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Women's Investment Behaviour and Technology: Exploring the Impact of Digital Tools on Financial Decision-Making

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Abstract: ***Digital technology has rapidly changed investment, enhancing accessibility, transparency, and financial inclusivity. Women, underrepresented in investment markets, are using digital financial tools to simplify and democratize investing. This article explores how online trading platforms, financial literacy apps, robo-advisors, AI, and blockchain advancements affect women's investment behavior. It examines how these technologies affect women investors' financial decisions, risk perception, portfolio diversification, and long-term wealth building. Risk aversion, gender-based financial disparities, and limited access to personalized financial solutions are also addressed in the study. The study discusses how technology might reduce gender investment gaps by evaluating current literature and digital trends. Finally, it recommends improving digital financial literacy and creating inclusive fintech solutions to empower women financially and sustainably.***

Keywords: Investment Behavior, Financial Literacy, Robo-advisors, Artificial Intelligence, Financial Inclusion.

1. Introduction

The integration of technology into financial markets has significantly transformed investment practices across the globe, reshaping how individuals' access, manage, and grow their financial assets. Innovations such as digital banking, mobile trading applications, robo-advisory services, and algorithm-driven financial planning tools have reduced traditional entry barriers, minimized transaction costs, and enhanced transparency in financial operations. These technological advancements have democratized investing by making financial information more accessible and user-friendly. Such developments are particularly important for women investors, who have historically encountered structural, institutional, and socio-cultural constraints limiting their participation in formal financial markets (OECD, 2017).

Although women's educational attainment and workforce participation have improved substantially over the past few decades, their representation in equity markets and high-risk investment instruments remains comparatively low. Empirical research indicates that women tend to invest less frequently in stocks and speculative assets than men (Barber & Odean, 2001). This investment gap is often attributed to higher levels of risk aversion, relatively lower financial literacy, limited access to professional advisory networks, and persistent gendered financial norms that discourage active market participation (Lusardi & Mitchell, 2014). These factors collectively contribute to slower wealth accumulation and reduced long-term financial security for women.

However, the rapid growth of financial technology (fintech) offers promising opportunities to narrow these disparities. Digital platforms provide simplified investment procedures, automated portfolio management, and personalized financial guidance, thereby enhancing confidence and perceived control over financial decisions. By integrating behavioral insights and technological innovation, fintech solutions can empower women to make informed investment choices and engage more actively in wealth-building activities. This paper therefore examines how digital financial tools shape women's investment behavior, analyzing the intersection of technology, behavioral finance, and gender in promoting financial empowerment and inclusive economic participation.

2. Literature Review

Gender Differences in Investment Behavior

A substantial body of literature documents persistent gender-based differences in investment behavior across global financial markets. Women are generally found to be more risk-averse and less overconfident than men in financial decision-making (Croson & Gneezy, 2009). Barber and Odean (2001) demonstrated that men trade more frequently than women due to higher levels of overconfidence, which often results in excessive trading and lower net returns. In contrast, women's relatively cautious and long-term oriented investment strategies may contribute to more stable and consistent portfolio performance over time. Their preference for diversified portfolios and lower speculative exposure reflects a more conservative financial orientation. However, lower participation rates in equity markets among women have significant implications for long-term wealth accumulation and retirement security (Lusardi & Mitchell, 2008). Limited exposure to high-return financial assets can restrict capital growth opportunities. Structural barriers including gender wage gaps, unpaid caregiving responsibilities, career interruptions, and restricted access to professional financial networks—further compound financial inequality. Social norms and confidence gaps also influence investment engagement, often discouraging women from actively participating in complex financial markets.

Financial Literacy and Women's Investment Participation

Financial literacy plays a critical role in shaping investment behavior and financial well-being. Lusardi and Mitchell (2014) emphasized that financial knowledge enhances individuals' ability to evaluate risk-return trade-offs, diversify portfolios, and plan effectively for retirement. Empirical studies consistently reveal that women report lower levels of financial literacy compared to men, which partly explains their lower investment participation and reduced exposure to equity markets (Bucher-Koenen et al., 2017).

The financial literacy gap is not merely a knowledge deficit but also reflects disparities in access to financial education and market experience. Digital financial literacy platforms, including online courses, webinars, podcasts, and interactive mobile applications, have emerged as effective tools to bridge this gap. Technology-driven financial education improves confidence, enhances perceived behavioral control, and fosters independent decision-making. Gamified learning tools and personalized financial dashboards further encourage engagement and long-term financial planning among women investors.

Fintech and Digital Investment Platforms

Fintech innovations have significantly democratized access to investment opportunities by reducing transaction costs, simplifying onboarding processes, and improving transparency. Online trading platforms allow users to open accounts, monitor markets, and execute trades with minimal paperwork and reduced brokerage fees. Robo-advisors provide automated portfolio management based on algorithmic risk profiling, making professional investment guidance accessible at lower costs (Sironi, 2016). Artificial intelligence enhances personalization by analyzing behavioral data and offering tailored investment recommendations aligned with individual goals and risk tolerance. AI-driven chatbots also provide real-time assistance, improving user engagement and financial confidence. Blockchain technology strengthens transparency and trust in financial transactions by ensuring secure, decentralized, and tamper-proof record-keeping systems (Tapscott & Tapscott, 2016). Collectively, these technological advancements may particularly benefit women investors by addressing information asymmetry, lowering advisory costs, minimizing behavioral biases, and reducing reliance on traditional male-dominated financial advisory networks. As fintech ecosystems evolve, they hold substantial potential to promote inclusive investment participation and gender-equitable wealth creation.

3. Theoretical Framework

Behavioral Finance Theory

Behavioral finance emerged as a critique of traditional finance theories such as Efficient Market Hypothesis and Expected Utility Theory, which assume that investors are fully rational, information-efficient, and utility-maximizing. In contrast, behavioral finance integrates insights from psychology and economics to explain systematic deviations from rationality in financial decision-making. The foundational work of Daniel Kahneman and Amos Tversky led to the development of Prospect Theory (1979), which demonstrates that individuals evaluate potential gains and losses relative to a reference point rather than in absolute terms.

Prospect theory posits that losses loom larger than gains, a phenomenon known as loss aversion. Investors tend to experience the pain of losses more intensely than the pleasure derived from equivalent gains. This asymmetry often results in conservative portfolio choices, premature selling of winning stocks, and reluctance to realize losses (Kahneman & Tversky, 1979). Empirical evidence suggests that women investors, on average, exhibit lower overconfidence and higher risk aversion compared to men, which may partly be explained by stronger loss aversion tendencies and greater sensitivity to financial uncertainty (Barber & Odean, 2001; Croson & Gneezy, 2009). Such behavioral traits can influence asset allocation, trading frequency, and long-term wealth accumulation patterns. Furthermore, behavioral biases such as herding behavior, anchoring, availability bias, and overconfidence can distort investment decisions, particularly during periods of market volatility. In this context, technology-driven advisory platforms such as robo-advisors and algorithm-based portfolio management systems play a significant role in mitigating cognitive and emotional biases. By relying on structured data analytics, automated rebalancing, and rule-based decision frameworks, these digital tools reduce impulsive trading and emotional reactions to short-term market fluctuations. Algorithm-based advisory systems encourage disciplined investment strategies aligned with predefined risk profiles and financial goals. This structured approach is particularly relevant for women investors in post-pandemic financial environments, where uncertainty and volatility may amplify behavioral biases. By providing objective recommendations and minimizing human emotional interference, financial technologies can enhance rational decision-making, promote portfolio diversification, and support long-term financial stability.

Theory of Planned Behavior (TPB)

Icek Ajzen (1991) proposed the Theory of Planned Behavior (TPB) as an extension of the Theory of Reasoned Action to explain how human action is guided by intention. According to TPB, an individual's behavioral intention—the immediate antecedent of actual behavior—is shaped by three core determinants: attitude toward the behavior, subjective norms, and perceived behavioral control. This framework has been widely applied in financial decision-making research to understand investment behavior, savings patterns, and technology adoption.

First, attitude toward the behavior refers to the individual's positive or negative evaluation of performing a particular action. In the context of investment, attitude reflects how favorably a woman perceives investing in financial instruments such as equities, mutual funds, or digital assets. A positive attitude may stem from beliefs about wealth creation, financial independence, retirement security, or portfolio diversification. Conversely, negative attitudes may arise from perceived risk, fear of loss, or past unfavourable experiences. Research indicates that when women perceive investing as beneficial and aligned with long-term financial goals, their intention to participate in investment activities increases significantly.

Second, subjective norms represent perceived social pressures to perform or not perform a behavior. In financial contexts, subjective norms may be influenced by family members, peers, colleagues, financial advisors, or broader societal expectations. For working women, particularly in developing economies, investment decisions are often shaped by family approval, spousal support, and peer networks. Positive reinforcement from social circles, exposure to financially literate communities, and encouragement from professional environments can strengthen investment intentions. In contrast, restrictive cultural norms or limited financial discussions within households may reduce confidence and delay investment participation. Third, perceived behavioral control (PBC) refers to an individual's perception of their ability to perform the behavior. It encompasses both internal factors (skills, knowledge, confidence) and external factors (resources, access, opportunities). In investment decision-making, PBC reflects a woman's belief that she possesses sufficient financial literacy, income stability, technological skills, and access to investment platforms to engage effectively in financial markets. Higher perceived behavioral control not only enhances intention but may also directly influence actual investment behavior. Digital financial technologies significantly enhance perceived behavioral control. Online trading platforms, mobile investment applications, robo-advisory services, and educational portals provide simplified procedures, real-time information, goal-based planning tools, and automated portfolio management. These digital tools reduce entry barriers, lower transaction costs, and eliminate the need for extensive procedural knowledge. By offering user-friendly interfaces and structured guidance, technology empowers women to feel more competent and self-reliant in financial decision-making. The availability of transparent data, risk profiling tools, and automated rebalancing mechanisms further strengthens confidence and reduces uncertainty. Moreover, financial literacy and technological familiarity play crucial moderating roles within the TPB framework. Financial literacy enhances positive attitudes toward investment by increasing understanding of risk-return trade-offs, diversification benefits, and long-term wealth accumulation. It also strengthens perceived behavioral control by equipping women with the knowledge required to interpret financial information and evaluate alternatives. Similarly, technological familiarity reduces digital anxiety and increases comfort with online transactions, thereby facilitating smoother engagement with investment platforms. Empirical studies consistently show that women with higher levels of financial literacy and digital competence demonstrate stronger investment intentions and greater participation in formal financial markets. In a post-pandemic environment characterized by accelerated digital transformation, the integration of financial education programs with digital skill development initiatives becomes particularly important. By simultaneously improving attitudes, reinforcing supportive subjective norms, and enhancing perceived behavioral control, digital financial ecosystems can significantly promote investment participation among working women. Thus, within the TPB framework, the interaction between psychological determinants and technological enablers provides a comprehensive explanation of women's investment intentions. Strengthening financial literacy, fostering supportive social environments, and expanding access to user-friendly digital platforms can collectively enhance women's confidence, autonomy, and long-term financial empowerment.

Financial Capability Framework

The financial capability approach, advanced by Michael Sherraden (2013), emphasizes that effective financial behavior depends not only on individual financial literacy but also on access to appropriate financial products and institutional support. Financial capability is thus a combination of knowledge, skills, attitudes, and access to financial services, recognizing that both personal competence and structural opportunities shape financial outcomes. In this framework, technology plays a transformative role by simultaneously improving knowledge dissemination and expanding access. Digital platforms provide financial education content, risk assessment tools, and real-time market information, thereby strengthening users' skills and confidence. At the same time, mobile banking apps, online brokerage accounts, and robo-advisory services reduce entry barriers and make investment products more accessible. By integrating financial knowledge with user-friendly investment mechanisms, technology enhances overall financial capability and promotes more informed and inclusive investment participation.

4. Role of Digital Tools in Shaping Women's Investment Behavior

Digital transformation has significantly redefined investment participation by improving accessibility, transparency, and efficiency in financial markets. For women investors who may traditionally face informational, social, or structural barriers digital tools act as enabling mechanisms that enhance autonomy, confidence, and long-term financial engagement.

Online Investment Platforms

Online trading and investment platforms have reduced geographical, procedural, and informational barriers to financial market participation. Earlier, investing required physical interaction with brokers or financial institutions; however, mobile-based applications now allow investors to open accounts, complete KYC procedures, and execute transactions digitally. Real-time market updates, portfolio tracking dashboards, performance analytics, and instant trade execution empower women to monitor and manage their investments independently. These platforms promote financial inclusion by simplifying complex processes and offering educational resources integrated within the application interface. Greater ease of access and reduced transaction costs positively influence participation in financial markets, as highlighted by Thomas Philippon (2016). Women investors increasingly utilize digital platforms to invest in mutual funds, equities, exchange-traded funds, and systematic investment plans (SIPs), enabling portfolio diversification and disciplined long-term wealth accumulation. By minimizing reliance on intermediaries, online platforms strengthen decision-making autonomy and financial self-reliance.

Robo-Advisors and Algorithmic Investing

Robo-advisors represent a significant advancement in algorithm-based portfolio management. These platforms use structured questionnaires to assess risk tolerance, investment horizon, and financial goals, and then construct diversified portfolios accordingly. Automated portfolio rebalancing ensures alignment with predefined asset allocation strategies, reducing impulsive reactions to short-term market volatility. Lower advisory fees compared to traditional human advisors make robo-advisory services particularly attractive to first-time and small-scale women investors. Automation reduces behavioral biases such as overconfidence and herding by limiting emotionally driven trading decisions. Empirical evidence from Francesco D'Acunto et al. (2019) suggests that algorithmic advice can improve portfolio diversification and reduce irrational trading behaviors. For women investors, who often prioritize financial security and long-term stability, robo-advisors provide structured investment pathways that align with retirement planning, goal-based investing, and risk-adjusted returns.

Artificial Intelligence and Predictive Analytics

Artificial Intelligence (AI) enhances financial services through predictive analytics, risk profiling, fraud detection, and personalized customer engagement. Machine learning algorithms analyze transaction histories, spending behavior, income patterns, and risk preferences to generate customized investment recommendations. This data-driven personalization ensures that financial advice is tailored to individual needs rather than generalized assumptions.AI-powered chatbots and virtual financial assistants provide real-time responses to queries, simplifying complex financial concepts and offering guidance on portfolio adjustments. Such tools improve accessibility, particularly for new or hesitant investors, by delivering continuous support without the intimidation sometimes associated with traditional financial advisory settings. Enhanced personalization through AI may also address gender-specific financial goals, such as retirement planning, wealth preservation, or balancing career breaks, thereby promoting greater financial inclusion and confidence among women investors.

Blockchain and Financial Transparency

Blockchain technology introduces transparency, immutability, and enhanced security into financial transactions. By maintaining decentralized and tamper-proof records, blockchain reduces the risk of fraud, mismanagement, and unauthorized alterations. Increased trust in digital financial systems is particularly important for women investors who may exhibit higher risk sensitivity and concerns regarding financial security. According to Don Tapscott and Alex Tapscott (2016), blockchain has the potential to transform financial ecosystems by fostering transparency and accountability. Greater transactional security and traceability may encourage broader participation among women who prioritize safety and reliability in financial decision-making. Overall, digital tools including online platforms, robo-advisors, AI systems, and blockchain technology collectively enhance accessibility, reduce behavioral biases, increase transparency, and promote structured financial planning. These technological innovations play a crucial role in strengthening women's investment participation and supporting long-term financial empowerment.

5. Challenges in Digital Investment Adoption

Despite rapid technological advancements in financial services, several structural, psychological, and systemic challenges continue to limit the widespread adoption of digital investment platforms, particularly among women. Addressing these barriers is essential for ensuring inclusive and equitable financial participation.

Digital Divide

The digital divide remains a significant constraint in the adoption of online investment tools. Unequal access to reliable internet connectivity, smartphones, and digital infrastructure disproportionately affects individuals in rural areas and low-income communities. Women, especially in developing regions, may experience limited access to personal digital devices due to socio-economic constraints or intra-household disparities in technology ownership. In addition to physical access, digital literacy gaps further restrict participation. Limited familiarity with mobile applications, online authentication procedures, or digital financial interfaces can discourage women from engaging with investment platforms. As a result, technological progress does not automatically translate into inclusive financial participation without parallel improvements in infrastructure and digital skills.

Cybersecurity Concerns

Concerns about online fraud, phishing attacks, data breaches, and identity theft significantly reduce trust in digital investment platforms. Women investors, who often exhibit higher risk sensitivity, may be particularly cautious about exposing personal and financial information online. Media reports of cybercrimes and financial scams reinforce apprehension and discourage digital engagement. The absence of clear grievance redressal mechanisms and limited awareness about cybersecurity safeguards can further intensify mistrust. Unless digital platforms ensure strong encryption, transparent privacy policies, and user education on safe digital practices, adoption rates may remain constrained.

Financial Confidence Gap

A persistent financial confidence gap also affects digital investment adoption. Gendered social norms and historical exclusion from financial decision-making roles may reduce women's self-efficacy in managing investments independently. Even when access to digital tools is available, lower confidence in financial knowledge and risk assessment can inhibit active participation. This psychological barrier often manifests as hesitation to explore advanced financial products, reluctance to take calculated risks, or dependence on informal advice networks. Without targeted financial education and mentorship initiatives, technological accessibility alone may not translate into meaningful engagement.

Algorithmic Bias

While artificial intelligence and algorithmic advisory systems enhance efficiency, they may inadvertently replicate existing

biases if trained on historically skewed data. For example, if financial datasets reflect past gender disparities in income, credit access, or investment patterns, algorithmic recommendations may unintentionally disadvantage women. Lack of transparency in algorithm design can also reduce trust in automated decision-making systems. Ensuring fairness, inclusivity, and accountability in AI-driven financial services is therefore critical to prevent reinforcement of structural inequalities**.**

6. Discussion

The integration of digital tools into financial markets has substantially reshaped the landscape of investment participation, particularly for women. By reducing traditional entry barriers such as geographical limitations, high transaction costs, and dependence on intermediaries, technology has made financial markets more accessible and user-friendly. Mobile investment applications, online trading platforms, robo-advisors, and AI-driven financial services enable women to independently open accounts, access diversified financial products, monitor portfolios in real time, and execute transactions with greater ease and efficiency. Technology also plays a crucial role in strengthening financial knowledge and awareness. Digital platforms increasingly integrate educational resources, risk assessment tools, performance analytics, and goal-based planning modules within their interfaces. This combination of information and action-oriented tools promotes informed decision-making and enhances financial confidence. Women investors, who may have previously faced informational asymmetries or limited exposure to formal financial education, benefit from continuous access to structured and personalized financial guidance.

From a behavioral finance perspective, algorithm-based advisory systems contribute to more rational and disciplined investment behavior. Automated portfolio construction and rebalancing mechanisms reduce the influence of emotional biases such as overconfidence, herding behavior, panic selling, and loss aversion. By relying on data-driven risk profiling and predefined investment strategies, digital advisory systems encourage long-term planning rather than short-term speculation. This structured approach is particularly beneficial in volatile market conditions, where emotional reactions can undermine financial stability. Digital empowerment, therefore, extends beyond mere technological access; it supports long-term wealth accumulation, financial resilience, and economic independence. Greater participation in diversified investment instruments enhances asset ownership among women, strengthens retirement preparedness, and contributes to intergenerational wealth creation. Increased financial autonomy also reinforces broader dimensions of empowerment, including decision-making power within households and active engagement in economic activities. However, while digital innovation creates significant opportunities, technology alone cannot eliminate deeply rooted structural inequalities. Persistent challenges such as the digital divide, socio-cultural constraints, income disparities, and financial confidence gaps continue to influence participation patterns. Without inclusive infrastructure development, gender-sensitive financial education, robust cybersecurity frameworks, and ethical algorithm design, the benefits of financial technology may remain unevenly distributed. Therefore, complementary policy measures are essential to ensure equitable access and sustainable empowerment. Government initiatives, regulatory oversight, targeted digital literacy programs, and inclusive fintech design must work in tandem with technological advancement. Only through an integrated approach that combines innovation with social and institutional support can digital transformation fully realize its potential in enhancing women's investment participation and economic empowerment. The growing integration of digital technologies into financial markets presents both opportunities and responsibilities for policymakers and financial institutions. To ensure that women fully benefit from digital investment ecosystems, strategic interventions are required at regulatory, institutional, and operational levels.

Policy Recommendations

Governments and regulatory bodies should design structured digital financial literacy programs specifically tailored to women across different socio-economic groups. These initiatives should combine financial education (investment concepts, risk-return trade-offs, portfolio diversification) with digital skill development (use of mobile apps, cybersecurity awareness, online transaction safety). Community-based training, partnerships with self-help groups, and workplace financial education programs can significantly improve participation and confidence. Policy frameworks should incentivize fintech companies to design products that address gender-specific financial needs. This includes goal-based investment tools for retirement planning, career breaks, caregiving responsibilities, and long-term wealth security. Gender-disaggregated data analysis can help in understanding usage patterns and designing inclusive products. Regulatory sandboxes can also encourage innovation while ensuring consumer protection. Robust cybersecurity policies are essential to build trust in digital investment platforms. Governments must enforce strong data protection laws, transparent grievance redressal mechanisms, and strict penalties for financial fraud. Public awareness campaigns on safe digital practices should complement regulatory efforts to reduce fear and mistrust associated with online transactions. Bridging the digital divide requires investment in reliable internet connectivity, affordable smartphones, and accessible banking services in underserved regions. Public-private partnerships can expand digital infrastructure, while financial inclusion schemes can integrate digital investment access into broader economic empowerment programs. Without infrastructure development, digital innovation may remain concentrated in urban and higher-income populations.

Implications for Financial Institutions

Financial institutions should prioritize intuitive platform design with simple navigation, multilingual options, and accessible visual dashboards. Reducing technical complexity can significantly improve engagement among first-time and less-experienced women investors. Clear communication of product features and risks enhances transparency and trust. Institutions can leverage data analytics and artificial intelligence to provide customized investment recommendations based on risk tolerance, income stability, and life-stage goals. Goal-based planning modules, automated savings plans, and periodic portfolio review alerts

can help women align investments with long-term objectives. Transparent pricing structures and the elimination of hidden charges are critical for building credibility. Clear disclosure of advisory fees, transaction costs, and risk factors strengthens investor confidence and supports informed decision-making. Financial platforms can incorporate behavioral nudges such as automated reminders for systematic investment plans, default diversification options, and visual progress trackers for long-term goals. These subtle design features encourage disciplined investment habits and reduce impulsive trading behavior.

Conclusion and Future Research Directions

Technology has emerged as a transformative force in reshaping women's investment behavior and expanding their participation in financial markets. Digital platforms, robo-advisors, artificial intelligence (AI), and blockchain-based systems have collectively enhanced accessibility, transparency, and efficiency within investment ecosystems. By reducing geographical barriers, lowering transaction costs, and providing real-time information, digital tools minimize information asymmetry and empower women to make informed financial decisions independently. Robo-advisory services and AI-driven analytics further strengthen financial confidence by offering structured, goal-based investment strategies aligned with individual risk tolerance and long-term objectives. Automated portfolio rebalancing and algorithm-based recommendations reduce the influence of emotional biases, encouraging disciplined and systematic investing. Blockchain technology enhances transparency and transactional security, thereby increasing trust an essential factor for risk-sensitive investors.

Despite these advancements, persistent challenges such as digital divides, limited technological access in underserved regions, cybersecurity concerns, and socio-cultural constraints continue to influence adoption patterns. Unequal digital infrastructure and varying levels of financial literacy may prevent certain demographic groups from fully benefiting from technological innovations. Therefore, inclusive fintech strategies combining accessible infrastructure, robust data protection frameworks, gender-sensitive product design, and targeted financial education are necessary to bridge gender gaps in investment participation.

Empowering women through technology-driven financial inclusion has broader macroeconomic implications. Greater investment participation contributes to wealth accumulation, financial resilience, intergenerational asset creation, and enhanced household decision-making power. At a societal level, reducing gender disparities in financial markets promotes wealth equality, strengthens economic growth, and supports sustainable development goals related to gender equity and financial inclusion. Future research should focus on empirical investigations across diverse demographic segments such as age groups, income levels, occupational categories, and urban rural distinctions to quantify the long-term impact of digital adoption on women's wealth accumulation. Longitudinal studies can assess whether technology-driven investment engagement leads to sustained financial growth and reduced gender wealth gaps over time. Additionally, integrating behavioral finance perspectives with technology adoption models can provide deeper insights into how psychological factors interact with digital tools in shaping investment outcomes. Such research would contribute to a more comprehensive understanding of digital financial empowerment and inform evidence-based policy and institutional strategies.

References

[1] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211.
[2] Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics, 116*(1), 261–292.
[3] Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2017). How financially literate are women? *Journal of Consumer Affairs, 51*(2), 255–283.
[4] Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature, 47*(2), 448–474.
[5] D'Acunto, F., Prabhala, N., & Rossi, A. G. (2019). The promises and pitfalls of robo-advising. *Review of Financial Studies, 32*(5), 1983–2020.
[6] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291.
[7] Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? *American Economic Review, 98*(2), 413–417.
[8] Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy. *Journal of Economic Literature, 52*(1), 5–44.
[9] OECD. (2017). *Women and financial education: Evidence, policy responses and guidance*. OECD Publishing.
[10] Philippon, T. (2016). The fintech opportunity. *National Bureau of Economic Research Working Paper No. 22476*.
[11] Sherraden, M. S. (2013). Building blocks of financial capability. *Financial Counseling and Planning, 24*(1), 1–43.
[12] Sironi, P. (2016). *FinTech innovation: From robo-advisors to goal-based investing and gamification*. Wiley.
[13] Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution*. Penguin.