Payment System Innovation

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Conventional two-tiered monetary arrangements
Potential impacts of payment system innovation

1. Payment system efficiency.

2. Monetary policy transmission, domestic and cross-border.

3. Disruption of banking franchises (payment fees; deposit funding; cross-selling).

4. Compliance: KYC-AML-CFT-tax

5. Privacy and data security.


7. Financial stability (bank runs; elasticity of money supply; netting liquidity; operational resilience).

8. Mixing commerce and banking.

9. Central bank footprint and independence.
Disruptable bank-based payment system revenues

Ratio of payment revenues to GDP: U.S. 2.37% versus EMEA: 1.25%

Examples of fast payment systems

- Bank of Mexico’s Sistema de Pagos Electrónicos Interbancarios.
- Swish, a private mobile payment system available in Sweden.
- The United Kingdom’s non-profit utility, Faster Payments.
- Singapore: Fast and Secure Transfers (FAST).
- China: Alipay and WeChatPay.
- The European Central Bank TARGET Instant Payment Settlement (TIPS), based on the SEPA Instant Credit Transfer platform.
- The US: Real-Time Payments System (private sector) and FedNow (Federal Reserve).
Main policy options

1. Use regulations and fast-payment infrastructure to promote a more open, efficient, and competitive bank-railed payment system.

2. Allow or encourage compliant private stablecoins.

3. Allow or encourage interoperable synthetic central bank digital currencies that “plug into” the central bank (Adrian and Mancini-Grifoli, Bindseil).

4. Introduce a general-purpose central bank digital currency.
Some high-level policy questions (WEF Davos, 2020)

1. Should central banks issue their own digital currencies for use in the broad economy, or is the better strategy to update and upgrade existing structures?

2. How should a central bank or legislature react if a non-native digital currency is gaining domestic popularity in payments relative to the native fiat currency?

3. What should be the protocols for international sharing of transactions data?

4. What is the appropriate public-policy stance on the disruption of conventional banking by payment system innovation?

5. What policy approaches are needed to promote the security of the payment system as digital innovations continue to evolve?