

Evaluation of irrational individual investors' behavior driving factors in Lithuania

In the article individual investors' irrational behavior is analyzed and the major factors, influencing it are presented. Based on the results of the research made in Lithuania, authors conclude, that Lithuanian individual investors suffer from basic biases such as overconfidence, anchoring, mental accounting, herd behavior, confirmation and overreaction. In the article authors present research results, which allow to conclude, that psychological factors of investors' behavior impact investment decision-making and cause irrational behavior of individual investors in the financial market.

Keywords: rationality, behavioral finance, individual investors, investment decision making, financial markets, psychological factors of investors' behavior.

Straipsnyje analizuojama individualių investuotojų iracionali elgsena, pateikiami pagrindiniai ją nulemiantys veiksniai. Remiantis atlikto Lietuvos individualių investuotojų tyrimo rezultatais, autorės prieina išvados, jog individualūs investuotojai jaučia tokių iracionalių veiksnių, kaip per didelis pasitikėjimas savimi, prisirišimas, apskaičiavimas mintyse, minios elgsena, pasitvirtinimas ir per jautrus reagavimas, poveikį. Straipsnyje pristatyti tyrimo rezultatai autorėms leidžia teigti, jog psichologiniai investuotojų elgsenos veiksniai turi įtakos jų investavimo sprendimų priėmimui ir sąlygoja individualių investuotojų iracionalią elgseną finansų rinkose.

Raktiniai žodžiai: racionalumas, individualūs investuotojai, investavimo sprendimo priėmimas, finansų rinkos, psichologiniai investuotojų elgsenos veiksniai.

JEL Classifications: G1/G11.

Introduction

Financial markets are complex and as it turned out during the financial crises, almost unpredictable. Modeling behavior of these markets participants is even more challenging. Classical financial theories some time can't explain market fluctuations,

so this prompted the authors of the paper to explore the cognitive psychology and analyze the irrational and illogical behaviors of investors in order to find out the real impact factors that influence the behavior of individual investors in Lithuanian stock market.

But can psychology really help us understand financial markets? Does it provide us

Kristina LEVIŠAUSKAITĖ – Dr., Prof., Head of Department of Finance, Faculty of Economics and Management, Vytautas Magnus University. Address: S. Daukanto str. 28 - 207, Kaunas 44246, Lithuania. Phone: 00 370 37 327 854. Fax: 00 370 37 327 857. E-mail: k.levisauskaite@evf.vdu.lt.

Jekaterina KARTAŠOVA - PhD student, Vytautas Magnus University, Faculty of Economics and Management, Department of Finance, Kaunas, Lithuania. Address: S. Daukanto str. 28 - 207, Kaunas 44246, Lithuania. E-mail: j.kartasova@evf.vdu.lt.

with hands-on stock picking strategies? Behavioral finance theorists suggest that it can and provide a couple key concepts (biases) that contribute to irrational financial decision making: Anchoring, Mental Accounting, Confirmation and Hindsight Bias, Gambler's Fallacy, Herd Behavior, Overconfidence, Overreaction and Availability Bias, Prospect Theory.

In the context of today's global crises to explain market behavior properly is very important. Academics and finance professionals are making attempts to identify and to evaluate the real influence of the psychological factors on investment decision making and behavioral financial and investment models become important scientific research object.

Investors' decision-making biases were investigated in numerous recent empirical researches by S. D. Campbell, S. A. Sharpe (2007); S. S. Lim (2006); D. Laibson, B. C. Madrian (2008); L. Cen, K. Wei, J. Zhang (2009); M. Glaser, M. Weber (2007); T. Oberlechner, C. L. Osler (2008); S. Pouget, S. Villeneuve (2009); B. Biais, M. Weber (2008); R. Decourt, A. Accorsi, J. Neto (2007); M. Johnsson, H. Lindblom, P. Platan (2002) and others. But the problem – does the market has a mood and how it influence its participants behavior and investment decision making - still lies because of the complexity of the financial market and human nature of its participants. It is important to mention that previously mentioned researches usually analyzed one or a couple of presented biases. Of course, this allows evaluating different aspects of its manifestations and make assumptions regarding the investors' behavior in one or another situation, but the results reflect only one or another psychological factor influencing investors' behavior thus in the reality the set of such factors exists.

The methodological approach of different authors is very similar: the main methods used in their researches are questionnaire and interview of the investors, but the target groups of investors are selected differently: starting from the beginners (or future investors) and sometimes extending the research by involving actively trading investors. As far as the results of all mentioned researches are very different, it is possible to conclude that the influence of psychological biases on different groups of investors depends on the target group of respondents and both cultural, economic differences in the region, where the survey was held. This enables to make an assumption that in Lithuania we could see some differences of biases impact in comparison to the other regions.

Also the authors of this paper make an attempt to investigate and consider investor behavior as a consequent of impact that all biases could make together and present the complex review of psychological biases influencing investors in Lithuania. Of course, this influence is difficult to evaluate quantifiably, but wide look on major biases that investors face could help to see the general tendencies and conclude about the factors which effect on investors behavior is the greatest. Authors of the paper assume, that psychology and rational arguments in investment decision making are equally important and make an attempt to check this hypothesis through empirical research of individual investors acting on Lithuanian stock market.

The **aim of this paper** is to identify and discuss factors that influence the individual investors' decision making and course their irrational behavior on the financial market in Lithuania.

In order to achieve this aim, the following **research tasks** have been set up to:

- overview the methodology and results of the researches made in this field previously;
- briefly present the methodology of research made by the authors of the paper;
- identify the biases that influence the behavior of individual investors in Lithuanian financial market;
- generalize the results of investigation and present its main findings.

The **methods** of analysis, systematization of scientific literature, generalization, survey, analysis and graphical presentation of data were used in this research. The main method used to identify basic biases influencing the behaviors of individual investors is survey based on the questionnaire. All data collected was processed – its grouping and comparing were made - using Excel.

Methodological aspects and results of current researches on irrational behavior of investors

The analyses of researches already made in the field of investors behavior and its basic biases showed that questionnaire and interview are the most frequently used methods. But the selection of target groups is very different: starting from students (as potential future investors), the beginners, actively trading individual investors and even managers of investment funds. Of course, the target group influences the results of the researches and sometimes comparing them, it is possible to find more differences than similarities. Thus, it could be useful to present briefly, but purposefully the methodological aspects and the results achieved by the other researchers.

S. D. Campbell, S. A. Sharpe (2007) analyzed whether expert consensus forecasts

of monthly economic releases from Money Market Services surveys from 1990–2006 have a tendency to be systematically biased toward the value of previous months' data releases. Researchers found significant evidence for the anchoring hypothesis; consensus forecasts are biased towards the values of previous months' data releases, which in some cases results in sizable predictable forecast errors. According to the results, bond yields react only to the residual, or unpredictable, component of the surprise and not to the expected piece of the forecast error apparently induced by anchoring. This suggests market participants anticipate the anchoring bias embedded in expert forecasts.

Recent studies have argued that prospect theory (Kahneman and Tversky, 1979) and mental accounting (Thaler, 1985) provide possible explanations for investor behavior (e.g., the disposition effect) and for outstanding asset pricing anomalies such as the equity premium puzzle, the value premium, and the momentum effect. However, there are relatively few empirical tests on whether and to what extent mental accounting affects investor decisions. S. S. Lim (2006) tests the effects of mental accounting on investor trading decisions, which provides more direct insight into whether the joint implications of mental accounting and prospect theory provide plausible explanations for capital market anomalies.

According to L. Cen, K. Wei, J. Zhang (2009) anchoring describes the fact that in forming numerical estimates of uncertain quantities, adjustments in assessments away from an arbitrary initial value are often insufficient. Researchers show that this cognitive bias has significant economic consequences for the efficiency of financial markets and found that analysts make optimistic (pessimistic) forecasts when a firm's

forecast earnings per share (FEPS) is lower (higher) than the industry median.

M. Glaser and M. Weber (2007) use theoretical models which predict that overconfident investors trade more than rational investors. They directly tested this hypothesis by correlating individual overconfidence scores with several measures of trading volume of individual investors. According to researchers' results investors who think that they are above average in terms of investment skills or past performance (but who did not have above average performance in the past) trade more.

T. Oberlechner and C. L. Osler (2008) showed that people tend to be overconfident in two dimensions: they underestimate uncertainty and overestimate their own abilities. Researchers studied overconfidence because this specific departure from rationality has been the subject of substantial research showing that overconfidence could lead to severe distortions in asset prices and provided evidence that foreign exchange dealers are likewise overconfident in both dimensions. Further, the widespread human tendency towards overconfidence is one of the strongest findings in psychology. This evidence provides an objective basis for identifying a specific departure of potential economic significance, thus addressing a common concern. The results indicate that currency dealers exhibit the same clear, strong tendencies to overconfidence documented among other groups.

S. Pouget and S. Villeneuve (2009) proposed a theory of financial markets that incorporates one of these information processing biases, namely the confirmation bias. A person prone to the confirmation bias tends to interpret new evidence as consistent with his or her prior views. In our framework, this bias creates differences

of opinion between rational arbitrageurs and biased traders over the interpretation of public information.

R. Decourt, A. Accorsi, J. Neto (2007) implemented investment simulations with Brazilian MBA students and physicians, indicating that the process of making investment decisions is based on the "Behavioral Economics" theory which uses the fundamental aspects of the Prospect Theory developed by D. Kahneman and A. Tversky (1979). The following effects have been tested and identified using an investment simulator over the Internet: 1) endowment, that makes the participants not to sell the received assets, no matter if better investment options are available; 2) the disposition effect, that refers to the pattern that people avoid realizing paper losses and seek to realize gains; 3) fear of regret, that makes the participant invest in rejected assets in the past that had good valorization and 4) framing, that modifies the investment decision depending on the perspective given to the problem.

M. Johnsson, H. Lindblom, P. Platan (2002) investigated how private as well as institutional investors have changed their investment behavior as a consequence of the speculative bubble during the period from Fall 1998 to March 2000. The empirical research was based on a questionnaire directed towards active private investors in Sweden, more specifically members of the Aktiespararna Association, and institutional investors mainly resident in southern Sweden. The results obtained suggest that the behavior of market participants during the speculative bubble was to some extent irrational and that the composition of investments has changed as a consequence of the speculative bubble. The results show that the fall in market values after March

2000 was mainly due to earnings and profitability of companies, or a lack thereof.

H. Shefrin (2000) reports that the reluctance to realize losses constitutes a self-control problem; he describes professional traders who are very prone to let their losses "ride". It is the control of losses that constitutes the essential problem. The traders' problem was to exhibit sufficient self-control to close accounts at a loss even though they were clearly aware that riding losses was not rational. Self-control is also exhibited in the dividends puzzle.

The key behavioral factor and perhaps the most robust finding in the psychology of judgment needed to understand market anomalies is overconfidence. People tend to exaggerate their talents and underestimate the likelihood of bad outcomes over which they have no control. A surprising aspect is the relationship between overconfidence and competence. J. G. March and Z. Shapira (1987) showed that managers overestimate the probability of success in particular when they think of themselves as experts.

J. Montier (2006) in his study "Behaving Badly" found that 74% of professional fund managers surveyed believed that they had delivered above-average job performance. Of course, overconfidence (i.e., overestimating or exaggerating one's ability to successfully perform a particular task) is not a trait that applies only to fund managers.

Recent empirical research in finance (Barberis, 1998) has uncovered two families of pervasive regularities: underreaction of stock prices to news such as earnings announcements, and overreaction of stock prices to a series of good or bad news. The underreaction evidence shows that over horizons of one to twelve months, security prices under react to news. As a consequence, news is incorporated only slowly

into prices, which tend to exhibit positive autocorrelations over these horizons. The underreaction evidence in particular is consistent with conservatism. Conservatism refers to a phenomenon according to which people mistrust new data and gives too much weight to prior probabilities of events in a given situation.

Summarizing the key findings of above presented researches it is possible to conclude that survey based on questionnaire is a suitable method to evaluate the effect of different biases on individual investors' behavior. But attempts to see the overall situation on the market (taking into consideration more than 1-2 biases) could be useful. Even more, analyses of Lithuanian financial market and the comparison of its behavior with the findings made during analyses of markets in other countries could show the similarities and differences of irrational behavior under the influence of different biases. So, it is evident, that a complex study of individual investors acting in Lithuanian market held by the authors of the paper could contribute to the understanding of general situation and allow making predictions of investors' behavior in the future. In the section below the methodology of the research is presented.

Methodology of research on irrationality of individual investors in Lithuania

The research of Lithuanian investors' behavior was divided and held in 2 stages.

During the first stage for the investigation of irrationality of individual investors pilot research was made. The target of the research was to identify the influence of Anchoring, Mental accounting, Confirmation

and Hindsight Bias, Gambler's Fallacy, Herd Behavior, Overconfidence, Overreaction and Availability Bias, Prospect Theory to the individual investors of Lithuania. For this purpose the authors of the paper used the questionnaire prepared by combining possible influence of these biases into closed-end questions without stating the bias itself. Each question was compounded to evaluate one specific bias and at the final stage of the questionnaire the investor was asked to identify himself/herself. During the research the survey target group of actively trading Lithuanian individual investors (20 people) was considered. The results of the pilot research showed that individual investors in Lithuania suffer from the majority of biases, such as anchoring, mental accounting, confirmation and hindsight bias, herd behavior, overconfidence, overreaction and availability bias.

During the second stage after the evaluation of the results of the pilot research in the first stage, necessary changes in the questionnaire were made and survey was broadened to more than 5000 individual investors invited to take part in the research. As the target group of the research were actively trading investors, the questionnaire was sent to the Lithuanian Association of Financial Analysts (it unites 90 members and the majority of them are investors) and to the journal "Invest", which edition in 2011 is 5000 copies. The editorial office of this journal collaborated with the authors of the research by distributing the link to the questionnaire among the subscribers and placed the questionnaire on their page in Facebook. This helps the researchers to insure the complex approach of individual investors.

Survey was held in March-April 2011. 394 individual investors filled the

questionnaire completely. Taking into consideration the requirements insuring the validity for such researches (reliability 99 % and error 10%), they all were completed, the results are statistically significant and reflect current situation in Lithuanian financial market.

After the medication of pilot research questionnaire, the survey form consisted of 3 basic parts:

- *identification of the respondent as investor* (investors were asked to specify their investing experience, their investing skills, investing results and their attitude towards risk, name the markets where they invest most);

- *investors' situation evaluation and behavior preferences* (investors were asked to select the answer from the list that illustrates the most possible behavior and valuation of the current situation);

- *investors' personal identification* (investors were asked to present themselves (their age, sex, education, current employment and marital status).

Final questionnaire allowed deeper evaluation of investors' behavior with an intention to analyze how these above mentioned personal characteristics could influence their decision-making.

The total number of questions in the survey was 25 and individual investors were asked to answer them online by providing a link to the questionnaire. This allowed insuring anonymity and the safety of data provided by investors. The questionnaire in Lithuanian is available at <http://www.apklausa.lt/f/iracionalia-investuotoju-elgsena-formuojanciu-veiksniu-tyrimas-lw8asug/answers/new.fullpage>.

The data collected was processed by Excel and the basic findings are presented in the next section.

Results of research on irrationality of individual investors in Lithuania

During the research held the major findings of pilot research were proved. Speaking about the influence of personal characteristics on individual investors' behavior and decision-making the main conclusions are the following:

- The most overconfident investors are women (33,33% of women think that their investment skills are good). Also the direct connection between the investment experience and influence of overconfidence was notice (the more experience investor has, the more overconfident he/she is. 80%

of investors who have more than 5 years trading experience believe that their investment skills are good or very good). It is interesting, that 55,55% investors who have economic-finance education say that their investment skills are good or very good. So, it is possible to conclude, that education and experience give the background for overconfidence bias to appear (Figure 1).

- The most risky investors are the beginners. 90,91 % of investors mark that they are willing to take risk (Figure 2). 83,33 % of investors at the age 30–45 years are ready to take risk. Single people (Figure 3) are also more risky than married (80 % of single people would accept to take risk).

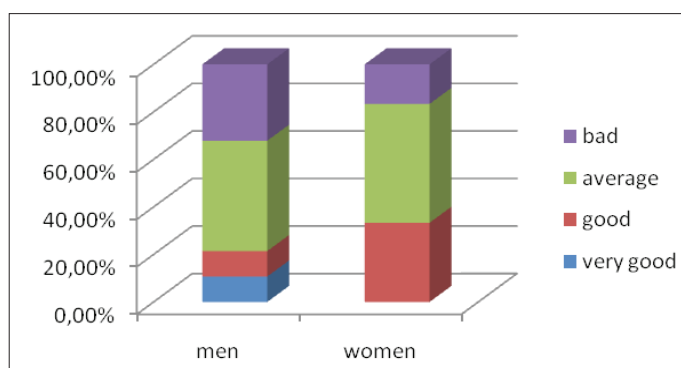


Fig. 1. Self-evaluation of respondents' investment skills

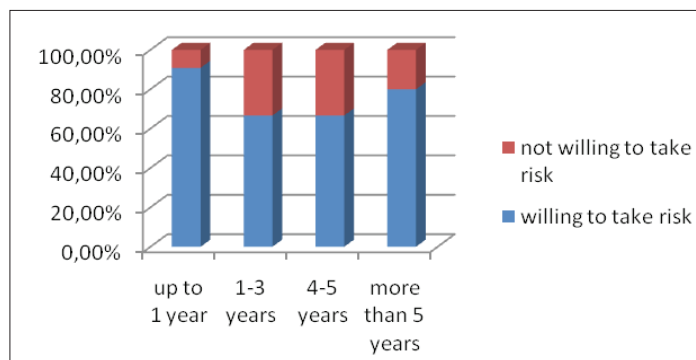


Fig. 2. Individual investors' attitude towards risk according to the investment experience

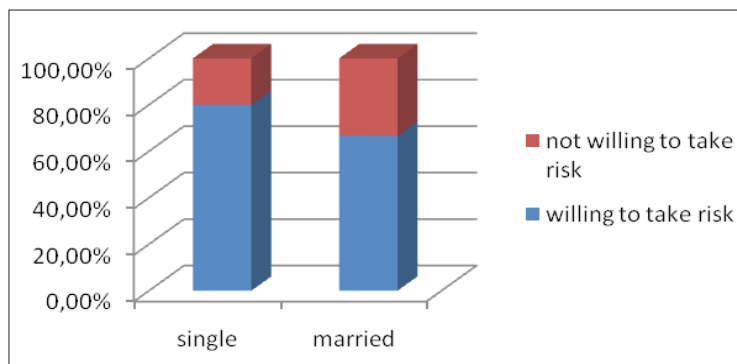


Fig. 3. Individual investors' attitude towards risk according to their marital status

– Though self-evaluation of investors shows that the majority of them are risk-takers, answering the questions about investment choice, 83,33 % of women would diversify their investment instead of investing in a particular share. The tendency to minimize risk is seen from the investors' behavior in choosing investment fund according to its activity report results. 61,76 % of investors prefer to get all available information about the fund. 7,14 % of

men think that 1-3 years results are enough to make the choice. About one third of investors (32,35%) prefer to evaluate 5 years results.

– 47,06 % of investors notice the influence of their mood on their investment decisions (Figure 4). 44,12 % didn't notice the connection between the mood and the decisions made. Only 8,82 % of investors think that their mood doesn't influence their decisions.

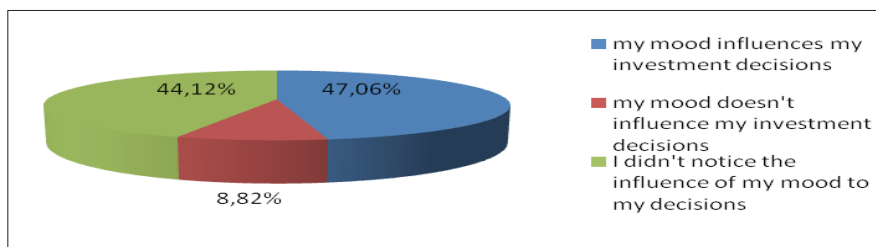


Fig. 4. Self-evaluation of respondents' mood influence to their investment decisions

– The strongest factors (Figure 5) that could influence the investors' mood turn to be mass media (55,56%), weather conditions (24,44%) and results of sport competitions (13,33%).

– During the financial crises 26,47 % of researched investors managed to get profit,

41,18 % faced losses. 11,76 % of investors didn't notice the connection between the crises and their investment results. 20,59 % of investors are sure, that crises didn't influence their investment results (Figure 6).

Summing up the results, the authors could conclude, that investing without

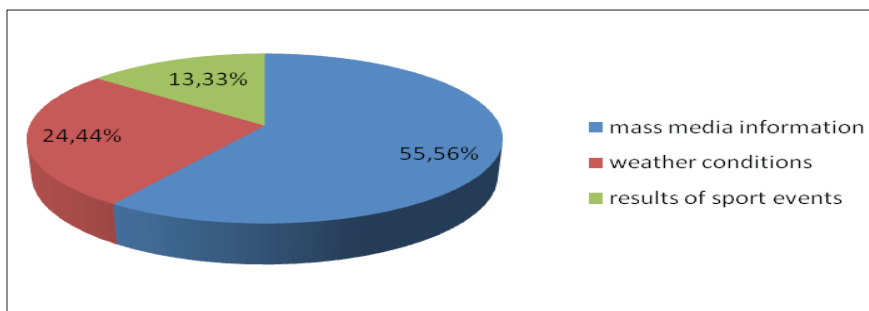


Fig. 5. Factors influencing the mood of individual investors

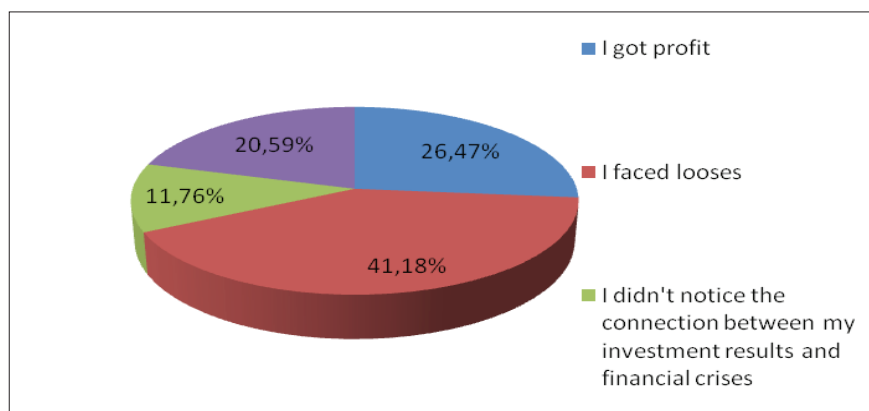


Fig. 6. Self-evaluation of respondents' investment results in connection with financial crises

emotion is easier to say than to do, especially because of the uncertainty, which rules the market. The research showed only basic trends and tendencies. The research method – the closed-end questionnaire is suitable for the evaluation of biases impact on individual investors, that is why the research could be extended and target group of beginners could be tested. As far as researches on individual investors' irrational behavior were not previously held in Lithuania and other Baltic countries, the research could be extended to Latvia and Estonia. Evaluation of similarities and differences that psychological biases course,

could contribute to the better understanding of individual investors decision making. The investors could also benefit from the results of the research, as understanding of major biases that they usually face, could significantly contribute to their portfolio performance.

Conclusions

The major biases that could influence the behavior of individual investors are the following: Anchoring, Mental accounting, Confirmation and Hindsight Bias,

Gambler's Fallacy, Herd Behavior, Overconfidence, Overreaction and Availability Bias.

The analyses of methodologies of current researches made by other authors showed that on a regular bases the researches select one or a couple of biases and evaluate different aspects of its manifestations and make assumptions regarding the investors behavior in one or another situation. This allows to see the "picture" but doesn't answer the question whether rationality is of prime importance making investment decisions and doesn't allow to discuss the possibilities of influence of psychological factors on the financial market participants. So, the complex research held by the authors of the paper contributed to the understanding of general situation of Lithuanian stock market.

In order to analyze the tendencies of Lithuanian stock market, the questionnaire was prepared and distributed among individual investors of Lithuania. The questionnaire was distributed among members of Lithuanian association of financial analysts and with the help of editorial office of investors' magazine "Invest" among its subscribers and readers. The authors combined psychological biases into closed-end questions without stating the bias itself and

check whether the investors felt the influence or not.

According to the results, women are more overconfident investors than men. Also the direct connection between the investment experience and influence of overconfidence was notice (the more experience investor has, the more overconfident he/she is). It is interesting, that investors who have economic-finance education say that their investment skills are good or very good. So, it is possible to conclude, that education and experience give the background for overconfidence bias to appear. The most risky investors are the beginners and investors at the age 30-45 years. Single people are also more risky than married. Almost a half of researched investors notice the influence of their mood on their investment decision. The strongest factors that could influence the investors' mood turn to be mass media information, weather conditions and results of sport competitions.

The results of the research showed that individual investors in Lithuania suffer from all basic biases, but overconfidence, anchoring, mental accounting and herd behavior make the strongest influence to their financial decision-making process.

References

1. Barberis, N., Shleifer, A., Vishny, R. (1998). A Model of Investor Sentiment // *Journal of Financial Economics*. No. 49.
2. Biais, B., Weber, M. (2008). Hindsight Bias. Risk Perception and Investment Performance. Internet access: <http://madoc.bib.uni-mannheim.de/madoc/volltexte/2008/2014/pdf/BiaisWeber2008.pdf>. [Prieiga per Internetą 2011 04 16].
3. Campbell, S. D., Sharpe, S. A. (2007). Anchoring Bias in Consensus Forecasts and its Effect on Market Prices. Internet access: <http://www.federalreserve.gov/PUBS/FEDS/2007/200712/200712pap.pdf>. [Prieiga per Internetą 2010 10 22].
4. Cen, L., Wei, K., Zhang, J. (2009). The Cross-Sectional Anchoring of Forecasted Earnings per Share and Expected Stock Returns. Internet access: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=967309&download=yes. [Prieiga per Internetą 2011 02 11].
5. Dave, Ch., Wolfe, K. (2003). On Confirmation Bias and Deviations From Bayesian Updating. Internet access: <http://www.peel.pitt.edu/esa2003/papers/>

- wolfe_confirmationbias.pdf. [Prieiga per Internetą 2011 02 24].
6. De Bondt, W., Thaler, R. (1985). Does the Stock Market Overreact? // *Journal of Finance*. Vol. 40.
 7. Decourt, R., Accorsi, A., Neto, J. (2007). Behavioral Finance and the Investment Decision-Making Process in the Brazilian Financial Market. Internet access: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=960350. [Prieiga per Internetą 2011 04 16].
 8. Ferris, S.P., Haugen, R.A. and Makhija, A. K. (1998). Contemporary Volume and Historic Volume at Differential Price Levels. // *Journal of Finance*, Vol. 43, No.3.
 9. Fromlet, H. (2001). Behavioral Finance – Theory and Practical Application. // *Business Economics*.
 10. Glaser, M., Weber, M. (2007). Overconfidence and Trading Volume. Internet access: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=976374&rec=1&srcabs=471925. [Prieiga per Internetą 2011 03 03].
 11. Griffin, J. and Karolyi, A. (1998). Another look at the role of the industrial structure of markets for international diversification strategies. // *Journal of Financial Economics*. Vol. 50(3).
 12. Goldberg, J., von Nitsch, R. (2001). Behavioral Finance, John Wiley & Sons.
 13. Johnsson, M., Lindblom, H., Platan, P. (2002). Behavioral Finance and the change of investor behavior during and after the speculative bubble at the end of the 1990's. Internet access: <http://www.essays.se/essay/8c645a4504/>. [Prieiga per Internetą 2011 03 12].
 14. Kahneman, D., Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk // *Econometrica*. Vol. 47.
 15. Laibson, D., Madrian, B. C. (2008). How Are Preferences Revealed? Internet access: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1125043. [Prieiga per Internetą 2011 03 23].
 16. Li, D. (2011) Empirical study of investment behavior in equity markets using wavelet methods. Internet access: http://www.norsworthy.net/uploads/Ding_Li_Thesis.pdf. [Prieiga per Internetą 2011 04 16].
 17. Lim, S. S. (2006). Do Investors Integrate Losses and Segregate Gains? Mental Accounting and Investor Trading Decisions. Internet access: http://mozart.depaul.edu/~slim/Lim_JB_Sep2006.pdf. [Prieiga per Internetą 2011 02 11].
 18. March, J. G. and Shapira, Z. (1987). Managerial Perspectives on Risk and risk Taking. // *Management Science*.
 19. Montier, J. (2006). Behaving Badly. Internet access: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=890563. [Prieiga per Internetą 2011 01 26].
 20. Oberlechner, T., Osler, C. L. (2008). Overconfidence in currency markets. Internet access: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1108787. [Prieiga per Internetą 2011 04 16].
 21. Odean, T. (1998). Volume, Volatility, Price, and Profit When All Traders Are Above Average. // *Journal of Finance*. Vol. 53.
 22. Odean, T. (1996). Internet access: <http://finance.wharton.upenn.edu/~rlwctr/papers/9705.pdf>. [Prieiga per Internetą 2011 02 19].
 23. Pouget, S., Villeneuve, S. (2009). Price Formation with Confirmation Bias. Internet access: <http://spouget.free.fr/Confbias.pdf>. [Prieiga per Internetą 2011 03 23].
 24. Shefrin, H., Statman, M. (1985). The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence // *Journal of Finance*. Vol. 40.
 25. Shefrin, H. (2000). Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing. Oxford University Press.
 26. Shiller, R. J. (1989). Co movements in Stock Prices and Co movements in Dividends. // *Journal of Finance*. Vol. 44(3).
 27. Shiller, R. J. (1998). Human Behavior and the Efficiency of the Financial System. Internet access: <http://cowles.econ.yale.edu/P/cd/d11b/d1172.pdf>. [Prieiga per Internetą 2011 04 16].
 28. Shiller, R. J. and Pound, J. (1989). Survey evidence on diffusion of interest and information among investors. // *Journal of Economic Behavior*. Vol. 12.
 29. Thaler, R. (1993). Advances in Behavioral Finance.
 30. Tversky, A. and Kahneman, D. (1991). Loss Aversion in Riskless Choice: A Reference-Dependent Model. // *The Quarterly Journal of Economics*. Vol. 106(4).

The paper submitted: June 23, 2011

Prepared for publication: September 1, 2011

Kristina LEVIŠAUSKAITĖ, Jekaterina KARTAŠOVA

LIETUVOS INDIVIDUALIŲ INVESTUOTOJŲ IRACIONALIĄ ELGSENĄ FORMUOJANČIŲ VEIKSNIŲ VERTINIMAS

S a n t r a u k a

Dauguma klasikinių finansinių teorijų ir modelių remiasi prielaida apie racionalią investuotojų elgseną rinkoje. Bet ar iš tikrųjų ši elgsena yra racionali?

Atlikti įvairių autorių tyrimai (Goldberg, von Nitsch, 2001; Fromlet, Hubert, 2001; Dave, Wolfe, 2003; Campbell, Sharpe, 2007; Decourt, Accorsi, Neto, 2007; Glaser, Weber, 2007; Biais, Weber, 2008; Cen, Wei, Zhang, 2009 ir kiti) rodo, kad priimant sprendimus neapibrėžtumo ir rizikos sąlygomis, žmonės jaučia įvairių iliuzijų, emocijų, klaidingo informacijos suvokimo bei kitų „iracionalių“ veiksmų įtaką. Šių veiksmų išskyrimas ir bandymai ištirti jų poveikį investicinių-finaninių sprendimų priėmimui davė pagrindą formuoti naujai mokslo šakai – elgsenos finansams.

Straipsnyje pristatomi Lietuvos individualių investuotojų elgsenos tyrimo rezultatai. Šio tyrimo tikslas – parodyti, jog psichologiniai veiksniai gali turėti įtakos jų elgsenai ir priimamiems investavimo sprendimams. Pastaraisiais metais atliktų kitų autorių tyrimų metodikų analizė parodė, kad, kaip taisyklė, tyrėjai pasirenka vieną ar kelis veiksmus ir vertina jų pasireiškimą įvairiais aspektais, bandydami nustatyti investuotojų tikėtiną elgseną vienoje ar kitoje situacijoje. Tai leidžia matyti bendrą „paveikslą“, bet neat-sako į klausimą, ar racionalumas yra tikrai lemiamas veiksnys, priimant investicinius sprendimus, ir koks yra psichologinių veiksmų poveikis finansų rinkos dalyvių elgsenai.

Siekiant įvertinti, ar Lietuvos finansų rinkos pokyčių tendencijas galima sieti su iracionalia šios rinkos dalyvių elgsena, buvo atlikta tikslinių investuotojų grupių apklausa. Tyrimas vyko dviem etapais. Pirmame etape buvo atliktas pilotinis tyrimas, kurio rezultatai patvirtino, jog Lietuvos investuotojų elgsenai įtakos turi dauguma nagrinėtų iracionalių elgseną formuojančių veiksmų. Antro etapo metu tyrimo klausimynas buvo modifikuotas ir praplėsta tikslinė respondentų grupė. Individualių investuotojų

elgsenos tyrimo klausimynas buvo išplatintas Lietuvos Finansų analitikų asociacijos nariams ir su žurnalo „Investuok“ redakcijos pagalba prenumeratoriams ir skaitytojams, darant prielaidą, kad dauguma jų investuoja rinkoje.

Straipsnyje autorės pristato tyrimo rezultatus, kurie leidžia teigti, jog psichologiniai investuotojų elgsenos veiksniai veikia jų investavimo sprendimų priėmimą ir sąlygoja individualių investuotojų iracionalią elgseną finansų rinkose.

Tyrimo metu buvo nustatyta, kad moterys yra labiau pasitikinčios savimi investuotojos nei vyrai. Taip pat buvo pastebėtas tiesioginis ryšys tarp investavimo patirties ir per didelio pasitikėjimo savimi pasireiškimu (kuo daugiau patirties turi investuotojas, tuo labiau per dideliu pasitikėjimu savimi pasižymi jo elgsena). Įdomu ir tai, kad investuotojai, turintys ekonominį-finaninį išsilavinimą vertina savo investavimo įgūdžius kaip gerus arba labai gerus, kas leidžia teigti, jog įgytas išsilavinimas ir turima investavimo patirtis formuoja prielaidas pasireikšti per dideliu pasitikėjimu savimi. Rizikingiausi yra pradedantieji investuotojai ir 30–45 metų investuotojai. Vieniši investuotojai yra taip rizikingesni nei susikūrę šeimos. Beveik pusė apklaustų investuotojų pastebėjo, kad nuotaika turi įtakos jų priimamiems investavimo sprendimams. Stipriausiai nuotaiką veikiantys veiksniai – žiniasklaida, oro sąlygos ir sporto varžybų rezultatai.

Straipsnyje autorės pristato tyrimo rezultatus, kurie leidžia teigti, jog psichologiniai investuotojų elgsenos veiksniai veikia jų investavimo sprendimų priėmimą ir sąlygoja individualių investuotojų iracionalią elgseną finansų rinkose.

Autorių atlikto tyrimo metu nustatyta, jog individualūs investuotojai jaučia tokių iracionalių veiksmų, kaip per didelis pasitikėjimas savimi, prisirišimas, apskaičiavimas mintyse, minios elgsena, pasitvirtinimas ir per jautrus reagavimas poveikiui.