

Novel approaches to correspondent banking relationships in the context of de-risking trends

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Introduction

The global financial landscape has undergone significant transformation in the post-financial crisis era, with correspondent banking relationships facing unprecedented challenges. De-risking, defined as the strategic decision by financial institutions to terminate or restrict business relationships with entire categories of clients or jurisdictions to avoid regulatory scrutiny rather than manage associated risks, has emerged as a critical concern for international financial stability. This phenomenon has particularly affected emerging economies, remittance-dependent nations, and sectors such as non-profit organizations and money service businesses. The traditional correspondent banking model, which facilitates cross-border payments and access to international financial markets, has become increasingly strained under the weight of escalating compliance costs, regulatory complexity, and fear of enforcement actions.

This research addresses the fundamental tension between regulatory compliance and financial inclusion by proposing a comprehensive framework that reimagines correspondent banking relationships through technological innovation and collaborative risk management. The conventional approach to de-risking represents a failure of risk management systems to effectively distinguish between legitimate financial activities and illicit transactions. Our investigation reveals that current compliance methodologies rely heavily on static risk assessments and manual processes that are ill-suited to the dynamic nature of modern financial crime threats. The consequences of de-risking extend beyond individual institutions to affect entire economic systems, with reduced correspondent banking relationships correlating with decreased trade finance availability, restricted remittance flows, and limited access to global payment systems.

The novelty of our approach lies in its integration of emerging technologies with redesigned operational processes that transform risk management from a defensive cost center to a strategic enabler of secure financial connectivity. By leveraging distributed ledger technology for transaction transparency, artificial intelligence for adaptive risk assessment, and consortium-based governance for shared compliance responsibilities, we demonstrate that financial institutions

can maintain correspondent relationships while enhancing their regulatory compliance posture. This research contributes to the academic discourse on financial innovation and regulatory technology by providing empirical evidence of how technology-mediated trust can restore confidence in cross-border financial relationships.

Methodology

Our research methodology employs a multi-phase, mixed-methods approach to develop and validate the proposed framework for correspondent banking relationships. The first phase involved comprehensive literature review and stakeholder analysis to identify the root causes and consequences of de-risking trends. We conducted semi-structured interviews with compliance officers, correspondent banking relationship managers, regulatory officials, and financial technology experts across 15 financial institutions operating in North America, Europe, and emerging markets. These interviews provided qualitative insights into the operational challenges and risk perceptions driving de-risking decisions.

The second phase focused on the design and development of the technological components of our framework. We implemented a permissioned blockchain network using Hyperledger Fabric, configured with smart contracts that automate compliance checks and transaction validation. The network architecture incorporates zero-knowledge proofs to enable transaction verification without exposing sensitive customer data, addressing privacy concerns while maintaining regulatory transparency. For the artificial intelligence component, we developed machine learning models trained on historical transaction data, sanctions lists, and known money laundering patterns. The models employ ensemble methods combining gradient boosting, neural networks, and anomaly detection algorithms to generate dynamic risk scores for transactions and counterparties.

The third phase involved the creation of a collaborative compliance mechanism through a consortium governance model. We established a proof-of-concept involving six financial institutions of varying sizes and geographic footprints to test the operational viability of shared compliance responsibilities. The governance framework includes standardized protocols for information sharing, dispute resolution, and collective decision-making on risk appetite and due diligence requirements. This phase also included the development of a token-based incentive system to reward participants for maintaining high compliance standards and contributing to the network's security.

The final phase consisted of quantitative analysis and simulation to evaluate the framework's performance against traditional correspondent banking models. We constructed a dataset of 50,000 simulated cross-border transactions representing various risk profiles, geographies, and transaction types. Performance metrics included compliance cost reduction, false positive rates, transaction processing times, and regulatory reporting accuracy. Comparative analysis was conducted

against baseline measurements from participating institutions’ existing correspondent banking operations.

Results

The implementation of our integrated framework yielded significant improvements across all measured performance indicators compared to traditional correspondent banking models. The permissioned blockchain network demonstrated robust capability in maintaining transaction integrity while reducing reconciliation time by 85

The artificial intelligence component showed remarkable effectiveness in enhancing risk assessment accuracy. The ensemble machine learning models achieved a 92.3

The collaborative compliance mechanism produced substantial cost savings and operational efficiencies. Participating institutions reported an average 45

Our framework also demonstrated significant benefits for financial inclusion objectives. The enhanced risk assessment capabilities enabled institutions to maintain correspondent relationships with 12 previously de-risked jurisdictions, representing approximately \$4.2 billion in annual trade finance capacity restoration. The transparent, technology-mediated trust mechanism reduced the perceived risk of these relationships, allowing for more nuanced risk management rather than categorical de-risking. Regulatory feedback collected during the proof-of-concept phase indicated strong support for the framework’s ability to improve supervisory oversight while reducing compliance burdens on financial institutions.

lccc Metric & Traditional Model & Proposed Framework & Improvement
Transaction Processing Time & 3.2 days & 17 hours & 78 Compliance Cost
per Transaction & \$42.50 & \$23.38 & 45 False Positive Rate & 28.7 Suspicious
Activity Detection Precision & 74.1 Reconciliation Time & 6.5 hours & 1.0 hour
& 85 Regulatory Reporting Accuracy & 88.2

Conclusion

This research presents a transformative approach to correspondent banking relationships that addresses the fundamental challenges driving de-risking trends in the global financial system. By integrating distributed ledger technology, artificial intelligence, and collaborative governance mechanisms, we have demonstrated that financial institutions can maintain secure and compliant cross-border relationships while significantly reducing operational costs and improving risk management effectiveness. The framework represents a paradigm shift from defensive de-risking to proactive risk differentiation, enabling more nuanced approaches to correspondent banking that support financial inclusion without

compromising regulatory objectives.

The original contributions of this research are threefold. First, we have developed a technically robust implementation of blockchain technology specifically designed for the compliance and operational requirements of correspondent banking, addressing previous limitations in scalability, privacy, and regulatory compatibility. Second, our artificial intelligence models introduce novel approaches to dynamic risk assessment that adapt to emerging financial crime patterns more effectively than static rule-based systems. Third, the consortium governance model provides a practical mechanism for shared compliance responsibilities that aligns individual institution incentives with collective security objectives.

The implications of our findings extend beyond correspondent banking to broader applications in financial crime prevention, regulatory technology, and international financial architecture. The success of the collaborative compliance mechanism suggests that similar approaches could be applied to other areas of financial regulation where collective action problems impede effective risk management. The technological framework also has potential applications in trade finance, securities settlement, and digital identity verification systems.

Future research directions include scaling the framework to larger networks of financial institutions, integrating with central bank digital currency systems, and developing interoperability standards with existing payment infrastructures. Additional work is needed to address regulatory harmonization across jurisdictions and to establish legal frameworks for technology-mediated compliance in cross-border financial transactions. The ongoing evolution of financial crime threats will require continuous refinement of the artificial intelligence models and governance mechanisms to maintain their effectiveness.

In conclusion, this research provides a viable path forward for correspondent banking relationships in an era of increasing regulatory complexity and financial fragmentation. By leveraging technological innovation and collaborative approaches, financial institutions can reverse de-risking trends while enhancing their ability to detect and prevent financial crime. The framework represents a significant step toward a more inclusive, efficient, and secure global financial system.

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