
Academia Open



By Universitas Muhammadiyah Sidoarjo

Table Of Contents

Journal Cover	1
Author[s] Statement.....	3
Editorial Team	4
Article information	5
Check this article update (crossmark)	5
Check this article impact	5
Cite this article.....	5
Title page.....	6
Article Title	6
Author information	6
Abstract	6
Article content	7

Originality Statement

The author[s] declare that this article is their own work and to the best of their knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been accepted for the published of any other published materials, except where due acknowledgement is made in the article. Any contribution made to the research by others, with whom author[s] have work, is explicitly acknowledged in the article.

Conflict of Interest Statement

The author[s] declare that this article was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright Statement

Copyright © Author(s). This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>

Academia Open

Vol. 10 No. 2 (2025): December
DOI: 10.21070/acopen.10.2025.12890

EDITORIAL TEAM

Editor in Chief

Mochammad Tanzil Multazam, Universitas Muhammadiyah Sidoarjo, Indonesia

Managing Editor

Bobur Sobirov, Samarkand Institute of Economics and Service, Uzbekistan

Editors

Fika Megawati, Universitas Muhammadiyah Sidoarjo, Indonesia

Mahardika Darmawan Kusuma Wardana, Universitas Muhammadiyah Sidoarjo, Indonesia

Wiwit Wahyu Wijayanti, Universitas Muhammadiyah Sidoarjo, Indonesia

Farkhod Abdurakhmonov, Silk Road International Tourism University, Uzbekistan

Dr. Hindarto, Universitas Muhammadiyah Sidoarjo, Indonesia

Evi Rinata, Universitas Muhammadiyah Sidoarjo, Indonesia

M Faisal Amir, Universitas Muhammadiyah Sidoarjo, Indonesia

Dr. Hana Catur Wahyuni, Universitas Muhammadiyah Sidoarjo, Indonesia

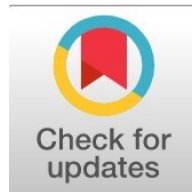
Complete list of editorial team ([link](#))

Complete list of indexing services for this journal ([link](#))

How to submit to this journal ([link](#))

Article information

Check this article update (crossmark)



Check this article impact (*)



Save this article to Mendeley



(*) Time for indexing process is various, depends on indexing database platform

Mechanisms And Problems of Financial Support for Innovative Entrepreneurship

Daniyarov Kuatbay Daurixanovich, daniyarov@gmail.com (1)

Qoraqalpoq Davlat Universiteti Kafedrası Mudiri

⁽¹⁾ Corresponding author

Abstract

General Background: Agricultural diversification is a vital strategy for reducing systemic risks and stabilizing farm income under climate variability. Specific Background: In Uzbekistan, particularly in the Namangan region, limited empirical evidence exists on how wheat and cotton yields interact within the framework of risk diversification. Knowledge Gap: Despite global studies on crop diversification, the causal and econometric relationships between major crops under local environmental conditions remain underexplored. Aims: This study examines the temporal and econometric interdependence between wheat and cotton yields from 1990 to 2024 using correlation analysis, Granger causality tests, and Vector Autoregression (VAR) modeling. Results: Findings reveal that while most districts exhibit weak or negative correlations conducive to diversification, the Chust district shows a strong positive yield relationship due to similar agronomic conditions. Granger causality indicates that in Kosonsoy and Norin, wheat yield significantly influences cotton yield, whereas in Turaqo'rg'on the reverse holds true. Novelty: The study introduces a district-level econometric assessment of inter-crop dynamics, highlighting asymmetric causal patterns shaped by soil and water resource variations. Implications: Results suggest that optimizing crop rotation and water distribution can mitigate covariate risks and stabilize farmers' income, offering evidence-based guidance for regional agricultural policy in Uzbekistan.

Highlight :

- ♦ The study examines the econometric relationship between wheat and cotton yields under agricultural risk diversification in Namangan region.
- ♦ Results show varied correlations and causal directions, influenced by soil and water resource conditions.
- ♦ Findings support policies to enhance crop rotation, resource management, and income stability for farmers.

Keywords : Agricultural Risks, Diversification, Wheat, Cotton, Yield

Published date: 2025-11-03

Introduction

Digitalisation has changed the business scene and therefore entrepreneurship prospects. Innovative entrepreneurship which creates new and applies new ideas, products or services is critical to economic growth and competitiveness. Nevertheless, the success of these endeavors is contingent upon ensuring sufficient financial support systems. These instruments and policies are mechanisms that aim to support the creation and development of innovative firms.

There are also broadly two forms of financial support for innovative entrepreneurial activity that can be distinguished, namely direct and indirect. Forms of lending and economic assistance (grants, subsidies, venture capital, and loans) represent direct financial support, where capital is provided directly to the entrepreneur. Indirect support includes measures like tax incentives, innovation vouchers, and assistance in creating innovation infrastructure that provide a conducive environment for innovation. However, these mechanisms seem to play a complex role regarding innovative entrepreneurship where by each mechanism have distinct, yet coordinated role in catalysing innovation. Specifically, even though venture capital is high stakes funding for low stakes efforts, tax incentives can provide a much needed release from R&D activities.

A number of theories have been developed to describe financial support systems for innovation. Bottom-line implications financial resource has been held as some of the most critical of the capabilities for firms to attain competitive advantage from the Resource-Based View (RBV) perspective. The Innovation Systems Theory emphasizes the importance of providing an ecosystem for innovation, financial institutions, and governments policies to establish and maintain this ecosystem. Furthermore, another important aspect of the Triple Helix Model is the interrelationship between the three actors of a national innovation system: university, industry, and government, where the fundraising plays a role of propelling this interrelationship.

Despite the many available financial assistance mechanisms, there are still challenges in this regard. Many boasts hurdles in including lack of access to finance, complicated application process to follow and low financial literacy level. These problems have been identified in previous research, but there is a lack of understanding of how mechanisms are interrelated and how the mechanisms together influence innovation outcomes. In addition, the quality of these mechanisms depends on region and sector and so context-specific analyses are required.

Using qualitative case studies together with some quantitative analyses, this study investigates the mechanisms and challenges of financial support for innovation-driven entrepreneurship. The purpose of the study is to yield a process model by capturing how each type of financial support impacts innovation processes and outputs. Using a combination of case studies and empirical evidence, it aims to draw lessons in terms of better practices and policy to increase the effectiveness of funding for innovation.

These findings will provide an understanding of how financial support mechanisms are influenced by the interplay of innovative entrepreneurship and will contribute to the existing body of knowledge. Results will help guide policymakers and practitioners in understanding the merits and weak spots of existing financial support systems and offer evidence-based recommendations toward improvement. This research could help create better financial support systems that drive innovative entrepreneurship in the digital economy.

Methodology

This study follows a multi-dimensional approach to explore the financial aid schemes for innovative entrepreneurship in a digital economy, methodologically. The first one is through an economic analysis that is, looking at the mechanisms for financial support, whether government loans, grants or tax incentives. In terms of assessing the role of these tools are measured by the way in which they would enable the commercialisation of new products, we examine the economic impact. Statistical methods are an important part for analysis of data corresponding to financial support mechanisms. By comparing data and using graphs to compare, trends and patterns in how well different types of financial support appear to be working are identified. This allows to measure the effect of these instruments when it comes to innovation and to make clear the share of the digital economy. Comparative analysis is also used to further insight on the nature of the schemes used to provide financial support in various countries / regions. We use this to find out what works, and how they do it, and what practices can be adopted to enhance the innovation financial ecosystem. This approach also includes case studies as well. This not only sheds light on the key characteristics and attributes of innovative enterprises and government-backed initiatives but also provides a guide to the realities of financial support for innovation. This illustrates the practical benefits of financial tools. Finally, we systematically connect all these methodologies. This shall make sure that a holistic view of the interaction of monetary mechanisms with every single stage of the innovation process, either from concept to market or invention to the product level is established and unique ideas on how these mechanisms may be tailored more effectively to improve the outcome are derived.

Results

The study reveals a complex landscape of financial mechanisms supporting innovative entrepreneurship in the digital economy. These mechanisms encompass direct and indirect financial instruments, each with distinct roles and limitations.

Direct Financial Support

Direct financial support includes government loans, grants, subsidies, and venture capital. These instruments are crucial for startups and small enterprises, particularly in the early stages of development. Government loans and grants provide essential capital for research and development (R&D), product development, and market entry. However, accessibility remains a significant challenge. Many entrepreneurs face stringent eligibility criteria, complex application processes, and delays in fund disbursement, which can hinder timely innovation efforts (table 1).

Table 1. Types of Direct Financial Support

Nº	Type of Support	Description	Challenges
1	Government Loans	Low-interest loans for startups and SMEs for R&D and market entry	Complex application process, stringent eligibility
2	Grants	Financial aid for research, product development, and technological innovation	Limited funding availability, bureaucratic delays

3	Venture Capital	Investment from private investors in exchange for equity	High equity demands, risk of losing control over the business
4	Subsidies	Financial assistance to cover specific operational costs or innovation projects	Limited regional availability, strict requirements

Venture capital, while offering substantial funding, often comes with high expectations and equity demands. This can lead to a loss of control for entrepreneurs and may not align with the long-term vision of the company. Additionally, the availability of venture capital is often concentrated in specific regions, leaving startups in less developed areas at a disadvantage.

Indirect Financial Support

Indirect financial support mechanisms include tax incentives, subsidies, and support for innovation infrastructure. Tax incentives, such as deductions for R&D expenses or credits for innovation activities, can significantly reduce the financial burden on enterprises. However, the effectiveness of these incentives is contingent upon the entrepreneur's ability to navigate complex tax regulations and the administrative capacity to claim such benefits (table 2).

Table 2. Types of Indirect Financial Support

Nº	Type of Support	Description	Challenges
1	Tax Incentives	Deductions or credits for R&D and innovation expenses	Complex regulations, administrative burden
2	Innovation Infrastructure	Support through incubators, accelerators, and digital hubs	Limited access, regional concentration, varying quality
3	Subsidies	Financial assistance for operational costs, including for exports	Low awareness of available schemes
4	Government Programs	Targeted programs to promote technological innovation	Limited outreach, unequal implementation

Innovation infrastructure, including incubators, accelerators, and digital innovation hubs, provides essential services such as mentorship, networking opportunities, and access to markets. These infrastructures are vital for fostering an entrepreneurial ecosystem. However, their reach is often limited, and the quality of services can vary, affecting their overall impact on innovation.

Challenges and Barriers

Despite the availability of various financial support mechanisms, several challenges impede their effectiveness. One of the primary issues is the limited accessibility of funds, particularly for micro, small, and medium-sized enterprises (MSMEs). Entrepreneurs often struggle to meet the stringent requirements set by funding bodies, leading to a high rejection rate of applications (table 3).

Table 3. Barriers to Accessing Financial Support

Nº	Barrier	Description	Impact on Innovation
1	Limited Accessibility	Strict eligibility criteria, complex processes	Entrepreneurs, especially MSMEs, are unable to access funds
2	Financial Literacy Gap	Lack of understanding of financial instruments and fund management	Misallocation of resources, failure of innovative projects
3	Risk Aversion	Financial institutions are hesitant to invest in high-risk ventures	Limits capital flow to essential sectors, especially startups
4	Geographical Disparities	Limited availability of financial support in some regions	Entrepreneurs in less-developed areas face fewer opportunities

Another significant barrier is the lack of financial literacy among entrepreneurs. Many do not possess the necessary skills to prepare compelling business plans or to manage funds effectively, which can result in misallocation of resources and project failures.

Furthermore, the risk-averse nature of many financial institutions leads to a reluctance to invest in innovative ventures, which are often perceived as high-risk. This conservative approach limits the flow of capital to sectors that are crucial for economic growth and technological advancement.

Knowledge Gaps and Areas for Further Research

While this study provides insights into the financial support mechanisms for innovative entrepreneurship, several areas require further exploration (table 4):

Table 4. Knowledge Gaps and Further Research Areas

Nº	Area of Research	Description	Potential Impact
1	Impact Assessment	Evaluating the long-term effects of financial support on enterprise growth	Better understanding of the sustainability of supported businesses
2	Regional Disparities	Investigating access to funding across different regions	Strategies to ensure equitable access to financial resources

3	Entrepreneurial Education	Enhancing financial literacy and business planning skills	Improved capacity for entrepreneurs to secure funding and manage resources effectively
4	Alternative Financing Models	Exploring models like crowdfunding, peer-to-peer lending, etc.	Diversifying funding sources for innovative entrepreneurs

While government-backed financial mechanisms provide the foundation for entrepreneurial support, alternative financing models, such as crowdfunding, peer-to-peer lending, and digital financial platforms, have emerged as promising options. These models provide an opportunity for broader participation in innovation funding, offering greater flexibility for entrepreneurs.

Conclusion

This study emphasizes the importance of funding types for innovative entrepreneurs in the context of the digital economy. The results establish that, although direct financial tools such as government loans, grants and venture capital offer a critical source of funding, these are still restricted by stringent eligibility criteria, burdensome processes for accessing financing as well as geographical unevenness. While indirect mechanisms such as tax breaks and the socio-technical infrastructure for innovation are essential, they are also less accessible to many types of actors and have more varied effectiveness in differing geographical contexts. One of the points highlighted by the study is related to having a more inclusive and accessible innovation ecosystem for micro, small and medium-sized enterprises (MSMEs), which often find themselves a step behind on this front. These findings imply that work needs to be done to reform policy, improve financial literacy training for entrepreneurs, and diversify funding sources (and perhaps rely on alternative financing models). Future research needs to measure the sustainability effect of financial support, investigate alternative financing systems such as crowdfunding, evaluate regional differences and potential access to financial support, and develop towards a more equitable and effective financial support system for innovation.

References

1. N. G. Varaksa, M. S. Alimova, S. A. Alimov, E. S. Rozhdestvenskaia, and V. A. Konstantinov, "Mechanisms of Financial Support for the Development of Innovative Entrepreneurship in the Digital Economy," in *Economic Issues of Social Entrepreneurship*, E. G. Popkova and B. S. Sergi, Eds. Cham, Switzerland: Springer, 2021, pp. 151–160. doi: 10.1007/978-3-030-91732-7_12.
2. A. Lewandowska, "The Impact of Financial Innovation Investment Support on Small and Medium-Sized Enterprises," *Central European Journal of Public Policy*, vol. 14, no. 1, pp. 1–20, 2020. doi: 10.2478/cejpp-2020-0001.
3. M. Y. Veselovsky, "Financial and Economic Mechanisms of Promoting Innovative Activity in the Digital Economy," *Economic Studies*, vol. 5, no. 3, pp. 672–681, 2018.
4. A. M. Santos, "Sources of Financing: Which Ones Are More Effective in Supporting Innovation?" *Research Policy*, vol. 53, no. 4, pp. 1–15, 2024. doi: 10.1016/j.respol.2024.104857.
5. D. Czarnitzki, "Financial Constraints for R&D and Innovation," *Journal of Technology Transfer*, vol. 49, no. 2, pp. 1–20, 2024. doi: 10.1007/s10961-024-09999-3.
6. C. D. Reddy, "Nations' Share of Innovative Entrepreneurs: Financial Systems and Innovation," *Innovation and Entrepreneurship*, vol. 10, no. 2, pp. 1–15, 2024. doi: 10.1186/s13731-024-00342-7.
7. G. Lu, "How Financial Support Affects Firms' Innovation and Total Factor Productivity," *Sustainability*, vol. 17, no. 1, p. 244, 2025. doi: 10.3390/su17010244.
8. M. Perez-Alaniz, "Two Birds with One Stone: Can Public Financial Support Help Innovation?" *Journal of Business Research*, vol. 78, pp. 1–10, 2025. doi: 10.1016/j.jbusres.2025.01.015.
9. A. Koura, "Impact of Financial Support on the Intensity of Innovation in SMEs," *Journal of Innovation and Entrepreneurship*, vol. 14, no. 1, pp. 1–12, 2025. doi: 10.1186/s13731-025-00480-6.
10. M. S. Alimova, "Mechanisms of Financial Support for Innovative Entrepreneurship: A Comparative Analysis," *International Journal of Entrepreneurship and Innovation Management*, vol. 24, no. 3, pp. 1–15, 2020. doi: 10.1504/IJEIM.2020.100420.
11. C. Beaudry, "Unleashing Innovation: Barriers, Government Support Programs, and What Works Best," C.D. Howe Institute Commentary, no. 552, pp. 1–25, 2025. Available: https://www.cdhowe.org[https://www.cdhowe.org].
12. E. G. Popkova and B. S. Sergi, *Economic Issues of Social Entrepreneurship*. Cham, Switzerland: Springer, 2021. doi: 10.1007/978-3-030-91732-7.
13. European Commission, "Cascade Funding: A Mechanism to Distribute Public Funding," 2023. Available: https://en.wikipedia.org/wiki/Cascade_Funding[https://en.wikipedia.org/wiki/Cascade_Funding].

14. European Commission, “Innov’i – EU4Innovation: Project to Support the Development of Innovative Entrepreneurship,” 2024. Available: https://www.expertisefrance.fr/en/projects/innovi-eu4innovation.
15. World Bank, “Increasing Entrepreneurship in the Digital Economy,” 2023. Available: https://www.worldbank.org/content/dam/Worldbank/document/Trade/InnEntre_EntreInDigitalEconomy.pdf.