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IMPROVING INVESTMENT MECHANISMS FOR INDIVIDUAL INVESTORS IN THE RUSSIAN FINANCIAL INSTRUMENTS MARKET UNDER SANCTIONS-RELATED RESTRICTIONS AND MACROECONOMIC INSTABILITY

Specialty 5.2.4 — Finance

Abstract

of the dissertation submitted for the degree of
Candidate of Economic Sciences

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Relevance of the research topic. Sanctions-related restrictions and macroeconomic instability have changed the conditions under which individual investors operate in the Russian financial market. Reduced access to foreign assets, price volatility, inflation risks and financial fraud heighten the importance of preserving savings, maintaining liquidity and generating returns. The concentration of individuals' investment activity in the domestic market increases the need to broaden the range of available instruments and improve investment decision-making.

The sanctions regime and hybrid warfare form part of the US political and financial elite's opposition to changes in the world economic order. In this context, the US authorities are guided by H. Mackinder's geopolitical theory and Z. Brzezinski's ideas, with the aim of cutting Russia off from the global financial market and severing its ties with European countries. This confrontation will be protracted; research into investment under these conditions will therefore remain relevant over the long term and at the global level.

Household savings provide investment resources for the national economy. The predominance of bank deposits and the limited use of alternative instruments constrain opportunities for investing these savings over the long term. Instruments based on precious metals, particularly gold, are becoming especially important. Their potential is constrained by high spreads, collective investment costs, uneven infrastructure development and a lack of comparable market information. The need to address these constraints determines the relevance of the research.

Existing research on the topic. The functioning of financial markets and investment instruments has been examined in the works of A. E. Abramov, N. I. Berzon, S. Yu. Glazyev, E. F. Zhukov, A. M. Karminsky, V. A. Lyalin and Ya. M. Mirkin. The use of gold as an investment asset and precious metals pricing have been studied by S. A. Anesyants and S. P. Kyurdzhiev. The interrelated mechanisms for incorporating precious metals into individual investors' portfolios, reducing costs, ensuring liquidity and establishing domestic price benchmarks under sanctions remain insufficiently developed.

Research aim and objectives. The aim of the research is to develop proposals for improving investment mechanisms for individual investors in the Russian financial instruments market under sanctions-related restrictions and macroeconomic instability. The following objectives have been set to achieve this aim:

1. Develop a model of a balanced investment portfolio combining traditional financial instruments and precious metals through the application of the Mobius effect;

2. Develop a model of domestic market indicators for valuing precious metals instruments, taking cross-border restrictions into account;

3. Substantiate a methodology for optimising banks' bid–ask spreads on precious metals transactions using Value-at-Risk (VaR) with a horizon of two business days;

4. Develop a framework for incorporating precious metals instruments into the system of individual investment accounts (IIAs) and differentiated tax incentives;

5. Propose a methodology for remunerating the management companies of unit investment funds (UIFs) according to the financial performance of the funds under their management;

6. Develop a framework for precious metals market infrastructure that integrates digital and physical channels;

7. Substantiate mechanisms for lending secured by precious metals and investment fund units to enhance the liquidity of long-term investments.

Object and subject of the research. The object of the research comprises the processes through which individual investors invest temporarily available funds under current conditions. The subject of the research comprises the models, instruments and methodological approaches used to develop and make management decisions concerning transactions in financial instruments.

Compliance with the research specialty profile. The dissertation has been prepared in accordance with the profile of research specialty 5.2.4 Finance: 7. Valuation of financial assets. Financial asset portfolio management. Investment decisions in the financial sector, 19. Financial risks. Financial risk management, 22. Financial instruments and transactions involving them, 23. Financial investment and financial innovation. Sustainable development finance. 'Green' finance and environmental investment.

The research addresses in depth the 4 specified areas of the profile of research specialty 5.2.4 'Finance'.

Theoretical foundation, methodology and research methods. The theoretical foundation comprises scholarly concepts concerning the transformation of savings into investment, the functioning of financial markets, portfolio management and financial risk management. The research employs analysis and synthesis, induction and deduction, systems and comparative approaches, abstraction, situational and scenario modelling, case study analysis and the analysis of regulatory documents. Quantitative methods include VaR-based price risk assessment, return calculations, comparisons of investment strategies and the construction of market indicators.

Information, empirical and regulatory basis of the research. The research draws on materials from the Bank of Russia, Moscow Exchange, the Government of the Russian Federation, credit institutions, management companies and news agencies, as well as academic publications. The empirical basis comprises financial instrument performance over time, transaction terms, asset composition and fund costs. Numerical examples cover equity transactions in 2020 –2023, gold prices in 2021–2024 and long-term changes in bullion coin prices; the analytical data have been updated to early 2026. The research examines legislation and regulations governing banking, the securities market, investment funds, taxation and transactions in precious metals.

Scientific novelty and principal propositions submitted for defence. The scientific novelty lies in the development of a framework for improving the investment instruments and methods available to individuals, integrating risk and cost management, tax incentives, market infrastructure development and investment liquidity. The following principal research findings are submitted for defence:

1. **A methodology for substantiating banks' bid–ask spreads on precious metals transactions.** The proposed methodology uses parametric VaR with a horizon of two business days as a quantitative price risk benchmark for setting the difference between buying and selling prices. It involves constructing a daily gold price series, calculating relative changes, their mean and standard deviation, selecting a confidence level and validating the results. Using data for 2021–2024, the dissertation derives a benchmark of 5.83%, which is compared with a spread of 8% in the example involving Sberbank PJSC. The market risk estimate is distinguished from the full spread: the bank's costs, liquidity and the duration of the open position must also be taken into account when setting the latter. The novelty lies in a shift towards a verifiable quantitative basis for the spread, with regular parameter updates.

2. **A framework for reforming individual investment accounts.** The research substantiates the expansion of the range of instruments eligible for IIAs to include Bank of Russia bullion coins and the introduction of tax incentives for precious metals transactions. The proposed eligibility conditions combine a minimum investment of three times the statutory minimum wage, the maintenance of a minimum balance for three years and a limit on purchase and sale transactions of once a day. This combination of quantitative and time-related conditions is intended to encourage long-term savings while retaining the ability to conduct transactions. The distinctive feature of the framework is the integration of precious metals instruments into the tax incentive mechanism for individual investment. These conditions are formulated as proposals for improving regulation.

3. **A methodology for remunerating precious metals fund management companies.** Remuneration is proposed to depend on management performance rather than the volume of assets. If the unit value falls, remuneration is 0%; if it rises in line with the price of the underlying metal, remuneration is 3–5% of the increase; if it outperforms the metal, remuneration is 10–15% of the excess increase. The methodology provides for the accumulation of physical gold at accredited credit institutions or the Bank of Russia, with the possibility of earning additional income through gold lending. It seeks to align the interests of managers and unitholders, reduce agency costs and promote effective management. The proposed organisational arrangements take account of the specific features of transactions in physical metal.

4. **A framework for developing precious metals market infrastructure.** The framework integrates a digital marketplace for bullion coins, based on the Bank of Russia's platform, with a network of certified exchange outlets in regions with insufficient banking infrastructure. The digital system should provide comparable information on coin ranges, prices, availability, delivery times and storage conditions, and enable remote purchases, sales and delivery. The research proposes incentives for credit institutions that expand their precious metals operations, including differentiated reserve requirements. The framework combines information provision, the physical circulation of assets and regulatory instruments, laying the foundation for reducing geographical barriers to access and information asymmetry.

5. **A balanced portfolio model applying the Mobius effect.** The model combines a banking component to maintain liquidity, blue-chip equities to benefit from market recovery and precious metals for the long-term investment of savings. The Mobius effect is interpreted as stock prices moving ahead of indicators of economic performance. A decision-making algorithm is proposed that uses already published data, with reserves, acceptable losses and investment horizons determined in advance. Asset weights depend on the investor's objectives and constraints; the model does not prescribe a single allocation for all investors. A

numerical example for 2020–2023 illustrates the advantage of trading equities during selected periods over continuous holding. The performance of the equity component is distinguished from the return on the portfolio as a whole and is not automatically extrapolated to other periods or to a practical investment algorithm.

6. **A model of domestic market indicators for precious metals.** The proposed system comprises bullion bar and bullion coin price indicators based on actual Russian transactions, together with a 'Gold Mining' sectoral equity index. Physical metal prices are calculated taking account of transaction volumes and the comparability of instruments; price indicators are expressed on a common base scale. Rules are specified for equity weighting and for maintaining index continuity when its composition is revised. The model's distinctive feature is its use of domestic rouble-denominated data and separate valuation of physical metal, coins and mining company equities, reflecting the characteristics of each segment. Applicability depends on data sufficiency; exchange data on coins may be incorporated once the relevant trading arrangements have been established.

7. **A framework for lending secured by precious metals and investment fund units.** The framework combines long-term investment with access to current liquidity through secured lending. It includes an assessment of the liquidation value of collateral that takes volatility into account, the differentiation of lending rates by risk and a scheme of interaction between the investor, the credit institution and the unit investment fund. Borrowing against collateral enables investors to retain their investment position without immediately selling the underlying asset. The research contribution lies in integrating the lending mechanism into individual investors' portfolio management; practical applicability depends on borrowing costs and the risks of changes in collateral value.

Theoretical and practical significance of the findings. The theoretical significance lies in the development of an integrated approach to investing individual savings, linking asset selection, risk assessment, intermediation costs, tax incentives and the organisation of market infrastructure. The findings extend

approaches to constructing investment portfolios and managing instruments linked to precious metals.

The practical significance derives from the potential use of the proposed approaches by individual investors, credit institutions, management companies and investment companies when selecting instruments, substantiating transaction terms and improving financial services. The infrastructure and regulatory proposals are intended to broaden access to investment and facilitate the long-term investment of savings. The research materials may be used in teaching finance courses.

Reliability of the findings. Reliability is supported by the use of official sources, comparisons of financial market data, calculations based on historical series and comparisons of investment strategies. The algorithms, underlying assumptions and model limitafions are explicitly stated. The quantitative results relate to the selected samples, periods and calculation conditions; their application under changing market conditions requires updated data and renewed validation of the parameters.

Presentation and implementation of the research findings. The findings have been implemented in the operations of the investment companies BCS and ATON, as confirmed by implementation certificates. Selected propositions have been incorporated into teaching at the Russian Presidential Academy of National Economy and Public Administration (RANEPA) and Rostov State Transport University in the courses 'Organisation of Investment Activities' and 'Securities Market and Exchange Operations'. The principal conclusions were discussed at national research and practice conferences in 2023–2026, including 'Current Trends in the Development of the Economy, Politics and Law', 'TransPromEk-2024' and 'Economic and Legal Mechanisms for Ensuring National Security'.

Publications on the research topic. A total of 23 research papers have been published, including 7 single-authored papers, with a total volume of 14.78 printed sheets; the author's contribution amounts to 8.01 printed sheets. Of these, 20 papers appeared in journals on the Higher Attestation Commission (VAK) list,

including 12 in K2 journals and 8 in K3 journals; 4 of these papers are single-authored.

The following are among the author's early publications that provided the starting point for defining the research problem and developing the dissertation's core conceptual propositions. Their examination of banking instruments, long-term investment in precious metals and financial literacy established the initial directions for subsequent research:

1. Anesyants, S. A. Opportunities and prospects for precious metals in the market for investment (financial) services for individuals under current conditions / S. A. Anesyants, **N. A. Titov** // Nauka i obrazovanie: khozyaistvo i ekonomika; predprinimatelstvo; pravo i upravlenie. – ISSN 2219-0279 – 2024. – No. 2 (165). – pp. 7–11. (In Russian).

2. Anesyants, S. A. Development of bank deposits as an area of investment (financial) services for individuals / S. A. Anesyants, **N. A. Titov** // Zametki uchenogo. – ISSN 2713-0142 – 2023. – No. 7. – pp. 273–278. (In Russian).

3. Anesyants, S. A. Development of investment service methods for corporations and individuals under current conditions / S. A. Anesyants, O. V. Timchenko, E. V. Radchenko, **N. A. Titov** // Ekonomika i upravlenie: problemy, resheniya. – 2024. – Vol. 6. – No. 4 (145). – pp. 152–158. (In Russian). DOI: 10.36871/ek.up.p.r.2024.04.06.019

4. Anesyants, S. A. Specific features of long-term investment in precious metals by individuals in the financial services market under current conditions / S. A. Anesyants, **N. A. Titov** // Ekonomika i upravlenie: problemy, resheniya. – 2023. – Vol. 1. – No. 12 (141). – pp. 157–164. (In Russian).
DOI: 10.36871/ek.up.p.r.2023.12.01.018

5. Sviridov, O. Yu. The problem of improving financial literacy among the population to counter various forms of fraud / O. Yu. Sviridov, S. A. Anesyants, **N. A. Titov** // Pervyi ekonomicheskii zhurnal. – 2023. – No. 12 (342). – pp. 166–170. (In Russian).
DOI: 10.58551/20728115_2023_12_166

6. **Titov, N. A.** Challenges of generating income by investing available funds in equity instruments in the provision of services to individual investors / **N. A. Titov** // Ekonomika: vchera, segodnya, zavtra. – 2023. – Vol. 13. – No. 10-1. – pp. 492–498. (In Russian).
DOI: 10.34670/AR.2023.26.46.064

7. **Titov, N. A.** Development of investment decision-making methods in banking services for individuals / **N. A. Titov** // Ekonomika i upravlenie: problemy, resheniya. – 2024. – Vol. 5. – No. 3 (144). – pp. 128–133. (In Russian).
DOI: 10.36871/ek.up.p.r.2024.03.05.016

Length and structure of the dissertation. The dissertation comprises 242 pages and includes an introduction, three chapters with three sections each, a conclusion, a list of abbreviations and symbols, and a bibliography containing 220 sources. The text is illustrated with 62 figures and 33 tables.