



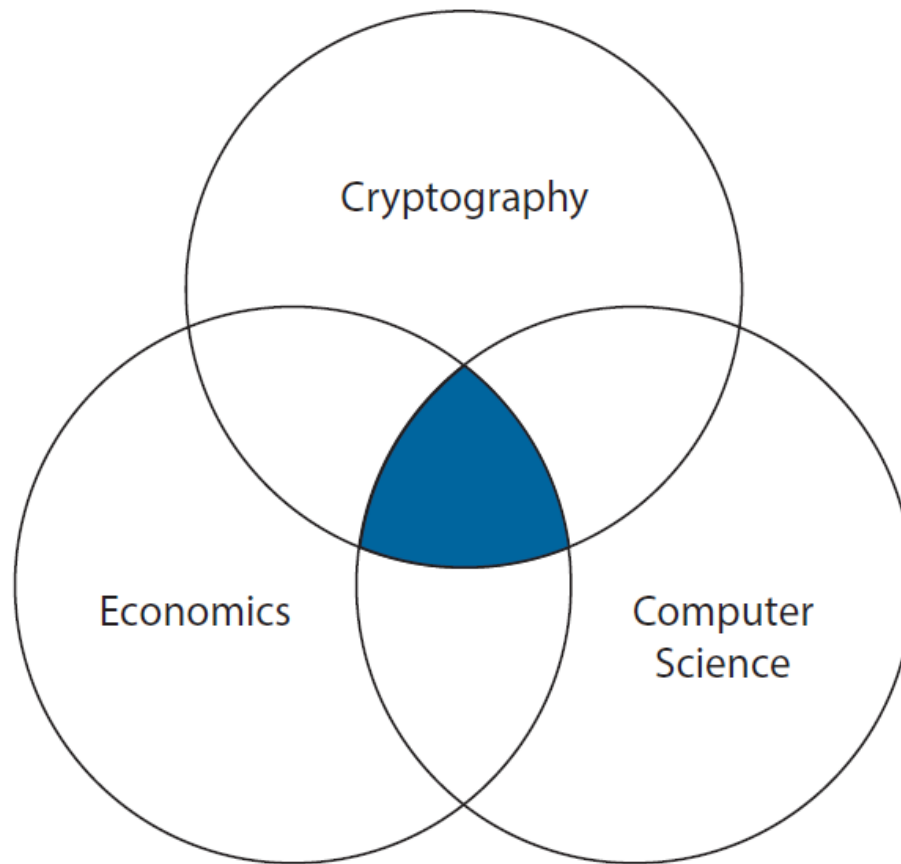
# CRYPTO-ASSETS

## Implications for financial stability

*Faidon Kalfaoglou*  
*Bank of Greece*

*The opinions expressed in this presentation are solely those of the presenter and not necessarily those of Bank of Greece*

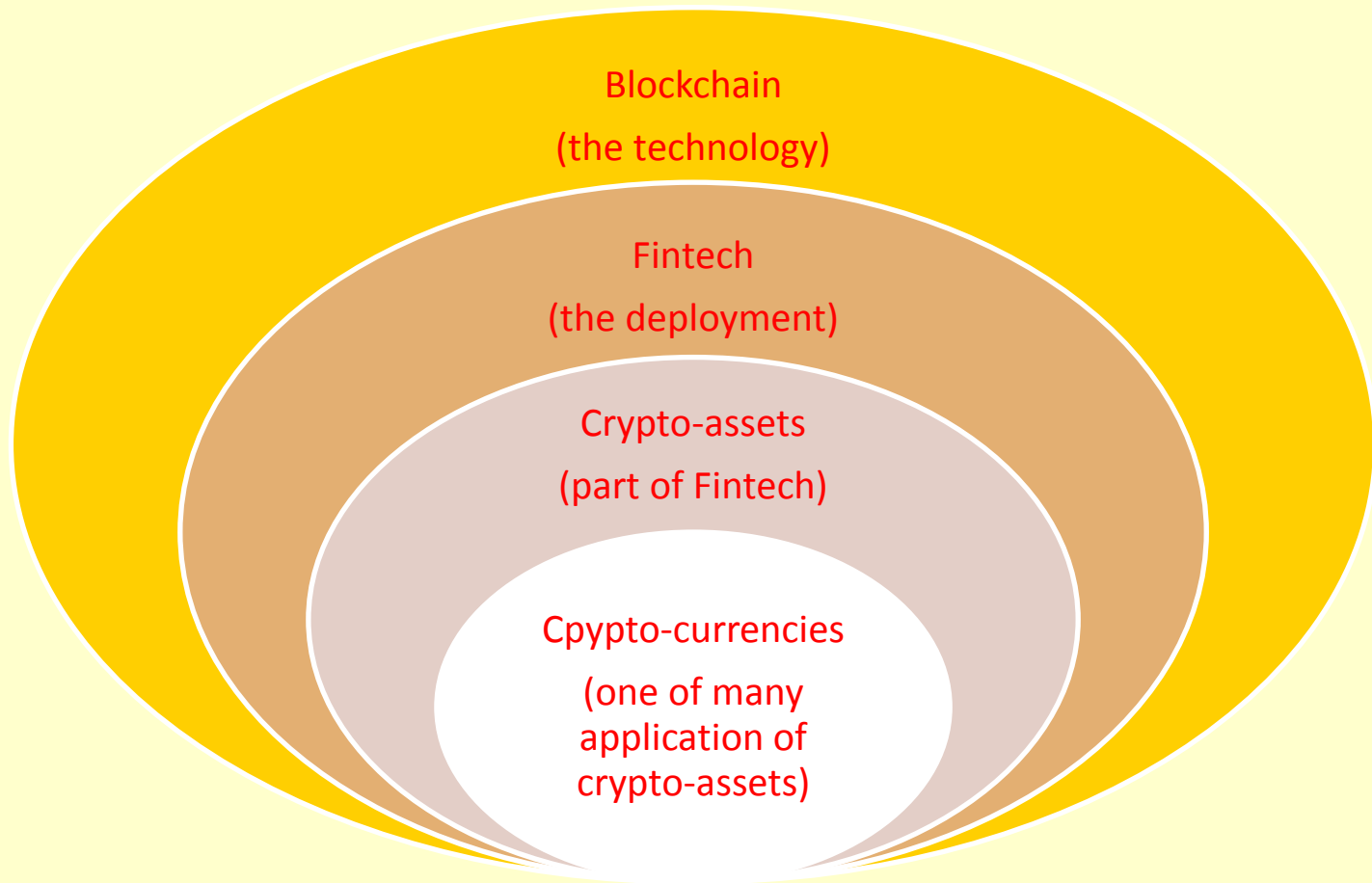
# Interdiscipinarity





# The Hierarchy

---



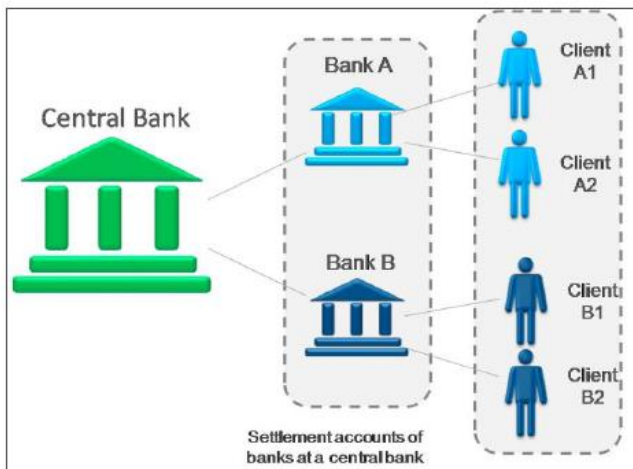
# The Blockchain

## Centralized ledgers VS Distributed Ledger Technologies

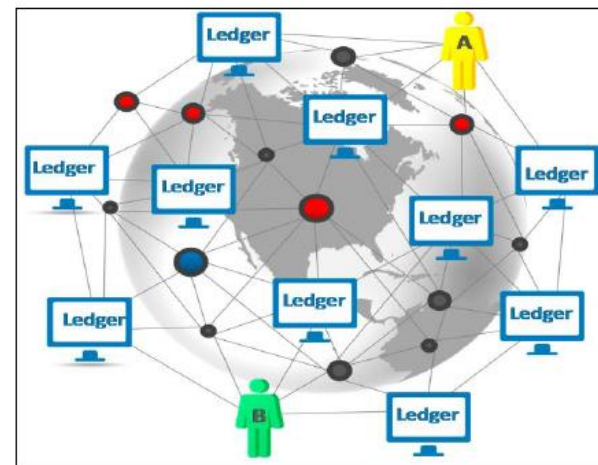
- Traditional payment systems are based on a centralized ledgers kept by a recognized authority;
- DLT technologies enabled emergence and use of decentralized ledgers within payment systems where trust is ensured by technology itself.

Figure 1.

### A. Traditional payment system



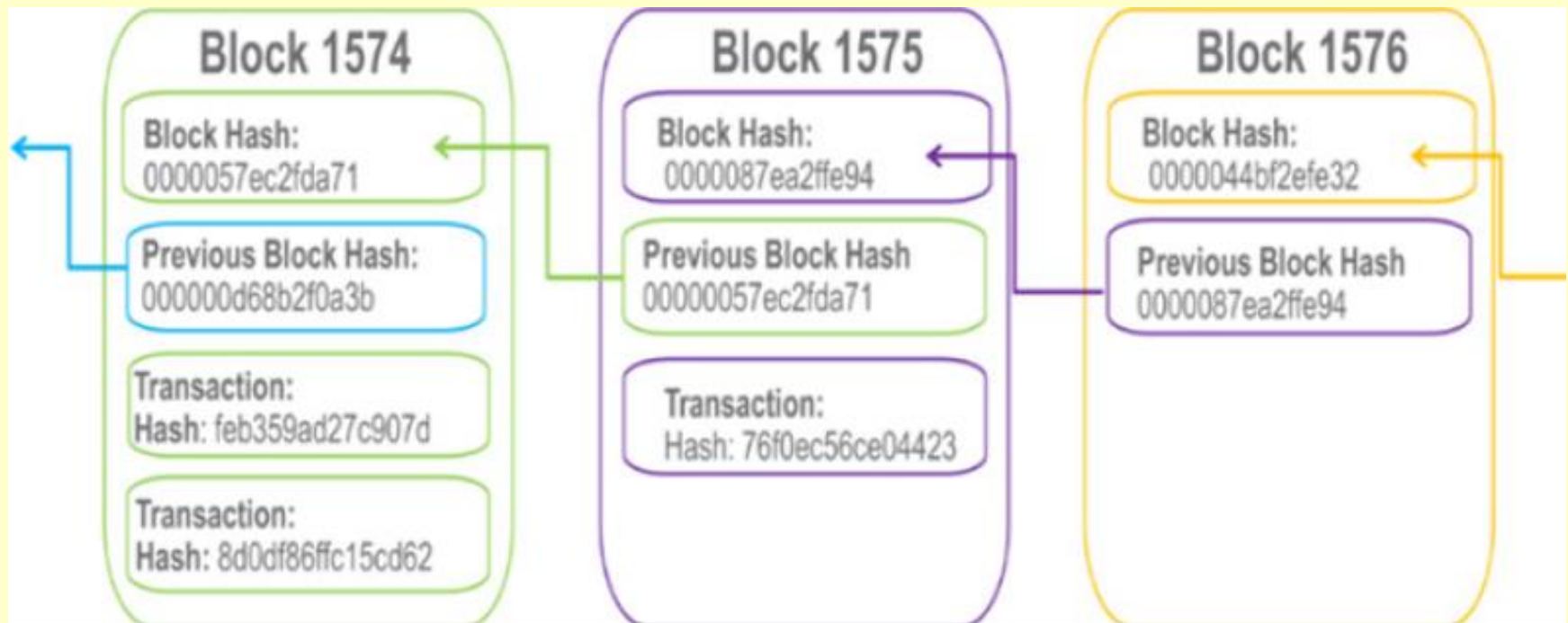
### B. DLT-based payment system



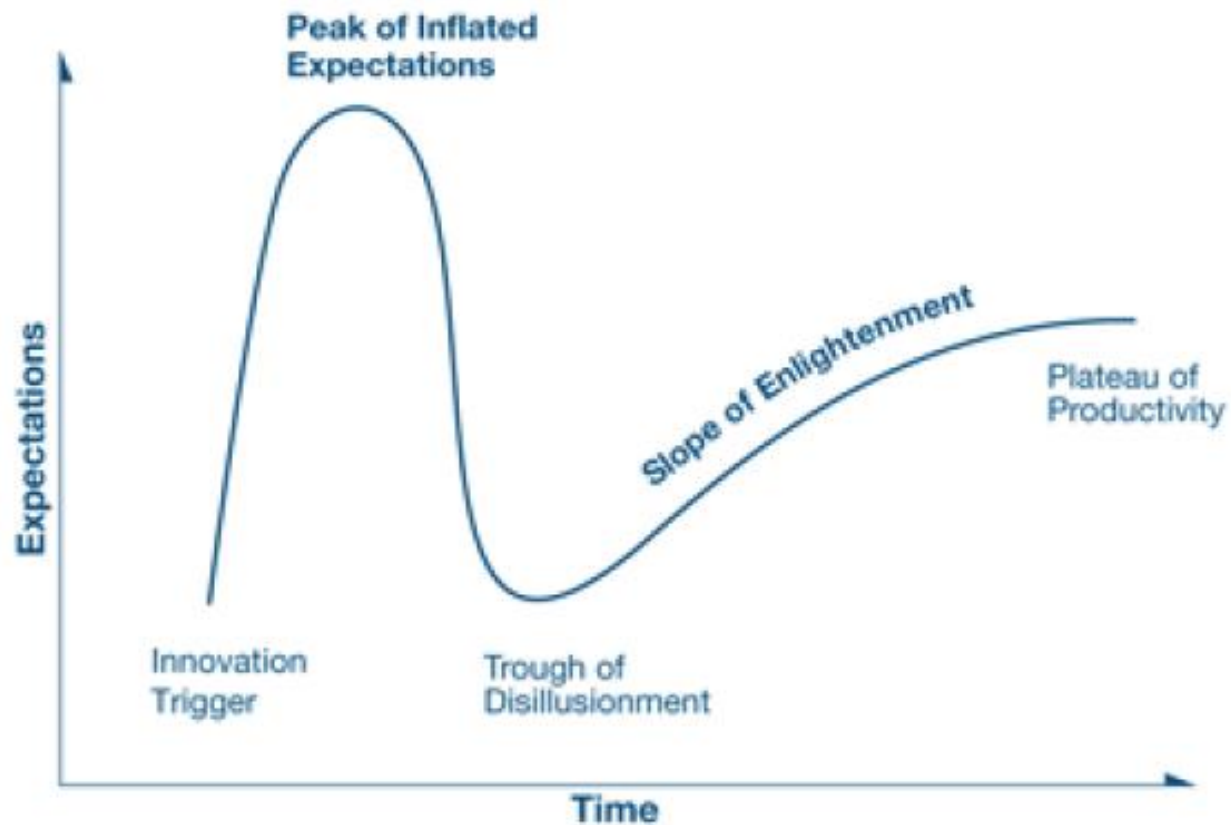


# The Blockchain

---



# The hype cycle





# Fintech: This time is different?

---

Technology

Innovation

Financial Stability Board: “... **technologically** enabled financial innovation that could result in **new business** models, applications, processes or products with an associated **material effect** on financial markets and institutions and the provision of financial services”.

Disruption

# Bundling and unbundling



Disaggregating the  
value chain

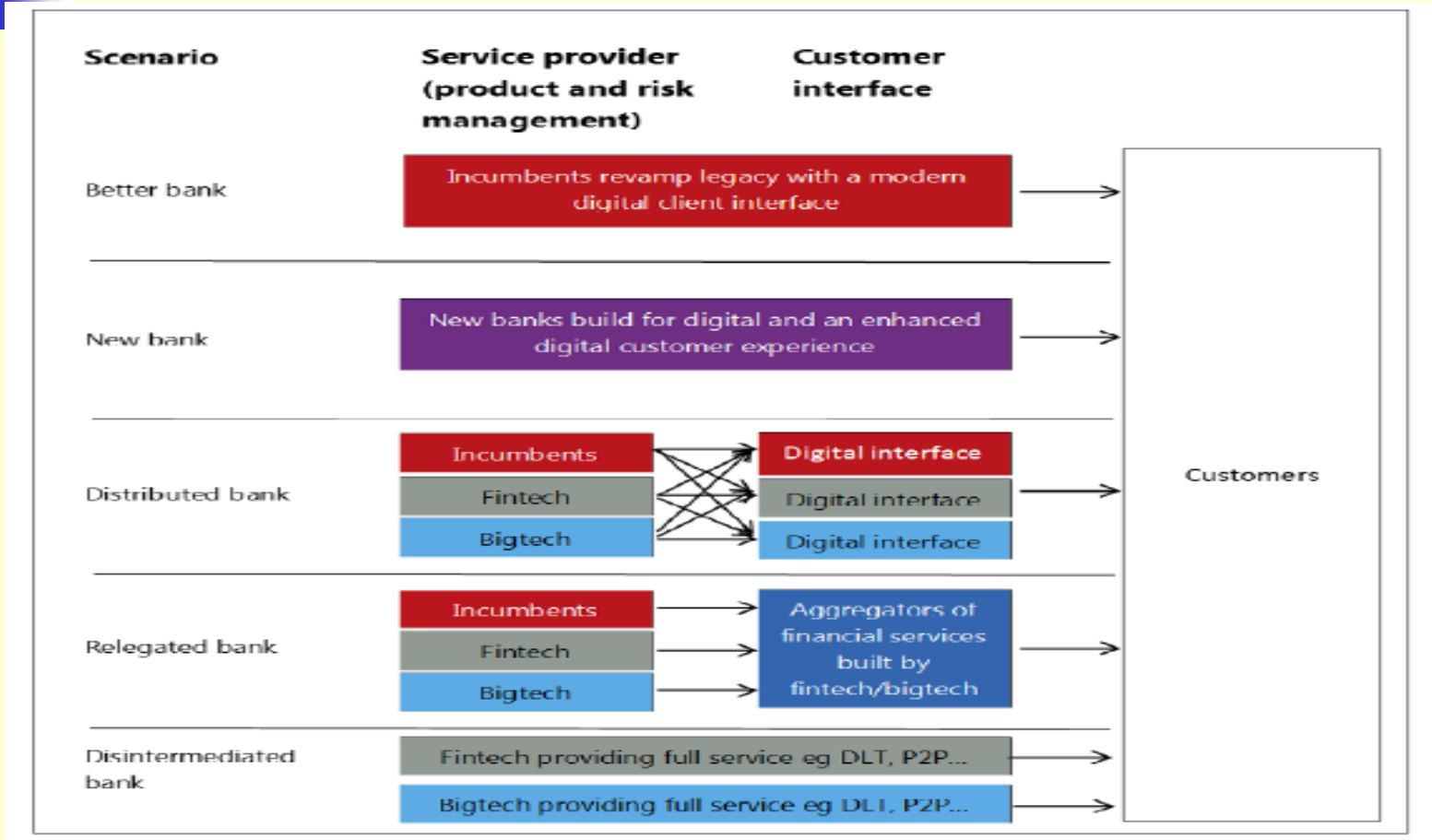


# Digitization

## The millennials



# Fintech: Disruption



# Crypto-assets: A new exposure class in the making?



# Initial Coin Offerings (ICOs)



Currency tokens

Utility tokens

Investment tokens

# Crypto-currencies





# What is money?

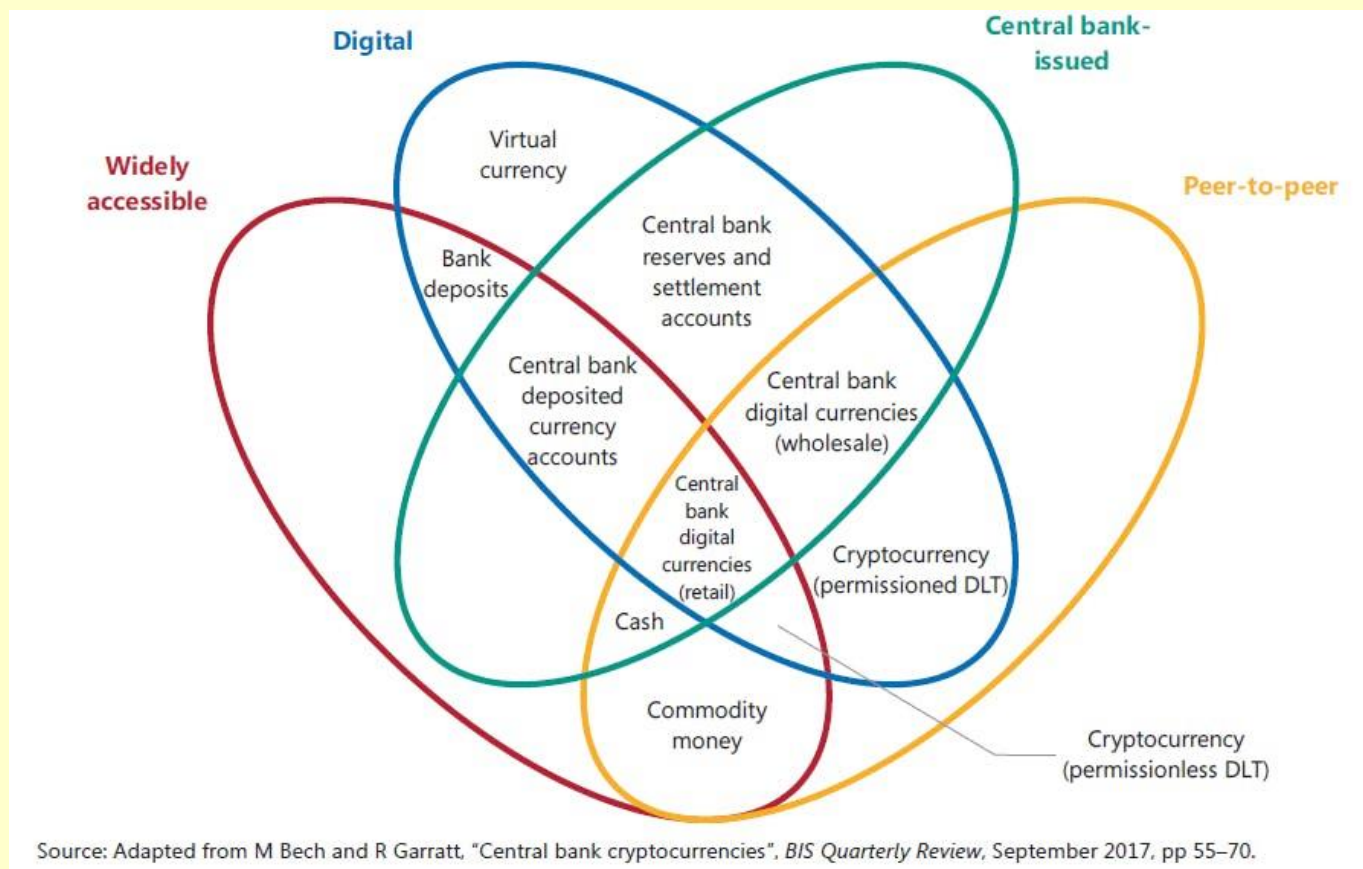
---



Physical or Electronic Tokens or Commodities that can be have the following properties:

- **Unit of Account → defined value**
- **Medium of Exchange → acceptability**
- **Store of Value → non-perishable**

# Taxonomy of digital money



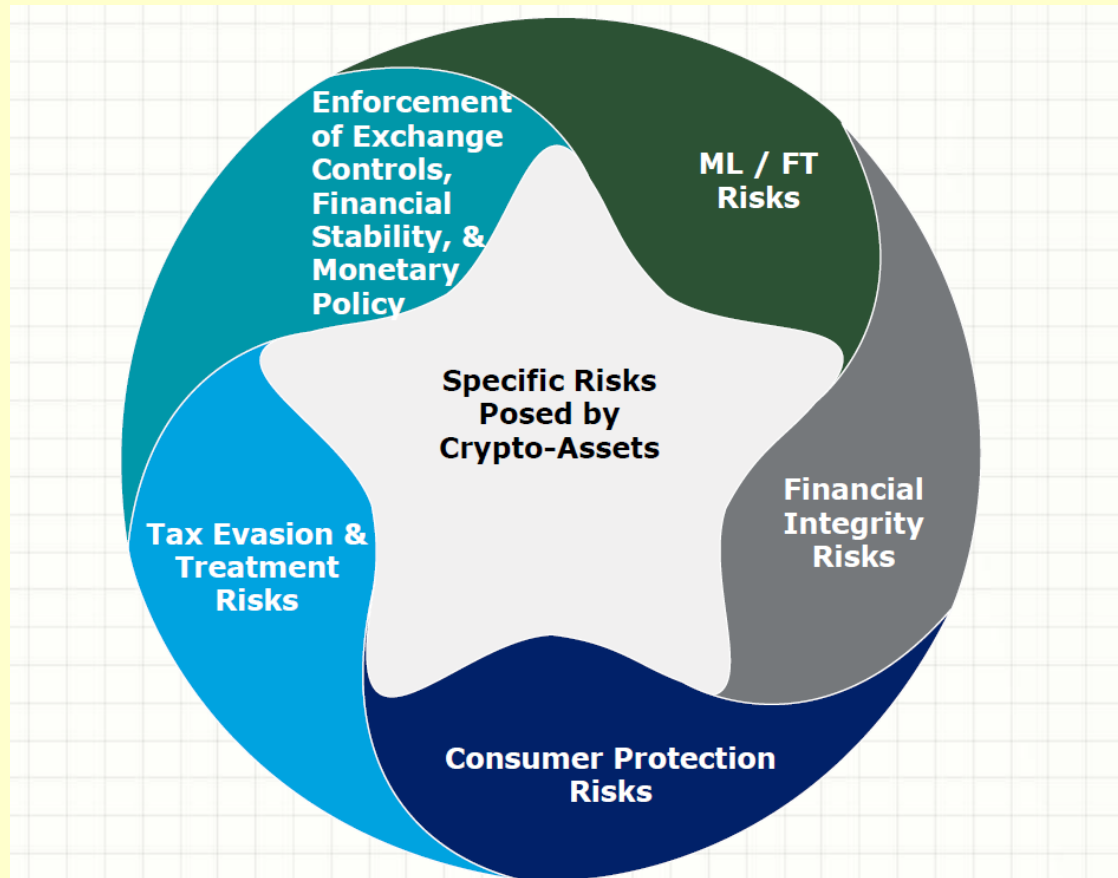
# Investment or speculation vehicle?





# Financial stability concerns

---



# Consumer and Investor protection

---



- Confidence and market integrity
- Risks
  - market liquidity risk
  - cyber risk
- Crypto-assets as securities
- Prudential treatment
- Valuation
- Money laundering



# The FATF Guidance

---

**Recommendation 1:** advises countries to conduct a coordinated risk assessment of VC products and services, ensure cooperation between public and private sectors to assist competent authorities, and undertake the regulation of exchange platforms between convertible VCs and fiat currency.

**Recommendation 14:** directs countries to register or license natural or legal persons providing money value transfer services, which would apply to entities providing convertible VC exchange services between VC and fiat.

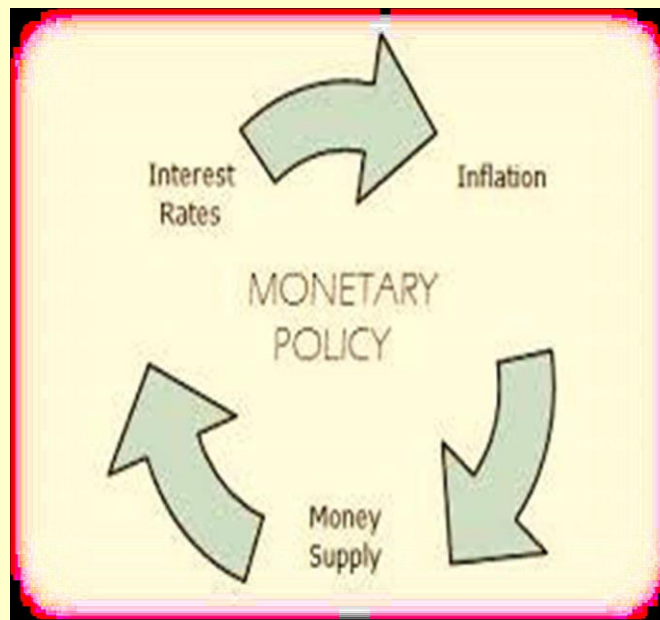
**Recommendation 15:** advises countries to identify and assess ML/TF risks surrounding new products, including VCs, and that local financial institutions take appropriate measures to mitigate these risks before launching new products or developing new technologies.

**Recommendation 26:** suggests countries should ensure convertible VC exchanges are subject to adequate regulation and supervision. Countries should also amend legal frameworks as needed to ensure effective AML/CFT regulation of decentralised VC payment mechanisms.

**Recommendation 35:** suggests countries mandate the licensing of VC exchanges, and application of customer identification and recordkeeping requirements at exchanges, to overcome these challenges. VCs & TF: assessing the risks and evaluating responses

# Monetary policy

No significant implications for monetary policy





# Conclusion ?

---

## IMF position in June 2016

Crypto-assets do not pose systemic risks to FS, owing to their small scale compared to the major credit card payments platforms.

Crypto assets may pose non-negligible financial risks to individual VC users and holders.

Large-scale use of VC's and greater interconnectedness with other parts of the financial sector could in due course rise to systemic financial risks.

## FSB in June 2018

it appears that risks to global financial stability are not significant at present, given the limited size of crypto-asset markets relative to other financial markets and the limited interconnectedness between crypto-asset markets and the regulated financial system. However, there is a need for vigilant monitoring in light of the speed of market developments.

## The Economist in September 2018

“Cryptocurrencies look like a solution in search of a problem”.