



# INTEGRATION TRADFI AND DEFI: A NEW FINANCIAL MODEL FOR UZBEKISTAN

**MARUFJON Yakubjanov**

Lecturer at Training Institute for Lawyers

E-mail: [maruf.yokubjonov@gmail.com](mailto:maruf.yokubjonov@gmail.com)

## Annotation

This article explores the prospects of integrating centralized banking systems (TradFi) with decentralized finance (DeFi) in the context of Uzbekistan's evolving financial ecosystem. It highlights the advantages of traditional finance, such as stability and regulation, alongside the technological benefits of DeFi, including automation and transparency. The study identifies key risks and legal gaps in the current regulatory framework and analyzes international approaches. Based on this, a controlled, permissioned integration model is proposed, combining open banking, tokenization, and gradual CBDC adoption. The article concludes that a balanced approach can support financial innovation while ensuring system stability. Special attention is given to the legal and regulatory environment of Uzbekistan, where existing legislation creates structural gaps in integrating crypto-assets into the national financial system. The article proposes a hybrid financial model based on open banking, tokenization of assets, permissioned DeFi platforms, and gradual integration with central bank digital currency infrastructure.

**Keywords:** TradFi, DeFi, centralised banking, tokenisation, hybrid financial model, open banking, stablecoins, financial regulation, smart contracts, financial innovation.

# ИНТЕГРАЦИЯ TRADFI И DEFI: НОВАЯ ФИНАНСОВАЯ МОДЕЛЬ УЗБЕКИСТАНА

**Якубжанов Маъруфжон**

Преподаватель Института переподготовки и

повышения квалификации юридических

кадров при Министерстве юстиции

Республики Узбекистан

E-mail: [maruf.yokubjonov@gmail.com](mailto:maruf.yokubjonov@gmail.com)

## Аннотация

В данной статье рассматриваются перспективы интеграции централизованных банковских систем (TradFi) с децентрализованными финансами (DeFi) в контексте развивающейся финансовой экосистемы Узбекистана. В ней подчеркиваются преимущества традиционных финансов, такие как стабильность и регулирование, наряду с технологическими преимуществами DeFi, включая автоматизацию и



прозрачность. В исследовании выявлены ключевые риски и правовые пробелы в действующей нормативной базе, а также проанализированы международные подходы. Исходя из этого, предлагается модель контролируемой, разрешенной интеграции, сочетающая открытый банкинг, токенизацию и постепенное внедрение CBDC. В статье делается вывод, что сбалансированный подход может поддерживать финансовые инновации при обеспечении стабильности системы. Особое внимание уделяется правовой и нормативной среде Узбекистана, где действующее законодательство создает структурные пробелы в интеграции криптоактивов в национальную финансовую систему. В статье предлагается гибридная финансовая модель, основанная на открытом банкинге, токенизации активов, разрешенных DeFi-платформах и постепенной интеграции с цифровой валютной инфраструктурой центрального банка.

**Ключевые слова:** TradFi, DeFi, централизованный банкинг, Tokenization, гибридная финансовая модель, открытый банкинг, стабилкоины, финансовое регулирование, смарт-контракты, финансовые инновации

Today, two parallel universes coexist in the world of finance. The first is the centralized banking system (TradFi) - a system shaped over centuries, protected by law, and built on public trust. The second is DeFi, or decentralized finance - a model that operates through blockchain and software code, offering financial services without banks, offices, or traditional paperwork. At first glance, these two worlds may seem completely incompatible. In reality, however, the picture is far more complex. Integration is becoming a necessity of the times. DeFi is not going to disappear in practice, yet neither can it replace the traditional system overnight. Presidential Resolution No. RP-359, signed on November 27, 2025, opened the way for the development of the fintech sector, the introduction of open banking, and the testing of digital currencies and stable tokens. Although this resolution did not directly legalize DeFi, it clearly signalled an effort to build a controlled bridge between these systems. This article addresses the following question: What kind of relationship should Uzbekistan establish between its centralized banking system and DeFi? The issue is not whether technology is inherently good or bad; rather, it is about seeing the risks clearly, assessing the opportunities realistically, and choosing the right path in light of national interests.

The foundation of the centralized banking system is an architecture of trust. This architecture rests on three pillars: the singleness of money, meaning that one som transferred within the banking system remains equal to one som in value; liquidity elasticity, meaning that the resources necessary for lending and payments can be provided when needed; and integrity, meaning that there are mechanisms to combat money laundering, fraud, and systemic crises. Together, these three pillars ensure public confidence in the monetary system[1].

DeFi is built on an entirely different logic. Its foundation is the principle that when trust is not visible, code performs the function. Smart contracts - self-executing pieces of software code - replace the broker, the bank, and even the notary. Transactions can be carried out around the clock, seven days a week, without interruption. Transparency is total: every transaction recorded on the blockchain can, in principle, be seen by anyone. Schar describes this ecosystem as a set of financial services built on blockchain and smart contracts [2].

Yet DeFi contains a paradox: there is often a gap between its name and its real substance. Although it is called decentralized, in practice many such systems are centralized in important ways. Decision-making power may accumulate in the hands of governance token holders,



external providers may determine price feeds, and front-end interfaces may depend on particular actors. The Bank for International Settlements refers to this phenomenon as the illusion of decentralization [3].

Thus, these two systems do not necessarily negate one another; they can complement each other. The traditional banking system provides trust and stability, while DeFi offers automation, transparency and broad technological possibilities. The real question is how these two worlds can be combined safely and efficiently.

One of the first challenges is technical risk, especially the possibility of errors in smart contracts. Code is written by human beings, and human beings make mistakes. Those mistakes can be exploited. The 2022 Wormhole bridge incident, for example, resulted in losses of roughly \$320 million. Another well-known vulnerability is oracle manipulation, where off-chain price data can be distorted. Any attempt to test DeFi pilots should therefore place such risks at the center of the analysis.[4]

There are also financial stability risks. Unlike the traditional banking system, DeFi does not have deposit insurance, a lender of last resort, or formal resolution mechanisms. When prices fall, collateral may be forcibly liquidated, which can push prices even lower and trigger chain reactions across the market. The stablecoin crises of 2022, especially the TerraUSD collapse, demonstrated this danger with particular clarity.[5]

Legal risk is another serious concern. In a traditional bank, the responsible party is clear: it is the licensed legal entity. In DeFi, however, responsibility is often dispersed among protocol developers, governance token holders, oracle providers, and front-end operators. In practice, this fragmentation makes it extremely difficult to determine whom an injured party can sue or hold accountable. Countries around the world have not reached a single universal conclusion regarding DeFi. Each major jurisdiction has chosen its own path based on its political, economic, and cultural circumstances. These experiences offer important lessons for Uzbekistan.

The European Union has sought to build trust through legal clarity. In 2023, it adopted the MiCA Regulation, which established licensing requirements for crypto-asset service providers, white paper obligations for token issuers, and consumer protection mechanisms. At the same time, the DLT Pilot Regime made it possible to test tokenized financial instruments in a controlled market environment. The European Central Bank has also advanced the digital euro project, first through an investigation phase and then through a preparation phase, and has now decided to move to the next stage.[6]

The United States presents a different picture - one of fragmented regulation and practical experimentation. In 2019, the Financial Crimes Enforcement Network clarified that business models involving convertible virtual currencies fall within AML and BSA requirements [7]. The Office of the Comptroller of the Currency, in turn, opened a legal path for national banks to provide custody services related to cryptographic keys [8]. At the same time, fragmented federal and state regulation, jurisdictional disputes among agencies such as the SEC and CFTC, and political controversy surrounding sanctions against protocols such as Tornado Cash all reveal the weaknesses of the U.S. model.

China has followed a markedly different path: prohibition combined with state-issued digital money[9]. In 2021, it declared commercial activities related to virtual currencies unlawful, and an official statement issued in 2026 reaffirmed that position [10]. At the same time, the People's Bank of China has been aggressively developing e-CNY, the digital yuan,



under a model of managed anonymity in which small-value payments may remain relatively private while large-value transactions are subject to traceability [1].

Singapore represents a model of innovation through licensing. The Payment Services Act 2019 recognized digital payment tokens as a separate regulatory category and introduced a licensing system that applied AML and CFT requirements to such [12]. Through initiatives such as Project Guardian, banks have also been experimenting with tokenized bank liabilities and government securities. The logic of this model is clear: supervision and innovation can coexist.

In Uzbekistan, the system of financial regulation is built on the basis of core laws. The Law on the Central Bank of the Republic of Uzbekistan and the Law on banks and banking activity form the legal basis of the traditional banking system. The Law on payments and payment systems regulates payment infrastructure. In the sphere of crypto-assets, there is a separate licensing framework together with a special sandbox regime. However, this is precisely where a major contradiction emerges. The Law on payments and payment systems excludes crypto-asset operations from the scope of payment legislation. In other words, operations involving crypto-assets do not fall under that law. This directly conflicts with the testing of stable tokens as payment instruments envisioned by Resolution RP-359. On the one hand, the pilot program is authorized; on the other hand, the payment law does not apply. This legal disconnect is the first major obstacle to integration.

The second problem concerns responsibility. The existing licensing framework is designed for conventional entities such as crypto-exchanges and depositories. In DeFi, responsibility is distributed: protocol developers, governance token holders, oracle providers, and front-end operators may all be involved at the same time, yet none is clearly recognized as legally accountable. IOSCO refers to this as the Who/How problem.

The third problem is the technical side of AML and KYC compliance. According to FATF guidance, virtual asset service providers must comply with the Travel Rule for transactions above specified thresholds, which means transmitting information about the sender and the beneficiary. In DeFi, however, self-custody and peer-to-peer mechanisms make compliance technically difficult. There is still no clear answer to the questions of who carried out the transaction and on whom the obligation rests.

The fourth problem is consumer protection. In the traditional banking system, a customer can submit a complaint to the Central Bank's consumer protection unit. But when harm results from a smart contract error or protocol exploit, who is responsible? Current legislation does not provide a sufficient answer. Drawing lessons from MiCA and IOSCO, DeFi pilots in Uzbekistan should be required to meet at least minimum bank-level standards of transparency and complaint handling.

There are also positive signs. Resolution RP-359 identified several important priorities: support for the fintech ecosystem, the introduction of open banking, and the testing of digital currency and stable tokens. This amounts to an official recognition that a controlled bridge between systems should be built. The Law on Electronic Digital Signature and the appearance of the concept of the smart contract in the 2018 resolution are also positive indicators.

When a consumer suffers harm because of a smart contract error, who should bear responsibility - the bank, the protocol operator, the auditor, or the token issuer? This is not only a legal question but also an ethical one. In the traditional banking system, consumer protection



institutions were formed over decades. DeFi should not attempt to reinvent them from scratch; rather, it should adapt them to its own architecture.

## Conclusion

Integration between the centralized banking system and DeFi is not a distant possibility; it is a process that has already begun. Rather than remaining outside this process or plunging into it recklessly, Uzbekistan should choose a third path - cautious, gradual, and controlled integration.

At the national level, the most important steps include eliminating the normative contradiction between the crypto-asset exclusion in the Law On Payments and Payment Systems and the pilot mandate in Resolution RP-359, clearly defining responsible subjects within DeFi architecture, and introducing minimum standards of consumer protection beginning with pilot projects.

## References:

1. Bank for International Settlements. (2025). BIS Annual Economic Report 2025: III. The next-generation monetary and financial system (Chapter III). <https://www.bis.org/publ/arpdf/ar2025e3.pdf>
2. Schär, F. (2021). Decentralized finance: On blockchain- and smart contract-based financial markets. *Federal Reserve Bank of St. Louis Review*, 103(2), 153-174. <https://doi.org/10.20955/r.103.153-74>
3. Aramonte, S., Huang, W., & Schrimpf, A. (2021). DeFi risks and the decentralisation illusion. *BIS Quarterly Review*, December 2021, 21-35. [https://www.bis.org/publ/qtrpdf/r\\_qt2112b.pdf](https://www.bis.org/publ/qtrpdf/r_qt2112b.pdf)
4. International Organization of Securities Commissions. (2023). Policy recommendations for decentralized finance (DeFi): Final report. <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD754.pdf>
5. Aquilina, M., Cornelli, G., Frost, J., & Gambacorta, L. (2025). Cryptocurrencies, digital tokens, stablecoins, and DeFi: Growing risks to financial stability (BIS Papers No. 156). Bank for International Settlements. <https://www.bis.org/publ/bppdf/bispap156.htm>
6. European Central Bank. (2025). Digital euro: Progress on the preparation phase. [https://www.ecb.europa.eu/euro/digital\\_euro/progress/html/ecb.deprp202510.en.html](https://www.ecb.europa.eu/euro/digital_euro/progress/html/ecb.deprp202510.en.html)
7. Financial Crimes Enforcement Network. (2019). Application of FinCEN's regulations to certain business models involving virtual currencies. <https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-certain-business-models>
8. Office of the Comptroller of the Currency. (2020). Interpretive letter #1170: Custody of cryptocurrency and distributed ledger technology (DLT). <https://www.occ.gov/topics/charters-and-licensing/interpretations-and-actions/2020/int1170.pdf>
9. Supreme People's Procuratorate of China. (2021). Notice on handling risks related to virtual currency trading speculation. [https://www.spp.gov.cn/spp/zd gz/202109/t20210924\\_530777.shtml](https://www.spp.gov.cn/spp/zd gz/202109/t20210924_530777.shtml)



10. China Securities Regulatory Commission. (2026). Statement on virtual currency-related business activities. <http://www.csrc.gov.cn/csrc/c100028/c7614320/content.shtml>
11. People's Bank of China. (2022). Progress report on e-CNY development and implementation. <https://www.pbc.gov.cn/en/3935690/3935759/4749192/2022122913350138868.pdf>
12. Monetary Authority of Singapore. (2019). Payment Services Act 2019. <https://sso.agc.gov.sg/Act/PSA2019>