Transforming Money and Payments

November 2023

Douglas W. Arner
Kerry Holdings Professor in Law
Associate Director, HKU-Standard Chartered Foundation FinTech Academy
RGC Senior Fellow in Digital Finance & Sustainable Development
University of Hong Kong
Douglas.arner@hku.hk

• Monetary Hegemony, Technological Evolution and the International Monetary System by Douglas W. Arner, Ross P. Buckley, Dirk A. Zetzsche, Anton N. Didenko :: SSRN

• CBDCs: Future of Money and Payments
  • Buckley, Zetzsche, Arner, Didenko

• Regulating LIBRA: The Transformative Potential of Facebook’s Cryptocurrency and Possible Regulatory Responses
  • Zetzsche, Buckley, Arner
Central Bank Functions and Evolution

- Monetary policy / stability
- Financial stability (positive / negative)
- Payments
- Supervision
- Development / inclusion (SDGs / innovation)
- Central banks as technology
Money, payment and technology

- Technological revolution in money and payment: decentralised / centralised
- Money, payments, finance and the technological horizon
- RTGS / mobile money / Alipay / WeChatPay
- FPS
- Bitcoin
- Blockchain
- Stablecoins
- Libra: G20 GSCs, CBDCs, G20 crossborder payments initiative
- Covid19
- Digital Yuan: eCNY
- CBDCs
- UPI / Pix
Finance in the 2020s: Pandemic Impact

• Technology
  – Digitisation: track / trace / test / ecommerce etc
  – BigTech / scale
  – Infrastructure
  – CBDCs
  – Techrisk

• Sustainability
  – Development
  – Travel
  – Small businesses
  – Future crises: resilience? (jared diamond): digital ID / simplified account opening / eKYC / electronic payment (CBDCs?)

• Globalisation / fragmentation
  – Trade patterns
  – Movement
  – Finance / money
  – Geopolitics
Money

• Medium of exchange
• Store of value
• Unit of account: social / legal / sovereign

• Plus
• Payment: mobilisation
• Finance: time
CBDCs: Structure – Legal and Regulatory Aspects

- Money vs payment
- Public / private / public-private / independent
- Structure: account / token / blockchain?
- Access: Retail (two tier, centralised) / wholesale (RTGS), domestic / foreign
- Interoperability? Cashless? Interaction with cash, other currencies etc
- Governance
- Liabilities?
- Finality
- Security
- Privacy
- Competition
- International / regional context
eCNY Rationale

- Monetary policy
- Financial crime
- Social policy
- Technology and innovation
- Global geopolitics
- Risk management
Digital Euro

- EU Digital Finance Strategy 2020
- ECB Digital Euro (2020)
Stablecoins

- E-money
- Bank deposit
- MMF
- Derivative
- Regulated stablecoins
- Synthetic cbdc
- Tokenised deposits / MMFs etc
Looking forward

- Technology
- Structure: money, payment, hybrid
- Rationale:
- Major currencies
- Others – individual circumstances
  - IFCs
  - Developed economies
  - Emerging / Developing economies
- Most: payment focus
- International / regional systems
International Money and Payment Arrangements

• Cross-border payments: G20 / CPMI / Libra / SWIFT etc

• International arrangements? Nexus, mBridge etc
A framework of contextual analysis

• The key is to analyse your own context. I suggest looking at 7 different aspects, derived from AFI FinTech4FI strategy, of which the level of development of the commercial banking system is only one:
  • 1. Digital inclusion? Mobile penetration? Smart phone penetration? Geography? Excluded population characteristics?
  • 2. Money and payments: how widely used is cash? Payments systems: RTGS / FPS / mobile payments? Interoperability?
  • 3. Banking system? financial inclusion: bank accounts, other accounts?
  • 4. National ID / digital ID / KYC/ekyc framework?
  • 5. Economic context: trade linkages? remittances? tourism? etc
  • 6. Legal context: does the central bank have payment systems supervision / authorisation? does the currency issuance / monetary stability authority extend to digital?

• Framework summary: https://nextbillion.net/economic-fintech-innovation-financial-inclusion-covid19/
Thank you!

Introduction to FinTech – on edX:
https://www.edx.org/course/introduction-to-fintech