Data Management, Technology and Cybersecurity – An Overview

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Problems and challenges

➢ How “financial market infrastructures” help growth while maintaining stability?
  ➢ Traditional “Financial Market Infrastructures (FMIs)”
  ➢ Financial Intermediaries
  ➢ “new FMIs”

What we need to determine?

➢ How we can manage distributed key applications, storage, and connections?
➢ How “new FMIs” scalable?
➢ How we can harmonize the regulatory approach, requirements, formats?
What are the process that can change in the future?

- **Exchange of Assets**
- **Sharing Key Data**

### Traditional Process

- **Hierarchical Structure**

### Emerging Process

- **Distributed Applications, Storages, Connections**

**Clients**

**Financial Intermediaries**

**FMIs**

- (payments, clearing and settlement infrastructures)

(In particular CSD, CCP, RTGS, and TR)
What are the process that can change in the future?

- Where are the emerging process applicable?
  - Developed market environment where trusted FMIs are already in place.
  - Emerging market environment where trusted FMIs are yet established.

- What are the merits?
  - Disrupt current process.
  - Provide inclusive services.

- What are the risks?
  - Increased number of interface ports increase vulnerability for cyber security?
  - Distributed process make hard to monitor the health of entire system?
How economies address cross-border process?

- Exchange of Assets
- Sharing Key Data

Traditional Process

Emerging Process

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<th>Jurisdiction A</th>
<th>Jurisdiction B</th>
<th>Jurisdiction A</th>
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new FMIs
How central counterparties’ functions are provided?

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<th>What to have in common?</th>
<th>Traditional Process (e.g. listed markets)</th>
<th>CCP Outsourced to other jurisdiction</th>
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Financial Intermediaries

CCPs

CSD & RTGS

Outsourced to other jurisdiction

What to have in common?

Can only CCP technologies be Outsourced?
What APEC economies are expected to address?

- Scope of “financial market infrastructures” (including “new FMIs”)
- Sharing the data cross border to best use of “fmis”
- Utilizing the part of “fmis” across the border for economies of scale
NRI

Dream up the future.
THANK YOU