

Section 2

Financial markets and financial institutions

2.1. Trends in the global financial market¹

2.1.1. Risks of a financial bubble

In 2025, despite an extraordinary increase in customs tariffs in the United States, when the average rate amounted to 11% of the value of imported goods — the highest value since the 1940s (Morningstar, 2026)² — according to World Bank experts (2025)³ this did not lead to the expected slowdown in economic growth and an increase in the rates of inflation and unemployment. According to the US Bureau of Economic Analysis, GDP growth rates of the US economy in 2025 were equal to 2.1%, and according to Goldman Sachs forecasts as of January 16, 2026 they will reach 2.5% in 2026, since the disincentive effect of tariffs is going to be replaced by the stimulating effect of tax cuts provided for by the One Big Beautiful Bill Act of 2025.⁴ Economic growth in 2025 was facilitated by investments in the technology sector and a moderately high level of consumption on the part of predominantly wealthier citizens.⁵

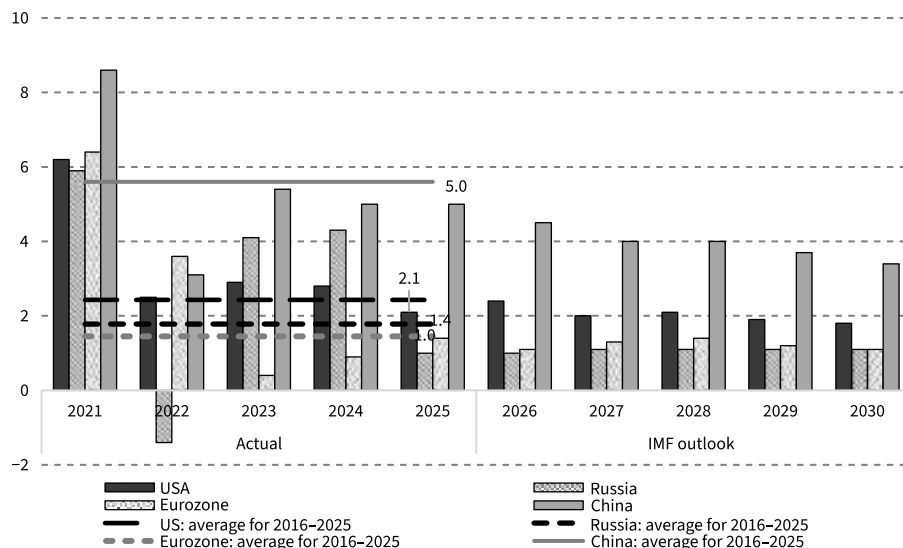
However, heightened geopolitical tensions in the world and restrictions on international trade due to US tariff policies and sanctions have led to the expected GDP growth rates of the world's largest economies in 2025 being lower than their average annual growth rate in the previous decade. As shown in *Fig. 1*, the average an-

-
1. Authors Sections 2.1–2.9: *Abramov A.E.*, Candidate of Economic Sciences, Head of the Department for Analysis of Institutions and Financial Markets, IAES RANEPA; *Radygin A.D.*, Doctor of Economic Sciences, Director of IAES RANEPA; *Chernova M.I.*, Candidate of Economic Sciences, Senior Researcher at the Department for Analysis of Institutions and Financial Markets, IAES RANEPA. This material was prepared within the scope of a state assignment for RANEPA.
 2. URL: <https://www.morningstar.com/business/insights/research/markets-observer>
 3. URL: <https://blogs.worldbank.org/en/developmenttalk/economic-growth-in-2025-has-defied-the-gloomy-expectations>
 4. URL: https://www.wsj.com/economy/global/the-world-economy-is-hooked-on-government-debt-71491482?mod=hp_lead_pos2
 5. URL: https://www.barrons.com/articles/k-shaped-economy-wages-consumers-federal-reserve-e6171791?mod=hp_SP_A_2

Russian economy in 2025

Trends and outlooks

nual growth rates in 2016–2025 in the United States, the eurozone countries, China and Russia were equal to 2.4%; 1.5%; 5.6% and 1.8%, respectively, while in 2025 they are estimated at 2.1%; 1.4%; 5.0%, and 1.0%, respectively.



Note. The countries' GDP growth rates for 2026 and 2027 have been adjusted in accordance with the International Monetary Fund's Global Economic Outlook for January 2026.

Fig. 1. Real GDP growth rates in the US, the eurozone, China and Russia in 2021–2030, %

Source: own calculations according to the International Monetary Fund (URL: <https://www.imf.org/ru/home>); U.S. Bureau of Economic Analysis (URL <https://bea.gov/data/gdp>); Rosstat and the RF Ministry of Economic Development.

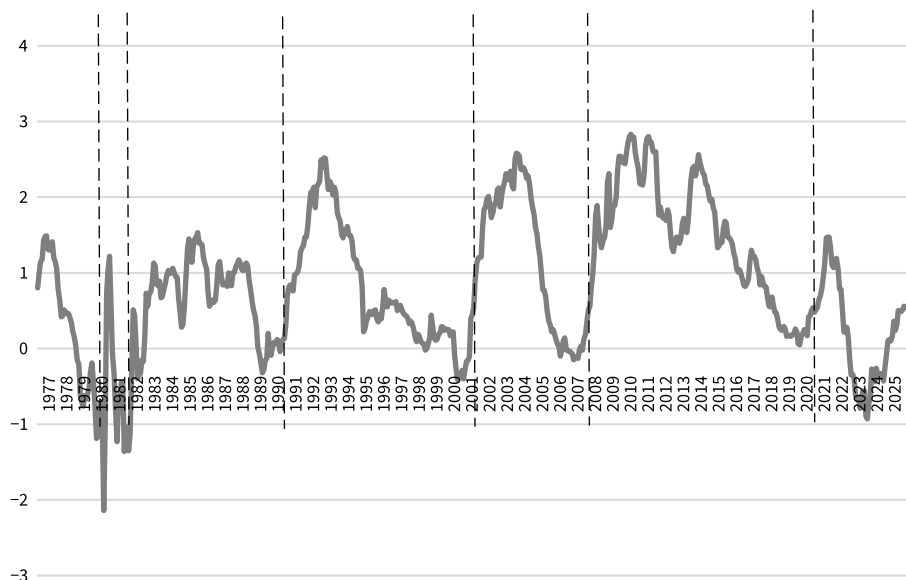
Despite various risks, in 2025, stock markets in the US and many countries around the world kept growing, which gave reason to assume the emergence of a financial bubble, primarily in the US stock market, as evidenced by many classic predictors of financial shocks.

One popular predictor of recessions and financial bubbles is the yield-to-maturity spread between 10-year and 2-year US government bonds. The break-out of a yield curve inversion, when the yield on long-term 10-year bonds equals the yield on 2-year bonds, is often accompanied by the onset of an economic recession within three to seven months of the event.¹ This occurs because the break-out of a yield curve inversion typically signifies that the central bank has completed its cycle of central bank interest rate increases, and a subsequent rate cut can,

1. The predictive power of this indicator was first substantiated by economist Harvey Campbell in his doctoral dissertation, defended at the University of Chicago (USA) in 1986.

at best, occur simultaneously with a “soft landing” (slowdown) in the economy and, at worst, a recession with negative GDP growth for at least two consecutive quarters.

As shown in *Fig. 2*, the moment of exit from inversion was observed in April 1990 with the onset of the recession in July 1990 after three months, in December 2000 with the recession in March 2001 after three months, in June 2007 with the recession from January 2008 after seven months, in September 2019 with the recession from March 2020 after six months. The most recent episode of exit from inversion in the United States was observed in September 2024. Since then, as of January 2026, 17 months have passed, but no signs of recession were observed in the US economy at this point.



Note. The vertical lines in the figure mark the beginning of the recession in the US economy in February 1980, July 1981, July 1990, March 2001, January 2008 and March 2020.

Fig. 2. Monthly yield to maturity spread between 10-year and 2-year US government bonds from June 1976 to December 2025, p.p.

Source: own calculations according to the Federal Reserve Bank of St. Louis (URL: <https://www.stlouisfed.org/>) and multpl Market, financial, and economic data (URL: <https://www.multpl.com/s-p-500-dividend-yield/table/by-year>).

Other predictors of financial crisis include Robert Shiller’s CAPE ratio¹ in combination with the Campbell dividend yield. If the current CAPE is high compared to long-term historical data and the dividend yield is low, indicating that the stock

1. The company’s market capitalization divided by its average annual net income over the past 10 years.

is overvalued, this may foreshadow a downturn in the market. In the late 1990s, this indicator reliably predicted the crisis of internet companies in the early 2000s. As shown in Fig. 3, by the end of 2025, the CAPE ratio reached 39.9, which was only slightly lower than the value of 44.2 in December 1999, and the dividend yield of 1.17% was almost comparable to 1.11% in August 2000. However, there were no obvious signs of a downturn in the US stock market as of February 2026.

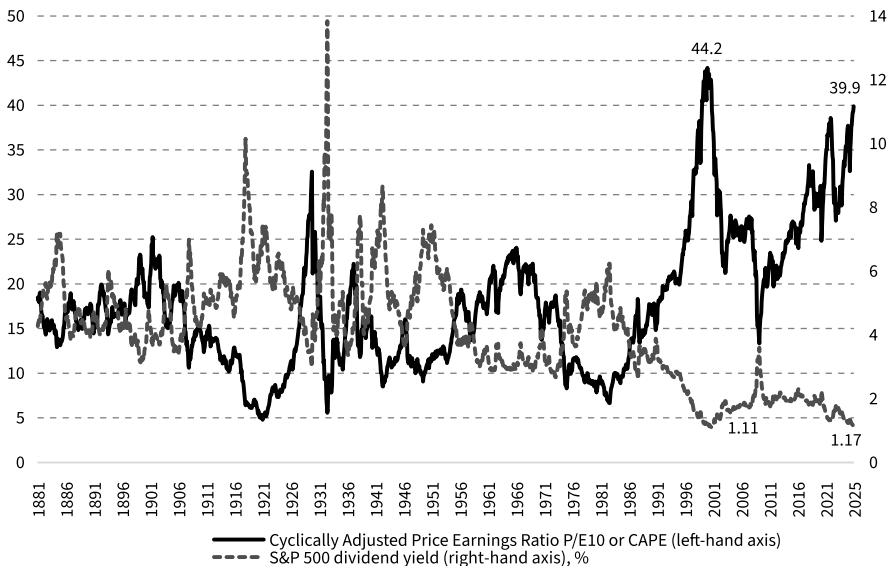


Fig. 3. Robert Shiller’s CAPE ratio and dividend yield of S&P 500 stocks from January 1881 to December 2025

Source: own calculations according to the Federal Reserve Bank of St. Louis (URL: <https://www.stlouisfed.org/>) and multpl Market, financial, and economic data (URL: <https://www.multpl.com/s-p-500-dividend-yield/table/by-year>).

The third indicator of projected stock returns is Excess CAPE Yield¹: its low value reflects overvaluation of stocks, predicting a small risk premium on stocks over the yield on 10-year government bonds over the next 10 years (Fig. 4). For example, according to Morningstar’s January 2026 forecast², over a 10-year forecast period, the annual nominal yield on US stocks is expected to be 5.3%, compared to a nominal yield of 4.5% on 10-year Treasuries. This means the equity risk premium could be equal only to 0.8 p.p. However, there are no signs yet of a long-term decline in US stocks.

1. One unit divided by the CAPE ratio minus the average annual real yield on 10-year government bonds over a 10-year period.

2. URL: <https://www.morningstar.com/markets/experts-forecast-stock-bond-returns-2026-edition>

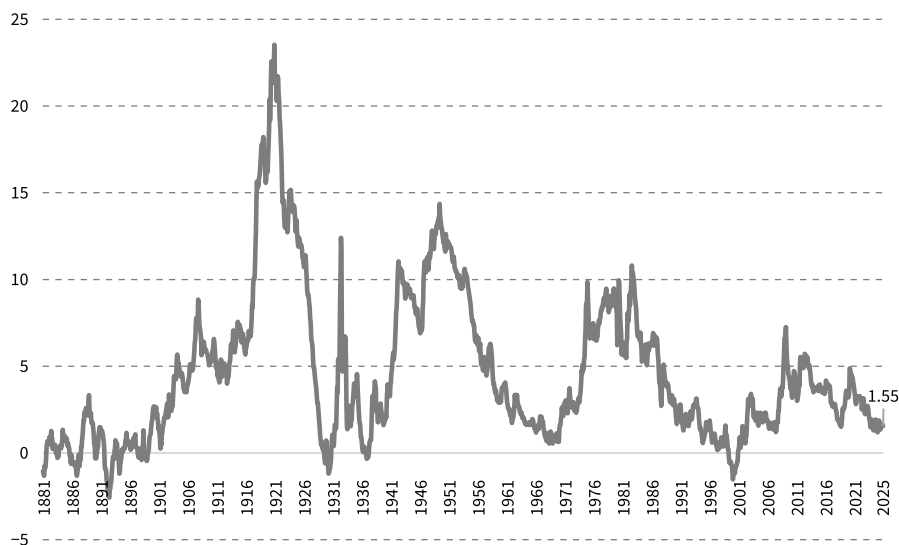


Fig. 4. Excess CAPE Yield from January 1881 to December 2025, p.p.

Source: own calculations according to the Federal Reserve Bank of St. Louis (URL: <https://www.stlouisfed.org/>) and multpl Market, financial, and economic data (URL: <https://www.multpl.com/s-p-500-dividend-yield/table/by-year>).

Finally, public debt growth, especially in developed countries and, to some extent, in China, could raise significant concerns about financial stability.

As shown in Fig. 5, based on IMF data, the estimated US public debt level in 2025 at 125.0% exceeded its average annual level over the past ten years by 6.5 p.p., while in the eurozone, China, and Russia the similar indicators were equal to 1.1 p.p.; 37.5 p.p.; and 32.9 p.p., respectively. That is, the level of public debt in the US and the eurozone was significantly closer to its historical average values than in China. As for Russia, if instead of the IMF estimate of the public debt in 2025 at 23.1% of GDP, we take into account its actual size according to the RF Ministry of Finance at 17.3%, this figure will almost completely correspond to the average annual debt level over the past ten years. According to IMF forecasts, in 2026–2030 compared to 2025, the relative size of government debt will increase by 14.5% in the United States, by 5.0% in the eurozone, by 20.6% in China and by 42.3% in Russia.

Thus, by historical standards and in accordance with the five-year forecast, the public debt situation in the US and the eurozone will not change significantly, while China is seeing a higher rate of public debt growth. In any case, the public debt situation in these countries is far from being critical: they have experienced no debt servicing problems.

Despite heightened volatility in global financial markets and alarming levels of several financial shock predictors, global investors remained skeptical about

Russian economy in 2025

Trends and outlooks

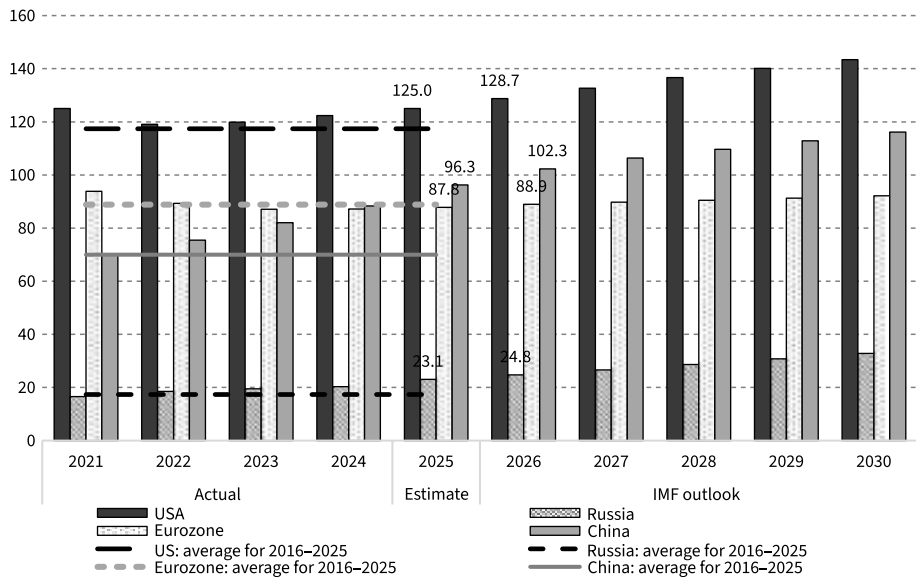


Fig. 5. The share of public debt to GDP in the US, the Eurozone, China and Russia in 2021–2030, %

Source: own calculations according to the IMF data. URL: <https://www.imf.org/ru/home>

the risks of a stock market downturn in early 2026. A survey of 1,300 experts conducted for the World Economic Forum's 2026 Global Risks Report¹ found that the threats of a financial bubble and a debt crisis ranked only 16th and 17th, respectively, in descending order of importance among the most important risks of a major crisis in 2026, significantly behind factors such as geopolitical confrontation, interstate conflicts, extreme weather events, social polarization, and disinformation.

In an article by Patricia Cohen in the *New York Times* (2026)², citing authoritative economists she argued that conventional macroeconomic and financial indicators predicting the direction of the economy (consumer sentiment indicators, unemployment, the yield spread between long-term and short-term government bonds, the dollar index, etc.) have proven extremely unreliable in recent years. The article cites the opinion of US economist Kenneth Rogoff that, despite the current unfavorable geopolitical and foreign trade circumstances, attempts to limit central

1. World Economic Forum (2026). Global Risks Report 2026. 21st Edition. Switzerland. 14 January 2026. URL: <https://www.weforum.org/publications/global-risks-report-2026/>

2. Cohen P. (2026). The Global Economy's Warning Signals Are Broken. From markets to spending to debt, usually reliable indicators that forecast where the economy is headed are proving deeply fallible. *NYT online*. February 3, 2026. URL: <https://www.nytimes.com/2026/02/03/business/economy/global-economy-forecasts.html>

bank independence, growing doubts about the rationale for investing in technology companies, the risks of a financial bubble, and the buildup of public debt, the stock market is showing growth and “it is surprising that we haven’t seen more dramatic fluctuations.” Another authoritative US economist Barry Eichengreen, commenting on the loss of effectiveness of traditional predictors of financial shocks, noted that “the economy is an incredibly complex system, and we are in a period of structural change, so it is not surprising that simple empirical rules are increasingly proving ineffective.”

Research by US economists at the Federal Reserve Bank of Minneapolis, A. Atkinson et al. (2025, 2026),¹ based on statistics disclosed by the Federal Reserve, substantiates the thesis that inflated multiples used to value US companies’ stocks are normal and that their values are unlikely to return to average levels in the foreseeable historical future. The authors attribute these trends to the sharp decline in the share of labor compensation in GDP observed in the United States since the 1980s, as well as the peculiarities of statistics, which do not fully account for the impact of investments in intangible assets, bonus payments to employees from company profits and other factors on company performance.

Morningstar’s 2026 forecasts² indicate that by the end of 2025, the capitalization of US stocks had a discount of 4% compared to the fair value of companies according to Morningstar calculations, i.e. this indicator was undervalued, which also calls into question the existence of a financial bubble.

2.1.2. Investment strategies’ key trends

In 2025 and early 2026, the following key patterns can be identified in the area of global investment strategies.³

1. The Trump administration’s reforms in the United States have led to a considerable weakening of the US dollar compared to other currencies. As shown in *Fig. 6*,

1. Atkeson A., Heathcote J., Perri F. (2025). Reconciling macroeconomics and finance for the U.S. corporate sector: 1929 to present. NBER Working Paper 33459, February 2025 (URL: <http://www.nber.org/papers/w33459>); Atkeson A., Heathcote J., Perri F. (2026). A macroeconomic perspective on stock market valuation ratios. Federal Reserve Bank of Minneapolis Staff Report No. 682 (URL: <http://doi.org/10.21034/sr.682> <https://researchdatabase.minneapolisfed.org/concern/publications/5x21tf60n>).
2. Sekera D. (2026). 2026 US Stock Market Outlook: Where to Find Investing Opportunities? High valuations, higher stakes: Expecting a volatile 2026 // Morningstar-online. January 9, 2026. URL: <https://www.morningstar.com/markets/2026-us-stock-market-outlook-where-find-investing-opportunities>
3. Our analysis of global investment trends is based on a selection of 276 strategies popular in business media, with a 15-year horizon as of December 31, 2025, based on Morningstar data. In addition to financial market indices, the sample also reflects the performance of mutual fund and exchange-traded fund portfolios in the United States, with total assets of \$7.1 trillion, or 15.9% of the total asset value of these funds in the United States in 2025.

Russian economy in 2025

Trends and outlooks

the period after the 2008 global financial crisis (GFC) till 2024 was characterized by a strengthening of the US dollar: its index to a basket of currencies, the U.S. Dollar Index (DXY), rose from 73.90 points in July 2011 to 108.49 points in December 2024, or by 46.8%, and then fell in December 2025 to 98.32 points, i.e., by 9.4%. The strengthening of the US dollar in the past contributed to the inflow of funds from global investors into US issuers' securities and higher returns on US company stocks compared to indices of other countries.

Between 2000 and 2025, the MSCI-US index of US stocks grew by 351.8%, the MSCI World ex USA index of stocks of the rest of the world except the US increased by 74.9%, and the MSCI Emerging Markets index of stocks of developing countries, by 186.9%.

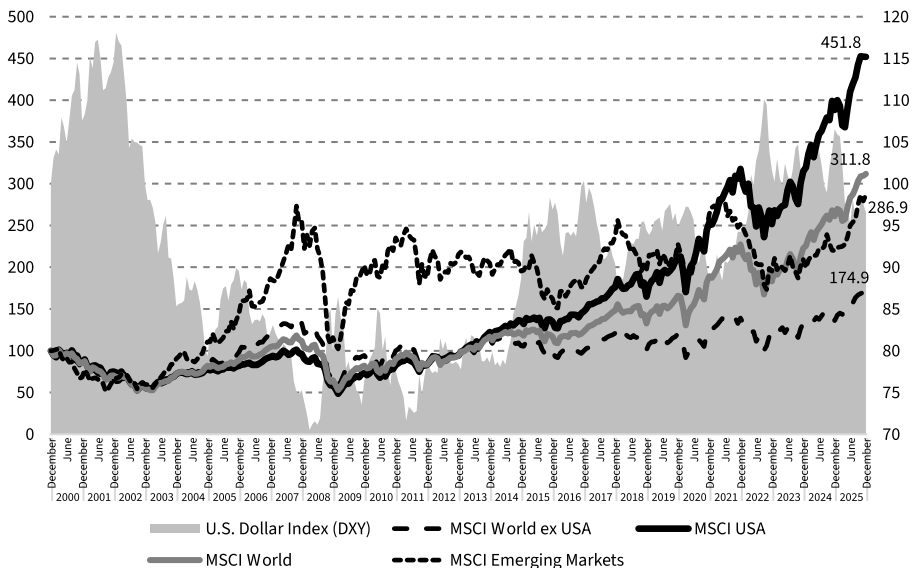


Fig. 6. Cumulative growth of global stock indices and the dollar index from December 1999 to December 2025 (December 1999=100%)

Source: own calculations according to MSCI (URL: <https://www.msci.com/end-of-day-data-country>) and The Wall Street Journal (URL: <https://www.wsj.com/>).

However, in 2025, the situation changed (Fig. 7). While the dollar index declined by 9.4% over the year, the MSCI-US stock index rose by 16.3%, and the MSCI World Ex USA and MSCI Emerging Markets indices increased by 28.6% and 30.6%, respectively. The weakening dollar trend is likely to continue in the future, making the outflow of global investors from US stocks and the outperformance of diversified portfolios of non-US stocks, including emerging market stocks, sustainable in the mid-term.

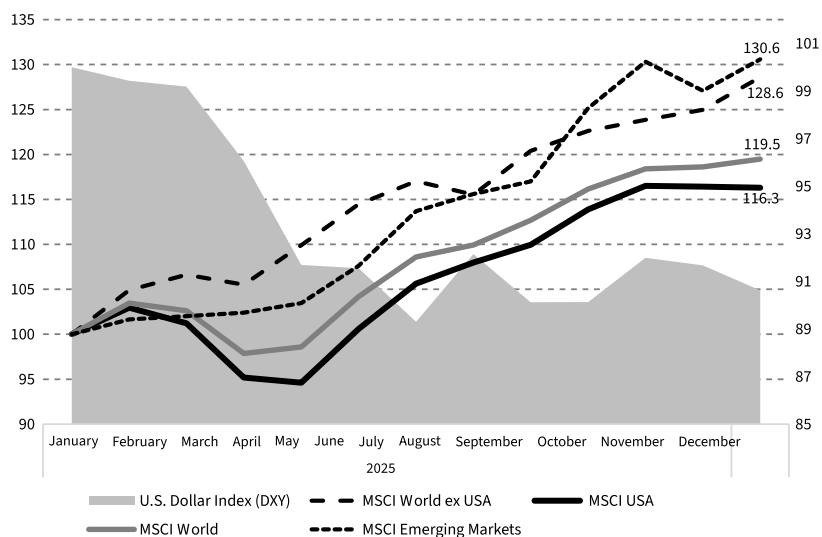


Fig. 7. The cumulative growth of global stock indices and the dollar index from December 2024 to December 2025 (December 2024 = 100%)

Source: own calculations according to MSCI (URL: <https://www.msci.com/end-of-day-data-country>) and The Wall Street Journal (URL: <https://www.wsj.com/>).

2. Investments in gold achieved the most impressive returns in 2025, while leading cryptocurrencies, long considered technological analogues of gold, on the contrary, showed negative returns.

The primary driver of appreciation of prices for gold in 2025 and early 2026 was that, amid high global economic uncertainty and a weakening dollar, gold became a key hedging asset for central banks and large institutional investors in many countries. At the same time, given the lack of robust financial regulation of the cryptocurrency market, significant fraud risks and government restrictions on its circulation, as well as public attention shifting to other technological innovations (AI, quantum computing, etc.), major investors' confidence in cryptocurrencies has declined considerably. This occurred despite measures taken by the Trump administration to stimulate the development of this market segment in the US in 2025 (relaxing enforcement, allowing cryptocurrency investments for retirement savings, promoting dollar-denominated stablecoins, etc.).

As shown in Table 1, returns on gold in 2025 were equal to 149.8%, while the Bitcoin Index declined by 6.3%. However, over a ten-year horizon, with a return of 70.1% per annum, the S&P Bitcoin Index still outperforms the Morningstar Global Gold GR USD Index, with a return of 19.8%. Over the same period, the Sharpe ratio, which takes into account not only the return but also the risk of financial investments, was equal to 0.90 for cryptocurrency, higher than 0.67 for gold.

Table 1

**Performance and risk indicators of underlying investment strategies
in the global financial market as of December 31, 2025**

Strategy	Benchmark	Return, % per annum					Sharpe ratio		
		2025	2022	3 years	5 years	10 years	3 years	5 years	10 years
Broad global stock market	Morningstar Global Markets	23.3	-17.9	20.7	11.3	11.9	1.1	0.65	0.68
Broad US stock market	Morningstar US Market	17.4	-19.4	22.6	13.3	14.4	1.1	0.73	0.79
NASDAQ-100 Index Shares	Invesco QQQ Trust (QQQ)	20.8	-32.6	32.9	15.1	19.5	1.32	0.72	0.94
Broad market of U.S. issuers' bonds	Morningstar US Core Bond	7.4	-13.0	4.7	-0.4	2.0	-0.05	-0.56	-0.04
US government bonds	Morningstar US Treasury Bond	6.4	-12.4	3.7	-0.9	1.4	-0.23	-0.75	-0.15
Short-term US government bonds (risk-free rate)	Morningstar US 1-3 Month Treasury Bill GR USD (MSUSTBGU)	4.3	1.5	4.9	3.3	2.2	-0.75	-1.41	-0.98
U.S. government bonds with a duration of 5-10 years	Morningstar US 5-10 Yr Treasury Bond	8.4	-12.6	4.2	-0.8	1.7	-0.13	-0.61	-0.08
US Money Market Fund	Vanguard Cash Rsrv Federal MnyMktAdmiral (VMRXX)	4.2	1.6	4.9	3.2	2.3	-2.35	-2.57	-0.42
Gold	Morningstar Global Gold GR USD	149.8	-9.2	43.3	19.8	21.7	1.15	0.62	0.67
Real estate	Vanguard Real Estate ETF (VNQ)	3.3	-26.2	6.6	4.6	5.1	0.11	0.21	0.27
Cryptocurrency	S&P Bitcoin Index	-6.3	-63.9	74.2	24.6	70.1	1.4	0.4	0.9
S&P Commodity Asset Index	iShares S&P GSCI Commodity-Indexed Trust (GSG)	5.9	24.1	2.8	13.3	5.0	-0.14	0.7	0.19

Source: our compilation based on the Morningstar data.

According to Morningstar analyst Amy Arnott (2026),¹ gold was the best-performing major asset class over the past twenty years, returning 11.3% annually as of January 21, 2026, ranking first compared to many other assets over most rolling

1. Arnott A.C. (2026). Gold Keeps Reaching New Heights. Here's Why Investors Should Proceed With Caution // Morningstar online. January 23, 2026. URL: <https://www.morningstar.com/markets/gold-keeps-reaching-new-heights-heres-why-investors-should-proceed-with-caution>

periods. For this reason, it can be an important asset for diversified retirement portfolios. In September 2025, Morgan Stanley Chief Investment Officer (CIO) Michael Wilson recommended a retirement portfolio allocation of 60% stocks, 20% bonds, and 20% gold. However, Morningstar analysts warned that the share of gold in retirement portfolios should not exceed 5% of their value.

In terms of the risks of investing in gold, it is important to take into account that its price is characterized by a tendency to revert to the mean, which is substantiated, for example, in the study of Claude Erb and Campbell Harvey in 2013.¹

3. Following the 2022 crisis caused by the rapid rise in the US Federal Reserve's central interest rates and geopolitical instability, the US equity market has grown for three consecutive years by 2025: the Morningstar US Market's broad US equity index returned 26.3% in 2023, 25.0% in 2024, and 17.4% in 2025. As shown in *Table 1*, over the past ten years, these stocks have returned 14.4% per annum, i.e., lower than gold and cryptocurrencies, but higher than most other assets. In addition, their Sharpe ratio over this period of 0.79 outperformed gold's 0.67. The index was driven by the strengthening of the dollar, the growing US economy and the high attractiveness of large technology companies' stocks for investors.

Technology stocks, particularly the Big Seven (Apple, Microsoft, Amazon, Alphabet, Nvidia, Tesla, and MetaTrader), outperformed the broader U.S. stock index, with the NASDAQ-100 returning 20.8% in 2025 compared to 17.4% for the Morningstar US Market. The tech index's performance and Sharpe ratio advantage also remained over the 10-year horizon (see *Table 1*). Given the rapid growth of AI stock investment in 2025 and early 2026, investor speculation about a bubble in AI stocks has increased.

4. In 2025, despite the risks of high government debt, investors saw a significant increase in the attractiveness of bond investments, viewed as a safe haven amid the growing risks of a financial bubble in the US stock market. Furthermore, the trend toward a gradual reduction in central interest rates by the US Federal Reserve and the European Central Bank, which began in 2025, became an additional factor in increasing the market value of bonds on the global market. According to Morningstar (2026)², of the record \$765.0 bn in net cash inflows into long-term mutual funds and ETFs in the US in 2025 after 2021, \$602.7 bn came from US bond funds, while investors withdrew \$32.3 bn from US equity funds. Following the severe crisis of 2022, when the US government bond portfolio declined by 12.4%, the geometric average return of most bond strategies in the US turned positive over a three-year historical horizon (*Table 2*).

1. Erb Claude B., Harvey Campbell R. (2013). The Golden Dilemma (January 2013). Available at SSRN. URL: <https://ssrn.com/abstract=2202645>

2. Carter D., Bullard J. (2026). 8 Charts on US Fund Flows in 2025: Highest Net Inflows Since 2021. Passives, ETFs, bonds, and gold were among the big winners for the year // Morningstar online. January 16, 2026. URL: <https://www.morningstar.com/funds/8-charts-us-fund-flows-2025-highest-net-inflows-since-2021>

Russian economy in 2025

Trends and outlooks

Table 2

Global Bond and Hybrid Strategies Performance and Risk as of December 31, 2025

Strategy	benchmark	Return, % per annum					Sharpe coefficient		
		2025	2022	3 years	5 years	10 years	3 years	5 years	10 years
Broad US stock market	Morningstar US Market	17.4	-19.4	22.6	13.3	14.4	1.10	0.73	0.79
US Money Market Fund	Vanguard Cash Rsrv Federal MnyMktAdmiral (VMRXX)	4.2	1.6	4.9	3.2	2.3	-2.35	-2.57	-0.42
Broad bond market	Morningstar US Core Bond	7.4	-13.0	4.7	-0.4	2.0	-0.05	-0.56	-0.04
U.S. Government bonds	Morningstar US Treasury Bond	6.4	-12.4	3.7	-0.9	1.4	-0.23	-0.75	-0.15
Government bonds with duration of 5–10 years	Morningstar US 5–10 Yr Treasury Bond	8.4	-12.6	4.2	-0.8	1.7	-0.13	-0.61	-0.08
Municipal bond ETF	iShares National Muni Bond ETF (MUB)	3.8	-7.4	3.5	0.8	2.1	-0.24	-0.44	-0.01
Mortgage bonds	Morningstar US Asset-Backed Securities	5.8	-4.4	5.9	2.7	2.7	0.59	-0.36	0.19
Corporate bonds	Morningstar US Corporate Bond	7.9	-15.7	6.1	-0.1	3.2	0.17	-0.39	0.16
Fallen Angels Bond ETFs	VanEck Fallen Angel High Yield Bond (FALN)	8.9	-13.8	10.0	3.9		0.87	0.20	
High-yield bonds	Morningstar US High-Yield Bond	8.6	-11.1	10.1	4.6	6.5	0.91	0.24	0.55
ESG US corporate bonds	iShares ESG USD Corporate Bond ETF (SUSC)	7.6	-16.0	6.0	-0.3		0.15	-0.41	
Broad bond market of developing countries	Morningstar Emerging Markets Composite Bond	10.9	-15.7	8.1	0.8	4.0	0.55	-0.27	0.24
60% stocks/40% bonds is largest fund	American Funds American Balanced A (ABALX)	18.5	-12.1	15.8	9.6	9.8	1.21	0.62	0.79
Global Strategy 60/40	BlackRock Global Allocation Instl MALOX	19.6	-15.8	13.8	5.7	7.5	0.92	0.27	0.54
Life Cycle Fund 2025 (50%/50%)	Fidelity Freedom® 2025 (FFTWX)	16.5	-16.7	12.9	5.7	7.9	0.70	0.32	0.56
Life Cycle Fund 2040 (85%/15%)	Fidelity Freedom® 2040 (FFFFX)	22.6	-18.3	18.5	9.7	10.9	0.94	0.55	0.64

Source: own compilation based on the Morningstar data.

The return of investor confidence in the protective properties of bonds is also entailing a gradual restoration of the investment attractiveness of mixed investment strategies — 60% stocks/40% bonds — and others widely used by large institutional investors. As shown in *Table 2* using the example of the largest US mixed investment fund with a 60/40 strategy, American Funds Balanced A (ABALX), its return in 2025 of 18.5% per annum exceeded the return of the broad stock market index Morningstar US Market (17.4%) and the return of government bonds (6.4%). The fund also outperformed the aforementioned benchmarks in terms of the Sharpe ratio over a three-year time horizon. However, over longer horizons — 5 and 10 years — mixed investment funds still lag behind the return-to-risk ratio of broad stock indices.

Unlike many bond portfolios with sTable investment ratings, the highest returns and high Sharpe ratios in 2025 across all considered horizons — from 3 to 10 years — were demonstrated by investments in high-risk bonds (Morningstar US High-Yield Bond) and fallen angel bonds¹ (VanEck Fallen Angel High Yield Bond).

The growing attractiveness of the global corporate bond market led to the fact that in February 2026, credit spreads between the indices of corporate bonds in the US and the eurozone countries (Ice BofA US Corporate Index and Ice BofA Euro Corporate Index) and the government bond index, according to the *Financial Times* (2026)², reached the lowest level since the GFC-2008, which indicates that investors underestimate the credit risks of investing in corporate bonds and the emergence of signs of a financial bubble in this segment of the financial market.

5. In the field of value (factor) investment in stocks in 2025, as in previous years, the four main portfolio strategies — investing in shares of large companies, in growth stocks and quality stocks, as well as the momentum strategy — continued to outperform broad equity market indices in terms of return and risk. Actively managed ETFs with multi-factor strategies have emerged, which also manage to earn a premium to equity returns. As shown in *Table 3*, in 2025, the returns of Vanguard US Growth (VUG), Vanguard Large Cap Index/ETF (VV), iShares U.S. Equity Fac Rotation Act ETF (DYNF), and the Morningstar US Momentum Factor TR USD index were equal to 19.4%; 18.1%; 20.0% and 21.9% per annum, respectively, compared to 17.4% for the Morningstar US Market index. Only the Morningstar US Quality Factor TR USD index, with a return of 16.2% per annum, slightly underperformed the market portfolio. However, over the ten-year historical period, the quality fund's return of 15.3% per annum, along with 17.5% for growth stocks, 14.8% for large-cap stocks, and 17.1% for the momentum portfolio, significantly outperformed the broad market stock index's return of 14.4% per annum.

-
1. Fallen angels are bond issues or issuers that have the lowest investment rating and are at risk of losing their investment rating.
 2. *Smith I., Chan M.* (2026). Rally in corporate bonds prompts “bubble” fears//*Financial Times* Weekend online. 14–15 February, 2026. URL: <https://www.ft.com/content/e87f04d5-9a19-4776-b0bc-3a78770be894>

Table 3

**Return and risk indicators of factor investment strategies
in stocks as of December 31, 2025**

Strategy	Benchmark	Return, % per annum					Sharpe coefficient		
		2025	2022	3 years	5 years	10 years	3 years	5 years	10 years
Broad US stock market	Morningstar US Market	17.4	-19.4	22.6	13.3	14.4	1.10	0.73	0.79
Stocks of the S&P 500 index	Vanguard S&P 500 ETF (VOO)	17.8	-18.2	23.0	14.4	14.8	1.16	0.80	0.83
Stocks of the S&P 500 index with the same weights in the portfolio	Invesco S&P 500® Equal Weight ETF (RSP)	11.2	-11.6	12.6	10.3	11.5	0.44	0.54	0.59
Value shares	Vanguard US Value (VTV)	15.3	-2.1	13.5	12.6	11.7	0.60	0.72	0.66
Growth stocks	Vanguard US Growth (VUG)	19.4	-33.2	32.5	14.6	17.5	1.32	0.69	0.86
Shares of largest companies	Vanguard Large Cap Index/ETF (VLCAIX) (VV)	18.1	-19.9	23.5	13.9	14.8	1.18	0.77	0.83
Shares of small companies	Vanguard Small-Cap ETF (VB)	8.9	-17.5	13.7	7.3	10.4	0.41	0.37	0.47
Morningstar Momentum Strategy	Morningstar US Momentum Factor TR USD	21.9	-18.1	24.2	13.9	17.1	0.96	0.66	0.84
Morningstar—Equity Quality Strategy	Morningstar US Quality Factor TR USD	16.2	-26.8	27.1	14.8	15.3	1.16	0.72	0.80
ESG stocks	Morningstar US Sustainability	14.2	-18.9	20.6	12.9	13.9	0.95	0.68	0.77
US Multi-Factor Strategy (Active ETF)	iShares U.S. Equity Fac Rotation Act ETF (DYNF)	20.0	-20.3	28.7	16.3		1.39	0.88	
Dividend stocks—broad diversification	Schwab U.S. Dividend Equity ETF (SCHD)	4.3	-3.2	6.8	8.9	11.5	0.10	0.47	0.65
Wide portfolio of high dividend stocks	Morningstar US High Dividend Yield	15.7	-1.0	12.9	12.6	11.3	0.59	0.74	0.66
Shares of companies with high dividends	WisdomTree US High Dividend ETF (DHS)	12.9	8.0	10.0	12.1	9.6	0.33	0.66	0.54
Index of dividend stocks and shares with repurchase (USA)	Morningstar US Dividend and Buyback TR USD MSDIBUGU	15.2	-10.2	15.7	12.9	13.3	0.64	0.71	0.71

Source: own compilation based on the Morningstar data.

At the same time, in 2025, the returns of such strategies as investing in value stocks, small companies, and dividend stocks continued to lag the market. This is due to the outperformance of large technology stocks, characterized by high financial multiples, significant capitalization and high yields due to the stock price, rather than dividends. In 2025, the returns of the Vanguard US Value ETF (VTV), Vanguard Small-Cap ETF (VB), Schwab U.S. Dividend Equity ETF (SCHD), and the Morningstar US High Dividend Yield Index of dividend stocks amounted to 15.3%; 8.9%; 4.3% and 15.7% per annum, respectively, being lower than the 17.4% of the Morningstar US Market Index. These funds and indices also underperformed the market equity index over five- and ten-year time horizons. In this case, the most interesting phenomenon is the low returns on small-cap stocks, which may indicate a disruption in the innovation elevator in exchange-traded financing of US companies' stocks and an excessive increase in business concentration across various sectors.

6. By sector, only the telecommunications and communications, technology and AI stocks sectors demonstrated a consistent ability to outperform broad equity indices (*Table 4*). In 2025, the Morningstar US Communication Services, Morningstar US Technology Sector and Alger Focus Equity Fund (ALZFX), which invests in AI-related stocks, exceeded considerably the Morningstar US Market index by 33.9%, 21.4%, and 41.8% per annum, respectively. These sector strategies significantly outperformed the market index over 3-, 5-, and 10-year horizons. All other sector strategies, as a rule, underperformed the broad equity index in 2025 over most investment horizons. The Sector Rotation Fund (NAVFX), a multi-sector strategy that involves rotating sector stocks in a portfolio at different stages of the economic cycle, also underperformed the market index.

The Renaissance IPO ETF (IPO), which invests in companies at the public offering stage, demonstrated significantly lower returns than the Morningstar US Market Index over most time horizons. Its performance supports the assumption that only actively managed funds with the ability to select stocks with the best post-IPO growth prospects have a chance of achieving returns above the market by investing in IPO companies.¹

7. In 2025, the weakening dollar led to a more active switch of global investments to emerging equity markets. As shown in *Table 5*, in 2025, with the US stock index returning 17.4% per annum, a similar indicator of the broad market of stocks of Morningstar Emerging Markets was equal to 30.1%. The highest dollar returns during this period were earned by funds investing in Poland, South Africa, Vietnam, Chile, Mexico and Brazil in the amounts of 77.4%; 75.2%; 66.5%; 65.1%; 53.7% and 48.4%, respectively. Investments in shares of companies from China and Russia brought

1. Abramov A.E., Chernova M.I. IPO of shares of Russian companies: theory, indicators, trends and prospects // *Financial Journal*. 2024. Vol. 16. No. 6. P. 42–60. URL: <https://doi.org/10.31107/2075-1990-2024-6-42-60>

Russian economy in 2025

Trends and outlooks

Table 4

Performance and risk indicators of sector and thematic equity investment strategies as of December 31, 2025

Strategy	Benchmark	Return, % per annum					Sharpe coefficient		
		2025	2022	3 years	5 years	10 years	3 years	5 years	10 years
Broad US stock market	Morningstar US Market	17.4	-19.4	22.6	13.3	14.4	1.10	0.73	0.79
Stocks of the S&P 500 index	Vanguard S&P 500 ETF (VOO)	17.8	-18.2	23.0	14.4	14.8	1.16	0.80	0.83
NASDAQ-100 Index Shares	Invesco QQQ Trust (QQQ)	20.8	-32.6	32.9	15.1	19.5	1.32	0.72	0.94
Telecommunications and communications sector	Morningstar US Communication Services	33.9	-40.9	42.2	14.5	15.1	1.91	0.62	0.75
Cyclical consumer goods sector	Morningstar US Consumer Cyclical Sector	5.7	-35.5	22.8	8.1	1.9	0.91	0.31	0.62
Countercyclical consumer goods sector	Morningstar US Consumer Defensive Sector	1.1	-2.6	5.7	6.3	8.2	0.12	0.28	0.51
Energy	Morningstar US Energy	7.6	62.5	4.5	23.6	7.9	0.06	0.82	0.33
Financial services	Morningstar US Financial Services Sector	16.9	-12.3	21.2	14.7	13.9	0.97	0.66	0.66
Medicine and healthcare	Morningstar US Healthcare Sector	15.2	-5.2	6.5	6.8	9.5	0.17	0.29	0.54
Manufacturing	Morningstar US Industrials Sector	18.7	-8.1	18.7	13.4	13.4	0.85	0.60	0.65
Public utilities	Morningstar US Utilities Sector	19.4	1.7	12.1	10.9	11.1	0.51	0.50	0.63
Technology sector	Morningstar US Technology Sector	21.4	-31.6	38.0	19.3	23.3	1.58	0.78	1.04
Basic Materials Sector	Morningstar US Basic Materials Sector	15.3	-11.4	9.2	8.5	10.7	0.31	0.34	0.50
Real estate transactions	Morningstar US Real Estate Sector	4.1	-25.6	6.9	4.7	5.4	0.19	0.16	0.26
Rotation of industries depending on business cycle	Sector Rotation Fund (NAVFX)	13.3	-17.8	19.7	10.3	10.2	1.09	0.53	0.59
AI-powered stock fund	Alger Focus Equity Fund ALZFX	41.8	-35.8	46.2	19.2	20.5	1.62	0.80	0.96
Investing in IPO shares	Renaissance IPO ETF (IPO)	5.5	-57.3	23.0	-6.5	8.4	0.73	-0.22	0.35

Source: own compilation based on the Morningstar data.

Table 5

Return and risk indicators of investments in shares of companies in emerging markets as of December 31, 2025

Strategy	Benchmark	Return, % per annum					Sharpe coefficient		
		2025	2022	3 years	5 years	10 years	3 years	5 years	10 years
Broad stock market	Morningstar Global Markets	23.3	-17.9	20.7	11.3	11.9	1.10	0.65	0.68
Shares of companies from developed countries	Morningstar Developed Markets	22.5	-17.9	21.3	12.2	12.3	1.11	0.68	0.69
Shares of companies from developed countries, excluding the United States	Morningstar Developed Markets ex-US	33.7	-14.8	18.2	9.5	9.0	0.94	0.51	0.48
Broad US stock market	Morningstar US Market	17.4	-19.4	22.6	13.3	14.4	1.10	0.73	0.79
Emerging Markets Broad Market Index	Morningstar Emerging Markets	30.1	-17.9	16.1	5.1	9.1	0.86	0.19	
Emerging Markets ETFs	iShares MSCI Emerging Markets	34.0	-20.6	15.9	3.6	7.8	0.80	0.08	
Developing countries in Europe	Morningstar Emerging Markets Europe	31.4	-65.1	18.8	-7.3	1.7	0.88	-0.05	
Dividend stocks in emerging markets	Morningstar Emerging Markets Dividend Yield Focus	20.4	-19.9	13.6	5.6	8.3	0.87	0.24	
Developing countries excluding China	iShares MSCI Emerging Mkts ex China ETF	35.1	-19.3	18.2	7.6		0.96	0.35	
China	iShares MSCI China ETF	31.0	-22.8	11.0	-3.7	4.9	0.36	-0.12	
Brazil	iShares MSCI Brazil ETF	48.4	12.4	11.0	4.9	9.9	0.35	0.19	
India	iShares MSCI India ETF	2.8	-8.9	9.3	7.7	8.2	0.41	0.38	
South Africa	iShares MSCI South Africa ETF	75.2	-5.1	24.0	14.2	9.2	0.86	0.55	
Saudi Arabia	iShares MSCI Saudi Arabia	-8.2	-6.1	1.8	5.8	6.7	-0.16	0.22	
Poland	iShares MSCI Poland ETF	77.4	-24.6	37.7	17.2	9.8	1.31	0.58	
Argentina	Global X MSCI Argentina ETF	11.5	11.8	41.0	26.6	18.9	1.00	0.78	
Indonesia	iShares MSCI Indonesia ETF	4.9	-0.2	-2.2	-1.4	1.3	-0.33	-0.21	
Chile	iShares MSCI Chile ETF	65.1	25.2	18.0	10.6	5.7	0.73	0.40	
Turkey	iShares MSCI Turkey ETF	-1.6	105.8	0.5	8.7	2.4	-0.07	0.30	
Mexico	iShares MSCI Mexico ETF	53.7	1.3	15.7	13.5	6.1	0.56	0.54	
Malaysia	iShares MSCI Malaysia ETF	15.7	-6.0	10.1	3.0	2.8	0.40	0.06	
Vietnam	VanEck Vietnam ETF	66.5	-43.7	19.4	3.2	3.9	0.63	0.10	
Russia	RTS Index— Total Return	33.8	-32.9	12.9	3.3	11.2			

Source: own compilation based on the data of Morningstar and the Moscow Exchange.

Russian economy in 2025

Trends and outlooks

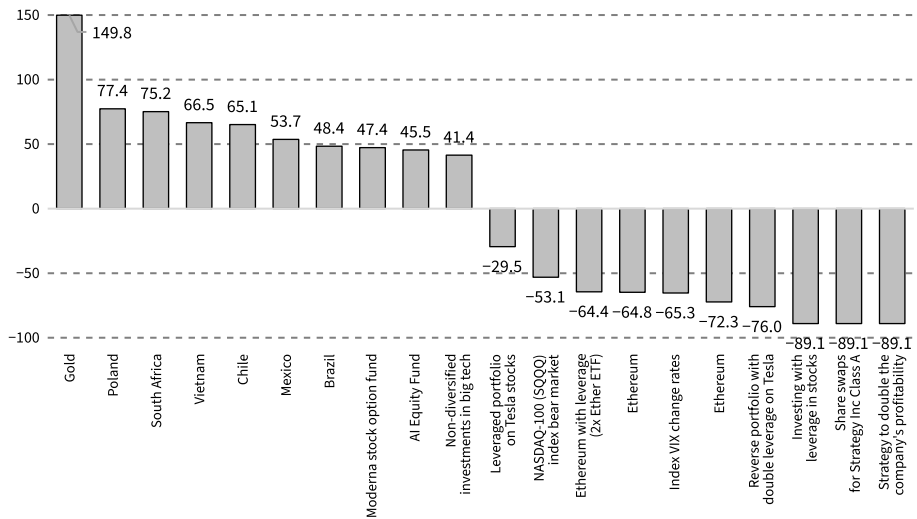


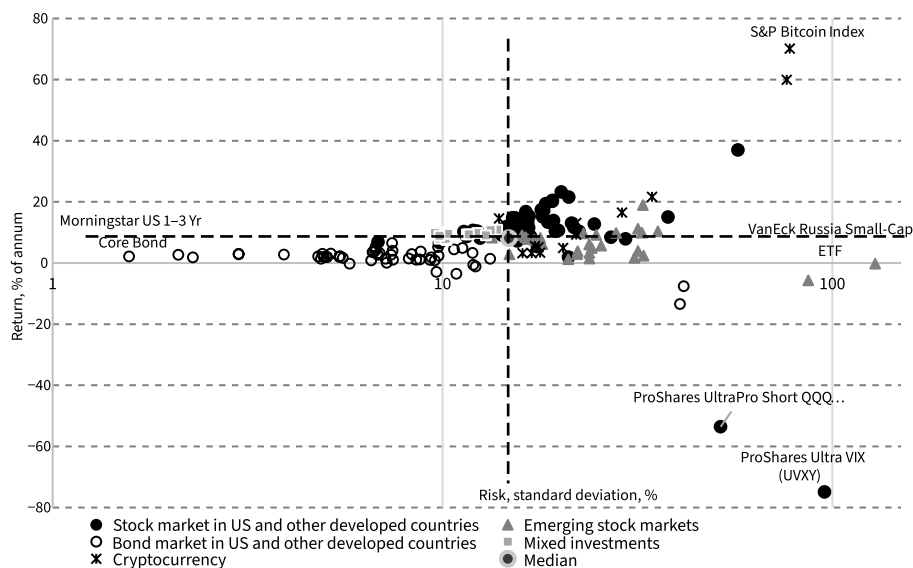
Fig. 8. Top 10 and 10 worst performing investment strategies in 2025 out of 276 global investment strategies, % per annum

Source: own calculations based on the Morningstar data.

returns of 31.0% and 33.8%, respectively. Negative returns were recorded for portfolios of shares of companies from Saudi Arabia and Turkey. However, over three-, five-, and ten-year horizons, the vast majority of emerging market equity strategies underperformed the US equity index. The only exceptions were the Global X MSCI Argentina ETF, which outperformed the Morningstar US Market Index over all three-, five-, and ten-year horizons, and the iShares MSCI Poland ETF, which delivered superior returns over three- and five-year horizons. The high stock returns in Argentina were driven by domestic investors, for whom local stocks were virtually the only means of protecting their savings from high inflation. The rise in Polish stocks was driven by their high attractiveness to foreign investors and the sustained growth of the national economy.

In conclusion of the international market review, let us look at its more general characteristics in 2025 and over a ten-year time horizon.

As shown in Fig. 8, the most profitable investments in 2025 from the considered sample of 276 strategies were investments in gold (Morningstar Global Gold GR USD Index), in the line of exchange-traded funds of BlackRock and VanEck companies investing in shares of companies from Poland, South Africa, Vietnam, Chile, Mexico and Brazil, as well as investments in shares of issuers in the AI sector (Morningstar Global Next Generation Artificial Intelligence Index) and in a poorly diversified portfolio of big tech (mutual fund Alger Focus Equity Fund Class I



Note. The x-axis is shown on a logarithmic scale.

Fig. 9. Returns and risks of 182 investment strategies in the global market, 2016–2025

Source: own calculations based on the Morningstar data.

with ticker ALGRX). The largest losses were incurred by the exchange-traded funds of the management company Defiance, which invested with leverage in shares of the only company Strategy, whose portfolio, in turn, consists of investments in cryptocurrency; funds that invested with leverage in the cryptocurrency Ethereum (Proshares UltraShort Ether ETF and Proshares Ultra Ether ETF); Speculative funds betting on changes in the VIX index (ProShares Ultra VIX) and on a decline in the NASDAQ-100 index (ProShares UltraPro Short QQQ ETF with the ticker SQQQ); a fund with a strategy for a decline in Tesla shares (T-REX 2X Long Tesla Daily Target ETF). The most profitable asset in 2025 — gold — returned 149.8% per annum, while the strategy turned out to be the most unprofitable of the sample of indices and funds, showing a loss of 89.1%.

As Fig. 9 shows, 182 randomly selected strategies with available return and risk information for ten years — from 2016 to 2025 — provided a wide range of investment options for investors with different risk profiles. The highest return of 70.13% per annum was achieved by investments in the S&P Bitcoin Index; the largest loss of 74.90% per annum was demonstrated by the ProShares Ultra VIX (UVXY) ETF,¹ which bets on the rise in the VIX stock volatility index. The lowest-risk investments in terms of the ave-

1. Investments in such a fund allow for high speculative returns in the event of a sharp rise in the VIX index, but long-term investments in such a fund are, with a high probability, clearly unprofitable.

range standard deviation of 0.54% per annum were in two money market funds—Vanguard Cash Rsrv Federal Money Market Admiral and Fidelity® Treasury Money Market (FZFX),¹ while the maximum annual risk of 128.72% was registered in the VanEck Russia Small-Cap ETF, which invested in shares of small Russian companies.

The median return for portfolios over a ten-year time horizon was 8.17% per annum, with a median standard deviation of 14.81% (see *Fig. 9*, the dotted line dividing the graph into four planes). The majority of investment strategies exhibit risks of around 40%. Against this backdrop, the geometric mean return of the Russian RTS-Full Index, at 11.20% per annum, exceeds the average, and the risk indicator, at 31.77%, is more than twice the average.²

To illustrate the efficient set of global portfolios of 182 strategies over a ten-year horizon, *Fig. 10* shows the 25 portfolios with the highest return-to-risk ratios. The five strategies with the highest ratios, ranging from 3.50 to 4.17, are money market funds and investments in low-duration US government bonds, including the BlackRock Liquidity Funds FedFund Institutional Shares, a digital asset fund managed by BlackRock. Technology funds and indices with return-to-risk ratios ranging from 1.05 to 1.16 occupy places 8 through 11 in the ranking. The SPDR® Gold Shares (GLD), an exchange-traded fund investing in gold with a ratio of 1.05, ranks only 12th.

Among the following leading strategies, we highlight the 60/40 mixed investment portfolios of American Funds American Balanced A (ABALX), the largest mixed-asset fund in the US, with a ratio of 1.02 (14th place), and Vanguard Wellington™ Inv (VWELX), the oldest fund with a nearly century-long history, with a risk-return ratio of 0.99 (17th place). This indicates a return to investment appeal for the previously most popular mixed investment strategy among institutional investors, which suffered greatly from the simultaneous decline of the US stock and bond markets in 2022.

Among the 25 most attractive portfolio management strategies for the 2016–2025 period, in 19th, 24th, and 25th place with return-to-risk ratios of 0.98, 0.93, and 0.92, respectively, one can see funds and indices of the broad stock market—the Vanguard S&P 500 ETF (VOO), the SPDR® Port S&P 1500 Comps Stk Mkt ETF (SPTM), and the Morningstar US Market index, respectively.

Thus, a distinctive feature of the global financial asset market in 2025 is the availability of a wide range of strategies for investors with varying risk profiles and strategies that allow them to hedge the risk of investment losses during financial crises, as well as manage portfolios during periods of market growth. This largely explains the trend of continued growth in financial market investment that emerged in 2025 and early 2026, despite uncertainties in the global economy and politics in various

1. They are not shown in *Fig. 9* because the X-axis with standard deviation values is given on a logarithmic scale starting from a value of 1.

2. Comparative characteristics of the return and risk of the RTS index are conditional, since, amid ongoing sanctions, global investors are practically not participating in transactions with Russian securities on Russian exchanges and the domestic over-the-counter market.

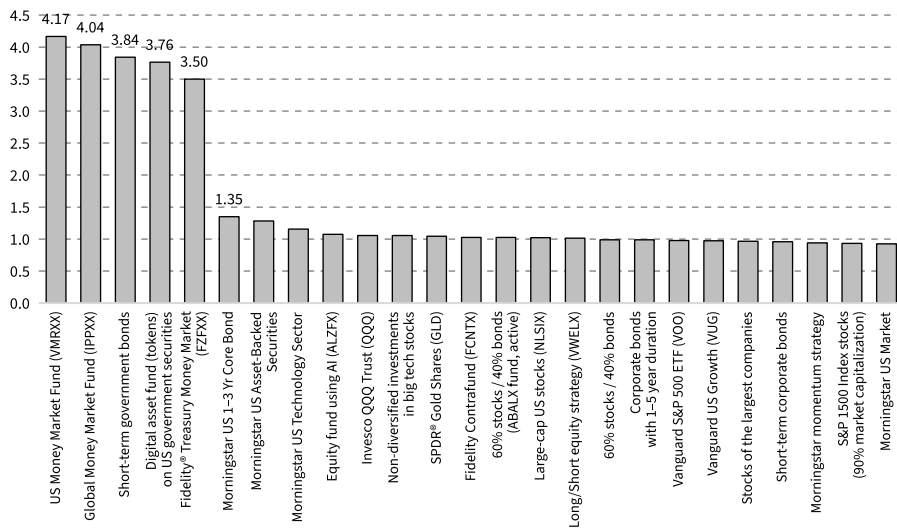


Fig. 10. Top 25 investment strategies by risk/return ratio over a ten-year time horizon from a sample of 182 portfolios in the global market in 2016–2025

Source: own calculations based on the Morningstar data.

countries, as well as the emergence of signs of market overheating and a growing financial bubble. Difficulties in the US economy and the weakening dollar are opening up new opportunities for stock market expansion in many countries, particularly in developing countries.

2.1.3. Specifics of the global financial market in January-February 2026

Between January and mid-March 2026, the global financial market experienced a reversal in the returns of many investment portfolios, driven by the impact of AI proliferation, investor concerns about a potential bubble in technology stocks, and a shock in the energy market following the outbreak of armed conflict in the Middle East.

In the first two months of 2026, many high-yield strategies from the previous year began to show low or even negative returns, while low-yield portfolios, conversely, became profitable. Morningstar analyst John Rekenhtaler (2026)¹ described the essence of these changes most eloquently. According to his comments, so-

1. Rekenhtaler J. (2026). AI Can Do Many Things. Market Analysis Isn't One of Them (Yet)//Morningstar online, February 26, 2026. URL: <https://www.morningstar.com/markets/ai-can-do-many-things-market-analysis-isnt-one-them-yet>

metimes all stocks fall, as in 2008; in other situations, a particular investment style ceases to work, as happened with growth companies in 2022; in still other cases, as with energy in 2015, the shares of an entire industry decline. A distinctive feature of the first six weeks of 2026 was the synchronized decline in the share prices of dozens of seemingly unrelated issuers, caused by global investors' fears that the rise of artificial intelligence could undermine the financial stability of software companies or asset managers. Another trend has been growing concerns about the accumulation of toxic debt in private lending firms (such as Blue Owl Capital) and the collapse of mortgage lending firms Market Financial Solutions (MFS) in the UK.

The reversal in portfolio returns intensified with the onset of armed conflict in the Middle East in early March 2026. MarketWatch analysts Gordon Gottsegen and Joseph Adinolfi (2026)¹ write about an unusual phenomenon in the returns of investment assets on the US market during the four weeks following its onset, due to the rise in oil prices to \$120 per barrel. During this time, contrary to analysts' expectations, broad indices of US companies' stocks declined very moderately, generally by no more than 10%. Gold and US government bonds did not act as a "safe haven": the price of gold fell, while the yield to maturity of government bonds, on the contrary, rose, which in both cases indicated weak investor demand for these assets in the face of instability in financial markets. Conversely, the value of cryptocurrencies, such as Bitcoin, increased, despite the traditional correlation between these assets' returns and stocks. According to the authors, investors' moderate demand for gold and government bonds was driven by their expectations of rising inflation and rising interest rates from the US Federal Reserve. In the stock market, investors expected the conflict to end quickly and were less concerned with hedging against stock price declines than with the opportunity to buy additional shares at a time when the conflict was over.

As shown in *Table 6*, in January-March 2026, there was a reversion of the returns of many investment portfolios compared to their value in 2025. For example, the return of the S&P 500 Vanguard S&P 500 ETF portfolio decreased from 17.8% in 2025 to -4.7% since the beginning of 2026 (as of March 20), the return of the NASDAQ-100 portfolio — from 20.8% to -5.3%, respectively, the Vanguard Large Cap Index/ETF portfolio of large companies — from 18.1% to -5.0%, the index of shares of companies in the telecommunications and communications sector — from 33.9% to -5.5%, the financial sector — from 16.9% to -10.4%, the Morningstar Global Next Generation Artificial Intelligence index — from 45.5% to -4.8%, gold — from 148.9% to -4.6%. The ProShares UltraPro QQQ ETF (TQQQ) NASDAQ-100 Index bullish portfolio declined from 34.4% to -18.3%, US government bonds from 6.4% to -0.4%, eurozone government bonds from 14.3% to -2.6%, Chinese company stocks from

1. *Gottsegen G., Adinolfi J.* (2026). Financial markets are responding to the Iran conflict in unexpected ways — leaving some investors puzzled // MarketWatch online, March 21, 2026. URL: https://www.marketwatch.com/story/financial-markets-are-responding-to-the-iran-conflict-in-unexpected-ways-leaving-some-investors-puzzled-0ce070d9?mod=home_lead

Table 6

Return in US dollars of various investment portfolios in the global financial market from January to March 20, 2026 compared to the return of the specified strategies for individual periods in 2016–2025, % per annum

Investment strategy	Benchmark: Morningstar Index and Exchange Traded Funds (ETFs)	Profitability since the beginning of 2026		CAGR as of December 31, 2025		
		As of March 20, 2026, after the start of the conflict with Iran	As of February 28, 2026, before the US-Iran war	2025	2022	10 years
S&P 500 stocks	Vanguard S&P 500 ETF (VOO)	-4.7	0.6	17.8	-18.2	14.8
Equally weighted S&P 500 stocks in the portfolio	Invesco S&P 500® Equal Weight ETF (RSP)	-0.6	7.0	11.2	-11.6	11.5
NASDAQ-100 Index Shares	Invesco QQQ Trust (QQQ)	-5.3	-1.1	20.8	-32.6	19.5
Value stocks	Vanguard US Value (VTI)	1.9	8.5	15.3	-2.1	11.7
Growth stocks	Vanguard US Growth (VUG)	-9.8	-5.5	19.4	-33.2	17.5
Shares of largest companies	Vanguard Large Cap Index/ETF (VLCAX (VV))	-5.0	0.1	18.1	-19.9	14.8
Small company stocks	Vanguard Small-Cap ETF (VB)	-0.3	7.4	8.9	-17.5	10.4
ESG stocks	Morningstar US Sustainability	-5.6	-0.3	14.2	-18.9	13.9
Dividend stocks – broad diversification	Schwab U.S. Dividend Equity ETF (SCHD)	10.8	15.8	4.3	-3.2	11.5
Telecommunications and communications	Morningstar US Communication Services	-5.5	-0.9	33.9	-40.9	15.1
Energy	Morningstar US Energy	32.8	25.0	7.6	62.5	7.9
Financial services	Morningstar US Financial Services Sector	-10.4	-6.0	16.9	-12.3	13.9
Global AI Stock Investing Index	Morningstar Global Next Generation Artificial Intelligence	-4.8	-0.4	45.5	-40.2	
Investing in IPO shares	Renaissance IPO ETF (IPO)	-6.8	-4.6	5.5	-57.3	8.4
Gold	Morningstar Global Gold GRUSD	-4.6	32.8	149.8	-9.2	21.7
Cryptocurrency	S&P Bitcoin Index	-19.2	-22.1	-6.3	-63.9	70.1
NASDAQ-100 Index Short-Selling	ProShares UltraPro Short QQQ ETF (SQQQ)	17.2	3.4	-53.1	82.4	-53.5
NASDAQ-100 Index bull run	ProShares UltraPro QQQ ETF (TQQQ)	-18.3	-6.1	34.4	-79.1	37.0
VIX Index Change Bets	ProShares Ultra VIX (UVXY)	50.6	10.4	-65.3	-44.8	-74.9

Table 6, end

Investment strategy	Benchmark: Morningstar Index and Exchange Traded Funds (ETFs)	Profitability since the beginning of 2026		CAGR as of December 31, 2025		
		As of March 20, 2026, after the start of the conflict with Iran	As of February 28, 2026, before the US-Iran war	2025	2022	10 years
Promotions popular on social media	VanEck Social Sentiment ETF (BUZZ)	-8.7	-5.5	30.6	-47.7	
Doubling Return on Tesla Stock Investments	Direxion Daily TSLA Bull 2X Shares (TSLI)	-36.6	-23.1	-26.9		
Tesla Inverse Portfolio with Double Leverage	T-REX 2X Inverse Tesla Daily Target ETF (TSLZ)	38.9	18.3	-76.0		
US Money Market Fund	Vanguard Cash Rsrv Federal MnyMktAdmiral (VMRXX)	0.8	0.6	4.2	1.6	2.3
US government bonds	Morningstar US Treasury Bond	-0.4	1.8	6.4	-12.4	1.4
Bonds with duration of 5-10 years	Morningstar US 5-10 Yr Treasury Bond	-0.6	2.0	8.4	-12.6	1.7
Corporate bonds with duration of 5-10 years	Morningstar US 5-10 Yr Corporate Bond	-1.0	1.7	9.6	-13.7	3.7
High-yield bonds in US	Morningstar US High-Yield Bond	-0.8	0.6	8.6	-11.1	6.5
Government bonds of Eurozone countries	Morningstar Eurozone Treasury Bond	-2.6	2.7	14.3	-23.2	0.9
Japanese government bonds	Morningstar Japan Treasury Bond	-2.3	0.6	-6.0	-17.6	-3.6
65/35 global distribution	Vanguard Global Wellington (VGWLX)	1.0	8.0	17.8	-7.2	
Emerging Markets ETFs	iShares MSCI Emerging Markets	1.7	14.4	34.0	-20.6	7.8
China	iShares MSCI China ETF	-8.1	-1.7	31.0	-22.8	4.9
Brazil	iShares MSCI Brazil ETF	10.4	21.9	48.4	12.4	9.9
India	iShares MSCI India ETF	-13.8	-3.3	2.8	-8.9	8.2
Poland	iShares MSCI Poland ETF	-2.0	8.4	77.4	-24.6	9.8
Argentina	Global X MSCI Argentina ETF	-6.4	-1.8	11.5	11.8	18.9
Turkey	iShares MSCI Turkey ETF	11.5	18.0	-1.6	105.8	2.4
Mexico	iShares MSCI Mexico ETF	0.8	16.8	53.7	1.3	6.1
Russia	RTS Index - Total Return	-1.9	-0.5	33.8	-32.9	11.2

Note. The 2025 yield is highlighted in grey for comparison with the period from January 1 to March 20, 2026.

Source: own compilation based on the data released by Morningstar and the Moscow Exchange.

31.0% to -8.1%, Polish companies from 77.4% to -2.0%, and Mexican issuers from 53.7% to 0.8%. The negative or low positive returns of many portfolios observed since the beginning of 2026 were in many ways similar to the similar results of these portfolios during the crisis year of 2022 when the value of many investment assets around the world simultaneously declined.

At the same time, the events of early 2026 led to increased returns for a number of defensive strategies that had demonstrated weak results in previous years. This primarily concerns investments in dividend stocks (Schwab U.S. Dividend Equity ETF), energy stocks (Morningstar US Energy), value stocks (Vanguard US Value), small-cap stocks (Vanguard Small-Cap ETF), speculative strategies betting on the downside of the NASDAQ-100 index and the upside of the VIX index (ProShares UltraPro Short QQQ ETF and ProShares Ultra VIX), and some other speculative strategies, as well as stocks of companies from Brazil and Turkey. (The data presented in *Table 6* does not show an exhaustive list of defensive strategies available to different categories of investors.)

Thus, the severe turmoil in commodity and financial markets in Q1 2026 does not yet pose systemic risks to the financial system, as was the case in the 1970s and in 2008, partly due to the post-GFC 2008 measures in the area of regulation of financial institutions, as well as owing to the availability of a wide range of diversified defensive portfolio strategies that operate even in the face of declining prices of many popular financial assets.

2.2. The situation on the Russian financial market

In 2025, the Russian financial market was solving the problem of restoring growth, still under pressure from sanctions and exposed to a high key interest rate, mainly through domestic long-term savings.

2.2.1. Anti-sanctions policies

In the area of relations with foreign investors, efforts were made to ensure the safety of Russian assets blocked in foreign depositories, the partial unblocking of assets of private investors and the creation of mechanisms for attracting new funds from foreign investors.

According to the data of the EU Council (2024), Euro 260 bn worth of assets of the RF Central Bank have been blocked in the G-7 countries.¹ On December 12,

1. Immobilised Russian assets: Council decides to set aside extraordinary revenues//Press release Council of the EU. February 12, 2024. URL: <https://www.consilium.europa.eu/en/press/press-releases/2024/02/12/immobilised-russian-assets-council-decides-to-set-aside-extraordinary-revenues/>

2025, the European Union adopted a decision to freeze Russia's assets indefinitely, eliminating the need to renew the freeze every six months. However, the risk of these assets being used to issue a so-called reparations loan to Ukraine remains.

In 2024, the total value of assets of Russian private investors blocked in foreign depositories was estimated at Rb5.7 trillion.¹

In turn, in Russia, according to our estimates, non-resident assets, primarily those of foreign institutional investors, amounting to approximately Rb10–15 trillion, primarily the shares of Russian issuers, are blocked in “C”-type accounts.² A selloff of these shares and the withdrawal of corresponding funds by non-residents can not only reduce sharply the value of Russian companies, but also lead to a considerable weakening of the ruble.

In 2024 and 2025, transactions to unblock private investors' foreign assets were carried out directly by financial institutions, with state legal support. In accordance with Executive Order No. 844 of November 8, 2023 of the President of the Russian Federation, “On additional temporary economic measures related to the circulation of foreign securities,” a mechanism for the voluntary exchange of blocked assets between Russian and foreign investors was established. This mechanism includes the possibility of exchanging blocked foreign assets of Russian private investors worth up to Rb100,000 for funds of foreign investors blocked in “C”-type cash accounts. This exchange was conducted through voluntary auctions organized by the Voronezh broker “Investment Chamber” which initiated this procedure. According to estimates by the RF Ministry of Finance, the implementation of these measures could have reduced the value of unblocked Russian assets by Rb100 bn, but the actual results of the exchange turned out to be more modest: according to RBC (2024)³, a total of Rb10.6 bn worth of frozen assets were bought out, which amounted to 30% of the volume that Russian investors had declared for exchange (Rb35.3 bn).

In December 2025, several Russian brokers (T-Investments, Finam, BCS, Investment Chamber and others) announced asset swaps with foreign financial institutions as a private initiative. In its announcement, the RF Central Bank noted that it supports the actions of Russian brokers aimed at unlocking the funds of Russian investors.⁴

To attract new funds from foreign investors from “unfriendly” countries, Executive Order No. 436 of July 1, 2025 of the President of the Russian Federation “On Additional Guarantees of Foreign Investors' Rights” provided for the opening of “In”

-
1. Thousands of Russian investors with frozen assets are not participating in their exchange // Frank Media. 22.06.2024. URL: <https://frankmedia.ru/168331>
 2. The RF Central Bank does not disclose the value of all non-resident assets blocked in type “C” accounts.
 3. URL: <https://www.rbc.ru/quote/news/article/670938189a794737dfcd2b7e?from=copy>
 4. URL: https://www.rbc.ru/quote/news/article/6979e4269a7947594b3d9011?from=copy; https://www.rbc.ru/quote/news/article/698ee6289a7947af773cbcf9?utm_source=rbc.ru&utm_medium=inhouse_media&utm_campaign=main_lines_6&utm_content=698ee6289a7947af773cbcf9&utm_term=B_noauth&from=copy

accounts for such investors in Russian financial institutions for investments in securities of Russian issuers and bank deposits, with the possibility of subsequent repatriation of these funds. According to the RF Ministry of Finance's estimates¹, by 2030 this mechanism is expected to attract Rb1 trillion worth of foreign investor funds.

2.2.2. Macroeconomic environment and financial stability

Predictors of financial shocks

With regard to the Russian financial market, traditional predictors did not foretell financial shocks—signals from indicators anticipating a recession, as in the US, were largely ineffective.

In Russia, there is no established methodology or procedure for recognizing economic recession. Therefore, for the period from January 8, 2013 to February 17, 2026, we independently identified four periods in which GDP, on a quarter-to-quarter basis, declined for at least two consecutive quarters (without counting in other criteria taken into account when recording the state of recession). As shown in *Fig. 11*, over the considered time horizon, in our opinion, there is no clear correlation between the exit of the yield curves of government securities from the state of inversion and the subsequent decline in GDP for at least two consecutive quarters (a “notional recession”) in the Russian economy.

In 2025, the inversion ended on July 16, 2025, amid the Central Bank of Russia's cautious key rate cut that began in June. Although no GDP decline was observed in the subsequent period, the risk of a hypothetical recession was still quite significant: quarter-on-quarter, GDP grew by only 0.1% in Q3 2025, while in Q4 2025, according to our estimates, it accelerated slightly to 0.9%. However, actual recession did not materialize; the predictor again failed to work, and at the end of 2025, a slight acceleration in economic growth was actually registered.

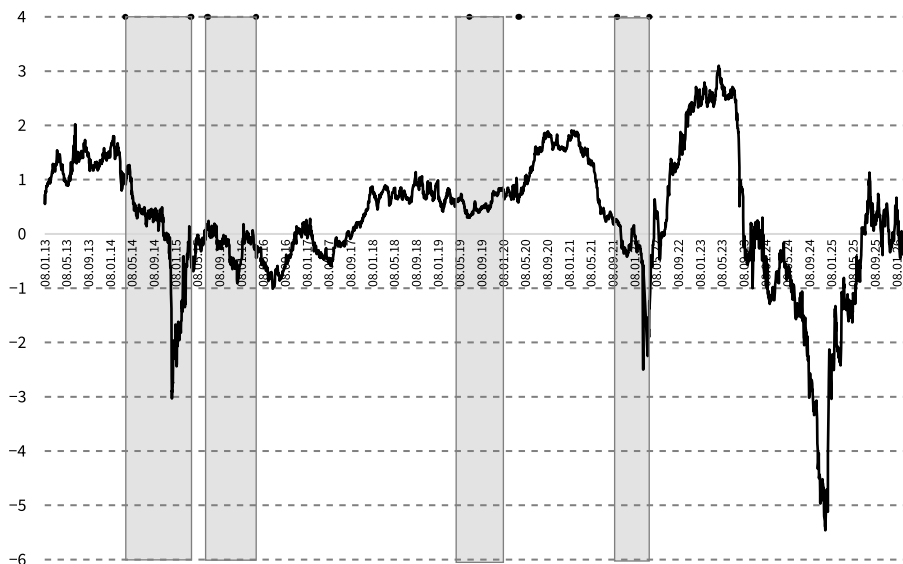
On March 13, 2026, amid a significant decline in fixed capital investment in 2025, the inversion was again reversed. Accordingly, the question may once again arise as to whether the current reduction in the Central Bank of Russia's key rate will be accompanied by the risk of a recession, or whether the Central Bank of Russia will succeed in achieving a soft landing of the economy in 2026.

In order to identify the level of undervaluation of shares of Russian public joint-stock companies, experts of the Department for Analysis of Institutions and Financial Markets of the IAES RANEPА (LAIFR) developed a proprietary methodology for calculating the CAPE Ratio indicator of issuers from the Moscow Exchange index, which made it possible to clarify and extend the historical series of this indicator, which was previously, until 2022, calculated by Barclays Bank (UK) based on information about issuers from the MSCI Russia index.

1. URL: <https://tass.ru/ekonomika/21885523>

Russian economy in 2025

Trends and outlooks



Note. The gray background in the figure indicates periods during which GDP in 2021 prices, excluding the seasonal factor, declined for two or more consecutive quarters on a quarter-over-quarter basis.

Fig. 11. Yield to maturity spreads between 10-year and 2-year OFZs from January 8, 2013 to March 23, 2026, p.p.

Source: own calculations based on the Moscow Exchange and Rosstat data.

As shown in *Fig. 12*, in 2025, such classic predictors of financial shocks as the CAPE Ratio and dividend yield indicated that a financial crisis was not expected on the Russian stock market. The dividend yield, although declining for the second year in a row, amounted to 10.2% per annum during this period, according to our preliminary estimates, compared to an average of 6.3% from 2006 to 2025. The CAPE value in 2025 decreased to 5.5, compared to an average of 9.2 for the same period. A significantly higher dividend yield compared to the historical average and a low CAPE level largely indicate the presence of chronic undervaluation of Russian public joint-stock company shares.

A relative indicator of stock market development — a capitalization/GDP ratio which is sometimes referred to as the “William Buffett Fear Index” — showed a clear downward trend in Russia from 2011 to 2025, while it increased in the United States (*Fig. 13*). In 2025, the indicator in the United States was equal to 225.2% of GDP, compared to its average value of 150.4% of GDP from 2006 to 2025, indirectly indicating stock market overvaluation. In Russia, this indicator fell again in the reporting year to 24.7% of GDP, compared to its average level of 48.8% of GDP.

As in the US, the Excess CAPE Yield indicator for Russian companies, which characterizes the premium on stock returns calculated based on the amount of net pro-

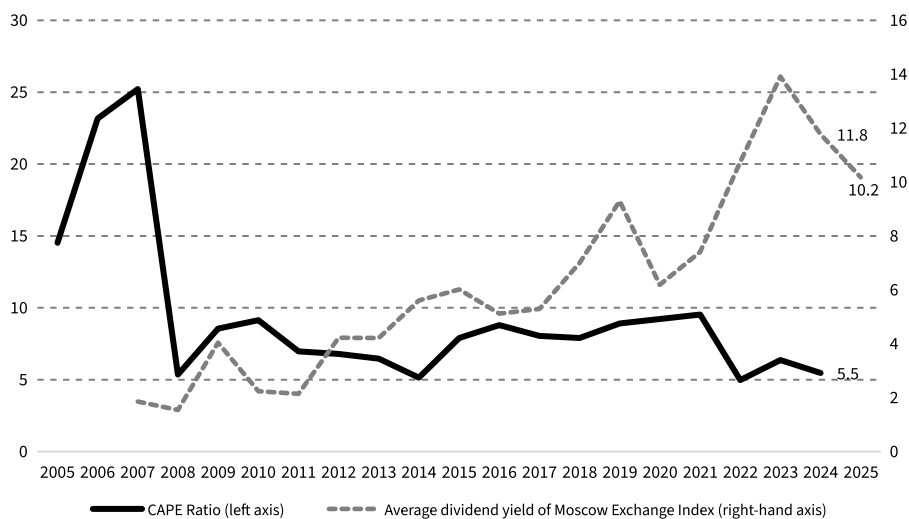


Fig. 12. Average dividend yield of Moscow Exchange index shares and CAPE ratio of Russian companies in 2005–2025

Source: Calculations by the Department for Analysis of Institutions and Financial Markets at IAES RANEPa based on data released by the Moscow Exchange, SPARK, and issuers' financial statements.

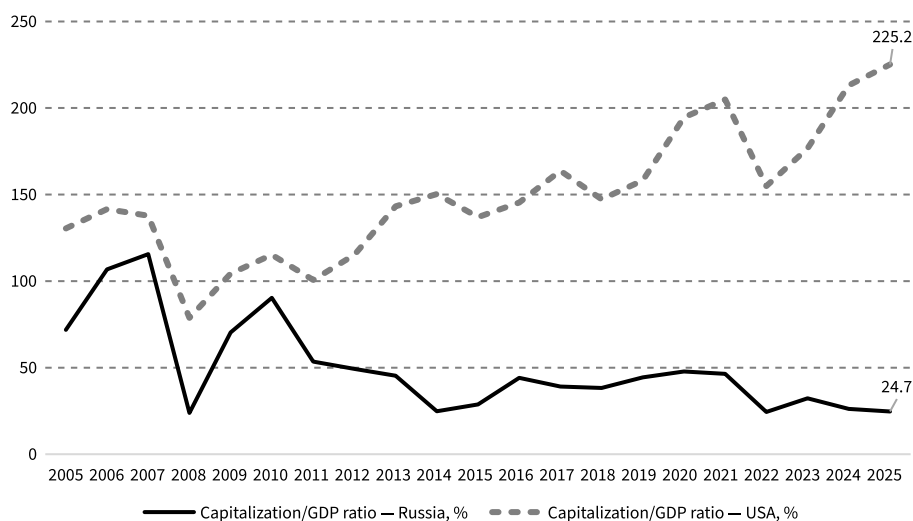


Fig. 13. The “capitalization/GDP” ratio of Russian and US companies in 2005–2025, %

Source: own calculations based on the data released by VFB and the Moscow Exchange.

fit relative to capitalization minus the real average yield on government bonds over ten years, was at a level close to the historical minimum of 10.1 p.p. in 2024,¹ with an average annual value of 14.8 p.p. from 2006 to 2024 (Fig. 14). From a forecasting theory perspective, it is believed that the low current value of this indicator foreshadows a corresponding level of the risk premium for stocks compared to the yield on long-term government bonds over the next ten years.

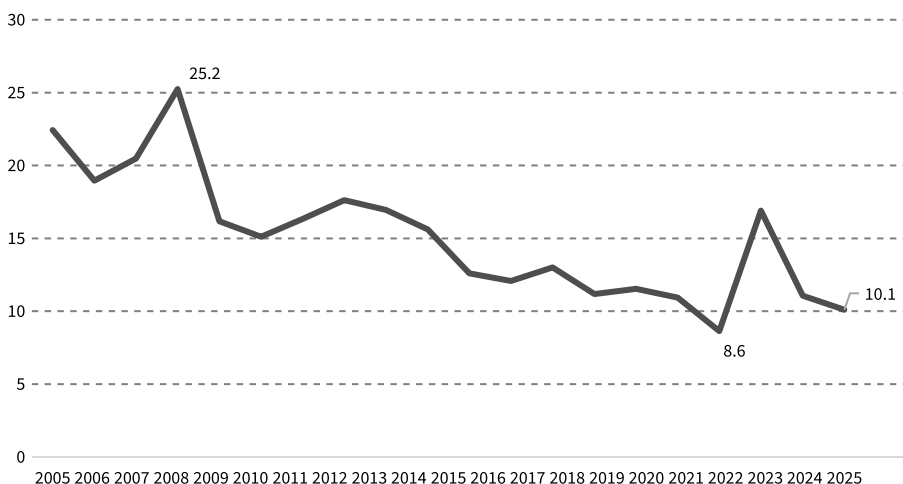


Fig. 14. Excess CAPE Yield (ECY) coefficient of Russian companies included in the Moscow Exchange index in 2005–2024, p.p.

Source: calculations by the Department for Analysis of Institutions and Financial Markets at IAES RANEPa based on data released by the Moscow Exchange, SPARK, and issuers’ financial statements.

Financial Market Development Policy

In 2025, an important area of government influence on the stock market was the implementation of measures pursuant to Executive Order No. 309 of May 07, 2024 of the President of the Russian Federation “On the national development goals of the Russian Federation for the period up to 2030 and for outlook up to 2036.” It provides for increasing capitalization to a level of at least 66% of GDP by 2030 and up to 75% of GDP by 2036, as well as increasing the share of long-term savings of citizens in their total savings to at least 40% by 2030 and up to 45% by 2036. Within the framework of the national project “Efficient and Competitive Economy” in the federal project “Development of the Financial Market” (FP FMR), the aforementioned target benchmarks were supplemented by other indicators, in particular, for conducting Rb5.5 trillion worth of public offerings of shares in 2025–2030, as

1. For many companies, at the time of writing, financial statements for 2025 were not available.

well as achieving the level of assets of non-banking financial organizations at 50% of PPV in 2030.

According to our calculations, this means that stock market capitalization should grow from Rb52.8 trillion or 24.7% of GDP achieved in 2025 to Rb212.4 trillion or 66% of GDP in 2030, i.e., by approximately Rb160 trillion from the 2025 level (*Fig. 15*).

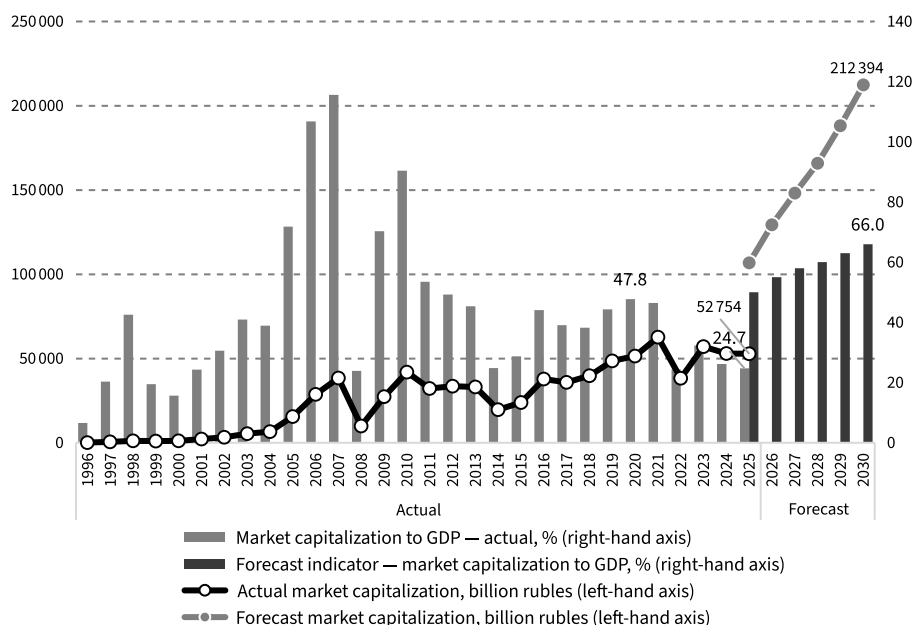


Fig. 15. Stock market capitalization in 1996–2025, based on actual figures and the forecast of the Financial Market Development Fund in 2025–2030

Source: own calculations based on the data of FP “Development of the Financial Market” and actual data from the Moscow Exchange and issuers’ reporting.

Of the specified increase in stock market capitalization between 2026 and 2030, approximately Rb55 trillion could come from the capitalization of new companies entering the market through IPOs. The remaining Rb105 trillion could be generated through growth in the market value of existing public joint-stock companies.

However, as shown in *Fig. 16*, based on historical data analysis, the realistic forecasts of the Russian Market Research Foundation regarding the volume of public offerings of shares in 2025–2030 are somewhat overstated. According to our calculations, the total volume of IPO transactions of Russian companies over the past ten years—from 2016 to 2025—amounted to the mere Rb0.8 trillion, while according to the forecasts of the Russian Market Research Foundation, the volume of public of-

ferings of shares over the forecast period should amount to Rb5.5 trillion, which is 6.9 times higher than the volume of transactions over the past decade. In 2025, the actual IPO volume amounted to Rb0.37 trillion, with a forecast for this year of Rb1.0 trillion.

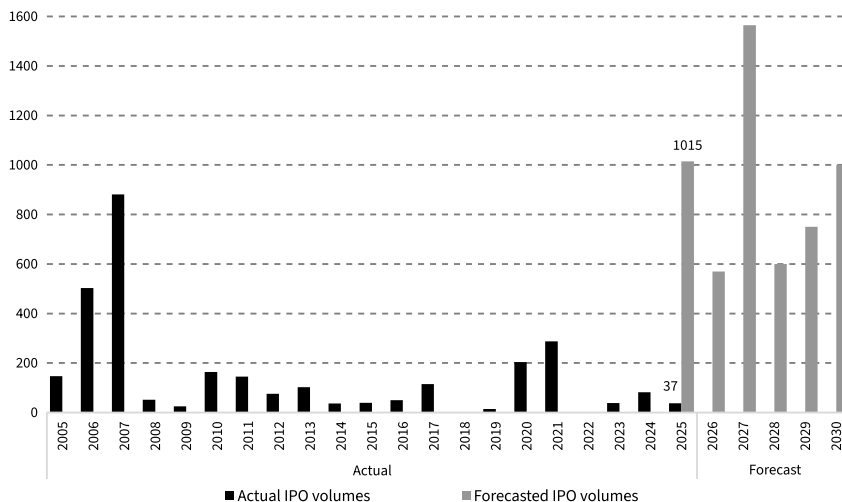
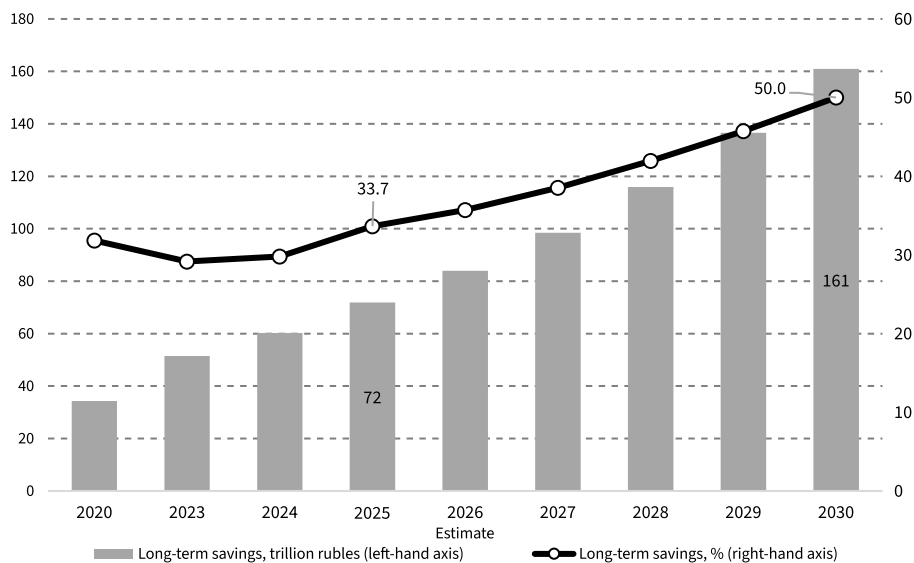


Fig. 16. Total volume of IPO transactions of Russian companies—actual in 2005–2025 and according to the forecast of the Financial Market Development Agency in 2025–2030, bn rubles

Source: own calculations based on the data of FP “Development of the Financial Market”, actual data of the Moscow Exchange and data of the Department for Analysis of Institutions and Financial Markets IAES RANEPА “IPO Constructor”.

According to our calculations, in order to achieve the planned targets for stock market capitalization while maintaining the risk premium for shares at the level of 5.5% through fiscal policy and monetary policy, the Government of the Russian Federation and the Central Bank of Russia will need to achieve a reduction in the real risk-free rate of return to approximately 3.0% (with its average historical level of 2.5%), which, with inflation at 4% per annum, would mean reaching a key rate of 7.0% per annum compared to 15.0% in March 2026.

A necessary prerequisite for growth of PJSC share prices is demand for securities from domestic investors. According to the Federal Register of Financial Markets, the size of non-bank financial institutions’ assets should increase from Rb71.9 trillion, or 32.9% of GDP, in 2025 to Rb161.1 trillion, or 50% of GDP, in 2030, i.e., by Rb89 trillion (Fig. 17). Approximately 97% of this increase in assets will come from savings such as client funds in brokerage and trust management accounts, mutual funds, pension reserves and savings other than pension savings, insurance reserves, and the assets of non-bank financial institutions.



Note. Excluding assets of microfinance organizations.

Fig. 17. Actual growth of long-term savings in 2020–2025 and forecast growth in 2026–2030

Source: own calculations based on the data of FP “Development of the Financial Market” and actual data from the RF Central Bank.

The feasibility of long-term savings plans is beyond doubt: to achieve them, various types of financial assets will need to grow at rates roughly similar to those seen in 2020–2025. However, growth in domestic savings in 2026–2030 can only facilitate capitalization growth if a significant share of such savings is invested in shares of Russian public companies. Long-term savings of individuals and legal entities will not transform into long-term investments if institutional and private investors direct the bulk of their funds to deposits, money market instruments, and short-term bonds.

Liquidity in the stock market

As shown in *Table 7*, in 2025, transaction volumes in most segments of the exchange market significantly exceeded the levels of 2021. In 2025, trading volumes on the Moscow Exchange in shares, OFZs, non-government bonds and money market assets (REPO transactions) increased compared to the same indicators in 2021 by 28.0%; 34.0%; 236.7% and 201.5%, respectively. The high key rate led to active growth, primarily in the OFZ and corporate bond markets, and also expanded demand for money market instruments.

Although the Moscow Exchange futures market and the Saint Petersburg Exchange (SPB) securities market did not recover to 2021 levels in 2025, they demon-

strated considerable progress during the year. Futures transaction volumes in 2025 increased by 46.7% compared to 2024, while trading volumes on the SPB, although down 95.2% from 2021, increased 39.2-fold compared to the previous year. This is explained by the SPB's recovery and its shift from organizing trading in foreign securities to Russian issuers' financial instruments.

In 2025, the volume of the foreign exchange market decreased by 35.8% compared to the previous year, mainly due to the cessation of organized trading in dollars and euros due to sanctions against the exchange infrastructure.

Table 7

Trading volumes on the Moscow and Saint Petersburg (SPB) exchanges in 2021–2025 and their changes

	2021	2022	2023	2024	2025	Average for 2021–2025	Change, %:	
							2025 on 2024	2025 on 2021
1. Secondary trading volume:								
Shares, receipts, units	30.0	17.6	22.9	32.5	38.4	28.3	18.1	28.0
OFZ	7.2	4.2	6.5	4.4	9.7	6.4	120.3	34.0
Non-government bonds	2.9	2.3	4.9	5.9	9.7	5.1	63.8	236.7
2. REPO transactions	420.8	541.9	659.9	847.5	1268.7	747.8	49.7	201.5
including with the central counterparty (CC)	271.0	301.8	364.0	440.7	597.1	394.9	35.5	120.3
3. Foreign exchange market ^b	322.0	267.8	328.0	253.9	162.9	266.9	-35.8	-49.4
4. Futures	151.8	75.6	77.9	96.6	141.8	108.7	46.7	-6.6
5. Options	6.8	2.3	2.9	3.3	3.4	3.7	4.1	-49.7
6. St. Petersburg Exchange, bn dollars	388.5	122.2	0.3 ^a	0.5	18.8	106.1	3822.6	-95.2

^a January — October 2023

^b The data in this row for 2015–2023 shows the volume of the foreign exchange market based on previous Moscow Exchange reporting. For 2024–2025, combined data for the foreign exchange and commodity markets are shown. The average share of the commodity market in foreign exchange market liquidity from 2015–2023 was only 0.06%.

Source: own calculations based on the data of Moscow and Saint Petersburg Exchanges.

Thus, in 2025, despite sanctions and a high key rate, the Russian financial market continued to develop, driven by demand from domestic investors. The market for Russian equities found itself in the most challenging situation, where a high key rate, risk premium, and the conservatism of domestic institutional investors toward equities limited the inflow of new funds into equities and led to a decline in capitalization. At the same time, the bond and money markets expanded at an accelerated pace. The banking sector remained stable, and the growing shortage of bank liquidity was offset by refinancing from the Central Bank of the Russian Federation.

At the same time, the government set an ambitious goal for stock market capitalization growth, which contributed to increased regulatory activity in the area of financial market development policy.

2.3. Investor strategies in the Russian market

To analyze investment strategies in the Russian market, we randomly selected 151 portfolios as of December 31, 2025. We calculated the geometric mean annual return, annual standard deviation, and return/risk ratios separately for 2023, 2024, and 2025 and over time horizons of 2, 3, 5, 10, 15 and 20 years. The strategies used included a wide range of Moscow Exchange stock indices with and without dividend yield, various Moscow Exchange and Cbonds bond indices, mixed strategies with different allocations of stocks and bonds, portfolios of popular exchange-traded and open-end mutual funds, 19 blue-chip issues and second- and third-tier stocks, as well as 34 factor investment portfolios with and without dividend yield calculated by the Department for the Analysis of Institutions and Financial Markets at IAES RANEP.

As shown in *Table 8*, 151 strategies were evaluated in 2025 with geometric mean returns ranging from -31.4% to 53.0% per annum with standard deviations (risks) from 1.0% to 63.2%, with median returns and risks of 5.2% and 20.5%, respectively. The median return was slightly below the 2025 inflation rate of 5.6%.

Over a 5-year time horizon (2021–2025), the return range of 127 strategies narrowed to -15.7% and 49.0% per annum, but the risk spread widened from 0.9% to 89.2%, with a median return and risk of 5.6% and 26.9%, respectively. The median return over the five-year period was largely lower than the geometric average inflation rate of 8.5% per annum.

Over a 10-year time horizon (2016–2025), the return range for 104 strategies narrowed further to -1.0% and 29.0% per annum; the spread of risk indicators also decreased, to 2.8% and 70.8%, with a more investor-friendly median return and risk of 9.3% and 22.1%, respectively. During the period under review, the median return was higher than the geometric mean inflation rate of 6.2% per annum.

Over a 20-year time horizon (2006–2025), the return range of 60 strategies narrowed again to -2.7 and 22.3% per annum, while the risk spread significantly decreased to 2.8% and 45.8%, with a median return and risk of 8.1% and 24.0%, respectively, and a median inflation rate of 7.8%.

Thus, over 10- and 20-year time horizons, the strategies under consideration were characterized by higher median returns, exceeding the inflation rate, and, as a rule, lower risk dispersion than the strategies over a 5-year period and in 2025 as a whole. Furthermore, the median return-to-risk ratios over 10- and 20-year horizons were higher than the same indicators for the strategy over a 5-year period and in 2025. The performance of the strategies over short-term horizons deteriorated.

Table 8

**Parameters of the sample of strategies at different time horizons
as of December 31, 2025**

Time horizon (number of strategies)	Geometric mean return, %	Standard deviation, %	Return/Risk
2025 (151):			
Maximum	53.0	63.2	20.9
Minimum	-31.4	1.0	-1.2
Median	5.2	20.5	0.2
5 years (127):			
Maximum	49.0	89.2	14.7
Minimum	-15.7	0.9	-0.4
Median	5.6	26.9	0.2
10 years (104):			
Maximum	29.0	70.8	3.8
Minimum	-1.0	2.8	0.0
Median	9.3	22.1	0.5
20 years (60):			
Maximum	22.3	45.8	3.5
Minimum	-2.7	2.8	-0.1
Median	8.1	24.0	0.4

Source: own calculations.

As shown in *Table 9*, under the conditions of tight monetary policy continuing into 2025, the return of the Moscow Exchange stock index MCFTR at 2.9% significantly underperformed not only the money market and bond indices, but also the inflation rate of 5.6%. Taking into account three difficult years for the stock market — 2022, 2024, and 2025 — these instruments lost to almost all basic bond strategies and medium-term bank deposits for the population, with the exception of the broad government bond index RGBITR and inflation over a five-year horizon. The situation with significantly higher bond yields compared to stocks is temporary, since borrowing that is too costly for issuers can undermine their financial stability and hinder the growth of equity financing.

Over longer time horizons — 10 and 20 years — the MCFTR stock index’s annualized returns of 11.9% and 10.4%, respectively, were higher than those of the RGBITR and IFX-Cbonds bond indices and the 10-year money market fund index. However, this advantage came at the expense of increased equity risk: the stock index’s return-to-risk ratio over 10- and 20-year horizons was significantly lower than that of bond portfolios.

Over 10- and 20-year horizons, the 40/60 and 60/40 mixed investment strategies, popular with institutional investors abroad but still underutilized by Russian finan-

cial institutions, demonstrated attractive return-to-risk results. During these periods, they were comparable to the MCFTR index and exceeded the bond index. However, across all time horizons considered, they outperformed the stock index in terms of return-to-risk, owing to their inherent ability to cushion portfolios from sharp declines through their bond component. Over all horizons except the 5-year horizon, the returns of both mixed strategies were significantly higher than the inflation rate.

Over shorter time horizons — from one to five years — mixed strategies tended to underperform the IFX-Cbonds corporate bond index and medium-term bank deposits.

Table 9

Return and risk indicators of basic investment strategies over different time horizons as of December 31, 2025

	Geometric mean return, %					Return/Risk				
	2025	3 years (2023–2025)	5 years (2021–2025)	10 years (2016–2025)	20 years (2006–2025)	2025	3 years (2023–2025)	5 years (2021–2025)	10 years (2016–2025)	20 years (2006–2025)
Moscow Exchange Index (MCFTR)	2.9	17.2	4.2	11.9	10.4	0.12	0.85	0.15	0.50	0.34
IF-MM — money market funds	20.2	16.6	13.2	10.2		20.20	14.96	6.12	3.69	
RGBITR index	23.1	6.7	3.7	7.5	8.1	3.13	1.01	0.37	0.97	0.91
IFX-Cbonds	24.2	13.6	11.0	10.8	9.8	11.63	5.55	3.37	3.76	3.48
Stocks 40%, bonds 60%	15.6	13.4	7.0	10.9	10.7	1.42	1.41	0.49	0.95	0.81
Stocks 60%, bonds 40%	11.4	14.8	6.4	11.5	10.9	0.76	1.14	0.34	0.74	0.58
Deposits from 181 days to 1 year, % per annum	14.9	16.6	12.0	8.7	8.8					
Inflation, % per year	5.6	7.5	8.5	6.2	7.8					

Source: own calculations.

The problem with assessing the performance of many bond index strategies is the lack of data on them over 20- and even 10-year time horizons due to frequent restructurings of bond index lines on the Moscow Exchange and Cbonds.

As shown in *Table 10*, over one-year and five-year time horizons, most bond portfolios outperformed the broad Moscow Exchange stock index in terms of total return. However, over longer horizons, from 10 to 20 years, stocks had an advantage. Moreover, in terms of return/risk, amid low bond price volatility, most bond portfolios outperformed stocks across virtually all time horizons.

Over horizons of up to five years, investors were offered various strategies to achieve high overall returns and protect themselves from the risks of changes

Table 10

**Total return and risk indicators of bond strategies over different time horizons
as of December 31, 2025**

	Geometric mean return, %					Return/Risk				
	2025	3 years (2023– 2025)	5 years (2021– 2025)	10 years (2016– 2025)	20 years (2006– 2025)	2025	3 years (2023– 2025)	5 years (2021– 2025)	10 years (2016– 2025)	20 years (2006– 2025)
Moscow Exchange Gross Total Return Index (MCFTR)	2.9	17.2	4.2	11.9	10.4	0.12	0.85	0.15	0.50	0.34
Moscow Exchange Government Bond Index (RGBITR)	23.1	6.7	3.7	7.5	8.1	3.13	1.01	0.37	0.97	0.91
RUGBINFTR (OFZ-i floaters)	21.1	3.1	6.3			3.59	0.48	0.69		
IFX-Cbonds	24.2	13.6	11.0	10.8	9.8	11.63	5.55	3.37	3.76	3.48
Cbonds CBI HY (from B- to BBB) Index	25.9	10.8				2.30	1.26			
Cbonds CBI from BBB- to BBB+ Group Index (fallen angels)	21.0	9.1				1.18	0.79			
First level Index KO (RUCBITRL1)	28.6	11.2	8.7	8.9		10.91	3.58	1.92	2.23	
Second-level KO index (RUCBITRL2)	28.5	11.5	8.9	9.8		11.57	3.61	1.94	2.45	
Third-level KO Index (RUCBITRL3)	27.2	11.1	8.1	9.5		9.22	3.43	1.59	2.20	
IF-FI—bond funds	14.0	8.2	6.2	7.6		4.09	2.51	1.21	1.82	
IF-MM—money market funds	20.2	16.6	13.2	10.2		20.20	14.96	6.12	3.69	
Mutual Fund Liquidity—UK VIM Investments	20.8	16.1	12.6			20.61	19.53	14.67		
Mutual Fund First—Corporate Bonds Fund	27.5	11.9	9.3			8.81	3.37	2.01		
Mutual Fund Moscow Exchange Index Management Company VIM Investments	5.2	15.8	2.5			0.21	0.75	0.09		
Alfa-Capital Mutual Fund—Managed Bonds	31.4	15.5	12.0			7.94	2.93	1.41		
Mutual Fund Gold—Exchange Management Company «VIM Investments»	26.7	36.2	18.5			1.46	2.11	0.91		
Mutual Fund First—Government Bonds Fund	21.9	6.9	3.5			3.20	0.98	0.35		
Mutual Fund SI Pervaya—Balanced	18.7	19.6	6.1	9.4	7.3	1.26	1.47	0.30	0.59	0.42
Mutual Fund Kaznacheysky—UK VIM Investments	31.6	13.0	7.6	9.1	10.2	5.55	2.86	0.93	1.22	1.62
Raiffeisen Mutual Fund—Corporate Bonds	21.9	11.9	8.0	7.5		5.41	2.47	1.41	1.73	

Source: own calculations.

in the Central Bank of Russia’s key rate, using money market instruments, floaters, bonds of varying durations, and exchange-traded gold mutual funds. However, as the key rate and real risk-free yield decline, the advantages of bonds over stocks will gradually diminish. The worsening of the financial position of many corporate bond issuers will increase credit risks. Under these circumstances, the lack of bond benchmarks with long-term historical data may complicate investment decisions.

In order for the corporate bond market to become a greater source of financing for issuers’ investments, it is necessary to solve the problems of issuance of bonds with long durations.

As shown in *Fig. 18*, over a five-year time horizon, the highest return-to-risk ratios among bond strategies were observed for the Money Market Fund “BPIF Liquidity of VIM Investments Management Company” at 14.7, the money market fund index IF-MM at 6.1, the corporate bond index IFX-Cbonds at 3.4, the corporate bond index with short-term duration Cbonds CBI1–3Y at 2.4, and the First BUITF—Corporate Bonds Fund at 2.0. The actively managed BUITF Alfa-Capital Managed Bonds rounds out the group of leaders with a ratio of 1.4.

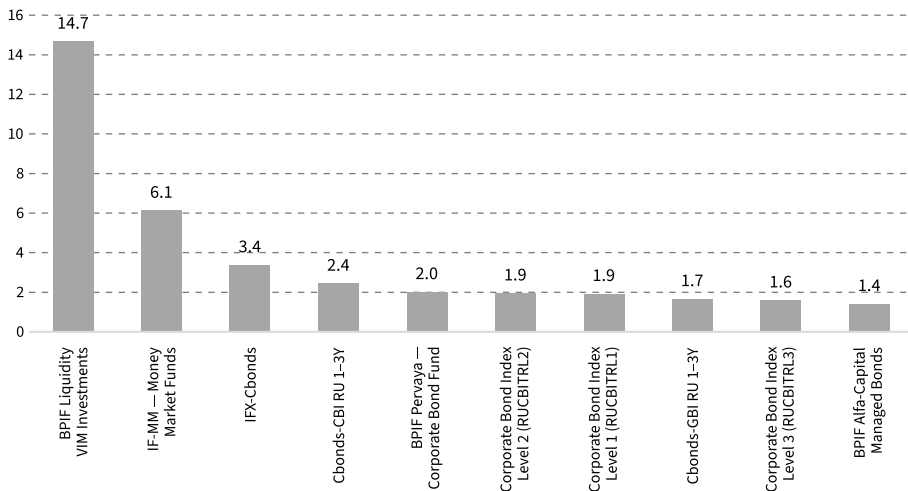


Fig. 18. Top 10 bond strategies by return/risk ratio over a 5-year horizon in 2021–2025 (out of 25 bond and mutual fund strategies)

Source: Own calculations.

As shown in *Table 11*, the 40/60, 50/50, 60/40, and 90/10 mixed investment strategies based on the total return criterion over 10- and 20-year horizons generally significantly outperformed broad government and corporate bond indices, inflation, and medium-term bank deposits. Over a 20-year horizon, these mixed strategies outperformed the MCFTR stock index and demonstrated roughly the same returns

as the index over a 10-year horizon. Furthermore, in terms of the return-to-risk ratio, the mixed strategies performed better than the broad stock index over virtually all horizons.

On one-year and five-year horizons, mixed investment strategies were inferior in terms of returns to bank deposits and the IFX-Cbonds corporate bond index.

Table 11

Total return and risk indicators of mixed strategies over different time horizons as of December 31, 2025

	Geometric mean return, %					Return/Risk				
	2025	3 years (2023–2025)	5 years (2021–2025)	10 years (2016–2025)	20 years (2006–2025)	2025	3 years (2023–2025)	5 years (2021–2025)	10 years (2016–2025)	20 years (2006–2025)
Moscow Exchange Gross Total Return Index (MCFTR)	2.9	17.2	4.2	11.9	10.4	0.12	0.85	0.15	0.50	0.34
Moscow Exchange Government Bond Index (RGBITR)	23.1	6.7	3.7	7.5	8.1	3.13	1.01	0.37	0.97	0.91
IFX-Cbonds	24.2	13.6	11.0	10.8	9.8	11.63	5.55	3.37	3.76	3.48
Stocks 10%, bonds 90%	21.7	11.0	7.4	9.7	9.6	3.98	2.21	0.97	1.61	1.56
Stocks 40%, bonds 60%	15.6	13.4	7.0	10.9	10.7	1.42	1.41	0.49	0.95	0.81
Stocks 50%, bonds 50%	13.5	14.1	6.7	11.2	10.9	1.04	1.26	0.41	0.83	0.68
Stocks 60%, bonds 40%	11.4	14.8	6.4	11.5	10.9	0.76	1.14	0.34	0.74	0.58
Stocks 90%, bonds 10%	5.1	16.6	4.9	11.9	10.6	0.24	0.91	0.18	0.55	0.39
OPIF SI Pervaya — Balanced Management Company Pervaya	18.7	19.6	6.1	9.4	7.3	1.26	1.47	0.30	0.59	0.42
Deposits for a period from 181 days to 1 year. % per annum (at the end of the year)	14.9	16.6	12.0	8.7	8.8					
Inflation	5.6	7.5	8.5	6.2	7.8					

Source: own calculations.

As shown in *Fig. 19 (a and b)*, of the top 25 best portfolios by risk/return ratio among 151 strategies in 2025, almost all were money market and bond instruments, including the top five strategies that were exclusively money market funds (see *Fig. 19, a*). Only the mixed investment strategy “10% stocks/90% bonds” ranked last, 25th. Given the high key rate and real risk-free return, the investment situation in 2025 can be considered abnormal and transitory.

On a 10-year time horizon (*Fig. 19, b*), out of 104 strategies, six factor portfolios (stocks with high dividend yield, large-cap companies, small companies, low-liquidity stocks, stocks of private issuers and growth companies with coefficients of 1.06; 0.93; 0.89; 0.84; 0.82 and 0.81, respectively) made it into the top 25. In ad-

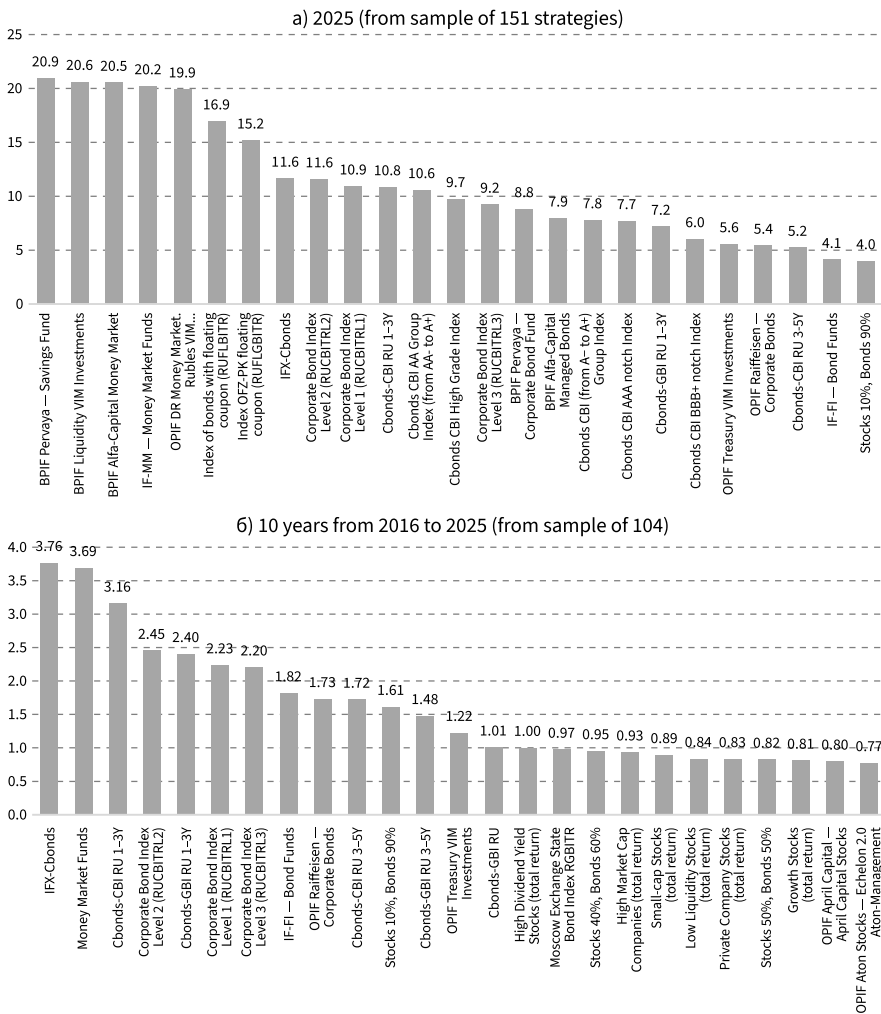


Fig. 19. Top 25 Strategies by Risk/Reward Ratio for Different Time Horizons as of December 31, 2025

Source: own compilation based on statistics released by the Moscow Exchange and information resources Cbonds, Investfunds.ru (URL: <https://investfunds.ru/>) and information resource LAIFR Konstruktor CAPM-RU Shares (URL: <https://aea.ru/CAPM-RU.html>).

dition to the mixed 10/90 strategy, the 40/60 and 50/50 strategies also made it into the list of leaders. Two equity mutual funds, April Capital — Shares of April Capital Management Company and Aton — Echelon 2.0 equity mutual fund of Aton-Management Management Company, round out the list.

Table 12

**Return on a number of popular strategies on the Russian market
in January — February 2026 compared to previous periods, %**

	February 2026	Geometric mean return as of December 31, 2025			
		2025	3 years	5 years	10 years
Moscow Exchange Index (IMOEX)	3.8	-4.0	8.7	-3.4	4.6
Moscow Exchange Gross Total Return Index (MCFTR)	5.5	2.9	17.2	4.2	11.9
Moscow Exchange Government Bond Index (RGBITR)	3.7	23.1	6.7	3.7	7.5
IFX-Cbonds	3.0	24.2	13.6	11.0	10.8
IF-MM — money market funds	3.0	20.2	16.6	13.2	10.2
Stocks 60%, bonds 40%	4.7	11.4	14.8	6.4	11.5
Gazprom	3.2	-5.8	-7.8	-9.7	-0.6
Rosneft	22.5	-31.4	3.8	-1.2	4.9
Lukoil	-2.0	-15.6	13.2	2.7	9.7
NOVATEK	16.6	24.8	3.3	-1.2	7.2
PJSC Krasny Oktyabr (KROT)	-6.3	5.2	46.7	33.9	29.0
PJSC Sollers (SVAV)	-10.7	-15.1	39.2	16.6	3.6
PJSC TNS Energo Rostov-on-Don (RTSB)	-6.5	53.0	80.4	49.0	
Globaltruck (GTM JSC) GTRK	-48.9	-18.1	50.5	33.0	
Inflation	5.9	5.6	7.5	8.5	6.2
Deposits for a period from 181 days to 1 year, % per annum (at year end)	14.9	14.9	16.6	12.0	8.7

Source: own compilation based on statistics released by the Moscow Exchange, Cbonds and the Central Bank of Russia.

Thus, despite current difficulties, the Russian financial market has provided investors with the opportunity to utilize a variety of strategies across different time horizons and economic cycles and monetary policy. Due to the current tight monetary policy coupled with the abnormally high real rate of return on risk-free investments, various bond and money market portfolios have become increasingly attractive over a five-year horizon. However, in the near future, the situation may shift again in favor of equities and mixed investments. Key promising areas for developing the equity financing market and increasing its attractiveness for investors include the use of factor and sector-specific investment strategies, as well as the creation of portfolios with different asset allocations.

In January — February 2026, unlike the global market, the Russian stock market did not experience a massive reversal in asset returns compared to returns in 2025 and longer periods (*Table 12*). However, against the backdrop of the escalating conflict in the Middle East and the relevant rise in oil and gas prices, the returns on Gazprom, Rosneft and NOVATEK shares improved considerably in early 2026 compared

to 2025 and the past three years. As a result, the return on the Moscow Exchange Index (MCFTR) exceeded the returns on government and corporate bond indices. At the same time, the decline in third-tier stock markets (Krasny Oktyabr, TNS Energo Rostov-on-Don, Sollers and Globaltruck) intensified.

2.4. Institutional characteristics of the Russian stock market

Like many emerging capital markets, the Russian market is highly volatile, frequently experiencing financial crises that can cause stock prices to decline by 20–25%. This instability in emerging markets is a serious obstacle to implementing long-term savings strategies.

2.4.1. Problems of long-term stability of the stock market

In 2024, the Russian market experienced another financial crisis, with the RTS stock index falling by 24.0% from May to December. This time, the main reason for the decline was the increase in the Central Bank of Russia's key rate to 21% per annum.

As shown in *Fig. 20*, over the past 30 years since 1995, the RTS stock index in foreign currency terms has experienced six financial crises, during which it fell by 25% or more; and three of them, which occurred in June 2008, November 2021 and May 2024, have not ended to date. From June 2008 to February 2026 — for 213 months (17.7 years) — the RTS index value in terms of exchange rate yield reached only 46.4% of the pre-crisis peak of May 2008. The index decline since November 2021 has continued for 52 months (4.3 years), and in February 2026 its value was only 61.9% of the October 2021 level. The index decline since May 2024 has continued for 22 months (1.8 years), during which it recovered to 97.5% by February 2026.

As shown in *Fig. 21*, the duration of the RTS index recovery after May 2008 did not set a record for similar events in the world. In the list of the longest financial crises, the most famous case is the recovery for over 25.3 years of the Dow Jones Industrial Average (DJIA) in the United States after the Great Depression of 1929. Currently, in terms of duration, it is inferior, for example, to the Chinese MSCI index,¹ which reached only 61.0% of its peak in December 1993 in 386 months (32.2 years), and to the Thai MSCI index, which reached only 47.9% of its peak in December 1993 in approximately the same period — 374 months (31.2 years).

The most significant event in this area was the recovery in May 2025 of the Japanese MSCI index to a level of 102.2% compared to its value in February 1989. This remains the longest recovery of a stock index in world history, which lasted 435 months, or 36.2 years.

1. All MSCI indices mentioned in this section are calculated based on share prices in US dollars.

Russian economy in 2025

Trends and outlooks

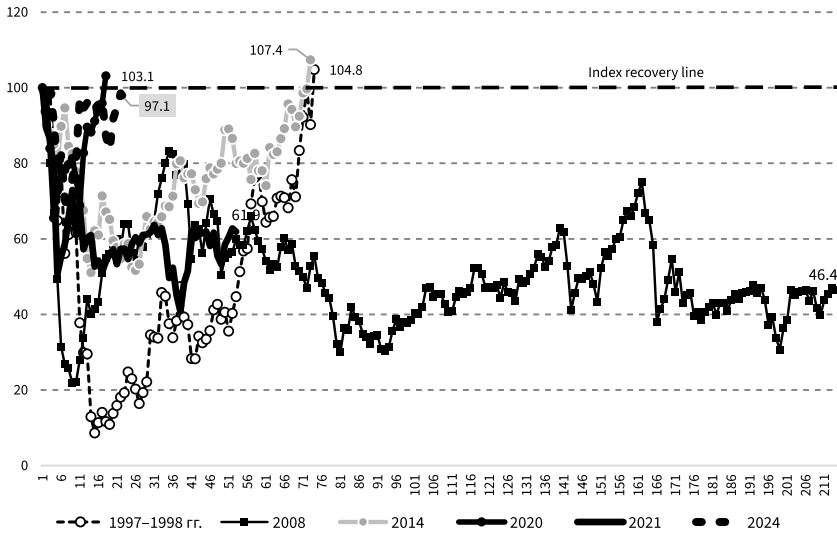


Fig. 20. Changes in the RTS index relative to its peak values in July 1997, May 2008, February 2014, December 2019, October 2021 and April 2024 over a time horizon measured in months as of February 27, 2026, % (peak=100%)

Source: own calculations based on the data released by the Moscow Exchange.

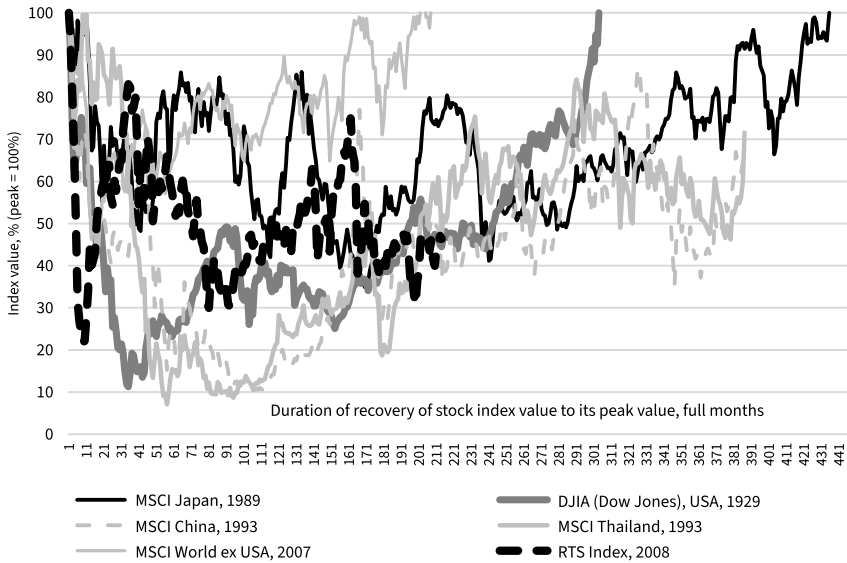


Fig. 21. The dynamics of the RTS index recovery since May 2008 against the backdrop of the longest-term financial crises in the world in dollar terms since the Great Depression of 1929 as of February 27, 2026

Source: own calculations based on MSCI data.

The RTS Index's recovery has already outlasted classic medium-term crises, such as the NASDAQ crisis of 2000 and the South Korean Kосpi Index, which recovered in 14.8 and 15.3 years, respectively. The RTS Index's current trajectory of slow recovery is currently in line with the DJIA after the Great Depression of 1929.

As shown in *Fig. 22*, unlike the dynamically growing MSCI World Index, the slow recovery of stock indices after the 2008 crisis is typical of all BRICS countries, with the exception of India. Like Russia's RTS Index, the MSCI Brazil Index has been unable to recover for 17.7 years since May 2008 — its current value of 42.7% from the pre-crisis level is even slightly lower than that of the Russian index. The MSCI indices of companies from China and South Africa reached recovery points at different times after 2008, meaning they have formally overcome the 2008 crisis. However, these markets have since experienced further declines: on February 27, 2026, 18.3 years after the onset of the crisis, the MSCI China Index was only 79.2% of its October 2007 peak, while the MSCI South Africa Index recovered from October 2007 to 102.5% in 17.8 years and has not fallen below 100% since.

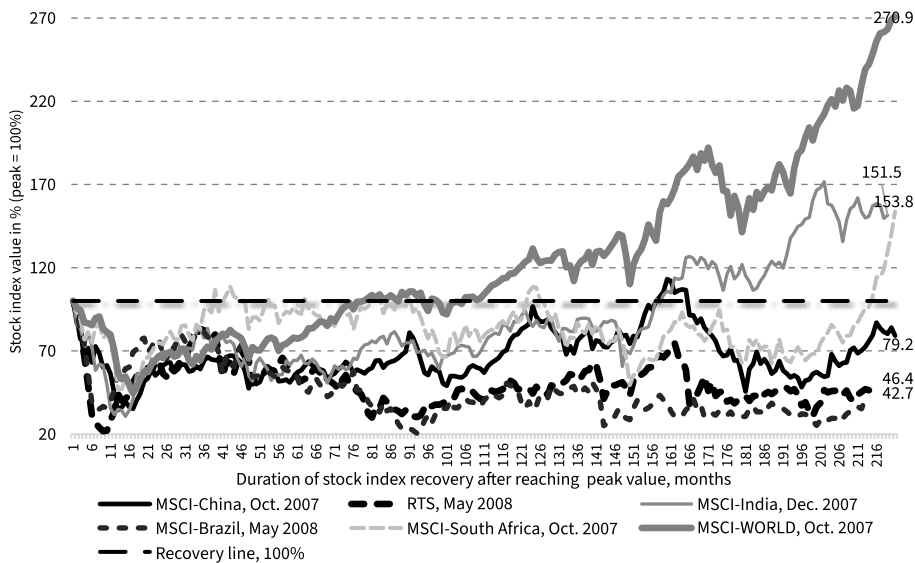


Fig. 22. The dynamics of the recovery of the BRICS and MSCI-World indices in dollar terms after the peak values reached in 2007–2008 (peak=100%) as of February 27, 2026

Source: own calculations based on MSCI data.

Thus, it can be concluded that most global stock markets, including the Russian stock market, are constantly experiencing one or more ongoing financial crises. Under these conditions, measures to ensure long-term financial market stability in each country are particularly important. These include maintaining macroecono-

Russian economy in 2025

Trends and outlooks

mic stability, a favorable investment climate, and protecting property rights, competition, and managing geopolitical risks.

As shown in *Fig. 23*, compared to its peak on December 29, 2021, after the start of the special military operation (SMO), the Moscow Exchange ruble index recovered by only 75.6% by March 20, 2026. Factors hindering the recovery of blue-chip stocks, which form the index's core, include their dependence on investments from foreign funds, which were blocked, and limited demand from domestic investors.

Over the period under review, Gazprom's shares recovered by 38.5%, Norilsk Nickel's by 66.6%, NOVATEK's by 81.7%, and Rosneft's by 85.6%. At the same time, Sberbank's ordinary shares recovered to 109.1%, while Sberbank and Surgutneftegaz's preferred shares recovered to 114.9% and 126.5%, respectively. However, even those shares that had already recovered showed no significant growth. Moreover, Lukoil's shares, which had previously recovered, had fallen again to 88.3% as of March 20, 2026, compared to their peak at the end of 2021.

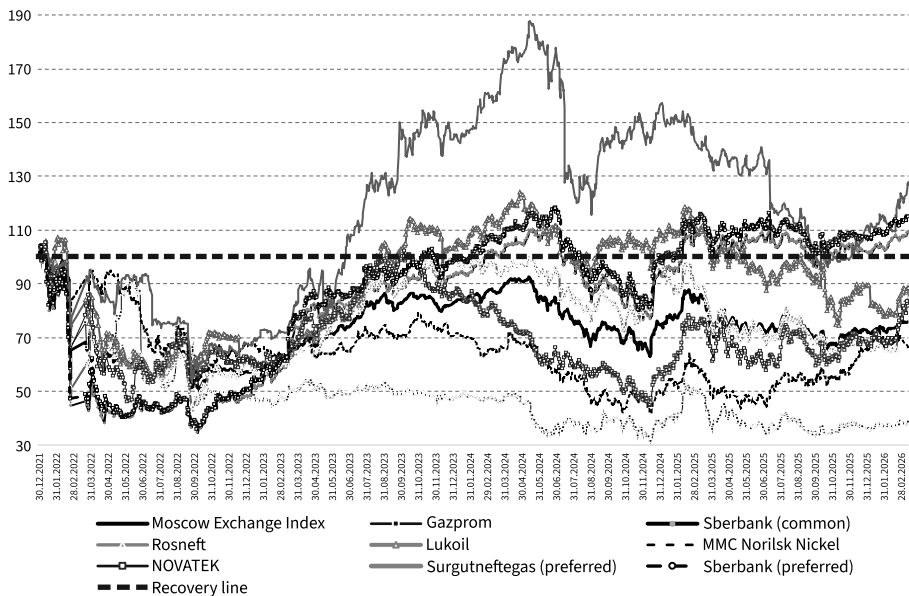


Fig. 23. Change in the Moscow Exchange Index value and the price of shares of Gazprom, MMC Norilsk Nickel, NOVATEK, Lukoil, Rosneft, Sberbank and Surgutneftegas as of March 20, 2026, % (Moscow Exchange Index values and issuers' share prices as of December 30, 2021=100%)

Source: own calculations based on the data released by the Moscow Exchange.

A phenomenon in 2023 was the exponential growth in the prices of many second- and third-tier stocks driven primarily by wealthy private investors (*Fig. 24*). However, in 2024 and 2025, prices for these stocks fell significantly due to decli-

ning interest from private investors. Nevertheless, as of March 20, 2026, the prices of most of these stocks, relative to their December 29, 2021 prices, remained higher than those of blue chips and the Moscow Exchange Index. Thus, they accounted for 111.9% of Belon OJSC shares, 122.9% of GAZ shares, 231.6% of Sollers shares, 249.0% of TGK-14 shares, 265.7% of RSC Energia shares, 319.4% of Glo-Baltrax (GTM), 370.3% of Krasny Oktyabr shares and 496.9% of TNS Energo Rostov-on-Don shares. The advantage in share price recovery from the 2021 peak for second- and third-tier shares compared to blue chips remains, although it has significantly decreased in 2024–2025. Dynamic growth of these shares is largely lost.

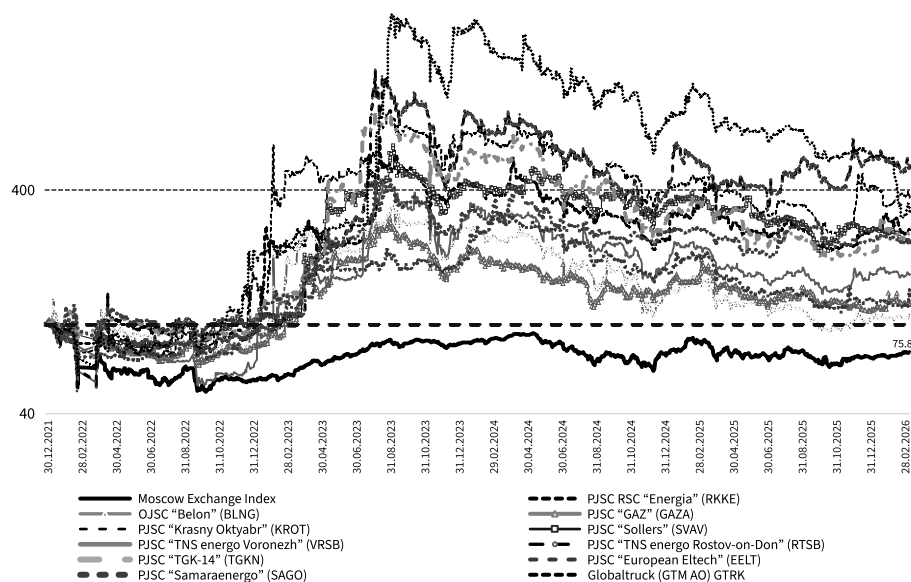


Fig. 24. Change in the value of the Moscow Exchange Index and the price of a number of second-tier shares on it as of March 20, 2026, % (values of the Moscow Exchange Index and prices of issuers' shares as of December 30, 2021=100%)

Source: own calculations based on the data released by the Moscow Exchange.

2.4.2. Depth of capital market and capitalization growth plans

Fig. 25 shows that in 2025, capitalization of Russian companies in dollar terms increased from \$574 bn in 2024 to \$632 bn, or by 10.1%, due to the ruble strengthening. Meanwhile, the liquidity of the stock exchange market increased to \$399 bn in 2025 compared to \$282 bn in 2024, or by 41.5%.

Since 2023, due to the revival of IPO transactions on the Moscow Exchange, signs of overcoming the long-term trend of a constant reduction in the number of listed

Russian economy in 2025

Trends and outlooks

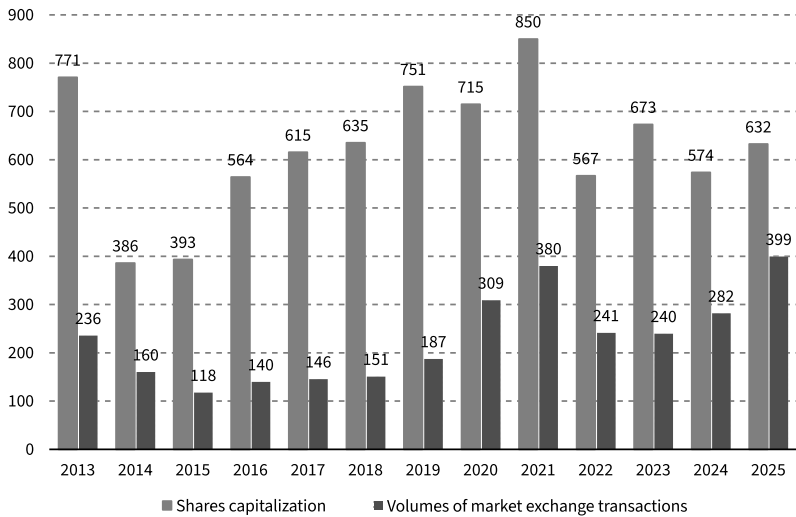


Fig.25. Capitalization and volume of market transactions involving shares on the Moscow Exchange from 2013 to 2025, bn dollars

Source: own calculations according to World Federation of Exchanges. Secondary trading volumes of shares in 2022–2025 are based on the Moscow Exchange data, converted into dollars at the exchange rate at year-end.

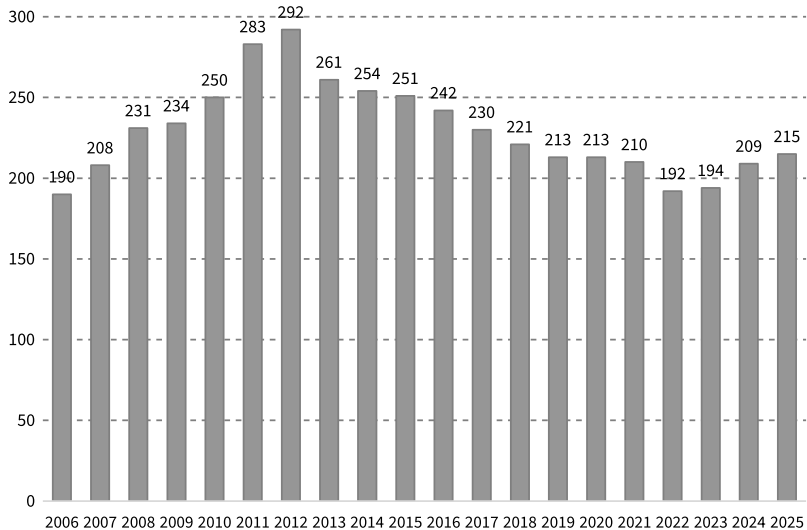


Fig.26. Number of Russian companies listed on the Moscow Exchange from 2006 to December 30, 2025

Source: own calculations according to according to the National Association of Securities Market Participants catalogue “Russian Stock Market in 2015. Events and Facts” for 2006–2008, as well as data from the World Federation of Exchanges and the Moscow Exchange for the period 2009–2025.

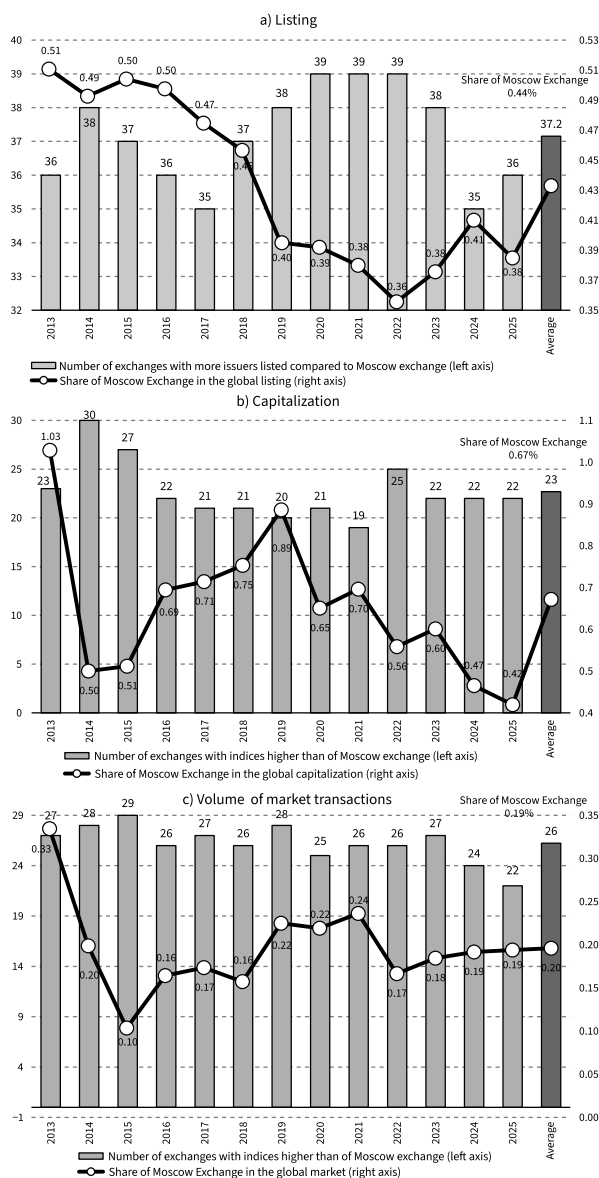


Fig.27. Indicators of competitiveness of the Russian stock market in 2013–2024 are as follows: a) number of foreign exchanges with a larger number of issuers listed compared to the Moscow Exchange (ME), and the ME's share in the sample of listed companies on the global stock market; b) number of exchanges with a larger capitalization of issuers listed compared to the Moscow Exchange, and the ME's share in global capitalization; c) number of exchanges surpassing the Moscow Exchange in terms of market transaction volume, and the ME's share in the total global value of market shares transactions

Source: own calculations according to World Federation of Exchanges and the Moscow Exchange.

companies have emerged (*Fig. 26*), and in 2025 these signs continued to be observed: the number of issuers listed on the exchange increased from 192 in 2022 to 215 in 2025.

In terms of key indicators describing the depth of the stock market, the Russian stock market is noticeably inferior to many of its foreign competitors.

Fig. 27, a shows that in terms of the number of national companies listed in 2025, Moscow Exchange was behind 36 other exchanges in the world compared to 35 in 2024 and 39 in 2021. Its share in the total number of publicly traded companies in the world was 0.38%, i.e. the same as in 2021. In terms of capitalization, Moscow Exchange was behind 22 exchanges globally in 2025, compared to 19 in 2021, and its share in the global corporate capitalization declined from 0.70% to 0.42% (*Fig. 27, b*). In terms of market share transaction volume, Moscow Exchange was behind 22 exchanges in 2025 compared to 26 in 2021, but its share in the total volume of exchange-traded shares declined from 0.24% in 2021 to 0.19% in 2025 (*Fig. 27, c*).

2.4.3. IPO–SPO of shares

One of the most important events in the domestic capital market in 2025 was the revival of the IPO and SPO market of Russian companies from December 2022. According to experts from the Bank of Russia, general public interest in the stock market has grown in the context of increasing household incomes, development of retail financing mechanisms, and high dividend payments on shares of Russian companies. However, in 2025, investor demand for IPOs was moderate: in 2025, there were 4 IPOs totaling Rb37 bn, in 2024, there were 12 IPOs totaling Rb82 bn, and in 2023, there were 8 IPOs totaling Rb38 bn. Issuers' interest in IPOs declined primarily due to the reduction in the cost of debt borrowing and lack of sufficient demand, including from institutional investors.¹

Table 13 shows that modern wave of IPO–SPO transactions is marked by a number of qualitative differences from the previous period of 1996–2021 (for more details refer to footnote²).

Over the entire thirty-year history of the market for public offerings of the Russian companies' shares in 1996–2025, 281 IPO–SPO transactions were completed for a total of \$136.4 bn, including 189 IPO transactions for a total of \$92.5 bn, or 67.8% of the total volume of IPO–SPO transactions.

The bulk of IPO–SPO transactions over this entire period occurred between 2006 and 2015, i.e. 162 transactions worth \$106.0 bn or 77.7% of their volume over the 30-

1. Review of financial instruments. 2023. Analytical material. Bank of Russia. 2026. P. 24. URL: https://www.cbr.ru/Collection/Collection/File/48944/fi_review_2023.pdf

2. Abramov A.E., Chernova I.M. IPO shares of Russian companies: theory, indicators, trends and prospects// Financial Journal. 2024. Vol. 16. No. 6. P. 42–60. URL: <https://doi.org/10.31107/2075-1990-2024-6-42-60>

year period, including 110 IPO transactions worth \$73.5 bn, or 79.4%. Main drivers of demand for Russian stocks were foreign investors; many public offerings were conducted on foreign exchanges.

In 2026–2025, 89 IPO–SPO transactions took place, amounting to 22.9% or 16.8% of the total volume of transactions over 30 years, including 49 IPO transactions in the amount of \$115.5 bn, or 12.4% of the total volume for the entire period under review.

Over the past four years, from 2022 to 2025, there were 50 IPO–SPO transactions worth \$7.2 bn, which is 5.3% of the total volume of transactions over 30 years, including 35 IPO transactions worth \$5.7 bn, or 6.2%.

In 2022–2025, the average IPO–SPO deal size was \$144.3 mn, 70.2% lower than the same indicator for the period 1996–2025, including the average IPO deal size of \$164.3 mn, i.e. 66.4% lower. In 2025, the average IPO–SPO deal size of \$78.6 mn was even 45.5% lower than the average for 2022–2025, and IPO deals of \$115.6 mn were 29.6% lower.

Based on the volume of share placements in 2022–2025, only 22.0% of IPO–SPO transactions involved raising capital for the company, compared to an average of 53.7% in 1996–2025. In 2025, this indicator was 92.9%, which, despite the modest volumes of transactions during this period, can be considered a positive development.

Throughout the history of the Russian public offering market, privatization transactions (IPOs and SPOs) accounted for 38.4% of all transactions, reflecting the important role of the privatization process as a growth driver for this segment of the stock market. However, in 2022–2025, only 6.2% of the volume of placements was accounted for by privatization transactions. In 2025, 71.1% of placements were IPOs of DOM.RF bank shares, which could become an impetus for attracting shares of new privatized companies to the stock market.

A significant problem concerning IPOs of Russian public joint-stock companies remains the low level of undervaluation of shares at the end of the first trading day¹, which, as a rule, is a sign of an overvaluation of the issuer's shares at the stage of their placement or insufficient interest in them on the part of exchange trading participants on the first day of their admission to trading on the exchange. The fact that 67.2% of public offerings were IPOs, indicates that Russian issuers have relatively seldom resorted to the strategy of conducting successive secondary share offerings after their initial public offering, using IPOs as a one-off event. This largely explains why the undervaluation of the first trading day for Russian companies is one of the lowest in the world.

1. Undervaluation is the difference between the share price at the close of the first trading day and the placement price of the said shares as a percentage of the placement price.

Table 13

**Parameters of IPO–SPO transactions of the Russian companies¹
in the period of 1996–2024**

	1996– 2005	2006– 2015	2016– 2025	1996– 2025	2022– 2025	2025
1. Volume of transactions, mn dollars:						
IPO	7501	73 453	11 526	92 480	5751	462
SPO	0	32 547	11 388	43 935	1466	88
Total	7501	105 999	22 914	136 414	7217	550
2. Number of transactions:						
IPO	30	110	49	189	35	4
SPO	0	52	40	92	15	3
Total	30	162	89	281	50	7
3. Average volume of a transaction, mn dollars:						
IPO	250.0	667.8	235.2	489.3	164.3	115.6
SPO		625.9	284.7	477.6	97.7	29.3
Total	250.0	654.3	257.5	485.5	144.3	78.6
4. Average undervaluation, %:						
IPO	9.9	1.2	6.4	5.3	2.9	–2.0
SPO		3.6	3.5	3.6	5.09	–3.4
5. Type of IPO–SPO transactions, share in %:						
IPO	100	69.3	50.3	67.8	79.7	84.0
SPO	0	30.7	49.7	32.2	20.3	16.0
6. IPO–SPO transactions according of criteria of attracting capital to a company, share in %						
	50.7	56.3	42.3	53.7	22.0	92.9
7. Volume of privatized transactions IPO–SPO, share in %						
	8.0	43.6	24.2	38.4	6.2	71.1

Source: own calculations according to the data Laboratory for the Analysis of Institutions and Financial Markets (LAIFM) IAES RANEP.

Fig. 28 shows that according to historical data, for 96 IPO transactions of Russian public companies that took place on Russian stock exchanges over the period from 2004 to 2025, the medium-term cumulative abnormal (above the Moscow Exchange index) return (CAR) of these companies' shares over a horizon of 250 business days (i.e., one calendar year) was generally negative. This means that to achieve

1. Herewith, the concept of an IPO–SPO transaction includes 8 categories of exchange transactions with shares of Russian offshore and onshore companies, classified according to 3 criteria: location of the transaction (Russian or foreign exchange), type of transaction (IPO or SPO), and content of the transaction (attracting new capital to the company or resale of a block of shares by their previous owner).

ve higher returns, investors preferred to invest in a passive index portfolio rather than purchase various shares during the IPO process.

The Fig. 28 reveals two patterns. The first is that during one year of IPOs shares for 69 companies held between 2004 and 2021, the volume-weighted CAR was -7.80 p.p., while the average CAR was 2.85 p.p. That is, larger transactions underperformed the index portfolio in terms of cumulative returns, while smaller ones offered the opportunity to outperform the index. A similar pattern was observed for 27 transactions completed in 2022–2025, where the average weighted annual CAR reached -11.56 p.p., while the arithmetic mean was only -1.75 p.p.

Another pattern is that, by both criteria, weighted average and arithmetic mean CAR, the IPOs conducted in 2022–2025 showed worse results over the annual period compared to 2004–2021: the weighted average CAR for deals in 2022–2025 was -11.56 p.p. compared to -7.80 p.p. for IPOs in 2004–2021, the arithmetic mean CAR was -1.75 and 2.65 p.p., respectively.

Thus, the simplest strategy of regularly investing in publicly traded shares of companies usually loses to passive investing in an index portfolio of the most popular issuers. At the same time, IPOs can generate higher returns for investors with expert knowledge of the specifics of new public companies going for IPO.

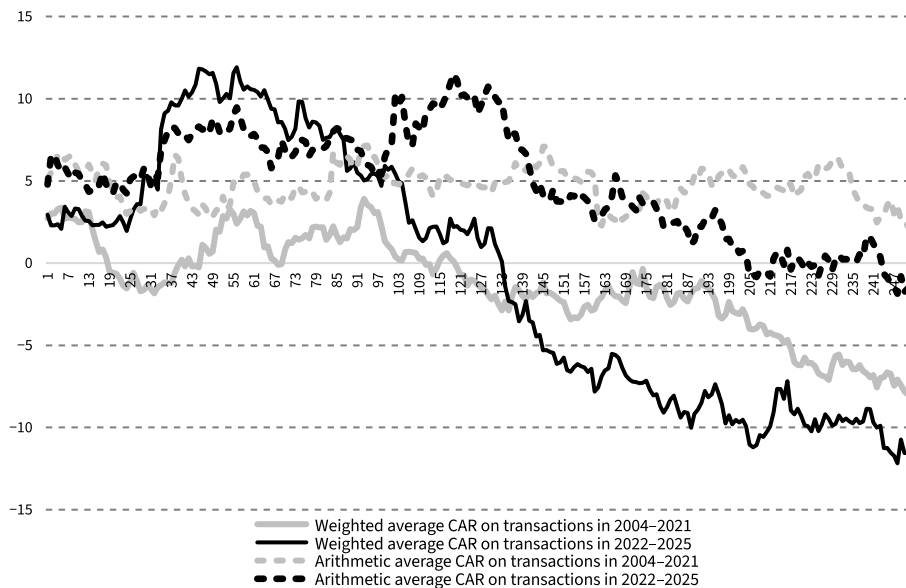


Fig. 28. Cumulative abnormal return (CAR) of the IPO portfolio of Russian companies within 250 days from the IPO date for a sample of 69 companies for the period 2004–2021 and 27 companies for the period 2022–2025, p.p.

Source: own calculations according to the data Laboratory for the Analysis of Institutions and Financial Markets (LAIFM) IAES RANEP.

2.4.4. Dividend policy

Since 2012, active dividend policy of public companies has been a significant phenomenon on the Russian stock market. Growth of dividend yields, and above all, of shares of state-owned companies (SOEs), was the result of the state's intention, as a major shareholder, to attract dividend income to finance the budget.¹ In accordance with the RF Government Edict dated June 11, 2021 No. 1589-p, from July 1, 2021, a requirement was established for mandatory allocation of at least 50% of annual profit for dividend payments, calculated based on the consolidated financial statements prepared in accordance with IFRS, taking into account its adjustment for a number of factors (net adjusted profit) for issuers with shares in federal ownership.

Moreover, in the context of a steady outflow of funds from foreign investors that began in 2022, for a significant portion of both public and private issuers, increasing the dividend yield of shares was an attempt to maintain shareholder loyalty by compensating for their losses in terms of a drop in the market shares' value. Currently, the factor of high dividend yield on stocks is of crucial importance for domestic investors compared to the high yield to maturity of government securities.

Fig. 29 shows that in 2019 the average dividend yield on shares of issuers from the Moscow Exchange index began to exceed the yield to maturity of the broad OFZ Cbonds-GBI index, reaching a peak of 13.9% per annum in 2023. However, in 2024–2025, amid high key rate of the Bank of Russia, the largest Russian public joint-stock companies were not able to compete with the inflated yield of OFZs any longer: in 2024, with the nominal yield to maturity of OFZs at 15.2% per annum, the dividend yield dropped to 11.8%, and in 2025, these indicators amounted to 15.0 and 10.2%, respectively. For the period 2007–2025, the correlation between the yield to maturity of OFZs and the dividend yield was 0.61, i.e., it was high, indicating that share issuers were forced to adjust the dividend yield of shares to the yield of OFZs.

The problem concerning high dividend yields is that they are a major risk premium on equities, therefore, rising dividend yields reflect a negative trend in the risk premium expected by investors. The rise in risk premium, along with the increase in the yield of a risk-free asset, leads to an overestimation of investors' expected return on shares (value of equity capital), which serves as a discounted factor when estimating the cost of companies based on the amount of dividends paid. As a result, high dividend yields and, accordingly, inflated risk premium expectations lead to a decline in share prices and issuer capitalization. From 2007 to 2025, the corre-

1. Abramov A.E., Radygin A.D., Chernova M.I., Entov R.M. "The Dividend Mystery" and the Russian Stock Market. P. 1//Voprosy ekonomiki. 2020a. No. 1. P. 66–92. DOI: 10.32609/0042-8736-2020-1-66-92; Abramov A.E., Radygin A.D., Chernova M.I., Entov R.M. "The Dividend Mystery" and the Russian Stock Market. P. 2//Voprosy ekonomiki. 2020b. No. 2. P. 59–85. DOI: 10.32609/0042-8736-2020-2-59-85

lation between dividend yield and capitalization was -0.56 , indicating a highly negative relationship between capitalization and dividend yield.

According to our assumptions, as the target inflation level reaches 4% and the Bank of Russia reduce the key rate to 8–9% per annum in the medium term, a significant reduction in the yield of OFZs and dividend yield on shares may result in rise in capitalization and a more balanced structure of growth in the total return on shareholders' assets due to dividends and share rate returns.

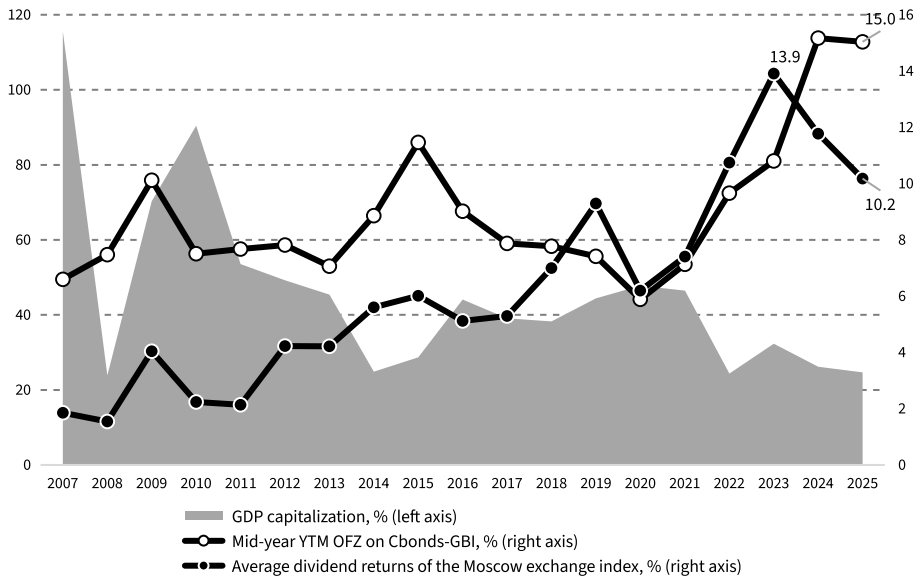


Fig. 29. Average annual yield to maturity of OFZs based on the Cbonds-GBI index, dividend yield of Moscow Exchange index shares and stock market capitalization to GDP in 2007–2025

Source: own calculations according to Cbonds, SPARK and Moscow exchange.

2.4.5. Mergers and acquisitions

Stock markets contribute to structural changes in the economy through mergers and acquisitions (M&A). Fig. 30 shows that volume of mergers and acquisitions in 2025 has not yet reached the local peak of 2021 in Russia, as in the world as a whole, which arose in the wake of economies' recovery from the coronavirus pandemic. The volume of completed M&A transactions globally fell from \$5.4 trillion in 2021 to \$4.5 trillion in 2025, or by 16.7%, and in Russia, respectively, from \$37.5 bn to \$26.1 bn, or by 30.8%. That is, significantly more than in the global economy. However, in 2025, global M&A transactions saw a significant increase com-

Russian economy in 2025

Trends and outlooks

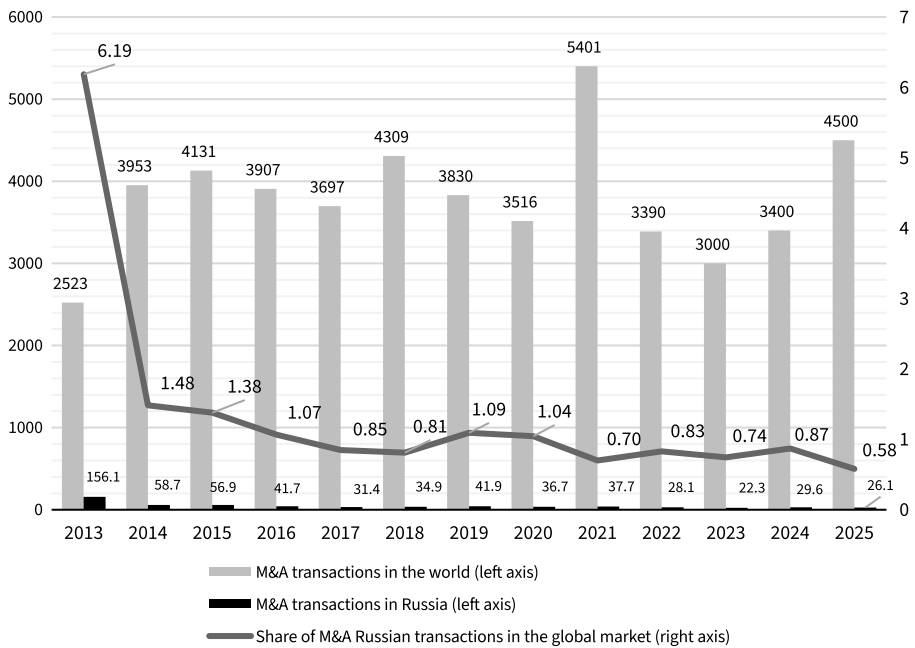


Fig. 30. Value of mergers and acquisitions (M&A) transactions in the world and in Russia and the share of M&A transactions in the total value of similar transactions in the world in 2013–2025

Source: own calculations based on Merger.ru. information resources. URL: <http://mergers.ru/>), SIFMA and McKinsey.

pared to 2024, i.e. by 32.4%, while in the Russian market, total value of such completed transactions dropped by 11.8%. As a result, the Russian M&A market's share of the global market continued to decline from 0.70% in 2021 to 0.58% in 2025.

The ongoing nationalization process, which affected such companies as Domoedovo Airport, Glavprodukt, Yuzhuralzoloto, Petropavlovsk-Kamchatsky Commercial Sea Port, Kamchatka Shipping Company, the Borets oilfield services group of companies, PAO Stavropolenergosbyt, JSC IT Technologies, and others, became an alarming trend in 2025 on the Russian capital market.

Estimates of the scale of nationalization vary among different experts, but according to the AK&M Information Agency, the value of nationalized companies was \$3.89 bn (Rb390 bn) in 2024 and \$14.9 bn (Rb1,165.6 bn) in 2025.¹

1. URL: <https://mergers.akm.ru/stats/pyataya-chast-obema-rynka-m-a-v-pervom-polugodii-natsionalizatsii-po-sudu/>; <https://mergers.akm.ru/stats/rynok-kommercheskikh-m-a-sdelok-sokrashchaetsya-na-fone-rosta-chisla-sdelok-s-gosuchastiem/>

2.4.6. Competition in the stock market

The Russian stock market evidences a high level of issuer concentration by capitalization, however, starting in 2020, a downward trend has been observed (Fig. 31 and Table 14): in the total capitalization of issuers, the share of the 10 largest public joint-stock companies dropped from 70.1% in 2019 to 61.3% in 2025, and share of the 20 largest issuers dropped from 82.9% to 75.4%, respectively. This reflects positive changes in the structure of stock exchange listings, consisting of faster growth in the market value and investment attractiveness of less liquid second- and third-tier shares compared to blue chips.

In 2025, capitalization of public joint-stock companies decreased slightly to Rb52.7 trillion compared to Rb53.0 trillion in 2024. All 10 largest companies remained in the top 10 list by capitalization in its structure. Compared to the previous year, in 2025, the share in capitalization of the following issuers has increased: Sberbank: from 11.2 to 12.3%, NOVATEK: from 5.6 to 6.9%, Polyus: from 3.6 to 6.2%, MMC Norilsk Nickel: from 3.3 to 4.3% and Yandex MKPJSC: from 2.8 to 3.4%. Conversely, due to sanctions and low prices on global markets, the share of the most oil and gas companies decreased: Rosneft: from 12.0 to 8.2%, respectively, Lukoil: from 9.4 to 7.7%, Gazprom Neft: from 5.8 to 4.4%, Gazprom: from 5.9 to 5.6% and Tatneft named after V.D. Shashin: from 2.8 to 2.4%.

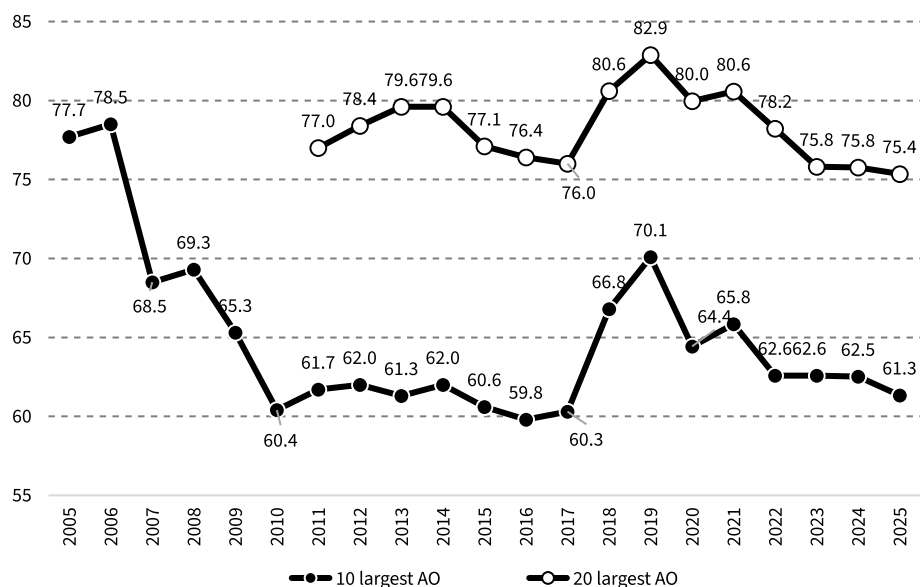


Fig. 31. Share of the largest PJSC in capitalization of domestic equity market in 2005–2025, %

Source: own calculations based on Moscow Exchange.

Table 14

Capitalization of the 10 largest Russian public joint-stock companies (PJSC)
in 2023–2025

2023			2024			2025		
Issuer	Capitalization, bn rubles	Ratio, %	Issuer	Capitalization, bn rubles	Ratio, %	Issuer	Capitalization, bn rubles	Ratio, %
PJSC NK Rosneft	6278	11.0	PJSC NK Rosneft	6377	12.0	PJSC Sberbank	6474	12.3
PJSC Sberbank	5863	10.3	PJSC Sberbank	5962	11.2	PJSC NK Rosneft	4333	8.2
PJSC Lukoil	4680	8.2	PJSC Lukoil	4968	9.4	PJSC Lukoil	4063	7.7
PJSC NOVATEK	4448	7.8	PJSC Gazprom	3118	5.9	PJSC NOVATEK	3617	6.9
PJSC Gazprom Neft	3983	7.0	PJSC Gazprom Neft	3098	5.8	PJSC Polyus	3254	6.2
PJSC Gazprom	3790	6.7	PJSC NOVATEK	2965	5.6	PJSC Gazprom	2972	5.6
PJSC MMC Norilsk Nickel	2476	4.3	PJSC Polyus	1904	3.6	PJSC Gazprom Neft	2326	4.4
PJSC Tatneft named after V.D.Shashin	1539	2.7	PJSC MMC Norilsk Nickel	1762	3.3	PJSC MMC Norilsk Nickel	277	4.3
PJSC Polyus	1444	2.5	MPJSC Yandex	1505	2.8	MPJSC Yandex	1785	3.4
PJSC Severstal	1172	2.1	PJSC Tatneft named after V.D.Shashin	1483	2.8	PJSC Tatneft named after V.D.Shashin	254	2.4
Capitalization of all issuers on Mocow exchange	56981	100	Capitalization of all issuers on Mocow exchange	53015	100	Capitalization of all issuers on Mocow exchange	52754	100
Capitalization of top 5 issuers	25252	44.3	Capitalization of top 5 issuers	23523	44.4	Capitalization of top 5 issuers	23523	44.6
Capitalization of top 10 issuers	35673	62.6	Capitalization of top 10 issuers	33142	62.5	Capitalization of top 10 issuers	32356	61.3

Source: own calculations based on Moscow exchange. URL: <https://www.moex.com/s26>

Thus, in 2025, due to high key rate, sanctions and geopolitical uncertainty, capitalization of Russian companies declined slightly, and the dividend-adjusted yield of the Moscow Exchange index remained low for the second year in a row. Expectations of a high-risk premium with a significant level of real risk-free return limited investors' demand for shares. The impact of the equity financing market on the structural transformation of the economy was limited. Public offering market volumes lagged behind the RFBR's forecasts. Market actors and regulators were searching for ideas to increase capitalization and stimulate domestic demand for shares.

2.5. Bond market

2.5.1. Situation in the bond market

In 2025, Russian bond market once again reached record levels. The government actively issued OFZs to finance the budget deficit. For companies, corporate bonds served as an important source of short- and medium-term financing and debt refinancing given the high key rate and, consequently, bank lending rates. The Bank of Russia's gradual reduction of the key rate, which began in 2025, has become an additional driver of bond attractiveness for investors, contributing to the growth of market value of bond portfolios. In 2025, with the Moscow Exchange stock index (MCFTR) achieving a full-year return of 2.9%, the broad-based OFZ index (RGBITR) and the corporate bond index (IFX-Cbonds) achieved similar returns of 23.1% and 24.2%, respectively, which were highly favorable for investors.

Fig. 32 shows the value of all ruble bond issues increasing from Rb54.9 trillion in 2024 to Rb66.2 trillion in 2025, or by 20.7%. However, the value of Russian government securities increased from Rb23.2 to 30.1 trillion, or by 29.8%. Over the same period, the value of corporate bond issues increased from Rb31.0 to 35.5 trillion, or by 14.5%, while the volume of regional bonds, as in the previous year, decreased from Rb0.64 to Rb0.61 trillion, or by 5.1%. The volume of Russian government bonds grew most rapidly in 2025, while growth in corporate bonds has slightly slowed.

Fig. 33 shows that volume of new ruble bond issues increased from Rb12.5 trillion in 2024 to Rb17.5 trillion in 2025, or by 40.2%. This was the highest growth rate of ruble bond placements since 2021. The most significant growth related to the value of new issues of Russian government bonds, i.e. from Rb4.3 trillion in 2024 to Rb7.8 trillion in 2025, or by 80.2%. According to experts from the Central Bank of the Russian Federation (2026)¹, in September the RF Ministry of Finance increased the planned budget deficit for 2025 from Rb3.8 to Rb5.6 trillion, which resulted in an increase in the annual borrowing plan from Rb4.8 to Rb7.0 trillion, or by 45.8%.

1. Review of financial instruments for 2025. Analytical material / Bank of Russia. 2026. URL: https://www.cbr.ru/ec_research/analytics/

Russian economy in 2025

Trends and outlooks

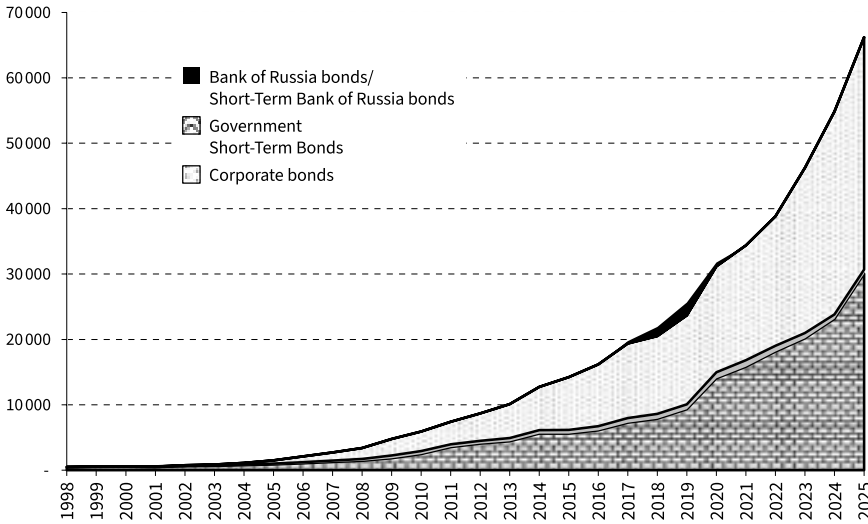


Fig. 32. Volumes of ruble bonds in circulation in 1998–2025, bn rubles

Source: own calculations based on RF Ministry of Finance and Cbonds.

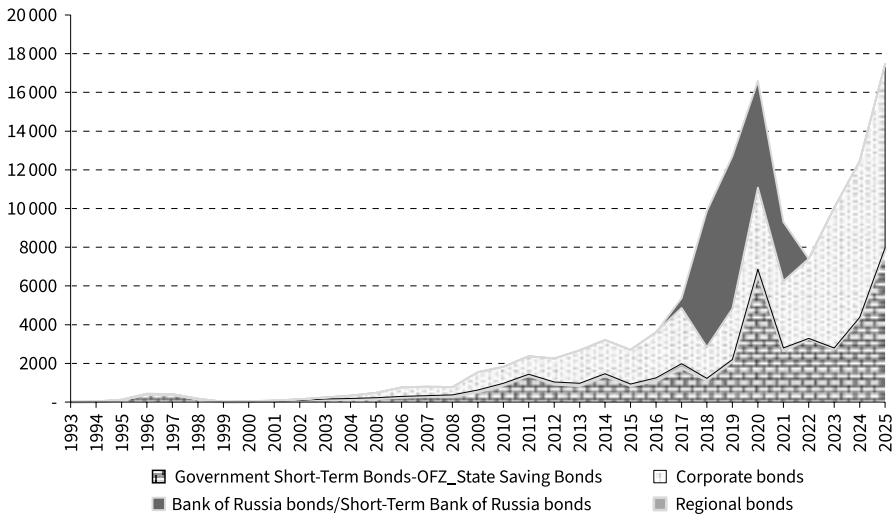
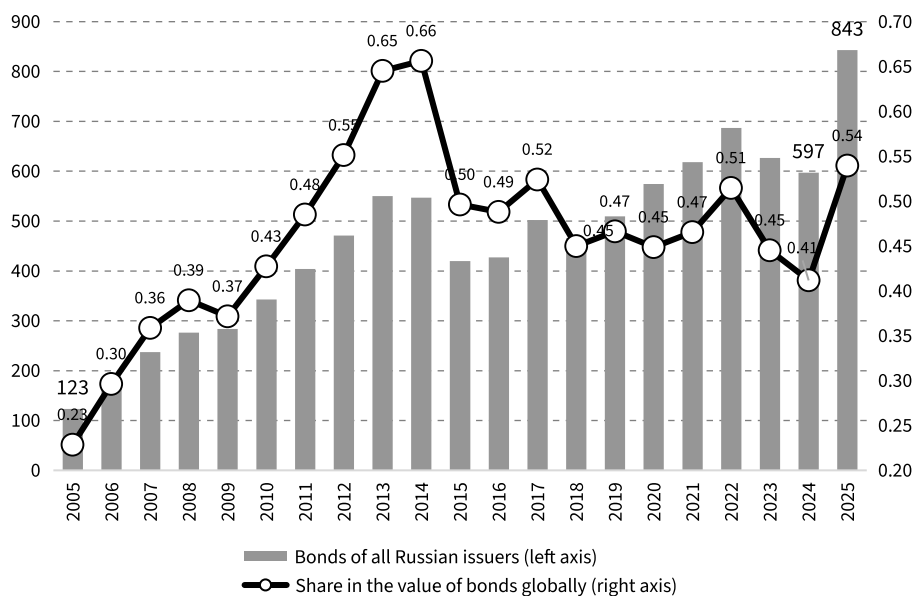


Fig. 33. Volumes of ruble bond placements in 1993–2025, bn rubles

Source: own calculations according to Cbonds.

The volume of new corporate bond issues increased year-on-year from Rb8.1 to Rb9.5 trillion, or by 17.5%; the value of regional bond placements increased from Rb38.1 to Rb148.4 billion, or by 3.9 times.



Note. Bonds of Russian issuers include corporate, government and municipal domestic bonds and Eurobonds.

Fig. 34. Value of outstanding bonds of Russian issuers and their share in the value of bonds globally in 2005–2025

Source: own calculations according to Cbonds и SIFMA Capital Markets Fact Book. URL: <https://www.sifma.org/resources/research/statistics/fact-book/>

Fig. 34 shows that a share of all bond issues by Russian issuers in the global bond market remains low. However, this indicator increased from 0.41% in 2024 to 0.54% in 2025. This is slightly higher than the share of Russian stock market capitalization in global capitalization, which stood at 0.4% and 0.42%, respectively.

2.5.2. Market of corporate bonds

Despite high interest rates in the Russian economy, the role of corporate bonds in financing the economy and placing domestic savings continued to grow. As *Fig. 35* shows, the value of non-financial sector bond issues increased from Rb19.2 trillion in 2024 to Rb21.9 trillion in 2025, or by 14.0%. The volume of bond issues by non-financial organizations expanded slightly faster than the total amount of loans received from banks. As a result, the share of corporate bonds in the total amount of loans from non-financial organizations increased from 25.6% in 2024 to 26.5% in 2025.

Russian economy in 2025

Trends and outlooks

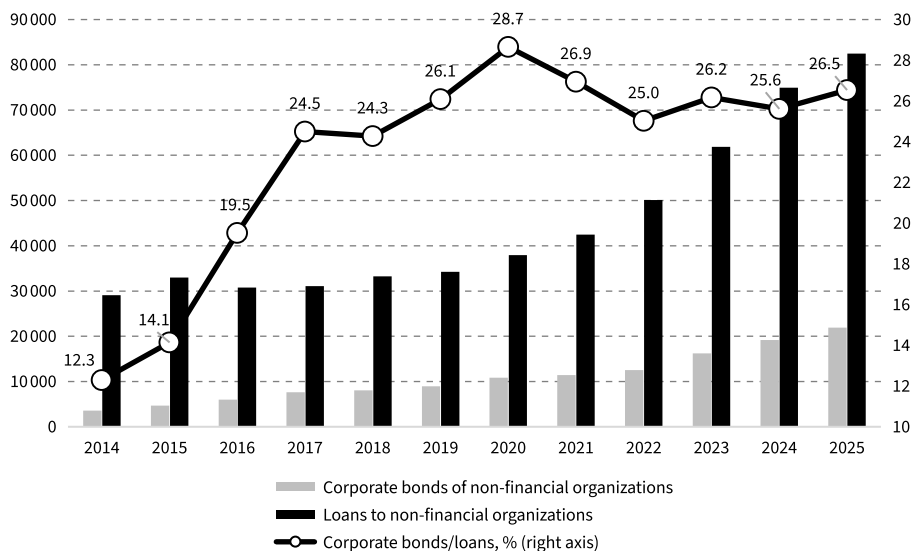


Fig. 35. Sources of funding of non-financial organizations in terms of bank loans and corporate bonds and share of corporate bonds of non-financial companies vs. their loan debt in 2014–2025

Source: own calculations according to Cbonds and Bank of Russia.

Corporate bond market has largely resolved the problem of transforming foreign currency Eurobonds into instruments of domestic debt funding, which has contributed to strengthening financial stability of borrowers. *Fig. 36* shows that corporate Eurobond debt decreased from \$31 bn in 2024 to \$24 bn in 2025, or by 22.6%. As a result, share of Eurobond liabilities in the value of ruble corporate bonds in 2025 was only 5.6% compared to 44.8% in 2021.

Unlike the stock market, the corporate bond market actively facilitates the attraction of new issuers to market equity financing. As *Fig. 37* shows, the number of corporate bond issuers increased from 601 in 2024 to 634 in 2025, or by 5.5%. Overall, the number of corporate bond issuers has increased by 68.6% since 2021. However, the number of corporate bond issues has decreased slightly, i.e. from 4.277 in 2024 to 4.137 in 2025, or by 3.3%, largely due to a slight increase in borrowing costs for large issuers amid high interest rates and limited bank credit resources.

In 2025, market for new types of corporate bonds, which appeared in 2022–2024, continued to develop. As shown in *Table 15*, the value of replacement bond issues increased from Rb2.4 trillion in 2024 to Rb3.2 trillion in 2025, or by 32.8%. Foreign currency bonds were a popular financial instrument in the domestic market, but their value decreased accordingly from Rb6.7 to 5.2 trillion, or by 21.4%; bonds in yuan increased from Rb1.8 to 1.9 trillion, or by 10.4%.

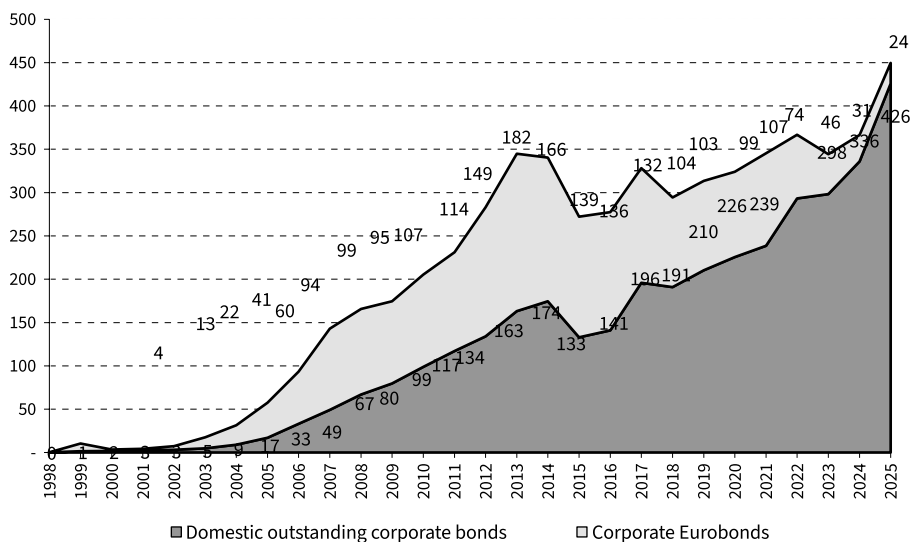


Fig. 36. Volumes of corporate outstanding bonds of Russian issuers in 1998–2025, bn dollars

Source: own calculations according to Cbonds and Moscow exchange.

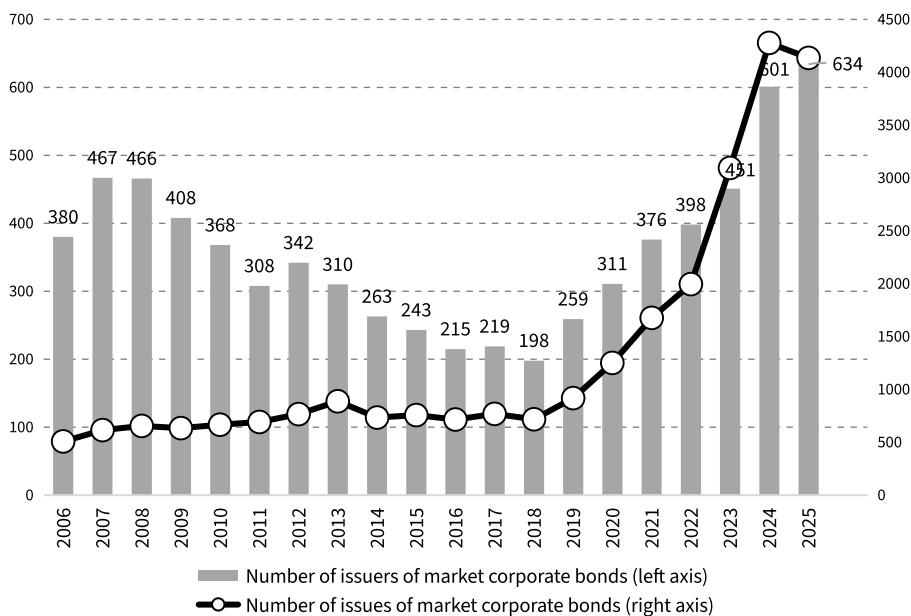


Fig. 37. Number of issuers and market issues of corporate bonds on the Moscow Exchange in 2006–2025

Source: according to Cbonds.

In the context of high interest rates, the debt market remained one of the few sources of funding for new companies issuing high-yield bonds (HYBs). Despite the growing risk of default, the value of HYBs issues increased year-on-year from Rb18.7 to 73.2 bn, or by 290.8%.

Meanwhile, according to the Bank of Russia (2026), share of individuals in the bond portfolio marked by a low credit rating of “BB” and below increased from 7 to 14% over the period under review.¹

The value of gold-linked bonds and “green” bonds grew at a relatively more modest rate. The volume of gold-linked bond issues increased from Rb34.0 bn in 2024 to Rb35.3 bn in 2025, or by 3.8%, while the volume of green bond issues increased from Rb337 bn to Rb366.5 bn, or by 8.7%.

In the context of the Bank of Russia’s initial reduction in the key rate, companies more actively placed fixed-coupon bonds compared to floaters, which became a distinctive feature of 2025. At the same time, bonds with monthly coupon payments were increasingly offered to attract investors amid these circumstances. According to the Bank of Russia (2026)², the share of these instruments in corporate bond placements in 2025 was 45%, compared to 28% in 2024.

Table 15

Value of outstanding corporate bond issues marked by special risk characteristics or issue conditions, bn rubles

Type of bond	2022	2023	2024	2025	2025 vs. 2024, %
Replacement bonds	545.9	1788.2	2393.4	3179.4	32.8
Currency bonds (domestic market)	4006.5	5008.9	6671.2	5246.5	-21.4
Bonds in yuan	599.4	1088.1	1754.8	1937.0	10.4
Gold-linked bonds		17.8	34.0	35.3	3.8
HYB	73.0	89.5	18.7	73.2	290.8
Green bonds	300.3	336.6	337.1	366.5	8.7

Source: own calculations according to Cbonds and Review of financial instruments of the Bank of Russia for a number of years.

A decline in the concentration level of new bond issues evidences a positive trend in the corporate bond market since 2021. Fig. 38 and Table 16 show that the share of top 20 issuers in the total volume of new bond issues declined from 78.6% in 2020 to 71.3% in 2025, while the share of top 10 issuers dropped from 68.3% to 53.2%, respectively. According to Table 16, in 2025, the DOM.RF group of issuers accoun-

1. Review of financial instruments for 2025. Analytical material. Bank of Russia. 2026. URL: https://www.cbr.ru/ec_research/analytics/

2. Ibidem.

ted for approximately 10.7% of the value of ruble corporate bond issues, VEB RF—7.5%, Sberbank of Russia—7.1%, Russian Railways—6.2%, VTB Bank Group—5.9%, Magnit—4.0%, Atomenergoprom—2.9%, Gazprom Neft and the Gazprom Group—3.5 and 2.8%, respectively, and SIBUR Holding—2.4%. Raising of funds by so-called “specialized financial entities” (SFEs), set up as joint-stock companies or limited liability companies under Article 15.1 of Federal Law No. 39-FZ of April 22, 1996, became a distinctive feature of the corporate bond market in 2022–2025, typically to finance large business projects amid sanctions restrictions. However, in 2025, this form of bond issuance was used less actively.

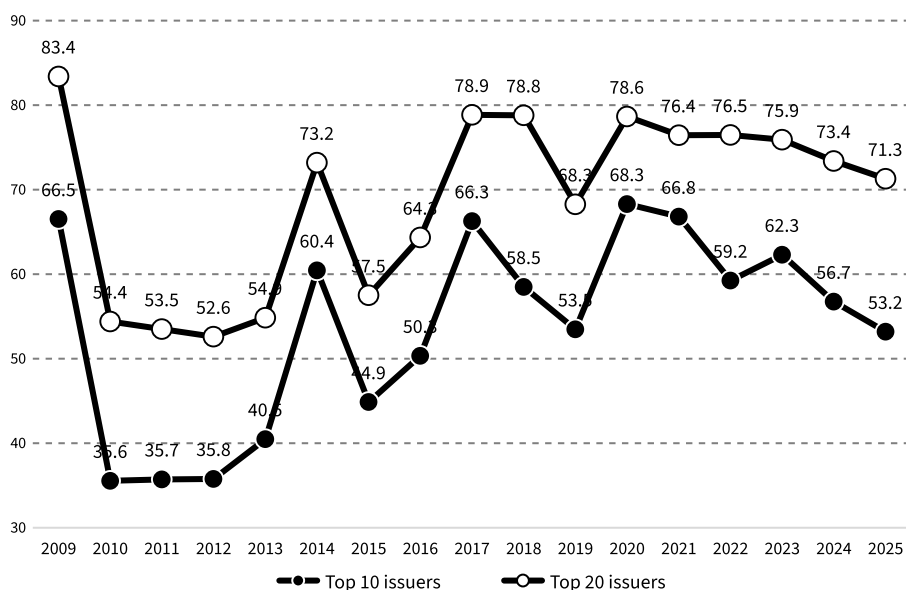


Fig. 38. Share of the largest 10 and 20 issuers in new issues of ruble corporate bonds in 2009–2024, %

Source: own calculations according to Cbonds.

Table 17 shows that the industry structure of corporate bond issues in 2025 has not undergone significant changes compared to previous years. Thus, the bond market’s role in the structural transformation of the economy remains limited. Despite the fact that the share of two key sectors, financial and oil, gas and coal production, decreased from 73.8% in 2024 to 67.8% in 2025, while current level of such issuers remains virtually unchanged from 2021, at 68.4%. The output of companies in the IT and telecommunications, chemical and petrochemical sphere, and other industries (including mechanical engineering, etc.) in 2025 amounted to only 3.5; 2.9 and 4.6%, respectively.

Table 16

Ten largest issuers of corporate bonds (CB) and their share in the cumulative value of the ruble CB issues emission

Issuer	2022			2023			2024			2025		
	Bn rubles	%	Issuer	Bn rubles	%	Issuer	Bn rubles	%	Bn rubles	%	Bn rubles	%
DOM,RF and DOM,RF Mortgage agent	519	18.6	Gazprombank and Gazprom Capital	1106	18.6	DOM,RF and DOM,RF Mortgage agent, Bank DOM,RF and SPFS DOM, RF	806	10.6	DOM,RF and DOM,RF Mortgage agent, Bank DOM,RF and SPFS DOM, RF	818	10,7	
Avtodor	277	10.0	DOM,RF and DOM,RF Mortgage agent	776	13.0	Rosneft	684	9.0	VEB,RF	575	7,5	
SFO Ideas and investment	156	5.6	SFO Ideas and investment	316	5.3	VEB,RF	568	7.5	Sberbank Russia and Sberbank CIB	542	7,1	
VEB,RF	156	5.6	NLC-Finance	265	4.4	SFO Optimum Finance	542	7.1	Russian Railways	475	6,2	
Sberbank Russia and Sberbank CIB	149	5.3	Avtodor	263	4.4	SFO Ideas and investment	377	5.0	VTB Group	451	5,9	
SFO Aurum-1	101	3.6	Sberbank Russia and Sberbank CIB	259	4.3	Rostekh	340	4.5	Magnit	303	4,0	
SFO MIP-1	83	3.0	SFO Optimum Finance	208	3.5	VTB Bank (PJSC)	315	4.1	Gazpromneft	270	3,5	
Rosseti	80	2.9	VEB,RF	186	3.1	Gazprombank and Gazprom Capital	260	3.4	Atomenergoprom	220	2,9	
MTS	72	2.6	Aviacapital-Service	180	3.0	SFS PB Service Finance	226	3.0	Gazprombank and Gazprom Capital	212	2,8	
SFO Media Assets	58	2.1	Russian Railways	150	2.5	MMC Norilsk Nickel	200	2.6	SIBUR Holding	183	2,4	
Capitalization of all CB issues	2787	100	Capitalization of all CB issues	5958	100	Capitalization of all CB issues	7611	100	Capitalization of all CB issues	7614	100	
Capitalization of issues of the top-10 CB issuers	1651	59.2	Capitalization of issues of the top-10 CB issuers	3710	62.3	Capitalization of issues of the top-10 CB issuers	4319	56.7	Capitalization of issues of the top-10 CB issuers	4049	53,2	

Source: own calculations according to Cbonds.

In the context of high interest rates and a decline in investment in 2025 and in Q1 2026, corporate bonds remain primarily instruments for supporting financing of companies' current business activities and refinancing their debts, rather than as sources of investment.

Table 17

Industry structure of the ruble corporate bond market from 2018 to February 2025, %

Industry	2018	2019	2020	2021	2022	2023	2024	2025
Financial organizations	40.3	41.8	40.2	42.9	43.7	43.7	47.4	44.7
Oil, gas, and coal production	30.2	27.9	28.3	25.5	25.3	27.1	26.4	23.1
Transportation	9.5	8.9	9.3	9.7	7.6	5.9	5.4	5.8
Electric power industry	4.6	3.9	3.2	2.8	3.1	2.9	3.1	4.1
Construction	4.1	4.4	4.4	4.3	5.4	5.2	4.0	3.5
Basic materials	2.0	2.8	2.6	1.9	3.7	4.3	4.9	5.9
IT, telecommunications, communications	2.2	2.9	3.0	2.7	2.5	3.3	3.3	3.5
Chemistry and petrochemistry	2.6	2.1	2.5	3.7	2.4	2.3	2.4	2.9
Other industries	4.4	5.4	6.5	6.5	6.3	5.3	3.1	4.6

Source: own calculations according to Cbonds.

In 2023–2025, corporate bonds were primarily used to finance high-quality borrowers, and this trend intensified in 2025. *Fig. 39* shows, the share of AAA-rated bonds increased from 65.2% in 2024 to 68.8% in 2025, while bonds rated A– to AA+ decreased slightly from 29.5% to 25.7%. The total share of HYB, i.e., bonds rated BB+ to BBB+ and BB and below, increased symbolically from 1.4% to 1.6%, while the share of unrated bonds dropped from 3.9% to 3.8%.

Fig. 40 shows that from 2004 to 2025, the ruble corporate bond market has experienced 4 financial shocks accompanied by extreme growth in the yield to maturity of bonds and, accordingly, a decline in their market value, i.e. in 2008–2009, 2014, 2022 and 2024. The yield to maturity of the index bond portfolio in November 2024 at 25.4% per annum, was the highest ever recorded in the corporate bond market. Due to key rate decline that began in 2025, coupled with sufficient liquidity in the banking system, the yield to maturity of the index bonds fell to 15.9% per annum. This largely contributes to maintaining financial stability in the corporate borrowings market, though this index still remains at its peak level recorded during the 2022 shock after the start of SMO.

However, as per February 2026, 39.1% of the value of issues of the corporate bonds were of non-market nature, which, to a certain extent, means the analogue of non-public debt financing on global markets.

Russian economy in 2025

Trends and outlooks

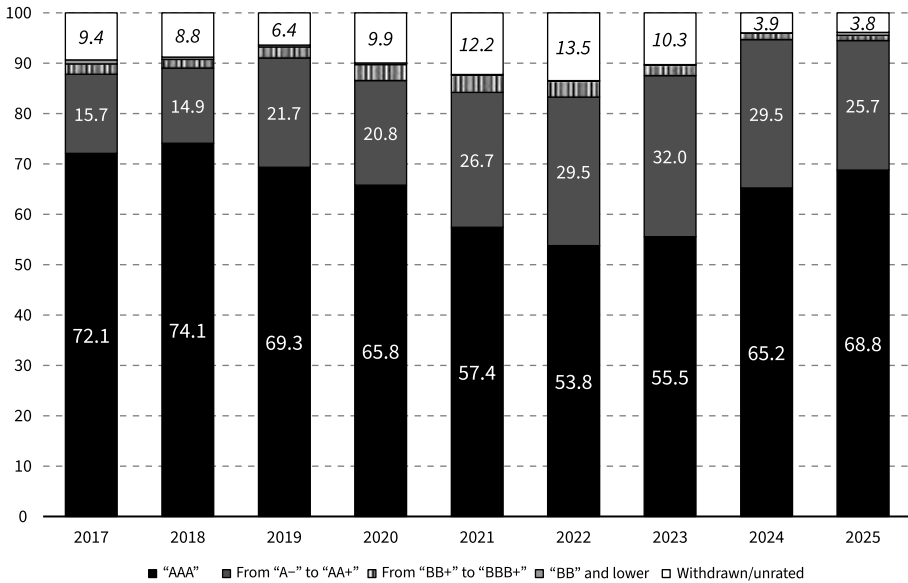
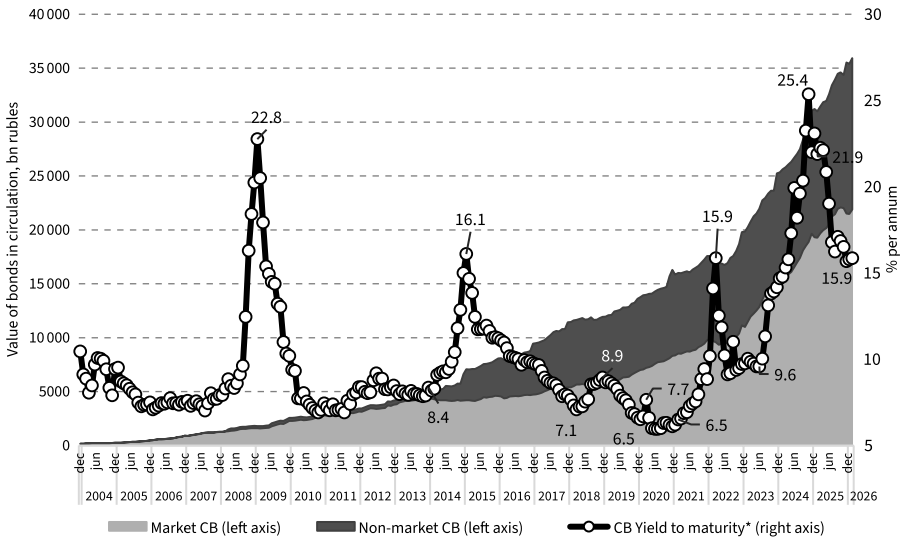


Fig. 39. Rating structure of corporate bonds by issue value in 2017–2025, %

Source: own calculations according to Review of the Bank of Russia financial instruments for a number of years. URL: https://www.cbr.ru/ec_research/analitics/



* Yield to maturity (YTM) for the IFXCBN portfolio.

Fig. 40. Value of ruble corporate bonds in circulation and the yield to maturity of the IFXCBN corporate bond portfolio from December 2003 to February 2026

Source: own calculations according to Cbonds.

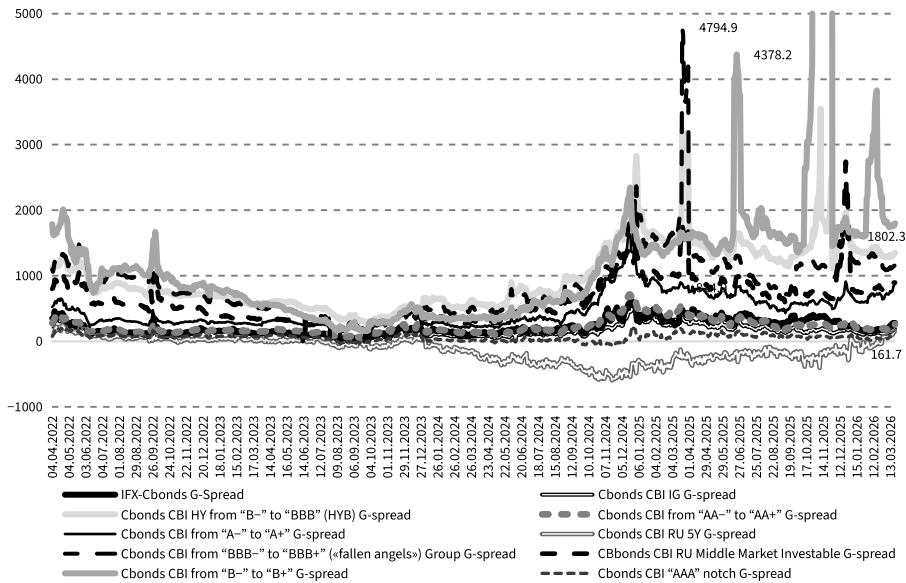


Fig. 41. Average g-spreads of ruble corporate bonds with different credit ratings from April 2022 to March 23, 2026, p.p.

Source: own calculations according to Cbonds.

Growth in the key rate in 2023 and moderate pace of its increase since 2024 resulted in a significant broadening of corporate bond credit g-spreads¹ compared to their values in H1 2023 (Fig. 41). Compared to 2024, in 2025—January–March 2026, despite growing number of corporate defaults, expectations of a decline in inflation and, consequently, the Bank of Russia’s key rate, corporate bond g-spreads dropped, which largely supported interest in corporate borrowing.

For example, the g-spread for the IFX-Cbonds index portfolio decreased from 314.8 bp on December 30, 2024 to 282.8 bp on March 23, 2026, the Cbonds CBI IG index — from 324.1 to 191.2 bp, Cbonds CBI from “AA-” to “AA+” — from 526.2 to 262.2 bp, Cbonds CBI RU 1–3Y — from 388.0 to 235.2 bp, Cbonds CBI from “BBB-” to “BBB+” (fallen angel bonds) — from 2130.9 to 1161.2 bp., Cbonds CBI HY from “B-” to “BBB” (VDO) — from 2657.6 to 1352.2 b.p. Only for a limited range of corporate bond portfolios (Cbonds CBI “AAA”, from “B-” to “B+”, RU 5Y) did g-spreads increase over the period under review.

1. G-spread is an indicator of the credit risk of corporate bond issues, representing the difference between the yield to maturity of corporate bonds and the yield to maturity of government bonds with a similar duration.

In the period of rising interest rates, the issue of “floaters”, i.e. bonds with a variable coupon, as well as so-called “linkers”, bonds with debt indexed in accordance with the level of inflation, played an important role in maintaining the investment attractiveness of corporate bonds.

We believe that lack of standardized and accessible historical data for investors on credit ratings or other indicators of credit risk for all issues of these securities remains a serious challenge for information transparency in the corporate bond market.

Current ratings do not cover all bond issues, and their archives are incomplete and not publicly disclosed. Since 2025, the Cbonds information resource has stopped updating some corporate bond indices, starting disclosing a wide range of their new indices with varying rating levels but less extensive archival data.

Maintaining high rates for raising new funds on the bond market and refinancing old debt increases the risk of defaults for a number of companies: according to the Expert-RA rating agency (2026)¹, the number of defaults in 2025 increased significantly compared to the previous year.

In 2025, 35 companies defaulted including digital financial asset issues, compared to 11 in the previous year. Upon expiration of the technical default period, 14 bond issuers defaulted, compared to 4 in 2024.

However, in value terms, volumes of defaulted bond issues remain moderate (*Fig. 42*). The share of such bonds in the total volume of corporate bond issues even slightly dropped from 0.21% in 2024 to 0.13% in 2025.

Nevertheless, the aforementioned credit risks will remain relevant in 2026, when record amounts of repayments of previously issued corporate bonds are expected, taking into account the need to refinance these debts in the context of remaining high interest rates.

High interest rates affect not only credit risks, but also the duration of issues, reducing the terms for attracting borrowed funds. *Fig. 43* shows that despite growth of a broad portfolio of IFX-Cbonds from 358 days in 2024 to 488 days in 2025, on the whole, since 2019, there has been a significant decline from 1.173 days in 2018 to 438 in February 2026, or by 62.7%. Moreover, the February duration of the IFX-Cbonds portfolio bonds in terms of 438 days was 4.1 times shorter than the duration of the broad Russian government bond index RGBI, which was 1.807 days.

To extend duration of corporate bond issues to a level that allows attraction of financial resources for 5–10 years using the possibility of directing them towards real investment, first of all, a more stable financial situation in the economy with a moderately low level of inflation is needed. *Fig. 44* shows that over time horizon from 2005 to February 2026, duration indicator of the bond portfolio of the IFX-Cbonds index evidences a negative dependence on the inflation rate, i.e. coefficient of determination between these indicators is 0.38.

1. URL: https://raexpert.ru/researches/ua/debt_market_4q2025/

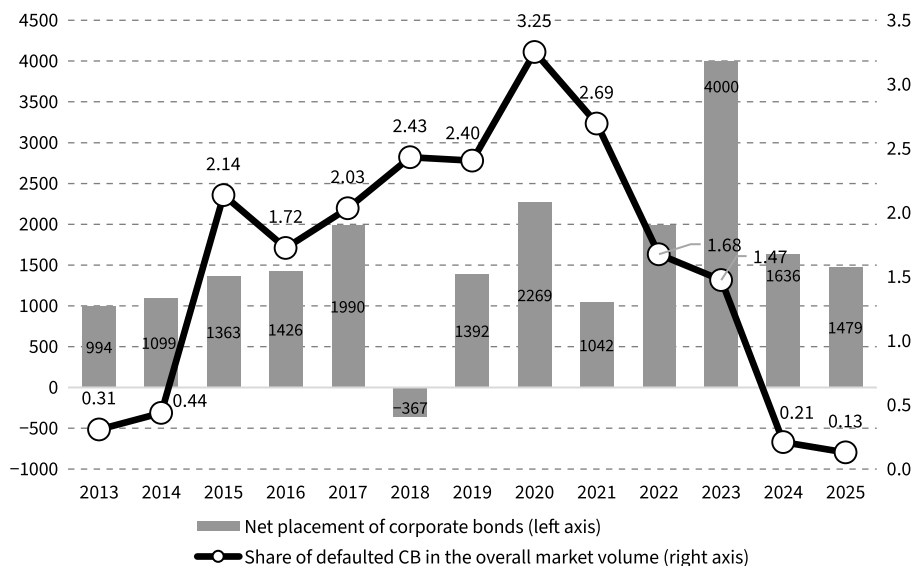


Fig. 42. Volume of net corporate bond placements and share of defaulted bonds in the total volume of corporate bond issues in 2013–2025

Source: own calculations according to Cbonds and Bank of Russia.

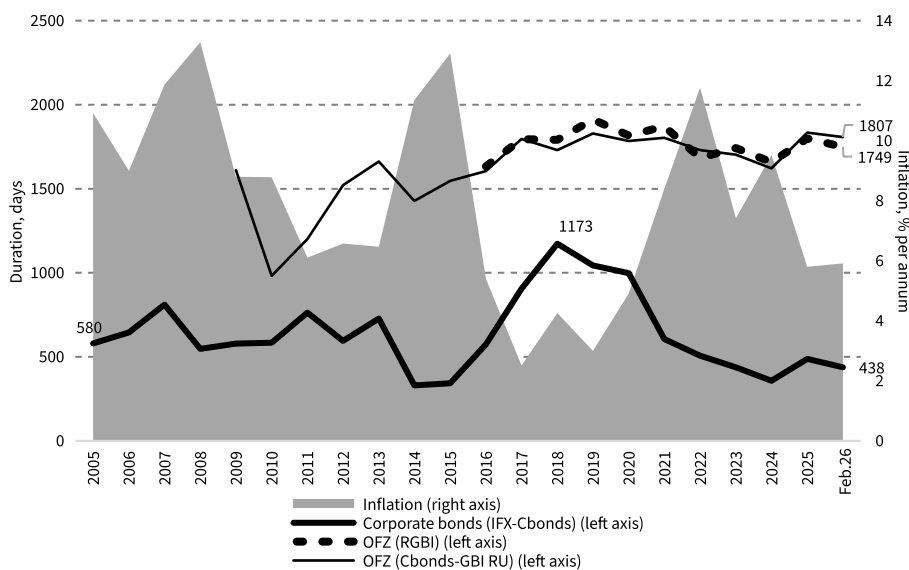


Fig. 43. Duration of corporate bond and OFZ indices and the inflation rate from 2005 to February 2026

Source: own calculations according to Cbonds.

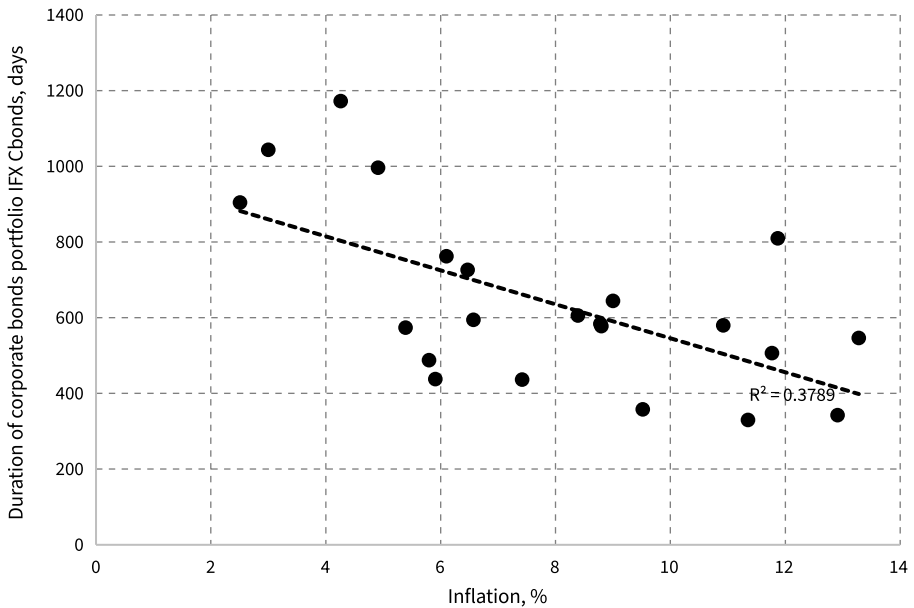


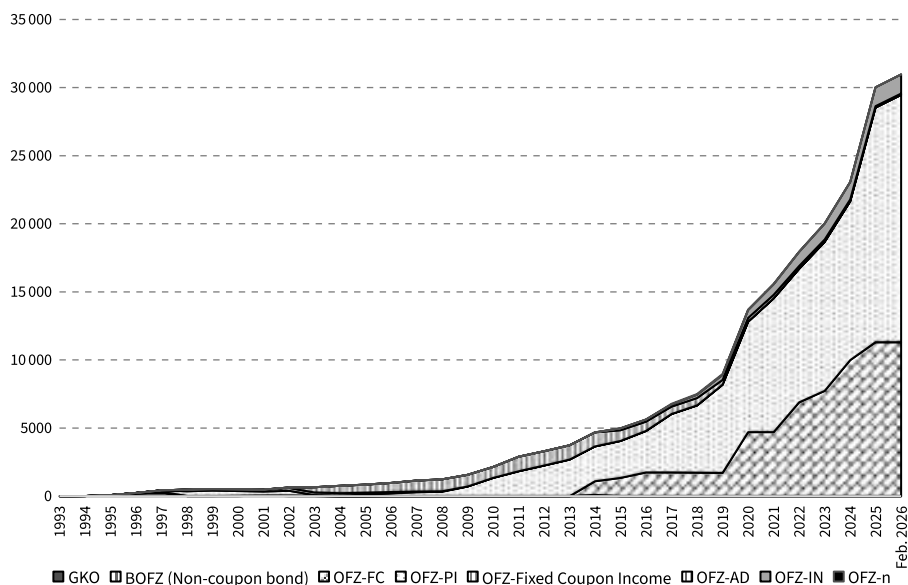
Fig. 44. Dependence of corporate bond duration on inflation from 2005 to February 2026

Source: own calculations according to Cbonds.

Thus, the corporate bond market continued to grow in 2025, albeit at a slightly slower pace than the OFZ market. The investment attractiveness of corporate bonds was supported by the Bank of Russia’s key rate reduction and narrowing of credit spreads on most portfolios of these securities. The accumulated volume of bond loans issued by non-financial sector exceeds 25% of the bank loan portfolios for these companies. Bonds play an important role in financing companies’ ongoing operations, but their potential for structural economic transformation has not yet been fully realized. This is largely prevented by short duration of bond issues and insufficient accessibility of this market segment for new and small companies. The events of 2025 have demonstrated the need for greater attention to disclosing credit risks to investors and careful monitoring of defaults in individual bond issues.

2.5.3. Government bond market of the Russian Federation

In 2025, government bond market will grow at an accelerated pace, ensuring the government’s adjusted needs for financing the budget deficit in the context of high attractiveness of the real yield of OFZs for investors. The total volume of OFZ issues increased from Rb23.2 trillion in 2024 to Rb30.1 trillion in 2025,



Note. The following abbreviations are used here and below: BOFZ — zero-coupon federal loan bonds; GKO — government short-term zero-coupon bonds; OFZ — federal loan bonds; OFZ-AD — federal loan bonds with debt amortization; OFZ-IN — federal loan bonds with a par value indexed to the inflation rate in the Russian Federation (“linkers”); OFZ-PI — federal loan bonds with a constant coupon income; OFZ-FC — federal loan bonds with a variable coupon income linked to the RUONIA rate (“floaters”); OFZ-n — federal loan bonds for individuals (“people’s bonds”).

Fig. 45. Volume of GKO-OFZ issues in circulation from 1993 to February 2026, bn rubles

Source: own calculations according to RF Ministry of Finance and Cbonds.

or by 29.8% (Fig. 45). Placement of OFZs with a floating coupon yield helped to fulfill the budget fundraising plan, taking into account its adjustment in September 2025.

The most significant segment of the OFZ market in terms of value is OFZ-PD with a constant coupon income, which accounted for 58.7% of the OFZ value in February 2026 compared to 50.5% in 2024. The coupon income amounts for these OFZs have to be set in advance for the entire period of circulation, which allows the RF Ministry of Finance to more effectively manage the costs of servicing the government debt avoiding undertaking the interest rate risk.

These bonds also become more attractive to investors expecting a reduction in the Bank of Russia’s key rate. The value of OFZ-FC bonds increased from Rb11.7 trillion in 2024, or 50.5% of the value of all OFZs, to Rb18.2 trillion in 2025, or 58.7%.

Amid rising inflation and key rate, investors, as a rule, prefer to purchase OFZs with a floating coupon (OFZ-FC), which provide more flexibility in managing liquidity and interest rate risks. In OFZ-FC, the coupon size is tied to the RUONIA money market rate, which usually follows the Bank of Russia’s key rate. With the key rate re-

duction beginning in 2025, the value of OFZ-FC issues increased from Rb10.0 trillion in 2024, or 43.3% of the value of all OFZs, to Rb11.3 trillion in February 2026, while the share of these instruments in the total value of OFZs fell to 36.5%.

OFZ-IN (linkers) provide for indexation of the nominal value of bonds depending on the level of inflation, measured with some time lag by the consumer price index (CPI). Due to their inflation-protective properties, they are in high demand among domestic institutional investors. However, partly due to concerns about the budget's exposure to volatile inflation risks, the RF Ministry of Finance is cautious in issuing these securities, not placing any new ones. Due to indexation of the par value, the value of OFZ-IN in circulation increased from Rb1.3 trillion in 2024 to Rb1.4 trillion in June 2026. During the same time, the share of these instruments in the total value of OFZ declined from 5.6 to 4.5%.

As government borrowing shifted to OFZ-PI and OFZ-FC, the attractiveness of OFZ-AD with amortization of the main debt, previously issued in a volatile financial market, for investing pension savings, fell to practically zero in the opinion of issuers and investors. Value of OFZ-AD issues dropped from Rb0.14 trillion in 2024 to Rb0.10 trillion in February 2026, or by 0.3% of the value of all OFZs.

OFZ-n, known as “people’s bonds” due to their focus on private investment in the over-the-counter market, never became an attractive financial instrument compared to classical OFZ issues. At the end of 2025, these securities were fully redeemed by the RF Ministry of Finance.

In 2025, the RF Ministry of Finance issued two trial issues of government bonds totaling RMB 20 bn, or Rb2020 bn (not reflected in *Fig. 45*). However, results of these issues require further evaluation due to yuan liquidity issues in the domestic Russian market.

Fig. 46 shows that by the end of 2025, the RF Ministry of Finance had practically resolved the issue of replacing previously issued government Eurobonds with domestic market bonds. The total value of Russian government bonds increased from \$278 bn in 2024 to \$386 bn in 2025, or by 38.7%. The share of ruble bonds increased from 90.3% in 2024 to 93.3% in 2025.

As was shown earlier in the comments to *Fig. 11*, in 2025, amid reduction in the Bank of Russia's key rate, the OFZ yield curve tended to leave the state of inversion, when the yield to maturity on short-term bonds exceeded the yield on long-term OFZ issues. (Convergence of the yield rates of OFZs with different durations and the RUSFAR money market rate, which began in H2 2025, is also seen on *Fig. 47*.) This has been observed since July 2025, and the last time was in March 2026. Withdrawal from this state is a positive development, signifying that OFZ yields of different durations are tending to return to equilibrium, where the yield on long-term issues reflects the time premium for risk. However, this also raises the possibility that the key rate reduction that triggered this change may prove insufficient to prevent an economic recession.

Fig. 47 shows that RUSFAR rate, the yield on quarterly, annual and 2-year OFZs decreased, respectively, from 20.3; 18.8; 23.3 and 18.1% per annum as of Decem-

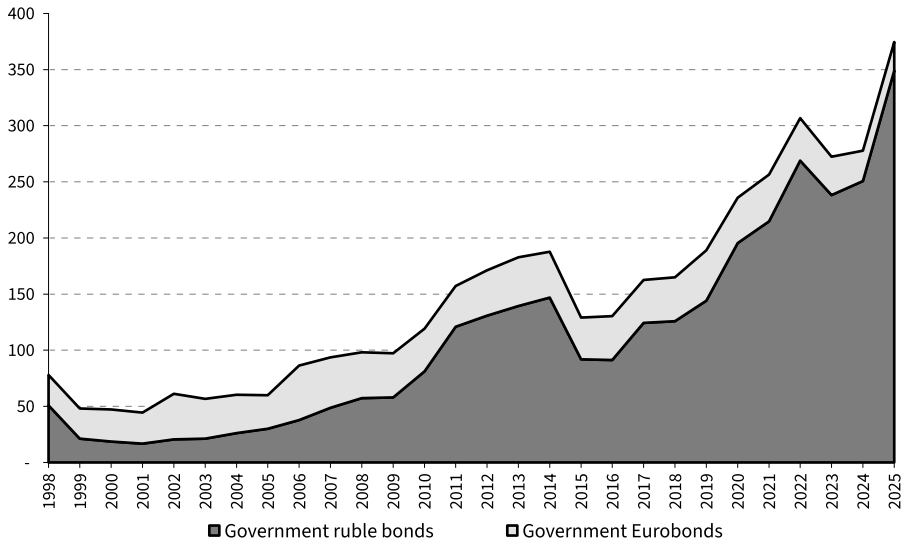
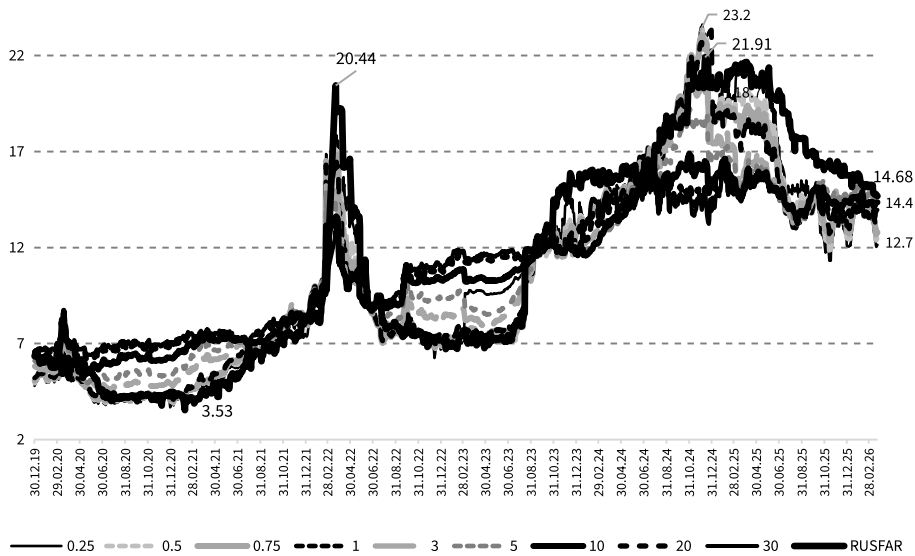


Fig. 46. Volumes of government domestic outstanding bonds and Eurobonds of the Russian Federation in 1998–2025, bn dollars

Source: own calculations according to Cbonds and Moscow Exchange.



Note. RUSFAR is the interest rate of the Russian money market, calculated by the Moscow Exchange based on REPO transactions with a central counterparty, which are secured by clearing participation certificates.

Fig. 47. Values of the zero-coupon yield curve for OFZs with maturities from 0.5 to 30 years and the RUSFAR money market rate from December 30, 2019 to March 23, 2026, in % per annum

Source: own calculations according to Moscow Exchange.

Russian economy in 2025

Trends and outlooks

ber 30, 2024 to 14.68; 12.2; 13.1 and 13.8% per annum as of March 23, 2026. During the same period, the yield to maturity on 10-year OFZs fell from 15.2 to 14.4% per annum, 20-year OFZs from 14.2 to 14.1%, and the yield on 30-year OFZs increased from 13.9 to 14.0%. That is, by the end of March 2026, the yield on long-term OFZ issues was almost equal to the RUSTAR money market rate, while the yield on short-term OFZ issues was lower compared not only to RUSFAR, but also to the yield on long-term issues.

At the same time, for example, for both 2-year OFZs and 10-year bonds, the yields to maturity on March 23, 2026, amounting to 13.8 and 14.4% per annum, respectively, significantly exceeded the annual inflation rate of 5.91% recorded in February, by 7.9 and 8.5 p.p., respectively, which, in our opinion, is too high a premium for investors in government borrowing.

There are risks of indirect financing of additional bond issues through centralized refinancing attracted by large banks, which could result in pro-inflation, as it happened in 2025, with uneven government borrowing throughout the year due to adjustments to the maximum values of the state budget deficit. *Fig. 48* shows surges in large-scale OFZ placements in late 2022–2025 that were accompanied by a significant increase in bank refinancing. This does not confirm the emission nature of government debt funding, however, this effect requires further study.

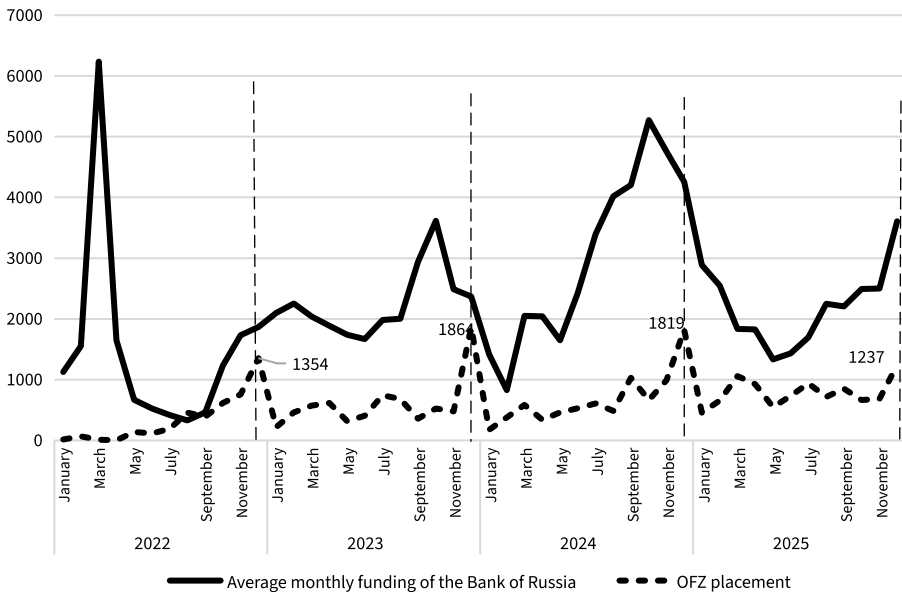


Fig. 48. Volumes of refinancing of the Bank of Russia and OFZ placements in 2022–2025, bn rubles

Source: own calculations according to Cbonds

Fig. 49 shows that over 14 years, from February 2013, i.e. since the nominee holder accounts were opened in the Russian Central Depository NSD by the foreign settlement and clearing organizations Euroclear and Clearstream, until February 2026 the share of non-resident investments in OFZs was very volatile. Maximum share of non-resident investments in OFZs was recorded in February 2020 at 34.9%, and in February 2026 this index dropped to 3.5%. Such a sharp decline in the volume of non-resident investments in OFZs, despite blocking of these funds in Russian depositories amid sanctions, allows to suggest that many non-residents from “unfriendly” countries have nevertheless managed to avoid counter-restrictions from the Russian Federation, as stipulated by Federal Law No. 319-FZ of July 14, 2022.

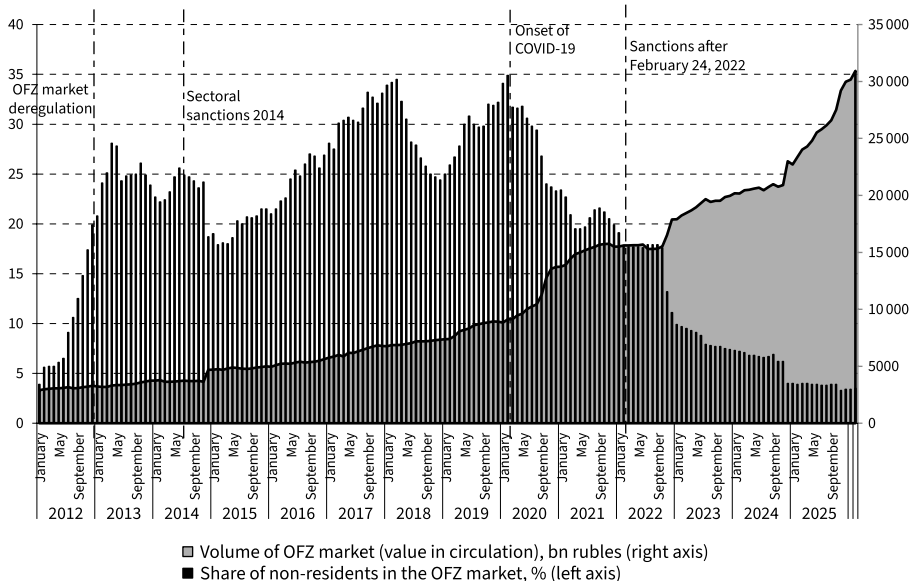


Fig. 49. Share of non-residents in the OFZ market and value of OFZs in circulation from February 2012 to February 2026

Source: own calculations according to Bank of Russia and Cbonds.

Fig. 50 shows that value of non-resident investments in Russian Eurobonds dropped from \$14.8 bn in 2023 to \$9.1 bn in 2025. However, share of non-residents in Russian Eurobonds fell from 44.8% in 2023 to 29.3% in 2025, or by 15.6 p.p.

Thus, in 2025, the RF Ministry of Finance succeeded to significantly increase budget borrowing through placement of government bonds. High yield on the bonds, significantly exceeding current inflation rate, as well as the trend toward a gradual reduction in the key rate, contributed to the successful placement of OFZ. Placement of floaters and issuance of yuan-denominated bonds helped the RF Ministry of Fi-

Russian economy in 2025

Trends and outlooks

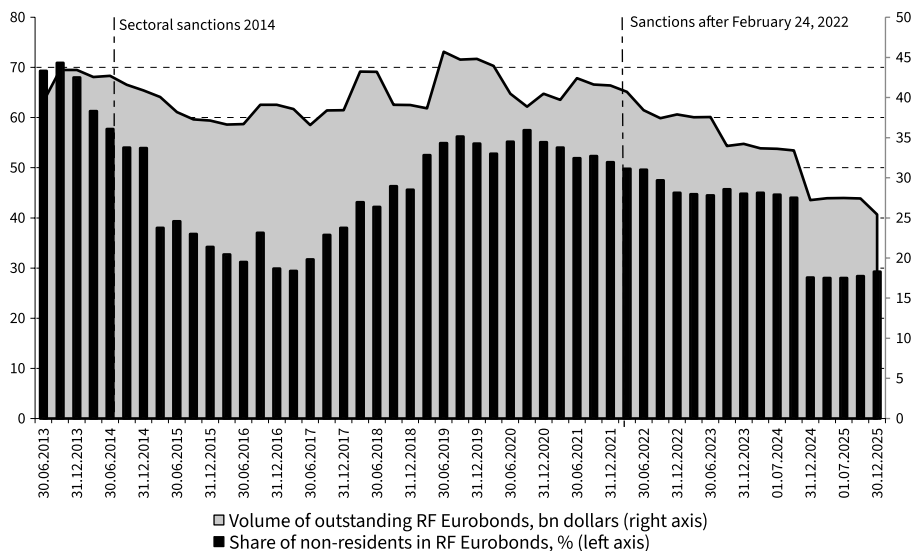


Fig. 50. Share of non-residents in the RF government Eurobond market and value of RF government outstanding Eurobonds from July 2013 to December 2025

Source: own calculations according to Bank of Russia and Cbonds.

nance to fulfil planned volumes of borrowings at the end of the year. The bond yield curve began to break out of its inversion, leading to longer borrowing maturities.

The share of foreign investors in OFZ issues and previously issued Eurobonds has reached a multi-year low, preventing risks of rapid sell-offs of these bonds.

2.6. Derivatives market

Economic significance of the derivatives market is determined by pricing of investment assets and in providing market participants with the ability to hedge against sharp price movements in the future. However, the derivatives market, dominated by private investors, is often for speculative transactions using high leverage rather than for risk management.

According to Moscow Exchange, total trading volume on the derivatives market increased from Rb99.9 trillion in 2024 to Rb145.2 trillion in 2025, or by 45.3%. The volume of open positions over the same period increased from Rb1.7 to Rb2.4 trillion, or by 41.1%. Number of client accounts increased by 22% in 2025 and reached 483.000. Meanwhile, total trading volume of private investors in 2025 increased by 31.0% and amounted to Rb78.4 trillion or 48% of the total trading volume, compared to 62% in the previous year. That is, the share of private investors in the Mo-

snow Exchange derivatives market has dropped, indicating growing activity in the futures market of financial and non-financial organizations.

The most popular 2025 instruments among private investors in the derivatives market were commodity contracts with a share of 35% of the volume of transactions by individuals, currency instruments (33%) and index derivatives (33%).

Fig. 51 shows that trading volumes on the Moscow Exchange derivatives market increased from Rb96.6 trillion in 2024 to Rb141.8 trillion in 2025, or by 46.7%; the volume of options transactions increased from Rb3.3 trillion to Rb3.4 trillion, or by 4.1%. Moreover, in 2025, liquidity of the derivatives and options markets reached 93.4 and 50.3% of trading volumes in 2021, respectively. Thus, the derivatives market is already approaching the point of recovery to the level that preceded the introduction of sanctions in 2022 largely due to the expansion of demand, primarily from domestic investors in the precious metals commodity futures segment.

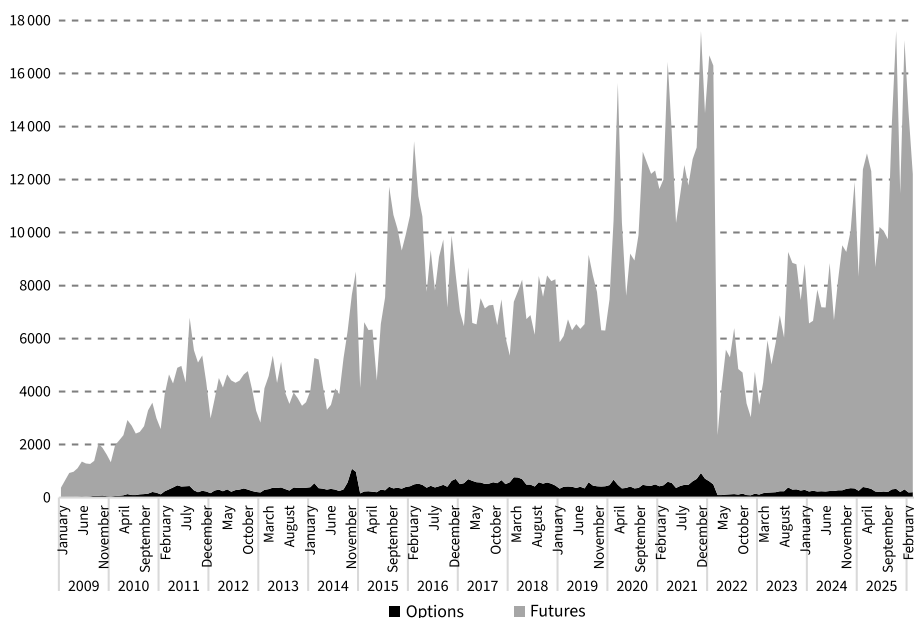


Fig. 51. Value of futures and options transactions on the Moscow Exchange from January 2009 to February 2026, bn rubles.

Source: own calculations according to Moscow Exchange.

Currency instruments dominate the Moscow Exchange derivatives market, but their share in the total volume of transactions decreased from 49.3% in 2024 to 35.0% in February 2026 (Fig. 52). This section of the exchange market primarily uses cash-settled futures on currency pairs, where trading participants do not bear

custody risk. According to the Bank of Russia (2025)¹, the most popular futures contracts in 2025 were forward transactions on the dollar/ruble, euro/ruble, euro/dollar pairs, and dollar currency pairs vs. currencies of “friendly” countries.

The commodity futures market grew most rapidly in 2025, with its share of transaction volumes increasing from 24.5% in 2024 to 49.0%. Among all instruments, the most in-demand futures were gold (GOLD), silver (SILV), platinum (PLT), natural gas (NG), etc.

The share of index instruments decreased from 21.9% in 2024 to 9.1% in February 2026 in total trading volume. Contracts on the Moscow Exchange Index were the most actively traded; the share of trades involving shares of the American SPY exchange-traded fund on the S&P 500 index dropped. The share of contracts on stock instruments over the same period declined from 5.2 to 3.3% (these contracts were concluded on certain shares of Russian issuers and a number of foreign securities).

The share of interest rate futures increased from 2.0% to 3.5% compared to the previous year. However, in 2025, amid high interest rates, growth in this market segment began to slow.

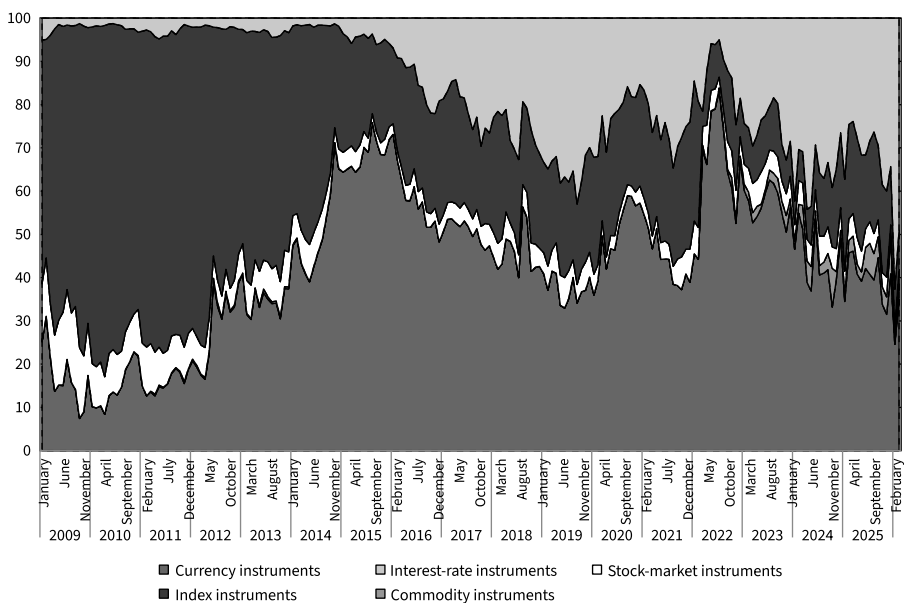


Fig. 52. Structure of the Moscow Exchange derivatives market from January 2009 to February 2026, % from the value of transactions

Source: own calculations according to Moscow Exchange.

1. Market of derivative financial instruments. Information/analytical material. Bank of Russia. 2025. URL: <https://www.cbr.ru/finstab/analytic/>

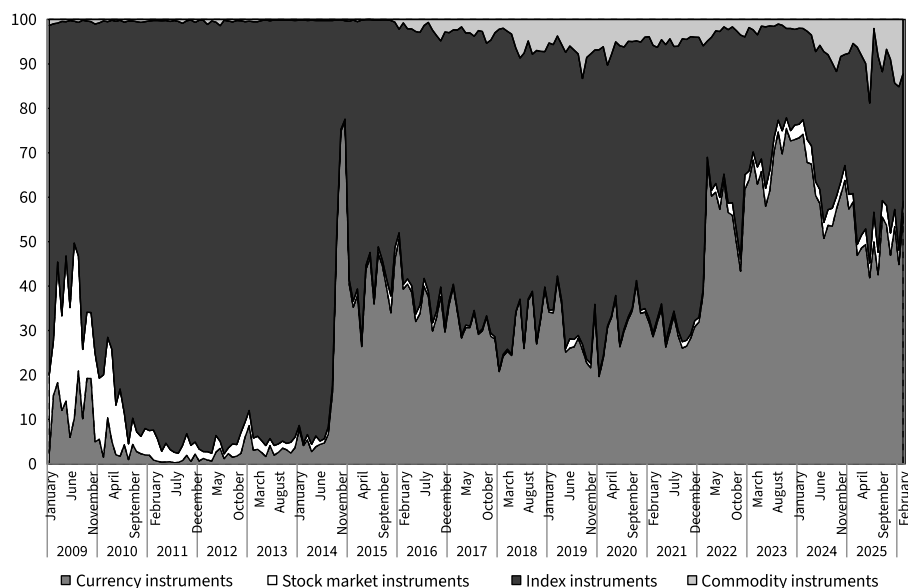


Fig. 53. Structure of the Moscow Exchange options market from January 2009 to February 2026, % from the value of transactions

Source: own calculations according to Moscow Exchange.

The options market is the riskiest for short-term transactions involving individuals. Unlike previous years, currency options have become the most traded contracts on the exchange over the recent years (Fig. 53). However, the volume of options on foreign exchange instruments decreased from Rb2.0 trillion in 2024 to Rb1.7 trillion in 2025, or by 13.5%. The volume of options on index instruments increased from Rb929 bn in 2024 to Rb1.243 bn in 2025, or by 33.8%. Options on commodity instruments increased from Rb218 to 298 bn, or 37.1%. Options volumes on individual stock instruments increased from Rb113 to 125 bn, or 10.4%.

2.7. Financial intermediaries and exchanges

According to the theory of contestable markets, the competition is determined not by the number of actors, but by freedom of entry into the market.¹ Many improvements in the market aimed at consumers are conducted by market actors un-

1. Baumol W. (1982). Contestable Markets: An Uprising in the Theory of Industry Structure: Reply // The American Economic Review. Vol. 72/1. URL: <http://www.jstor.org/action/showPublisher?publisherCode=aea>

der the threat of entry by new companies in cases where existing firms set prices above marginal costs and receive excess profits.¹

Russian financial market evidences that despite development of fintech, digital technologies, AI, and access of tens of millions of private investors to the market, long-term trend of a reduction in the number of licenses for professional activity in the securities market is accompanied by a very limited number of new companies entering the market.

In 2025, compared to 2024, the number of organizations possessing broker licenses reduced from 255 to 251, those having dealer licenses fell from 280 to 270, and those having trust management licenses fell from 177 to 1.170 (Fig. 54). The number of new professional market participant licenses issued to actors expanding their activities in the securities market decreased from 46 to 33.

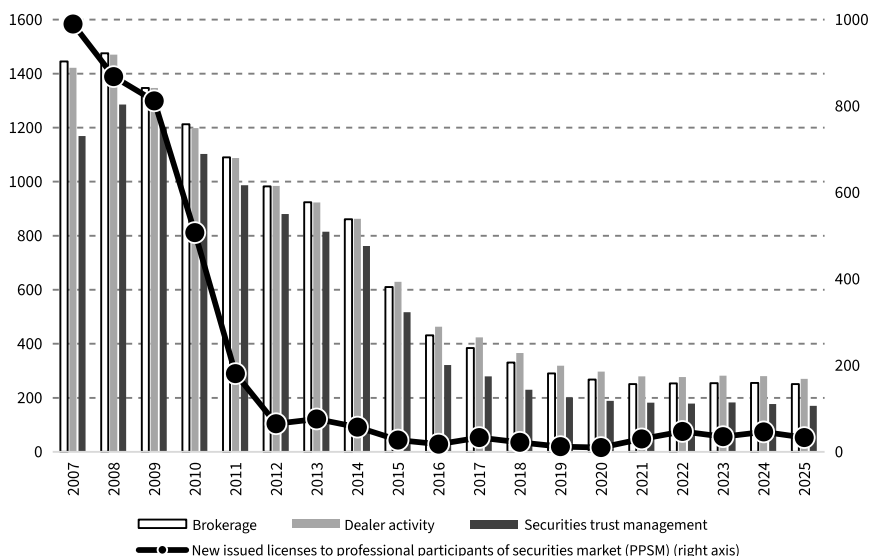


Fig. 54. Number of brokerage and dealer licenses, and securities trust management activities and number of licenses issued to professional participants in the securities market in 2007–2025

Source: own calculations according to National Association of Securities Market Participants (NASMP) and the Bank of Russia registers. URL: https://cbr.ru/securities_market/statistic/

In our opinion, lack of competition in the domestic stock market manifests as follows: unlike in the US, China, and the EU, independent fintech companies have not emerged in Russia that could compete with existing large banks and brokers

1. Claessens S. (2009). Competition in the Financial Sector: Overview of Competition Policies // The World Bank Research Observer. Vol. 24/1, P. 83–118. URL: <https://doi.org/10.1093/wbro/lkp004>

Table 18

Moscow Exchange market structure from 2010 to February 2026, % of total

	2010	2015	2020	2021	2022	2023	2024	2025	February 2026
Stock market	13.2	3.0	5.8	5.2	3.5	4.8	4.8	4.6	3.5
including:									
Equities, RDR and shares,	8.0	1.4	2.5	3.0	1.7	1.8	2.2	2.2	1.5
Bonds	5.2	1.6	3.2	2.2	1.9	3.0	2.6	2.4	2.0
Secondary auctions	3.4	1.2	1.2	1.0	0.6	0.9	0.7	1.1	1.1
Placement market	1.8	0.4	2.1	1.2	1.2	2.2	1.9	1.3	0.9
Foreign exchange market	72.0	83.3	80.5	78.9	89.1	89.0	88.5	87.1	87.4
including:									
Monetary market	33.9	38.0	45.7	47.2	63.7	64.0	71.5	77.7	78.6
REPO operations	31.5	33.2	40.7	41.7	51.3	50.4	56.9	72.7	77.3
Credit market	2.4	4.8	5.0	5.5	12.4	13.6	14.6	5.0	1.3
Currency and commodities market	38.1	45.4	34.7	31.7	25.4	25.1	17.0	9.3	8.9
Derivatives market	14.8	13.7	13.7	15.7	7.4	6.2	6.7	8.3	9.1
Total	100	100	100	100	100	100	100	100	100

Source: own calculations according to Moscow Exchange.

in the areas of payment services, liquidity management, and creation of customized securities portfolios for private investors. Russia has no equivalent to companies like Revolut, Robinhood, Betterment, Acorns, SoFi, and many others. Unlike China, large big tech companies in the Russian market have not become competitors of banks in cash transactions, payment services and provision of other financial services.

Despite using modern financial banking technologies, level of tariffs for payment services and costs in the field of financial asset management remain high, and the range and quality of financial services are limited. So far, there is no competition between financial products from different providers in the Russian market, however, it is replaced by competition between financial organizations, where 4 or 5 large retail banks dominate. As a result, clients of financial institutions are forced to use financial products only from the provider where they hold their broker or other account. Without product competition, whereby investors could purchase products from different providers from a single account, the products they receive are not the best on the market and impose high costs on investors. A typical Russian investor does not yet have access to information containing comparative analysis on financial products he is seeking to purchase.

Table 18 shows that a share of stock market transactions continues to decline in the overall structure of transactions on the Moscow Exchange, i.e. from 5.2% in 2021 to 3.5% in February 2026; during the same time, a share in the foreign exchange market increased from 78.9 to 87.4%.

Moreover, during the period of high interest rates, growth of the money market stands out, with the share of 64.0% in 2023, and by February 2026 it increased to 78.6%. The share of currency and commodity markets fell over the same period from 25.1% to 8.9%, owing to imposition of international sanctions on the Moscow Exchange and its infrastructure institutions, which restricted conducting of exchange dollar and euro transactions.

The market trading structure is gradually restoring the role of the forward transactions sector: its share increased from 6.2% in 2023 to 9.1% in February 2026.

2.8. Investors in the domestic financial market

Over the past 7 years, the number of private investors in the Russian market has been growing: the number of unique client broker accounts has grown from 47.4 mn in 2024 to 55.6 mn in 2025, or by 17.3%¹ (Fig. 55). However, since most of these accounts have no assets, the number of active client accounts who make at least one exchange trade per month is a more objective intensity indicator of private investor' trading activity, and the number of such accounts at brokers has grown from 5.3 mn in 2024 to 5.8 mn in 2025, or by 9.8%.

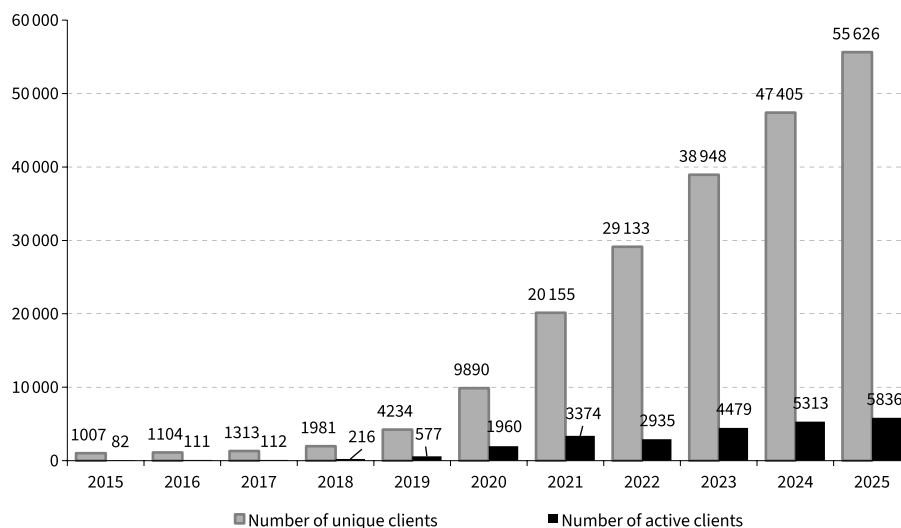
However, the information about 55.6 mn accounts of private broker investor is not entirely correct, since most of these accounts do not have any assets: Fig. 56 shows that the number of funded accounts evidences only 37.2% of the total number of broker accounts. The number of specified funded client broker accounts increased from 16.7 mn in 2024 to 20.7 mn in 2025, or by 23.8%.

In other countries, the US, EU, China, India and South Korea, information is usually published only on clients' funded broker accounts.

The number of individual investment accounts (IIA) of private investors increased from 6.1 mn in 2024 to 6.4 mn in 2025, or by only 5.7% (Fig. 57). Value of IIA assets increased from Rb595 bn in 2024 to Rb888 bn in 2025, or by 49.2%. In accordance with amendments to the Federal Law "On the Securities Market", which came into force on January 1, 2024,² instead of the previous IIA-1 and IIA-2, individuals could only open a new type of account, the so-called IIA-3. The new version of the IIA-3 allows its owners to take advantage of a wider range of tax benefits, such as a tax deduction on PIT when depositing new funds into the account in the amount of up to Rb400.000 per year, and also provides for an exemption from PIT on investment income when withdrawing savings from the account.

1. Unfortunately, exchange statistics on the number of private investor accounts becomes opaque. Following its refusal to publish client account statistics for individual brokers, Moscow Exchange has ceased publicly disclosing information on the total number of broker client accounts and actively managed accounts since May 2024.

2. Federal law of 19.12.2023. No. 600-FZ "On amendments to certain legislative acts of the Russian Federation."



Note. A number of unique broker clients was defined in 2015–2018 by summing up unique broker accounts at the Moscow and Saint Petersburg Exchanges. In 2019–2025, data on a number of broker clients have been presented according to “Dynamic series of key indicators of brokers’ activities” of the Bank of Russia. URL: https://www.cbr.ru/securities_market/statistic/

Fig. 55. Number of registered accounts and active broker clients on Russian Exchanges in 2015–2025, thousand

Source: own calculations according to Moscow Exchange, Saint Petersburg Exchange and Bank of Russia.

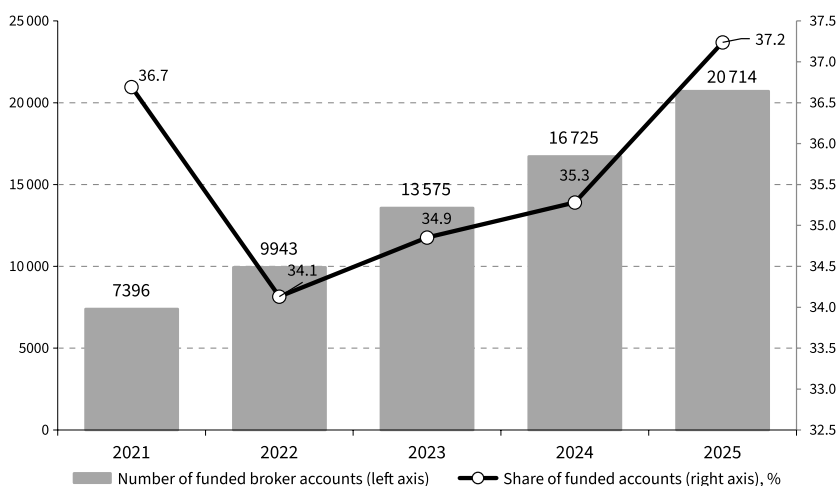


Fig. 56. Number of funded broker clients’ accounts and their share in the total number of broker accounts in 2021–2025

Source: own calculations according to Bank of Russia. URL: https://www.cbr.ru/securities_market/statistic/

Russian economy in 2025

Trends and outlooks

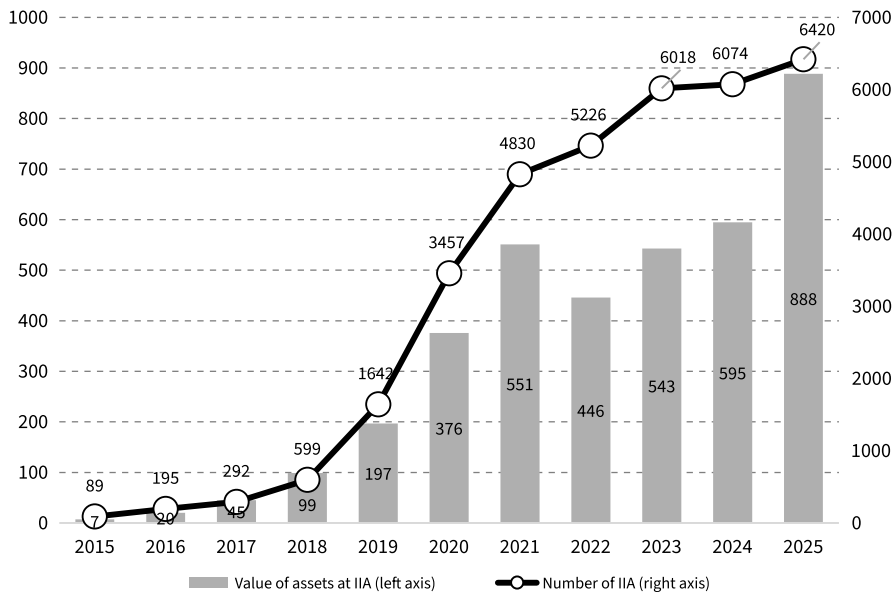


Fig. 57. The number of individual investment accounts (IIA 1–3) and value of client assets in these accounts in 2015–2025

Source: own calculations according to Bank of Russia and Moscow Exchange.

Moreover, the amount of funds deposited into an IIA-3 account is not limited, and the maximum amount of investment income exempt from tax amounts to Rb30 mn. The size of the IIA grew due to sales by banks and non-bank brokers, as well as to adoption of an amendment to tax legislation allowing dividends received on IIA shares to be withdrawn to investors' bank accounts, beyond the minimum holding period for IIA assets. The main failure of IIA-3, according to investors, compared to IIS-1 and IIA-2,¹ is that the minimum period for storing assets in the account must be 5 years with a subsequent increase to 10 years.

In terms of the number of client accounts and their assets, the broker IIA are growing significantly more slowly than similar indicators for ordinary brokerage accounts of individuals (Fig. 58). At the peak of IIA popularity in 2020, value of assets held in these accounts accounted for only 6.7% of individual brokerage account assets; in 2025, this figure was 6.1%. The share of brokerage accounts with IIA status in the total number of brokerage accounts peaked at 33.6% in 2019, and fell to 11.3% in 2025.

1. Minimum storage period for assets in IIA-1 and IIA-2 was 3 years, however, it was not tied to the time of depositing funds into the account.

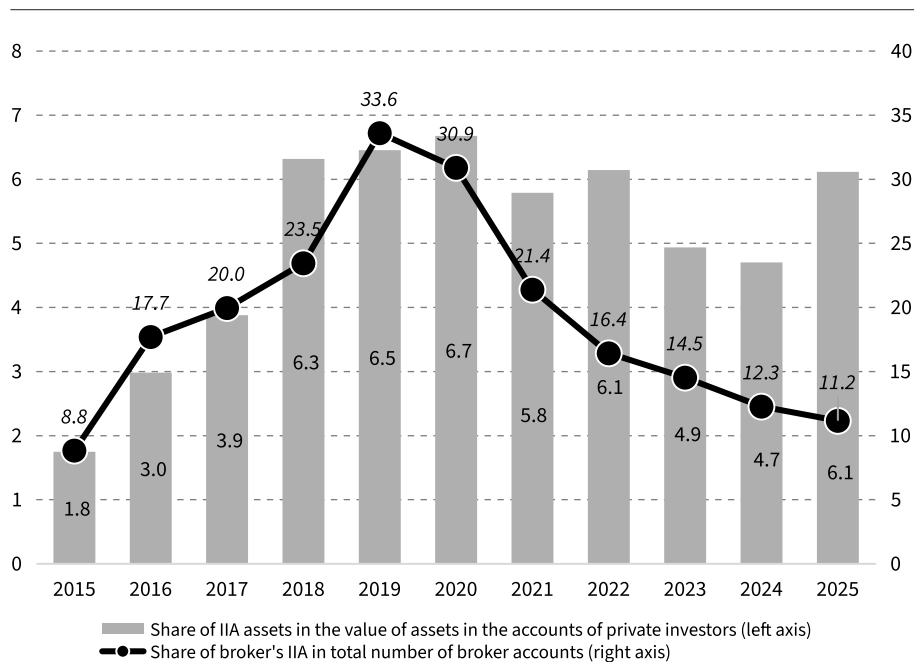


Fig. 58. Share of assets in IIA (IIA-1 and IIA-2) in total value of assets in the accounts of private investors and share of brokerage IIA in total number of brokerage accounts in 2015–2025, %

Source: own calculations according to Bank of Russia. URL: https://www.cbr.ru/analytics/rcb/iis_4q_2024/

Data on the number of brokerage accounts does not fully reflect true picture of the households' involvement in stock market investment. The majority of brokerage accounts opened by individuals are empty or hold insufficient assets for safe investment. *Table 19* shows that value of assets in brokerage accounts of private investors increased from Rb10.6 trillion in 2024 to Rb12.3 trillion in 2025, while the number of unique brokerage clients grew from Rb47.4 to Rb55.6 mn. Similar indicators for trust management accounts evidenced Rb2.0 and 2.0 trillion, respectively, and 0.8 and 0.7 mn accounts.

34.9 mn people (62.8%) of the total number of brokerage account holders had no assets in their accounts in 2025 (respective figure in 2024 was 64.7%). As per our estimates, to build the simplest diversified portfolio, a private investor needs to have at least Rb100.000 in their account.

In 2025, the number of private investors possessing the abovementioned investment potential was only 2.9 mn people, or 5.3% of the total number of brokerage account holders (in 2024, the share of such investors was 5.3%). Similar figures for individual trust management accounts evidenced 0.3 mn people with a share of 34.2% in 2024 and 0.2 mn people and 32.3% in 2025.

Table 19

Data on distribution of the number of private investors and value of client assets depending on the value of assets in the brokerage account in 2021–2025

a) Clients and brokers

	Number of clients						Portfolio volume															
	2021		2022		2023		2024		2025		2021		2022		2023		2024		2025			
	Mn people	%	Mn people	%	Mn people	%	Mn people	%	Mn people	%	Mn people	%	Rb trillion	%	Rb trillion	%	Rb trillion	%	Rb trillion	%		
1. From Rb1 mn and higher	0.6	3.0	0.5	1.8	0.7	1.8	0.8	1.7	1.0	1.7	1.0	1.7	7.6	91.1	5.3	87.6	8.5	91.9	9.9	93.2	11.6	94.1
2. From Rb100.000 and higher	2.0	9.9	2.0	6.9	2.4	6.2	2.5	5.3	2.9	5.1	8.2	99.1	5.9	98.5	9.1	99.1	10.5	99.1	10.5	99.1	12.2	99.5
3. Up to Rb100.000	5.4	26.8	8.0	27.4	11.2	28.7	14.2	30.0	17.9	32.1	0.1	0.9	0.1	1.5	0.1	0.9	0.094	0.9	0.1	0.5	0.0	0.0
4. Empty accounts	12.8	63.3	19.2	65.7	25.3	65.1	30.7	64.7	34.9	62.8	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.0	0.0	0.0	0.0	0.0
5. Total (sum of lines 2 and 4)	20.2	100.0	29.1	100.0	38.9	100.0	47.4	100.0	55.6	100.0	8.3	100.0	6.0	100.0	9.2	100.0	10.6	100.0	10.6	100.0	12.3	100.0

6) Trust manager clients

	Number of clients						Portfolio volume															
	2021		2022		2023		2024		2025		2021		2022		2023		2024		2025			
	Mn people	%	Mn people	%	Mn people	%	Mn people	%	Mn people	%	Rb trillion	%	Rb trillion	%	Rb trillion	%	Rb trillion	%	Rb trillion	%		
1. From Rb1 mn and higher	0.1	9.3	0.1	9.1	0.1	11.0	0.1	10.5	0.1	11.9	1.1	88.4	1.1	88.7	1.7	94.5	2.0	95.8	2.0	97.4	2.0	99.4
2. From Rb100.000 and higher	0.4	48.0	0.4	43.0	0.3	42.6	0.3	34.3	0.2	32.3	1.2	98.9	1.2	99.1	1.8	99.7	2.0	99.8	2.0	99.9	2.0	99.9
3. Up to Rb100.000	0.4	51.8	0.5	56.7	0.5	56.7	0.5	65.0	0.5	67.0	0.0	1.1	0.0	0.9	0.0	0.3	0.0	0.2	0.0	0.1	0.0	0.1
4. Empty accounts	0.0	0.2	0.0	0.3	0.0	0.7	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Total (sum of lines 2 and 4)	0.8	100.0	0.8	100.0	0.8	100.0	0.8	100.0	0.7	100.0	1.2	100.0	1.2	100.0	1.8	100.0	2.0	100.0	2.0	100.0	2.0	100.0

Note. Data on the number of clients in the “Less than 0” category, including client portfolios for which the volume of net liabilities to the broker exceeds the amount of assets, is included in the “Empty accounts” line, and for net assets in the category of clients with assets from Rb0 to 10.000.

Source: Statistical data for a review of key indicators of professional participants in the securities market. Bank of Russia. URL: https://www.cbr.ru/securities_market/statistic/

Table 21 also shows high level of concentration of assets of private investors and brokers: In 2025, only 1.0 mn people having assets worth Rb1 mn or more held 94.1% of assets held in brokerage accounts. The same figures for individual management accounts were 100.000 people and 97.4% of assets. Thus, the stock market continues to face challenges of more actively attracting moderate-income groups of households to invest in securities.

In 2024 and 2025, amid high bank deposit rates, people increased investments in deposits from Rb59.7 trillion in 2023 to Rb75.1 trillion in 2024 and Rb83.0 trillion in 2025; the share of deposits in the structure of household assets increased from 49.7 to 52.9 and 54.0%, respectively (*Table 20*). On the contrary, investments in listed shares decreased from Rb7.2 trillion in 2023 to Rb7.0 trillion in 2024, with a subsequent increase to Rb7.3 trillion in 2025; their share in the structure of financial assets fell from 6.1 to 4.9 and 4.7%, respectively. Over the period under review, the share of household investments in bonds remained virtually unchanged: in 2023, it was 3.6%, then fell to 3.3% in 2024 and again returned to 3.6% in 2025. The share of investments in investment funds (primarily closed-end mutual funds) in household financial assets increased significantly — from 5.1% in 2023 to 7.6% in 2025.

However, cash currency reserves remained the second-largest category of household financial assets. Their share of these investments dropped from 23.2% in 2023 to 15.9% in 2025; their value decreased slightly, from Rb24.9 trillion in 2023 to Rb24.4 trillion in 2025. Over the previous two years, the share of organized forms of collective investments in terms of pension and insurance reserves in the value of household assets has not changed, remaining at 5.9% in 2023 and 2025.

Thus, the consolidated portfolio of household financial assets in 2025 remained emphatically conservative, focused more on preserving value in risk-free assets rather than on generating additional income from investments in risky assets.

Private investors became the main driving force supporting the exchange liquidity of shares and bonds in 2025 after non-resident investments in securities of Russian issuers had been frozen in 2022 and the level of development of domestic institutional investors evidenced insufficiency.

Fig. 59 shows that a share of non-residents in stock market transactions on the Moscow Exchange fell from 48.5% in 2021 to 0.5% in 2024, but then rose to 3.6% in 2025. According to Kommersant experts (2026)¹, this was facilitated by the introduction of “In” accounts, which lowered the market entry barrier for foreign capital. Most investors represented the EAEU and CIS countries.

Conversely, a share of private investors increased from 38.5% to 72.2% over the same period. However, in 2025, it declined to 64.8%, which may be explained

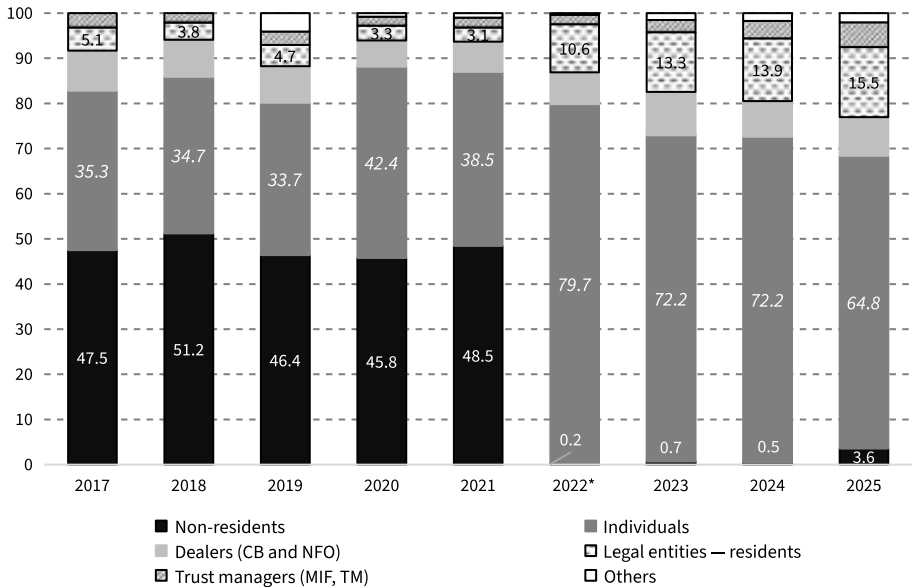
1. *Kovalev A.* Foreigners are flocking to the stock exchange. The share of non-residents in Russian stock market transactions has reached a three-year high//Kommersant. 15.03.2026. URL: https://www.kommersant.ru/doc/8512634?from=glavnoe_5

Table 20

Structure of household financial assets from 2017 to January 2025, % of total

	2017	2018	2019	2020	2021	2022	2023	2024	2025	January 2026
Cash	22.6	23.4	21.4	24.0	22.2	22.7	20.7	18.1	15.9	15.7
Deposits and funds in escrow accounts	52.8	51.7	51.2	48.3	47.9	49.2	49.7	52.9	54.0	53.7
Cash at brokers	0.3	0.3	0.5	1.1	1.1	0.6	0.5	0.3	0.3	0.2
Shares of public companies	3.4	3.3	4.0	4.9	6.2	4.8	6.1	4.9	4.7	4.7
Residents' unlisted shares	8.3	8.0	8.6	7.6	7.6	9.0	8.4	8.4	8.1	8.0
Bonds	1.7	2.1	2.7	3.0	3.6	3.0	3.6	3.3	3.6	3.7
Investment funds	2.1	2.6	2.7	3.1	3.7	3.5	5.1	6.3	7.6	7.8
Pension and insurance reserves	8.8	8.6	8.8	8.0	7.6	7.0	5.9	5.7	5.9	6.2
Financial assets -total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: own calculations according to Bank of Russia. URL http://www.cbr.ru/statistics/macro_itm/households/



*January 2023.

Fig. 59. Structure of investors in shares secondary trading on the Moscow Exchange from December 2017 to December 2025, %

Source: own calculations according to Review of financial instruments of the Bank of Russia from 2022 to 2025 and the Moscow Exchange for an earlier period.

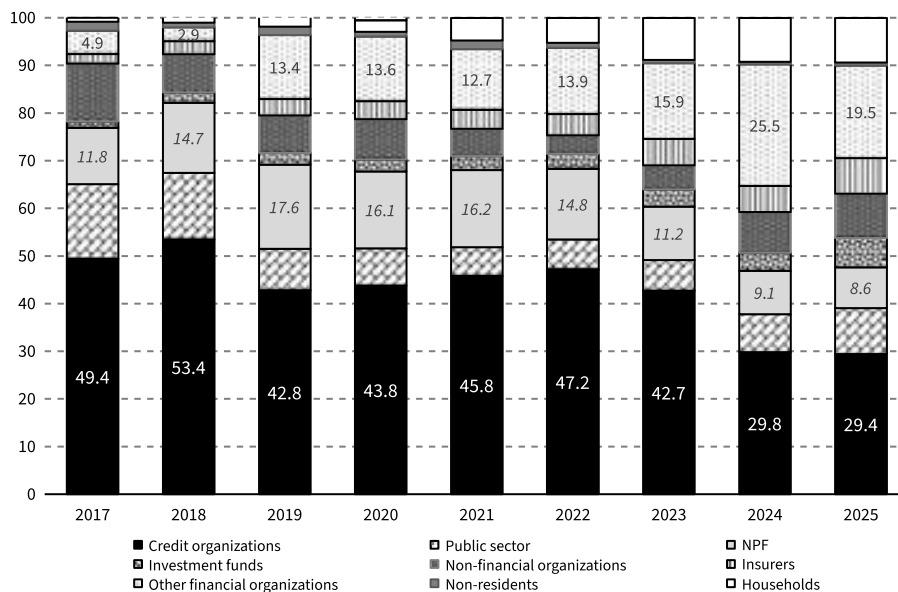


Fig. 60. Structure of corporate bonds owners in 2017–2025, %

Source: own calculations according to Review of financial instruments of the Bank of Russia for a number of years. URL: https://www.cbr.ru/ec_research/analytics/

by the increased role of other market participants, particularly legal entities and collective investments.

The Bank of Russia research (2026)¹ shows that private investors' market behavior in 2025 was countercyclical: they reduced their equity investments during market expansions and acted as net buyers during market contractions. Moreover, 94% of the value of private investor equity portfolios was concentrated in listed securities.

According to Kommersant experts (2026),² in H2 2025, a share of non-resident transactions on the Russian stock market more than tripled compared to previous years, exceeding 3.5% of total turnover. This was due to the introduction of "In" accounts, which lowered the entry barrier for foreign capital. Most investors came from the EAEU and CIS countries.

Data presented in Fig. 60 and Table 21 show that main owners of corporate bonds are credit institutions, other financial organizations, public sector (institutions)

1. Retail investment market. Information and analytical material. Bank of Russia. 2026. URL: https://www.cbr.ru/analytics/finstab/retail_investment_market/

2. Kovalev A. Foreigners are flocking to the stock exchange. The share of non-residents in Russian stock market transactions has reached a three-year high//Kommersant. 15.03.2026. URL: https://www.kommersant.ru/doc/8512634?from=glavnoe_5

Table 21

Structure of owners of corporate bonds in 2017–2025, %

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Credit organizations	49.4	53.4	42.8	43.8	45.8	47.2	42.7	29.8	29.4
Other financial organizations	4.9	2.9	13.4	13.6	12.7	13.9	15.9	25.5	19.5
Non-residents	1.9	1.0	1.8	1.0	1.8	1.0	0.7	0.6	0.6
Households	0.8	1.0	1.9	2.4	4.7	5.2	8.8	9.2	9.4
NPF	11.8	14.7	17.6	16.1	16.2	14.8	11.2	9.1	8.6
Investment funds	1.3	2.2	2.5	2.5	2.9	3.2	3.6	3.8	6.1
Public sector (development institutions)	15.7	14.0	8.7	7.8	6.0	6.3	6.4	8.0	9.6
Insurers	2.0	2.7	3.4	3.8	4.0	4.5	5.5	5.4	7.4
Non-financial organizations	12.1	8.0	7.9	8.5	5.7	3.9	5.1	8.6	9.3
Others	0.0	0.0	0.0	0.6	0.0	0.1	0.1	0.0	0.0
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
<i>For reference: share of non-residents according to previous data of the Bank of Russia, published before 2023</i>	14.0	10.0	13.0	12.0	11.0	1.0			

Source: own calculations according to Review of financial instruments of the Bank of Russia for a number of years. URL: https://www.cbr.ru/ec_research/analytics/

of development, households and non-state pension funds (NPF). However, compared to 2023, a share of credit institutions in the structure of corporate bond holders decreased from 42.7% to 29.8% in 2024 and 29.4% in 2025. This could be due to reorientation of banks' portfolios towards investments in Russian government bonds in the context of a worsening of a surplus of free banking liquidity. In addition to banks, a share of non-state pension funds (NPF) decreased from 11.2% in 2023 to 8.6% in 2025, as did the already low share of non-residents, from 0.7% to 0.6%.

In the structure of corporate bond investors, a share of other financial institutions increased from 15.9% to 19.5% in 2023–2025, a share of the public sector increased from 6.4% to 9.6%, non-financial organizations increased from 5.1% to 9.3%, investment funds increased from 3.6% to 6.1%, insurers increased from 5.5% to 7.4%, and households increased from 8.8% to 9.4%.

Fig. 61 shows that currently credit institutions, non-state pension funds, and other non-banking financial institutions — non-residents, are main owners of government bonds. In 2023–2025, the share of credit institutions in the composition of government bond holders increased from 61.5 to 62.9%, while investment funds grew from 2.3 to 3.3%, other financial organizations from 6.8 to 8.0% and households from 2.3 to 3.3%.

At the same time, during this period, the share of non-state pension funds (NSPFs) decreased moderately from 11.6 to 10.7%, public sector (development institutions) from 3.5 to 2.4%, and insurers from 4.5 to 3.9%. The share of non-residents decreased more significantly — from 8.1 to 3.4%.

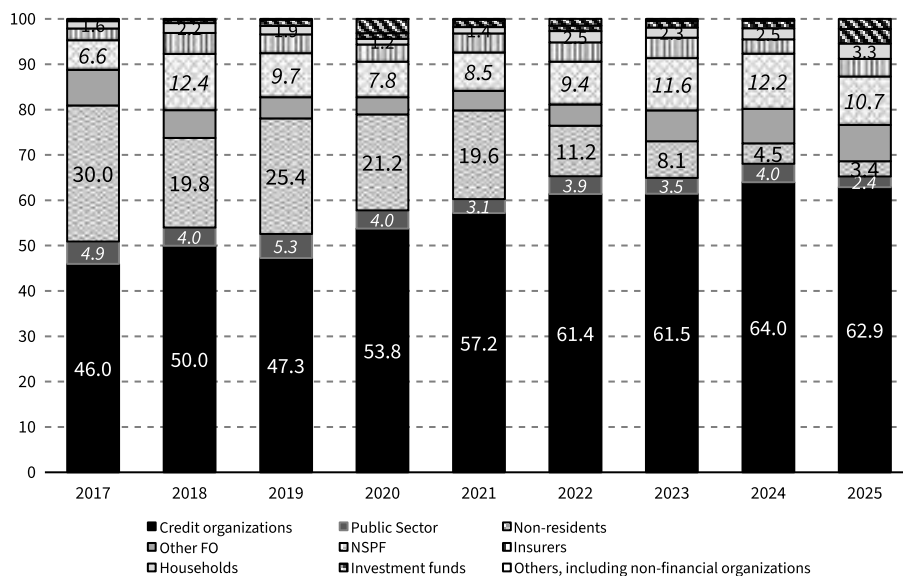


Fig. 61. Structure of government bonds owners in 2017–2025, %

Source: own calculations according to Review of financial instruments of the Bank of Russia for a number of years. URL: https://www.cbr.ru/collection/collection/file/55196/review_2024.pdf

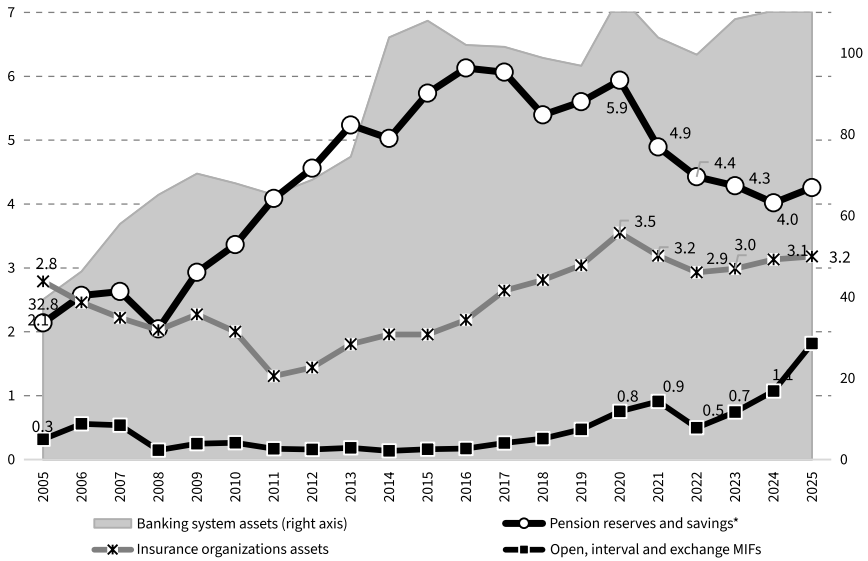
Fig. 62 shows that in 2025, compared to 2021, value of financial institutions' assets vs. to GDP increased from 112.8% to 120.3%. However, main growth in this indicator was driven by banks, whose share of assets in GDP increased from 103.8% to 111.3%. Most other financial institutions showed mixed dynamics in their share of GDP: share of net asset value of open-end, interval and exchange-traded mutual funds (MIF) in GDP increased from 0.9% in 2021 to 1.8% in 2025, share of pension reserves and savings decreased from 4.9% to 4.3%, and share of insurers' assets remained unchanged at 3.2%. Thus, the size of long-term household savings still lags significantly behind bank deposits.

In 2025, net asset value growth of open-end, interval, and exchange-traded mutual funds accelerated significantly compared to previous years. However, main driver of collective investment growth remained money market exchange-traded funds, which demonstrated high resilience despite declining value of stock and bond portfolios.

Fig. 63 shows that value of net assets (VNA) of the exchange-traded MIFs has increased from Rb355 bn in 2023 to Rb1860 bn in 2025 or by 5.2 times. However, VNA MIFs of the monetary market increased in the same period from Rb207 to Rb1576 bn or by 7.6 times. Thus, money market funds accounted for almost all of the growth in exchange-traded mutual funds.

Russian economy in 2025

Trends and outlooks



* For 2025, data on pension reserves and savings are provided as of October 1.

Fig. 62. Share of bank assets, pension reserves and savings, assets of insurance organizations and net asset value of open-end, interval and exchange-traded mutual funds in GDP in Russia in 2005–2025, %

Source: own calculations according to Bank of Russia, VEB and Rosstat.

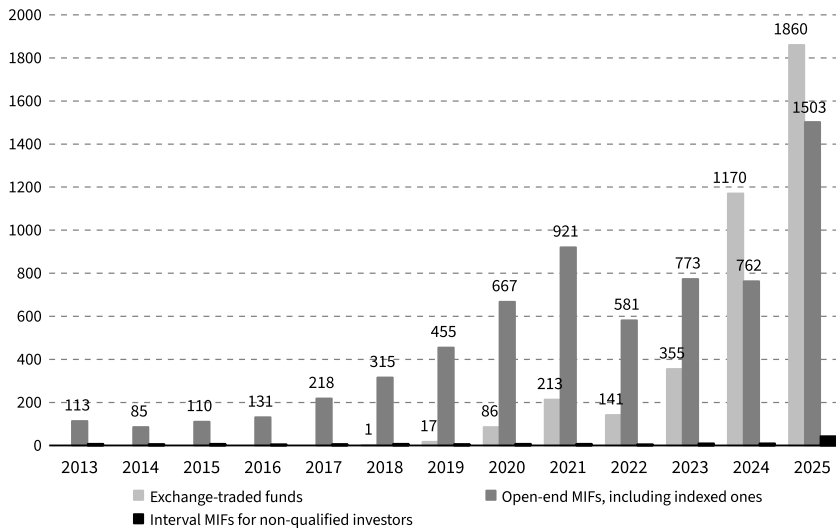


Fig. 63. Value of net assets, open-end and exchange-traded MIFs from 2013 to February 2025, bn rubles

Source: own calculations according to Investfunds.ru, including value of blocked assets funds.

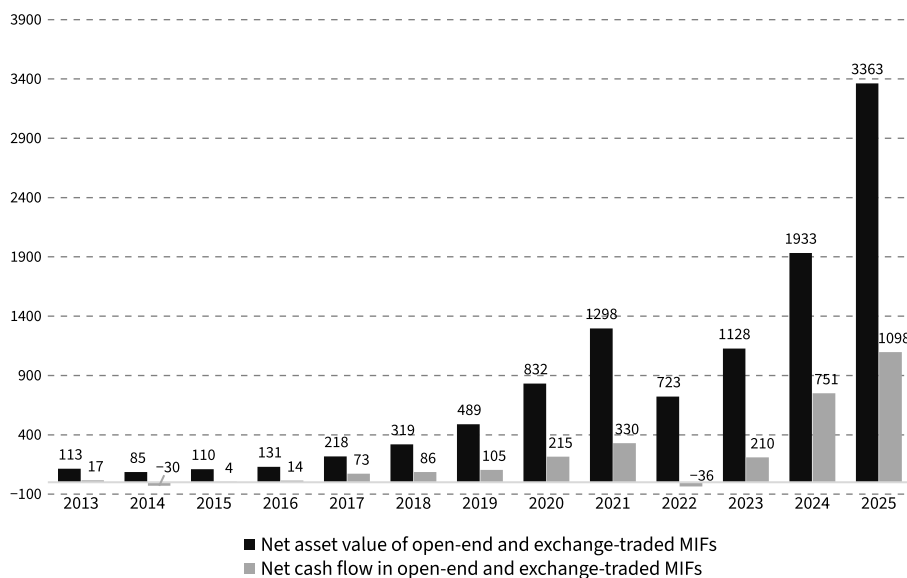


Fig.64. Net asset value of open-end and exchange-traded mutual funds and net cash flow of investors into these funds in 2013–2025, bn rubles

Source: own calculations according to Investfunds.ru.

The VNA of open-end mutual funds increased from Rb773 bn in 2023 to Rb1.503 bn in 2025, or by 94.4%. Among open-end equity mutual funds, money market funds and bond funds were the most popular.

Attractiveness of investments, primarily in exchange-traded money market mutual funds, ensured an influx of new investor funds into MIFs in 2025 (Fig. 64). Value of net cash inflows into exchange-traded and open-end mutual funds increased from Rb210 bn in 2023 to Rb1.098 bn in 2025 or by 5.2 times.

2.9. Summary

In 2025, amid difficult atmosphere of sanctions and high turbulence in the global economy, the Russian financial market continued to resolve a previously started complex task of its development, primarily through resources of domestic savings.

The goals set in the Executive Order No. 309 of the President of the Russian Federation dated May 7, 2024, within the national project “Efficient and Competitive Economy” began to be implemented this year: increasing stock market capitalization to at least 66% of GDP by 2030 and increasing the share of long-term savings of individuals in their total savings to at least 40%.

Reduction of inflation and of the key rate of the Bank of Russia, stability of the national currency, sufficient liquidity in the banking system and the interest of the RF Ministry of Finance in attracting funds to the budget by issuing government bonds on market terms, became drivers of financial market growth in 2025.

The year 2025 was not entirely favorable for the stock market due to high real returns on risk-free instruments (OFZs and bank deposits), financial problems of issuers amid high interest rates, inflated expectations of the risk premium by investors, including due to an unstable investment climate.

The volume and state of the IPO market in 2024 and 2025 are not yet in line with expectations. However, active efforts of financial regulators and their interaction with issuers and financial institutions give hope for accelerated growth of the stock market, including public offering segment in the medium term. In this review, we attempted to show which monetary policy and macroeconomic policy guidelines create favorable conditions for growth of the market under study.

Positive results for 2025 include steady growth of government and corporate bond markets and emerging growth of the derivatives market, largely supported by the expansion of commodity market.

The range of long-term investment instruments offered to people (LTI, IIA) changed positively. Retail and closed-end mutual funds became the most dynamically developing segment of long-term savings.

2.10. Cryptocurrency Market Trends in 2025¹

For most of 2025, the total market capitalization of the cryptocurrency market fluctuated within a fairly wide range of \$2.5 trillion to \$4.4 trillion (*Fig. 65*). The market showed growth in the first three quarters, and by the start of the fourth quarter, its total market capitalization reached a new high of \$4.3 trillion. However, in October, the positive trend gave way to a decline, and by the end of the year, market capitalization had shrunk to approximately \$3.0 trillion. Over the last three months of the year, the market lost about 23.7% of its market capitalization, or nearly \$1 trillion. Compared to the end of 2024 (approximately \$3.35 trillion), the total market capitalization of the cryptocurrency market in 2025 decreased by about 10% year-over-year (versus growth of more than 100% in 2024).

The structure of the cryptocurrency market in 2025 remained concentrated. The two largest cryptocurrencies (ETH and BTC) continued to account for the bulk of the crypto market's total market capitalization (averaging over 70%). Bitcoin (BTC) ended 2025 with a share of about 58%, slightly strengthening its dominance over the year (compared to 56% at the beginning of the year). During 2025, Bitcoin's price managed to hit

1. Authors: *Larionova V.M.*, Junior Researcher, Digital Finance Studies Department, Gaidar Institute; *Sherbakov G.A.*, Junior Researcher, Digital Finance Studies Department, Gaidar Institute.

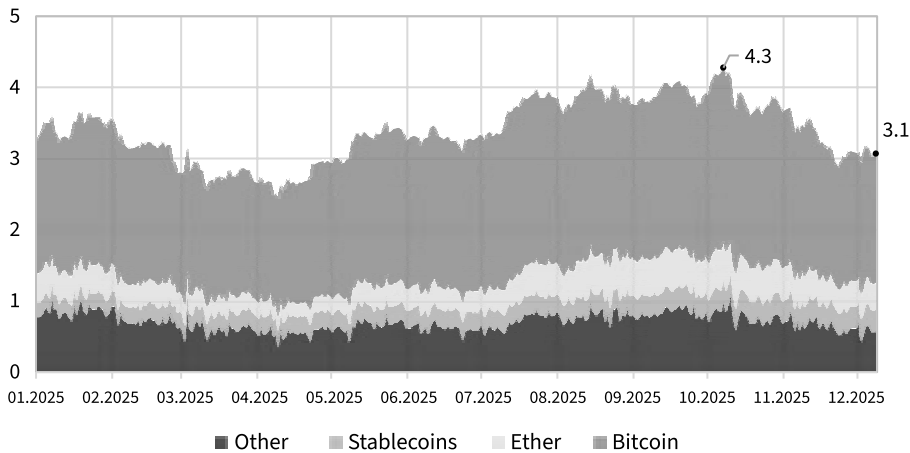


Fig. 65. Trends in the cryptocurrency market capitalization in 2025, in trillions of dollars

Source: own compilations based on data. URL: coinmarketcap.com

new all-time highs several times. The most recent of these was reached in October, when Bitcoin's price exceeded \$125,000 at the market peak. However, by the end of December, the price of the largest cryptocurrency had already fallen to around \$88,000, which is approximately 6% below the levels seen at the start of the year.

2.10.1. Factors affecting overall market dynamic

Market dynamics in this sector in 2025 were primarily driven by the high sensitivity of assets to macroeconomic shocks, the impact of which consistently outweighed the significance of internal narratives within the crypto sphere. Throughout the year, one of the key factors influencing the market was uncertainty regarding expectations for U.S. economic policy¹ following the inauguration of the country's newly elected president.

The market reacted particularly strongly to the new administration's actions regarding trade policy and tariffs, which was also reflected in the dynamics of various uncertainty indicators. Thus, the Global Economic Uncertainty Index (GEPU)² reached its all-time high in April 2025 (Fig. 66). The S&P 500 Volatility Index (VIX) also showed fairly high values.

1. Hong J. W. Economic Policy Uncertainty and Cryptocurrency Bubbles: Case of Donald Trump's Return to Office// Available at SSRN 5898043. 2025. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5898043

2. URL: https://www.policyuncertainty.com/global_monthly.html

Russian economy in 2025

Trends and outlooks

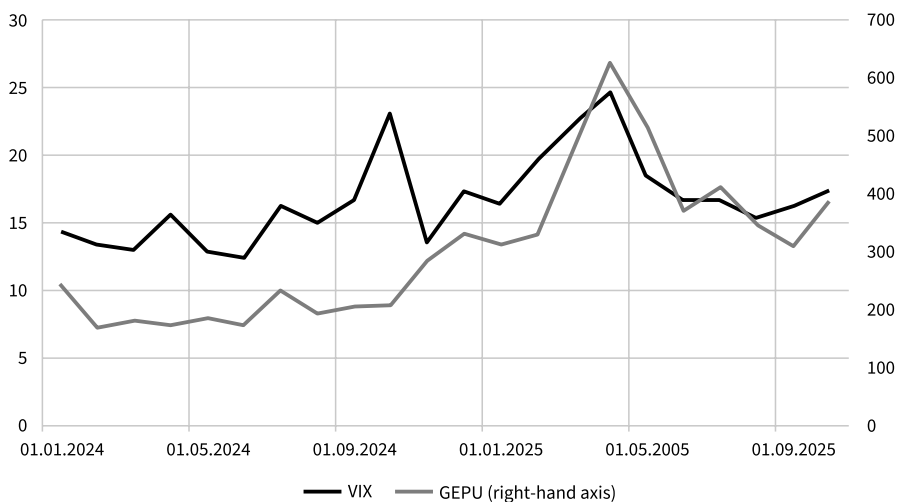


Fig. 66. VIX and GEPU indices dynamic in 2024 and 2025

Source: own compilations based on data. URL: <https://fred.stlouisfed.org/series/>

The increased uncertainty has led to a cautious mood in financial markets and has been accompanied by a widespread flight from risky assets. For example, during the April wave of “tariff wars,” when the U.S. announced the imposition of 50% and then 145% tariffs on Chinese goods, the U.S. market (the S&P 500 index) posted a return of -15.3% relative to the start of 2025. A decline was also observed in the cryptocurrency market; however, while Bitcoin fell by a comparable 18.4% relative to the start of January, other volatile altcoins¹ plummeted by 40–60% in the vast majority of cases; Ether, for example, fell by 55.8%. Nevertheless, the U.S. and China reached an agreement fairly quickly (as early as May) to reduce mutual tariffs to an acceptable level, after which both traditional and cryptocurrency markets resumed growth and hit new highs as early as August.

The next episode of the “tariff war” took place in October 2025, when the U.S. once again imposed additional tariffs of 100% on Chinese goods. Markets reacted with another drop on October 10; however, while the S&P 500 fell by only 2.7% that day, the total market capitalization of volatile cryptocurrencies plummeted by more than 20% in an instant. Bitcoin fell by 15.27%, Ether by 21%, and other altcoins by an average of more than 43%. By early October, the cryptocurrency market had a fairly large volume of positions opened using leverage.² Consequently,

1. A collective term for all cryptocurrencies other than Bitcoin and stablecoins.

2. URL: <https://www.vaneck.com/us/en/blogs/digital-assets/matthew-sigel-vaneck-mid-october-2025-bitcoin-chaincheck>

the sharp price drop caused by the introduction of fees triggered a spiral of cascading liquidations of open margin positions totaling approximately \$19 bn over 12 hours — the largest amount in the history of the crypto market.¹ Over the following week, the crypto market’s total market capitalization shrank by approximately \$1 trillion, and prices did not stabilize until late November.

Another key factor influencing the cryptocurrency market throughout the year was U.S. monetary policy. Following a series of aggressive rate hikes, the Fed shifted to a more cautious tone; however, markets remained in a wait-and-see mode for an extended period, with discussions focusing on the likelihood of a recession and the timing of a potential shift toward rate cuts. This was accompanied by heightened volatility in financial markets, which was reflected, among other things, in the dynamics of the VIX index, which reached a level of more than 25 points during the year.² At the same time, Bitcoin’s annual realized volatility, calculated based on daily price changes, stood at around 30–35% during certain periods of 2025, significantly exceeding the figures for most traditional financial assets.³

In Q4, the macroeconomic situation began to gradually stabilize. The Fed signaled a possible shift toward monetary easing and, in December, announced its first — albeit modest — rate cut of 0.25 p.p. Markets interpreted this as a positive signal: expectations of further tightening eased, the VIX index fell to multi-year lows by about 12 points, and the S&P 500 continued to rise, closing the year with a return of +16%. As for the cryptocurrency market, following the events of October 10, it continued its downward trend despite a positive local price reaction to the Fed’s decisions.

Overall, the moving correlation between the logarithmic returns of Bitcoin and the S&P 500 remained predominantly positive throughout the year, though it fluctuated significantly (*Fig. 67*) and averaged around 0.4, which is comparable to previous years. During the stressful periods of April and October, a brief decline in this correlation was observed due to the higher volatility of cryptocurrencies compared to the stock market; however, during recovery phases, the synchronization of price movements strengthened again. It is worth noting that during phases of U.S. monetary policy easing (or rising expectations of such easing), the correlation strengthened again and rose toward the upper limit of the annual range — to a level of approximately 0.6–0.7.

It is worth noting that amid the aforementioned shock events, gold — as a traditional safe-haven asset — posted phenomenal growth of over 72% over the course of the year, whereas its “digital counterpart,” Bitcoin, was unable to fully fulfill

1. URL: <https://www.coindesk.com/ru/coindesk-indices/2025/10/15/crypto-s-black-friday>

2. URL: <https://fortune.com/2025/11/21/vix-cboe-volatility-index-highest-level-trump-tariffs-nvidia-tech-stocks-valuations/>

3. URL: <https://www.postfinance.ch/en/blog/investing-in-simple-terms/understanding-volatility-cryptocurrencies>

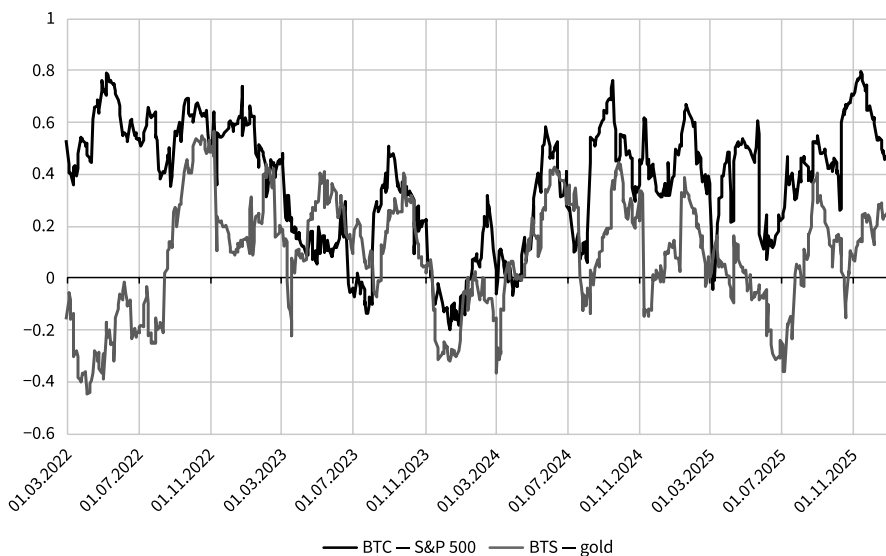


Fig. 67. Moving correlations between the daily logarithmic returns of BTC and the S&P 500, and between BTC and gold (30-day windows) in 2022–2025

Source: own compilations based on data. URL: <https://developers.coindesk.com/> and <https://finance.yahoo.com/>

a similar protective role. Although there were periods when the correlation between BTC and gold briefly rose to 0.2–0.3, this link weakened noticeably during times of increased uncertainty.

2.10.2. The Institutionalization of Cryptoassets

By 2025, the topic of institutionalization had firmly established itself as one of the central themes of the crypto market. While in previous years the focus was more on its early stages (the launch of trading in shares of exchange-traded funds (ETFs) investing in cryptocurrencies, and isolated corporate purchases), the participation of major investors, public companies, and government agencies in this market has now become significantly more prominent in scale.

In 2025, investor inflows into exchange-traded funds (ETFs) focused on cryptocurrencies continued (Figs. 68 and 69), although their trends showed some variation on both across assets and over time.

January 2025 proved to be a very significant month for Bitcoin funds (+\$5.3 bn) but February saw a substantial outflow from them (-\$3.6 bn), while March remained close to zero. Starting in April, inflows resumed and intensified in the second

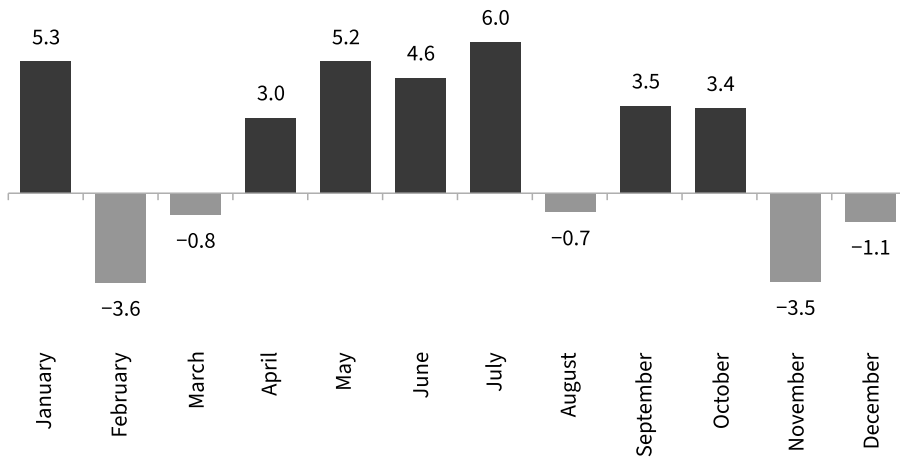


Fig. 68. Net inflows/outflows into Bitcoin ETFs in 2025, in USD bn

Source: own compilations based on Farside Investors.

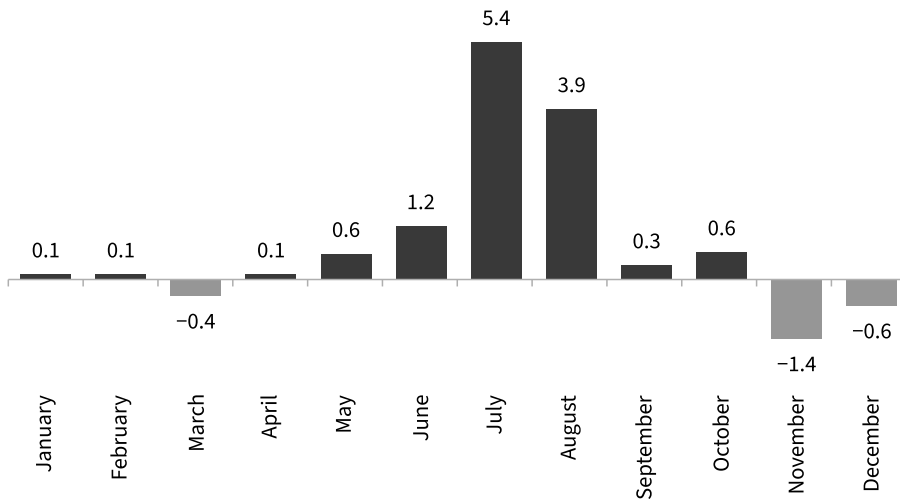


Fig. 69. Net inflows/outflows of funds in Ether—ETF in 2025, USD bn

Source: own compilations based on Farside Investors.

and third quarters; July was particularly notable (+\$6.0 bn for BTC and +\$5.4 bn for ETH), coinciding with rising prices and increased interest in crypto assets. In June–August, demand for Ether specifically rose significantly, driven by the successful Pectra network upgrade in May 2025, as well as the adoption of stablecoin regulations in the U.S. (the Genius Act, discussed in more detail below), a significant

portion of which are traded on the Ethereum blockchain. In the first five months, Ether-based exchange-traded products were in low demand among investors.

Until the fall, inflows into crypto ETFs remained generally positive, largely against the backdrop of geopolitical uncertainty in April 2025. However, after October, investors began reducing their positions in the funds: in November and December, net outflows were observed for several weeks in a row, including the largest in the history of individual funds. For example, more than \$0.5 bn was withdrawn from a fund managed by BlackRock on November 18 alone, and the total outflow from Bitcoin ETFs for November–December exceeded \$4.3 bn.

Despite the autumn correction, assets under management across all exchange-traded crypto products increased for the full year 2025. The total net inflow into these products amounted to approximately \$47.2 bn, which is comparable to the figure for the partial year 2024 (\$48.74 bn). As for the geographic distribution of these funds, the bulk of them went to the U.S., while in Europe and globally, the figures were significantly more modest;¹ in some countries, including Sweden and Brazil, there was a net outflow of such funds. As expected, Bitcoin remained the leader in terms of inflow volume — BTC funds received approximately \$26.9 bn over the year (net of outflows). Interest in Ether also increased: net inflows into it amounted to about \$12.7 bn, more than double the previous year's figure. Among altcoins, XRP and Solana stood out: ETFs for these assets, launched in November 2025, attracted \$3.7 bn and \$3.6 bn, respectively, by the end of the year, which was many times their initial volumes.

Since exchange-traded fund (ETF) shares have proven to be a convenient and popular way to invest in Bitcoin (as reflected in the volume of inflows over the past year), this has led to significant changes in the ownership structure of the largest cryptocurrency. Thus, by early 2026, approximately 7.1% of the total cryptocurrency supply (about 1.49 mn BTC) was concentrated on the balance sheets of Bitcoin ETF issuers alone, compared to 6% in early 2025. Nearly one-fifth of the total supply of 21 mn BTC (about 4.1 mn units) was held on the balance sheets of institutional entities, including public companies, investment funds, and governments, with this share growing by nearly 5 percentage points over the year (from 14.2% to 19.1%). Within this group (*Fig. 70*), ETFs and other funds accounted for about 37%, primarily the largest spot Bitcoin ETFs managed by BlackRock and Fidelity.

Public companies accounted for approximately 28%, with Strategy emerging as the largest holder. Governments (primarily the U.S. and China) accounted for 16%. The remainder was distributed among private companies, DeFi/smart contracts, and exchanges/custodians.

By 2025, cryptocurrency purchases by public companies had become systematic. Whereas such decisions were previously viewed as isolated cases, this period saw the emergence of an entire segment of companies for which accumulating

1. URL: https://www.kucoin.com/news/flash/crypto-funds-record-47-2b-net-inflows-in-2025?lang=en_US

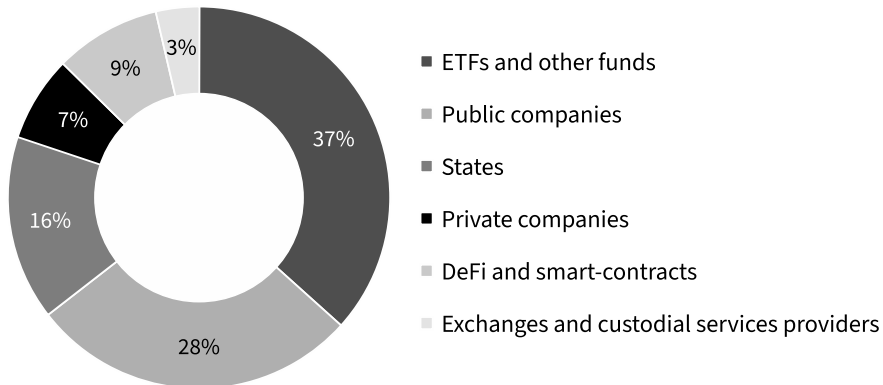


Fig. 70. Distribution of BTC across institutional organizations' balance sheets in 2025

Source: URL: bitcointreasuries.net

digital assets became a core strategic focus. The number of so-called Digital Assets Treasury Companies (DATCOs) doubled over the year, reaching 142 companies. Previously, this practice was associated primarily with Bitcoin, but in 2025, this trend also spread to Ether, BNB, Solana, and TRON. Many market participants, following Strategy's example, used borrowed funds, additional share issuances, and the issuance of convertible bonds to acquire assets, which, according to analysts, served as a driver of market capitalization but simultaneously increased systemic risks in the event of a correction.

The market capitalization of these companies (primarily Strategy) began to grow quite rapidly, especially during the summer and early fall. This called into question the need to include them in various market indices, which would have compelled funds that build portfolios based on such indices to purchase their shares. In October 2025, the financial index provider MSCI put forward a proposal for public discussion to exclude from its indices companies in which the majority of assets (50% or more) consist of digital assets. MSCI noted that such issuers largely resemble investment funds, whereas MSCI indices serve as benchmarks for companies directly engaged in some form of operational activity. This news drew criticism from some market participants,¹ as many companies hold digital assets as part of their core business and should not automatically be equated with funds, while certain companies (such as Strategy) also engage in actual commercial activities. In January 2026, MSCI abandoned its initial plan to exclude DATCO and announced a revision of the criteria for classifying non-operating companies.² This decision redu-

1. URL: <https://www.coindesk.com/opinion/2025/12/02/why-the-market-crashed-on-october-10-and-why-it-s-struggling-to-bounce>

2. URL: <https://finance.yahoo.com/news/msci-drops-plan-exclude-crypto-083540378.html>

ced market uncertainty and fears of forced sell-offs, which could have exacerbated the effects of the October crash.

In addition to companies directly purchasing cryptocurrencies for their own accounts, another key sign of the institutionalization of cryptocurrencies has been the growing number of companies whose businesses are directly linked to the cryptocurrency market. In 2025, major players went public: the issuer of the USDC stablecoin, Circle¹ (IPO worth \$1.05 bn) and the crypto exchanges Bullish² (IPO worth approximately \$1.1 bn) and Gemini³ (IPO worth \$425 mn). 2026 began with the IPO of the custodial provider BitGo:⁴ the company raised \$212.8 mn in its initial public offering, was valued at approximately \$2.08 bn at the offering price, and following a surge in its share price at the start of trading, its valuation reached \$2.59 bn.⁵

Alongside ETF issuers and public companies, sovereign states have firmly established themselves as a distinct and influential category of digital asset holders by 2025. The United States made the most significant contribution to this trend by radically revising its approach to managing crypto assets seized during law enforcement operations: instead of selling them off, the government adopted a policy of long-term retention. In the spring of 2025, an executive order was signed to establish the Strategic Bitcoin Reserve, as well as the “U.S. Digital Asset Stockpile.” The Strategic Reserve includes only BTC previously confiscated in criminal and civil cases, while the “Digital Asset Stockpile” is intended for other confiscated crypto assets (altcoins). According to public estimates, the reserve includes approximately 200,000 BTC, which have been designated as a long-term asset and are not intended for sale. With this executive order, BTC was formally recognized for the first time in U.S. official policy as a government reserve asset, thereby strengthening its legitimacy at the state level. At the same time, a bill (the BITCOIN Act of 2025) was introduced in Congress, providing for a program to purchase 1 million BTC over the next five years (200,000 BTC per year) with subsequent long-term storage; however, as of early 2026, it remains in the introduction stage.

In a broader context, governments as a whole are significant holders of BTC (typically through confiscations). For instance, China has accumulated a large volume of crypto assets seized from criminal schemes, and there is periodic discussion within the country about how to handle these assets.⁶ Germany, on the other hand,

1. URL: <https://investor.circle.com/news/news-details/2025/Circle-Announces-Pricing-of-Upsized-Initial-Public-Offering/default.aspx>

2. URL: <https://www.bullish.com/news-insights/pricing-of-upsized-initial-public-offering>

3. URL: <https://investors.gemini.com/news-releases/news-release-details/gemini-announces-pricing-initial-public-offering>

4. URL: <https://www.businesswire.com/news/home/20260121850585/en/BitGo-Holdings-Announces-Pricing-of-Initial-Public-Offering>

5. URL: <https://www.reuters.com/business/crypto-custody-firm-bitgos-shares-jump-246-nyse-debut-2026-01-22/>

6. URL: <https://www.reuters.com/world/china/china-debates-how-handle-criminal-crypto-cache-2025-04-15/>

chose to sell 50,000 confiscated BTC in 2024, which subsequently led to a public debate on whether the state should hold BTC as a strategic asset.¹ El Salvador, unlike most countries, continues to build up its state reserves through BTC purchases and publicly manages them as part of the financial system.² As a result, BTC is gradually becoming the subject of strategic decisions by governments, although there is still no unified approach to managing confiscated reserves.

2.10.3. Trends in certain crypto economy spheres

Memecoins

In 2025, the meme coin segment experienced a significant decline. At the beginning of the year, trading activity remained high, largely due to the successful development in 2024 of platforms designed to simplify the launch of custom tokens, such as Pump.fun (launchpad platforms). In early January 2025, the meme coin market capitalization stood at approximately \$116.7 bn (*Fig. 71*).

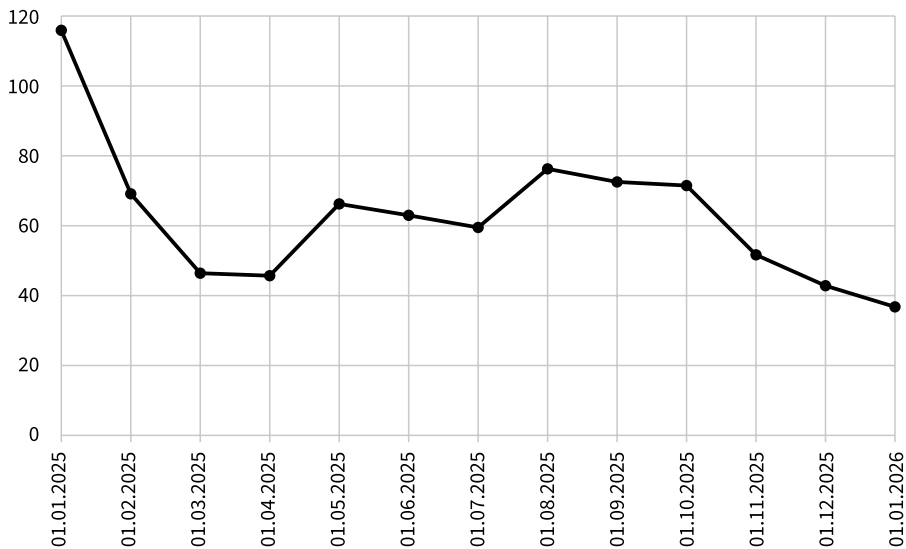


Fig. 71. Monthly trends in the total market capitalization of memecoins in 2025, in USD bn

Source: own compilations based on data: URL: <https://coinmarketcap.com/view/memes/>

1. URL: <https://finance.yahoo.com/news/while-traders-hodl-germany-loses-101127779.html>
2. URL: <https://www.coindesk.com/policy/2026/01/29/el-salvador-s-central-bank-buys-usd50-million-of-gold-as-government-keeps-adding-bitcoin>

The launch of the TRUMP meme coin¹ marked the peak of this sector's growth, after which both its market capitalization and user activity began a prolonged decline. Launched just a few days before the inauguration of the newly elected U.S. president and reaching a market capitalization of over \$9 bn in two days, it fell by 66% (nearly threefold) over the following month. Against the backdrop of such events and a large number of short-term speculative launches, interest in the sector declined significantly, and by early March 2026, the total market capitalization of meme coins stood at just over \$47 bn. Despite a brief rise in the sector's market capitalization during the summer and fall, memecoins, along with the rest of the market, also experienced a decline in October and November, closing the year at around \$36 bn.

Anonymous cryptocurrencies

By the end of 2025, there was a marked increase in attention toward privacy coins—cryptocurrencies designed to provide enhanced privacy and limited transaction traceability. The growing interest in such instruments largely coincided with the tightening of regulatory requirements for crypto market participants. In various jurisdictions, requirements for KYC (Know Your Customer), AML (Anti-Money Laundering), and the exchange of transaction information (Travel Rule) are already in effect or being phased in, along with mechanisms for exchanging information on digital asset transfers between service providers. Under these conditions, some users began to view instruments with built-in privacy protection as a way to minimize the disclosure of data on transaction activity. This was reflected in the price dynamics of assets such as Monero (XMR), Zcash (ZEC), and Dash (DASH), which demonstrated significant growth over the course of the year (*Fig. 72*).

While anonymous cryptocurrencies generally moved in tandem with the market in the first half of the year and did not show any significant outperformance, their price movements have become more volatile since the start of autumn. The most notable growth was seen in Zcash: in October and November, its price increased significantly, substantially outperforming both Bitcoin and other anonymous cryptocurrencies. Monero and Dash also demonstrated growth, albeit less extreme. By the end of the year, Zcash had recorded a 782% increase, Monero just over 120%, and Dash only 5.7% (compared to a 7.3% decline in BTC).

It is noteworthy that, among the anonymous cryptocurrencies under consideration, Dash showed the lowest returns. Unlike Monero and Zcash, privacy on the Dash network is not enabled by default but is implemented as an optional feature while maintaining blockchain transparency. This makes the asset somewhat more acceptable to regulated platforms, which may partly explain its more moderate overall returns.

1. URL: <https://www.coindesk.com/markets/2025/12/17/memecoin-boom-turns-into-capitulation-one-year-after-usd150-billion-market-peak>

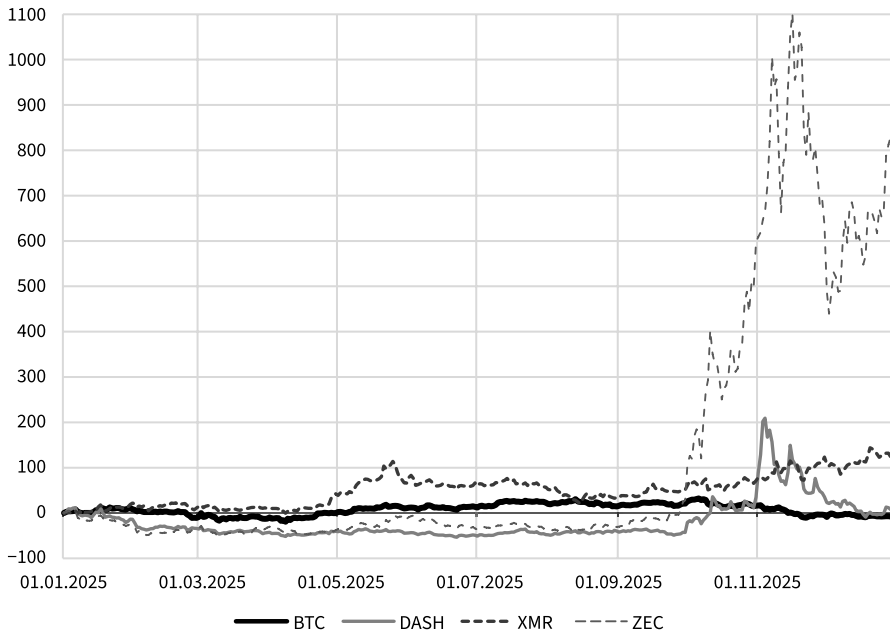


Fig. 72. Prices of anonymous cryptocurrencies (BTC) in 2025 (normalized to January 1, 2025), %

Source: own compilations based on data. URL: <https://finance.yahoo.com/>

2.10.4. Hacks

In 2025, security remained one of the traditional risk factors for the cryptocurrency market, with a significant portion of vulnerabilities linked to the architecture of decentralized finance (DeFi). According to Immunefi, the total losses from cryptocurrency hacks and fraud for the year amounted to approximately \$3.4 bn (the highest figure since 2022); the total number of recorded attacks exceeded 400.¹ Although the largest losses were incurred by centralized services (losses resulting from the February Bybit hack amounted to approximately \$1.46 bn²), it was the DeFi infrastructure that was most frequently targeted by hackers. Cross-chain bridges³—services that help move liquidity between different blockchain networks—once again proved to be the most vulnerable element of DeFi. According to analysts' esti-

1. URL: <https://phemex.com/news/article/80-of-hacked-crypto-projects-fail-to-recover-immunefi-reports-54269>

2. URL: <https://ru.investing.com/news/cryptocurrency-news/article-93CH-2665667>

3. URL: <https://digitalbytes.substack.com/p/the-hidden-costs-of-decentralisation>

mates, hacks of these bridges accounted for up to 40% of all losses in 2025 (about \$2.8 bn) Bridge exploits led to the loss of collateralized assets¹ and destabilized certain tokens, causing price distortions and cascading liquidations in related DeFi protocols that use such assets as collateral.

Vulnerabilities in the DeFi protocols' smart contracts themselves also persisted. According to CertiK, exploits related to contract logic errors, oracle manipulation,² and other issues accounted for approximately 14% of total losses (out of a total of \$2.46 bn) in the first half of 2025.³ Operational risks also played a significant role: according to CertiK, incidents caused by compromised wallets, with total losses exceeding \$1.7 bn,⁴ became the largest source of damage in the cryptocurrency sector. In a number of cases, such incidents were caused by the compromise of private and administrative keys. For DeFi, such incidents are particularly critical, as the capture of administrative keys allows for the direct theft of protocol funds, which is in fact not caused by any direct vulnerabilities in smart contracts. Another cause of this situation was phishing attacks on users of DeFi applications (approximately \$410 mn in losses in the first half of 2025).

The unique challenge of DeFi lies in the extreme difficulty of mitigating the consequences of hacks. The absence of compensation mechanisms and external intervention leads to a sustained outflow of liquidity and a loss of trust: according to Immunefi, approximately 80% of projects that have survived major attacks have been unable to recover their previous TVL levels and user base. Thus, DeFi vulnerabilities translate into greater risks for the cryptocurrency market as a whole, making the security of decentralized finance one of the most critical structural challenges facing the crypto industry. The scale of losses and the recurrence of incidents limit investor confidence and increase the cost of capital, as the risk of a hack is increasingly factored into the required return on cryptocurrency.

2.10.5. Prediction markets

Another sector closely associated with the cryptocurrency market that experienced significant growth and moved beyond niche products in 2025 was prediction markets, with Polymarket and Kalshi serving as the leading platforms. Polymarket is a decentralized prediction market built on the Polygon blockchain, while Kalshi operates as a regulated exchange in the U.S. under the supervision of the CFTC.

-
1. An exploit is the use of a vulnerability in software code or protocol logic to perform actions not intended by its normal operation (e.g., bypassing restrictions, gaining unauthorized access, or withdrawing assets).
 2. Services that broadcast third-party information to the blockchain, such as asset price quotes from cryptocurrency exchanges, prices of real-world assets, etc.
 3. URL: <https://deepstrike.io/blog/crypto-hacking-incidents-statistics-2025-losses-trends>
 4. URL: <https://www.certik.com/resources/blog/hack3d-the-web3-security-quarterly-report-q2-h1-2025>

Both projects saw a sharp increase in trading volume in 2025: trading volume on the Kalshi platform reached \$26 bn during this period¹ (compared to \$2 bn a year earlier), while Polymarket recorded approximately \$19.5 bn.² (against \$8 bn in 2024).

The growing interest in prediction markets stemmed not only from their betting aspect but also from their practical utility. By 2025, such markets were increasingly being used to factor in event-driven factors when making investment decisions. Contracts tied to U.S. Federal Reserve decisions, the release of macroeconomic data, and regulatory and political events allowed investors to factor in the probabilities of specific scenarios when establishing positions in cryptoassets and other asset classes. For example, purchasing a contract on monetary policy tightening could partially hedge open positions in risky assets and in the same cryptocurrencies that had actively reacted to U.S. monetary policy throughout the year. Thus, prediction markets complemented traditional financial instruments, allowing for event-driven uncertainty to be accounted for in a more explicit manner.

Regulation played a significant role. In 2025, Kalshi secured its status as a regulated exchange in the U.S., and a court upheld the legitimacy of trading contracts on events outside the realm of finance and the economy.³ Polymarket, in turn, took a step toward regulation by acquiring a licensed U.S. platform. This boosted confidence in prediction markets and paved the way for larger players to participate in them.

It is noteworthy that in a number of cases, prediction markets were quicker than other sources to reflect shifting expectations in the cryptocurrency market. For example, the probability of an Ethereum ETF being approved, as traded on Polymarket, rose sharply several days before official statements from regulators, outpacing traditional sources of information. In 2025, such quotes began to be used by the media and analysts as an additional indicator of market expectations.

Overall, 2025 was a turning point for prediction markets: they were increasingly viewed less as a form of gambling and more as an independent financial instrument. Increased liquidity, arbitrage opportunities, and regulatory approval make them potentially attractive to institutional investors and corporations. In the long term, prediction markets could establish a firm foothold alongside futures and options, particularly in the segment of hedging narrowly focused macroeconomic and regulatory risks.

Meanwhile, prediction markets have faced criticism related to the risks of insider trading. There have been instances of sharp price movements in individual contracts shortly before the publication of official decisions or the release of statistics, raising suspicions of the use of non-public information. Since the legal frame-

1. URL: <https://www.kalshidata.com/>

2. URL: <https://dune.com/filarm/polymarket-activity>

3. URL: <https://kpmg.com/kpmg-us/content/dam/kpmg/pdf/2025/current-state-prediction-markets.pdf>

work for such platforms remains less detailed compared to the securities market, oversight of trading in event-driven contracts is an issue that regulators are likely to address in the near future.

2.10.6. The tokenized assets market (RWA)

Another significant development in 2025 was the growth of the Real-World Assets (RWA) tokenization segment. RWAs refer to traditional financial assets—such as government bonds, funds, loans, and commodity assets—represented as tokens on a blockchain. Throughout the year, this market grew at an accelerated pace: according to RWA.xyz, the total value of tokenized real-world assets (excluding stablecoins) increased from approximately \$15 bn at the beginning of the year to \$40 bn by the end of the year (Fig. 73).

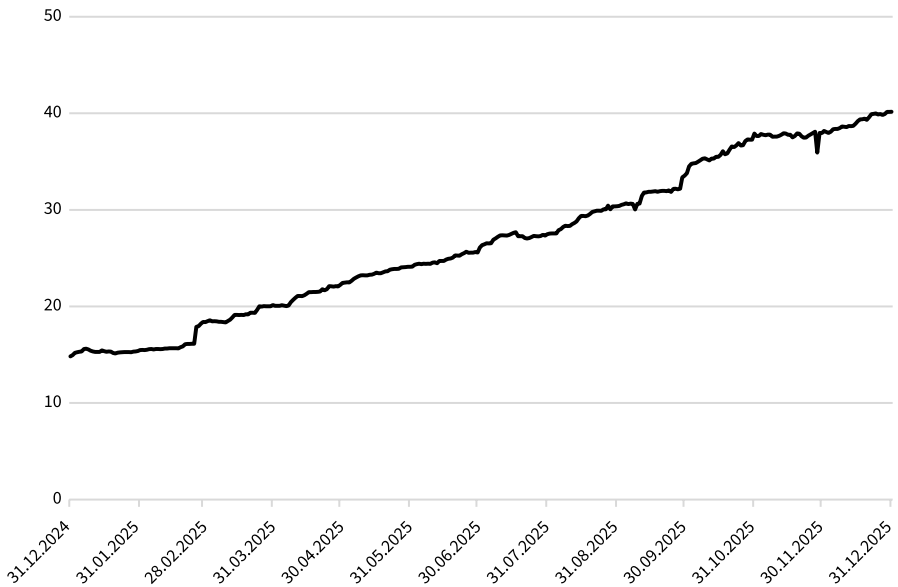


Fig. 73. RWA Market Capitalization Trends in 2025, in USD bn

Source: own compilations based on data. URL: <https://app.rwa.xyz/commodities>

A key driver of this trend has been tokenized U.S. Treasury securities—essentially on-chain equivalents of money market funds that offer returns in line with Fed rates. Between 2024 and 2025, the volume of such instruments grew to over \$10 bn.¹

1. URL: <https://21x.eu/the-16-trillion-opportunity/>

A “tokenized cash” market has emerged on the blockchain, serving as an alternative to stablecoins: these tokens generate interest income and are used as collateral in DeFi. And some stablecoins, such as USDtb, are directly backed by tokenized money market funds. At the same time, the success of individual products was largely determined not by the issuer’s brand, but by the depth of integration into the crypto infrastructure. This was reflected in trading volumes, the liquidity involved, and the number of protocols in which the tokens were simultaneously used in lending, settlement, and yield strategies.

In addition to treasury securities, tokenization has extended to funds and credit assets. In 2025, asset management firms and fintech platforms expanded the issuance of tokenized fund shares and on-chain loans backed by real assets.¹ Such instruments began to play a significant role in DeFi ecosystems, bringing real-world interest rates onto the blockchain.

The interest in RWA stems primarily from its infrastructure advantages: blockchain simplifies the issuance, accounting, and settlement of assets, reducing costs and speeding up transactions. By 2025, major banks and international institutions were already using tokenization for repo transactions and bond placements, achieving faster and more efficient settlements compared to traditional markets. A notable example is the institutional blockchain infrastructure Canton Network, which has placed a total of more than \$6 trillion in tokenized assets.²

Thus, by 2025, the tokenization of real-world assets moved beyond the experimental stage and entered a phase of practical application. Tokenized bonds, funds, and loans began to function fully and attract significant capital. For the crypto market, this means an influx of more stable assets and further convergence with the traditional financial system, while RWA is becoming one of the key drivers of its institutionalization.

2.10.7. Trends in Cryptocurrency Market Regulation

In current regulatory practice, the prevailing view is that stablecoins constitute a distinct class of cryptoassets whose functionality is more akin to payment systems and/or electronic money (e-money) systems. Accordingly, requirements are now imposed on stablecoin issuers that are, in essence, similar to banking regulations. For example, in 2025, the GENIUS Act³ was signed in the U.S., which requires stablecoin issuers to fully back their coins with reserves of highly liquid, low-risk as-

-
1. URL: <https://cryptoslate.com/blackrock-just-lost-control-of-the-10b-tokenized-treasury-market-to-circle-for-one-simple-mechanical-reason/>
 2. URL: <https://www.coindesk.com/ru/business/2025/12/09/blockchain-network-canton-with-usd6t-of-real-world-assets-taps-redstone-for-defi-access>
 3. URL: <https://www.whitehouse.gov/fact-sheets/2025/07/fact-sheet-president-donald-j-trump-signs-genius-act-into-law/>

sets, as well as to regularly disclose the composition of these reserves. In practice, this means that a significant portion of the reserves is formed from short-term U.S. government bonds: stablecoin issuers already hold about \$200 bn in U.S. Treasury bills, with a total market capitalization of about \$310 bn.¹

The EU has implemented the MiCA (Markets in Crypto-Assets) regulation, which imposes strict requirements on the collateralization of stablecoins, requires crypto-exchanges to register users, ensure the security of client assets, disclose information, and protect investors from market manipulation and fraud. At the same time, European authorities emphasize that their regulation is motivated not only by investor protection and ensuring financial stability, but also by the need to avoid the risks of increased dollarization and the undermining of the eurozone's monetary sovereignty.² Stablecoin regulation is also being implemented in other countries, including Canada (Stablecoin Act), Hong Kong (Stablecoins Ordinance), and the UAE (Federal Decree-Law No. 6 of 2025).

At the same time, stablecoins are increasingly being used outside developed economies. In countries with high inflation, currency restrictions, or sanctions risks, dollar-pegged stablecoins are beginning to serve as a means of saving and making payments (for example, in Venezuela³). This trend is also currently being discussed as a risk to the banking system:⁴ international organizations point out that the widespread adoption of stablecoins could displace local currencies and bank deposits, affecting financial stability and the transmission mechanisms of monetary policy.

As for the regulation of other, volatile cryptocurrencies, leading jurisdictions are also currently actively working on this issue. In the U.S., the CLARITY Act⁵ is being drafted, aimed at establishing a unified legal framework for digital assets and regulating the market. The bill distinguishes between digital commodities (decentralized cryptocurrencies such as BTC, ETH, LTC) and investment contract assets (those issued or previously issued via ICOs, such as XRP, SOL) and also establishes the division of authority between the Commodity Futures Trading Commission (CFTC) and the Securities and Exchange Commission (SEC). A separate set of requirements concerns market infrastructure: cryptocurrency exchanges, brokers, and custodial providers must register, comply with rules regarding the safekeeping of client assets, the prevention of market manipulation and conflicts of interest, and adhere to anti-money laundering legislation.

1. URL: <https://www.binance.com/en/square/post/33785629481018>

2. URL: <https://www.ecb.europa.eu/press/blog/date/2025/html/ecb.blog20250728~e6cb3cf8b5.en.html>

3. URL: <https://www.wsj.com/finance/currencies/maduros-crypto-backed-oil-deals-put-tether-at-center-of-venezuela-money-drama-3fc53b29>

4. URL: <https://www.reuters.com/world/stablecoins-could-put-competitive-pressure-monetary-frameworks-imf-official-says-2026-01-22/>

5. URL: <https://www.congress.gov/bill/119th-congress/house-bill/3633>

In the EU, the crypto market is regulated by the MiCA Regulation,¹ which establishes a single status for crypto-asset service providers (CASP) and requires authorization from a national regulator. Such companies are subject to requirements regarding client protection (including rules on the safekeeping and handling of client assets, internal controls, and complaint handling), as well as requirements to combat market abuse (such as insider trading and market manipulation on platforms).

The United Kingdom is actively developing a comprehensive regulatory framework for cryptoassets.² Starting in September 2026, the Financial Conduct Authority (FCA) will begin accepting applications for the authorization of crypto companies. The framework for the new regime is being established through HM Treasury regulations under the Financial Services and Markets Act 2000 (FSMA). The final version of the relevant legislation was introduced to Parliament in December 2025.³ However, certain regulatory elements are already in effect, including requirements for crypto-financial advertising and the “travel rule” for crypto-asset transfers.

Overall, regulation of the cryptocurrency market in many countries boils down to licensing providers, strengthening KYC/AML measures, and attempting to bring the stablecoin and exchange segments out of the gray area. At the global level, standards are set by the FATF (Financial Action Task Force), which requires crypto providers to implement AML procedures.⁴

As for Russia, by early 2026, the ownership of and investment in crypto assets will effectively be permitted, though only indirectly, via cash transactions or foreign infrastructure. At the same time, Russia remains one of the largest markets in terms of actual cryptocurrency usage. According to Chainalysis, between July 2024 and June 2025, Russia received \$376.3 bn in crypto assets⁵ and was among the top ten global leaders in terms of adoption rates.⁶ In December 2025, the Bank of Russia presented a concept for regulating cryptocurrencies,⁷ under which digital currencies and stablecoins are recognized as monetary assets and established in the legal framework as investment vehicles, but not as a means of payment. A comprehensive legislative framework is expected to be ready by mid-2026.

1. URL: <https://www.esma.europa.eu/esmas-activities/digital-finance-and-innovation/markets-crypto-assets-regulation-mica>

2. URL: <https://www.fca.org.uk/firms/new-regime-cryptoasset-regulation>

3. URL: <https://www.gov.uk/government/publications/regulatory-regime-for-cryptoassets-regulated-activities-draft-si-and-policy-note>

4. URL: <https://www.fatf-gafi.org/en/topics/virtual-assets.html>

5. URL: <https://www.chainalysis.com/blog/europe-crypto-adoption-2025/>

6. URL: <https://www.chainalysis.com/blog/2025-global-crypto-adoption-index/>

7. URL: <https://cbr.ru/press/event/?id=28213>