

Systemic Risk Centre

# The implementation of CBDC: challenges, risks and opportunities

**Piero Cipollone**

Deputy Governor of the Bank Of Italy

28-10-2022

*London School of Economics*

What are the risks associated with the implementation of a CBDC?

The main risk is to **DO NOTHING**

## Why?

### TRENDS

- Digitalisation of payments: use of cash in payments is declining
- New forms of money: stablecoins, crypto assets and money issued by Sovereigns

### RISKS

- Only private money
- Loss of monetary sovereignty

**ISSUANCE OF A CBDC** to preserve the public money as an anchor of the monetary system

**A**

**THE ECONOMIC OF CBDC**

**B**

**LEGAL ISSUES**

**C**

**TECHNOLOGY**

**D**

**INTERNAL ORGANISATION OF THE CENTRAL BANKS**

## DEFINING THE RIGHT LEVEL OF SUCCESS

**Too much**

**Disintermediation of banks**

**Mitigation measures:**

**1. To avoid excessive detection:**

- Quantity holding limits
- Price based tools →

**2. Role of intermediaries in the distribution:**

- Embedding the CBDC distribution model within the current bank-client relationship
- Definition of a scheme

**Too little**

**Failure to achieve the ultimate goals**

**Users :**

- Privacy
- Broad Acceptance
- Easy to use
- Low cost
- Scheme

**Merchant:**

- Low cost
- Interoperability with current system

## 1- Has a central bank the power to issue a CBDC?

- No mention in the EU primary law (Art 128 TFEU only refers to 'banknotes')
  - What's the legal basis for the issuance of a digital euro?

## 2- Legal tender status

- Art 128 of the TFEU provides that banknotes issued by the ECB and the NCB are the *'only banknotes with the status of legal tender within the Union'*.
- **Issuing a digital euro, its possible legal tender status and an harmonization across the euro area of the meaning of legal tender need to be assessed**

## 3- Potential impact on the existing legislative frameworks

**Need to look at several pieces of legislation** (possible amendments through Art 133 TFEU)

- PSD2
- PAD
- SFD
- AML Directive
- E-money directive

## Information technology entails choices that affect many dimensions:

- 1. How ownership is assessed:** through identity or through knowledge?
- 2. How money is represented:** accounts or token?
- 3. Governance Model**
  - Centralised
  - Decentralised (permissionless blockchain)
  - Distributed (permissioned blockchain)
- 4. How the ledger is accessed?**
  - Directly
  - Through intermediaries

## Transition from printing banknotes to minting CBDC

- **Organizational changes**  
How the cash distribution oversight function will change?
- **Do we need an oversight function for the “distribution of CBDC”?**
- **How the skill mix will change?**  
The tech people will prevail over “legal” and “economic” experts?
- **Cyber exposure of the CB**

## 1. Financial Inclusion

- Share of the unbanked in Europe is about 4%
- The issuance of a CBDC could promote access to and use of financial services to the unbanked and underserved (traditionally unwilling to use private financial products)
- Encourage them to demand for more complex products such as savings, loans and insurance
- The efficiency of remittances, still far more expensive and slower than domestic payments

## 2. Contribute to enhance cross-border payments

- CBDCs could pave the way for innovations that might improve international payments
- Multi-currency dimension
- G20 Road map

## 3. Pan Euro Area reach

- Retail payments strategy
- Lack of harmonized scheme in Europe



## A wholesale CBDC

- Not new in the euro area, since central bank money has been available to the banks in digital form for wholesale transactions for decades

## Trigger solution:

### Integrating DLT platforms with the existing infrastructures

Adopted for the settlement of the cash-leg of a tokenized transaction

- A relatively **inexpensive option** to quickly respond to emerging market needs, keeping the settlement in central bank money within the scope of Target Services
- **Reduces the risks of fragmentation** of the liquidity needed on the 'cash-side' of the settlement systems

**Banca d'Italia** successfully experimented with a trigger solution centered on TIPS, the Eurosystem's instant payments platform.

A **DLT-agnostic protocol**, making an atomic and instantaneous DvP possible on a **24/7 basis**.

# Limits and disincentives: Bindseil-Panetta model

Bindseil-Panetta two-tier system

