

P.R.I.M.E. Finance

Panel of Recognized International Market Experts in Finance

Eruption of Disruption: The FinTech Future



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* The views expressed are those of the author and do not necessarily reflect those of the ECB

Digital innovations and the financial sector

- **Virtual («crypto») currencies** were at the forefront of recent technological developments
 - ⇒ Separation of **assets** (e.g. Bitcoin) and **technology** (e.g. Blockchain)
- **Potential to induce change across the value chain**
 - Payments, clearing and settlement
 - Data and identity management as well as regulatory reporting
 - Holding and transfer of assets, record of ownership and asset services
- The **emergence of new technologies** triggered reflections how payment, clearing and settlement arrangements are designed
- **Distributed ledger technology and digital currencies** are a focal point of attention by financial market participants, academics, authorities and central banks



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Potential implications for markets and regulators

- **Various possible scenarios** (ranging from *incremental usage* of new technology to improve internal efficiency, *disintermediation* by start-ups/ peer-to-peer networks, market-entry of bigtechs to *cooperation models*)
 - **Pressure on business models, risk management and supervision**
 - Challenges to the intermediary function of financial institutions
 - Market entry of new (unregulated) entities
- ⇒ Existing **legislation and regulation may be affected**
- requirements to *use specific types of FMIs and access points (eg banks)*
 - operational and prudential requirements for *regulated entities*
- ⇒ **Regulatory responses** vary from *warnings, prohibitions, entity specific* regulation (eg for wallet providers, exchange platforms), targeted *fintech* regulation (eg for privately issued securities) to *accommodation* (eg sandboxes)
- ⇒ **Regulators to adapt own frameworks** for data access and reporting («*RegTech*», «*SupTech*»)



Focus of regulatory bodies

Assessment of *need for new regulatory standards*

First nucleus: **CPMI analytical framework** (February 2017)

- Guidance on **understanding arrangements** (functionality and nature of arrangement, key factors for an effective implementation)
- Potential implications for **efficiency, safety and broader financial markets**

Efficiency	Safety
Speed of end-to-end settlement Costs of processing Reconciliation (transparency) Credit and liquidity management Automated contract tools	Operational and security risk (cyber) Settlement issues (finality) Legal risk Governance Data management and protection
Broader financial market implications	
Connectivity issues and standards development Financial market architecture (actors, markets, regulators) Broader financial market risks (micro- and macro-level)	



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Some key issues for further evolution of DLT

- **Re-intermediatisation** (Regulatory compliance, control of access)
- **Network effects** (Fragmentation, technical standardisation)
- **Process integration** (DvP, Nexus to central bank money)
- **Governance** (setting the rules/protocols, access, risk management)
- **Regulatory compliance** (KYC duties, AML, consumer protection, data secrecy and privacy rules)
- **Legal issues**
 - Nature of digitised assets, legal status of a ledger
 - Identification and authentication of users
 - Finality of the records/balances
 - Liability, applicable law, jurisdiction and enforceability



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Implications for central banks



Operational perspective

- Relevance for efficient and safe *central bank payments and settlement services*
- Impact on *monetary operations* and *central bank money issuance*



Catalyst/policy perspective

- Supporting *market efficiency* through DvP/PvP in central bank money
- Need for *standardisation and interoperability*, countering fragmentation



Oversight, supervisory and financial stability role

- Impact on *overseen/supervised entities* and their business models as well as on the financial markets at large



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Digital currency – a taxonomy

	Physical currency		Digital deposits
Central bank	Cash (eg banknotes)	Digital currency	Central bank deposits (eg settlement and reserve accounts)
		Central bank digital currencies	
Commercial bank	Commercial bank notes	Commercial bank digital currencies	Commercial bank deposits (eg transaction accounts)
Other (including non-bank entities and no issuers)	Other issued notes and commodities	Private digital currencies (eg bitcoin)	Non-bank accounts and stored-value records (eg broker-dealer accounts)



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Digital currencies - implications and risks

- **Technical**

- Degree of *robustness of possible technologies, cyber risks*
- *Standardisation* and reference architecture

- **Economic**

- *Monetary policy impact* (lower bounds) and *financial stability*
- Impact on *bank business models* (bank deposits, credit provision)
- *Cost-benefits* and *acceptance* by users

- **Regulatory and policy**

- *Private sector vs. public sector* action
- *Regulatory compliance*, tax and *privacy* considerations

- **Legal**

- *Legal qualification* (discharge of obligations, liability, legal tender, ...)
- **Tax and accounting** treatment



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