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IMPROVING THE INVESTMENT BEHAVIOUR OF THE POPULATION OF UZBEKISTAN THROUGH ENHANCED FINANCIAL LITERACY

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Annotatsiya. Moliyaviy savodxonlikning O'zbekiston Respublikasi aholisi investitsion xulq-atvorini takomillashtirish va fond bozori ishtirokchilari orasida xulq-atvorga oid xatolarni kamaytirishdagi o'rni tadqiq etilgan. O'ziga ortiqcha ishonch, ommaviy xulq-atvorga ergashish, yo'qotishdan qochish, dispoziitsiya effekti, langarlash va mental hisob kabi asosiy kognitiv hamda emotsional og'ishlar tahlil qilingan. Xalqaro va mahalliy tadqiqotlarning qiyosiy tahlili, shuningdek, O'zbekiston Respublikasi Markaziy banki, "Toshkent" Respublika fond birjasi hamda xalqaro moliya institutlarining rasmiy statistik ma'lumotlari asosida moliyaviy xizmatlardan raqamli foydalanish imkoniyatlarining jadal kengayishi bilan aholining investitsiyalarga oid moliyaviy savodxonligi yetarli darajada shakllanmagani o'rtasidagi tarkibiy nomutanosiblik aniqlangan. Tadqiqot natijalari umumiy moliyaviy savodxonlik risklarni baholash, investitsiya portfelini diversifikatsiya qilish va moliyaviy axborotni tanqidiy baholash bo'yicha amaliy kompetensiyalar bilan mustahkamlanmasa, oqilona investitsion qarorlar qabul qilinishini har doim ham ta'minlamasligini ko'rsatadi.

Kalit so'zlar: moliyaviy savodxonlik, investitsion xulq-atvor, fond bozori, xulq-atvor moliyasi, xulq-atvorga oid og'ishlar, o'ziga ortiqcha ishonch, ommaviy xulq-atvorga ergashish, yo'qotishdan qochish, chakana investorlar, kapital bozori, O'zbekiston.

Аннотация. Исследована роль финансовой грамотности в совершенствовании инвестиционного поведения населения Республики Узбекистан и снижении поведенческих ошибок среди участников фондового рынка. Проанализированы основные когнитивные и эмоциональные искажения, включая чрезмерную уверенность, стадное поведение, неприятие потерь, эффект диспозиции, эффект якоря и ментальный учёт. На основе сравнительного анализа международных и отечественных исследований, а также официальных статистических данных Центрального банка Республики Узбекистан, Республиканской фондовой биржи «Тошкент» и международных финансовых институтов выявлен структурный дисбаланс между быстрым расширением цифрового доступа к финансовым услугам и недостаточным уровнем инвестиционной грамотности населения. Результаты исследования показывают, что общая финансовая грамотность не всегда обеспечивает принятие рациональных инвестиционных решений, если она не подкрепляется практическими компетенциями в области оценки рисков, диверсификации инвестиционного портфеля и критического анализа финансовой информации.

Ключевые слова: финансовая грамотность, инвестиционное поведение, фондовый рынок, поведенческие финансы, поведенческие искажения, чрезмерная уверенность, стадное поведение, неприятие потерь, розничные инвесторы, рынок капитала, Узбекистан.

Abstract. The role of financial literacy in improving the investment behaviour of the population of the Republic of Uzbekistan and reducing behavioural errors among stock market participants is examined. Major cognitive and emotional biases, including overconfidence, herd behaviour, loss aversion, the disposition effect, anchoring, and mental accounting, are analysed. Based on a comparative analysis of international and domestic studies, as well as official statistical data from the Central Bank of the Republic of Uzbekistan, the Republican Stock Exchange "Toshkent", and international financial institutions, a structural imbalance is identified between the rapid expansion of digital access to financial services and the insufficient level of investment-specific financial literacy among the population. The findings indicate that general financial literacy does not necessarily ensure rational investment decision-making unless it is reinforced by practical competencies in risk assessment, investment portfolio diversification, and the critical evaluation of financial information.

Keywords: financial literacy, investment behaviour, stock market, behavioural finance, behavioural biases, overconfidence, herd behaviour, loss aversion, retail investors, capital market, Uzbekistan.

INTRODUCTION

The growing participation of households in financial markets has increased interest in how individuals make investment decisions. Traditional financial theory assumes that investors act rationally, evaluate risks and returns objectively, and choose portfolios that maximise utility. In practice, however, decisions are often influenced by limited information, emotions, and cognitive shortcuts. Investors may overestimate their abilities, follow the crowd, hold losing assets for too long, sell profitable assets too early, or react differently to gains and losses. These deviations are known as behavioural biases. The importance of this issue has increased with the digitalisation of financial services and easier access to securities trading. Mobile applications, online platforms, and social media have lowered barriers to investing but have also increased investors' exposure to diverse information, speculative activity, and emotional market reactions. With an insufficient level of financial knowledge, easier access may encourage excessive trading, herd behaviour, and short-term speculation rather than rational investing. Financial literacy has therefore become a key factor in the development of stable and inclusive capital markets. It includes the knowledge, skills, and attitudes needed to understand financial products, assess risks, and make informed decisions. In securities markets, general financial literacy differs from investment literacy, which involves understanding risk and return, diversification, inflation, market volatility, valuation, and issuer-related risks.

Research shows that financial literacy generally improves investment decisions and portfolio diversification while reducing reliance on intuition. However, its impact varies across behavioural biases. It may reduce errors such as anchoring or herd behaviour but may be less effective in addressing emotionally driven biases such as loss aversion. In some cases, investors with developing financial knowledge may become overconfident, potentially leading to excessive trading. Therefore, the relationship between financial literacy and behavioural biases is complex.

Modern studies increasingly view financial literacy as a behavioural risk-management tool. Financially literate investors are better able to distinguish reliable information from market noise, evaluate investment recommendations, compare risks and returns, and avoid decisions based solely on market sentiment. Its effectiveness, however, depends on whether knowledge is translated into consistent behaviour. This issue is especially important in emerging markets, where information asymmetry, evolving market depth, and developing advisory services may increase the sensitivity of retail investors to market conditions. Investment decisions in such markets may also be influenced by social networks, informal recommendations, and speculative expectations alongside fundamental analysis.

For Uzbekistan, the topic is strategically important as the country continues its transition towards a market-oriented economy. National reforms aim to attract private investment, strengthen corporate governance, expand private ownership, and increase confidence in market institutions. Achieving these goals requires not only modern capital-market infrastructure but also financially informed and resilient investors. Uzbekistan has made significant progress in expanding financial inclusion and financial education. The Central Bank has implemented educational initiatives through the Finlit.uz platform and other programmes. However, most efforts primarily focus on banking services, savings, borrowing, and consumer protection. As capital-market development becomes a priority, greater attention may be given to investment literacy. Traditionally, Uzbek households have preferred bank deposits, foreign currency, real estate, and precious metals.

At the same time, economic growth, rising incomes, and increasing digitalisation are creating new opportunities for investment. The effective mobilisation of household savings depends on trust in financial institutions, transparency, investor protection, and the ability of citizens to make informed decisions. An adequate level of financial literacy can contribute to improved risk assessment, more informed investment decisions, and greater confidence in the market. Behavioural factors are therefore relevant not only at the individual level but also from a public-policy perspective. Widespread behavioural biases may influence market volatility, speculative trading, and the relationship between market prices and fundamental values. They may also affect the effectiveness of privatisation and public offerings when investment decisions are shaped by expectations that are not fully supported by market fundamentals. Therefore, investment literacy should be considered an important element of investor protection and capital-market regulation.

Although behavioural finance has received growing international attention, the relationship between financial literacy and investor biases requires further examination in the context of Uzbekistan. Existing studies mainly focus on financial inclusion, savings behaviour, and digital financial services, while comparatively less attention has been devoted to how financial literacy affects specific behavioural biases among investors. This research gap is important because findings from developed markets cannot always be directly applied to Uzbekistan. Investor behaviour is influenced by local institutions, financial culture, income levels, trust in markets, and digital inclusion. Therefore, empirical evidence from Uzbekistan is needed to identify the most common biases and determine which aspects of financial literacy are most effective in reducing them.

Accordingly, this study examines the role of financial literacy in reducing behavioural errors among individual investors in Uzbekistan's stock market. It focuses on how financial knowledge, investment skills, and informed attitudes influence overconfidence, herd behaviour, loss aversion, anchoring, representativeness, mental accounting, and the disposition effect. The study also explores whether risk perception mediates the relationship between financial literacy and investment decision quality. The research aims to systematise theoretical approaches linking financial literacy and behavioural finance; identify key behavioural biases affecting investors; assess investment literacy levels; analyse the relationship between literacy and behavioural errors; and develop policy recommendations for investor education and capital-market development. Special attention is given to factors such as age, income, education, investment experience, digital access, and reliance on social media.

The main hypothesis is that higher investment literacy reduces behavioural biases and improves investment decisions. However, the strength of this effect may vary across different biases and levels of investor confidence. Therefore, the study distinguishes between objective financial knowledge, perceived competence, and actual investment behaviour. The scientific contribution of the research lies in applying behavioural-finance concepts to the institutional context of Uzbekistan. It integrates financial literacy, behavioural biases, risk perception, and investment decision quality into a single analytical framework. From a practical perspective, the findings can support investor-education programmes, improve digital investment platforms, and strengthen investor-protection policies.

LITERATURE REVIEW

The relationship between financial literacy and behavioural biases in investment decision-making is a key topic in financial economics and behavioural finance. Traditional finance assumes that investors act rationally, while behavioural finance demonstrates that decisions are often influenced by cognitive shortcuts, emotions, and social pressure, which may lead to less rational investment choices. Behavioural biases are commonly divided into three groups. Cognitive biases include anchoring, representativeness, confirmation bias, and mental accounting. Emotional biases include loss aversion, regret aversion, and the disposition effect. Social biases mainly involve herd behaviour. Overconfidence combines both cognitive and emotional elements.

Financial literacy is often viewed as a tool for reducing these biases. However, researchers distinguish between general financial literacy, which encompasses knowledge of savings, inflation, borrowing, and budgeting, and investment literacy, which includes an understanding of securities, diversification, risk, and return. An individual may be financially literate in everyday matters but may still encounter challenges when making investment decisions. Dhandapani (2026) finds that financial literacy positively affects investment decision quality and helps investors better evaluate risks and opportunities. However, overconfidence and risk aversion remain important factors, suggesting that knowledge can be complemented by other behavioural competencies to promote rational decision-making. Similarly, Malik (2026) shows that behavioural biases influence investment decisions through risk perception. Financial literacy reduces these effects by improving investors' ability to interpret information and assess risks. This finding is particularly relevant for emerging markets such as Uzbekistan, where further improvements in information accessibility and transparency can support informed investment decisions. Mahmood (2024) confirms that financial literacy moderates the impact of behavioural biases. Financially literate investors are generally less dependent on rumours and more capable of evaluating financial consequences. However, Kumar (2025) presents a complementary perspective, finding that financial literacy does not always fully mitigate irrational behaviour. Investors may understand financial concepts but may still follow market rumours or hold losing assets due to emotional factors. These findings suggest that effective financial literacy should include not only knowledge but also behavioural awareness, self-control, and bias recognition. Excessive confidence may also increase among investors who overestimate their financial competence. Agarwal (2025) concludes that financial literacy improves investment decisions but is most effective when complemented by other relevant competencies. During periods of uncertainty, emotions and social influence may sometimes outweigh analytical thinking.

Overall, international studies provide three main conclusions. First, financial literacy generally improves investment decisions. Second, its impact differs across behavioural biases and is usually stronger for cognitive biases than for emotional biases. Third, financial literacy is most effective in promoting rational behaviour when supported by relevant behavioural competencies. Research on Uzbekistan is developing and provides valuable insights. Eshpulatov, Berdiev, and Artemenkov (2025) examine investment intentions among university students using the Theory of Planned Behaviour. Their results show that overconfidence, herd behaviour, and risk tolerance significantly influence investment intentions, while the direct effect of financial literacy is less pronounced.

These findings suggest that behavioural factors may have a stronger immediate influence on investment

participation than basic financial knowledge. They also indicate opportunities to further develop commonly used measures of financial literacy by incorporating investment-specific competencies. Berdiev (2025) highlights the importance of social influence. Young investors are strongly affected by peers and online opinions, making herd behaviour particularly relevant. Therefore, investor education should focus not only on financial instruments but also on evaluating information critically and making informed decisions in the presence of social influence. Artemenkov (2025) links investment intention with actual investment behaviour and argues that the quality of participation is as important as the number of investors. Investors influenced by herd behaviour or overconfidence may increase trading activity, while enhanced investment literacy can help align such activity more closely with market stability. Zakharova (2025) studies financial behaviour in Uzbekistan and emphasises the role of trust in financial institutions. Trust affects whether individuals use formal investment channels and participate in capital markets. Financial literacy can encourage investment more effectively when it is accompanied by confidence in financial institutions. Nepeyvoda (2025) argues that financial behaviour reflects the interaction of knowledge, institutional trust, and socioeconomic experience. He stresses that successful capital-market development requires both financial literacy and an understanding of investor rights and risks.

The domestic literature identifies several important determinants of investment behaviour, including financial literacy, trust, digital literacy, risk tolerance, herd behaviour, and overconfidence. At the same time, the existing body of research provides opportunities for further development. Most studies focus on general financial behaviour rather than specifically on stock-market investing, examine investment intentions more frequently than actual behaviour, and measure financial literacy primarily through general rather than investment-specific indicators.

Another area for further research concerns the frequent focus on university students, whose investment behaviour may differ from that of the broader population of investors. In addition, further differentiation between objective financial literacy (actual knowledge) and subjective financial literacy (perceived competence) may contribute to a more comprehensive understanding of overconfidence.

The literature also suggests that financial literacy affects different biases in different ways. It may reduce anchoring, representativeness, and herd behaviour, while its effectiveness in addressing emotional biases such as loss aversion and regret aversion may be strengthened through complementary behavioural competencies.

For Uzbekistan, these findings have important policy implications. Financial education can further develop beyond basic financial knowledge by incorporating investment-specific training, behavioural awareness, and practical decision-making skills. Scenario-based learning, portfolio simulations, and behavioural warnings on digital investment platforms could help investors make more informed decisions and manage common behavioural biases effectively.

RESEARCH METHODOLOGY

This study uses a quantitative, cross-sectional design to examine how financial literacy affects behavioural errors among individual investors in Uzbekistan's stock market. The framework is based on behavioural finance, the Theory of Planned Behaviour, prospect theory, and bounded rationality. The research focuses on current and potential retail investors who are familiar with basic securities-market instruments and may invest through brokers, banks, or digital financial platforms. Both experienced investors and those intending to invest are included. Data are collected through a structured questionnaire adapted to Uzbekistan's economic and institutional conditions. The survey is available in Uzbek and Russian and is tested through expert review and a pilot study before full implementation. Financial literacy is measured as a multidimensional concept, including knowledge of inflation, interest rates, risk–return relationships, diversification, and investment skills. Both objective knowledge and self-assessed competence are evaluated.

The behavioural errors examined include overconfidence, herd behaviour, loss aversion, anchoring, mental accounting, representativeness, and the disposition effect. These biases are measured using established behavioural-finance scales.

Investment decision quality is the main dependent variable and reflects informed decision-making, risk assessment, diversification, and long-term planning. Risk perception and institutional trust are included as additional variables. The model assumes that financial literacy improves investment decision quality and reduces behavioural biases. Control variables include age, education, income, investment experience, digital financial literacy, and exposure to investment content on social media. Most questionnaire items use a five-point Likert scale. Objective financial-literacy questions are scored separately to create a factual knowledge index. A purposive and stratified sampling approach is applied. Respondents include investors, brokerage clients, financial-sector employees, entrepreneurs, students, and users of digital financial services. Stratification by age, region, and investment experience enhances representativeness.

Data analysis includes descriptive statistics, reliability testing, correlation analysis, and structural equation

modelling (PLS-SEM). Reliability is assessed using Cronbach's alpha and composite reliability, while validity is tested through standard construct-validity measures. Bootstrapping is used to evaluate direct, indirect, and moderating effects. Additional regression analysis may be conducted to test the robustness of the results. To reduce self-reporting bias, respondents' perceived financial competence is compared with their actual literacy scores. Separate analyses may be conducted for experienced and inexperienced investors. The methodology also considers Uzbekistan's institutional environment, including the developing level of market participation, opportunities for improving information accessibility, privatisation reforms, and the growing role of digital finance. Variables such as trust in regulators, transparency of issuers, and access to investment information are included.

ANALYSIS AND RESULTS

The analysis of the relationship between financial literacy and behavioural errors in Uzbekistan should be conducted within the broader context of the institutional transformation of the national financial system. The country is simultaneously expanding digital financial access, modernising capital-market infrastructure, implementing privatisation measures, and promoting the mobilisation of household savings for productive investment. These processes create substantial opportunities for widening retail participation in the securities market. At the same time, they increase the importance of preparing less experienced investors to engage effectively with increasingly complex financial products, accelerated information flows, and behavioural influences generated by social networks, informal recommendations, and short-term market movements.

The statistical evidence indicates that Uzbekistan has achieved considerably faster progress in digital financial access than in the development of sophisticated financial decision-making capabilities. According to the 2025 national assessment of financial inclusion and financial literacy, conducted with the support of the Asian Development Bank, 72 per cent of respondents had made or received a digital payment through an account during the preceding twelve months, compared with 39 per cent in 2021. This represents an increase of 33 percentage points and confirms that the technological conditions for the digital distribution of investment products are developing rapidly. However, digital participation can be further complemented by the development of investment competencies. The capacity to execute transactions through an electronic interface can be strengthened by the ability to evaluate an issuer, interpret volatility, construct a diversified portfolio, and distinguish between reliable market information and speculative noise.

This divergence is also reflected in the level of public familiarity with market-based financial instruments. The national survey showed that 29 per cent of respondents were aware of electronic trading services, while 2 per cent reported their actual use. Awareness of financial leasing stood at 26 per cent, while its reported use was 1 per cent. In contrast, considerably larger proportions were familiar with payment cards, money transfers, and conventional banking services. The resulting pattern demonstrates that the financial inclusion achieved in Uzbekistan remains primarily transactional and bank-centred, while investment-oriented financial participation has considerable potential for further development. Accordingly, greater access to digital financial channels creates favourable conditions for a corresponding increase in the population's ability to make informed securities-market decisions.

The quality of general financial decision-making provides additional evidence of the importance of strengthening behavioural competencies. Approximately 37 per cent of respondents reported that they had not considered any alternative product when making a financial choice, while another 17 per cent were unable to determine whether they had compared available options. Only 25 per cent examined products offered by several different companies, and 11 per cent compared several products within the same institution. These findings indicate opportunities for expanding the practice of systematic comparison and may be interpreted as indirect evidence of bounded rationality, status quo bias, and reliance on familiar providers. Although the survey did not measure stock-market anchoring or herd behaviour directly, the observed decision pattern suggests the importance of developing established procedures for comparing expected returns, costs, liquidity, and risk among potential participants in the investment market.

Savings behaviour also plays an important role in the formation of a broad domestic investor base. The official assessment found that 39 per cent of respondents had not actively saved during the previous twelve months. The proportion reached 54 per cent in the northern and western regions, compared with 25 per cent in Tashkent. It was also substantially higher among respondents with lower educational attainment. These regional and educational differences are important because the capacity to participate in the securities market depends not only on disposable income but also on financial planning, precautionary saving, and the accumulation of investable resources. Developing regular saving practices can contribute to a perception of investment as a component of long-term household wealth management rather than as episodic financial activity.

Alongside these areas for further development, the infrastructure of Uzbekistan's capital market has

demonstrated substantial quantitative expansion. The Republican Stock Exchange “Toshkent” reported securities trading of UZS 12.02 trillion during the first half of 2025, approximately seventeen times the level recorded during the corresponding period of 2024. The number of transactions reached 214,851, while 85 per cent of trades involved securities included in the official quotation list. Average daily trading volume amounted to UZS 97.7 billion. These indicators confirm that the operational scale of the organised securities market is increasing and that capital-market instruments are becoming more economically relevant.

The rapid growth of trading activity should also be evaluated in conjunction with qualitative indicators of investor behaviour. An increase in transaction volume may indicate improved liquidity and stronger investor interest, while its contribution to sustainable market development can be further enhanced through informed and rational investment decision-making. In markets characterised by developing investment experience, the rapid expansion of trading activity also increases the importance of financial literacy in managing excessive turnover, trend-following behaviour, and overconfidence.

The structural depth of the Uzbek equity market remains at a developing stage in comparison with international levels. World Bank data indicate that the market capitalisation of listed domestic companies in Uzbekistan was equivalent to approximately 16.4 per cent of GDP in 2024. For comparison, the global weighted indicator was substantially higher, while the average across the countries participating in available international datasets also considerably exceeded the Uzbek level. Global equity-market capitalisation reached USD 125.71 trillion at the end of 2024 and subsequently increased to USD 151.94 trillion in 2025. These figures demonstrate the scale of the international securities market and the growing exposure of households worldwide to market-based financial instruments.

The difference in capital-market depth has important behavioural implications. In a mature market, investors can generally choose among a broad range of liquid securities, investment funds, exchange-traded products, and professional advisory services. In Uzbekistan, the developing range of liquid instruments and the concentration of attention on a limited number of issuers may increase familiarity bias and portfolio concentration. Where investors have fewer opportunities to diversify across sectors and instruments, they may rely disproportionately on a company’s reputation, state affiliation, or recent price performance. Financial literacy is therefore required not only to encourage participation but also to ensure that the developing structure of the market contributes to more diversified and behaviourally informed portfolios.

Table 1.
Integrated Statistical Assessment of Financial Literacy, Financial Behaviour and Capital-Market Development¹

Analytical dimension	Uzbekistan: latest available indicator	International or empirical benchmark	Behavioural-finance interpretation
Overall financial literacy	National score increased from 12.6 in 2021 to 12.7 in 2025	OECD/INFE international average: 60 points out of 100; OECD-country average: 63 points	Continued improvement in knowledge can further strengthen investors’ capacity to manage emotional and heuristic biases
Digital financial participation	72% made or received a digital payment in 2025, compared with 39% in 2021	Rapid global growth of app-based and platform-based financial participation	Technological access is expanding rapidly, creating opportunities to further strengthen the capacity to evaluate financial risk
Knowledge and use of electronic trading	29% were aware of electronic trading; 2% reported actual use	Developed markets exhibit widespread use of digital brokerage and fund platforms	The knowledge–participation gap indicates considerable potential for expanding informed participation, while early users may be highly heterogeneous in competence
Financial-product comparison	37% did not compare any alternative product; 25% compared offers from several companies	Across OECD/INFE participants, 26% compared products across providers	Greater comparison intensity can help address status quo bias, familiarity bias, and limited information search

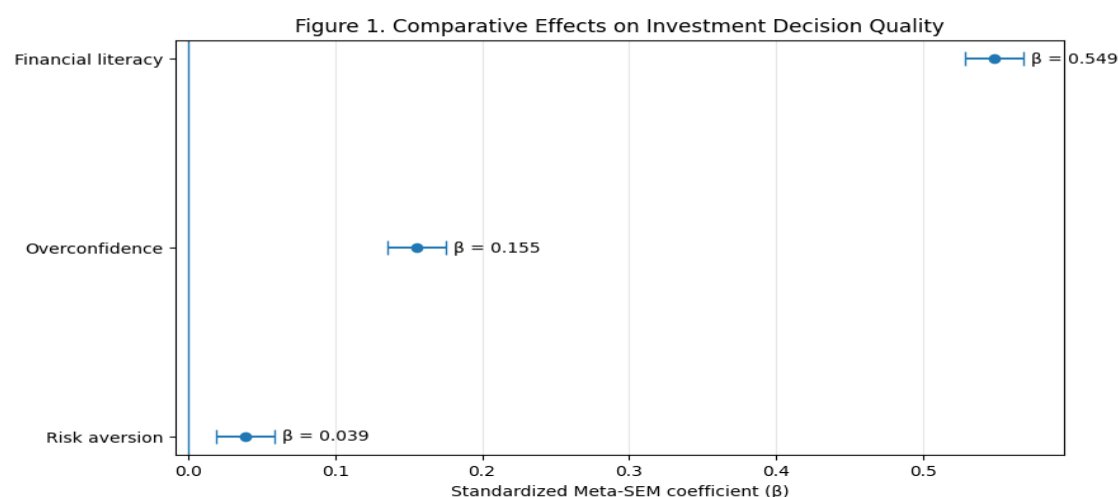
¹ Source: compiled by the author from the Central Bank of the Republic of Uzbekistan and Asian Development Bank financial-inclusion assessment; Republican Stock Exchange “Toshkent”; World Bank World Development Indicators; OECD/INFE; World Federation of Exchanges; Dhandapani et al. (2026); and Eshpulatov, Berdiev, and Artemenkov (2025).

Saving capacity	39% did not save during the preceding year; 54% in the North/West and 25% in Tashkent	International evidence links higher income, education, and literacy with stronger saving and investment behaviour	Addressing regional and educational disparities can support the formation of a more inclusive retail-investor base
Stock-exchange activity	UZS 12.02 trillion in trading volume and 214,851 transactions in H1 2025; volume increased seventeenfold year-on-year	Global equity capitalisation reached USD 125.71 trillion in 2024 and USD 151.94 trillion in 2025	Rapid market growth can reflect improved liquidity and highlights the importance of informed investment activity
Equity-market depth	Listed-company market capitalisation equalled approximately 16.4% of GDP in 2024	World market capitalisation was approximately 130% of global GDP in 2024	A developing market creates opportunities to expand diversification and reduce issuer familiarity and concentration bias
Econometric effect of financial literacy	A nationwide Uzbek estimate for actual retail investors represents an area for further empirical assessment	International Meta-SEM coefficient: $\beta = 0.549$, $p < 0.001$	Financial literacy has a substantially stronger association with investment decisions than overconfidence or risk aversion
Explanatory role of behavioural factors	National evidence identifies overconfidence and herding as significant determinants of investment intention among students	International Meta-SEM model explains approximately 32.7% of the variation in investment decisions	Investment decisions are shaped by knowledge and behavioural characteristics simultaneously

The integrated evidence presented in Table 1 reveals a structural asymmetry. Uzbekistan possesses a rapidly expanding digital-payment environment and an increasingly active organised securities market, while the behavioural and educational foundations of mass retail investment continue to develop. The financial-literacy score increased from 12.6 to 12.7 between the two relevant assessment periods. Although the national scoring methodology is not directly comparable with the OECD scale, this change is analytically important because it indicates opportunities to further align improvements in financial behaviour with stronger gains in financial knowledge.

International evidence reinforces this interpretation. The OECD/INFE survey covering 39 countries and economies reported an average financial-literacy score of 60 out of 100, increasing to 63 among participating OECD countries. Although 77 per cent of adults understood the general relationship between risk and return, only 42 per cent correctly answered a compound-interest question. Moreover, 63 per cent of adults holding at least one financial product did not achieve the minimum target score of 70. These results demonstrate that opportunities to strengthen behavioural competencies are relevant not only to emerging markets but also to financial systems at different stages of development.

The international econometric evidence provides a clearer indication of the relative importance of financial literacy. A 2026 meta-analysis and meta-analytic structural equation model synthesising 37 empirical studies with 18,835 respondents estimated a standardised coefficient of 0.549 between financial literacy and investment decisions. The corresponding coefficient was 0.155 for overconfidence and 0.039 for risk aversion. The model explained approximately 32.7 per cent of the variation in investment decisions.



Source: constructed by the author from Dhandapani et al. (2026), Meta-SEM based on 37 studies and 18,835 respondents. Error bars represent approximate 95% confidence intervals calculated as $\beta \pm 1.96 \times SE$.

Figure 1. Comparative Meta-SEM Effects on Investment Decision Quality²

The econometric figure compares the standardised structural coefficients of financial literacy, overconfidence, and risk aversion. Financial literacy demonstrates the dominant association with investment decision quality, with a coefficient approximately 3.5 times larger than that of overconfidence and more than fourteen times larger than that of risk aversion. The confidence intervals calculated from the reported standard errors are narrow and do not include zero. The figure therefore supports the interpretation that financial literacy is a central determinant of investment decisions, although the results should be interpreted as evidence of association rather than causality because the underlying studies predominantly rely on cross-sectional and correlational data.

The international coefficients should be interpreted in accordance with the specific institutional context of Uzbekistan. The institutional environment, market liquidity, investment traditions, and information architecture of the Uzbek market differ from those of many countries represented in the meta-analysis. Nevertheless, the estimates provide a defensible external benchmark for assessing the potential economic significance of investment literacy. If a similarly strong relationship were confirmed for Uzbekistan, financial-literacy policy could influence not merely the number of people entering the market but also the quality of capital allocation and the stability of retail investment behaviour.

The available national econometric evidence points to a more complex relationship. Eshpulatov, Berdiev, and Artemenkov examined 369 university students in Uzbekistan using partial least squares structural equation modelling. Their results showed that risk tolerance, overconfidence, and herd behaviour had statistically significant positive effects on investment intention, whereas the direct effect of financial literacy was less pronounced. Investment intention, in turn, strongly predicted actual investment behaviour. These findings complement the international meta-analysis by suggesting that the effect of literacy may depend on how it is measured and on whether the dependent variable represents investment intention, participation frequency, or decision quality.

The less pronounced direct effect among Uzbek students may indicate that basic financial knowledge can be further strengthened through practical competencies that help individuals manage social influence and subjective confidence. Students may understand general financial concepts while still developing practical experience in issuer analysis, valuation, and portfolio construction. In this context, investment intention may be driven primarily by confidence, peer influence, and tolerance for risk. Financial literacy may affect behaviour indirectly through improved risk perception or may become more significant as individuals gain actual market experience.

This interpretation is consistent with the official product-comparison statistics. When 37 per cent of respondents do not consider alternatives, the issue extends beyond factual knowledge and highlights the importance of effective decision-making procedures. Investors require the ability to slow down the decision-making process, search for competing information, test assumptions, and evaluate whether a product corresponds to their risk capacity. Accordingly, an effective financial-literacy policy can combine substantive knowledge with behavioural techniques, including pre-commitment rules, diversification requirements, cooling-off periods, and

2 Author's elaboration.

guidance designed to promote decisions based on comprehensive information rather than exclusively on social proof or recent performance.

The political economy of Uzbekistan's capital-market reform further strengthens this conclusion. The expansion of IPO and SPO programmes, the privatisation of state-owned enterprises, the liberalisation of access for foreign investors, and the development of new investment platforms are expected to widen the range of investment opportunities available to households. The effectiveness of these reforms can be assessed not only through the proceeds raised or the number of transactions but also through the quality and sustainability of market participation. Sustainable market development requires investors who understand shareholder rights, corporate disclosure, liquidity risk, and the possibility of capital loss.

Financial literacy therefore performs a dual economic function. At the microeconomic level, it supports households in managing risk-taking, portfolio concentration, and emotionally motivated trading. At the macroeconomic level, it supports efficient capital allocation by increasing the probability that savings are directed towards issuers with stronger fundamentals rather than towards assets promoted primarily through rumours or speculative narratives. It may also strengthen the reputational sustainability of capital-market reform by enabling less experienced retail investors to make more informed decisions and thereby reinforcing trust in individual intermediaries, privatisation processes, and the broader market-development agenda.

The results of the analysis demonstrate that Uzbekistan has reached a stage at which financial access is increasingly complemented by the need to enhance the quality of financial participation. Digital payments, electronic platforms, and rising exchange turnover provide the infrastructure for broader investment, while the development of informed investment competencies can further strengthen their effectiveness. The observed patterns in product comparison, saving behaviour, and specialised market knowledge indicate opportunities to enhance the ability of potential participants to manage anchoring, herd behaviour, familiarity bias, and overconfidence.

The principal analytical result is therefore that financial literacy should be treated as a component of capital-market infrastructure rather than solely as a supplementary social programme. Its role is comparable to that of disclosure standards, brokerage regulation, and investor-protection rules because it affects the ability of market participants to interpret and use available information. At the same time, national evidence indicates that the effectiveness of general financial literacy can be further enhanced through investment-specific literacy that combines objective knowledge, practical analytical skills, calibrated confidence, and explicit awareness of behavioural biases.

CONCLUSIONS AND RECOMMENDATIONS

The study confirms that financial literacy is a key factor in improving investment decisions. It helps investors assess risks, compare alternatives, identify reliable information, and manage behavioural biases such as overconfidence, herd behaviour, and loss aversion. In Uzbekistan, digital financial services and stock-market activity are developing rapidly, creating opportunities for the corresponding advancement of investment knowledge and competencies. Although access to financial products is expanding, many potential investors can further develop the skills required to make informed investment decisions. The findings show that general financial literacy can be strengthened through specialised knowledge of securities, diversification, market risks, transaction costs, and portfolio management. Financial literacy has a stronger impact on the quality of investment decisions than on the willingness to invest. Therefore, policy success should be measured not only by the number of investors but also by the quality and sustainability of their investment decisions.

It is recommended that the Central Bank, capital-market authorities, the Republican Stock Exchange "Toshkent", educational institutions, and market participants develop a national investment-literacy programme. Training should combine theoretical knowledge with practical exercises, case studies, and risk simulations. Investor education should also address the relationship between actual knowledge and self-confidence. Programmes should help individuals recognise uncertainty and develop appropriately calibrated confidence. Digital investment platforms should include investor-protection tools such as risk warnings, diversification indicators, and alerts concerning excessive trading or portfolio concentration. Improving issuer disclosure is equally important. Companies should provide clear, timely, and standardised information on financial performance, risks, and corporate governance to enhance information transparency.

The expansion of retail investing should be supported by a wider range of financial instruments, including bonds, investment funds, and exchange-traded products, allowing for greater diversification. Regional differences require appropriately targeted policies. Investment-literacy programmes should be available across the country through universities, banks, and digital platforms, with content adapted to different social groups. Privatisation and public share offerings should include effective investor-protection measures and transparent communication regarding risks, returns, and potential losses. Regular national surveys should be introduced to

monitor investment literacy, risk perception, and behavioural biases. This would help evaluate the effectiveness of educational initiatives. Future research should employ longitudinal and experimental methods to develop a deeper understanding of how financial literacy affects investor behaviour and whether educational and behavioural interventions improve investment decision-making.

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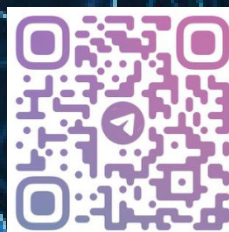
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