

# Digital Assets in Digital Finance

## Regulatory Standards and Law Reform Implications

**Prof. Giuliano G. Castellano**

*Associate Professor* | Faculty of Law

Deputy Director | Asian Institute of International Financial Law

University of Hong Kong



**HKU  
LAW**

Asian Institute of  
International Financial Law  
The University of Hong Kong

UNCITRAL Colloquium: Navigating the New Era  
of Digital Finance

20-21 February 2025

United Nations Headquarters, New York

# Regulation and Digital Assets Market

Separating private law and regulation is helpful to define the scope of international standards but may be misleading:

- Regulations on digital assets are often enacted to instill confidence and support the industry SME financing.
- Drafting private law rules assuming that regulatory standards can be applied separately may lead to
  - i. Misinterpreting current market practices and
  - ii. Designing private law frameworks with limited or no applicability
- Clarity in private law rules, instead, can support alignment with international and/or domestic regulatory regimes.

## Regulatory Focus

Digital assets and activities that are not subjected to existing regulatory regimes

## Crypto-assets Classification

- Non-referenced crypto-assets (e.g. Bitcoin or utility tokens).
- Referenced crypto-assets, i.e. representing rights/claims on other assets (e.g. stablecoins)

## Crypto-assets related activities

- Issuance, custody, trading
- **Lending against crypto-assets**

# The Regulatory Landscape for Digital Assets

## Main Initiatives

### Financial Stability Board

- Crypto-Asset Activities and Markets (2023)
- Global Stablecoins (2023)

### IOSCO

- Crypto and Digital Asset Markets (2023)
- Decentralized Finance (DeFi) (2023)

### Basel Committee

- Cryptoasset Exposures (2022-2026)

### Financial Action Task Force

- Recommendation 15, Virtual Assets (2018)

## Emerging Framework

### Scope

- G20 initiatives with global reach

### Key Principle

- *Same function, same risk, same rule*

### Approach

- Comprehensive regulatory framework
- Focus on activities and entities related to **crypto-asset**

## Impact on Transactions & Markets

# Market Overview

## Centralized Exchanges (CEXs)

- CEXs are primary venues for crypto trading.
- Preferred for investors and large scale trade due to:
  - (i) institutional-grade liquidity,
  - (ii) regulatory compliance (e.g., KYC/AML frameworks), and
  - (iii) fiat onboarding.

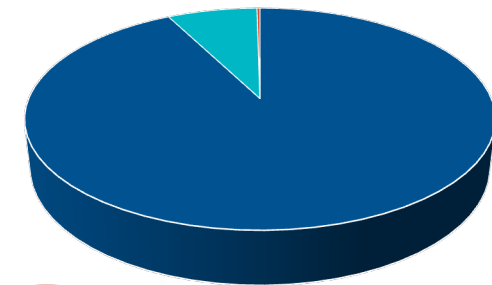
## Decentralized Exchanges (DEXs)

- DEXs: 10-15% of total crypto trading volume.
- Preferred for:
  - (i) pseudonymous trading,
  - (ii) access to speculative tokens, and
  - (iii) self-custody preferences for retail in regions with restrictive banking or crypto policies

## Key Dynamics

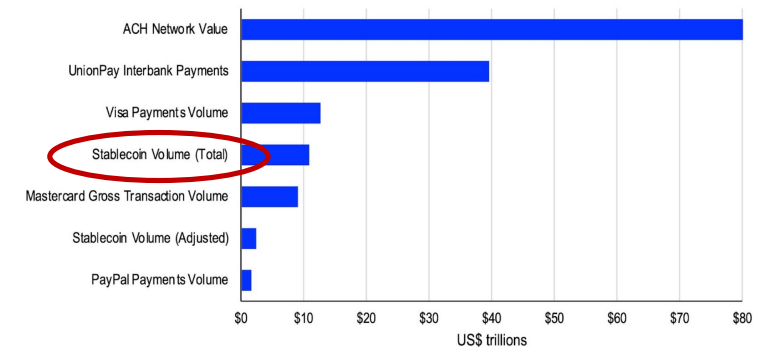
- Reliance on **regulatory compliant CEX and assets**.
- Expansion of trusted and **regulated stablecoins**.
- Integration of crypto-assets with **traditional finance/entities**.

## 2024 Total Transaction Volume (USD)



■ CEXs (18.83 tn) ■ DEXs (1.5 tn) ■ Illicit (51 bn)

## Payment System Transactions Volume 2023



Based on the full year 2023, not fiscal year. Adjusted stablecoin volumes remove "inorganic" activity. Sources: Allium, Mastercard, Nacha, PayPal, People's Bank of China, Visa and Coinbase.

# Private Law and Regulation: Two Examples

|             |            | Rights on   |  | Anonymity  |
|-------------|------------|---|--|--|
|             |            | A. Digital Assets   | B. Referenced Assets<br><i>(fiat-backed stablecoin)</i>  |  |
| Private Law |            | <ul style="list-style-type: none"> <li>• <u>UNIDROIT/UCC-Common Law</u>: Digital assets can be items of property and encumbered.</li> <li>• <u>Civil Law Jurisdictions</u>: depends:               <ul style="list-style-type: none"> <li>• Japan: Art 85 Civil Code (tangibles).</li> <li>• China: Court interpretation of the Civil Code indicated that property rights on crypto-assets can be established even if trading is banned.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• <u>UNIDROIT</u>: rights on “linked assets” governed by other laws.</li> <li>• <u>Current debates</u>: stablecoins with rights on redeemable reserves possibly treated as negotiable documents.</li> </ul>   | <u>International Private Law</u> <ul style="list-style-type: none"> <li>• Significant attention has been devoted on the anonymity feature of crypto-assets transactions impeding to determine the location of the transferor.</li> </ul>   |
|             | Regulation | <u>FSB, EU, Japan:</u> <ul style="list-style-type: none"> <li>• Segregation and obligations to return assets</li> <li>• Rules “mimic” property rights protections for clients dealing with crypto-assets service providers.</li> </ul>  | <u>FSB, Basel, EU, Japan, Hong Kong:</u> <ul style="list-style-type: none"> <li>• Obligation of 1:1 reserves held in a regulated credit institution</li> <li>• Reserves must be redeemable (FSB indicates “users” broader than holders).</li> <li>• Same level of protection as “commercial bank money.”</li> <li>• EU: Defined as “e-money” possibly considered as financial collateral.</li> </ul> | <u>FATF, IOSCO, EU, etc.:</u> <ul style="list-style-type: none"> <li>• Uses of crypto-assets in commercial transactions likely fall into AML/KYC rules.</li> <li>• Issuers’ identity disclosed.</li> <li>• Clients’ identity, nationality, and residency must disclosed.</li> <li>• Identity is disclosed when crypto-assets are transferred to wallets (“travel rules”).</li> </ul> |

# Implications on Transactions and Markets

|         |  | Rights on  |   | Anonymity  |
|---------|--|--|---|--|
|         |  | A. Digital Assets  | B. Referenced Assets<br>(fiat-backed stablecoin)  |  |
| Effects |  | Rights on <i>crypto-asset</i> of <i>service providers' clients</i> are protected regardless of property law categories and contractual arrangements.<br>Accounts with regulated crypto-assets are equated to accounts with regulated financial institutions. |   | <ul style="list-style-type: none"> <li>Lending against crypto-asset is likely to trigger KYC/AML rules.</li> <li>Institutional investors and commercial transactions rely on licensed and regulated regime.</li> <li>Anonymity/Pseudonymity mostly is non-mainstream.</li> </ul> |
|         |  | Growing <u>convergence</u> between <ul style="list-style-type: none"> <li>regulatory classifications and</li> <li>market uses of “digital assets.”</li> </ul>  | Fiat-backed stablecoins with a promise of redeemable reserve: <ul style="list-style-type: none"> <li>Treated similar to <u>bank accounts</u> or <u>debt claims</u>,</li> <li>Issuers treated as <u>regulated credit providers</u>.</li> </ul> |  |

*For whom should private law standards be designed?*

# Possible Way Forward

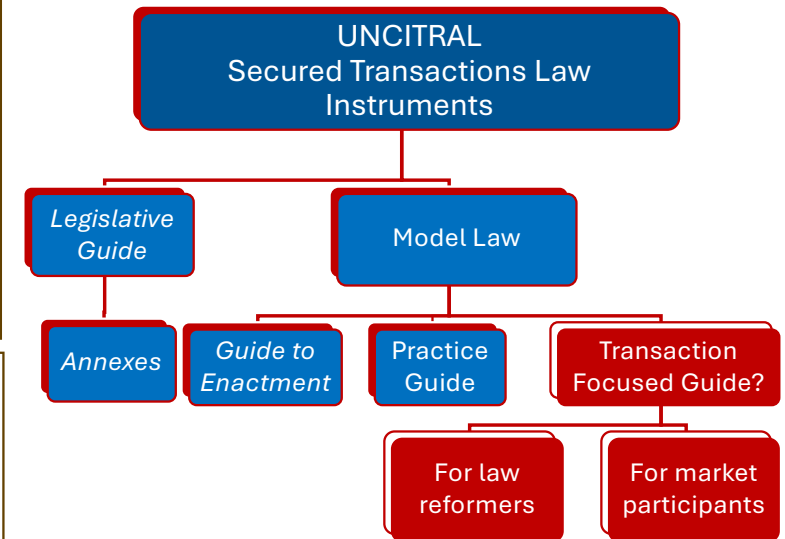
## Need

- UNCITRAL MLST offers a comprehensive framework.
- UNIDROIT Digital Assets and Private Law Principles (DAPL) provide a blueprint for “digital assets.”
- Guidance is needed to coordinate **UNCITRAL** and **UNIDROIT** instruments in emerging market practices shaped by **international regulatory standards**.
  - How do existing instruments apply to the main categories of crypto-assets (e.g., payment tokens, security tokens, stablecoins)? What perfection rules apply? Is the UNCITRAL MLST compatible with FSB/BaseI/IOSCO/FATF recommendations?
  - Answers to these and other questions might not be obvious to law reformers and market participants.

## Feasible Options

1. Applicability of the UNCITRAL MLST (coordinated with MLTER + UNIDROIT DAPL) to secured transactions involving specific types of digital assets.
2. Methods to implement the UNCITRAL MLST (coordinated with MLTER + UNIDROIT DAPL) to support international regulatory requirements (e.g., stablecoins).

Which approach should UNCITRAL follow to address these needs?





Thank you!



# Taxonomies & Classifications

## Regulatory Taxonomies

## Implication

- 1. Crypto-assets:** digital representation of value or a right that can be transferred or stored electronically using *distributed ledger*. Key distinctions:
  - Focus on Crypto-assets that do **not** qualify as financial instruments

→ Key distinction based on underlying rights or claims (i) crypto-asset not representing any right/claim/asset (e.g., Bitcoin), and (ii) with a value referenced to or backed by other assets (e.g. stablecoins).
- 2. Crypto-assets & Regulated Activities:** different transactions and activities that trigger licensing requirements and various obligations on the providers
  - They include (i) issuance of different types of crypto-assets, (ii) custody and administration of crypto-asset for clients, (iii) trading platforms and operations.

→ Lending against crypto asset in some jurisdictions may require a license. Regardless, it is likely to be subject to KYC rules for AML purposes