



# BLOCKCHAIN IN FINANCE & DEVELOPMENT

Greg Medcraft  
Director  
Directorate for Financial and Enterprise Affairs



# BLOCKCHAIN IN FINANCE & DEVELOPMENT – OVERVIEW

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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



# 1. KEY USES OF BLOCKCHAIN

## BLOCKCHAIN - BASIC TRAITS

*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

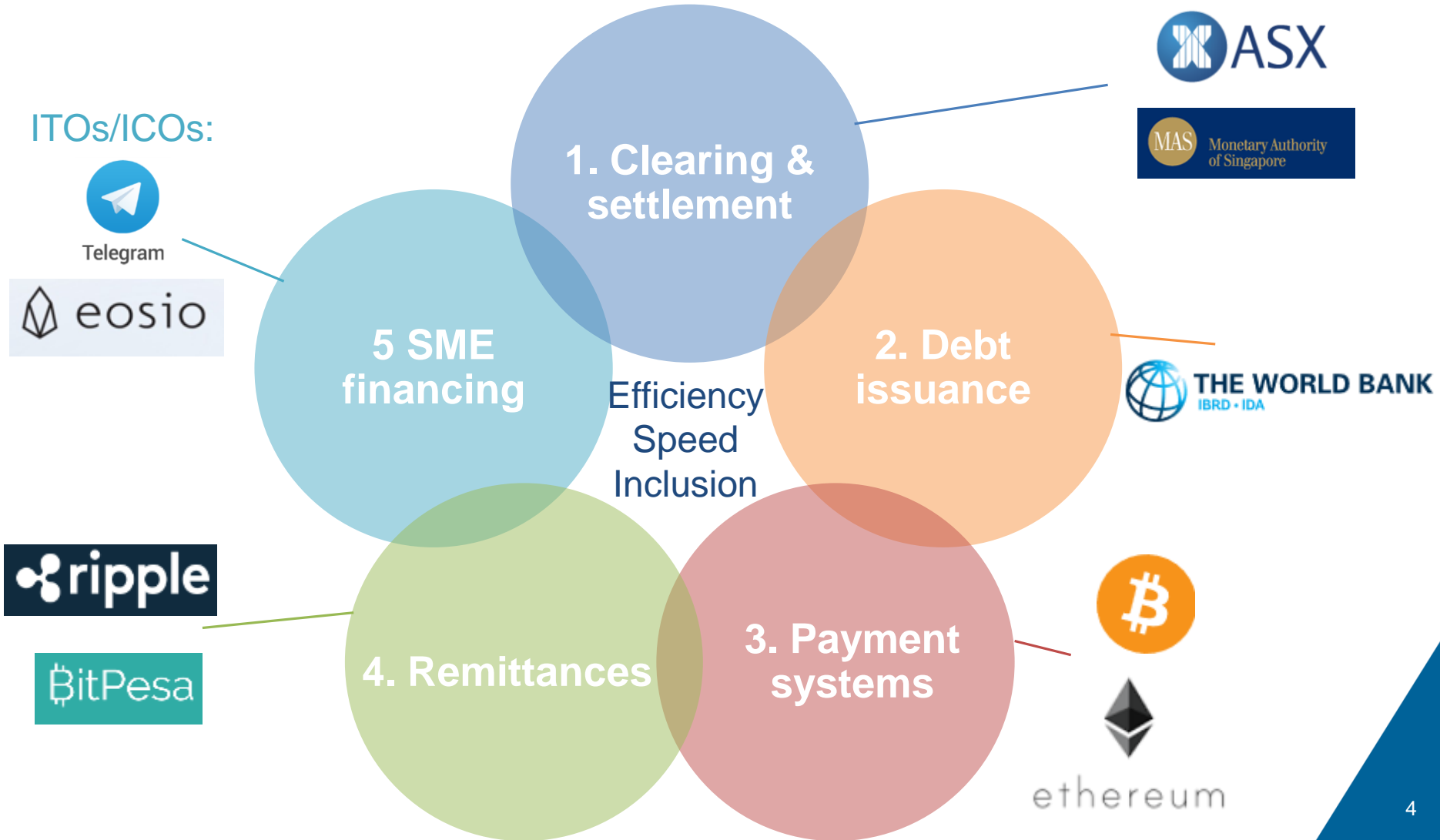
**Automated:** Network runs automatically and allows 'smart contracts'



Efficiency



# 1. KEY USES OF BLOCKCHAIN IN FINANCE





## 2. CHALLENGES TO IMPLEMENTATION A TECHNOLOGY IN ITS INFANCY

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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

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*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

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*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.



# Q&A