to buy shares on their own, and they rely on others opinion: broker, family, friends etc.

Information from the media is often used by less experienced investors. This happens because information which appear in media, often draw attention (surprising or extraordinary earnings announcements). Odean (1999) shows the tendency

of investors to buy certain shares if they heard about them in the media.

The information from the market is another strategy that can be the base for their decision to buy or sell a stock. Shares are traded in large volumes or their price increases or decreases impressive in a short period of time (Odean, 1999).

Both information from the media and the market may have a "herd effect" result. When investors base their investment decision only on the information in the market or the media, they may be influenced by price increases or decreases by buying or selling shares. Basically, the effect is the tendency of investors to imitate the rest of the market participants. There are numerous studies (Avery & Zemsky, 1998, Lovric et al., 2008, Ionescu et al., 2009) about the herd effect. Avery and Zemsky (Avery & Zemsky, 1998) show that the herd effect may occur when investors are subject to a degree of uncertainty following the trend. Bikchandani and Sharma (2000) classify herd effect on rational investors in three subcategories: herding effect based on information, reputation or compensation. Herd effect can be observed both in rising prices and depreciation moments. When, more investors decide to sell shares depending on market rumors or information or media, panic appears among investors.

The reputation of the shares is a strategy that relies on familiarity and knowledge management. A good example is the case of Banca Transilvania, where employees buy shares because they know the financial situation and reputation management. In November 2010, the Board of Directors of Banca Transilvania has decided to grant 6,000,000 shares (of the 7,300,000 unsubscribed shares after the capital increase) to the employees and 1,300,000 shares were offered to a number of less than 100 investors ([www.bvb.ro](http://www.bvb.ro)). Another case is that of 2007, when BCR employees could buy Erste Bank shares at a preferential price.

There are examples, notices and articles (see: [www.bvb.ro](http://www.bvb.ro)) showing the trend of employees to buy shares in the company they work for.

## 2. Research methodology

For answering the research questions related to decision-making strategies of retail investors, we used a questionnaire-based survey. For more relevance, we gather, analyze and sort information from literature. The questions used in this survey were closed dichotomous, multihotomics, or scale type. Brokers in different investment firms in Cluj-Napoca, through the "snowball method", promoted the survey. The questionnaire was posted on the

Internet at the following address: [http://www.chestionareonline.com/ruleaza\\_chestionar.phpid\\_chestionar=1289321175&chestionar=CESTIONAR%20PRIVIND%20COMPORTAMENTUL%20CONSUMATORU LUI%20DE%20SERVICII%20SI%20IN VESTITII%20FINANCIARE](http://www.chestionareonline.com/ruleaza_chestionar.phpid_chestionar=1289321175&chestionar=CESTIONAR%20PRIVIND%20COMPORTAMENTUL%20CONSUMATORU LUI%20DE%20SERVICII%20SI%20IN VESTITII%20FINANCIARE) between October 15 2010 and 30 November 2010 and was promoted by agents from various investment services and

financial investment services companies in Cluj-Napoca, so a non-random method, based on reasoning. As the author lacked direct connection with most of those questioned, she could not control the number of people who received the questionnaire. In conclusion, there were 54 investors who answered the questions of the study.

### 3. Results

We note that most investors choose their shares based on market information (23.66%) and technical and fundamental analysis (19.08), few basing the decision to invest in technical analysis (7.65%) or fundamental analysis (5.34%). 32.07% of respondents base their investment decision on technical, fundamental or technical and fundamental analysis.

A US study (Lease at al. 1974) shows that 42% of American investors use at least one variant of the two types of analysis, or a combination of both. Given that, to "read" technical and fundamental analysis, the investor should have at least some knowledge about stock market, we infer that the level of sophistication of the Romanian retail investor is lower than in America.

Lack of investors sophistication is highlighted by the results of this research by the large number of respondents (67.93%) who base their buying decisions on the recommendations of others, corporate reputation, media information or market information.

There are differences in responses between women and men. Women base their buying decision especially on the recommendations of others (27.50%) and then on the market information (22.50%). The last place in the preferences of women is technical and fundamental and technical or fundamental analysis (20%). Instead 37.36% of men base their decision to invest on this type of analysis, showing a higher level of sophistication among men investors (results are detailed in Table 1.).

Experienced investors (11-15 years of experience on the stock market), noted that there are equally important (25%) three sources of information: fundamental and technical analysis, information from the media and information from the market. As expected, less experienced investors (0-2 years experience) note as very important, the others recommendations (25%).

To see which of these investing strategies were the most successful, we analyze the data in Table 2.

In 2006, most investors surveyed had a profit of over 20%, irrespective of source of information used. However, large percentages of investors who had profit, based their buying decision on information from fundamental analysis (85,71%), technical analysis (77,78%), media (70.59%) and the company's reputation (78.57%).

Due to the small number of respondents, this study is not representative for the whole community and is only an exploratory study.

The answers to questions show what strategy retail investors prefer and what was the gain or loss on their portfolio on a certain period of time: 2006, 2007, 2008 and 2009.

In 2007 (see Table 3), most investors have won, regardless of the decision making strategy. Notably are the portfolios with profits of over 20%. A hierarchy of most successful strategy could look like this: Technical Analysis (77.78%), Technical and Fundamental analysis (60%) and Information in the media (55.56%).

In 2008, due to the economic situation, the question of decision-making strategy is made based on the profit or loss achieved. Those who had the biggest losses, were the ones that used for technical analysis (100%), technical and fundamental analysis (72%) and those using market information (68.97%). Among the investors who used fundamental analysis in decision-making process, many have suffered financial losses, but most of them were winners (42.86%) (see Table 4).

In 2009, most investors had a negative yield on the portfolio (Table 5), especially those who based their investment decision on information related to the company's reputation (75%) and technical and fundamental analysis (72%). The number of investors with losses was lower for those who analyzed market based on fundamental analysis (57.15%) and other recommendations (57.9%).

Trying to find out if panic influenced the Romanian retail investor on the stock exchange, our data reveals that most investors are influenced by market panic neutrally (50.91%), poor (25.45%) and very poor (10.91%). 47.37% of females respondents answered that they are influenced by market panic in small and very small proportion, which suggests that they are more rational than male respondents (30.55% of the men surveyed said they were weak or very weak influence of market panic).

For an overview of strategies to invest, we thought the following items should be considered by the degree of importance:

- Rumors, speculation, unconfirmed reports within the company;
- Qualification managers of Issuer companies;
- The quality of information that the company publishes.

The majority of respondents take into account elements such as rumors, speculation, unconfirmed reports within the company, noting them as being of very high importance (1.89%), high (30.19%) or neutral (43, 40%). Gender differences on this issue are small. Women notes as great significance, great

or neutral in 78.95%, and men responding that are important in a percentage of 73.53%. We find differences between respondents both with or without experience. All experienced investors believe that rumors, speculation, unconfirmed reports within the company have neutral, big or great significance, compared to 20 % of those less experienced.

Investors have a lukewarm attitude about qualifications of managers on the buying decision: about 33% of them consider it of great importance and very high, 39% consider as being of neutral and 28% of investors consider as a small or very small importance. We don't find differences in responses of men and women, but instead,

#### 4. Conclusion

Most investors choose their shares based on the information received from the market (23.66%) and technical and fundamental analysis (19.08), few basing their decision to invest, in technical analysis (7.65%) or fundamental analysis (5.34%).

32.07% of respondents base their investment decision on technical analysis, fundamental or technical and fundamental. Given that to "read" technical and fundamental analysis, the investor should have some knowledge about the analysis, we infer that the level of sophistication of the investor novel is lower than in America.

Lack of investor sophistication novel is highlighted by the results of this research by the large number of respondents (67.93%) who base their buying

#### 5. Limitations and future research

Tight legislation, the refusal of investors to cooperate, limited financial resources, are only a few limitations of this study. The author could not get access to any investors' database, because their identification data are confidential. The natural

#### References

- [1] Avery, C. & Zemsky, P. (1998), Multidimensional Uncertainty and Herd Behavior in Financial Markets, *The American Economic Review*, 88 (4), 724-748
- [2] Beyoglu, B. & Ivanov, M. (2008), Technical Analysis of Can Slim Stocks, available at: [www.wpi.edu/.../Technical\\_Analysis\\_of\\_CAN\\_SLIM\\_Stocks.pdf](http://www.wpi.edu/.../Technical_Analysis_of_CAN_SLIM_Stocks.pdf), accessed 2010
- [3] Bikchandani, S. & Sharma, S. (2000), Herd Behavior in Financial Markets, *IMF Staff Papers*, 47(3), 279-310
- [4] Dechow, M. P., Hutton, A., Meulbroek, R. & Sloan, R. G. (2000), Short-sellers, fundamental analysis and stock returns, disponible la: [www.en.atfin.ru/Aretr.pdf](http://www.en.atfin.ru/Aretr.pdf), accessed 2010

experienced investors deem most important great qualification of managers in percentage of 66.67% compared to 20% of less experienced investors that agree with this statement.

Over 72% of respondents answered that the quality of information the company publishes is of great importance. This is normal when a technical or fundamental analysis is desired on a particular symbol. According to data, the quality of information has greater importance for women (84.21%). Interestingly new investors, with little experience (0-2 years) believe that the quality of information is more important than most experienced investors (66.67%).

decisions on the recommendations of others, corporate reputation, media information or market information.

In the years of economic growth (2006 - 2007), 100% of investors had profit and they based their decisions on the information in the technical or fundamental analysis. In the next period, of economic decline (2008 - 2009), many investors who had profit fell, based their decision on the fundamental analysis. Following the information, we note that, regardless of the economic cycle, those who use the fundamental analysis in the decision making process, have been more successful than the rest

consequence is that the information in these questionnaires cannot be proved.

A future research could show the present strategies of Romanian retail investors compared to those from this study.

- [5] <http://www.markets.com/ro/education/fundamental-analysis/what-is-fundamental-analysis.html>, accessed 10/10/2015
- [6] Gelos, R. G. & Wei, S.J. (2002), Transparency and International Investor Behavior, NBER Working Paper No. 9260, available at: [http://www.researchgate.net/profile/Gaston\\_Gelos3/publication/5123918\\_Transparency\\_and\\_International\\_Investor\\_Behavior/links/09e4150b7595e5377a000000.pdf](http://www.researchgate.net/profile/Gaston_Gelos3/publication/5123918_Transparency_and_International_Investor_Behavior/links/09e4150b7595e5377a000000.pdf), accessed 2015
- [7] [www.Bvb.Ro](http://www.Bvb.Ro), accessed 2010
- [8] Ionescu, G. H., Ungureanu, D. V., Vilag, R. D. & Stoian, F. B. (2009), Financial contagion and investors behavior, *Annales Universitatis Apulensis Series Oeconomica*, 11 (1) 556 – 567

- [9] Lease, R.C., Lewellen, W.G. & Schlarbaum, G.G. (1974), The individual investor: attributes and attitudes, *Journal of Finance*, 29 (2), 413-38
- [10] Lovric, M., Kaymak, U., Spronk, J. (2008), A Conceptual Model of Investor Behavior, available at <http://repub.eur.nl/pub/12468>, accessed 2010
- [11] Lucey, B.M. & Dowling, M.D. (2005), The role of feelings in investor decision-making, *Journal of Economic Surveys*, 19(2), 211–237, available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.0950-0804.2005.00245.x/full>
- [12] Emir, S., Dr. Hasan Dinçer, H. & Timor M., (2012), A Stock Selection Model Based on Fundamental and Technical Analysis Variables by Using Artificial Neural Networks and Support Vector Machines, *Review of Economics & Finance*, available at: <http://www.bapress.ca/ref/ref-2012-3/A%20Stock%20Selection%20Model%20Based%20on%20Fundamental%20and%20Technical%20Analysis%20Variables%20by%20Using%20Artificial%20Neural%20Networks%20and%20Support%20Vector%20Machines.pdf>, accessed in 10/10/2015
- [13] Odean, T. (1999), Do Investors Trade Too Much?, *American Economic Review*, 89 1279-1298
- [14] Yeoh, K. (2010), Environmental and Contextual Influences on Investors' Governance-related Behaviour, Teza de Doctorat, available at: [northumbria.openrepository.com/northumbria/bitstream/10145/113659/1/yeoh.ken\\_phd.pdf](http://northumbria.openrepository.com/northumbria/bitstream/10145/113659/1/yeoh.ken_phd.pdf), accessed 2010

## Tables

Table 1

*Responses of investors related the sources underlying the buying decision, by gender*

	GENDER	
	Female	Male
In buying decision, I select the shares by:		
Their reputation	12.50%	12.09%
The information in media	17.50%	13.19%
Market information (volume, no. of transactions)	22.50%	24.18%
The recommendations of others (broker, family, friends)	27.50%	13.19%
Technical Analysis	2.50%	9.89%
Fundamental Analysis	2.50%	6.58%
Technical analysis and fundamental analysis	15.00%	20.88%
Total	100.00%	100.00%

Table 2

*Responses depending on decision-making strategies and profit&loss on the portfolio in 2006*

Year 2006	A	B	C	D	E	F	G
Win 0-5%	0.00%	0.00%	16.00%	11.76%	10.71%	22.22%	7.14%
Win 5% - 10%	14.29%	22.22%	4.00%	5.88%	3.57%	5.56%	7.14%
Win 10% - 15%	0.00%	0.00%	4.00%	5.88%	7.14%	11.11%	0.00%
Win 15% - 20%	0.00%	0.00%	0.00%	0.00%	3.57%	5.56%	0.00%
Win > 20%	85.71%	77.78%	68.00%	70.59%	67.86%	50.00%	78.57%
Loss 0-5%	0.00%	0.00%	4.00%	0.00%	3.57%	0.00%	0.00%
Loss 5% - 10 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Loss 10%-15 %	0.00%	0.00%	4.00%	0.00%	3.57%	0.00%	0.00%
Loss 15%-20 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Loss > 20%	0.00%	0.00%	0.00%	5.88%	0.00%	5.56%	7.14%

Note: A - fundamental analysis; B - Technical Analysis; C - Fundamental analysis and technical analysis; D - Mass-Media; E - market information; F - Recommendations of others; G - Issuer reputation.

Table 3

*Responses depending on decision-making strategies and profit&loss on the portfolio in 2007*

Year 2007	A	B	C	D	E	F	G
Win 0-5%	14.29%	11.11%	4.00%	5.56%	10.71%	21.05%	6.67%
Win 5% - 10%	14.29%	11.11%	4.00%	5.56%	7.14%	10.53%	6.67%
Win 10% - 15%	14.29%	0.00%	4.00%	11.11%	7.14%	10.53%	6.67%
Win 15% - 20%	14.29%	0.00%	16.00%	11.11%	7.14%	5.26%	6.67%
Win > 20%	42.86%	77.78%	60%	55.56%	53.57%	42.11%	53.33%
Loss 0-5%	0.00%	0.00%	8.00%	0.00%	10.71%	0.00%	6.67%
Loss 5% - 10 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Loss 10%-15 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Loss 15%-20 %	0.00%	0.00%	4.00%	11.11%	3.57%	10.53%	13.33%
Loss > 20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Note: A - fundamental analysis; B - Technical Analysis; C - Fundamental analysis and technical analysis;  
D - Mass-Media; E - market information; F - Recommendations of others; G - Issuer reputation.

Table 4

*Responses depending on decision-making strategies and profit&loss on the portfolio in 2008*

Year 2008	A	B	C	D	E	F	G
Win 0-5%	28.57%	0.00%	12.00%	22.22%	13.79%	20.00%	26.67%
Win 5% - 10%	0.00%	0.00%	4.00%	0.00%	3.45%	0.00%	0.00%
Win 10% - 15%	14.29%	0.00%	0.00%	0.00%	3.45%	5.00%	0.00%
Win 15% - 20%	0.00%	0.00%	4.00%	0.00%	6.90%	5.00%	0.00%
Win > 20%	0.00%	0.00%	8.00%	5.56%	3.45%	5.00%	13.33%
Total win %	42.86%	0.00%	28.00%	27.78%	31.04%	35.00%	40.00%
Loss 0-5%	14.29%	11.11%	12.00%	16.67%	6.90%	5.00%	6.67%
Loss 5% - 10 %	14.29%	22.22%	4.00%	11.11%	13.79%	5.00%	6.67%
Loss 10%-15 %	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	0.00%
Loss 15%-20 %	0.00%	11.11%	4.00%	0.00%	3.45%	0.00%	6.67%
Loss > 20%	28.57%	55.56%	52.00%	44.44%	44.83%	50.00%	40.00%
Total Loss %	57.15%	100.00%	72.00%	72.22%	68.97%	65.00%	60.01%

Note: A - fundamental analysis; B - Technical Analysis; C - Fundamental analysis and technical analysis;  
D - Mass-Media; E - market information; F - Recommendations of others; G - Issuer reputation.

Table 5

*Responses depending on decision-making strategies and profit&loss on the portfolio in 2009*

Year 2009	A	B	C	D	E	F	G
Win 0-5%	28.57%	0.00%	4.00%	5.56%	6.90%	5.26%	6.25%
Win 5% - 10%	0.00%	10.00%	4.00%	11.11%	6.90%	5.26%	0.00%
Win 10% - 15%	0.00%	0.00%	4.00%	0.00%	6.90%	15.79%	0.00%
Win 15% - 20%	0.00%	0.00%	4.00%	11.11%	3.45%	5.26%	12.50%
Win > 20%	14.29%	30.00%	12.00%	5.56%	10.34%	10.53%	6.25%
Total win %	42.86%	40.00%	28.00%	33.34%	34.49%	42.10%	25.00%
Loss 0-5%	14.29%	10.00%	8.00%	11.11%	6.90%	5.26%	12.50%
Loss 5% - 10 %	0.00%	0.00%	4.00%	11.11%	3.45%	10.53%	6.25%
Loss 10%-15 %	0.00%	0.00%	4.00%	5.56%	3.45%	0.00%	0.00%
Loss 15%-20 %	0.00%	0.00%	16.00%	5.56%	13.79%	10.53%	6.25%
Loss > 20%	42.86%	50.00%	40.00%	33.33%	37.93%	31.58%	50.00%
Total Loss %	57.15%	60.00%	72.00%	66.67%	65.52%	57.90%	75.00%

Note: A - fundamental analysis; B - Technical Analysis; C - Fundamental analysis and technical analysis;  
D - Mass-Media; E - market information; F - Recommendations of others; G - Issuer reputation.