

Personal financial investments: leading trends and growth factors

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Abstract The development of market relations in Russia is directly related to the formation and development of the financial market which is considered in developed countries as an attractive alternative to a bank deposit for investing household savings. At the same time, the overwhelming majority of the population of Russia prefers deposit and investments in foreign currency to achieve their financial goals.

Our paper substantiates the availability of opportunities for direct personal investment in debt and equity securities and conditions for diversification, including international through the use of ETF, that are attractive by the risk-return criterion in the Russian financial market. We note that the expansion of the market of exchange mutual funds through the appearance of Russian management companies. Direct investment in securities through a brokerage agreement is characterized by low transaction costs. Growth factors of return on investment in securities are associated with tax incentives. The reason for the high volatility is the dependence of the state of the Russian financial market on macroeconomic conditions, including foreign policy events.

1 Introduction

Official Russian statistics show that in order to achieve their financial goals, the population of Russia prefers a bank deposit and foreign currency. Although the desired goals vary greatly from person to person, they can be organized within the formal investment structure.

In general, the financial goals of a household, depending on the phase of its life cycle, are reduced to typical issues that require cash: buying an apartment, car, expenses on education of children, payment of expensive treatment, travel, ensuring a decent retirement life. Investments in financial instruments, primarily in securities, are traditionally regarded as attracting alternative to bank deposits in dealing with the management of personal capital of a retail unqualified investor.

There are two ways to invest in securities: indirect (through financial intermediaries - investment and pension funds, insurance companies) and direct - through the conclusion of an agreement on brokerage services or an agreement of individual trust management. Indirect method of investing in financial instruments in the Russian context is inefficient. Individual trust management implies that the investor has large start-up capital, which is why it is not common among retail (unqualified) investors.

Our paper explores the opportunities offered by the Russian financial market to private investors, based on an analysis of the dynamics of key indicators, leading trends in the attractiveness of financial instruments for investing household savings are identified, and key factors for increasing the return on retail investment are identified. The object of research of this paper has been considered by selecting simple, least risky and highly liquid securities that are traded on the Moscow Stock Exchange as suitable tools for a retail investor, taking into account his risk profile. Such financial instruments are represented by government and corporate bonds (of the highest quotation list), shares (of the highest quotation list), as well as investment units of exchange represented by UIF and ETF shares.

2 Literature review

Assessing the degree of study of the research topic, it should be noted that the work of Russian and foreign scientists covered various theoretical and practical aspects of personal financial investment (see, for example, Plakhova 2007; Hamarat and Özen 2015; Klimavičiene and Jureviciene 2007; Loerwald and Retzmann 2010; or Ongena and Zalewska 2018).

The development of such areas of financial theory as portfolio theory, risk theory, and life cycle theory and behavioural theory defines investment as a complex, multidimensional process. Coordinating financial theory with behavioural theory allows us to explain inconsistent investment decisions and excess transaction costs by not accepting losses (Sy 2018). The investment portfolio is the engine of wealth creation. Investing in financial assets, households take risks to achieve specific goals. Setting their goals, households form their investment policy, which is characterized by certain values of risk and return (Chhabra 2018).

Quite a lot of research has been devoted to identifying factors affecting personal investment decisions: personal characteristics, education level and risk tolerance, gender and marital status (see, for example, Lei 2018; Fajardo and Blanco 2013; Boldyreva and Reshetnikova, 2019). At the same time, it is difficult in the scientific literature to find a general approach to systematizing the problems that hinder the increase in private investment in securities, and to identify factors that significantly influence the development of personal financial investment (Bulsara et al. 2015; Davies and Glenday 1990; Hwi 2012; Dolvin et al. 2008).

Despite the large number of scientific publications devoted to this topic, the question of the development of private investment in securities market instruments remains insufficiently developed. Many works of Russian scientists contain only a macroeconomic view of the investment resources of the population (see, for example, Suetin 2015; Shukhov 2008; Glukhov 2009). Studying scientific work, it was not possible to find studies that reveal the investment attractiveness of the tools of the Russian financial market for a retail (unqualified) investor.

3 Methodology

When working on our paper, we used such methods of economic research as a systematic approach to the study of the object of study, a graphical method, clearly illustrating the relationship of risk and profitability of financial instruments in the Russian market. On the basis of a scientific approach, relevant material on the research topic is investigated using methods of comparison, generalization, economic and statistical processing of information.

While writing this work, we were guided by the traditional approach to assessing the attractiveness of investments based on the use of a risk-return coordinate system. Studies of the investment behavior of a retail investor make it possible to single out the main risks of financial investments and rank them in descending order of importance: credit risk, liquidity risk, market risk. These requirements most meet the government bonds of the Russian Federation, shares of the highest quotation list, investment units of exchange UIF and ETF shares admitted to circulation on the Moscow Exchange. The information base for assessing profitability and risk of these financial instruments in the article presents data on the dynamics of the corresponding indices. Using the benchmark allows you to select the most attractive tools. The profitability of exchange-traded financial instruments is compared with the profitability of a bank deposit and the rate of inflation. The study was conducted according to the Moscow Exchange (2019), the Bank of Russian Federation (2019a; 2019b) and the Rosstat (Federal Statistics 2019) over the past five years (2014–2018). Geometric average and cumulative returns are used to estimate returns. To estimate market risk, we use an indicator of the magnitude of the variation in returns. The stock volatility is calculated as a standard deviation of return.

4 Results and discussions

In order to increase public involvement in the financial market, it is necessary to protect investors from risks, one of the mechanisms of which is the allocation of investors into categories (Boldyreva and Reshetnikova 2017). Such a mechanism has long been working in Europe and the USA in order to rationally distribute investment risks.

The Bank of Russia approved a new concept for categorizing investors, according to which the largest group of the Russian population is represented by unqualified investors. Unqualified investors can invest in stocks, bonds and ETFs circulating on the organized market, as well as tools of the organized foreign exchange market and the precious metals market.

The potential of the Russian market for personal investments in the risk-return system in the last five years (2014–2018) compared with the inflation rate and bank deposits are presented in Table 1 that follows.

Table 1. Investment attractiveness of the Russian financial market, in %

	Scope of yield variation	Average yield	Accumulated profitability (cumulative inflation)	Real yield
Deposit from 1 to 3 years	3,9	8,0	50	0,75
Government bond index MCXRGBITR	8,3	8,1	47,6	0,84
Corporate bond index MCXCBITR	8,5	9,5	57,7	2,15
Oil and gas share index MICEX O&G	45,8	15,0	100	7,28
Chemicals and petrochemicals stock index MICEX CHM	74,8	18,8	140	10,82
Metallurgy and mining stock index MICEX M&M	47,5	22,8	180	14,57
USD/RUR	88,66	15,89	109	8,11
EUR/RUR	71,9	12,06	77,0	4,53
Inflation		7,2	41,6	

Source: Own results

Over the past five years, inflation has increased 1.42 times, at an average inflation rate of 7.2% per year. All the considered instruments showed a positive real yield, from 0.75% on bank deposits to 14.57% on the stock index of the metallurgy and mining industry. The statistics of the Moscow Exchange testifies to the high volatility of the yield of financial instruments: the smallest variation range of 3.9% is related to the bank deposit, the largest 88.66% to the US dollar exchange rate. The comparison of financial instruments in the risk-return coordinate system is presented in Figure 1.

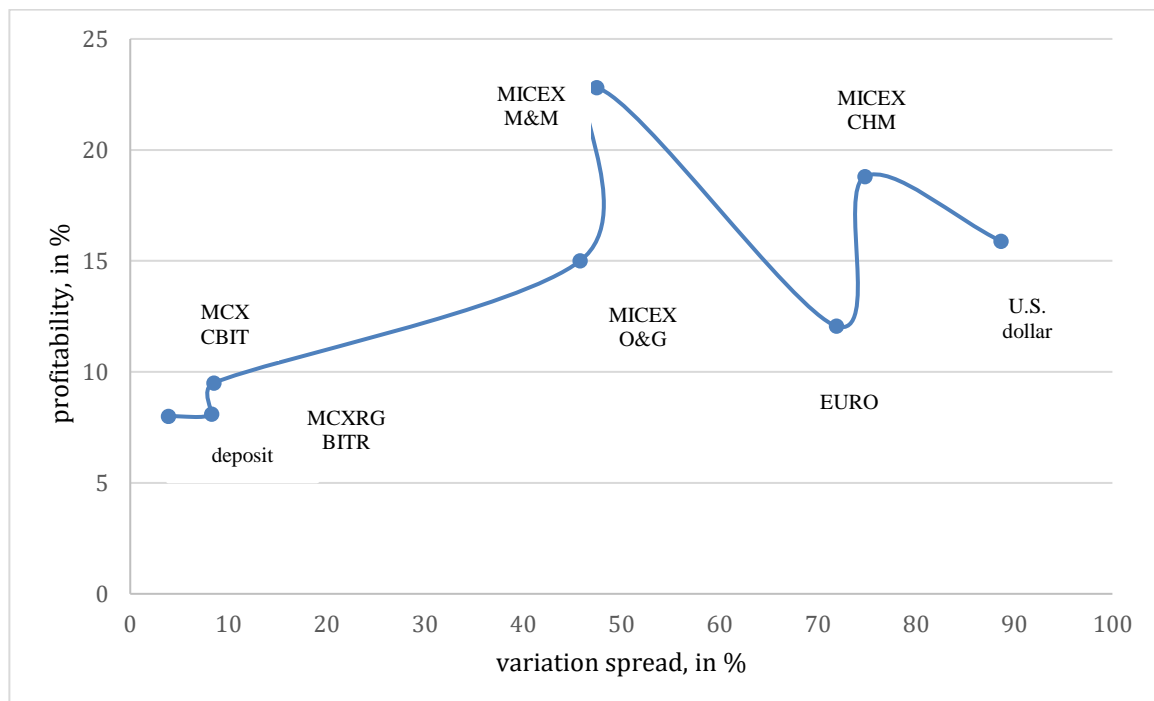


Fig. 1. Risk and profitability of Russian financial instruments

Source: Own results

From Figure 1 it can be seen that in terms of the ratio of profitability and risk-holding instruments are inferior to equity instruments, among debt instruments the bank deposit is the least profitable and risky. The

variation range of the index of government bonds of the Russian Federation is more than two times higher than the corresponding indicator of bank deposits with an insignificant difference in the rate of return. A factor in the high market risk of government bonds in the Russian Federation is the active participation of a foreign investor in this market. Compared to the government bond index, the corporate bond index is more profitable. The euro is the fourth after the deposit in terms of profitability, but it is significantly ahead of it in terms of risk. The U.S. dollar, in contrast to the euro, behaves more standardly: yielding only the indices of stocks of the branches of chemistry and petrochemistry, as well as metallurgy and mining, in yield, it is the leader in terms of the range of variation.

In general, the statistics shows the presence of a positive relationship between the market risk of a financial instrument and its profitability. The least risky and least profitable is a bank deposit, the riskiest investment option is to buy U.S. dollars, and the most profitable are financial investments in metallurgy and mining industry shares.

Let us note that the range of variation is an indicator of the market risk of a financial asset. Other risks are associated with financial instruments. For a retail investor, given its behavioural characteristics, the most significant are the credit risk associated with debt financial instruments (bank deposits and bonds) and liquidity risk. The risk of reinvesting intermediate incomes (dividends on stocks, coupons on bonds, interest on bank deposits), operational risks, counterparty risks (broker, depository and stock exchanges) are not perceived as such by the population due to their latent nature, but it should be noted that they are not significant by virtue of adequate regulation.

Given the smooth operation of the Deposit Insurance Agency, the credit risk of a bank deposit is at the level of sovereign risk, as is the credit risk of government bonds of the Russian Federation. The corporate bond market is characterized by high default activity. The bank deposit is characterized by the highest liquidity risk due to the fact that the repayment of the principal amount of the debt before the expiration date of the contract is possible only under the condition that the interest to be received is lost. Statistics of the Moscow Exchange testifies to the liquidity of the government securities market of the Russian Federation, the stock market included in the highest quotation list. The market for corporate bonds of the highest quotation list is characterized by low liquidity due to the “settling” of these securities in the portfolios of institutional investors at the stage of their placement.

Table 2. Risk and profitability of the ETF on the Moscow Stock Exchange (up until 11.05.2018)

ETF name	Yield, in %	Volatility, in %	Yield/risk coefficient
FinExMSCIAustraliaUCITSETF(FXAU)	2,04	17,49	0,12
FinExMSCI China UCITS ETF (FXCN)	56,34	19,15	2,94
FinExMSCI Germany UCITS ETF (FXDE)	42,73	17,62	2,43
FinExGold ETF (FXGD)	-7,33	13,37	-0,55
FinExMSCI USA Information Technology UCITS ETF (FXIT)	130,04	15,63	8,32
FinExMSCI Japan UCITS ETF (FXJP)	31,04	17,83	1,74
FinExCash Equivalents UCITS ETF(FXMM)	43,05	0,61	70,57
FinExTradable Russian Corporate Bonds (FXRB)	69,14	6,59	10,49
FinExRussian RTS Equity UCITS ETF (USD) (FXRL)	72,29	22,37	3,23
FinExTradable Russian Corporate Bonds UCITS ETF (USD) (FXRU)	17,29	5,89	2,94
FinExMSCI United Kingdom UCITS ETF (FXUK)	33,58	13,5	2,49
FinExMSCI USA UCITS ETF (FXUS)	62,72	12,49	5,02
Average value	46,08	13,55	3,4

Source: Own results based on Moscow Stock Exchange (2019)

ETF shares are admitted to the Moscow Exchange. Their provider is FinEx. The listing of the first ETF on the Moscow Stock Exchange was held in 2013. ETFs provide an opportunity to invest in international stock and bond indices. Currently, there are 12 ETFs from the FinEx provider with a rather long history on the shares of the companies of the USA, Japan, Germany, China, Great Britain, Australia, Russia, low-risk Russian issuers of Eurobonds, gold, and the ETF of the money market. Eight of the twelve ETFs can be bought both for rubles and

for US dollars on the Moscow Stock Exchange. ETFs on stocks include the securities of dozens or hundreds of major companies, repeating the structure of a certain stockindex. ETF are characterized by a low level of operating costs. The overall level of commission is on average 0.8% (from 0.45% to 0.95%). At the same time, all expenses are included in the ETF share price. The liquidity of the ETF market is provided by the market maker. ETF volatility and yield are presented in Table 2.

Table 2 shows that the ETF market yield is represented by a wide range of values: from minus 7.33% per annum to FXGD to 130.04% per annum FXIT, an average of 46.08% per annum. Volatility also varies over a wide range: FXMM has the smallest 0.61% and FXRL has the largest 22.37%, an average of 13.55%. In terms of profitability / risk ratio, FXGD showed the worst result minus 0.55, the best 70.57 is associated with FXMM, the average risk / return rate for the market was 3.4.

In September 2018, the ETF market was supplemented with a mutual investment fund from a Russian management company. At present, this market is represented by five exchange UIF UK Sberbank Asset Management, VTB Asset Management, Alfa Capital.

The analysed period in Russia was marked by the crisis of 2014-2015, characterized by high political instability associated with, among other things, economic sanctions, and other factors, which was reflected in the dynamics of profitability and riskiness of the financial instruments considered. The high profitability of individual sectoral stock indices (metallurgy and mining MICEX M&M; chemistry and petrochemistry MICEX CHM) in the analysed period does not mean obtaining similar results in the future. The solution to this problem is connected with the application of the diversification principle and taking into account the time horizon of investment. The financial instruments available to the Russian retail investor are represented by various asset classes: deposits, bonds, stocks, investment shares (stocks) of Russian and foreign mutual funds, foreign currency, which allows us to talk about real opportunities for portfolio investment, including international diversification, in the Russian financial market.

Direct investment in securities is related to transaction costs, represented by commission fees of a broker, depositary, Moscow Exchange. Their values depend on various factors, including the volume of the transaction. On average, the aggregate value of these costs does not exceed 1% of turnover, which, in our opinion, is an attractive side of direct investment through a brokerage service agreement. An important factor in determining the net return on investments is also taxation.

Income from investments in financial instruments is taxed differently depending on its type. Income in the form of an increase in the market value of government and corporate bonds, shares of Russian issuers, unit investment funds, ETF shares is taxed at a rate of 13% when selling (redeeming) a financial instrument (Tax Code of the Russian Federation 2019).

In recent years, the government of the Russian Federation has taken a number of measures to stimulate the investment of people's savings in stock market instruments. Retail investors, who receive coupon income on government bonds of the Russian Federation, are exempt from income tax. Taxation of coupon income on corporate bonds denominated in rub. and issued after January 1, 2017, is built by analogy with taxation of interest on a bank deposit: 35% if the coupon yield rate on bonds (interest on the deposit) is 5% higher than the Bank of Russia key rate, otherwise - 0%.

In order to reduce the taxation of income, allowing tax breaks seem to be useful. Individual investors have tax preferences associated with an individual investment account and long-term ownership of securities for more than three years. These measures can significantly increase the profitability of investments, but the number of retail investors on the Moscow Exchange stock market does not exceed 1% of the employed population of Russia. In order to become an effective growth factor, tax incentives should be imposed on the "fertile soil". Its creation implies, first of all, an increase in the money incomes of the population of Russia, as well as an increase in the financial and digital literacy of the population due to the high digitization of brokerage services.

5 Conclusions

As a result of an analysis of the possibilities of the Russian financial market for personal investments, certain conclusions can be drawn: first, there are real and attractive options for a retail investor to invest his savings in both debt and equity securities; secondly, the Russian financial market provides opportunities for diversifying the investments of a retail investor; thirdly, the ETF market creates opportunities for the international diversification of investment portfolios of Russian retail investors. It should be noted the expansion of the market of exchange UIF, the appearance on it of Russian management companies; direct investment in securities through a brokerage agreement is characterized by low transaction costs; and the conditions have been created on the Russian financial market for profitable investment of people's savings in securities through tax breaks.

All in all, we might conclude that the prospects for the further development of personal financial investments in Russia are determined by the state of the financial market, which is in close connection with the macroeconomic situation, which is determined, among other things, by foreign policy factors. The low level of

monetary incomes of the population of Russia, its low financial and digital literacy restrain the growth of personal investment in securities in the Russian financial market.

References

- Boldyreva N, Reshetnikova L (2019) Financial literacy in the context of digital competencies. The collection of materials of the 6th International Conference “Sustainable development: society and economy”, SPb: Publishing House of Saint Petersburg University.
- Boldyreva N, Reshetnikova L (2017) Update the Russian model of investor qualification in the context of the modernization of the country's economy. Economic, social and spiritual renewal as the basis of the new industrialization of Russia: Collection of scientific works of the IV Ural scientific readings of professors and doctoral students of social sciences. Silin Y, Ivanitsky V (eds.). Yekaterinburg, pp. 149-156
- Bulsara HP, Desai HA, Miniaoui H (2015) An exploratory study of consumer demeanor towards financial investment. *Investment Management and Financial Innovations* 12(1):124-133.
- Central Bank of Russian Federation (2019a) Analytics. <http://www.cbr.ru/analytics> Accessed 22 March.2019
- Central Bank of Russian Federation (2019b) Improving the system of investor protection in the financial market by introducing regulation of investor categories and determining their investment profile. <https://www.cbr.ru/StaticHtml/File/11114/170209.pdf> Accessed 22 March 2019
- Chhabra A (2018) How Can You Make Sure Your Portfolio Lines Up with Your Actual Goals? In: McCullough T, Whitaker K (eds.) *Wealth of Wisdom: the top 50 questions wealthy families ask*. Wiley and Co. doi: 10.1002/9781119331568.ch13.
- Davies J, Glenday G (1990) Accrual Equivalent Marginal Tax Rates for Personal Financial Assets. *Canadian Journal of Economics/Revue Canadienne d'Economique* 23(1):189-209. doi: 10.2307/135527.
- Dolvin S.D, Gonas JS, Pyles MK (2008) The Influence of University Investment Education on Asset Allocation. *Journal of Economics and Finance Education* 7(1):29-42
- Fajardo J, Blanco S (2013) Psychological Influence on Women's Financial Investments. *SSRN Electronic Journal*. doi: 10.2139/ssrn.2206440.
- Federal Statistics (2019) Statistical Compendium <http://gks.ru> Accessed 22 March.2019
- FinEx (2019) <http://www.finex-etf.ru/products/http://www.finex-etf.ru/products>. Accessed 22 March.2019
- Glukhov V (2009) Investment nature of public finance. *Finansy i kredit* 18(354):42-45.
- Hamarat B, Özen E (2015) Türkiye’de tasarruf tercihlerini etkileyen değişkenlerin kanonik korelasyon analizi ile belirlenmesi. *Journal of Life Economics (JLE)* 2(1):47-74. doi: 10.15637/jlecon.58
- Hwi LM (2012) Personal Financial Asset Allocation focused on investment psychology. doi: 10.16935/ejss.2012.28.005 Accessed 20 March 2019
- Klimavičiene A, Jureviciene D (2007) Development possibilities of personal investments into financial instruments in Lithuania. *Verslasterijairpraktika* 8(1):33-43. doi: 10.3846/btp.2007.07
- Lei Sh (2018) Single women and stock investment in individual retirement accounts. *Journal of Women & Aging* 1:1-15. doi: 10.1080/08952841.2018.1510241.
- Loerwald D, Retzmann T (2010) Misselling as a New Topic of Financial Education? A Didactic Analysis of Investment Advice after the Financial Crisis. *Journal of Social Science Education* 9(1):49-58. doi: 10.2390/JSSE-V9-i1-1110
- Moscow Stock Exchange (2019) Dataset. <https://www.moex.com/ru/indices> Accessed 22 March 2019
- Ongena S, Zalewska A (2018) Institutional and individual investors: Saving for old age. *Journal of Banking & Finance* 92:257-268. doi: 10.1016/j.jbankfin.2017.10.012.
- Plakhova L (2007) Financial behaviour of the population in the formation of investment. *Digest-Finances* 5(149):24-30.
- Suetin SN (2015) Current investment strategies for private investors. *Nauchnye Obozrenye* 18:331-338

Shukhov VV (2008) Household savings and investments. *Finansy i Kredit* 19(307):59-63.

Sy WN (2018) Measured Investment Inefficiency of the Australian Superannuation System. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3215838.

Tax Code of the Russian Federation (2019) Tax on personal income.
http://www.consultant.ru/document/cons_doc_LAW_28165/6e508f67e051bccbe249e6f0aebb2fa31f61a111/
Accessed 22 March 2019