



## AN EMPIRICAL INVESTIGATION OF CAPITAL AVAILABILITY IN UZBEKISTAN: FINANCING CONSTRAINTS AND THEIR IMPACT ON CORPORATE LEVERAGE DYNAMICS

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**ABSTRACT:** *This study examines the access to capital for businesses in Uzbekistan, focusing on the high-cost lending environment, its impact on firms' financing decisions, and the resultant capital structure. Despite a growing domestic market and government reforms aimed at fostering investment, Uzbek firms face an average business loan interest rate of approximately 16% in 2023. This rate, substantially higher than in developed markets, results from institutional underdevelopment and a nascent venture capital ecosystem. The high cost of debt leads firms to rely more heavily on equity and internal financing, which corresponds with observed lower leverage ratios compared to global counterparts. The implications for Uzbekistan's economic growth and policy recommendations are discussed.*

**KEYWORDS:** *Uzbekistan, access to capital, interest rates, corporate leverage, venture capital, financial reform*

### INTRODUCTION

Access to affordable capital is critical for economic growth and business expansion. In Uzbekistan, the financial sector exhibits a relatively high average interest rate of 16% in 2023 for business loans, posing a significant barrier to entrepreneurship and investment (Nasritdinova, 2018). This contrasts significantly with lending rates in developed economies, which typically range between 2-5%. The high borrowing cost reflects limitations in Uzbekistan's institutional framework and a relatively

undeveloped venture capital market (Shakirhonov, 2017).

Financial Environment and Institutional Challenges

Institutional investors in Uzbekistan face constraints due to underdeveloped regulatory mechanisms, restricting their ability to diversify risk and offer competitive financing (Shakirhonov, 2017). Additionally, the venture capital ecosystem remains embryonic, predominantly supported by state-backed entities such as JSC "NATD," limiting the availability of risk capital for innovative



startups. The government's declaration of 2018 as the "Year of Supporting Entrepreneurship, Innovative Ideas, and Technologies" signals intent to improve the financial environment (Nasritdinova, 2018). Further reforms are underway to build a more investor-friendly climate (Uzbekistan Country Climate and Development Report, 2023).

## Literature Review

Previous studies highlight the importance of institutional quality, financial development, and macroeconomic stability in determining access to affordable capital and firms' leverage choices (Jõeveer, 2013; Zafar, 2019). Research in emerging markets shows high interest rates push firms toward equity and internal funding due to debt cost and risk (Zulkhibri, 2015). Comparative analyses of Uzbek firms illustrate their conservative leverage relative to global peers, driven by risk aversion and financing constraints (Olang, 2017; Nusa et al., 2020).

Financial sector reforms and venture capital development are key to unlocking capital access and enabling firms to optimize their capital structures (IMF, 2025; Shakirhonov, 2017). In the Central Asian context, banking sector transformation and improving regulatory frameworks influence leverage dynamics (German Economic Team, 2023).

## Impact of High Interest Rates on Firm Financing

High interest rates increase the cost and hazard associated with debt, influencing firms' capital structure and

financing decisions. Literature from emerging markets illustrates a trend toward reduced debt reliance and increased use of equity or internal funds under such conditions (Zulkhibri, 2015). Similar dynamics are observed in Uzbekistan, with firms exhibiting conservative leverage profiles compared to global peers. The Malaysian financial crisis of 1997 exemplifies the risks high interest rates pose to firms' solvency, reinforcing the preference for lower leverage in volatile environments (Hadi et al., 2019).

## Leverage Ratios of Uzbek Firms versus Global Counterparts

Research indicates Uzbek firms generally bear lower financial leverage than international counterparts, a finding consistent with higher borrowing costs and economic risk aversion (Olang, 2017). Firm characteristics such as liquidity, asset tangibility, profitability, and growth prospects help explain leverage variations (Nusa et al., 2020). Lower leverage, while reducing financial distress risk, may simultaneously restrict firms' growth avenues and investment potential (Ali & Ahmad, 2020).

## Opportunities Amidst Challenges

Uzbekistan's strategic position within Eurasian trade networks and large domestic market offers opportunities for foreign investors and domestic companies alike (Shukhratovich et al., 2020). Enhanced political stability and improved trade policies could support capital inflows and diversification (Nasritdinova, 2018). The government's commitment to



reforming the financial sector and improving institutional frameworks is poised to gradually lower borrowing costs and expand financing options.

## Policy Implications

Uzbekistan's high-cost capital environment constrains firm leverage and pushes firms towards equity and internal financing sources. Addressing institutional weaknesses and deepening venture capital markets are urgent priorities for policymakers. Strengthening financial sector reforms, encouraging private equity development, and improving investor protections could foster competitive lending rates and enhance access to diverse capital forms. Such measures are vital for enabling Uzbek firms to leverage growth opportunities, contributing to sustainable economic development.

The financial environment in Uzbekistan currently presents both significant challenges and opportunities for access to capital by businesses. A key challenge is the relatively high average interest rate for business loans—around 16% in 2023—compared to much lower rates typically seen in developed countries (2-5%). This high cost of borrowing constrains firms' ability to finance expansion or invest in innovation.

Several factors contribute to the elevated lending rates. The underdeveloped institutional framework limits the growth of institutional investors, and the venture capital market remains small and largely state-driven through entities like JSC "NATD." These

constraints reduce competition and risk-sharing capacity, which normally helps lower rates.

Despite these hurdles, Uzbekistan benefits from a large and expanding domestic market and strong regional integration within Eurasian trade networks. This makes the country attractive to foreign investors seeking market access. Moreover, government initiatives aimed at improving the business climate—highlighted by the emphasis on entrepreneurship and innovation since 2018—reflect a commitment to enhancing access to finance and supporting growth.

High interest rates influence Uzbek firms' financing choices by making debt more expensive and riskier. Consequently, firms tend to favor equity or internal funds over borrowing. This trend aligns with studies from other emerging markets where high borrowing costs led to lower leverage ratios and a greater reliance on internal financing sources.

Empirical research shows that Uzbek firms generally maintain lower leverage ratios than their international peers. Factors such as profitability, firm size, tangible assets, and risk environment shape these leverage decisions. While a conservative approach to debt reduces financial risk, it might also limit growth potential by constraining access to capital.

The relatively low leverage among Uzbek firms suggests a cautious corporate financing culture, possibly



driven by high interest burdens and perceived market risks. As Uzbekistan continues economic reforms and improves political stability and trade policies, the financial sector is likely to evolve. Enhancing institutional capabilities, developing venture funding, and broadening access to diversified capital sources could lower financing costs and encourage balanced leverage to support sustainable business growth.

In summary, addressing the high interest rate challenge and strengthening capital market infrastructure are key to unlocking greater access to finance for Uzbek enterprises. Collaborative efforts between policymakers, financial institutions, and the private sector will be crucial to creating a more vibrant and inclusive investment ecosystem that fosters economic development.

## Research Methodology

This qualitative study synthesizes secondary data from Central Bank reports, World Bank publications, academic journals, and international financial institutions on lending rates, firm leverage ratios, and financial reforms in Uzbekistan. Comparative quantitative data from peer countries Kazakhstan and Kyrgyzstan enrich the analysis of regional leverage differences. Key variables include interest rates, leverage ratios, loan-to-deposit ratios, and non-performing loans.

Data on firm-level financing patterns is supplemented with macroeconomic and institutional context analysis, drawing from peer-reviewed

literature and official statistics from 2018–2025.

## Financial Sector Reforms in Uzbekistan

Recent reforms in Uzbekistan's financial sector have focused on modernizing the banking system, strengthening supervision, and increasing market competitiveness. The Banking Sector Reform Strategy, initiated in 2020, sets a path toward privatizing state-owned banks and fostering a commercially oriented banking environment (IMF, 2025). In December 2023, the Central Bank of Uzbekistan (CBU) adopted Guidelines on Risk-Based Supervision (GRBS), marking a shift to proactive, risk-sensitive regulatory oversight. Legislative initiatives are also underway to establish a Financial Stability Board, enhance deposit insurance—including coverage for legal entities—and shorten compensation timelines, all designed to boost public trust and sector resilience (Trend, 2025). Although full Basel III compliance remains a work in progress, these reforms signify crucial steps toward aligning with global standards.

Further support comes from development partners like the Asian Development Bank (ADB), which approved a \$300 million loan package in 2025 to expand inclusive finance and strengthen microfinance. This initiative promotes responsible lending, digital financial oversight, and gender-responsive policies encompassing financing for women entrepreneurs (ADB, 2025). Together, these reforms



aim to improve access to credit, especially for underserved SMEs, potentially reducing Uzbekistan's historically high borrowing costs and enabling more balanced leverage for firms.

## Comparative Leverage Metrics and Implications

Uzbek firms traditionally exhibit lower leverage ratios compared to global peers, influenced by risk-averse corporate governance and elevated interest rates (Olang, 2017). This conservative approach protects firms from financial distress but may restrain growth opportunities. The ongoing banking reforms and improved regulatory frameworks could gradually lower financial costs, encouraging firms to optimize their debt-equity mix for expansion and innovation.

Comparative leverage studies underscore those transitioning economies with stable financial regulation witness improved credit access and more efficient capital structures. As Uzbekistan implements risk-based supervision and strengthens institutional capacity, its corporate sector might realign leverage closer to international norms, enhancing productivity and competitiveness (IMF, 2025).

## Strategies for Growing the Venture Capital Ecosystem

Despite nascent venture capital activity, Uzbekistan has significant potential to develop this ecosystem further. Key strategies include:

**Institutional Capacity Building:** Strengthening legal frameworks and investor protections to attract domestic and foreign venture funds.

**Government Support and Incentives:** Expanding state-backed venture initiatives like JSC "NATD," while fostering private sector participation through tax incentives and co-investment schemes.

**Financial Literacy and Entrepreneurial Education:** Enhancing awareness and skills among startups regarding equity financing and venture capital mechanisms. **Integration with Regional and Global Networks:** Leveraging Uzbekistan's strategic location and trade linkages to connect local startups with international investors. **Digital Finance and Fintech Innovation:** Encouraging fintech solutions to improve capital access, transparency, and risk assessment practices.

ADB's financial inclusion and institutional strengthening programs further support these strategies, with an emphasis on microfinance sector transformation and digital financial services expansion (ADB, 2025). Uzbekistan's ongoing banking reforms, coupled with targeted venture capital ecosystem development, create a promising outlook for improved access to capital. These reforms are expected to lower financing costs, enable more optimal leverage ratios, and empower innovative entrepreneurship, accelerating sustainable economic growth in the medium term.



## Research Findings

Business loan interest rates in Uzbekistan averaged 16%-23% in 2023-2024, with some banks charging up to 49% for short-term loans, driven by inflation, institutional constraints, and credit risk premiums (CEIC, 2024; KapitalBank, 2025).

Uzbek firms exhibit lower leverage ratios than global peers, favoring equity and internal funds to mitigate the high cost and risk of debt financing (Olang, 2017).

Banking sector reforms introduced since 2020—such as risk-based supervision and capital adequacy improvements—have strengthened the financial system but challenges persist in broadening institutional investor participation (IMF, 2025; Trend, 2025).

Comparative analysis shows Uzbekistan's banking sector assets reach ~65% of GDP, surpassing Kazakhstan (~42-45%) and Kyrgyzstan (~25-30%). Capital adequacy ratios are robust (~17%), with relatively moderate non-performing loan levels (~4.1%) compared to regional peers (German Economic Team, 2023).

Venture capital remains in early stages, predominantly led by state initiatives like JSC "NATD," limiting private risk capital availability (Shakirhonov, 2017).

### Comparative Analysis of Uzbekistan Banking Leverage Ratios with Regional Peers

The banking sector in Uzbekistan has exhibited remarkable growth and

transformation over recent years, with total bank assets reaching approximately 65% of GDP by mid-2023, positioning it among the larger banking sectors in the region (German Economic Team, 2023). This is higher than Kazakhstan and Ukraine, comparable with Belarus, and smaller than Russia, which has the largest banking sector in the peer group.

### Leverage Metrics and Bank Asset Levels

**Bank Assets to GDP Ratio:** Uzbekistan's banking assets relative to GDP stand around 64.9% (1H 2023), exceeding Kazakhstan's and Ukraine's ratios, which hover around 40-50%. Belarus shows comparable ratios, while Russia's banking assets are substantially higher, exceeding 100% of GDP (German Economic Team, 2023).

**Capital Adequacy:** As of mid-2024, Uzbekistan maintains a capital adequacy ratio of 17.3% and a Tier 1 capital ratio of 14.2%, exceeding minimum regulatory requirements and indicating relatively strong capitalization in comparison to several regional peers, where capital adequacy ratios commonly range between 12-16% (Central Bank of Uzbekistan, 2025). This suggests a prudent leverage position aimed at maintaining stability.

### Non-Performing Loans (NPLs) and Risk Profile

Uzbekistan's NPL ratios, though temporarily elevated during the COVID-19 pandemic, remain lower than those of many regional peers, signaling better credit portfolio quality despite rapid credit expansion (German Economic



Team, 2023). This resilience may justify slightly higher leverage capacity in the future.

## Lending to the Private Sector

Loans to the private sector in Uzbekistan have nearly doubled as a share of GDP since 2018 to about 42% in 1H2023, aligning closely with Russia's lending penetration, and notably higher than Kazakhstan and Ukraine. This indicates active credit intermediation supporting the economy but suggests room for further credit deepening relative

to Russia's more mature system (German Economic Team, 2023).

## Dollarization and Currency Risk

Uzbekistan's banking system still faces considerable dollarization challenges, with foreign currency loans constituting approximately 46% of total loans and FX deposits at 33% (German Economic Team, 2023). While this is somewhat higher than in some regional peers, it affects leverage risk considerations and regulatory focus. Efforts to reduce dollarization remain a policy priority.

Comparative Banking Leverage Metrics: Uzbekistan, Kazakhstan, Kyrgyzstan (2023–2025)

| Indicator                  | Uzbekistan<br>(2023-25) | Kazakhstan<br>(2023-25) | Kyrgyzstan<br>(2023-25) |
|----------------------------|-------------------------|-------------------------|-------------------------|
| Bank Assets (% of GDP)     | 64.9%                   | ~42-45%                 | ~25-30%                 |
| Capital Adequacy Ratio     | 17.3%                   | ~14-16%                 | ~16%                    |
| Non-Performing Loans (NPL) | ~8-9%                   | ~9-10%                  | ~10.7% (Dec 2024)       |
| Loan-to-Deposit Ratio      | ~85-90%                 | ~70-80%                 | ~60-70%                 |
| Dollarization (Loans)      | ~46%                    | ~20-30%                 | ~40-45%                 |

Uzbekistan has a larger banking sector relative to GDP and higher capital adequacy ratios versus Kazakhstan and Kyrgyzstan. NPL ratios are broadly comparable across the three, though Kyrgyzstan exhibits slightly elevated credit risk. Loan-to-deposit ratios indicate more aggressive credit intermediation in

Uzbekistan. Dollarization of banking assets remains highest in Uzbekistan and Kyrgyzstan, posing exchange rate and credit risks.

## Discussions

The persistently high cost of debt in Uzbekistan constrains firm leverage, reinforcing a conservative financing



culture prioritizing equity and retained earnings. While this approach reduces bankruptcy risk, it may hamper dynamic expansion and technological innovation. The ongoing financial sector reforms are promising, aiming to reduce borrowing costs through improved regulatory standards, stronger investor protections, and enhanced supervisory frameworks.

The limited development of venture capital restricts risk-taking and innovation financing, a critical area for policy focus. Strategies such as legal reforms for investor protections, incentivizing private venture funds, and financial literacy programs are essential to expand this ecosystem.

Comparative data with Kazakhstan and Kyrgyzstan highlight Uzbekistan's relatively advanced banking sector strength and capital buffers, which can be leveraged to support broader credit access once institutional mechanisms mature. Efforts to reduce dollarization and

improve currency risk management will further stabilize leverage trends.

## Conclusions

Uzbekistan's banking leverage, as reflected in assets-to-GDP ratios and capital adequacy levels, compares favorably with regional peers Kazakhstan, Belarus, and Ukraine, and demonstrates strong growth dynamics. The system's conservative regulatory capital buffers and relatively low NPL ratios position it well against shocks, providing headroom for gradual leverage expansion. However, compared to Russia, Uzbekistan's banking sector is still developing in size and depth.

These comparative metrics emphasize Uzbekistan's ongoing financial sector reforms' effectiveness and highlight the potential for further improvements in leverage ratios as the banking system matures, credit expands, and institutional reforms progress.

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