INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY
ISSN: 2454-132X
Impact Factor: 6.078
(Volume 11, Issue 5 - V11I5-1142)
Available online at: https://www.ijariit.com

Crypto & Traditional Banking: An Evolving Relationship

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ABSTRACT

The rapid rise of cryptocurrencies over the past decade has catalyzed a major shift in the global financial landscape. Once niche digital experiments, cryptocurrencies powered by blockchain and tokenization technologies have now achieved wider recognition across institutional investors, fintech innovators, and even central banks. A 2025 survey by EY and Coinbase revealed that 83% of institutional investors plan to increase their digital asset allocations, driven by growing regulatory clarity and product innovation.

Keywords: *Cryptocurrency, DeFi, Traditional Banking, Blockchain, Financial Transformation.*

1. INTRODUCTION

The rapid rise of cryptocurrencies over the past decade has catalyzed a profound transformation in the global financial landscape. Once niche digital experiments, cryptocurrencies powered by blockchain and tokenization technologies have now achieved mainstream acceptance across institutional investors, fintech innovators, and even central banks. A 2025 survey by EY and Coinbase revealed that 83% of institutional investors plan to increase their digital asset allocations, driven by growing regulatory clarity and product innovation.

This shift has compelled traditional banking institutions to fundamentally rethink their business models. Crypto-native firms like Ripple and Circle are now pursuing U.S. banking charters enabling them to operate as full-service financial entities, hold customer deposits, custody stablecoins, and access Federal Reserve payment infrastructure . Meanwhile, legacy banks face mounting pressure to incorporate digital asset services such as custody, token issuance, crypto-enabled payments, and decentralized finance (DeFi) integrations to stay relevant.

Key Drivers Of Transformation

i. Institutional Demand: Financial institutions are responding to bullish sentiment, with stablecoins projected to reach a $500 billion market cap by 2026.
ii. Regulatory Momentum: Governments are developing frameworks like the U.S. “Genius Act,” EU’s MiCA, and bank charter approvals, which enable deeper crypto-bank integration .
iii. Technological Evolution: Banks are adopting blockchain to modernize operations collaborating on real-time settlement systems with blockchain-led initiatives like Fnality.

Why It Matters

Traditional banks have thrived for centuries as trusted intermediaries. Cryptocurrency challenges this model in three fundamental ways:

i. Disintermediation: Blockchain enables peer-to-peer transactions, reducing banks’ traditional role as middlemen.
ii. Speed & Costs: Crypto and stablecoin networks promise real-time, low-cost payments and cross-border settlements, often outperforming legacy banking rails.
iii. Financial Inclusion: Crypto adoption is taking root in emerging markets, helping the unbanked by bypassing traditional account-based systems.

Yet this transformation carries significant challenges from regulatory uncertainty and compliance costs to privacy concerns, operational risk, and threats to monetary sovereignty.

Structure Of This Paper

i. Drivers of Change examining technological innovations, institutional adoption, and incentives for banks to pivot
ii. Impacts on Banking Models from payments and asset custody to loans and risk management
iii. Operational & Strategic Challenges including regulatory compliance, AML/KYC, technology adoption, and risk governance.
iv. Emerging Frameworks & Collaborations exploring charters, sandboxes, partnerships, and internal innovation.

v. Future Outlook assessing how banks can navigate business transformation, competition from crypto-native entrants, and evolving regulations

This analysis aims to unpack how cryptocurrencies are reshaping traditional banking, spotlight the opportunities and risks, and chart a path forward for legacy institutions seeking to thrive in this digital asset era.

2. DRIVERS OF CHANGE: HOW CRYPTOCURRENCIES CHALLENGE TRADITIONAL BANKING

Over the past decade, cryptocurrencies pioneered by Bitcoin in 2009 have introduced disruptive dynamics into the financial ecosystem, compelling traditional banks to rethink their core operations. Their foundational attributes decentralization, real-time transactions, and lower costs serve both to attract new users and to challenge established banking models.

2.1 Decentralization & Disintermediation

Cryptocurrencies operate on public blockchains, where consensus is maintained by decentralized nodes rather than central intermediaries. This model facilitates peer-to-peer (P2P) and on-chain financial activities, effectively bypassing banks for functions like payments, lending, and asset transfers.

2.2 Real-Time Settlement & Lower Fees

Blockchain-based systems process transactions in seconds, significantly reducing dependence on legacy systems that take days for cross-border payments . Central bank projects like “Project Pine” (NY Fed + BIS) have demonstrated that tokenized systems can enable policy tools like tokenized reserves while retaining monetary control yet speeding settlement time.

2.3 Lower Costs & Enhanced Transparency

By cutting out correspondent banking, crypto networks reduce settlement and operational fees . Their transparent nature enables near-real-time auditing and immutable records potentially reducing fraud and compliance costs for banks.

2.4 Institutional & Retail Adoption

i. Ripple and Circle seeking U.S. bank charters signal deeper integration with traditional finance, granting them access to Federal Reserve infrastructure and streamlined stablecoin reserves.
ii. Mastercard’s Multi-Token Network partners with banks like JPMorgan to facilitate compliant cross-border and fiat-crypto transactions, offering smoother integration for end users.

2.5 Regulatory Momentum & Framework Development

Global authorities are intensifying regulatory efforts:

i. The FATF warns that only 40 of 138 jurisdictions fully comply with crypto AML/KYC standards and illicit use of crypto assets reached US$51 billion in 2024.
ii. Multilateral rules like EU’s MiCA, U.S. OCC licensing, and FATF’s VASP frameworks are emerging to supervise digital asset players ensuring compliance and systemic safety.

2.6 Summary

Cryptocurrencies present a fundamental challenge to bank business models, offering faster, cheaper, and more transparent alternatives to critical services. With major crypto firms seeking banking charters and established institutions embracing blockchain rails, this shift moves beyond theoretical experimentation. However, it raises critical questions around regulation, security, and integration forces this study explores in depth.

3. EVOLVING RELATIONS BETWEEN CRYPTOCURRENCIES AND BANKS

As digital currencies disrupt traditional banking, the relationship between banks and crypto evolves from opposition to collaboration and integration. This section examines the impacts on banking operations, customer behavior, and regulatory frameworks.

3.1 Banks Offering Crypto Services

Major crypto-native firms like Ripple and Circle are applying for U.S. banking charters to deepen their integration with traditional finance. Ripple’s application for a national bank charter and Federal Reserve master account would allow it to lower costs, enable non-business hours transactions, and enhance transparency in stablecoin operations. Similarly, Circle seeks a national trust bank license to custody reserves and serve institutional clients through its First National Digital Currency Bank.

At the same time, legacy banks including JPMorgan, Bank of America, Citigroup, and Wells Fargo are exploring bank-issued stablecoins or “digital dollars” to modernize payment systems and support cross-border transactions. These efforts reflect a strategic pivot toward digital asset services and a desire to retain deposits that might otherwise migrate to crypto platforms.

3.2 Changing Customer Expectations

With increasing consumer familiarity with cryptocurrencies, digitized and instant payment experiences have become anticipated norms. A 2025 consumer sentiment survey reports that over 70% of U.S. adults now understand crypto basics, and many expect embedded crypto functionalities in banking apps. Community banks and credit unions are particularly focused on integrating cryptocurrency payment options and educational tools to avoid losing customers, especially older demographics.

3.3 Regulatory Shifts Supporting Innovation

U.S. regulators are increasingly enabling banks to engage with crypto:

i. The FDIC rescinded its prior blanket notification requirement (FIL-16-2022), clarifying that supervised banks may partake in crypto asset custody and stablecoin operations without pre-approval, provided they manage associated risks.

ii. Likewise, the Federal Reserve and OCC withdrew earlier restrictive guidance, affirming that banks may engage in permissible crypto activities including custody and execution under Interpretive Letter 1184.
iii. U.S. crypto policy is evolving rapidly, with deregulatory momentum under the Trump administration supporting stablecoin innovation and banking integration.

3.4 Banking Operations: Efficiency, Competition, and Risk

Increased Operational Efficiency

Banks expect stablecoin and blockchain integration to streamline cross-border payments and reduce dependency on legacy correspondent systems.

Competitive Realignment

Banks offering digital asset services can capture segments of the market that previously turned to purely crypto-native platforms, preserving deposits and reducing outflow risk especially as migrations to stablecoins threaten traditional funding bases .

Risk Exposure

However, crypto engagement brings unique risks, including price volatility of digital assets, custody vulnerabilities, AML/KYC compliance challenges such as FATF Travel Rule adherence, and consumer protection issues . Illicit transaction volume remains high, with FATF estimating $51 billion in cryptocurrency laundering in 2024 .

SUMMARY

The emerging synergy between cryptocurrencies and banks is shaped by strategic initiatives like charter applications and digital dollar development driven by evolving customer needs and embraced by forward-looking regulators. If managed carefully, this evolution could redefine banking systems; but institutions must enhance risk frameworks and regulatory compliance to uphold safety and stability.

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