

# Cross-border payments and cooperative oversight \*

***CentralBanking***

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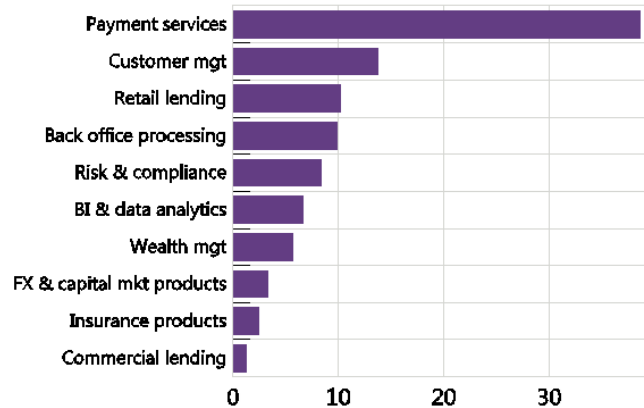
\* The views expressed are solely those of the author

# Overview

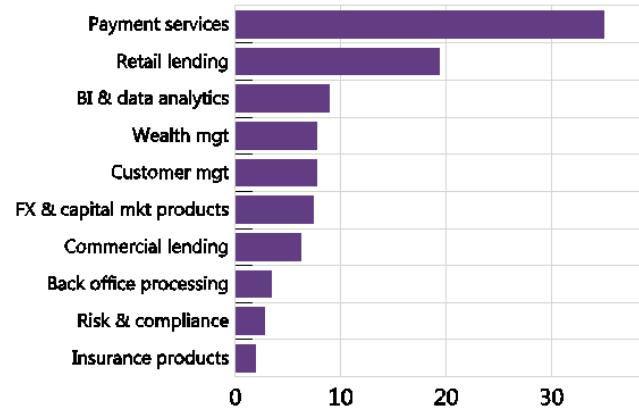
- Overview of applications for cross-border payment frameworks
- Key risks associated with innovative cross-border payment solutions
- Implications for legal and regulatory frameworks
- Cross-jurisdiction regulatory and supervisory cooperation and coordination

# Payment services disrupted

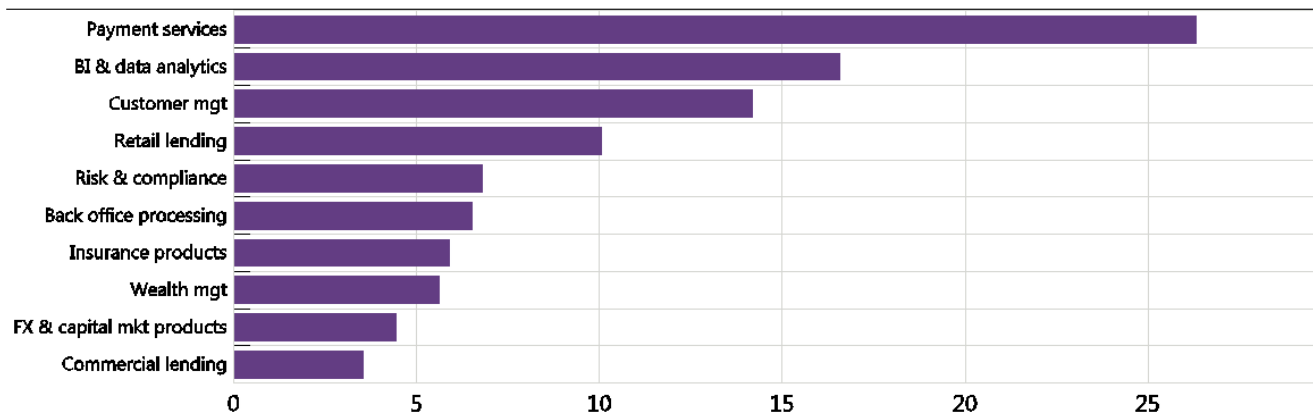
Products and services affected by technological developments



Products and services affected by competition



Products and services that will be most affected by technological developments over the next 5 years

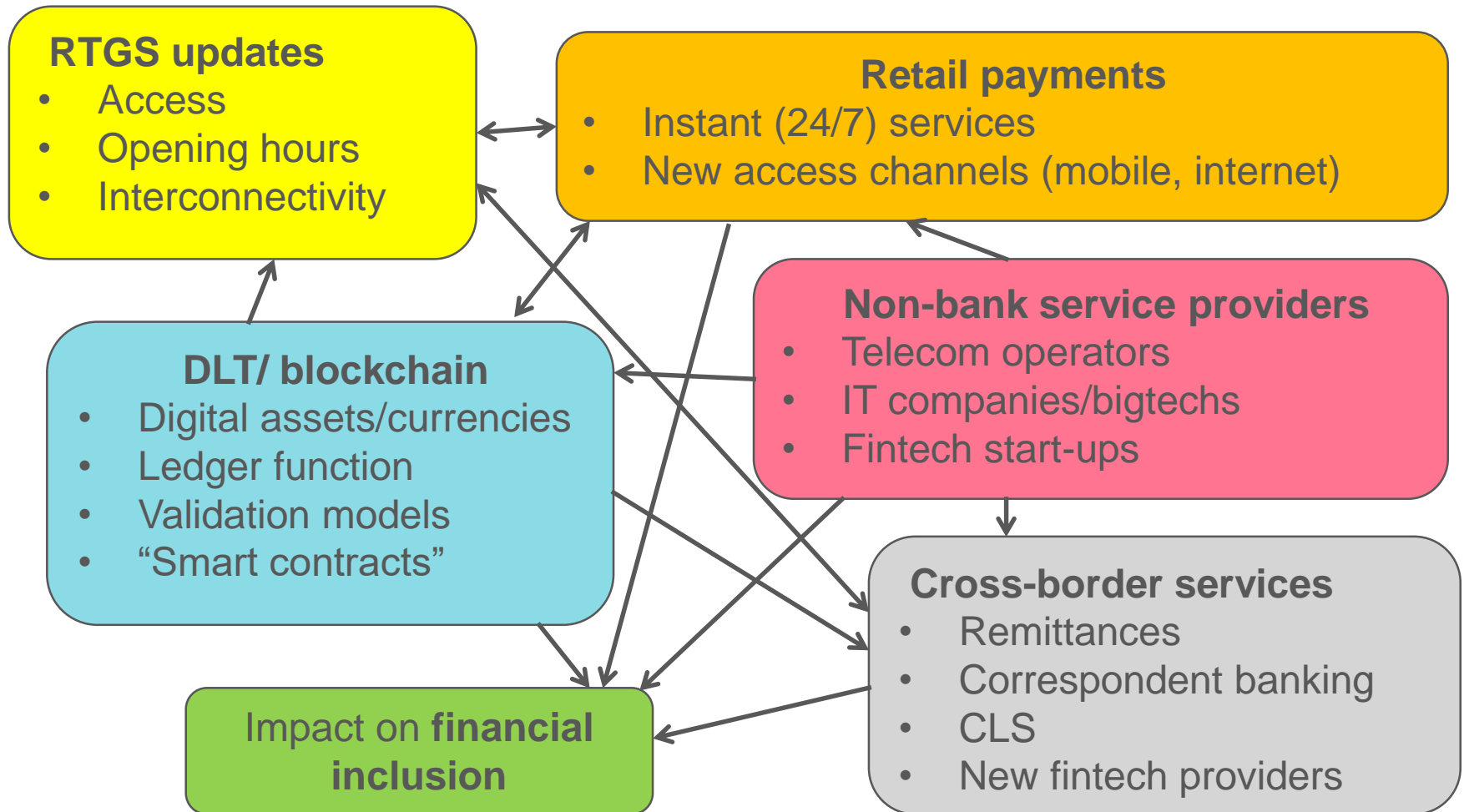


Source: K Petralia, Philippon T, Rice T, Véron N (2019): "Banking disrupted? Financial intermediation in an era of transformational technology", Geneva Reports on the World Economy 22

## Demand for improvements in payments

- **Faster execution of transfers and enhanced convenience:** user expectations push towards 24/7 solutions, immediate execution, mobile or internet integration
- **Broader access:** as non-banks are becoming more important actors in the payment space, they are seeking access to central bank money and settlement accounts
- **Adapt to tokenisation :** if securities become tokenised, then money settlement might need to follow the movement and bring “cash on ledger”
- **Enhancing efficiency in *cross-border transactions*:** lowering of costs, reduction of settlement times, extension of operating hours, adherence to international messaging standards and improvement of international interoperability

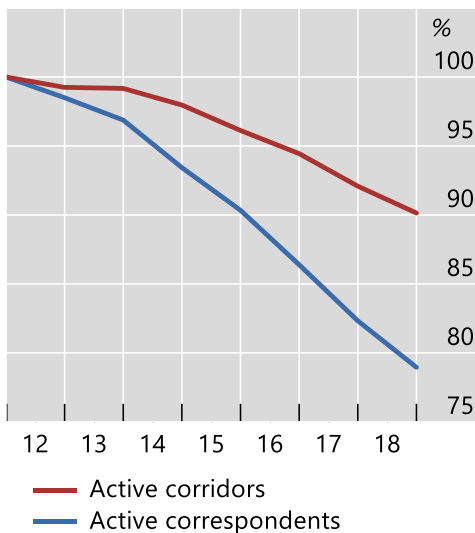
# Evolution of the financial ecosystem – the payments area



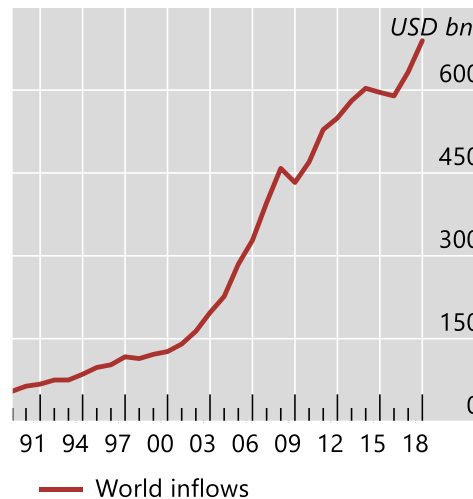
# Issues in cross-border payments

Cross-border payments evolve, but remain slow, costly and opaque

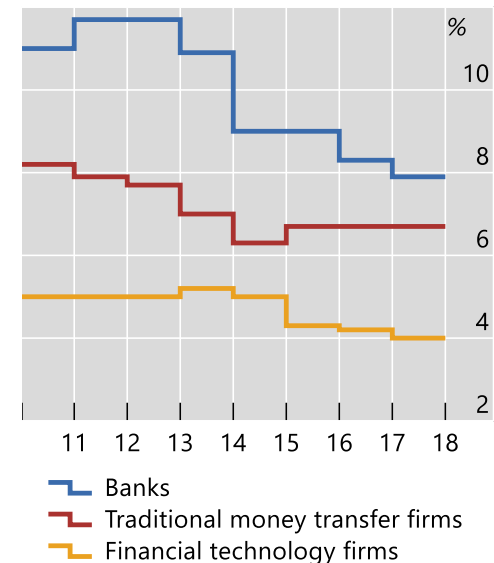
## Decline in correspondent banking



## Remittances volumes are rising

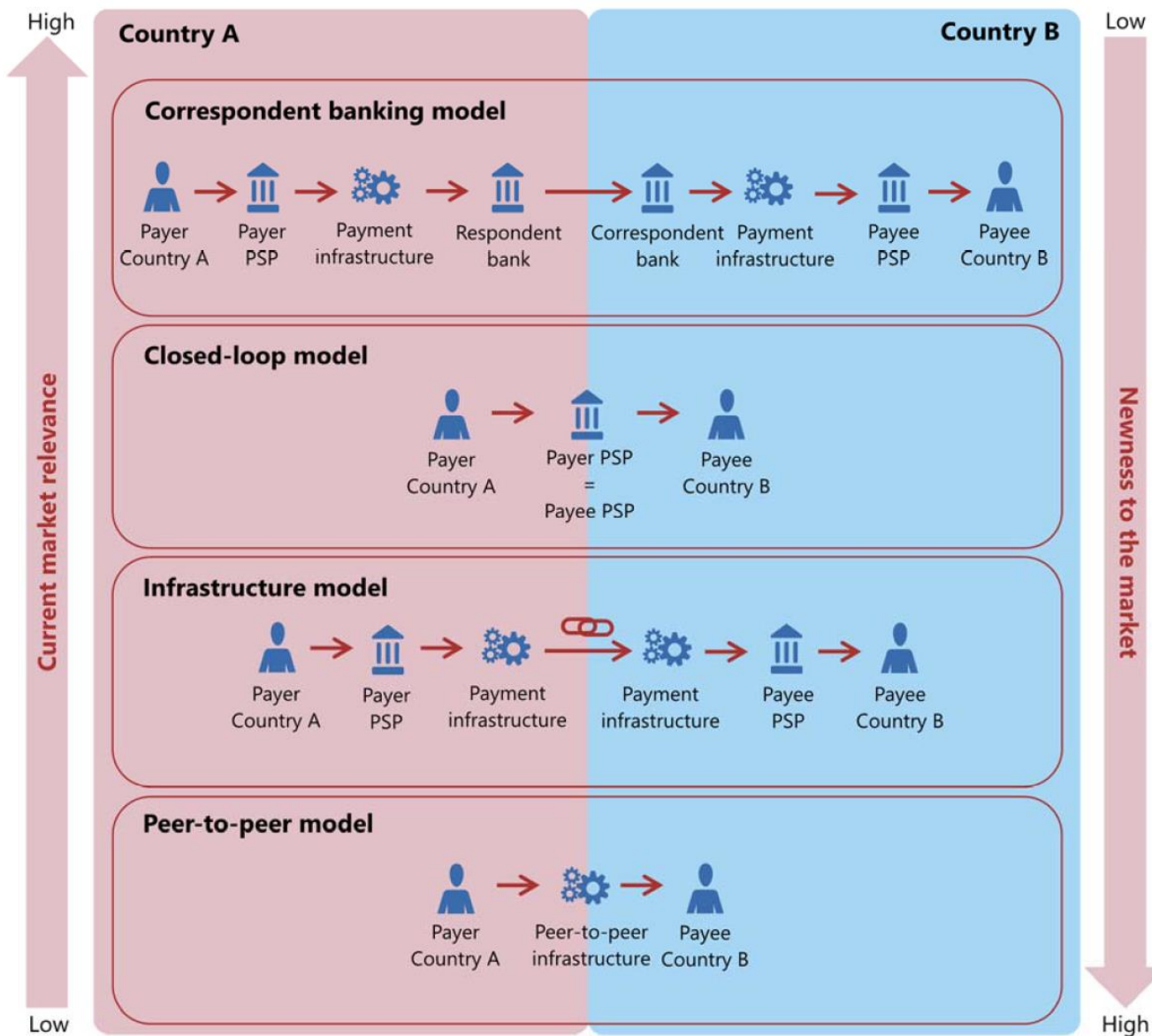


## Still high average costs



Sources: National Bank of Belgium; SWIFT BI Watch; *The Economist* (2019); World Bank, *Remittance Prices Worldwide*; World Bank; BIS calculations.

# Cross-border payments



## New forms of cross-border and cross-currency settlement

- **Entry of new players and reaction of incumbents**
  - **Fintech payment service providers** reinventing remittance (TransferWise, Revolut)
  - **Alternative connectivity services** (Ripple Connect, response by SWIFT with GPI)
  - **Use of crypto-assets as a bridge currency** (Ripple Liquidity, alternatives based on DLT CLSNet)
  - **Settlement assets as proxy for CBDC** (**digital token** denominated in major sovereign currencies to improve wholesale (DvP and PvP) settlement in major currencies, fully backed by **funds held at the *central banks of issue***)
- Could also be **combined with CBDC** (tiered CBDC)



## Emergence of new global players

- **BigTech** and other players (telecoms, Amazon, Alibaba, etc.)
  - Technological giants providing global platforms or global services
  - Services and providers *not easily locatable in a jurisdiction*
- **‘Platformication’** of financial services (Facebook, WeChat etc.)
  - Business models based on services in exchange for personal data (with or without consent by the user) - *potential data protection issues*
  - Combination of personal and financial data in one location - *facilitating social engineering and identity theft*
- **Unregulated actors** in the value chain (outsourcing, embedded products or services)
  - Unregulated service providers providing services directly to users or to financial institutions, e.g. cloud providers or blockchain fabric providers
    - *raising issues of liability and of critical service provision*

# Regulatory issues of relevance in global payment solutions

## ***“Absolute prerequisite”***

**Legal certainty**

**Sound governance**

## **Risks regardless of size**

AML/CFT compliance

Safety of payments system

Cyber security

Data privacy/protection

Consumer/investor protection

Market integrity

Tax compliance

## **+ Challenges if global**

Transmission of monetary policy

Financial stability risks

Fair competition

International monetary system

and currency substitution

## Risks - CPMI analytical framework (February 2017)

- Guidance on **understanding the arrangement (scope)**
  - Functionality and nature of the arrangement
  - Key factors for an effective implementation
- Potential implications for **efficiency, safety and the broader financial markets**

Efficiency	Safety
Speed of end-to-end settlement Costs of processing Reconciliation (speed, transparency) Credit and liquidity management Automated contract tools	Operational and security risk Settlement issues 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)	

# Potential implications for safety

## Operational and cyber security risk

- Management of key risks – cyber resilience and reliability (multiple nodes), security (reliability of cryptography; points-of-entry), operational capacity and scalability

## Data management and protection

- Data integrity; data privacy and confidentiality
- Immutability of data (error handling)

## Settlement issues

- Types and legal nature of records on the ledger (e.g. balances, digital assets, digital representations of a physical or immaterial asset)
- Modes of operational settlement (consensus/synchronisation across nodes, proof-of-work, etc.)
- Legal recognition of settlement finality (probabilistic finality)
- Achievement of delivery versus payment (also across autonomous ledgers or between a ledger and a traditional FMI)

# Selected governance, regulatory and legal aspects

- **Governance**

- Setting or changing the *rules/protocols*
- Control of *access*
- Responsibility for the *operational design and risk management*

- **Regulatory compliance**

- *Licencing requirements*
- *KYC duties, money laundering and terrorist financing*
- *Consumer/investor protection, data secrecy and privacy rules*

- **Legal issues**

- *Nature of digitised assets, the legal status of the ledger and of its “rules”*
- *Identification and authentication* of users/parties to a transaction
- *Finality of the records/balances* on a DLT/blockchain
- *Liability* for operational vulnerabilities (cyber resilience, protocol control, etc.), losses, fraud or theft
- *Applicable law, jurisdiction and enforceability*

## Impact on regulatory frameworks

- **Oversight principles and FMI regulation predate digital technology**
  - Centralised systems and centralised governance under a responsible operator are two premises on which regulation and oversight is conducted today
  - The use of new technologies might create new sources of risks that are not yet included in the scope of existing oversight principles
- **Technological neutrality**
  - *“The requirement for Member States to ensure that national regulatory authorities take the utmost account of the desirability of making regulation technologically neutral, that is to say **that it neither imposes nor discriminates in favour of the use of a particular type of technology, ....**”*
    - Directive 2002/21 on a common regulatory framework for electronic communications networks and services
- **Proportionality**
- **Functional or entity based approach?**

## Challenges for oversight

- Market infrastructure and technological changes
- Increasing complexity and interconnectedness
- Evolving global and national legal and regulatory environment
- Need for domestic and cross-border co-operation and information sharing

## Key implications for overseers

- **Suitability/adaptations of regulatory standards** as regards global market developments:
  - Regulatory addressee
  - Cross-sectoral services and activities
  - Cross-jurisdictional reach
- **Avoidance of competitive advantages** for disrupters compared to traditional infrastructures
- **Need of relevant knowledge** by regulators and overseers to comprehensively understand technology, underlying protocols/codes, and to adequately assess their functioning
- **“Observer nodes”** could enable direct monitoring of new arrangements, facilitate oversight activities, but possibly creating moral hazard
- Possible **need to rethink certain legal concepts** (formation of contracts, finality, DvP, etc.)



## Increased importance of cross-border cooperation and coordination of authorities

- Global activities, systemic relevance, interdependencies and overlapping responsibilities necessitate **enhanced cooperation** at domestic level and in particular **cross-border (home vs. host authorities)**
- Cross-sectoral coordination (payment system overseers, bank supervisors, market regulators, AML authorities, consumer protection authorities, data protection authorities, competition authorities, ...)
- Need for **effective, flexible and tested arrangements** for normal circumstances and for times of market stress
- Increasingly **formal and complex arrangements** (multilayered colleges, crisis management groups, etc.)

# Outlook

- Global *standardisation* efforts (by standard-setters and industry bodies)
  - Increasing impact of *innovations*
  - Initiatives to enhance *(cross-border) interoperability*
  - Enhanced focus on *cyber resilience*
  - Reaction of incumbents (such as banks and infrastructures) on innovations and new competitors (“*second round*” effects)
  - Leveraging by relevant public bodies on *financial inclusion*
- ⇒ ***Oversight frameworks*** to be adapted to the evolving landscape
- ⇒ Further need for ***cooperation and coordination*** of central banks and regulatory authorities (at the national and international level)

# Global regulatory standard setting activities

## Application of existing securities regulation and new regulatory initiatives

- **FSB**
  - Crypto-assets financial stability risk monitoring
  - Directory of regulators of crypto-asset (2019)
  - High-level recommendations for regulation, supervision and oversight of “global stablecoin” arrangements (2020)
- **FATF**
  - Application of AML recommendations to virtual assets (concept of VASP) (2018)
  - Guidance for a risk-based approach to virtual assets and VASPs (Travel Rule for KYC) (2019)
  - Draft updated Guidance (including individuals, non-fungible assets) (2021)
- **BCBS**
  - High-level supervisory expectations for banks engaging in crypto-assets (2019)
  - Work on prudential treatment of crypto-assets (2021)
- **IOSCO**
  - Statement on the risks of initial coin offerings (2017)
  - Crypto-asset trading platforms (2020)
  - Report on education of retail investors regarding risks of crypto-assets (2020)

# Global regulatory standard setting activities

- **CPMI**
    - Digital currencies (2015)
    - Distributed ledger technology in payment clearing and settlement – An analytical framework (2017)
  - **CPMI-IOSCO**
    - Work on application of PFMLs to transfer arrangements involving crypto-assets (2021)
      - key issues governance and risk management, regulatory perimeter, settlement asset, finality, participation and access
  - **OECD**
    - Overview of Tax Treatments and Emerging Tax Policy Issues (2020)
    - Regulatory Approaches to the Tokenisation of Assets (2021)
- ⇒ **Piece-meal approaches** and so far no coordinated focus or taxonomy (outside stablecoins)
- ⇒ Issues of **perimeter of existing standards** in view of arrangements or services crossing sectoral boundaries