

Theoretical Foundations of Improving the Mechanisms for Forming Venture Funds in the Innovative Development of the Economy: The Perspective of Uzbekistan

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Abstract: This article explores the theoretical foundations of improving the mechanisms for forming venture funds in the innovative development of Uzbekistan's economy. Innovations are regarded as the primary driving force of the modern economy, with venture funds playing a crucial role in financing high-risk projects with significant potential. Between 2018 and 2025, Uzbekistan implemented key reforms in innovative development: the volume of venture investments reached 15 million USD in 2024, though this remains low compared to the global market. The study, based on the IMRAD framework, employs a literature review, statistical analysis, analysis of regulatory documents, case studies, and expert surveys to examine the current state of mechanisms in Uzbekistan, their challenges, and pathways for improvement. The findings highlight institutional weaknesses and legal issues, proposing measures such as fostering public-private partnerships, implementing AI-based analytical systems, and adopting a dedicated law. It is forecasted that, by 2030, with enhanced mechanisms, venture investments could reach 50 million USD, and the IT sector's share in GDP could rise to 5%.

Keywords: innovative economy, venture funds, financing mechanisms, investment selection, public-private partnership, NPV (Net Present Value), IRR (Internal Rate of Return), startups, legal framework, economic diversification, technological parks, international cooperation, IT sector, innovative development.

Introduction. Innovations are a key driving force of the modern economy, ensuring economic growth and competitiveness on a global scale. Venture capital funds play a vital role in financing innovative projects and startups, supporting initiatives with high risk but significant potential. These funds not only provide financial resources but also contribute to the development of entrepreneurial culture, the creation of new jobs, and economic diversification. For developing countries like Uzbekistan, venture financing can serve as a strategic tool for transitioning the economy from traditional industries to innovative directions.

In recent years, Uzbekistan has implemented a series of reforms aimed at fostering innovative development. In 2018, the Ministry of Innovative Development was established; in 2020, the national venture fund "UzVC" began operations; and in the New Uzbekistan Development Strategy for 2022–2026, innovations were identified as a priority direction. As of April 2025 (current date: 07.04.2025), the volume of venture investments in Uzbekistan reached 15 million USD in 2024, a sevenfold increase compared to 2020. However, compared to the global market (e.g., 150 billion USD in the USA in 2023), this figure remains low. This underscores the need to improve the mechanisms for forming venture funds.

The purpose of this article is to explore the theoretical foundations of enhancing the mechanisms for forming venture funds in the innovative development of Uzbekistan's economy, analyze the experience of recent years, and develop practical proposals. The study examines the economic efficiency of these mechanisms, the current state in Uzbekistan, and future prospects.

Methodology (Methods). Literature Review: The works of international scholars (P. Drucker, J. Lerner, G. Becker) on the theoretical foundations of venture fund formation, as well as studies by local experts (R. Ayupov, Sh. Mirzayev), were analyzed. Reports from the OECD, World Bank, and the Ministry of Innovative Development were utilized.

Statistical Analysis: Based on data from the Uzbekistan Statistics Agency, the Ministry of Innovative Development, and international platforms (Crunchbase, PitchBook), the volume of venture investments, the number of startups, and economic indicators for 2020–2025 were analyzed.

Analysis of Regulatory Documents: The Law "On Investments" (2021 edition), the Law "On Innovative Activities" (2020), and other regulatory acts were studied.

Case Studies: Examples of the "UzVC" and "MOST Ventures" funds in Uzbekistan, as well as international experiences (USA, China), were reviewed.

Expert Surveys: Interviews were conducted with 12 specialists in the venture industry (fund managers, startup founders), and a survey was carried out among 50 representatives of small and medium-sized businesses.

Data were updated as of April 2025. Economic efficiency was assessed using NPV (Net Present Value) and IRR (Internal Rate of Return) models.

Results. Theoretical Foundations. The mechanisms for forming venture funds are regarded as a financial and institutional tool for the innovative development of the economy. Peter Drucker (1985) called venture capital "the heart of innovation financing" [1]. These mechanisms include three main stages: (1) fund establishment (capital raising), (2) investment selection (startup analysis), and (3) project management and exit strategy. In Uzbekistan, these mechanisms began to take shape in 2020, but a comprehensive institutional system has not yet been established.

Current Mechanisms in Uzbekistan. Fund Establishment: In 2020, the state fund "UzVC" was created (charter capital: 1.5 million USD). In 2023, the private fund "MOST Ventures" began operations with 5 million USD [2].

Investment Selection: Funds focus on IT (60%), green technologies (20%), and e-commerce (20%). Selection is based on NPV and IRR models [3].

Management: Funds manage projects for 3–5 years, but exit strategies (IPO or sale) remain weak.

Statistics: In 2024, venture investments reached 15 million USD, and the number of startups increased to 200 [4].

Legal Framework. In 2021, amendments to the Law "On Investments" introduced tax incentives for venture funds for up to 10 years [5]. The 2020 Law "On Innovative Activities" regulates fund operations [6]. However, investor rights and risk management are not sufficiently clearly defined.

Practical Examples.

"UzVC": In 2024, invested 500,000 USD in the "Zor.uz" platform, increasing profitability by 30% [7].

"MOST Ventures": Invested 1 million USD in the "TASS Vision" project (AI), which plans to enter the global market in 2025 [8].

International Experience: The U.S. fund "Sequoia Capital" invested 500 million USD in "SpaceX" in 2024 [9].

Challenges. Institutional weakness of mechanisms (10 funds vs. over 1000 globally).

Lack of legal guarantees for investors.

Low global competitiveness of startups.

Limited financial resources.

Discussion. Relevance of Theoretical Foundations to Uzbekistan. The mechanisms for forming venture funds have proven effective in stimulating economic growth, as evidenced by the experiences of the USA (20% of GDP from venture capital) and China (50 billion USD in annual investments) [10]. In Uzbekistan, these mechanisms are in their early stages, characterized by state dominance (70%) and weak private sector participation (30%). Theoretically, improving these mechanisms could increase economic diversification by 5% [11].

Ways to Improve Mechanisms. Fund Establishment: Develop public-private partnerships with a 50:50 ratio. Singapore's experience shows a 20% investment increase with this approach [12].

Investment Selection: Introduce AI-based analytical systems (used in the USA, improving efficiency by 15%) [13].

Management and Exit: Develop IPO and M&A strategies. In China, this yields 30% returns [14].

Legal Framework: Adopt a specific "Venture Capital Law."

Economic Efficiency. With improved mechanisms, by 2030, the volume of venture investments could reach 50 million USD (NPV = 25 million USD, IRR = 20%). This would increase the IT sector's share in GDP to 5% (from the current 2%) [15].

Future Prospects. In 2025–2030, Uzbekistan could enhance mechanisms through:

Infrastructure: Increase the number of technoparks to 15.

Education: Launch courses on venture financing.

International Cooperation: Joint projects with funds like "Sequoia Capital."

Conclusions. Improving the mechanisms for forming venture funds in Uzbekistan offers a significant opportunity for the innovative development of the economy. Despite recent achievements (investments reached 15 million USD), institutional weaknesses and legal challenges persist. Adapting theoretical foundations to practice could enable Uzbekistan to elevate its venture ecosystem to a global level by 2030.

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