

## Innovative Stock Market in Terms of the Crisis

*Yerkin Nesipbekovich Nesipbekov,  
Raziya Maratovna Ashimova and Bakytnur Zhumashevich Uteyev*

Kazakh National Pedagogical University named after Abai, Almaty, Kazakhstan

---

**Abstract:** The study reveals the scientific background and the specific problems of the Kazakhstan stock market and retail investors and the need to analyze the features of retail investors' behavior. There is an examination of the results of the 2012 survey of the Kazakhstan retail investors (644 respondents). The basic characteristics of typical behavior of Kazakhstan's retail investors have been formed. It has been found that the main reason for the low participation rates of investment in the stock market is not the lack of financial capacity but the distrust to the stock market instruments. There have been determined the contradictory views of Kazakhstan retail investors on their rights and risks combining the need for protection and guidance, infantilism and susceptibility to the outside influence and manipulation, distrust to the financial institutions and to the national system of the investor's interests security.

**Key words:** Behavioral finance theory • Individual / retail investors buying and selling behavior • Retail investors' trades • Drivers of retail trades • Behavioral factors

---

### INTRODUCTION

The current world economy is like a tangle of interrelated intractable problems. It includes mass production in the regions with cheap labor, the need for continuous growth in consumption for the normal functioning of the economy, the consequent need for continued expansion of credit, the fallibility of the risk management approaches of the financial sector. The core of the tangle is a contradiction between the interests and behavior of investors and entrepreneurs.

Sooner or later for successful business conduct any entrepreneur needs an investor. It is desirable to have an investor who shares all the risks and does not demand to return the investments on account of someone's offer of more favorable terms and to have a substantial part of the profits, who leaves the earned money for business development [1]. It is a pipe dream as the majority of small (retail) investors have inherited the traits of a rentier formed in the era of feudalism. They seek to get the maximum income easily, without responsibility and preferably without any risk. Alternatively they would have become entrepreneurs themselves long ago. Therefore, the retail investor cannot do without an intermediary between himself and the entrepreneur.

An intermediary who would have taken care of all the investment risk and have allowed the investor to have the only duty-to receive his rent regularly [2].

In terms of the global crisis when the qualitatively increased uncertainty may reduce the overall effectiveness of traditional methods of risk management in the financial markets, retail investors are rapidly losing confidence to their financial intermediaries [3]. They are getting nervous and rushing to find the most reliable and profitable market; and their behavior largely determining the situation in the financial markets becomes impulsive, irrational, illogical, difficult to explain, unpredictable.

### MATERIALS AND METHODS

The impact of this phenomenon on the financial markets and the economy has led to the heightened attention of many researchers. Individual investors' trades can move stock prices [4]; retail contrarian trades also destabilize prices, perhaps by slowing down price discovery [5]; non-informational trading imbalances in a stock affect the price of that stock and other related stocks [6]. Episodes of high and low idiosyncratic volatility are more pronounced in stocks held relatively more by retail investors,

(e.g., stocks with low price, or stocks that catch the attention of retail investors, such as stocks with extreme returns). These findings suggest that there is a positive association between volatility and retail trading activity and are consistent with our findings because we show that retail trading has a positive causal effect on volatility [7]. Retail trading may positively affect volatility if individual investors behave as "noise traders" or "liquidity traders." On average, stocks purchased by retail investors underperform stocks sold by retail investors, which suggests that retail investor's trade for non-informational reasons (e.g., misperception of future returns, shifts in risk aversion, or hedging needs) [8].

Surely, the individual investors' trades contain a systematic component (see, for instance, [1], [2], [9]). The level of investment knowledge significantly leverages the returns on the investments [10]; the investors' competence was explained by a combined function of sex, education, age and income [11]. However, at the same time, according to behavioral finance theory, investors' psychology can be classified as overconfidence, optimism, hindsight, overreaction to chance, errors of preferences, regret of omission and commission, regret and risk taking; individuals' investment decisions are not rational. Their decisions are affected by inevitable cognitive and emotional biases which make their decisions irrational. This phenomenon is more relevant in case of stock market investors' behavior. The different studies have opposite conclusions [12], [13].

A great number of authors shows that individual investors prefer lottery-type stocks, defined as low-priced stocks with high idiosyncratic skewness and high idiosyncratic volatility [4], [9], [14], [15]; retail investors can be attracted by high idiosyncratic volatility; retail trading in the stock market exhibited significant incidence of compulsive behavior and there was an apparent addiction problem between active retail investors [16].

Since its inception in 1997, the Preferences Network (an interdisciplinary group headed by H. Gintis, an economist and Professor at the University Massachusetts and R. Boyd, an anthropologist and Professor at UCLA) has developed and begun to implement an ambitious research agenda on modeling individual decision making and strategic interaction. From the wide range of possible aspects of human preferences, they focus on a few key tastes that we believe are central to developing a manageable model for policy purposes. These include: preferences for risky activities, the determinants of deferred gratification and impulsivity, strong reciprocity, trust, racist and discriminatory attitudes.

As stated in the conclusions of an extensive review by the members of this group B. Barber and T. Odean (2011), the investors who inhabit the real world and those who populate academic models are distant cousins.

In theory, investors hold well diversified portfolios and trade infrequently so as to minimize taxes and other investment costs. In practice, investors behave differently. They trade frequently and have perverse stock selection ability, incurring unnecessary investment costs and return losses. They tend to sell their winners and hold their losers, generating unnecessary tax liabilities. Many hold poorly diversified portfolios, resulting in unnecessarily high levels of diversifiable risk and many are unduly influenced by media and past experience.

Individual investors who ignore the prescriptive advice to buy and hold low-fee, well-diversified portfolios, generally do so to their detriment. Individual investors underperform standard benchmarks (e.g., a low cost index fund), sell winning investments while holding losing investments (the "disposition effect"), are heavily influenced by limited attention and past return performance in their purchase decisions, engage in naïve reinforcement learning by repeating past behaviors that coincided with pleasure while avoiding past behaviors that generated pain and tend to hold undiversified stock portfolios. These behaviors deleteriously affect the financial well being of individual investors [17].

The financial world has been changed greatly since last 20 years. Individual investors have started to participate actively in the investment activities. It has become very crucial to understand the investors' behavior for their investment decision [13]. In recent years the specific retail investors' behavior in different countries and regions has attracted the researchers' attention.

G. Sevil *et al.*, (2007) conducted a study about the small investors' behavior in Istanbul Stock Exchange [18].

B. Barber and T. Odean (2008) studied individual investors buying and selling behavior using data drawn from U.S. brokerage firms and thousands of individual investors. They found that individual investors bought the stocks that grabbed their attention but they did not do that when selling. The authors thought that after a complicated search and sifting through a large number of stocks, the choice depended on personal experience and what grabbed the eye. Attention is affected by news, abnormal trading volumes, etc [19].

B. Barber *et al.*, (2009) in a study about Taiwan found individual investors to be at a disadvantage compared to institutional investors. The latter have better access to information and modern technology. They concluded that

trading in financial markets leads to economically large losses for individual investors. The estimated losses were staggering at a rate of 2.2% of Taiwan's gross domestic product [20].

T. Foucault *et al.*, (2011) find that the volatility of the stocks affected by the reform of the French stock market declines after the implementation of the reform, relative to other stocks, which means that the effect of retail trading on volatility is positive. This positive effect is consistent with the view that some retail investors behave as noise traders. The reform also triggers a drop in the size of price reversals and the price impact of trades for the stocks affected by the reform. All these observations are predicted by models of noise trading. «One must be careful in interpreting these findings: they are consistent with the view that some retail investors play the role of noise traders but they do not imply that all retail investors are noise traders or that only retail investors are noise traders. Moreover, we do not identify the drivers of retail trades (misperception of future payoffs, risk aversion, or hedging needs). Thus, our findings should not be construed as evidence that retail investors are irrational traders» [8].

F. Abdel-Raheem and G. Faisal, (2011) identified four behavioral factors that influenced investors' trading decisions at Amman Stock Exchange. Investor's age, education and his/her accessibility to the internet had a significant and positive effect on stock trading. The interaction between the investor and his/her broker, on the other hand, had a highly significant and negative effect. Brokers did not employ professionally trained analysts therefore they lost their clients' trust [21].

P. Murthy and J. Divyang, (2012) examine the Indian investors' behavior. The findings support the rationality, disposition effect and theory of regret concepts of behavioral concept. But findings do not support the overconfident, conservatism and cognitive dissonance concepts. The study found that investors are irrational with different investment options, investors were found overconfident. The findings also support the disposition effect theory and regret theory [13].

Many studies investigated the factors that affect investments in stock trading, but the investors' characteristics are still not well documented [21].

**The Main Part:** Specific problems of Kazakhstan stock market and retail investors. Amman Stock Exchange (ASE) is a small exchange-the number of listed firms is 272 [21]. However, even in comparison with ASE, Kazakhstan Stock Exchange (KASE) is a very small

exchange: KASE index is calculated on the prices of shares of only the seven items (the others do not meet the criteria of liquidity).

In recent years KASE has a reducing number of participants, available financial instruments and investors. KASE entered the top five falling stock market index; during 2011 the turnover fell by 20%; the stock market was affected most severely as the decline was 43.2%; the given negative trends were observed in 2012 [22].

Over the last two years, Kazakhstan has made a series of measures to stimulate investment activity of population; the leadership of KASE has exerted strong efforts to improve the legal, technical and technological base and to implement the new tools and services. Nevertheless, in 2012 the main subject of discussion at the Kazakhstan Financial Forum was the existence of KASE.

The fact is that Kazakhstan has not yet formed a massive public secondary stock market and the stock markets are generally traded with a few "blue chips" (though it's the main feature of a much more large-scale Russian stock market too [23]). The market for private equity is quite narrow; creating some rather large funds has not improved the situation since the cost of the few companies that meet the criteria of funds is rising continuously and these funds are not competitive in comparison with similar companies in Russia and Turkey. Lately the Kazakh brokers earned money only due to the sale of corporate securities in the international markets. However, recent changes in the rules of the broker-dealer cooperation in the Kazakhstan stock market have almost cut the given source of income [24].

According to many participants of the forum, increasing the tightening in government regulation leads to the fact that KASE can actually cease to exist (or at best can turn into a filial branch). According to some Kazakhstan experts, an alternative is to restart the stock market and develop it on a qualitatively new customer base. Many local companies with growth potential are experiencing serious difficulties in funding and in fact do not have access to public capital markets. The idea is to reorient the exchange into the model of the stock market where the target investor is citizens.

By all means it requires a radical change in the alignment of certain quantitative indicators of listing at KASE-emitters should include a significant part of Kazakhstan small and medium businesses. But there is a question-is the population of Kazakhstan able to become an investor.

The amount of deposits and retirement savings of people of Kazakhstan is almost \$ 51 billion. It is a huge investment potential for Kazakhstan. However, 50% of the total deposits are accounted for only 0, 1% of the deposits; the other half of the deposits' funds is also distributed unevenly. Only 17% of the population has deposits and generally the amount of deposits is very small [24].

According to the UN report concerning the average wage of workers in 72 countries Kazakhstan ranked 53<sup>rd</sup> with \$ 753 a month and was between Macau (52th) and Bulgaria (54th). The gap to the next partner in the Customs Union-Belarus-is 206 dollars (the Belarusians-\$ 959) [25]. The share of wages of employees in the developed countries is about two-thirds of GDP. Kazakhstan's payroll share is half of the GDP. Living wage, according to the experts, is understated almost in 2-2, 5 times; the average salary exceeds the actual cost of living in 2-2.5 times. If we consider that family factor in Kazakhstan is about 4, 2, then each person in the families of workers with low wages has an amount not exceeding the value of real cost of living [26].

It means that significant investment potential of the population, as retail investors, is not really accessible. In these conditions, the problem of predicting of the retail investors' behavior is crucial. Therefore, in 2012 we conducted a study on Kazakhstan retail investors' behavior.

The study is conducted to understand the retail investors' behavior in Almaty city. The study covers a period from May 2012 till January 2013.

The study does not cover the entire population of the retail investors in Kazakhstan due to the limitation of time and resources. The results of the analysis are based on the data about the sample population of retail investors in Almaty city only, the results need to be generalized with caution and may not be entirely valid for population of other Kazakhstan regions.

The manner to explore the investors' behavior is to interact directly with the investors and try to extract their opinion. So, the questionnaire survey technique was adopted and questions based on these psychological biases were asked. The responses collected through the questionnaire were analyzed and hypothesized.

The survey was carried out in two stages. At the first stage the respondents were asked two screening questions. If the respondent answered both questions positively, i.e. if he/she 1) had the recent experience in various financial transactions and 2) had an interest in

investing, then he/she passed to the second stage of the survey. He/she was asked several sets of questions with respect to 1) the level of awareness and understanding of the nature of the stock market and investing, 2) his/her concept of the protection of investors, 3) behaviors in the investment activity and 4) the attitude to the information about investing in the stock market and information needs (total-56 questions).

The selection of respondents was made randomly using quotas by gender, age and education. The number of respondents interviewed at the second phase is 644.

## RESULTS

Most of the respondents were males, aged 26-35 years, women accounted for only 36%. Only 20% were older than 35 years. 68% have higher education, mainly economic.

In addition to socio-demographic factors, the investment objectives of the respondents are affected by 1) the financial competence (the higher it is the more likely respondents are set to invest), 2) the latest investment experience and 3) the presence of the respondents who have acquaintances among investors. However, there is only a quarter of such respondents: 18% have a small number of such friends (1-2 people), 5%-a lot (3 or more), another 5% could not estimate how many or little they have such friends.

The investment climate in the country has a great influence upon the readiness of the respondents to implement investments. Those who consider the economy to be stable enough to make investments (presently 35%) are twice as likely determined to invest. 41% of the respondents believe that the next years the state affairs in the economy will not improve and will not be stable. 35% of the respondents expect stability. Another 25% did not give their forecast. Investment climate appraisals are quite diverse depending on the level of competence-the higher it is, the more likely the respondents are inclined to consider the current economy to be stable enough and the more they give positive forecasts of the situation.

The study highlighted the group "having significant intention to invest"-they accounted for 15% of the original sample. These respondents are usually people aged under 25 years (19% vs. 15% of the sample), from 25 to 32 years (22%), citizens having higher education diplomas (24%), people with above the average incomes (21%) and high incomes (24%).

Most respondents, even members of the group "having significant intention to invest" are not yet ready to the current form of investment activity with greater involvement and quite active behavior in the stock market. They are more focused on becoming "passive investors".

50% of all the respondents and 57% of the group "having significant intention to invest" would prefer to receive dividends and not to resell the shares. Only 29% of the respondents and 35% of the group "having significant intention to invest" are shares reselling oriented.

28% of all the respondents (and 33% of the group "having significant intention to invest") would prefer not to sell their shares as long as possible, 31% and 32%, respectively, would sell their shares only when their value significantly change (increase or decrease). Only 19% of the respondents in the sample (and 26% of the group "having significant intention to invest") would prefer to resell shares constantly benefiting on the stock price change.

As for the amount of investment, 21% of the respondents are willing to spend on buying of shares no more than \$ 1000, 7%-about \$ 2000, 7%-\$ 1000-\$ 3000, others 7%-\$ 3000-\$ 10000 and 4%-more than \$ 10,000.

Most respondents (58%) of the total sample are focused on investments with lower income, but more secure; those who would prefer more profitable investments are twice as little (27%). However, most respondents are disposed to behave rationally in case the stock begins to float: 44% believe that in such a case they need to wait and not to sell the shares and 28% believe that in such a situation they need to sell shares as many as possible.

According to the absolute majority of the respondents the living regulations only "partly" cover the requirements of the stakeholders. Only a quarter of the respondents consider themselves well-informed about the content of the Kazakh laws of protection the rights of investors; and nearly half of the respondents at the time of the survey were not interested in protecting the rights of investors.

Answering the question "Could you tell us what additional measures to protect investors' rights were enshrined in the Kazakhstan legislation at the end of 2011?" almost all of the respondents found it difficult to answer. According to three-quarters of the respondents, the level of protection of Kazakh investors to a great extent depends on the state regulation of the stock market. Only 14% of the respondents believe that the security of Kazakh investors may increase due to the

activity of self-regulated organizations uniting investment companies. It is an interesting fact that 82% hope for the activity of the internal control of investment companies.

Answering the question "Whose actions often lead to violations of rights of investors?" the respondents thought that in most cases (64-66%) the cause of violation of investors' rights is often lack of awareness of their rights, as well as the shortcomings of Kazakhstan legislation. The following factors also lead to violations of rights of investors: low qualification of investors (38%) and poor infrastructure of the market (16%), the activity of executive authorities, according to the respondents, violates the rights of investors the least (12%).

Self-managing of their investments would prefer 30% of the respondents in the total sample and 35% of the group "having significant intention to invest"; 45% and 51% respectively would prefer to entrust management of the funds to the specialists.

The vast majority of the respondents (90%) admitted that they personally did not have enough information and knowledge to successfully invest in stocks and only 7% rated their knowledge as sufficient. There is not enough information in the media on the subject of investing: according to 37% of the respondents, such information does not occur, 34% believe that available information is not enough and only 15% say they have enough information. Those who find such information (32% of the sample) have stated that usually they do not understand it. Only 21% understand such information without difficulty.

The following sources of information are most popular among the respondents in case of purchasing the stock shares (answering this question, it was possible to note a few sources). 60% would prefer the advice of finance professionals known personally, 48%-the advice of friends who have experience in buying of stocks, 26%-the advice of relatives and friends with whom they usually discuss the financial issues, 22% would apply to the recommendations of employees of financial companies, 18% would listen to the advice of financial analysts in the media, 12% would prefer to use the knowledge that they can get at the seminars and training courses, 8% would prefer to use the information from the Internet web-sites concerning the finance, 6% would listen to the advice of journalists or to advertising, 4% would use the information on the web-sites of individual financial companies.

The respondents do not trust any single source of information fully and unconditionally, with the exception of the competent members of family and friends.

The presence of "helpful people" among friends as a whole is very highly regarded by the respondents, as it leads to access to insider information determining the successful behavior in the investment market.

### CONCLUSION

The main characteristics of the typical behavior of Kazakhstan's retail investors: irrationality in making investment decisions; infantile ideas about protecting the interests of investors in the stock markets; request for the protection to the government and financial institutions; conviction that the stock market is dominated by speculators and that the opinion of the analysts does not reflect the real condition.

Kazakh retail investors have contradictory understanding of their rights and risks. Just over half of the respondents in some way aware that the depositors have the responsibility for the risks associated with investments in securities and in case of the fall of stocks, nobody will make amends to the investors. At the same time, more than a third of the respondents believe that the state must indemnify (especially concerning the shares of national companies).

On the one hand, the results show the immaturity of Kazakhstan people in the financial sector, on the other hand, they show that a retail investor has a request for protection by the state-at least from fraud intermediary companies in the financial markets. At the same time, the respondents have distrust to the financial system due to their financial and legal experience. In addition, they believe that investment firms are protected neither from the state nor from criminal gangs-they can lose their business and cannot reply to existing commitments. The main reason for the low participation rates of investment in the financial market is not only the lack of financial ability to implement savings, but the distrust to the stock market instruments.

### REFERENCES

1. Kumar, A. and C. Lee, 2006. Retail investor sentiment and return co movements. *Journal of Finance*, 61: 2451-2486.
2. Dorn, D., G. Huberman and P. Sengmueller, 2008. Correlated trading and returns. *Journal of Finance*, 63: 885-919.
3. Kaniel, R., G. Saar and S. Titman, 2008. Individual investor trading and stock returns. *Journal of Finance*, 63: 273-310.
4. Hvidkjae, S., 2008. Small trades and the cross section of stock returns. *Review of Financial Studies*, 21: 1123-1151.
5. Bloomfield, R., M. O'Hara and G. Saar, 2009. How noise trading affects markets: An experimental analysis. *Review of Financial Studies*, 22: 2275-2302.
6. Andrade, S.C., M. Charles and M. Seasholes, 2008. Trading imbalances, predictable reversals and cross-stock price pressure. *Journal of Financial Economics*, 88: 406-423.
7. Brandt, M.W., A. Brav, J.R. Graham and A. Kumar, 2010. The idiosyncratic volatility puzzle: Time trend or speculative episodes. *Review of Financial Studies*, 23: 863-899.
8. Foucault, T., D. Sraer and D.J. Thesmar, 2011. Individual Investors and Volatility. *The Journal of Finance*, LXVI, 4: 1369-1406.
9. Barber, B.M., T. Odean and N. Ning Zhu, 2009. Do retail trades move markets. *Review of Financial Studies*, 22: 152-186.
10. Shaikh, A.R. and A.B. Kalkundarikar, 2011. Analysis of Retail Investor's Behaviour in Belgaum District, Karnataka State. *International Journal for Management Research*, 1(2): 22-39.
11. Chandra, A., 2011. Individual Investors' Trading Behavior and the Competence Effect. *International Journal of Economics and Finance*, 3: 6.
12. Yalcin, K.C., 2010. Individuals' Choices: Traditional and Behavioral Finance Perspectives. *Journal of Academic Studies*, pp: 12.
13. Murthy, P. and J. Divyang, 2012. A Study on Retail Investors Behavior. *International Journal of Contemporary Business Studies*, 3: 6.
14. Barber, B.M., L. Yi-Tsung, L. Yu-Jane and T. Odean, 2009. Just how much do individual investors lose by trading. *Review of Financial Studies*, 22: 609-632.
15. Linnainmaa, J.T., 2010. Do limit orders alter inferences about investor performance and behavior. *Journal of Finance*, 65: 1473-1506.
16. Konstantaras, K. and A.N. Piperopoulou, 2011. Stock Market Trading: Compulsive Gambling and the Underestimation of Risk. *European Psychiatric. Supplement*, 26: 66-66.
17. Barber, B.M. and T. Odean, 2011. The Behavior of Individual Investors. University of Massachusetts Amherst, <http://www.umass.edu/preferen/> Barber-Odean 2011. pdf.
18. Sevil, G., M. Sen and A. Yalama, 2007. Small Investor Behavior in Istanbul Stock Exchange (ISE). Eurojournal Publishing, Inc, Middle Eastern Finance and Economics, pp: 74-79.

19. Barber, B.M. and T. Odean, 2008. All That Glitters: The Effect of Attention and News on the Buying Behavior on Individual and Institutional Investors. *The Review of Financial Studies*, 2(21): 785-818.
20. Barber, B.M. *et al.*, 2009. How Much Do Individual Investors Lose by Trading?. *The Review of Financial Studies*, 2(22): 609-632.
21. Abdel-Raheem, F.F. and G.K. Faisal, 2011. Individual Investors' Stock Trading Behavior at Amman Stock Exchange. *International Journal of Economics and Finance*, 1(3): 6.
22. Web-site of the Kazakhstan Stock Exchange <http://www.kase.kz/>.
23. Berdnikova, T.B., 2010. Modernization of the national security of the stock market: problems and finding of solutions. *Problem analysis and public management design*, 1(3): 30-46 (in Russian).
24. Web-site of the National Bank of the Republic of Kazakhstan <http://www.nationalbank.kz>.
25. Economic and social survey of Asia and the Pacific, 2012. Pursuing shared prosperity in an ERA of turbulence and high commodity prices. United Nations, 2012, pp: 236. // <http://www.apec-center.ru/>.
26. Koshanov, A., 2012. Industrial innovation challenges of globalization and new imperatives of socialization of social production in Kazakhstan. *Economy: Strategy and Practice*, 2(22): 6-11 (in Russian).