BG Pulse Journal USA
ISSN:1947-2536 http://www.bgpulseusa.com/index.php/bg
BG PULSE JOURNAL

THE IMPACT OF LENDING ON THE DEVELOPMENT OF ENTREPRENEURIAL ACTIVITY

Susanna S. Alieva

Candidate in Economics, Associate Professor,
Samarkand and Institute of Economics and Service,
Samarkand, Uzbekistan
https://doi.org/10.5281/zenodo.20233446

Abstract. This article examines the impact of bank lending on the development of entrepreneurial activity at both national and international levels, with a particular focus on the experience of the Republic of Uzbekistan. Drawing on statistical data from the Central Bank of Uzbekistan, the Asian Development Bank, and international academic sources, the study analyses the dynamics of the loan portfolio, the sectoral structure of lending, and the conditions of SME access to financial resources. The key barriers to entrepreneurial lending are identified, high interest rates, collateral requirements, and information asymmetry, and directions for improving the effectiveness of the credit mechanism are defined. The results confirm a statistically significant positive relationship between SME lending volumes and regional GDP growth.

Keywords: lending, entrepreneurship, SMEs, bank financing, Uzbekistan, loan portfolio, subsidised lending, access to finance.

Introduction. Entrepreneurial activity is a driving force of economic growth, job creation, and technological progress. At the same time, one of the main obstacles to enterprise development, particularly for small and medium-sized enterprises (SMEs), remains limited access to financial resources. In this context, bank lending serves as the key mechanism through which savings are transformed into productive investments.

According to World Bank data, SMEs account for more than half of GDP and over two-thirds of employment in most countries worldwide. Credit availability directly determines the capacity of enterprises to expand production, enter new markets, acquire equipment, and implement innovative projects.

Uzbekistan demonstrates a notable trajectory in this regard: over the period 2020–2023, the total loan portfolio of the country's banking sector grew from 218 to 497 trillion UZS, while the volume of loans directed to the financing of entrepreneurial activity increased by 24% in 2023 compared to 2022, reaching 251.4 trillion UZS (Central Bank of Uzbekistan, 2024). The share of small business entities in the country's GDP reached 58.6% by the beginning of 2024, while their contribution to employment stands at approximately 80% (WJARR, 2024). According to the study by Gaybullaev & Oliński (2020), published in the Olsztyn Economic Journal, the key challenges for Uzbekistan's SMEs include weak infrastructure, a shortage of qualified specialists, difficulties in accessing credit, and high interest rates.

The aim of this article is a comprehensive analysis of the impact of lending on entrepreneurship development based on international and Uzbek experience. The study addresses the following objectives: (1) to systematise theoretical and empirical approaches to the study of the credit–entrepreneurship nexus; (2) to analyse the dynamics and structure of SME lending in Uzbekistan; (3) to conduct a comparative analysis of lending conditions in an international context; (4) to assess the effectiveness of government subsidised lending programmes and identify key barriers.

Research methodology. The study is built on a combined methodological approach encompassing both qualitative and quantitative methods of analysis. The theoretical foundation is the financial intermediation framework of Berger & Udell (2006), published in the Journal of Banking & Finance, according to which banks act as key agents reducing transaction costs and information asymmetry between savers and entrepreneurs.

The empirical base of the study is drawn from three categories of sources. The first comprises official statistical data: the Annual Report of the Central Bank of the Republic of Uzbekistan for 2023, publications of the Statistics Agency of Uzbekistan (Uzstat), materials of the Business Development Bank of Uzbekistan, and decrees of the President of the Republic of Uzbekistan (PP-55/2021, PP-306/2023). The second category consists of international analytical sources: reports from the Asian Development Bank (ADBI Working Paper 997, Tadjibaeva, 2019), data from rating agency Moody's (2024), and materials from Expert RA (2024). The third category comprises peer-reviewed academic publications from 2006 to 2026.

The following research methods are applied: (1) statistical time-series analysis, to assess loan portfolio dynamics; (2) comparative method, to contrast lending conditions across different jurisdictions; (3) econometric approach (GMM estimation), with reference to the verified results of Ergasheva & Oltinov (2025); (4) content analysis of regulatory documents, to assess government entrepreneurship support policy.

The study covers the period 2020-2024; earlier data are used where comparative analysis requires them. The units of observation are commercial banks, SME entities, and regions of Uzbekistan.

Literature review. The theoretical foundations for studying the impact of credit on entrepreneurship were established in the financial intermediation literature. The conceptual model of Berger & Udell (2006), published in the Journal of Banking & Finance, examines various SME lending technologies, from financial statement analysis to relationship lending. The authors demonstrate that enterprise access to credit is determined by the degree of borrower opacity and the institutional characteristics of the banking market. This work remains the most widely cited in the academic discourse on SME finance.

In the area of the impact of credit on firm innovation, the systematic review by Romero Alvarez, Salas-Navarro, Martínez & Zamora-Musa (2025), published in the International Journal of Innovation Science (Emerald Publishing), is of particular significance. The authors note that adequate financing through credits allows companies to invest in research and development, enhancing their capacity to innovate and compete in the market. The study also emphasises that reducing collateral requirements can substantially stimulate the innovative activity of small businesses (Kaur et al., 2022, cited in Romero Alvarez et al., 2025).

The role of SMEs in rural development and the mediating function of access to finance are studied by Manzoor, Wei & Sahito (2021), published in PLoS ONE. Using structural equation modelling on data from 338 entrepreneurs in Pakistan, the authors confirm that SME access to finance significantly mediates the effect of SME development on rural development. These findings are applicable to the agrarian regions of Uzbekistan, where the concentration of small businesses is high.

The specific challenges of small business lending in Uzbekistan are examined in several domestic works. Ernazarov N.S. (2019), in the journal Economics and Business: Theory and Practice, analyses the theoretical and practical aspects of small business lending by commercial banks in Uzbekistan, noting that lending to small businesses is gradually becoming one of the priority areas of banking activity, yet support mechanisms remain insufficiently developed.

Gaybullaev & Oliński (2020), drawing on a CAWI survey of 384 entrepreneurs, found in the Olsztyn Economic Journal that among the key challenges for Uzbekistan's SMEs are problems with the credit allocation system and high interest rates, whereas the primary opportunities include tax incentives and government subsidies.

The specifics of microfinance as an SME support instrument in Uzbekistan are analysed by Gafarova D.T. (2025) in the Journal of Multidisciplinary Sciences and Innovations. The author notes that in 2023-2024 the volume of microloan issuance more than doubled, yet the risks of non-performing loans and borrower financial stress are growing.

From the perspective of Uzbek academic scholarship, the study by Tadjibaeva D. (2019) of the National University of Uzbekistan, published in the Asian Development Bank Institute working paper series (ADBI Working Paper No. 997), is of fundamental importance. The author analyses the SME financing system, identifying the absence of a legislative definition of medium-sized enterprise and the underdevelopment of value-chain financing instruments as the main structural constraints.

Ergasheva & Oltinov (2025), in Innovation Science and Technology, present an econometric analysis of the relationship between SME financing and economic growth in Uzbekistan using panel data from 14 regions for the period 2010–2024. Employing panel unit root tests, Pedroni cointegration analysis, and GMM estimation, the authors establish that a 1% increase in SME lending volume is associated with an approximate 0.23% rise in regional GDP. The identified bidirectional causality confirms the mutually reinforcing nature of credit expansion and economic development.

Asrorov & Rashidov (2026), in the American Journal of Social and Humanitarian Research (DOI: 10.31150/ajshr.v7i4.4783), systematically substantiate the causal relationship between SME lending and Uzbekistan's foreign trade balance. The authors note that the SME share in bank loan portfolios is significantly lower than in developed countries, primarily owing to information asymmetry, excessive collateral requirements, and bureaucratic lending procedures.

Key barriers to SME lending in Uzbekistan are systematised in the study published in the American Journal of Business Management, Economics and Banking (2026). The authors find that only 10% of small and 16% of medium enterprises in Uzbekistan have effective access to credit, creating a financing gap of approximately USD 6 billion. The main barriers identified are

insufficient collateral, low financial literacy, high interest rates (averaging 35.9% for MFI microcredits), and gender disparities.

Analysis and Results. Uzbekistan's banking sector demonstrated sustained growth across all key indicators during 2020–2023. According to the Central Bank's Annual Report for 2023, total bank assets increased from 354 to 652 trillion UZS (+84.2%), while the total loan portfolio grew from 218 to 497 trillion UZS (+128%). The volume of loans directed to financing entrepreneurial activity grew by 24% in 2023 compared to 2022, reaching 251.4 trillion UZS, while the total outstanding credit balance exceeded 497 trillion UZS.

Particularly noteworthy is the growth in the SME share of the loan portfolio: the indicator rose from 28.4% in 2020 to 39.7% in 2023, reflecting a deliberate shift in credit policy towards small and medium-sized businesses. According to Expert RA (2024), the share of foreign-currency loans is gradually declining, from 50% in 2022 to 45% in 2023, reflecting a de-dollarisation policy. The relevant data are presented in Table 1.

Table 1. Dynamics of the loan portfolio of Uzbekistan's banking sector (2020–2023)

Indicator	2020	2021	2022	2023
Total bank assets, trillion UZS	354.0	451.0	557.0	652.0
Total loan portfolio, trillion UZS	218.0	299.0	401.0	497.0
Loans to businesses (legal entities), trillion UZS	141.0	189.0	203.0	251.4
Growth rate of business loans, %	—	+34.0	+7.4	+24.0
Business loans as % of GDP	21.5	24.3	26.0	29.1
SME share in the loan portfolio, %	28.4	31.2	35.8	39.7

Source: Central Bank of Uzbekistan, Annual Report 2023; Expert RA, Review of Uzbekistan's Banking Market 2024.

Analysis of Table 1 confirms that, despite the deceleration in growth in 2022 (+7.4%) owing to external shocks, the market recovered its strong momentum in 2023 (+24.0%). The share of business loans in GDP rose from 21.5% in 2020 to 29.1% in 2023, indicating a deepening of financial intermediation.

An examination of the sectoral distribution of the loan portfolio reveals the priorities of credit policy and the imbalances in financing across sectors of the economy. According to the Central Bank's Annual Report, the outstanding loan balance in the industrial sector in 2023 amounted to 140.2 trillion UZS (+10.7%), in agriculture, 47.3 trillion UZS (+12.3%), in transport and communications, 34.3 trillion UZS (+15.7%), in trade and public catering, 32.5 trillion UZS (+12.5%), and in construction, 12.3 trillion UZS (+18%). The dynamics of the sectoral structure in relative terms are presented in Table 2.

Table 2. Sectoral structure of business loans in Uzbekistan (2020–2023), %

Sector	2020, %	2021, %	2022, %	2023, %
Industry	32.1	31.5	30.8	28.2
Trade and public catering	14.8	15.3	16.1	16.5
Agriculture	12.3	11.9	11.1	9.5
Construction	8.7	9.1	9.4	10.2
Transport and communications	7.2	7.5	7.8	6.9
Services and other	24.9	24.7	24.8	28.7

Source: Central Bank of the Republic of Uzbekistan, Annual Report 2023; author's calculations.

Industry traditionally accounts for the largest portfolio share, but its relative weight is declining, from 32.1% in 2020 to 28.2% in 2023. A notable trend is the growth in the share of construction loans (from 8.7% to 10.2%) and services (from 24.9% to 28.7%), reflecting the diversification of the economic structure. The relative decline in the agricultural lending share (from 12.3% to 9.5%) amid continued high employment in the agrarian sector creates structural imbalances, as noted by Tadjibaeva (2019).

An international comparison of SME lending conditions allows an assessment of Uzbekistan's competitive position. Table 3 presents key indicators for six countries with different levels of financial sector development.

Table 3. Comparative characteristics of SME lending conditions (2023-2024)

Country	SME lending rate, %	SME share in loan portfolio, %	SME share in GDP, %	SME share in employment, %
Uzbekistan	18–22	39.7	58.6	~78
Kazakhstan	14–17	28.3	32.0	~60
Russia	10–16	19.5	21.9	~25
China	4.5–6.0	42.0	60.0	~80
Germany	3.0–5.5	53.0	55.0	~63
USA	5.5–8.5	44.0	43.5	~47

Source: ADBI Working Paper 997 (Tadjibaeva, 2019); WJARR (2024); Expert RA (2024); OECD (2022); national central bank data; author's calculations.

The comparative analysis reveals fundamental differences in SME credit access conditions. Lending rates in Uzbekistan (18-22% per annum) substantially exceed comparable figures for Germany (3-5.5%) and China (4.5-6%), yet Uzbekistan's SME share in GDP (58.6%) is comparable to levels seen in developed economies. This paradox is explained by the high labour intensity of Uzbek entrepreneurship against a backdrop of relatively low capital intensity of production.

According to Moody's (2024), the rapid growth of retail lending in Uzbekistan - by 171% over 2021-2023 - was accompanied by rising credit risks, though favourable economic conditions and regulatory measures ensured their mitigation. The share of non-performing loans in the banking sector by end-2023 amounted to 16.6 trillion UZS (+18% over the year), equivalent to 3.4% of the total loan portfolio (Expert RA, 2024).

Uzbekistan's state policy for entrepreneurship support is implemented through an extensive system of subsidised lending programmes, whose regulatory framework was substantially expanded during 2021-2023. An overview of the key programmes is presented in Table 4.

Table 4. Government subsidised lending programmes for entrepreneurship in Uzbekistan

Programme /	Target group	Interest	Ter	Key

Regulatory Act		rate	m	indicator
Family entrepreneurship (PP-55, Dec. 2021)	Citizens and small business entities	14% p.a.	Up to 3 yrs	Grace period – 6 months
Financial support for small business (PP-306, Sept. 2023)	SME entities	CBR key rate + 4 p.p.	Up to 3 yrs	43% SME share in loan portfolio by 2026
Business Development Bank (strategy 2024–2026)	Small business (150,000 entities)	Subsidised	Up to 5 yrs	Resources up to $800 m; Eurobonds $300 m
Youth lending (UP-6260, July 2021)	Young entrepreneurs	Subsidised	Up to 3 yrs	2023: 21,000 recipients, 320 bn UZS

Source: lex.uz (PP-55/2021, PP-306/2023, UP-6260/2021); kun.uz (2023); JSC Uznatsbank, Results for 2023.

The implementation of these programmes has produced measurable results. Under the youth lending initiative, approximately 21,000 young people received loans totalling over 320 billion UZS in 2023, of which 120.7 billion UZS comprised subsidised loans for entrepreneurship development (JSC Uznatsbank, 2024). The Business Development Bank's strategy for 2024-2026 envisages attracting resources of up to USD 800 million for small business project financing and reaching a target coverage of 150,000 SME entities.

The study published in the American Journal of Business Management (2026) highlights a critical challenge: despite the growth of support programmes, only 10% of Uzbekistan's small enterprises genuinely have access to credit resources, creating a financing gap of approximately USD 6 billion. This gap is driven primarily by high collateral requirements, low entrepreneur financial literacy, and the underdevelopment of credit scoring institutions.

Conclusion. The analysis conducted confirms a robust positive relationship between credit availability and the development of entrepreneurial activity. Lending enables enterprises to overcome financial growth constraints, invest in innovation, expand production capacity, and create employment. Econometric estimates based on Uzbekistan data (Ergasheva & Oltinov, 2025) confirm that a 1% increase in SME lending volume is associated with an approximate 0.23% rise in regional GDP, with the relationship being bidirectional.

Uzbekistan has established a basic institutional infrastructure for business lending: by 2023, the SME share in the bank loan portfolio reached 39.7%, the volume of business loans grew by 24% in a single year, and government programmes provide preferential access to finance for a wide range of small business entities. Nevertheless, a number of structural challenges persist. High interest rates (18–22% per annum on market-rate loans) substantially restrict actual credit access for start-up entrepreneurs. The concentration of lending in industry alongside a declining agricultural share creates sectoral imbalances. Collateral requirements and information asymmetry continue to constrain lending to early-stage enterprises (Asrorov & Rashidov, 2026).

Priority directions for developing the credit mechanism include: (1) introducing alternative credit scoring methods based on digital data; (2) improving government guarantee mechanisms for SME loans; (3) developing microfinance institutions with a focus on rural areas; (4) reducing dollarisation of the loan portfolio; (5) raising financial literacy among entrepreneurs. Implementing these measures has the potential to significantly enhance the contribution of the credit mechanism to the sustainable development of entrepreneurship in Uzbekistan.

References

1. Ergasheva, A.F., & Oltinov, R.O. (2025). The Impact of Small and Medium Enterprise Financing on Economic Growth: Empirical Evidence from Uzbekistan. Innovation Science and Technology, 1(11). DOI: 10.5281/zenodo.17757039. URL: https://ist-journal.uz/index.php/IST/article/view/369

2. Tadjibaeva, D. (2019). Small and Medium-Sized Enterprise Finance in Uzbekistan: Challenges and Opportunities. ADBI Working Paper No. 997. Asian Development Bank Institute, Tokyo. URL: https://www.adb.org/publications/small-medium-sized-enterprise-finance-uzbekistan-challenges-opportunities

3. Asrorov, A.I., & Rashidov, Z.I. (2026). Improving the Creditworthiness of Small Businesses in Commercial Banks. American Journal of Social and Humanitarian Research, 7(4), 42–49. DOI: 10.31150/ajshr.v7i4.4783. URL: https://globalresearchnetwork.us/index.php/ajshr/article/view/4783

4. Microfinance and SME Lending: Challenges and Opportunities in Uzbekistan. (2026). American Journal of Business Management, Economics and Banking, 45, 112–121. URL: https://americanjournal.org/index.php/ajbmeb/article/view/3409

5. Gaybullaev, O., & Oliński, M. (2020). Opportunities and Challenges Faced by Small and Medium Enterprises in Uzbekistan. Olsztyn Economic Journal, 15(4), 285–299. URL: https://czasopisma.uwm.edu.pl/index.php/oej/article/view/6852

6. Gafarova, D.T. (2025). Microfinancing Problems in the Republic of Uzbekistan and Their Solutions. Journal of Multidisciplinary Sciences and Innovations, 1(6), 613–615. URL: https://inlibrary.uz/index.php/jmsi/article/view/136206

7. Ernazarov, N.S. (2019). Practice of Crediting Small Business in Uzbekistan. Economics and Business: Theory and Practice, 4-3(50). DOI: 10.24411/2411-0450-2019-10605. URL: https://cyberleninka.ru/article/n/practice-of-crediting-small-business-in-uzbekistan

8. World Journal of Advanced Research and Reviews. (2024). The Challenges of Commercial Banks for Financing Project: In Case of Small-Medium Enterprises in Uzbekistan. WJARR, 23(02), 1449–1455. DOI: 10.30574/wjarr.2024.23.2.2473. URL: https://wjarr.com/sites/default/files/WJARR-2024-2473.pdf

9. Central Bank of the Republic of Uzbekistan. (2024). Annual Report 2023. Tashkent: CBU. URL: https://cbu.uz/upload/medialibrary/dba/Godovoy-otchet-2023.pdf

10. Berger, A.N., & Udell, G.F. (2006). A More Complete Conceptual Framework for SME Finance. Journal of Banking & Finance, 30(11), 2945–2966. DOI: 10.1016/j.jbankfin.2006.05.008. URL: https://www.sciencedirect.com/science/article/abs/pii/S0378426606000938

11. Romero Alvarez, Y.P., Salas-Navarro, K., Martínez, L.B., & Zamora-Musa, R. (2025). Financing Innovation in SMEs: A Systematic Review of Financing Channels. International Journal of Innovation Science, ahead-of-print. DOI: 10.1108/IJIS-06-2024-0151. URL: https://www.emerald.com/insight/content/doi/10.1108/ijis-06-2024-0151

12. Manzoor, F., Wei, L., & Sahito, N. (2021). The Role of SMEs in Rural Development: Access of SMEs to Finance as a Mediator. PLoS ONE. DOI: 10.1371/journal.pone.0247598. URL: https://pmc.ncbi.nlm.nih.gov/articles/PMC7939373/

13. Expert RA. (2024). Review of Uzbekistan's Banking Market. URL: https://raexpert.ru/researches/banks_uzb_2024/

14. Moody's / UzDaily. (2024). Retail lending in Uzbekistan grew by 171% over 2021–2023. URL: https://www.uzdaily.uz/ru/v-uzbekistane-potrebitelskie-kredity-i-avtokredity-byli-naibolee-bystrorastushchimi-vidami-roznichnykh-kreditov-v-2021-23-gg/

15. Decree of the President of the Republic of Uzbekistan No. PP-55, 20.12.2021. On Additional Measures for the Development of Family Entrepreneurship. URL: https://lex.uz/docs/5785328

16. Decree of the President of the Republic of Uzbekistan No. PP-306, 14.09.2023. On Measures of Financial and Institutional Support for Small Business Development. URL: https://lex.uz/ru/docs/6609112

17. Alieva, S. S. (2023). Problems of the need for justification of enterprise's financial and economic stability. The Journal of Economics, Finance and Innovation, 1(4), 10-18.

18. Alieva, S. S., & Urunova, M. G. (2023). Theoretical Fundamentals of Improving Financial Health in Enterprises.