

Agpaytech's Research  
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# Potential U.S. CBDC Design Features

*A Summary of U.S Treasury Department Report*

**Agpaytech**

# Introduction

This report reviews the design choices for a potential U.S. Central Bank Digital Currency (CBDC) in the context of public policy considerations related to building the future of money and payments, supporting U.S. global financial leadership, and advancing financial inclusion and equity, while minimizing risks. The report covers the core features of the CBDC instrument, intermediaries, architectural designs and security concerns.

## Governance and policy objectives of U.S. CBDC

Developing a U.S. CBDC could support progress towards goals related to payment system efficiency, technological innovation, payment system resilience, and cross-border transaction costs. The policy considerations discussed in this section are based on the objectives set out in the Executive Order as reported by the U.S Treasury Department. These considerations relate to four broad themes:

**Building the future of money and payments:** The future system of money and payments should be efficient, provide a foundation for further technological innovation, achieve a high degree of resilience, and facilitate cross-border transactions.

**Supporting U.S. global financial leadership:** The future money and payment systems should be consistent with the global role of the dollar; enable the enforcement of sanctions; and advance democratic values, human rights, and privacy.

**Advancing financial inclusion and equity:** Innovations to payment systems, including a potential U.S. CBDC, should enable access to and preserve choice for a broad set of potential consumers and users, particularly for those Americans underserved by the traditional banking system.

**Minimizing risks:** The system of money and payment should have design features that protect the singleness of the currency, support financial stability, preserve credit creation, minimize the risk of illicit financial transactions, and promote environmental sustainability.

# CBDC Type-Wholesale & Retail

The report argued for both wholesale and retail CBDC types in the US financial system. The wholesale CBDC is intended for banks and other financial institutions, thus it could be designed for large-value financial transactions.

On the contrary, a retail CBDC is intended to be accessed and used by a wide range of consumers and businesses. A retail CBDC could be designed as an alternative to payments using cash, checks, credit or debit cards, or ACH. For example, a retail CBDC could substitute cash in low-value transactions.

## Payment system

At its core, a CBDC system would need to support instant settlement. In addition, the system would need to have appropriate cybersecurity incident management, contingency plans, and continuity plans to ensure the availability of its functionalities, including during natural disasters and foreign attacks.

CBDC design features that users may value in these settings include flexibility, safety, security, reversibility, and verifiability

The Federal Reserve could consider whether wholesale U.S. CBDC would pay interest, as reserve balances do. The level of interest paid would affect wholesale U.S. CBDC's substitutability with reserve balances. Paying interest could also encourage adoption at the introduction of CBDC

A retail CBDC could also pay interest. Although paper currency does not pay interest, bank deposits often do. The retail bank deposit rate is often significantly lower than the relevant policy rate and "sticky"; as policy rates rise, deposit rates often follow sluggishly upwards.

# Infrastructure

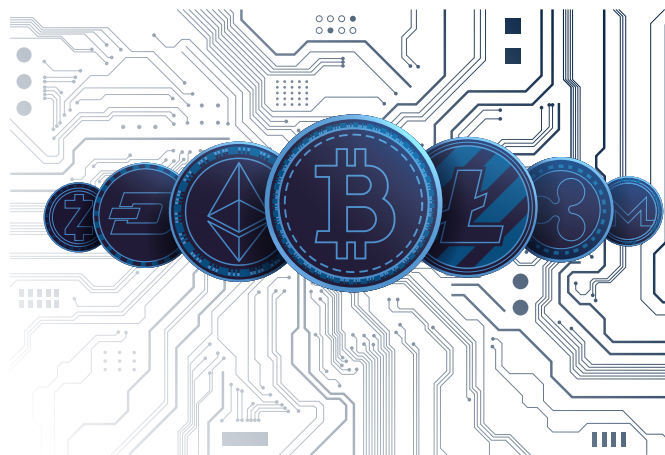
Both retail and wholesale CBDC could run on centralized payment systems or distributed ledger technology (DLT) for processing payments. Technological developments such as DLT could enable a variety of models with roles for specialized intermediaries to initiate, process, and execute CBDC payments.

DLT-based systems could be both permissioned, meaning the network of nodes that verify or commit transactions would be pre-approved entities, or permissionless, where any entity with the requisite technology and capacity could act as a node.

# Cross-border CBDC

A U.S. CBDC could be designed to interoperate with foreign CBDCs to support and enhance cross-border payments.

Systems could have varying levels of interoperability including separate but compatible CBDC systems that share common technical standards and alignment in their legal and regulatory frameworks, common user interfaces or clearing mechanisms that are jointly designed and developed or adopted across jurisdictions, or jointly operated and governed multi-CBDC systems.



## Security, privacy, and risk

- CBDC ledger design could have significant implications for user privacy, cybersecurity, and illicit finance risks.
- In a system with a publicly visible ledger, user information could be pseudonymously recorded on the ledger, but with the passage of time and accumulation of transaction data, transactions might be attributed to individual users; therefore, a publicly visible ledger may result in reduced user privacy.
- The ledger design would also affect the degree of illicit finance risk, based on the degree of transparency in the ledger and whether the nodes in a decentralized system are pre-approved entities.

## Intermediaries

- There are two general architectures for CBDC intermediation: (1) a single-tier (i.e., direct) CBDC with the central bank, and (2) a two-tier CBDC where intermediaries (potentially banks or nonbank financial intermediaries) would onboard and manage payments while the central bank records account balances.
- In a single-tier model for retail CBDC, the central bank would issue CBDC and interact directly with the public. The central bank would be responsible for all AML/CFT obligations, including transaction monitoring, filing suspicious activity reports, and customer due diligence.
- In the case of intermediating a retail U.S. CBDC, it would be a two-tiered system, which is in line with what the majority of jurisdictions globally are considering. Under this model, the Federal Reserve would issue and redeem CBDC, but the distribution would be handled by intermediaries.

## Co-existence with other payments

Consumers could hold retail CBDC in digital wallets, similar to some private digital assets and nonbank payment services. Wallets could allow users to convert between CBDC and commercial bank money or hold CBDC alongside other digital assets, promoting convenience and flexibility.

## Tier account functionality

A CBDC could also have tiered accounts to allow for different functionality, tied to different levels of identity verification and monitoring.

Controls could be embedded into the design of any tiered system to enable intermediaries to identify instances of structuring designed to avoid compliance thresholds.

Tiered accounts could enable customers without identity credentials, who are often unable to access traditional financial services, to access CBDC.



## Conclusion

While the current U.S. system of money and payments has significant strengths, the United States also needs to continue to innovate in support of its policy objectives. The U.S objectives center around themes of developing a future system of money and payments that promote U.S. values, fosters inclusion, and minimizes risks for financial inclusion.

