

Tokenization: Building Financial Resilience for Tomorrow

The financial sector currently operates with a paradigm built on centralized and vertically integrated systems. While this paradigm has historically ensured robust operations, recent outages at reputable service providers demonstrate these systems are unable to keep pace with the increase in the scale of products and users thereof. Therefore, it is imperative that the financial sector embarks on the pursuit of creating future-proof solutions.

Consider the recent outage of the Bloomberg terminal on May 21, 2025, which delayed critical operations such as the UK 4% 2031 debt auction. This is especially egregious given the cost of these terminals and their pivotal role in a plethora of operations. This incident is not isolated, nor are other vendors immune to service interruptions. Platforms such as LSEG's Refinitiv and CME's BrokerTec have experienced multiple outages in recent years.

Solutions to mitigate vendor lock-in exist, with the most quixotic being the usage of telephones and fax-machines. However, the failure of a Financial Market Infrastructure (FMI) poses a structural threat to market stability. Recent major outages at Euronext, CME, FedACH, and especially the TARGET Services of the Eurosystem, which experienced a ten-hour outage in February 2025, are concerning. The incident at TARGET is particularly troubling because the backup systems did not work, despite significant investments by the ECB to improve network resilience after a similar outage in 2020.

Although, technicians have managed to contain the adverse impact of such issues within a span of a few hours, these events reveal deeper systemic risks arising from centralized systems. Beyond operational concerns, second-order risks like market risk, liquidity risk, portfolio instability, and reputational damage have also become apparent. Nevertheless, the typical attitude towards such outages – given their frequency

and persistence – has been one of resigned complacency, purporting that building fail-proof systems is impractical and prohibitively expensive.

The advent of decentralized systems such as blockchain and the tokenization of assets offers ways to mitigate risks arising from centralized infrastructures. Unfortunately, this technology is a victim of confusion primarily due to the recent hype surrounding various crypto-assets. Therefore, a brief distinction between key terms is necessary. At the core of decentralization is Distributed Ledger Technology (DLT), a broad term for decentralized databases that record transactions across multiple nodes. Blockchain is a specific type of DLT that orders data chronologically and cryptographically. Secondly, tokenization involves converting assets – including traditional financial instruments like bonds and equities – into digital tokens stored on a blockchain. Lastly, crypto-assets such as Bitcoin, NFTs, and memecoins are speculative assets often likened to betting on horses.

Positive developments by major financial institutions to explore the advantages of tokenization such as enhancing liquidity, reducing transaction costs, and enabling 24/7 trading are being made. Notably, BlackRock's USD Institutional Digital Liquidity Fund and Franklin Templeton's OnChain U.S. Government Money Fund exemplify positive developments in

tokenizing money market funds. The advantages of tokenization are not exclusive to crypto-native institutions. New tokenized offerings from reputable issuers, combined with supportive EU regulations such as Markets in Crypto-Assets (MiCA) help in enhancing market integrity and ensuring financial stability. Due to this, the benefits of DLT such as transparent pricing, instant settlement, elimination of central counterparties, and automation of strategies are accessible to investors domiciled in the Netherlands. While tokenization cannot fully replace systems like Euronext or Euroclear, it complements them by offering resilient trading and settlement options during outages. Finally, the ability to access data transparently without intermediaries enables institutions to reduce costs and mitigate vendor lock-in.

Notwithstanding the numerous benefits of DLT, it is important to acknowledge the associated risks. The technology's relative infancy means many tokenized markets suffer from limited depth, leading to speculative trading, reduced liquidity, and challenges in exiting positions. Furthermore, the ever-present threat of malicious actors in cyberspace, combined with rapidly evolving technologies such as quantum computing, demands that blockchain security remain constantly ahead of emerging vulnerabilities. Additionally, the majority of platforms hosting tokenized offerings – such as Aptos and Stellar, used by BlackRock and Franklin Templeton – are based in the USA, introducing geopolitical risks. While these risks require careful management, the potential for tokenization to reduce systemic dependencies on centralized infrastructure makes it worthy of serious institutional consideration.

*On behalf of the committee
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