

# **6<sup>TH</sup> ESRB ANNUAL CONFERENCE**

Panel discussion: Technological innovation and systemic risk

Michael Leibrock, Managing Director, The Depository Trust and Clearing Corporation December 8, 2022

### **Benefits and Opportunities of Fintech:**

### Hold considerable promise and potential benefits for the financial system:

- Enhancing the customer (user) experience
- Increasing access to the financial system
- Realizing efficiencies
- Reducing costs
- Reducing friction across markets
- Strengthening critical infrastructure components
- Initial Fintech developments have focused primarily on *enhancing existing capabilities* through innovative technologies, such as:
  - Cloud computing, APIs Programming Interfaces (APIs), A.I / Machine Learning
- Future Fintech applications will likely *transform the way counterparties interact* with each other through the use of:
  - Distributed Ledgers, Smart Contracts, Digital Assets / Tokens



### **Benefits and Opportunities of Fintech – Guiding Principles:**

- These guiding principles help ensure that Fintech developments are designed that provide optimal value and maximum benefits to clients:
  - **Client benefits must be clear and tangible**, backed by customer engagement, industry support and proven hypotheses

 New technologies must offer added value and flexibility to clients, but should never be used at the expense of risk mitigation or resiliency

 Given that ecosystem will continue to change, be prepared to adjust early and often, and focus on creating the most flexible long-term solution, not the only short-term solution



### **DTCC Fintech Initiatives: Use Cases and Innovation**

- DTCC has a history of using emerging technologies to reduce risks and costs in posttrade processing, such as:
  - Transformation of Trade Information Warehouse (TIW) [2016 2017]
    - o Re-platforming of TIW (asset servicing infrastructure for credit derivatives) using cloud and DLT
  - Benchmark Study on DLT support for U.S. Equity Market [2018]
    - o Demonstrated DLT can support avg. daily trading volumes of more than 100 million trades per day
  - Project Ion [2020 present]
    - $\circ$  Alternative digital settlement platform for the U.S. capital markets leveraging DLT

#### - Project Whitney [2020]

- o Asset tokenization and digital infrastructure prototype to support private market securities
- Digital Securities Management (DSM) [2021 present]
  - o Cloud-based platform to modernize and digitalize private market securities

#### - Project Lithium [2022]

 Prototype to explore how a U.S. Central Bank Digital Currency (CBDC) might operate in the U.S clearing and settlement infrastructure leveraging DLT



# **Potential Impact of Fintech on Systemic Risk:**

#### 1) Interdependencies

 Reliance on entities that are highly interconnected and/or act as a critical service provider (e.g., cloud provider) to facilitate the digital financial system elevates potential concentration and contagion risks.

#### 2) Shared Model Vulnerabilities

 Lack of common taxonomy across policies and the absence of forward-looking data and information being embedded into modelling applications present extensive uncertainties.

### 3) Conflicting National Priorities

• Global issues including cyberattacks, financial crime and cross-border data issues.

### 4) Emerging Media Platforms

 New sources of influence are using social media platforms to create new opportunities for market manipulation and pose risks to consumer protection and market stability.



# **U.S. Legislative and Regulatory Focus Areas: Digital Assets**

#### White House Executive Order and Framework

- Whole of govt approach to address risks and harness potential benefits of digital assets and underlying tech; called for agency recommendations
- EO-mandated reports provide framework for responsible development

### Congressional proposals re: Digital Asset Spot Market

 Senate and House Agriculture proposals to provide CFTC regulatory authority over digital asset spot markets

#### Congressional proposal re: Stablecoins

 House Financial Services draft proposal to provide regulatory oversight of payment stablecoins

### • FSOC: Digital Assets Financial Stability Risks and Regulation report

 EO-mandated report; outlined regulatory gaps and risks which could pose threats to financial stability; provided recommendations including passage of legislation and continued enforcement

