Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 2, Issue 1, January, 2026
Website: usajournals.org

THE MEDIATING ROLE OF RISK MANAGEMENT PRACTICES IN THE RELATIONSHIP BETWEEN MULTIPLE RISK TYPES AND BANK PERFORMANCE: EVIDENCE FROM COMMERCIAL BANKS IN TASHKENT, UZBEKISTAN

Sardor Kodirov
Professional Development Centre Leading Specialist,
Management Development Institute of Singapore in Tashkent

Abstract

This study examines how credit, market, operational, liquidity, and technological risks influence bank performance in commercial banks in Tashkent, Uzbekistan, with risk management practices as a mediator and regulatory compliance and corporate governance as moderators. Primary data from a survey of 100 bank managers revealed that all risk types positively associate with performance, but their effects are primarily mediated by robust risk management practices, increasing explained variance from 40% to 55%. Technological risk emerged as particularly significant. Findings underscore the strategic importance of integrated risk management in emerging markets with limited external hedging options, offering practical recommendations for Uzbek banks and regulators.

Keywords: Bank performance, risk management practices, technological risk, mediation, Uzbekistan.

Introduction

Banking institutions underpin national economic stability yet remain vulnerable to systemic shocks, as evidenced by the 2008 global financial crisis and the COVID-19 pandemic disruptions. Traditional risks such as credit, market,

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 2, Issue 1, January, 2026
Website: usajournals.org

operational, and liquidity challenges persist, compounded by emerging technological risks from digitalization, fintech innovations, cybersecurity breaches, and AI integration. While extensive literature exists for developed and some emerging economies, Central Asian banking systems, particularly Uzbekistan, remain underexplored, with scant empirical attention to post-pandemic dynamics and digital vulnerabilities in a liberalizing financial environment.

Uzbek commercial banks in Tashkent face critical pressures from state-directed lending, high non-performing loans, underdeveloped interbank markets, exchange rate volatility, and rising cyber threats amid rapid digitization. Despite regulatory reforms, empirical evidence on how managers perceive these risks, implement mitigation strategies, and achieve performance outcomes is limited. This gap hinders targeted interventions by banks, regulators, and policymakers to enhance resilience and competitiveness.

This study addresses these voids by investigating the direct and indirect effects of five key risk types on perceived bank performance, mediated by risk management practices (RMP), and moderated by regulatory compliance and corporate governance. Using primary survey data from 100 Tashkent bank managers, it tests the following hypotheses:

- **H1**: Credit risk negatively impacts bank performance, mediated by RMP.
- **H2**: Market risk negatively impacts bank performance, mediated by RMP.
- **H3**: Operational risk negatively impacts bank performance, mediated by RMP.
- **H4**: Liquidity risk negatively impacts bank performance, mediated by RMP.
- **H5**: Regulatory compliance moderates the relationship between RMP and bank performance.
- **H6**: Corporate governance moderates the relationship between RMP and bank performance.
- **H7**: Banks adopting advanced digital risk tools outperform those using traditional methods.

By integrating Basel and COSO frameworks with local context, this research provides theoretical extensions and actionable insights for sustainable banking in Uzbekistan.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 2, Issue 1, January, 2026
Website: usajournals.org

Methods

Research Design and Sample

This cross-sectional quantitative study employed a structured questionnaire survey targeting middle and senior managers from commercial banks in Tashkent, Uzbekistan. A purposive sample of 100 respondents was selected based on their involvement in risk, finance, or operations roles, sourced from company databases. Questionnaires were distributed via email in a self-administered format, with a one-month collection period yielding usable responses for analysis.

Instrument and Measures

The questionnaire comprised two parts. **Part 1** captured demographics (e.g., position, experience). **Part 2** assessed variables using 5-point Likert scales (1 = strongly disagree, 5 = strongly agree):

- **Independent variables:** Credit risk (e.g., borrower default likelihood), market risk (e.g., interest rate/exchange volatility), operational risk (e.g., internal failures/fraud), liquidity risk (e.g., short-term obligation shortfalls), and technological risk (e.g., cyber threats/fintech disruptions) - each with 4-6 items.
- **Mediator:** Risk management practices (RMP; e.g., identification, assessment, monitoring) - 8 items.
- **Moderators:** Regulatory compliance (e.g., adherence to Central Bank directives) 5 items; corporate governance (e.g., board oversight) - 5 items.
- **Dependent variable**: Bank performance (perceived financial/operational outcomes, e.g., profitability, resilience) - 6 items.

A pilot test with 8 managers confirmed clarity, relevance, and 11-minute completion time, prompting minor wording refinements. Cronbach's alpha ranged from 0.781 to 0.862, indicating strong reliability.

Data Analysis

Responses were coded and analyzed in SPSS. Descriptive statistics summarized means, standard deviations, and frequencies. Inferential analyses included Pearson correlations, hierarchical multiple regression for direct effects, and

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 2, Issue 1, January, 2026
Website: usajournals.org

mediation tests via Baron and Kenny (1986) approach with Sobel test for significance. Moderation was assessed by interaction terms in regression models. Explained variance (R^2) changes evaluated mediation strength.

Results

Descriptive statistics showed strong perceived RMP adoption (M = 4.08, SD = 0.72), highest among variables, followed by operational risk (M = 3.92, SD = 0.81) and technological risk (M = 3.65, SD = 0.89). Credit and liquidity risks scored moderately high (M = 3.85 and 3.78), reflecting prevalent concerns in Uzbekistan.

Correlations revealed positive associations between all risks and performance (r = 0.32-0.48, $p < 0.01$), with RMP strongly correlated to performance (r = 0.62, $p < 0.001$). Risks also positively linked to RMP (r = 0.41-0.55, $p < 0.01$).

Variable	**M**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1. Credit Risk	3.85	0.76	1							
2. Market Risk	3.72	0.82	0.52*							
3. Operational Risk	3.92	0.81	0.47*	0.51*						
4. Liquidity Risk	3.78	0.79	0.49*	0.53*	0.48*					
5. Technological Risk	3.65	0.89	0.44*	0.46*	0.55*	0.42*				
6. RMP (Mediator)	4.08	0.72	0.51*	0.48*	0.55*	0.52*	0.54*			
7. Regulatory Compliance	3.91	0.75	0.38*	0.41*	0.46*	0.43*	0.39*	0.57*		
8. Bank Performance	3.88	0.74	0.42*	0.39*	0.48*	0.45*	0.46*	0.62*	0.51*	1

***Note:** Correlations significant at $p < 0.01$.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 2, Issue 1, January, 2026
Website: usajournals.org

Regression results supported mediation across risks. Without RMP, risks explained 40% of performance variance ($R^2 = 0.40$, $F = 12.45$, $p < 0.001$). Adding RMP increased this to 55% ($\Delta R^2 = 0.15$, $F = 18.76$, $p < 0.001$), with significant indirect effects (Sobel z = 2.84-3.92, $p < 0.01$). Technological risk showed strongest mediation (β = -0.28 direct to -0.12 indirect). H1-H4 supported.

Moderation tests confirmed H5 (regulatory compliance × RMP: $\beta = 0.22$, $p < 0.05$) and H6 (governance × RMP: $\beta = 0.19$, $p < 0.05$), enhancing positive RMP-performance links. H7 held: digital tool adopters scored 15% higher performance ($t = 3.21$, $p < 0.01$).

Discussion

Findings reveal that in Tashkent's commercial banks, risk exposure does not directly dictate performance; rather, RMP mediates these relationships, transforming potential threats into manageable factors. This aligns with Basel and COSO principles but highlights their amplified relevance in Uzbekistan's constrained environment - marked by high NPLs, limited derivatives, and state lending - where internal practices serve as primary buffers.

Technological risk's prominence, despite lower perceptions, signals digitization's dual edge: vulnerabilities from cyber/fintech threats offset by advanced tools yielding superior outcomes. Moderating effects of compliance and governance imply that regulatory alignment and board oversight amplify RMP efficacy, verifying emerging market studies while extending them to Central Asia.

Practically, banks should prioritize AI-driven credit scoring, VaR/ALM for markets, internal controls for operations, LCR/NSFR with climate tests for liquidity, cybersecurity/IT audits for technology, and board-level ERM integration. Regulators could mandate stress testing and digital governance to foster resilience (Dash, 2013; Amar and Bambang Tj Ahjadi, 2025).

Limitations include self-reported perceptions, single-city sample (n=100), and cross-sectional design precluding causality. Future research should employ longitudinal data, objective metrics (e.g., ROA/NPL ratios), and multi-country Central Asian comparisons.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 2, Issue 1, January, 2026
Website: usajournals.org

Conclusion

This study examined how traditional (credit, market, operational, and liquidity) and technological risks influence bank performance in commercial banks in Tashkent, with risk management practices as a mediating mechanism and regulatory compliance and corporate governance as moderating factors. The findings show that risk exposure alone does not determine outcomes; instead, the strength and integration of risk management practices largely explain variations in perceived performance. Risk management practices substantially increased the explained variance in performance and emerged as the most influential construct, underscoring their central role in transforming exposures into manageable risks in Uzbekistan's constrained financial environment. Furthermore, recent research by Jallali and Zoghlami (2022) demonstrates that integrating Enterprise Risk Management into governance frameworks substantially improves banks' capacity to maintain profitability and endure systemic shocks.

Technological risk, although perceived slightly lower than traditional risks, significantly predicted both risk management practices and performance, highlighting the strategic importance of digital risk governance as banks accelerate their adoption of fintech, artificial intelligence, and online channels. Studies around the world indicate that banks exhibiting robust IT governance and proactive cybersecurity strategies are more likely to maintain consumer trust and competitive advantage in digital banking (Chand et al., 2025; Del Sarto and Ozili, 2025). By adopting these steps, Uzbek banks can safeguard against digital risks while facilitating lucrative growth in digital channels. The moderating effects of regulatory compliance and corporate governance suggest that when supervisory frameworks are effectively enforced and boards actively oversee risk, the positive impact of robust risk management practices on performance is amplified. These results reinforce and extend established international frameworks, such as Basel and COSO/ERM, by demonstrating their practical relevance in an under-researched Central Asian market. Concurrently, Zhu (2025) stresses the need for mechanisms to assess outbound data security, alongside legal and regulatory frameworks for data sovereignty and cultural ethics.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 2, Issue 1, January, 2026
Website: usajournals.org

For banking executives, the evidence indicates that investment in integrated risk management systems, IT governance, and a strong risk culture is not merely a regulatory obligation but a strategic imperative for profitability, competitiveness, and resilience. For regulators and policymakers, the study provides empirical support for strengthening supervisory standards, promoting digital risk oversight, and encouraging enterprise-wide risk integration across the sector. Global data indicates (Singh et al., 2021; Chand et al., 2025) that technological risk can serve as a source of potential disruption and a catalyst for long-term resilience when managed proactively. For Uzbekistan and analogous emerging markets, the findings indicate that enhancing technical literacy, governance, and resilience must be an immediate priority. The future sustainability of the sector will hinge on the effective recognition and management of digital threats. While the research is limited by its cross-sectional design, reliance on self-reported perceptions, and focus on a single city, it offers a foundation for future longitudinal and comparative studies on risk and performance in Uzbekistan and the broader Central Asian region.

References

1. Amar, S.S. and Bambang Tj Ahjadi (2025). Role of credit risk, market risk, liquidity risk, and operational risk on banking financial performance with good corporate governance as a moderating variable. International Journal of Innovative Research and Scientific Studies, 8(3), pp.5001–5015. doi:https://doi.org/10.53894/ijirss.v8i3.7700.
2. Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research. Journal of Personality and Social Psychology, 51(6), 1173-1182.
3. Chand, S.A., Singh, B., Narayan, K. and Chand, A. (2025). The Impact of Financial Technology (FinTech) on Bank Risk-Taking and Profitability in Small Developing Island States: A Study of Fiji. Journal of Risk and Financial Management, [online] 18(7), p.366. doi:https://doi.org/10.3390/jrfm18070366.

4. Dash, M. (2013). A Study of the Impact of Asset-Liability Management on the Profitability of Banks in India. Journal of applied management and investments, 2(4), pp.230–234.
5. Del Sarto, N. and Ozili, P.K. (2025). FinTech and financial inclusion in emerging markets: a bibliometric analysis and future research agenda. International Journal of Emerging Markets, 20(13), pp.270–290. doi:https://doi.org/10.1108/ijoem-08-2024-1428.
6. Jallali, S. and Zoghlami, F. (2022). Does risk governance mediate the impact of governance and risk management on banks' performance? Evidence from a selected sample of Islamic banks. Journal of Financial Regulation and Compliance. doi:https://doi.org/10.1108/jfrc-04-2021-0037.
7. Singh, R., Malik, G. and Jain, V. (2021). FinTech effect: measuring impact of FinTech adoption on banks' profitability. International Journal of Management Practice, 14(4), p.411. doi:https://doi.org/10.1504/ijmp.2021.116587.
8. Zhu, K. (2025). The Technological Applications and Risk Challenges of Artificial Intelligence in International Communication. Communications in Humanities Research, 74(1), pp.129–136. doi:https://doi.org/10.54254/2753-7064/2025.lc25848.