



Citi Digital Currency Concepts

# Regulated Liability Network

Tony McLaughlin  
Managing Director  
Citi Treasury & Trade Solutions



# The Digital Money Format War

The battle between **physical and digital** money recedes. The contest is between different formats of digital money: **liabilities vs non-liabilities** , **tokens vs accounts** and **regulated vs non-regulated** formats.



## Central Bank Money

Central bank money is a liability of the central bank. It exists in two forms:

- Reserves – held by commercial banks
- Cash in circulation

**Central bank liabilities do not currently exist in digital format for widespread domestic or international usage**

**Dozens of central banks are in the CBDC exploration stage**



## Commercial Bank Money

Commercial bank money is a liability of a commercial bank in favour of the depositor. It is stored in accounts and is the dominant form of digital money.

**Commercial bank money is not generally available in tokenized format for retail or wholesale usage.**

**JP Morgan has launched JPM Coin, a single bank representation of commercial bank money.**



## Electronic Money

Electronic money (or Stored Value) is a liability of a regulated non-bank payment company. It is redeemable on demand at par value.

**E-money operators have brought hundreds of millions of consumers/businesses into digital payments.**

**Regulators are considering whether stablecoins are a new form of E-money**



## Public Cryptocurrencies

The original bitcoin and hundreds of derivative instruments are not liabilities – they are intangible assets traded on exchanges and peer to peer.

**Public cryptocurrencies have not become ‘money’ due to volatility.**

**There are financial crime risks associated with their nature as bearer instruments. They do not yet comply with FATF ‘travel rules’.**



## Stablecoins

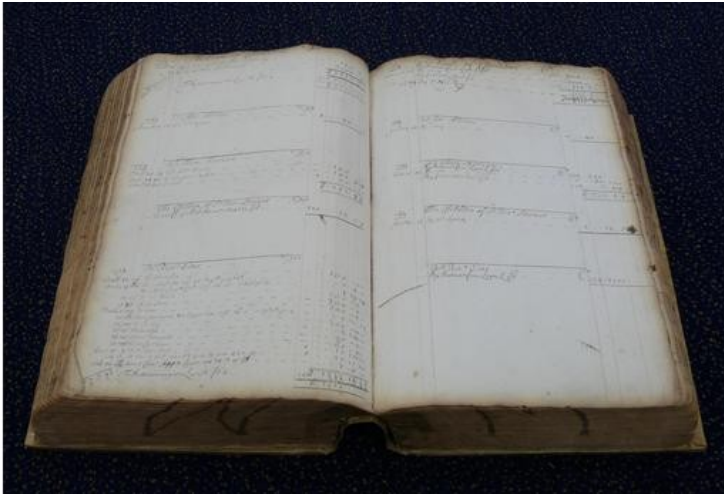
Stablecoins seek to deliver the benefits of tokenization while removing volatility. They may or may not be liabilities of an institution. The institution may or may not be regulated. There is uncertainty whether they are redeemable on demand at par value.

**Stablecoins in national currency units are growing fast and may cross the rubicon to become a new rail for digital payments traffic.**

# Independence of Instruments and Representation

Legal instruments should be considered independently of their technological representation.

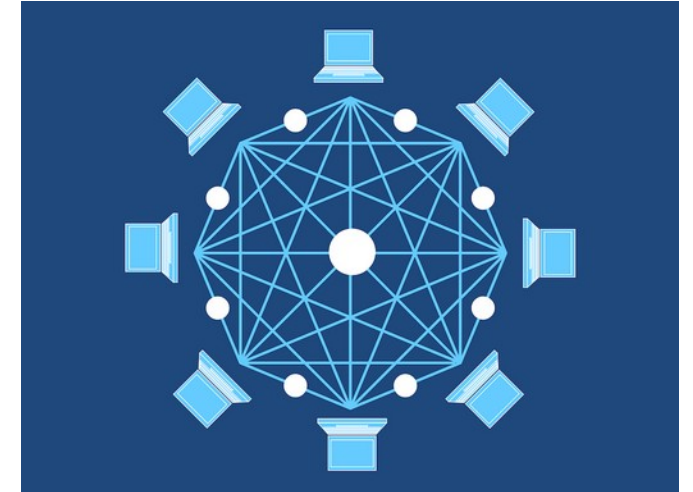
PAPER LEDGER



TRADITIONAL DATABASE



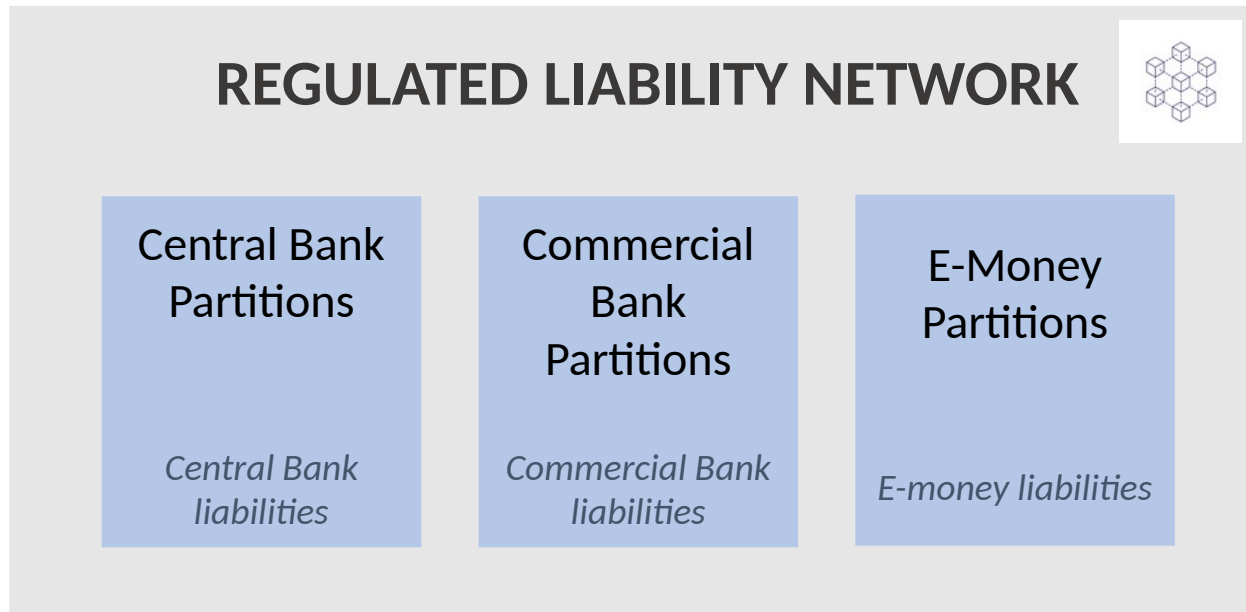
DISTRIBUTED LEDGER



- Any of these technologies may be utilized to **record liabilities** without changing their legal meaning
- DLT may lend itself to recording the **liabilities of different regulated institutions** on the **same network**

# Regulated Liability Network (RLN)

Citi and partners will demonstrate a **single DLT** with **central bank money**, **commercial bank money** and **electronic money** on the same chain. A positive alternative to **narrow CBDC** and **single bank coins**.



- RLN is **not a proprietary Citi network**, it will be a new market infrastructure owned by the participants
- RLN is an alternative model for the development of **digital national currencies**
- RLN is a new **Financial Market Infrastructure** for next generation settlement
- Multiple central bank participation delivers **Global Real Time Gross Settlement (RTGS)** capability
- **Significant interest** from central banks, commercial banks and regulated no-bank players
- Requires the development of a consortium developed through a **public/private partnership**



## RLN Proof of Concept

- **OBJECTIVE:** Test a range of wholesale/retail and domestic/international use-cases on the RLN construct. Inform the design of national digital currencies in public/private partnership
- **DURATION:** 9 month RLN Proof of Concept (POC) running from Q1 2022 to end Q3 2022
- **PLATFORM:** provided by SETL and AWS
- **ALTERNATIVE PROVIDERS:** RLN sandboxes being developed by **R3** and **Digital Assets** – no vendor or technology lock in
- **CENTRAL BANK INVOLVEMENT:** 3-4 central bank partitions (Bank of Finland confirmed)
- **COMMERCIAL BANKS:** 12-15 regulated commercial banks (Group complete)
- **REGULATED NON-BANKS:** 3-4 regulated non-banks (Group complete)
- **SYSTEM ACCESS:** Platform accessed through Graphical User Interface (GUI) and/or Application Programming Interface (API)
- **RESOURCE COMMITMENT:** No cost for central banks to participate. Estimated 1 FTE requirement for meetings and testing use-cases
- **DELIVERABLES:**
  - Technical whitepaper (drafted)
  - Business whitepaper (drafted)
  - Use-case library (drafted)
  - Legal analysis - Linklaters
- **POTENTIAL NEXT STEPS:** Consortium formation and FMI building – commencing Q4 2022

# Thank you



*IRS Circular 230 Disclosure: Citigroup Inc. and its affiliates do not provide tax or legal advice. Any discussion of tax matters in these materials (i) is not intended or written to be used, and cannot be used or relied upon, by you for the purpose of avoiding any tax penalties and (ii) may have been written in connection with the "promotion or marketing" of any transaction contemplated hereby ("Transaction"). Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.*

This communication is provided for informational purposes only and may not represent the views or opinions of Citigroup Inc. or its affiliates (collectively, "Citi"), employees or officers. The information contained herein does not constitute and shall not be construed to constitute legal, investment, tax and/or accounting advice by Citi. Citi makes no representation as to the accuracy, completeness or timeliness of such information. This communication and any documents provided pursuant hereto should not be used or relied upon by any person/entity (i) for the purpose of making regulatory decisions or (ii) to provide regulatory advice to another person/entity based on matter(s) discussed herein. Recipients of this communication should obtain guidance and/or advice, based on their own particular circumstances, from their own legal, investment, tax or accounting advisor.

Any terms set forth herein are intended for discussion purposes only and are subject to the final terms as set forth in separate definitive written agreements. This presentation is not a commitment or firm offer and does not obligate us to enter into such a commitment, nor are we acting as a fiduciary to you. By accepting this presentation, subject to applicable law or regulation, you agree to keep confidential the information contained herein and the existence of and proposed terms for any Transaction.

We are required to obtain, verify and record certain information that identifies each entity that enters into a formal business relationship with us. We will ask for your complete name, street address, and taxpayer ID number. We may also request corporate formation documents, or other forms of identification, to verify information provided.

© 2021 Citibank, N.A. All rights reserved. Citi and Citi and Arc Design are trademarks and service marks of Citigroup Inc. or its affiliates and are used and registered throughout the world.