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Factors influencing individual investment on the Russian stock market

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Keywords

Investment portfolio, individual investor, Russia, key rates, economic factors, stock market

Disciplines

Behavioral Economics | Business | Eastern European Studies | Economic History | Finance | Finance and Financial Management | International Economics | Macroeconomics | Portfolio and Security Analysis

Factors influencing individual investment on the Russian stock market

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September 2021

Abstract

CBR also lowered key rates to decrease the spread between the inflation expectations and the real rate. Currently Russian economy is experiencing a historical maximum of the individual investment on the Russian stock market. In this paper we used linear correlation method to see the intensity of the association between economic factors such as market interest rates and profitability of different types of assets and indicators of individual investment activity like number of active broker clients, number of unique active investors in Moscow Stock Exchange and the increase in the amounts in asset management. We also used the horizontal analysis helps to compare historical data such as assets that people invested in over a number of periods. In this paper, it is used to show which types of assets were the most attractive to individuals since 2018 to 2021. We found strong correlations between percentage of active broker clients and key rate adjusted for inflation (-0.91), percentage of active broker clients and real and nominal interest rates on the bank deposits of the 10 largest banks of Russia (-0.84 and -0.89 respectively), absolute value of asset growth of individuals in asset management to key rate and key rate adjusted for inflation (-0.94 and -0.93 respectively), absolute value of asset growth of individuals to real and nominal interest rate of bank deposits in 10 largest banks of Russia (-0.94 and -0.84 respectively), percentage of active broker clients and the amounts of individual investment in bonds (0.92), percentage of active broker clients and complains on the professional market participants (0.87), net purchase of transactions of individuals and yield of government and corporate bonds (-0.81 and -0.9 respectively). Those correlations showed that lower market rates made individuals seek higher returns in riskier assets and pushed them out of the bank deposits to the stock market. This increased investment demand made new investment instruments popular and brought changes to the market infrastructure.

Introduction

The importance of the private investor for the Russian economy can hardly be overestimated.

The insufficient depth of the Russian financial market limits the possibilities for fully servicing the needs of the economy, including large national borrowers.

In particular, in terms of bank loans to GDP, Russia lags behind many developed countries (59.9% versus 158.7% in OECD countries, 94.8% in the Eurozone in 2020), but it is comparable to some emerging market countries (70.2% in Brazil, 55.3% in India). The indicator of the volume of bonds of non-financial organizations to GDP in Russia is also below the level of the OECD countries (8.1% against 24.4% at the end of 2020), as well as China (30.7%), while close to the value of the indicator in Brazil (7%). Equity capital has not yet become an important source of long-term resources in the Russian economy.

Under these conditions, the Government of the Russian Federation and the Central Bank of Russia have been making efforts for a long period of time to increase the involvement of long-term money of the population in the country's economy through the securities market.

Meanwhile, a tangible inflow of household funds has been felt only in the last couple of years.

The reasons for this were both external and internal factors.

The ultra-soft monetary policy that was pursued in previous years and was strengthened in the context of the 2020-2021 pandemic, as well as large-scale fiscal incentives in most countries during this period, led to a significant increase in the risk appetite of investors (in search of profitability), contributed to the development of the market private investment and caused a significant increase in asset prices in the global financial market. In the future, the gradual withdrawal of support measures may reveal additional problem areas in both the public and private sectors, including those related to the debt burden, especially in emerging markets. This can significantly affect the dynamics and development of world financial markets.

A significant increase in private individuals' investments in securities took place in many countries, but in Russia it was more noticeable due to the relatively low level of citizens' investments in capital market instruments at the beginning of 2019. Citizens' purchases of securities were largely facilitated by a decrease in interest rates on traditional banking products (deposits), an increase in the interest of large banks in expanding the range of financial products and services to clients and obtaining additional income through cross-selling, as well as a simplification of the customer journey, including in terms of digitalization. The measures to support the Government in terms of the development of individual investment accounts also had a significant impact.

In past, Russia has dealt with high economic uncertainty prompted by high inflation rates. High inflation contributed to the challenges in planning and consequently had a negative effect on the production, investment and long-term savings. It was one of the reasons for underinvestment in the Russian economy. Russian economy experienced low economy monetization its slow development. In the beginning of 2014, the Central Bank of Russia (later CBR) started targeting the inflation at 4% to stabilize the Russian economy, support businesses and attract investment on the stock market. CBR also continued to lower key rates to decrease the spread between the inflation expectations and the real rate. In July 2020, the CBR key rate hit the historical minimum of 4.25%¹, making saving less attractive than investing.

Currently Russian economy is experiencing a novel situation on the Russian stock market – historical maximum of the individual investment on the Russian stock market. Currently, there are more than 12 million citizen accounts registered on the Moscow Exchange (later MOEX). The active individual investors amounted to 2.4% out of the workforce, which is 9.23 times more than 3 years ago. The amount of the individual investment in the stock market reached 6 billion rubbles and continued growing.

¹The Bank of Russia cuts the key rate by 25 bp to 4.25% p.a., Central Bank of Russia

This large participation of the individuals on the stock market is unusual for Russia and is a topic of large interest now. This paper is aimed to contribute to the discussion of this phenomenon.

Moreover, individual investors are yet inexperienced and might require protection from economic fraud and financial failure. For the first time the amount of individual investment is large enough that people's decisions can influence the market in Russia. However, people might show irrational behavior patterns and bring unexpected effects on the market; therefore, it is important to keep attention on them and know how to regulate if needed.

As the individual investment only started growing 3 years ago, it is still a very new, developing and relatively unstudied topic for Russia. Therefore, the data specifically on the investment of individuals, their preferences and their influence on the market is very limited and not coherent.

CBR started posting full data with information on private investment included only in 2021. The data includes relevant statistics only since 2018 and it did not highlight private investment separate before. The 2020 report from NAUFOR "Current state of the stock market and the main directions of its development"² analyzed investment on the stock market with distinguishing private from corporate investment and identified a significant problem with limited data especially the one dating prior to 2018. Therefore, this research is aimed at continuing the study of the investment in Russia and contributing to the discussion of individuals as investors in Russia.

Meanwhile, the importance of a private investor for the financial market is confirmed by the goals that are listed in the Draft Main Directions for the Development of the Financial Market Placed by the Russian Federation for 2022 and the Period of 2023 and 2024, published on the website of the Central Bank of Russia.

² Current state of the stock market and the main directions of its development, NAUFOR, 2020

In the draft document, the first goal of the medium-term policy for the development of the financial market of the Central Bank sets "Strengthening the confidence of the retail consumer and investor in the financial market by strengthening its security, increasing financial literacy and expanding the availability of financial services.³ The Bank clarifies that "this goal acquires its specificity in the context of digitalization of financial and economic relations, which leads to a change in the nature of interaction between suppliers and consumers of financial products and services, a reduction in the customer path and the arrival of mass consumers in segments of the financial market with an increased level of risk, where investment requires special qualifications, as well as attention and time. At the same time, with the introduction of new technologies, the requirements for the level of skills of the consumer of financial services in the use of modern devices and remote channels are increasing, as well as the risks of digital inequality are increasing. Of particular importance are the safety issues of the product offered to the consumer (investor) and the quality of its promotion on the market. At the same time, new types of fraud and unfair practices are emerging, which requires improved methods of countering them. In these conditions, additional adjustment of mechanisms for protecting the rights of retail investors and consumers of financial products and services is required, especially taking into account the use of artificial intelligence and robotization of relations between the consumer and the financial industry (M2M finance), as well as an increase in investment, digital and cyber literacy.

The document draws attention to the fact that the flow of funds from citizens to the capital market can increase the availability of financial resources for companies and become an additional factor in the development of the real sector of the economy. However, in the current environment, such a massive arrival of novice retail investors can in many ways be a challenge, given that most new investors do not understand the specifics of the complex financial instruments they buy and the associated risks, their fundamental difference from bank deposits.

³ Main Direction Financial Market Development Russian Federation, July 2021, Central Bank

The situation is complicated by the not always conscientious behavior of financial intermediaries when selling investment products, who do not fully explain to clients the specifics of instruments, and who use misseling and misprising practices.

A feature of novice investors is the desire to independently try their hand at the securities market. Russian citizens prefer brokerage services over trust management. From the beginning of 2019 to the beginning of June 2021, the number of open brokerage accounts (almost 6 times, up to 14.2 million) and trust accounts (almost 4 times, up to 597 thousand) increased many times. Over the same period, the number of open individual investment accounts increased significantly - more than 6 times, to 3.8 million.

Developed markets like the United States, have seen the boom of individual investment for some time now. Most of the investors there are passive ⁴because they have been on the market for a while and have already realized that passive investment is easier and more stable. However, Russian market is a developing one, and individuals have just started investing. 4.5 million shareholders represent passive investors, while 13 million citizens have brokerage accounts in July 2021.⁵ There is currently a larger share of active investors than passive ones, because they are still curious to try themselves and want to get the hands-on experience.

Therefore, it is important to study the development of the individual investment on the developing markets as it shows the early stages of the process. Moreover, there are limited studies on the individual investment in the developing countries as they are yet to experience the significance of this phenomenon. They investigate the matter before 2018; however, there's limited information on post-crisis events. This study continues the discussion of the individual investment in developing countries and shows some of stages of the early development of the process. Issues related to individual investment are relevant both for the government of the

⁴ "Passive management now accounts for 45 percent of all assets for U.S. stock-based funds." cited from <https://www.cnbc.com/2019/03/19/passive-investing-now-controls-nearly-half-the-us-stock-market.html>

⁵ <https://econs.online/articles/opinions/rossiyskie-investory-i-zarubezhnye-etf/>

country and the Central Bank, and for professional participants in the financial market. Banks and non-financial institutions should take into account the specifics of the behavior of individuals, since individuals influence the prices of securities, in addition, they compete for money from individuals and are also interested in the long-term presence of these investors and their prosperity.

The main goal of this paper is to explore what the factors influencing the presence and the amount of the individual investment on the Russian stock market and what behavior patterns individuals exhibit on the Russian stock market. We intend to find that interest rates, profitability of different types of assets – bank deposits, bonds, and equities – and change in taxation on the bank deposits returns affect the investment preferences of individuals on the stock market in Russia. We see several important implications of such investigation. Understanding the investment preferences of individuals might be useful for the Central Banks of countries with developing markets because that might help them detect the harmful effects and regulate them. It is important to know what risks the individuals might face on the stock market and how to protect them because inexperienced investors are under the financial loss risk, and a negative memory of the failure on the stock market might make them aversive to entering it again.

In our research we focus on linear correlation models between economic factors - market interest rates and profitability of different types of assets - and indicators of individual investment activity: number of active broker clients, number of unique active investors on MOEX, and the increase in the amounts in asset management. To see what investment instruments attract individual investors horizontal analysis of asset portfolios of individual investors was used.

Data used is the statistics from CBR, the World bank, MOEX, and NAUFOR reports.

The structure of the paper is following: Section 2 contains the description of methods used to find factors influencing the individual investment decisions the most as well as characterize data

and research process. In Section 3, we present results and the discussion. The paper is finished with conclusions and implications.

Methods

Linear correlation method shows the intensity of the association between two variables. The coefficient correlation ranges from -1 to 1 with measures from -1 to 0 showing negative dependence of two variables studied and from 0 to 1 a positive dependence between the two variables. We conducted correlations between economic factors such as market interest rates and profitability of different types of assets and indicators of individual investment activity like number of active broker clients, number of unique active investors in Moscow Stock Exchange and the increase in the amounts in asset management.

The horizontal analysis helps to compare historical data such as assets that people invested in over a number of periods. In this paper, it is used to show which types of assets were the most attractive to individuals since 2018 to 2021.

Due to the rather short presence of the individual investment on the stock market, and therefore, novelty of this phenomenon, data on the individual investment in Russia is rather limited and lacks comprehensive reports especially prior to 2018, when investment of individuals was not as significant.

Table 1. Key economic factors and indicators of activity of individuals

Date	30.12.2016	29.12.2017	29.12.2018	31.12.2019	31.12.2020	01.04.2021
Inflation	5,38	2,52	4,27	3,05	4,91	6,51
Key rate	10,00	7,75	7,75	6,25	4,25	6,50
Key adjusted for inflation	4,62	5,23	3,48	3,20	-0,66	-0,01
Nominal interest rate on the deposits of the 10 largest banks in Russia except for Sberbank	8,28	7,11	7,01	5,66	4,30	4,62
Real interest rate on the deposits of the 10 largest banks in Russia except for Sberbank	2,90	4,59	2,74	2,61	-0,61	-1,89
Government bonds total return	15,00	12,80	2,10	20,00	8,50	-0,90
Corporate bonds total return	11,00	12,30	4,40	14,30	8,30	-0,40
Percentage of the active clients on the brokerage accounts	3,35	3,26	13,90	13,70	19,25	19,16
Net purchase of transactions of individuals, billion rubbles				270,52	259,83	490,74
Amount of individual investment in bonds, trillion rubbles		320,00	712,90	1 236,67	1 575,39	1 648,17
Number of complains on the professional market participants			350,00	214,00	429,00	465,00
Number of unique active investors on MOEX, million of people	0,10	0,10	0,20	0,40	1,40	1,80
Absolute value of asset growth of individuals, billion rubbles	54,00	131,00	147,00	156,00	341,00	

The data on inflation, key rate, nominal interest rate on deposits in 10 largest banks in Russia, active broker clients, net purchase of transaction on the stock exchange of individuals, number of complains on the professional market participants, government bond total return and corporate bond total return were gathered from historical statistics on the CBR website and are presented in the Table 1.

Linear correlation coefficient was calculated for all of the factors to see which ones had the strongest relationship.

Results and discussion

The starting point for our study was computing the correlation coefficient between economic factors and indicators of individual investment activity. Full data on correlation coefficient is presented in Table 2.

Table 2. Correlations coefficients between economic factors and indicators of the activity of individual investors

Comparison factors	Inflation	Key rate	Key rate adjusted for inflation	Nominal interest rate on deposits in 10 largest banks in Russia	Real interest rate on deposits in 10 largest banks in Russia	Percentage of the active clients on the brokerage accounts	Net purchase of transactions of individuals, billion rubbles	Amount of individual investment in bonds, trillion rubbles	Number of complains on the professional market participants	Government bonds total return	Corporate bond total return	Number of unique active investors on MOEX, million of people	Absolute value of asset growth of individuals, billion of rubbles
Inflation				0.73	-0.56	0.83	0.82	0.76	0.94	-0.62	-0.76	-0.16	0.12
Key rate	0.69			0.98	-0.15	-0.81	0.62	-0.78	-0.26	0.18	0.15	-0.57	-0.94
Key rate adjusted for inflation	-0.31	0.48		0.38	0.94	-0.91	-0.32	-0.93	-0.81	0.52	0.58	-0.57	-0.94
Nominal interest rate on deposits in 10 largest banks in Russia	0.73	0.98	0.38		0.16	-0.89	-0.25	-0.96	-0.52	0.34	0.39	-0.67	-0.94
Real interest rate on deposits in 10 largest banks in Russia	-0.56	0.15	0.94	0.16		-0.84	-0.69	-0.87	-0.85	0.59	0.71	-0.58	-0.84
Percentage of the active clients on the brokerage accounts	0.83	-0.81	-0.91	-0.89	-0.84		0.45		0.87	-0.54	-0.55	0.82	0.83
Net purchase of transactions of individuals, billion rubbles	0.82	0.62	-0.32	-0.25	-0.69	0.45		1.00	0.58	-0.81	-0.90	0.69	-1.00
Amount of individual investment in bonds, trillion rubbles	0.76	-0.78	-0.93	-0.96	-0.87	0.92	1.00		0.50	-0.02	-0.15	0.89	0.80
Number of complains on the professional market participants	0.94	-0.26	-0.81	-0.52	-0.85	0.87	0.58	0.50		-0.84	-0.83	0.81	ЛОЖЬ
Government bonds total return	-0.62	0.18	0.52	0.34	0.59	-0.54	-0.81	-0.02	-0.84		0.97	-0.57	-0.30
Corporate bonds total return	-0.76	0.15	0.58	0.39	0.71	-0.59	-0.90	-0.15	-0.83	0.97		-0.66	-0.28
Number of unique active investors on MOEX, million of people	-0.16	-0.57	-0.57	-0.67	-0.58	0.82	0.69	0.85	0.81	-0.57	-0.66		0.98
Absolute value of asset growth of individuals, billion rubbles	0.12	-0.94	-0.94	-0.94	-0.84	0.83	-1.00	0.80	0.75	-0.30	-0.26	0.96	

When analyzing the obtained results, it is worth noting the largest in absolute value correlation coefficients (above 0.7 and below -0.7), as they indicate the stronger dependence of variables.

This statistical method showed strong negative correlations between the percentage of active broker clients and key rate adjusted for inflation (-0.91) and an absolute value of asset growth of individuals in asset management to key rate and key rate adjusted for inflation (-0.94 and -0.93 respectively.) It is important to observe that both active, whose change in investment interest is reflected in the increase in the percentage of active broker clients, and passive, whose investment

interest is reflected by the increase in the absolute value of asset growth of individuals in asset management, individual investors on the stock market increase their interest in investing as the key rate or the key rate adjusted to the inflation decreases. This is demonstrated in the Figures 1 and 2.

Figure 1. Influence of interest rates on the activity of broker clients

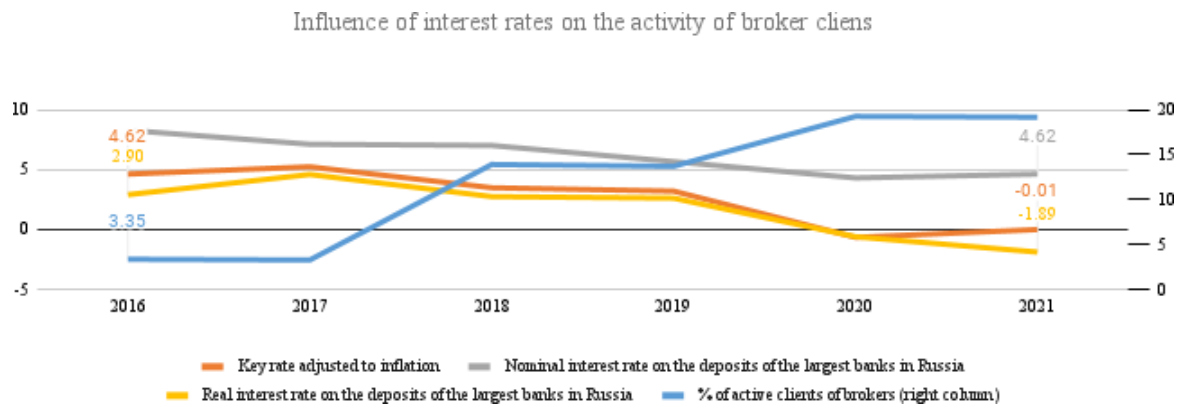
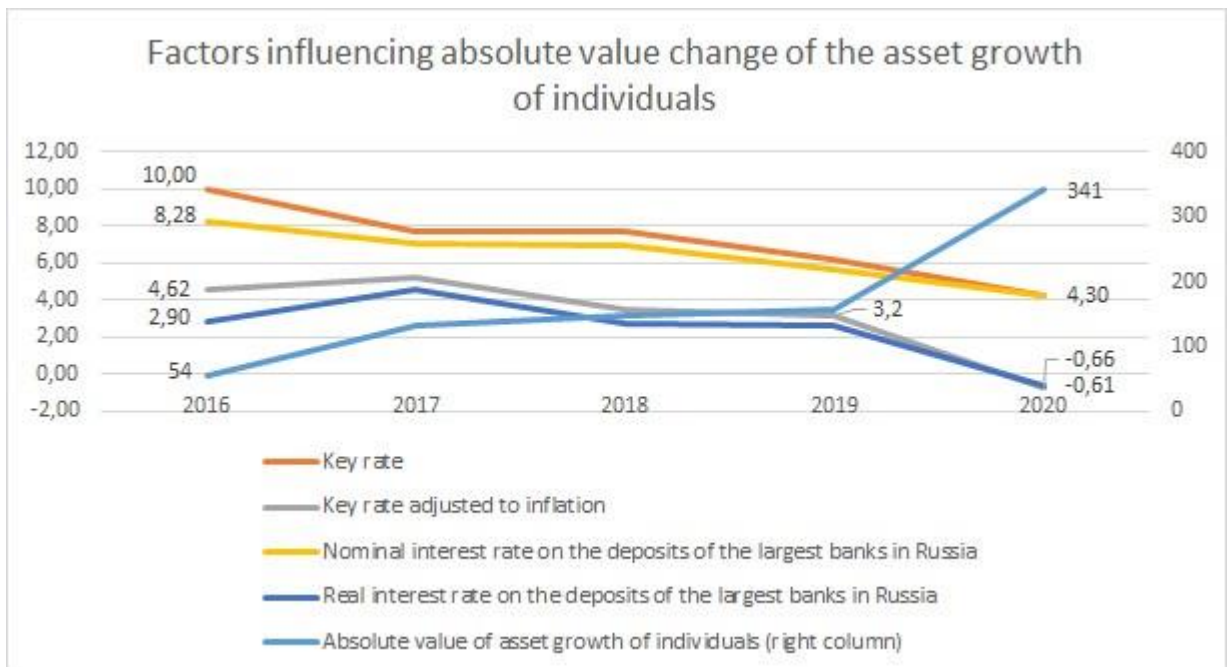


Figure 2. Factors influencing absolute value change of the asset growth of individuals



Strong negative correlation between the key rates and two of the indicators of the individual investment activity highlights that both active and passive investors are drawn to invest more as the key rates decrease. Moreover, there are also high negative correlations between the

percentage of active broker clients and real and nominal interest rates on the bank deposits of the 10 largest banks of Russia (-0.84 and -0.89 respectively) and an absolute value of asset growth of individuals to real and nominal interest rate of bank deposits in 10 largest banks of Russia (-0.94 and -0.84 respectively). These correlations show that both active and passive investors are inclined to enter and invest more on the stock market when the bank deposits rates become less appealing. Key rates and bank deposit rates have similar downward trajectory because the CBR as a megaregulator in Russia conducts its monetary policy through influencing the key rate at which it lends money to banks in Russia. Therefore, as the CBR lowers the key rate, bank deposits rates decrease as well. However, both of the rates have strong negative correlation with the indicators of investment activity. This might be true because individuals are seeking higher return rates.

Linear correlation method showed a strong positive relationship between percentage of active broker clients and the amounts of individual investment in bonds (0.92). It indicates that when individuals start investing on the stock market, they start with the bonds market first.

As the bank deposit rates drop, people are pushed out on the stock market, where asset yield is higher and might bring individuals more profit than regular bank deposit. Thus, key rate appears to be a powerful tool to influence the amounts of individual investment on the Russian stock market.

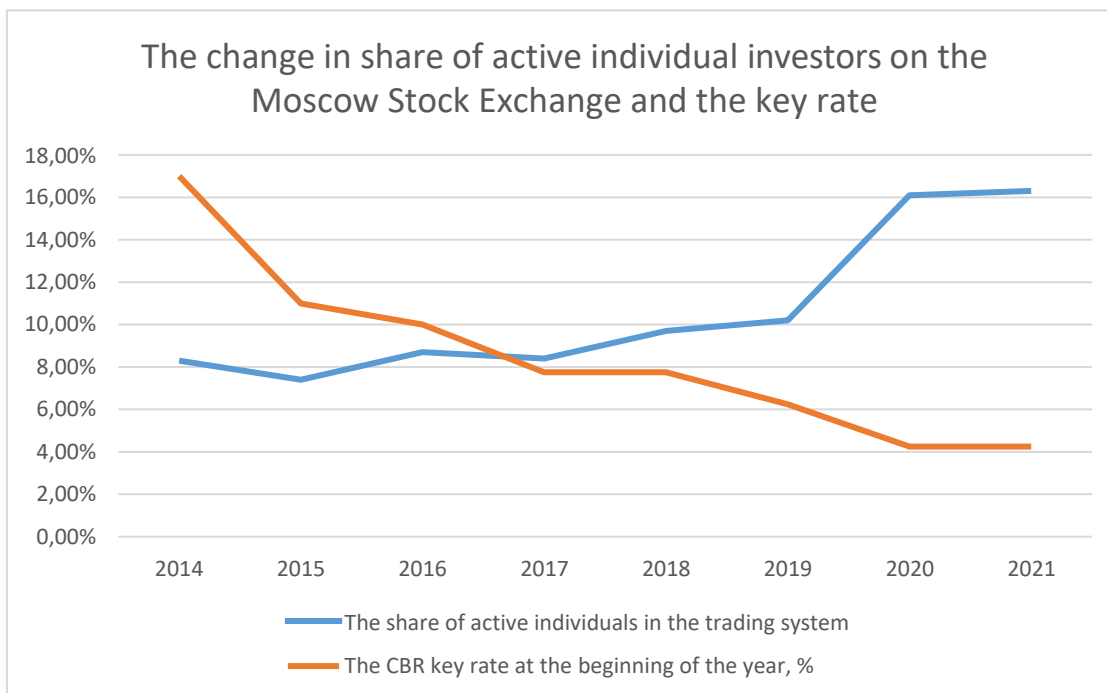
Moreover, in January 2021 new regulation on the taxation of the interest income from the bank deposits was introduced⁶. Previously only deposit holders whose savings rate was higher than the refinancing rate had to pay the tax on the interest income. For Russian Federation residents the tax rate was 35% and for non-residents 30%. However, in practice most of the savings rates were lower than the refinancing rate; therefore, most of the holders did not pay the tax.

⁶ Taxation of interest on bank deposits in Russia and income from debt securities, Ernst&Young

The new regulation applies tax of 13% on the amount exceeding the stated limit, which is calculated according to the CBR key rate. On the January 2021 the limit was 42 500 rubles. (The current key rate, 4.25%, multiplied by 1 million.)⁷ As a result of these regulations, investing in bonds becomes more attractive to the individuals. The taxation regulations for bonds have also changed. As of January 1, 2021 investors in OFZ (government bonds), municipal bonds and corporate bonds have to pay 13% (for Russian Federation residents) and 30% (for non-residents) taxation on the coupon. Because bonds have higher profitability compared to bank deposits, similar risk (in case for OFZ), and similar taxation rate, individuals started shifting from bank deposits to bonds. The share of individuals in corporate bond placements, excluding short bonds and large non-market issues, amounted to 18.1% in 2020 against 12.7% in 2019, and in the secondary corporate bond market, the share of private investors increased to 12.5% in 2020 versus 10.6% in 2019. The total number of retail investors who completed bond transactions over the year increased to 817 thousand, which is twice as much as in 2019. Lower interest rates, stable inflation, and new regulations prompted increased interest in the stock market investment from individuals, which was unusual for the Russian stock market.

⁷What you need to know about taxes on deposits in 2021, Reifessein Bank

Figure 3. The change in share of active individual investors on the Moscow Stock Exchange



The share of active individual investors on the Russian stock market almost doubled from 8.3% in 2014 to 16.3% in 2021. In May 2021 more than 1.8 million. People made transactions on the stock exchange, compared to 580.3 thousand people in May last year⁸.

The total trading volume on the stock market in 2020 amounted to 54.5 trillion rubles, which is 34% higher than the level of 2019. The trading volume on the stock market increased by 93%, to 23.9 trillion rubles, reaching a record value in the entire history of exchange trading. In the bond market, the total trading volume increased to 30.6 trillion rubles, which is 8.5% more than in 2019.

The increase in the trading volume on the stock market was primarily driven by the record inflow of private investors, the extension of the trading time due to the introduction of the evening trading session, as well as a significant increase in the number of traded instruments, including foreign shares.

⁸Private investors have opened over four million IIS on the Moscow Exchange, Moscow Exchange

The number of individuals with brokerage accounts on the Moscow Exchange in 2020 increased by almost 5 million and reached a record 8.8 million. The number of individual investment accounts opened also doubled, reaching 3.45 million by the end of the year.

Individuals increased their share in trading to 41% of all transactions in the stock market, up from 34% in 2019. Private investors are the main participants in the evening trading session, accounting for 69% of the total trading volume.

The activity of private investors is growing at a high rate. In 2020, 2.3 million clients concluded transactions on the stock market, more than 200 thousand investors made daily transactions, which is three times more than in 2019.

According to the Moscow Stock Exchange, at the end of the first half of 2021, individuals have invested 426.9 billion rubbles in bonds, which is 69.2% from total investment in 2020.

Moreover, the share of investment into rubble bonds doubled, increasing from 7% in 2020 to 14% in 2021. Investment from Individuals makes 4.1% from the total investment in government bonds (OFZ) in the first half of 2021. Corporate bonds comprise the maximum share of investment from individuals (77.66% or 153.8 billion rubbles). Individuals have acquired 31.0% from the total value of corporate bonds issued in the first half of 2021 and 1.1% from the total value of issued sub-federal bonds.

Table 3. Investment of the individuals in bonds on the Moscow Stock Exchange

Billion rubbles	2020		1Q 2021		2Q 2021	
Bonds, total	617	100.00%	198	100.00%	228.9	100.00%
Corporate	546	88.50%	153.8	77.66%	187.8	82.04%
Government	40.1	6.50%	34.6	17.47%	32.2	14.08%
Regional	6.2	1.00%	0.2	0.08%	1.2	0.52%
Eurobonds	24.7	4.00%	9	4.55%	7.7	3.36%

Figure 4. Amount and structure of individual investment in bonds on the Moscow Stock Exchange in the first half of 2021



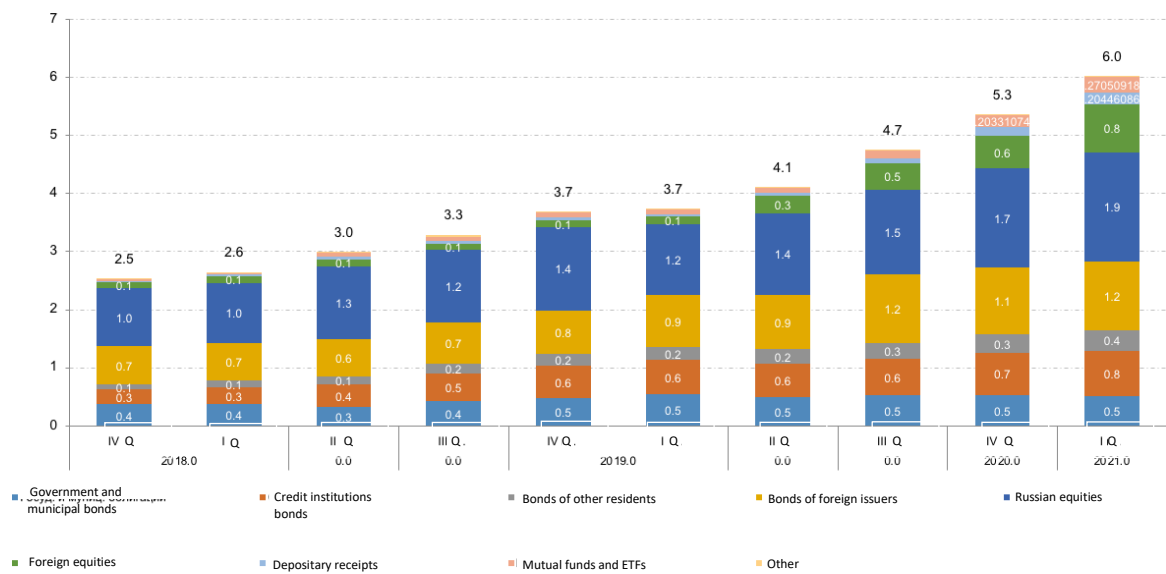
According to Moscow Stock Exchange, the percentage of individuals' investment in bonds to the total deal value on the secondary market changed from the minimum 14% in April 2021 to the maximum 17.6% in May 2021. In the first half of 2021, the average percentage amounted to 15.7%, which is by 2.7% more than the 13% for the whole 2020.

Figure 5. The percentage of individuals in the secondary market value of bonds trading at MOEX



As the individuals enter the stock market, they tend to start investing with an asset with the closest risk to the bank deposit, which is usually bonds. Government bonds have the lowest risk; therefore, they become the first tool for the most investors-beginners. It was evident from the horizontal analysis of the investment portfolios of individuals and is demonstrated on the Figure 6.

Figure 6. Dynamics of securities of individuals in accounts with depositories at assessed value (trillion rubles)



The major part of the individual's portfolio were securities, with government bonds taking the largest share. However, as the time progressed, the portfolio became more diverse and equities became more prevalent. It might be possible that after trying investing in lower-risk assets, individuals were continuing seeking higher returns and started exploring riskier assets like equities.

It is worth noting that there is a high positive correlation between the percentage of active broker clients and complains on the professional market participants (0.87). It might be possible that individual investors are relatively inexperienced and encounter difficulties on the market and report them to the CBR. It could be one of the indicators that individuals require protection and guidance by the CBR.

The entry of retail investors into the stock market with the development of remote service channels is accompanied by an increase in citizens' investments in foreign securities. In 2020, this trend has especially intensified. From the beginning of 2020 to the beginning of June 2021, investments in shares of non-residents increased by 8.4 times (up to 866 billion rubles), and in bonds - by 1.6 times (up to 646 billion rubles).

Although investments in securities of Russian issuers still account for the bulk of investments in the portfolios of citizens (82% at the beginning of June 2021), the dynamic growth of investments in foreign securities requires constant monitoring in order to limit risks to both financial stability and well-being citizens.

Along with the widespread use of remote service formats and digital financial services, illegal activities in the financial market through online channels have intensified. Citizens without sufficient knowledge and experience become more vulnerable to fraud. Under these conditions, the number of entities identified by the Bank of Russia with signs of illegal activity is growing (more than 1.5 thousand in 2020). More than half of them carried out illegal lending. The other two most prominent groups are illegal forex dealers (25.5%) and pyramid schemes (14.3%).

The growth in the number of private investors on Russian stock exchanges gives rise to an increase in the supply of dubious and low-quality investment recommendations, advice on the Internet, social networks, instant messengers. Moreover, anonymous sources can deliberately manipulate the behavior of investors, and transactions based on such recommendations may not always be legal. In particular, within the framework of constant monitoring of organized trading, the Situation Center of the Bank of Russia has already identified coordination and attempts to involve private investors in unfair practices in exchange trading through popular messengers. Changing the formats of illegal activity also requires a corresponding improvement in methods of combating it, as well as an increase in the level of knowledge of citizens about the peculiarities of purchasing financial products through online channels and the ability to distinguish between legal and illegal activities.

Conclusion and Implications

The Central Bank of Russia has detected limited investment on the stock market due to the people's uncertainty in the economic stability in Russia caused by high and difficult-to-predict inflation rates. To stabilize the economy and improve the economic expectations, CBR started targeting the inflation in 2014 by changing the key rate under they lend the corporate banks money.

Lower key rates prompted banks to lower their deposit rates, which were the main tool of individuals for preserving their savings from inflation. However, this study shows that as the deposits became less attractive, individuals started seeking higher returns and entered the stock market. People started investing in the government bonds because this type of asset has the least risk and is the next safest alternative on the stock market after bank deposits. Lower market rates made individuals seek higher returns in riskier assets and pushed them out of the bank deposits to the stock market.

As the time progressed and individuals became more confident on the stock market, they started exploring riskier assets. Likewise, high yield bonds became very popular in Russia. People increased investment in equities and mutual funds. ETFs and Russian analogs appeared for the first time on the Russian stock market. Currently, in Russia, the use of brokerage services prevails over trust management. At the end of 2020, client funds in brokerage services accounted for about 90% of the total portfolio in brokerage accounts and in trust. In developed market countries, including the United States, the situation is reversed.

As a result of the increased trading interest from individuals, Moscow Stock Exchange (MOEX) prolonged the daily trading hours. To meet the increased interest in private investment, large banks in Russia like Sberbank, VTB, Tinkoff, etc. and developed mobile application for easier and more available trading. People no longer need to call brokers or visit banks in person. They could use their smartphones.

However, new individual investors may bring additional market volatility risk. The amount of investment in bonds coming from individuals became significant (41% in 2021) and now people can significantly impart the market. On the other hand, new investors are unexperienced; therefore, they might make irrational investment decisions and unexpectedly influence the market. This way, it is important to observe and understand the investment patterns of the individuals to know how to regulate or protect different stock market participants.

Growing individual investment shows both positive and negative perspectives; therefore, requires further investigation. As a result of increased interest in individual investment from people who are not significantly financially literate, increases the risk of misseling. Misseling is the new financial scheme to trick buyers into buying something different from what previously was agreed upon or following a different contract. The individual investment trend attracts more scammers to the market and requires professional market participants to be more careful and protective of individuals.

One more negative outcome for the investors could be their potential big financial loss.

Individuals not being financial literate enough and seeking high returns might overlook the increased risks of investment and lose substantial amount of money. This negative memory might prompt them to leave the market and never come back. As supporting the individual investment is one of the important development strategies for the Russian economy, the CBR will attempt to protect private investors from leaving the market. Therefore, it is important to study their behavior and know what tools or regulations might prevent them from receiving challenging financial experience.

In order to protect the retail investor, a law has been passed and the relevant SRO standards are being developed, which will introduce, from October 1, 2021, a testing procedure for unqualified investors when they purchase complex financial products. testing of unqualified investors, which will solve several problems: it will enable the client to assess his own readiness to purchase complex investment instruments, create incentives and guidelines for increasing investment

literacy, and also allow financial intermediaries to obtain additional information about the client and warn him against making transactions with increased risk.

The Bank of Russia seeks to form basic investment attitudes among the population that can solve the problem of obviously erroneous investment decisions. For citizens who are ready to spend their time on the acquisition of investment knowledge, the website "Financial Culture" (fincult.info) is supported. This resource provides guidance on how to choose financial instruments based on the investment goals, how to choose a financial intermediary / provider, use the services of financial platforms (marketplaces), how to choose the right investment strategy, how to avoid fraud in the financial market. In order to educate the population, the Strategy for Improving Financial Literacy in the Russian Federation for 2017–2023 was adopted (approved by the Order of the Government of the Russian Federation dated September 25, 2017 No. 2039 r “On Approval of the Strategy for Improving Financial Literacy in the Russian Federation for 2017–2023”⁹).

Improving the quality of informing and consulting citizens on the part of financial institutions, as well as the formation of basic attitudes and the promotion of knowledge on investment literacy will create conditions for unskilled investors to choose less risky forms of entry to the capital market for them: trust management and passive investment strategies.

On the other hand, it is possible that private investors gaining investment experience might realize the difficulty of active investment and might switch to the passive one instead. In the following years, it is possible that such options as ETFs, Russian analogs of them, mutual funds, and asset management services will become more popular. Markets that have had a longer history of individual investments are currently experiencing the majority of private investment in

⁹GOVERNMENT OF THE RUSSIAN FEDERATION R A S P O R Y G E N I E dated September 25, 2017 No. 2039-r

passive options, such as the United States, for example. As a developing economy, Russian markets are yet to follow that path and experience it in the future.

Moreover, as the individual investment is becoming more attractive with every year, it brings new investors to the market. Although the participation of individuals on the stock market is relative small compared to the one in the developed economies, Russian stock market continues to grow.

Bibliography

1. *THE MAIN DIRECTIONS OF THE RUSSIAN FINANCIAL MARKET DEVELOPMENT IN 2022 AND 2023 AND 2024 PERIOD* Project for the public discussion from 23.07.2021, Moscow 2021
http://www.cbr.ru/Content/Document/File/124658/onrfr_project.pdf
2. *Strategy on the advancement of financial literacy in the Russian Federation for 2017-2023 years (approved by the order of the Government of the Russian Federation dated September 25, 2017 No. 2039 r "On approval of the Strategy for improving financial literacy in the Russian Federation for 2017–2023")*., Moscow 2017_
http://www.cbr.ru/content/document/file/59796/inf_note_dec_2718.pdf
3. “Goals and principles of the monetary policy” Central Bank of Russia
https://www.cbr.ru/dkp/objective_and_principles/
4. “Key Rate of Bank of Russia” Central Bank of Russia
https://www.cbr.ru/hd_base/KeyRate/
5. “Statement by the Governor of the Bank of Russia E.S. Nabiullina following the meeting of the Board of Directors on September 12, 2014” Central Bank of Russia, September 2014
<https://www.cbr.ru/press/event/?id=5208>
6. “Lecture by the Governor of the Bank of Russia Elvira Nabiullina. IMF conference in Washington” Central Bank of Russia, September 2018_
<http://www.cbr.ru/press/event/?id=5227>
7. “Information on the labour market of Russia” Mintrud Rossii, December 2019
<https://mintrud.gov.ru/ministry/programms/inform/1>
8. “Passive investing automatically tracking indexes now controls nearly half the US stock market” CNBC, March 2019

<https://www.cnn.com/2019/03/19/passive-investing-now-controls-nearly-half-the-us-stock-market.html>

9. *Russia's economic recovery gathers pace* *Russia Economic Report 45*, May 2021, World Bank
<https://openknowledge.worldbank.org/bitstream/handle/10986/35653/Russia-Economic-Report-Russia-s-Economic-Recovery-Gathers-Pace-Special-Focus-on-Cost-Effective-Safety-Nets.pdf?sequence=7>
10. *OVERVIEW of key indicators professional participants securities market, Information and analytical material 2018 year*, January 2019, Central Bank of Russia
11. *REPORT NAUFOR "Current state of the Russian stock market and the main directions of its development,"* March 2021, NAUFOR
12. *Budgetary policy: new turn, Macroeconomic Analysis/Russia*, June 2021, Expert Rating Agency
13. *II quarter of 2020 OVERVIEW OF KEY INDICATORS PROFESSIONAL PARTICIPANTS SECURITIES MARKET* *Information and analytical material*, July 2020, Central Bank of Russia
14. *GOVERNMENT OF THE RUSSIAN FEDERATION R A S P O R Y G E N I E* dated September 25, 2017 No. 2039-r
15. *The Bank of Russia cuts the key rate by 25 bp to 4.25% p.a.*, Central Bank of Russia
https://www.cbr.ru/eng/press/pr/?file=24072020_133000Key_eng.htm
16. *MAIN DIRECTIONS FINANCIAL MARKET DEVELOPMENT RUSSIAN FEDERATION FOR 2022 AND PERIOD 2023 AND 2024 Draft for public comment 07/23/2021* Moscow 202, July 2021, Central Bank of Russia
17. *Taxation of interest on bank deposits in Russia and income from debt securities*, Ernst&Young

https://www.ey.com/en_ru/tax/tax-alert/2020/04/ey-taxation-of-interest-on-bank-deposits-2-april-2020-pas-eng

18. *What you need to know about taxes on deposits in 2021*, Raiffeisen Bank

<https://www.raiffeisen.ru/wiki/nalog-na-vklady-dlya-fizicheskikh-lic-v-2021-godu/>

19. *Private investors have opened over four million IIS on the Moscow Exchange*, Moscow Exchange

<https://www.moex.com/n34481/?nt=106>