# Digital Capital Markets and SMEs

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### Presentation Plan

- SMEs Finance: Introduction
- Capital Markets and SME Finance
- Digital Capital Markets for SMEs

### SMEs and Financing Gaps

- Small and medium enterprises (SMEs) play important role in the economy
  - Constitute 90% of the businesses.
  - Provide 50% of the employment
  - Contribute to 40% of the national income
- Annual finance gap for formal MSMEs in emerging and developing countries
  - Total—US\$ 5.2 trillion (World Bank and IFC 2017)
  - Equity financing gap—US\$ 3.92 trillion (World Bank 2020b: 73).



### Reasons of financial exclusion from financial institutions

- Involuntary (supply side issues)
  - Acute asymmetric information increases risks
  - Lack of acceptable collateral
  - High transactions costs
  - Cumbersome and opaque processes
- Voluntary (demand side)
  - Due to religious cultural reasons





### Capital Markets

- Capital markets can be used to raise funds directly from investors in the form of
  - Equity (shares and private equity placements)
  - Debt (minibonds, securitization and private debt placements)
- Mechanisms and Processes
  - Issuance and Listing
  - Trade and Post-trade Mechanisms

## Capital Market Processes: Issuance and listing

- Issuance of securities in capital markets is a complex process involving different types of processes and stakeholders (investment banks, lawyers, etc.)
- Companies issuing securities are subject to disclosure and reporting requirements
- 'Prospectus' provide essential information of the security to the investors
  - Detailed information on the company, financials, sales, risks, etc.



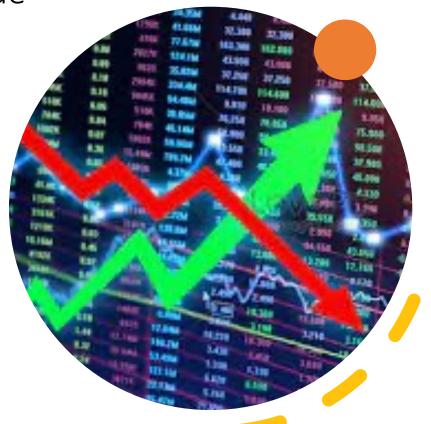
### Capital Market Processes: Issuance and listing costs

- Direct costs include expenditures for preparing the documentation for listing and admission
  - Fees paid to sponsor, advisor, accountants and lawyers involved with the issuance and listing processes
  - Charges for listing include application fee, vetting fee and admission or trading fee
- Ongoing fees paid to exchanges and for audit and ongoing compliance



Capital Market Processes: Trade and Post-Trade Mechanisms

- Well-functioning capital market enables smooth trading of securities among different parties
- Execution of a trade goes through a process of clearing, settlement and custody
- Services provided by
  - Market infrastructure entities—Central Counterparties (CCPs), Clearing Houses, Central Securities Depositories (CSDs)
  - Intermediaries such as banks and brokers help in buying/selling of securities





### Capital Markets for SMEs: Constraints and issues

- Underdeveloped capital markets in emerging economies
- Higher costs of issuing and listing securities
- Onerous disclosure and reporting requirements
- Lack of liquidity due to lack of depth and small trading sizes

### Solution—Use Digital Technology

- Crowdfunding platforms—lack liquidity features
- Cryptoassets and exchanges
- Cryptoassets and initial coin offerings (ICOs)
  - Exchange tokens: Exchange or payment tokens (cryptocurrencies) do not give any rights, but can be used as means of exchange or for investment
  - *Utility tokens*: Tokens providing consumptive rights and access to some specific service, product or platform
  - Security tokens: Investment tokens representing rights of ownership in some specific underlying assets such as bonds, stocks or other assets
    - Non-fungible tokens (NFTs) representing ownership of a specific non-fungible asset such as digital art





## Shariah Views on Cryptoassets

- Many national level Shariah bodies (including Indonesia) have prohibited cryptocurrencies
- Security tokens with underlying assets of economic activities are Shariah compliant (digital securities)
  - Equity based—ownership of companies
  - Asset based—ownership of assets



## Security Tokens and Crypto-Exchanges

- A 'whitepaper' published before launching provide basic information on the ICO/STO
- Due to lack of regulations, accuracy of information in the whitepaper cannot be ensured
- Many ICOs turned out to be scams and fraud that result in loss of investors' funds
- Crypto-exchanges—key issue relates to governance
  - Some crypto exchanges have decided to close down trading limiting access to crypto-assets by owners

## Digital Capital Market (DCM) for SMEs: Rationale

- DCM for SMEs can mitigate the constraints existing in traditional capital markets and crypto exchanges
- Security token offerings (STOs) will represent ownership of shares in the firms or assets by start-ups, growth companies and SMEs
- Regulated exchanges will improve governance and increase trust among investors



### Digital Capital Market (DCM) Ecosystem for SMEs

Regulations/Regulators

Laws, regulations, listing & disclosure standards, supervision, etc.

Information Infrastructure Institutional investors, Crypto-exchanges, digital pension funds, insurance wallets, payment systems, etc. companies, mutual **SMEs** Issuers Investors funds, financial Supporting institutions and intermediaries. mechanisms individuals Instruments Crypto-asset tokens, ITOs

### Crypto-Exchanges—Basic Features

### **Settlement and Asset Layers**

Tokens are created and ownership recorded on blockchain



Any exchange of tokens verified and recorded on blockchain

### **Protocol and Application Layers**

Application Programming Interface (APIs) enable interaction with end-users (such as display of market prices, digital wallets, buying and selling of tokens)







### DCMs for SMEs: Issuance and Listing

- Issuing security tokens remove the need for involving intermediaries and reduce costs of issuances significantly
- SMEs seeking to raise funds using STOs have to issue a 'whitepaper' (to mitigate the asymmetric information problems)
- Regulatory guidelines on what should be disclosed in a 'Whitepaper' providing Information on the firms, their assets and operations that can be used to rate the firms
- Using the concept of proportionality, disclosure requirements less stringent than 'Prospectus' in IPOs



## DCMs for SMEs: Trade and Post-Trade Mechanisms

- Once issued and listed, STs can be held in digital wallets (plays the role of depositaries)
  - Blockchain can also reduce the chain of custody arrangements and hence reduces costs
- While intermediaries can be used to trade on the exchange, investors will be able to buy/sell directly on the digital exchange
- Settlement process can be done directly on the blockchain ledger which record transactions and resolve clearing and settlement without the involvement of CCP



