

2030 ASIAN INSIGHTS CONFERENCE



# Digital currencies, banking, and central banking



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# Digital currencies, past, present, and future

- Western Union began using its telegraph network for wiring money in 1872
- More than a century ago, traders in London and New York communicated with each other in real time
- Central banks have been managing the issuance of reserves to banks electronically for many decades
- RTGS, FedWire, CHIPS, SWIFT, EFTS have been operating for decades

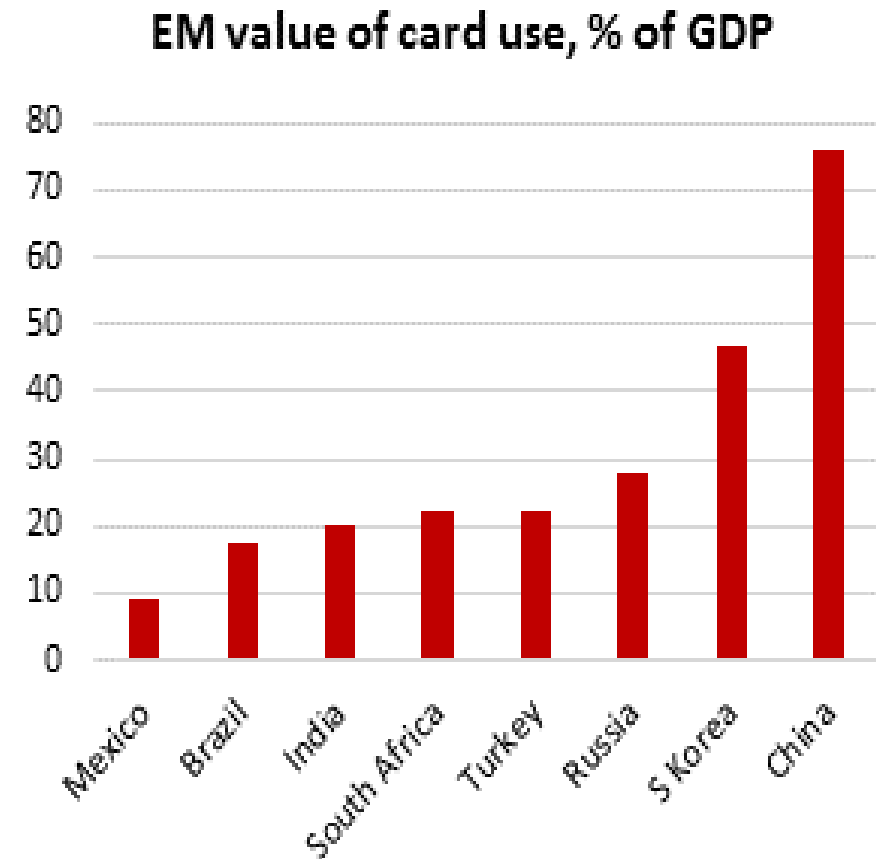
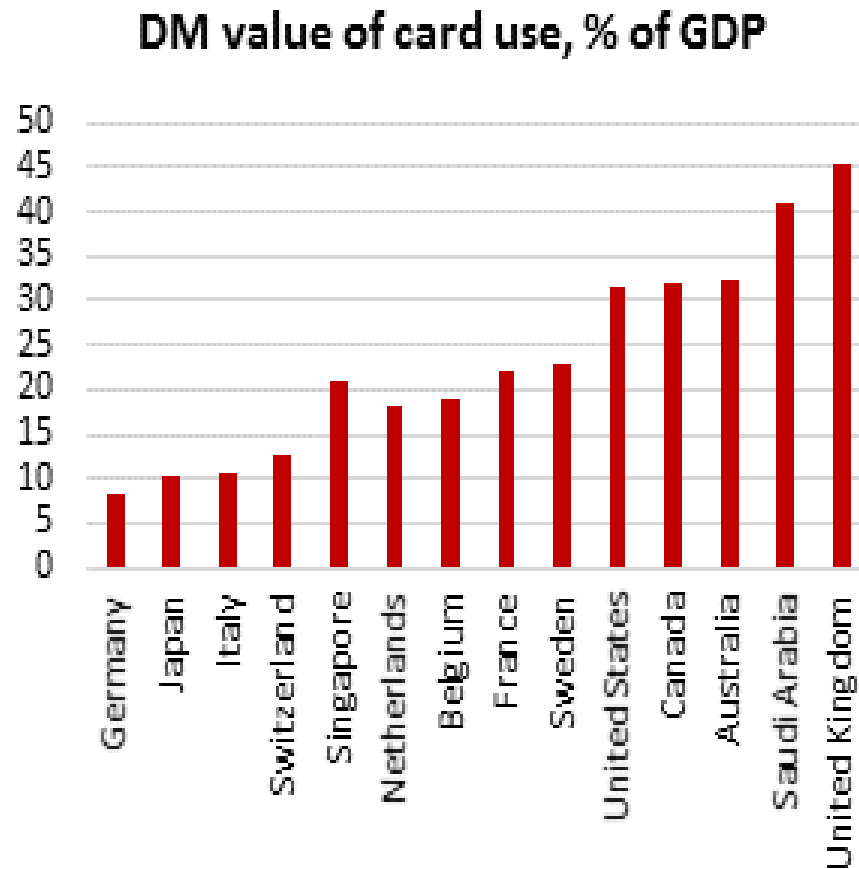
# Digital currencies, past, present, and future

- What has changed?
  - Mobile computing power
  - Connection speed
  - Innovations like blockchain and cryptography
  - Secure digital payments and settlements are now at our fingertips

# Digital currencies, past, present, and future

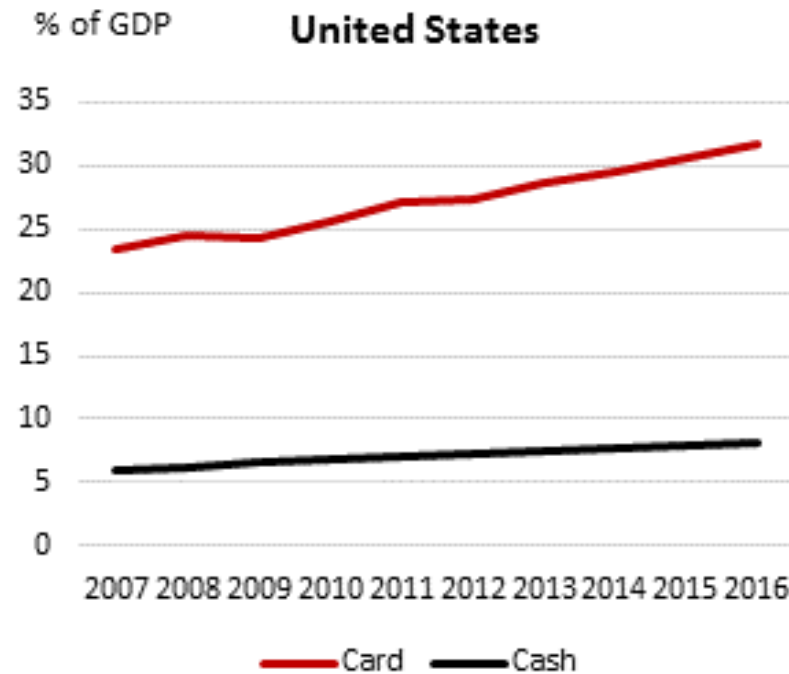
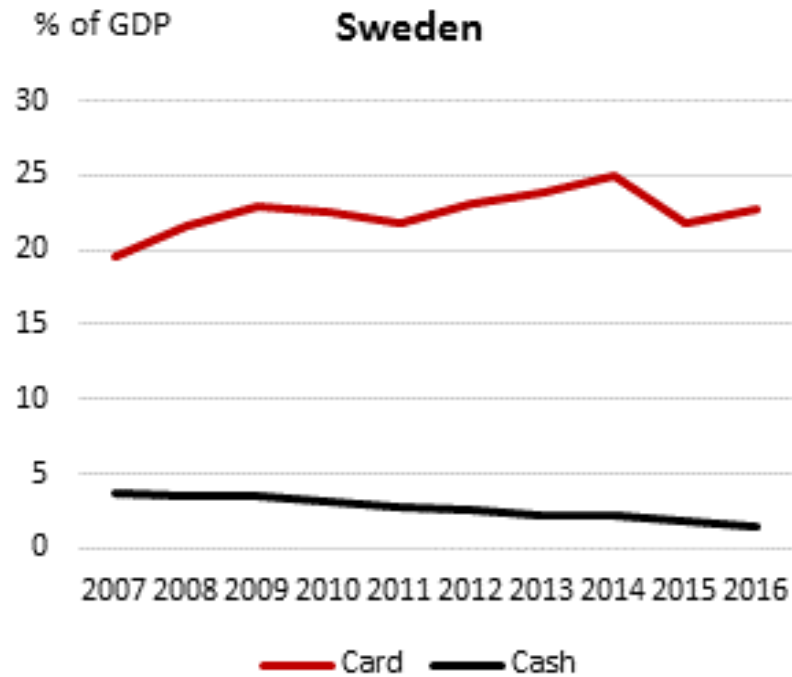
- This is a daunting subject
  - ***“It is with peculiar diffidence and even apprehension that one ventures to open one’s mouth on the subject of money”*** -- John Hicks
  - Digital currency => payments system, banking, monetary policy, and financial stability
  - Each of these topics have vast history, extensive literature, best practice, and legal and jurisdictional implications
  - Digital cryptocurrencies => computer science and cryptography

# Is cash dying? Evidence from around the world



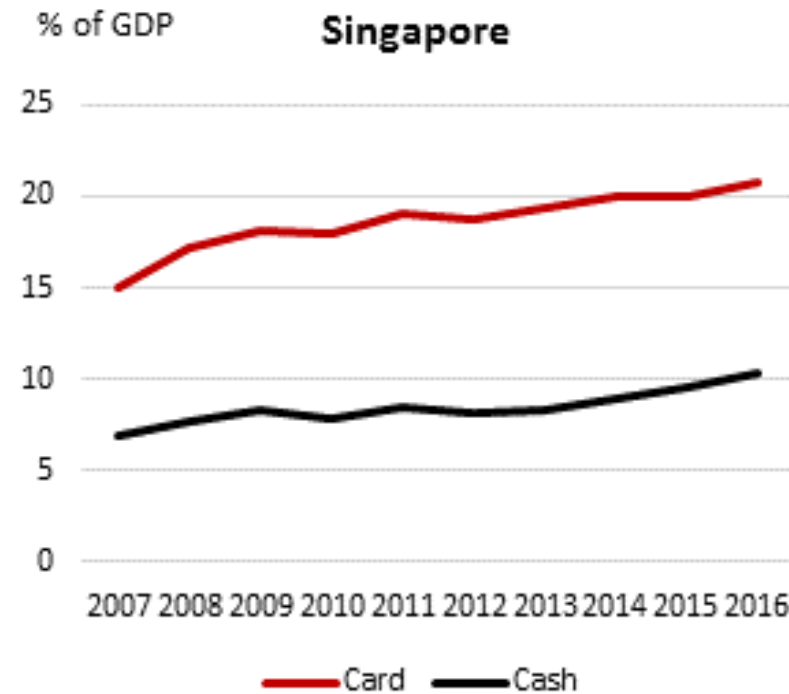
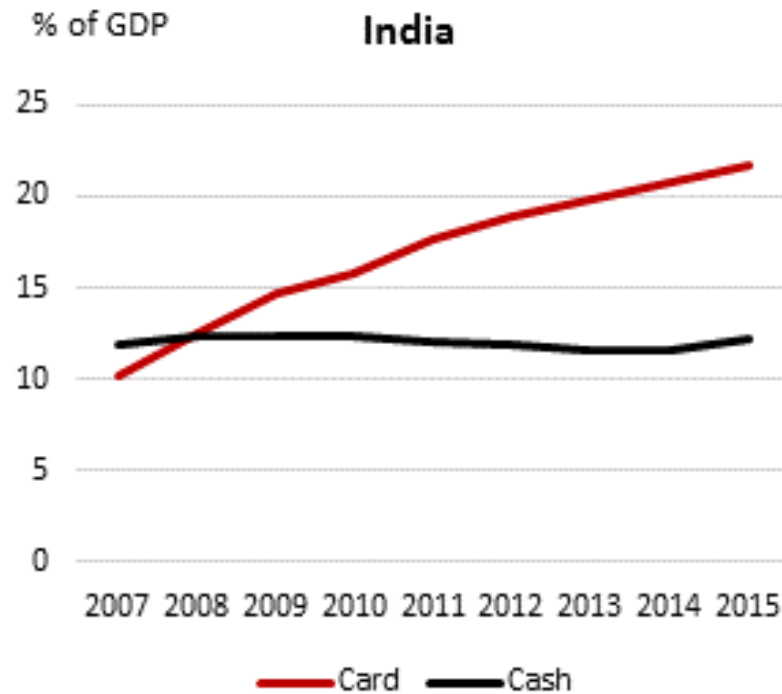
Source: BIS, DBS. Data from 2016

# Is cash dying?



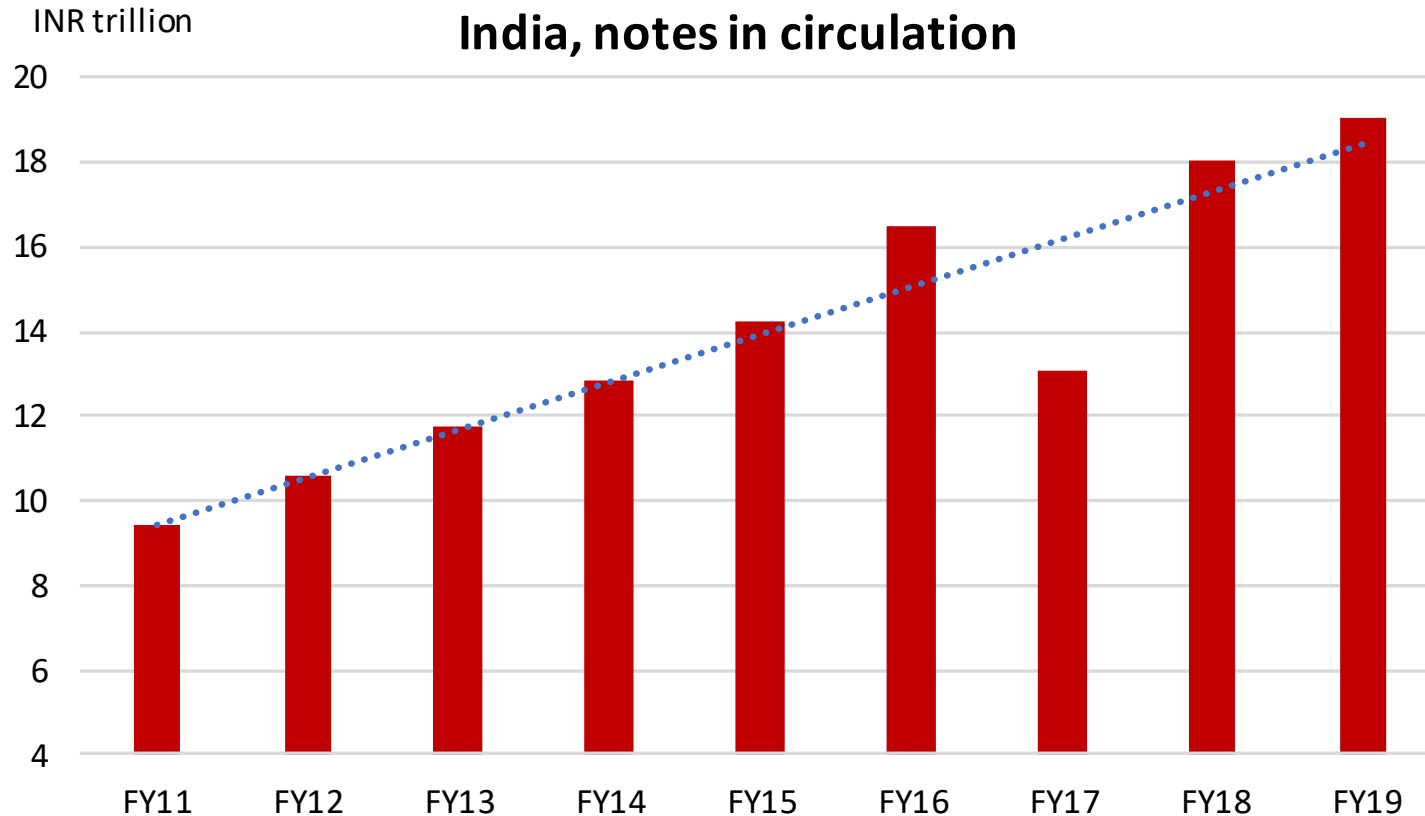
Source: BIS, DBS

# Is cash dying?



Source: BIS, DBS

# India's demonetization experiment

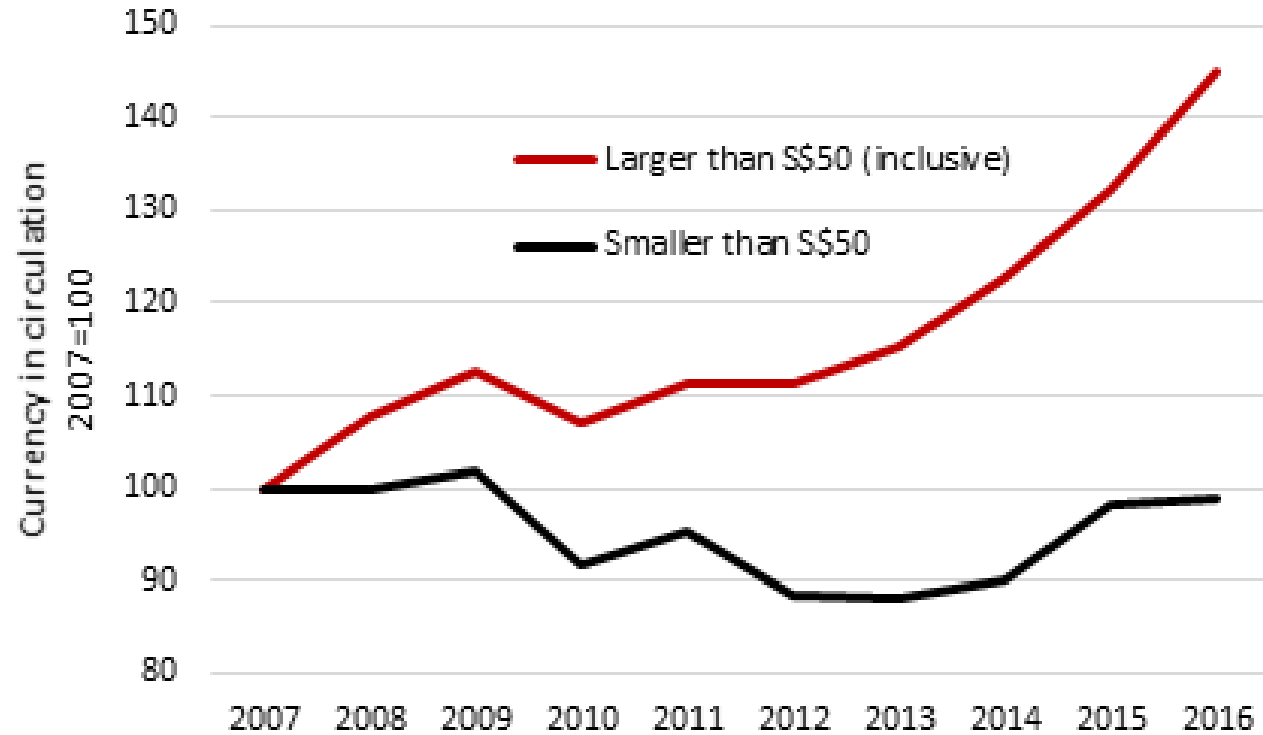


Source: RBI, DBS

Note: Note: all data points as of March 31 of the fiscal year, except, for FY19, for which the data is for May 25, 2018

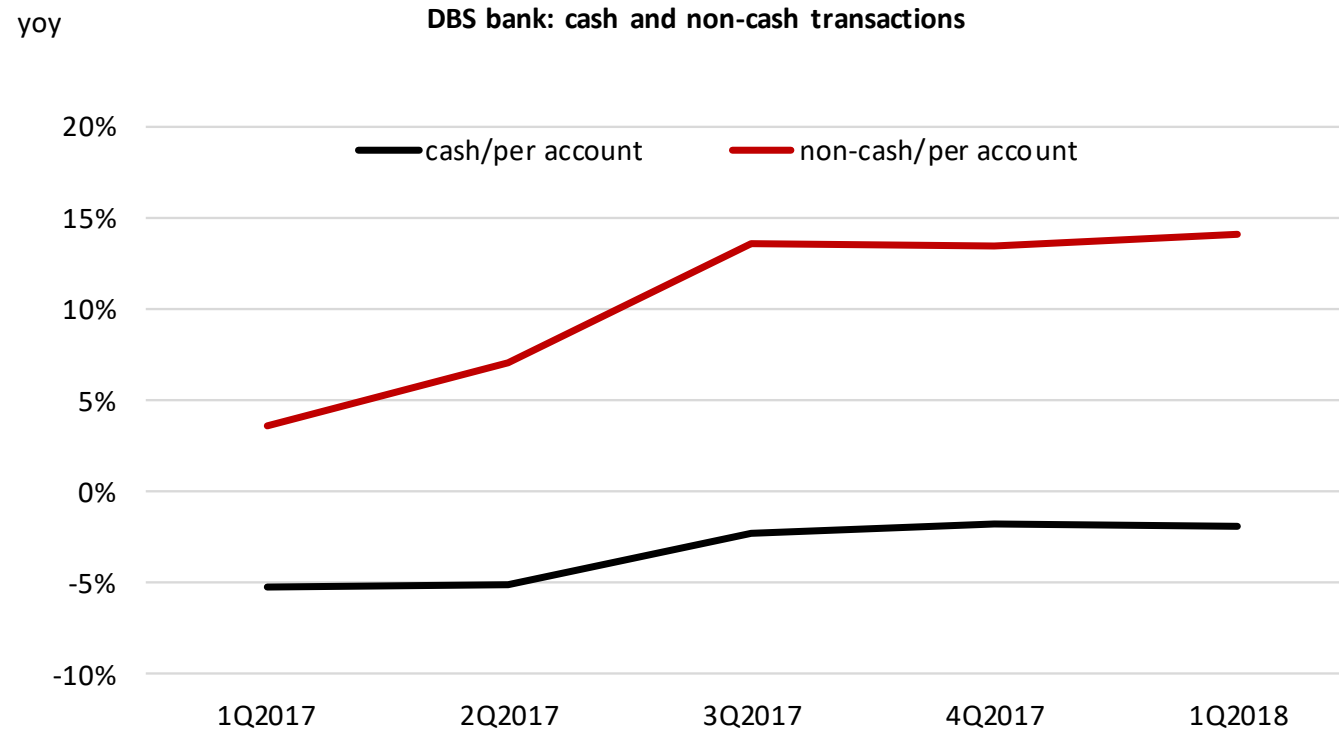


# Cash versus non-cash in Singapore



Source: MAS, DBS

# Cash versus non-cash in Singapore



Source: DBS

# Cryptos: Currencies or Assets?

- Centralized and decentralized payment systems
- Speed versus security
- Blockchain is promising; jury out on cryptos
- Risk of over-supply
- Project Ubin

# CBDCs

- Technology already there:
  - Provide each citizen with a central bank account
  - Credit them with CBDCs
  - Potential to charge negative interest rates
  - Efficient and targeted transfer of money to citizens
  - What happens to banks?