

THE INTERNATIONAL DIMENSION OF DLT NETWORKS, LAW AND REGULATION

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**BLOCKCHAIN FINANCIAL ASSETS AND BEYOND:
LEGAL AND REGULATORY PERSPECTIVES**

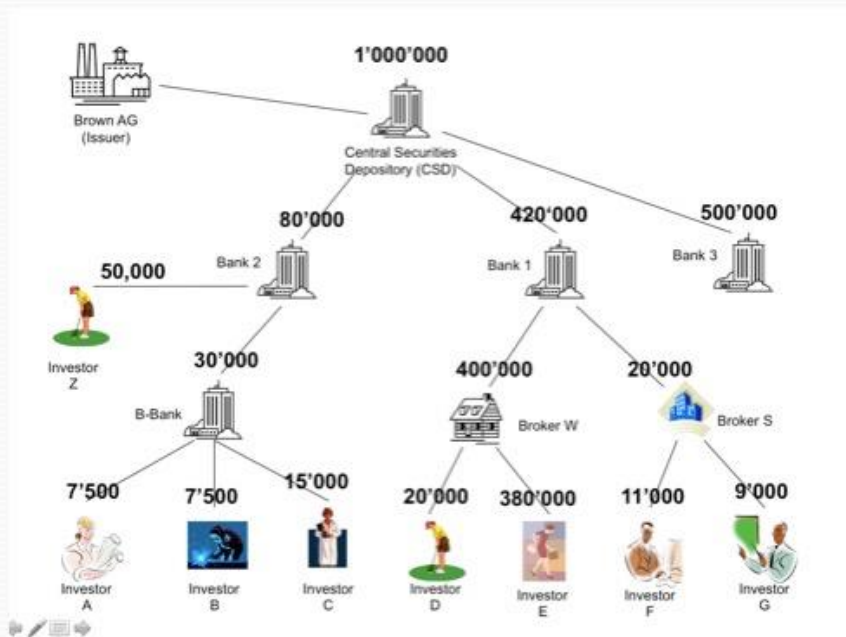
LONDON SCHOOL OF ECONOMICS, 26 MAY 2017

OVERVIEW

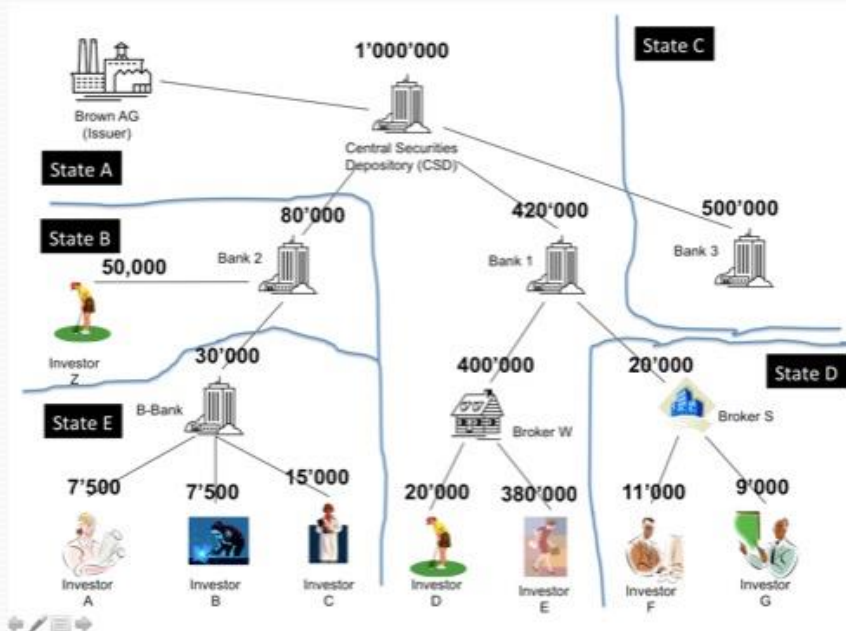
- **Introduction**
- **Securities custody, clearing and settlement –
current and future state of play**
- **Applicable Law**
- **Regulation**
- **Conclusions**

SECURITIES CUSTODY, CLEARING AND SETTLEMENT

MULTI-TIERED HOLDING SYSTEM

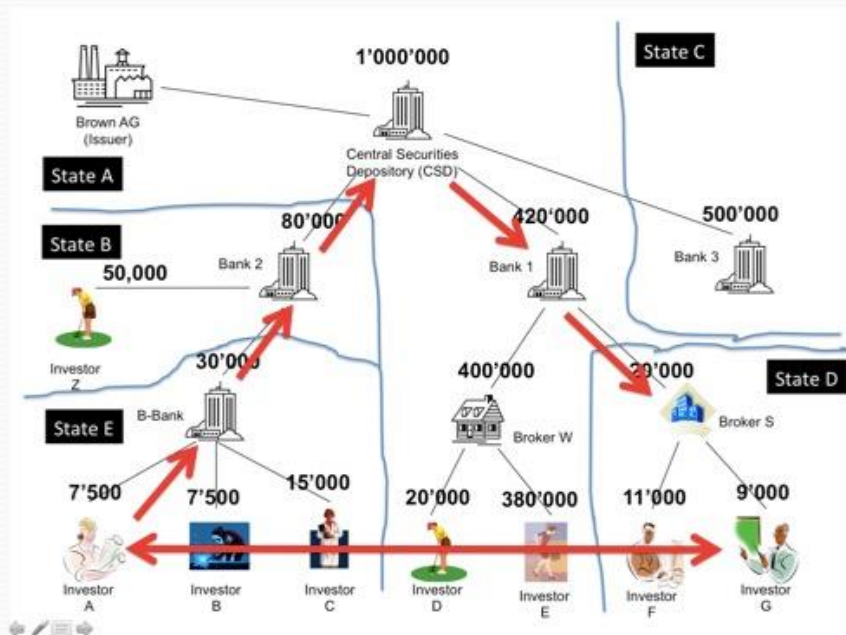


MULTI-TIERED HOLDING SYSTEM



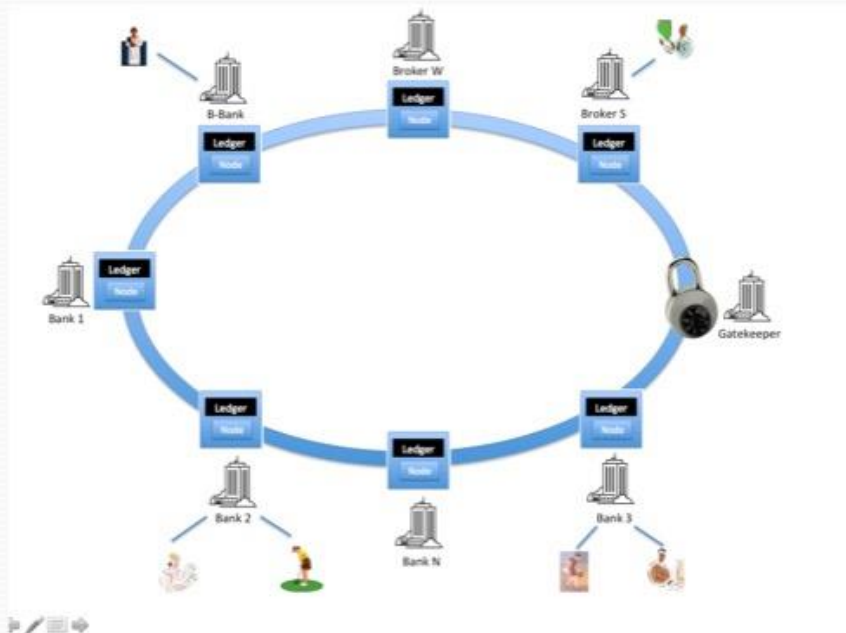
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MULTI-TIERED HOLDING SYSTEM

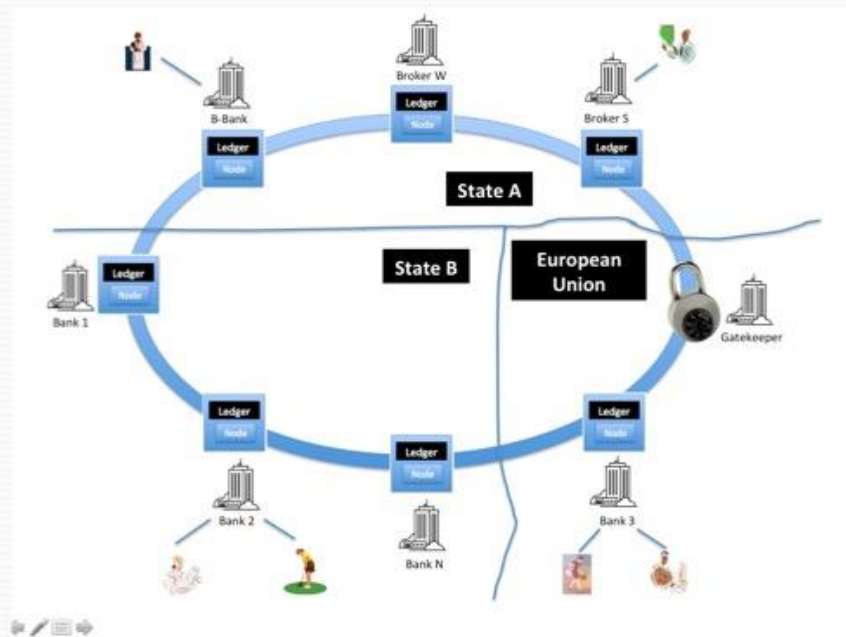


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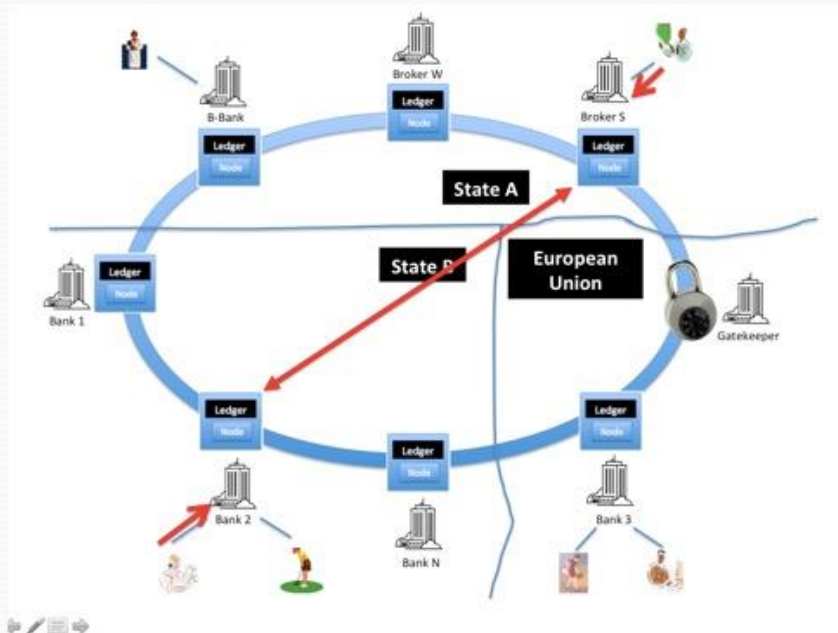
DLT NETWORK (PERMISSIONED)



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INTERNATIONAL DIMENSION OF DLT NETWORKS

APPLICABLE LAW

APPLICABLE LAW

Instruments

- **Hague Securities Convention**
 - Finalized 2001; ratified by Switzerland, Mauritius (2009), US (2016)
 - Applied by Switzerland as domestic private international law since 2010
 - Entered into force on 1 April 2017
- **European Union**
 - Settlement Finality Directive (9 II) (1998)
 - Winding-up Directive for Credit Institutions (24) (2001)
 - Financial Collateral Directive (9) (2002)
 - Public consultation on the conflict of laws rules for third party effects of transactions in securities and claims (4 April 2017)

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APPLICABLE LAW - HSC

Scope of HSC

- **determines the law applicable to <<proprietary interests in>> securities held with an intermediary (2 I HSC)**
 - Securities ... any shares, bonds or other financial instruments or financial assets (other than cash), or any interest therein (1 I a HSC)
 - Securities held with an intermediary ... rights of an account holder resulting from a credit of securities to a securities account (1 I f HSC)
 - Securities account ... account maintained by an intermediary to which securities may be credited or debited (1 I b HSC)
 - Intermediary ... maintains securities accounts for others or both for others and for its own account (1 I c HSC)

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APPLICABLE LAW - HSC

Connecting factors – PRIMA (Place of Relevant Intermediary Approach)

- **Primary rule (4 HSC):**
 - law expressly agreed in account agreement +
 - Intermediary has a qualifying office in that state
- **Fall back rules (5 HSC):**
 - Office through which account agreement was entered into (5 I HSC)
 - State of incorporation of relevant intermediary (5 II HSC)
 - Place of business of relevant intermediary (5 III HSC)
- **Applicable law has to be determined separately for each leg – conceptual difficulties for jurisdictions which apply the concept of a (single) disposition**

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APPLICABLE LAW – EU DIRECTIVES

EU directives also based on PRIMA, but different connecting factors:

- **SFD: “register, account or centralised deposit system located in a Member State”**
- **FCD: “country in which the relevant account is maintained”**
 - ‘relevant account’ is defined as “the register or account – which may be maintained by the collateral taker – in which the entries are made by which that book entry securities collateral is provided to the collateral taker”;
 - “book entry securities collateral” means „financial collateral provided under a financial collateral arrangement which consists of financial instruments, title to which is evidenced by entries in a register or account maintained by or on behalf of an intermediary“
- **Winding-up Directive: “register, an account or a centralised deposit system held or located in a Member State”**

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APPLICABLE LAW – EU DIRECTIVES

EU directives – way forward (Cons. Doc. 4/7/17)

- **Problems**

- Fragmented legal framework
- Different instruments cover a different range of assets
- Unclear how many laws apply in a holding chain and how they interact

- **Alternative Solutions**

- Super-PRIMA
- Law designated for the system (2(1)(a) SFD)
- Law under which the financial instrument is constituted



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APPLICABLE LAW - DLT

Application of HSC/EU Directives to DLT securities clearing and settlement networks

- Only permitted DLT (“securities held with an intermediary”)
- Problems with determining the location of an account unresolved
- HSC approach works better, but qualifying office-requirement difficult to reconcile with realities of a digital economy
- Determining applicable law for each leg of a transaction not compatible with blockchain-mechanism
- Chain of transactions = chain of jurisdictions?
 - Under PRIMA, different laws will govern perfection and priority of different transactions within one single blockchain
 - What happens if transaction 1 is not effective/perfected under law 1 to transactions 2 - n perfected under laws 2 – n?

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APPLICABLE LAW - DLT

Better approach: Law designated by the system

- 2(a) SFD:
 - “governed by the law of a Member State chosen by the participants”
 - Minimum contact requirement, e.g. at least one participant must be established in that Member State
- One single law covering all transactions in a blockchain
- Full transparency for participants – Consumer participants – exception for financial instruments 6(4)(d) Rome I
- Full transparency for third parties acquiring interests in DLT-based securities
- May be identical with law governing issuance of financial instrument (if issued on DLT, if debt instrument)
- Different laws may apply if pools or portfolios of financial instruments are transferred

INTERNATIONAL DIMENSION OF DLT NETWORKS

REGULATION

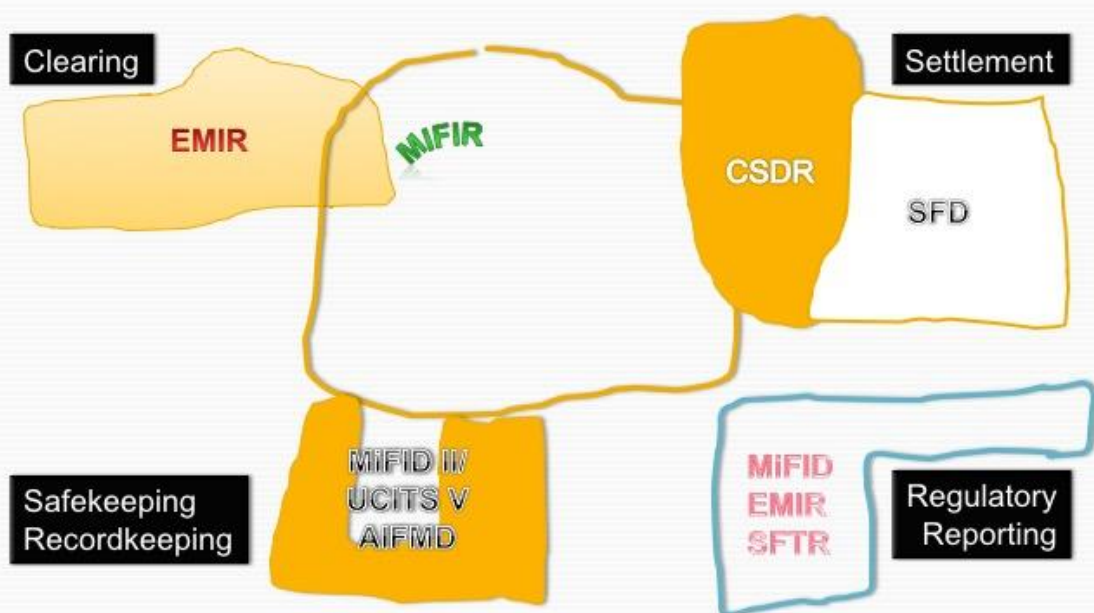
REGULATION AND DLT

Issues

- **How is existing regulatory regime applied to DLT networks?**
 - Personal/substantive scope of regulations
- **What is territorial scope of regulations?**
- **How is financial sector regulation enforced if financial services are provided in/through a DLT network?**
 - Permitted vs. unpermitted DLT
 - ESMA: "...the DLT that is likely to be used in financial markets would be a permitted system with authorized participants only."

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EU REGULATORY LANDSCAPE



Source: ESMA: The Distributed Ledger Technology Applied to Securities Markets (7 February 2017)

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TERRITORIAL SCOPE

PRESENCE WITHIN TERRITORY

2 I (2) CSDR: 'third-country CSD' means any legal entity established in a third country ...

2 I (23) CSDR: 'home Member State' means the Member State in which a CSD is established;

4 I a iv EMIR: ... OTC derivatives contract (iv) between a financial counterparty or a non-financial counterparty ... and an entity established in a third country ...

EFFECT WITHIN TERRITORY

Competition law – US vs. Alco, 148 F.2d 416 (1945); ECJ, 27.9.1988 – 89/85 - wood pulp

4 I a v EMIR: ... OTC derivatives contract (v) between two entities established in one or more third countries ..., provided that the contract has a direct, substantial and foreseeable effect within the Union ...;

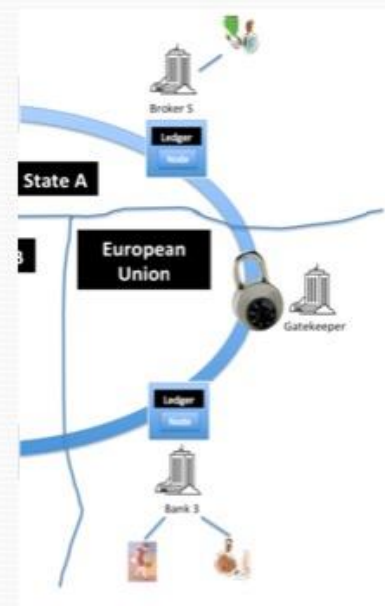
TERRITORIAL SCOPE

DLT-network will be subject to EU regulation only if:

- all participants are established within Union
- If gatekeeper is established within Union, or
- if network has direct, substantial, foreseeable effect within Union

Presence of one or several, but not all participants alone not sufficient

Risk of fragmentation if regulation is enforced extraterritorially



CONCLUSIONS

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1. **DLT may reduce complexities of current tiered systems for the custody, clearing and settlement of securities – also reduction of complexities in cross-border situations**
2. **While PRIMA would work (with a few twists, only permissioned DLT) it is not the ideal connecting factor – law designated by the system**
3. **Territorial approach to regulation will not work either to determine regulation applicable to network – effects doctrine (direct, substantial, foreseeable)**
4. **“DLT could introduce new functions or roles” (and make existing roles less relevant) (ESMA)**

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