What is a Digital Currency?

❖ Cryptocurrency: an instrument or token based on cryptography that is generally intended to be used as a currency for making purchases.

❖ Cryptoasset/Security Token: an instrument or token based on cryptography that is intended to be an asset or security and not for use as a money to buy goods and services.

❖ Cryptoutilility/Utility Token: an instrument or token based on cryptography that is used to support the functioning of an online platform.
Bitcoin Price

Updated: May 27, 2021 | Source: coinmarketcap.com
Market Capitalization of Global Crypto
Actively Traded Cryptocurrencies

Total number of cryptoassets actively trading by week

Updated: May 27, 2021 | Source: coinmarketcap.com
Cryptocurrency Volatility

- Updated: May 27, 2021 | Source: coinmarketcap.com & Federal Reserve Economic Data (FRED)
Potential Implications of Cryptocurrencies

- Could erode the effectiveness of monetary policy and Lender of Last Resort policy
- Could facilitate money laundering and terrorist financing
- Reduce market integrity
- Poor consumer and investor protection
- Not compliant with securities legislation
- Removes need for other payment intermediaries
Stablecoins
What is a Stablecoin?

- **Stablecoins**: type of cryptocurrency which use a stabilization mechanism to attain price stability

- A stablecoin arrangement refers to a range of **functions** and the related **activities** to provide an instrument that is meant to be used as a **means of payment** and/or **store of value**
  - **Functions**: governance, issuance, transfer, redemption, stabilization, and interactions with users
  - **Activities**: setting rules, minting/burning coins, custody/trust, operating infrastructure, trading, and market making

- Stablecoins can be classified in multiple regulatory categories
  - E.g., Currency, deposit, e-money, payment instrument, FMI, collective investment scheme, security, commodity, derivative, unregulated class
Components of a Stablecoin Arrangement

- Stablecoin Arrangement
  - Coin Attributes
    - Related
      - Transfer System
      - Financial Services
Stabilization Mechanism

- Stablecoins can be classified in four different types depending on their price stabilization mechanism:

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiat-collateralized</td>
<td>Tether (USDT)</td>
<td>1 USDT is backed by 1 USD in reserves</td>
</tr>
<tr>
<td>Commodity-collateralized</td>
<td>Digix Gold (DGX)</td>
<td>1 DGX is backed by 1g of gold in reserves</td>
</tr>
<tr>
<td>Crypto-collateralized</td>
<td>Dai (DAI)</td>
<td>While Dai is pegged to the USD, the collateral in reserves in comprised of cryptocurrencies</td>
</tr>
<tr>
<td>Non-collateralized</td>
<td></td>
<td>Stablecoins whose price stabilization rely on algorithms that adjust the supply</td>
</tr>
</tbody>
</table>
Normalized Prices: Bitcoin and Tether

Normalized to May 1, 2020. Updated: May 27, 2021 | Source: coinmarketcap.com
What is CBDC?

- Central Bank payment liability
- Denominated in national unit of account: CAD
- Electronic
- Retail or wholesale
- Token or account based
Building a Modern Ecosystem

- Payments Modernization
- Real Time Rail
- Open Banking
- Bank notes
- CBDC ??
Retail CBDC Potential Benefits

- Keeps central bank money competitive with private alternatives
- Maintains general public access to risk-free asset
- Enhances resilience of payment system
- Next step in efficiency and security for cash issuance
- Supports confidence and trust in financial system
- Central bank only institution to credibly guarantee universal access: anyone, anytime, anywhere
- Can maintain access to payments privacy
- Support monetary sovereignty
Retail CBDC Potential Costs or Risks

- Risk of substituting for retail bank deposits
- Risk of run toward CBDC during a crisis
- Cybercrime
- Money laundering and illicit activity
Current Perspectives

- Not a compelling case to issue a retail CBDC at this time

- Canadians will continue to be well-served by the existing payment ecosystem, provided it is modernized and remains fit for purpose
Wholesale CBDC

❖ Would a wholesale tokenized CBDC improve settlement efficiency of financial asset transactions?