BLOCKCHAIN IN FINANCE & DEVELOPMENT

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1. Key uses of blockchain

Finance and development outcomes

2. Challenges facing adoption

Technology and policy

3. Ramifications & lessons for regulators
Blockchain uses network protocols, encryption, and distributed databases to enable value and data to be captured, stored and transferred.

**Blockchain networks are capable of being:**

- **Trusted:** The rules and structure of the network is reliable and predictable  
  - Less need for intermediaries

- **Tamper-proof:** Data and transfers are extremely difficult to tamper with  
  - Reliable ledger of information

- **Automated:** Network runs automatically and allows ‘smart contracts’  
  - Efficiency
1. KEY USES OF BLOCKCHAIN IN FINANCE

1. Clearing & settlement

2. Debt issuance

3. Payment systems

4. Remittances

5 SME financing

ITOs/ICOs:
- Telegram
- eosio
- ripple
- BitPesa
- ethereum

Efficiency
Speed
Inclusion
2. CHALLENGES TO IMPLEMENTATION
A TECHNOLOGY IN ITS INFANCY

Technology at very **early phase** – untested and still developing, most uses are trials/pilots/experiments

1. **Clearing and settlement**: ASX pushed back for further testing, Project Ubin (MAS) still experimental

2. **Debt Issuance**: World Bank had very centralised network, had to settle through traditional means – no ‘atomic swap’

3. **Payment systems**: Cryptocurrency transactions still too expensive and slow to rival current systems

4. **Remittances**: Trouble with volatility of costs and values of digital currency rails

5. **SME financing**: lack of regulatory oversight has presented host of market integrity issues and high amount of scams
2. CHALLENGES TO IMPLEMENTATION
THE NASCENT POLICY ENVIRONMENT

Technological progress is an inevitable march – public policy less so.

Lesson from ICOs: legal grey areas / regulatory uncertainty create risks:

1. Unclear legal rights and obligations, and inconsistent enforcement.
2. Improper valuations owing to lack of formal market structures
3. Conflicts of interest, without disclosure or lock-in periods
4. Consumer protection risks, investor suitability
5. Unclear rights for investor redress
6. Lack of AML/CFT and KYC compliance
7. Uncertain tax status, with duality of token uses
3. EMERGING LESSONS FOR REGULATORS

No formal guidance internationally but emerging lessons from roundtable discussions, FSB work and experience with fintech

1. **Focus on market fundamentals**: orderly financial markets – financial stability; business conduct; consumer protection and market efficiency.

2. **Leverage existing rules**: market issues raised by new blockchain-based products or business models may be already covered elsewhere.

3. **Regulatory certainty is important – but is a fine balance**: if new rules needed, take the long view, use principles, be tech-neutral

4. **Build capacity and understanding in regulators**: to allow authorities to respond appropriately and not rush in.

5. **Cooperate internationally**: to learn from one another and to arrive on common approaches, in order to avoid fragmentation and arbitrage given global nature of digital assets and blockchain networks.