



# BOWMANS

THE VALUE OF KNOWING

## BLOCKCHAIN IN AFRICA CONFERENCE: CRYPTOCURRENCY-REGULATION AND CENTRAL BANKS

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# INTRODUCTION

- Central bankers are interested in blockchain technology because:
  - blockchain technology represents a powerful new tool for improving financial services
  - blockchain is potentially disruptive to many financial institutions
  - blockchain may enhance the performance of central banks in the global economy.
  - blockchain raises existential questions for central banks.

(D. Tapscott & A Tapscott (2016) **Blockchain Revolution**, p 293-294)

# CURRENT ROLE OF THE CENTRAL BANK?

- Central banks:
  - manage monetary policy by setting interest rates, controlling the money supply and in exceptional circumstances injecting capital directly into the system
  - attempt to maintain financial stability. They act as banker to the government and for banks (they are the lender of last resort)
  - regulate and monitor the financial system (in particular the activities of banks that deal with savings and loans to average consumers)

# WHAT ARE CENTRAL BANKS DOING?

- **Creating ‘sandboxes/sandpits’** – “Go and play there, let’s see what you can come up with “ e.g. the Bank of England & the Monetary Authority of Singapore.
- **Engaging with the technology** – if there is a risk in the technology, how is the risk to be mitigated.
- **Collaboration** – engagement between the tech sector, tax sector, banking sector and the regulators.

# THE CHALLENGE OF CRYPTO CURRENCY

- Monetary value has existed in two forms : **physical bearer instruments** (cash).
- The explosive growth of computer usage gave rise to **digital registered instruments** (digital money).
- **Crypto instruments** combines characteristics of both bearer and registered instruments.
- *“Cryptocurrencies are essentially protocols that allow for the validation of transactions without the need for a trusted third party such as a bank, credit card company, escrow agent or recording agency”* ( O Marian , **A Conceptual Framework for the Regulation of Cryptocurrencies** (University of Chicago Law Review)).



# THE CHALLENGE OF CRYPTO CURRENCY...

- Cryptocurrencies present the following challenges:
  - relatively high level of anonymity makes it difficult for regulators to identify individuals who use the protocol for illicit value transfers.
  - the public ledgers have the potential to eliminate intermediaries. Consequently, regulators would lose the ability to use intermediaries as regulatory agents.
  - combination of decentralisation of financial dealings and anonymity presents real regulatory challenges.
  - cryptocurrency market demands the creation of new financial intermediaries to serve it (e.g. exchanges of cryptocurrency to fiat currencies, cryptocurrency-wallet service providers, and clearinghouses for cryptocurrency transactions)

# TO REGULATE OR NOT?

- SJ Hughes & ST Middlebrook , **Advancing a Framework for Regulating Cryptocurrency Payment Intermediaries** (Yale Journal of Regulation 2015 (vol.32)), write that:
  - First system rules and eventually formal regulations follow initial periods of non-regulation. System rules and regulations mature and the afford protections of counterparties to transactions.
  - Proponents of cryptocurrency argue that early regulation could hamper development.
  - There is a risk relating to the prospects of adopting the wrong regulation, e.g. by over-regulating or under-regulating the most pressing issues.
  - Another question is whether regulators should segregate the regulation of new technologies from regulation of products with which they may compete.
  - The choice of regulatory approach depends on (1) whether regulators see cryptocurrencies primarily as storage of value useful primarily to make payments or whether regulators see them as commodities, securities or some combination of stored-value, payment technologies, commodities and securities

# CENTRAL BANK AS A ROLE PLAYER.

- Crypto currency to be treated as a new form of money, issued by a central bank – in the form of central bank issued crypto currency (**CBCCs**).
- CBCC could be implemented via sovereign blockchains.
- Sovereign blockchains, “ *are blockchains that are established for a common currency area (usually a nation) under jurisdiction of a single central bank. These blockchain networks are ‘permissioned ‘ or ‘private’ networks, in which nodes on the network need to be known and trusted,*” (Foundry RMB, **The Advent of Crypto** Banking, November 2016).
- Arguments in support of central banks playing a role:
  - Central banks could observe in real time the transactions in an economy.
  - Central banks would be moderators of the permissioned networks.