

Digital Asset Funds under MiCA

9th FinTech Conference – University of Luxembourg
Wednesday 4 October 2023, Prof. Dr. Dirk A. Zetsche & Dr. Julia Sinnig



UNIVERSITÉ DU
LUXEMBOURG

Start date:
September

Collective Investment Schemes
Law & Regulation

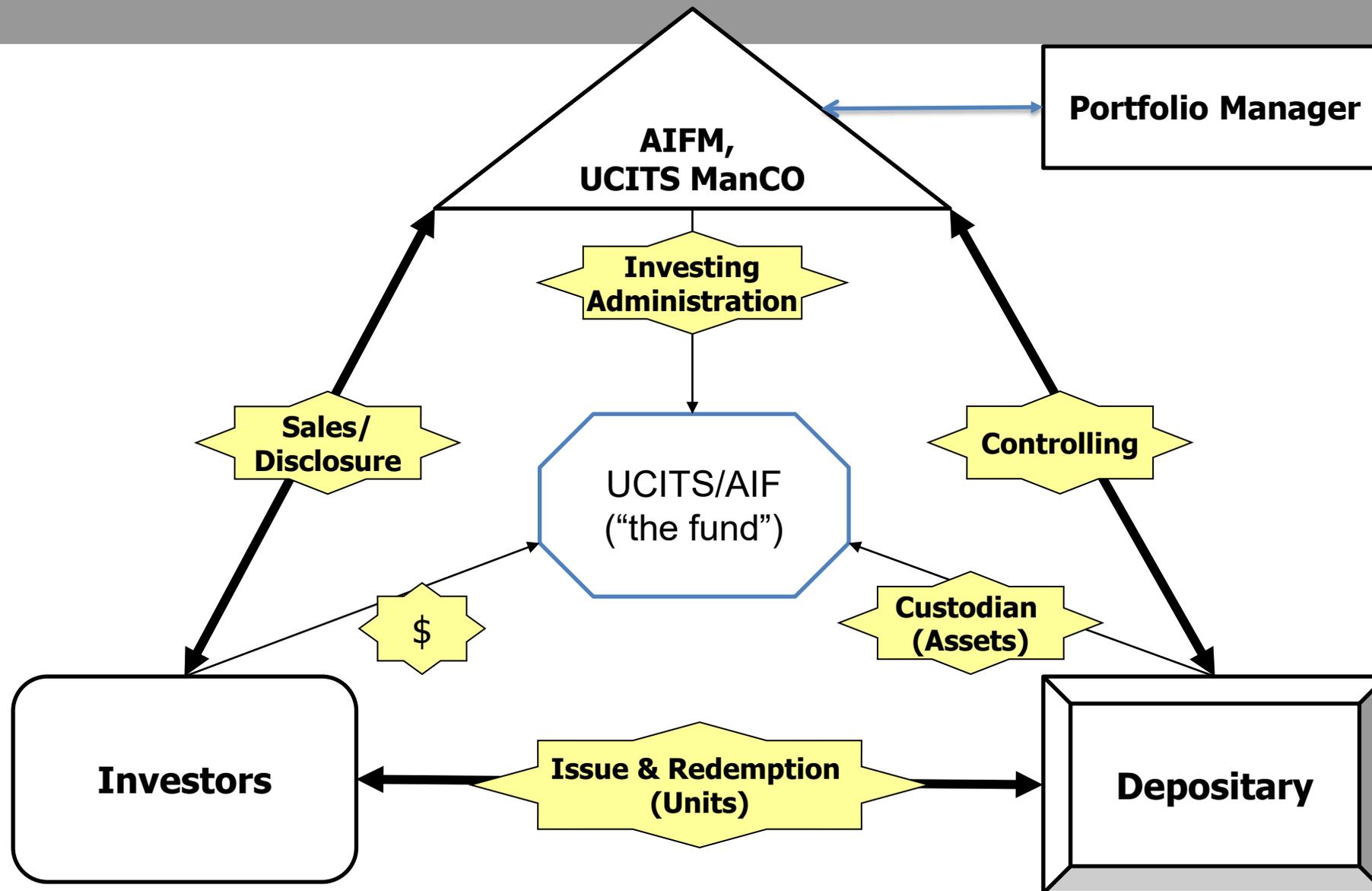


Banking & Financial Law



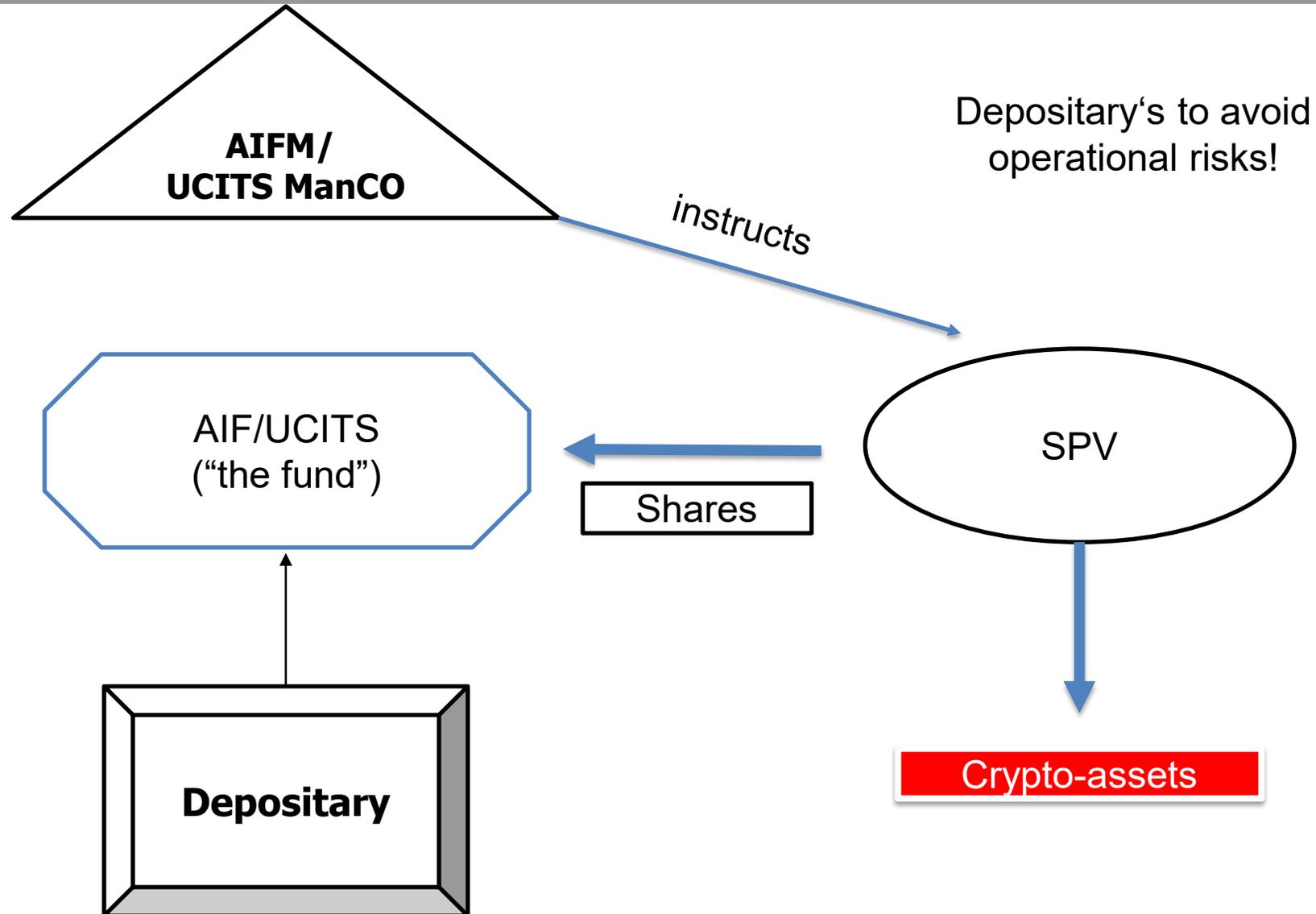
Fund Set-up

□ FACULTY OF LAW, ECONOMICS AND FINANCE



Status prior to MiCA: SPV Hold Co Model

□ FACULTY OF LAW, ECONOMICS AND FINANCE



Issues of Cryptofunds prior to MiCA

U FACULTY OF LAW, ECONOMICS AND FINANCE

- Operational risks
 - Three Arrows Capital
 - Alameda Research
 - Multiple cases of asset diversions ('stealing') on the asset side

Operational instability: no exemption, but the norm

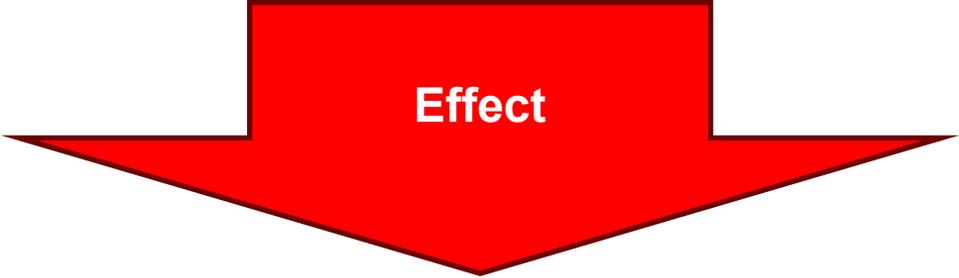
□ FACULTY OF LAW, ECONOMICS AND FINANCE

Major Asset Diversions

DATE	PLATFORM	TYPE	D/C	ASSETS DIVERTED	METHOD
Jul '15	Mt. Gox	CEX	C	\$ 473,000,000	Inside job / mismanagement
Jan '18	Coincheck	CEX	C	\$ 534,000,000	Inadequate security
Feb '21	CreamFinance	Lender	D	\$ 38,000,000	Flash loan attack
Mar '21	PAID Network	Payment services	D	\$ 7,000,000	Infinite mint attack
Aug '21	CreamFinance	Lender	D	\$ 25,000,000	Flash loan attack
Aug '21	Poly Network	Bridge	D	\$ 611,000,000	Software bug
Oct '21	CreamFinance	Lender	D	\$ 130,000,000	Flash loan attack
Oct '21	Compound	Lender	D	\$ 150,000,000	Software bug
Nov '21	bZx Protocol	Lender	D	\$ 55,000,000	Stolen private keys
Dec '21	Bitmart	CEX	C	\$ 196,000,000	Stolen private keys
Dec '21	VulcanForged	GameFi	D	\$ 140,000,000	Stolen private keys
Dec '21	BadgerDAO	Bridge	D	\$ 120,000,000	Governance attack
Feb '22	Wormhole	Bridge	D	\$ 325,000,000	Bridge exploit
Feb '22	Qubit Finance (X-Bridge)	Bridge	D	\$ 40,000,000	Bridge exploit
Mar '22	Ronin Network	GameFi	D	\$ 625,000,000	Stolen private keys
Apr '22	Beanstalk	Stablecoin	D	\$ 182,000,000	Flash loan attack
Aug '22	Nomad Bridge	Bridge	D	\$ 190,000,000	Software bug
Sep '22	Wintermute	Market Maker	pD	\$ 162,000,000	Software bug
Oct '22	Binance	CEX	C	\$ 570,000,000	Bridge exploit
Nov '22	FTX	CEX	C	\$ 477,000,000	Inside job / mismanagement

- Legal risks
 - No European regulation of crypto – uncertainty as to whether AIFMD/UCITSD applies
 - General uncertainty as to applicable national regulatory framework
 - Sophistication and knowledge differing amongst regulators

Legal uncertainty and operational risk (“Crypto winter”)



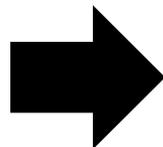
Effect



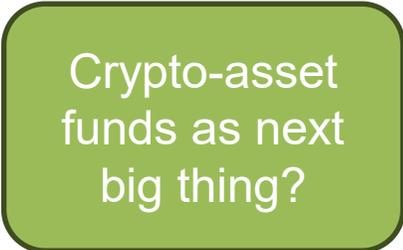
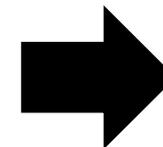
Low asset volumes ↔ high interest
(LHoFT)



Legal uncertainty?
Operational risk?



MiCA



Crypto-asset
funds as next
big thing?

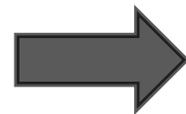
Agenda

- A. Introduction
- B. Scope Issues
- C. Set-up Variants
- D. Additional MiCA Requirements for Cryptofunds
- E. Remaining Issues of Cryptofunds
- F. Outlook & Theses

B. Scope Issues

□ FACULTY OF LAW, ECONOMICS AND FINANCE

- Some DeFi applications are potentially AIFs...



Why?

B. Scope Issues – CIU Definition

□ FACULTY OF LAW, ECONOMICS AND FINANCE

1) Number of investors: (+)

→ Due to nature of DLT + economic necessity, DeFi applications need several participants

B. Scope Issues

2) “Pooling”: (+)

→ Pooling of assets for financial purposes in DeFi applications, e.g.



Funds allocated to smart contracts – pooled assets used for lending activities



Staking intermediary: users get derivative for staked token

→ Transfer of title (+); joint fate in insolvency (+)

→ Protocol can be established as legal entity (more centralized models), or assets of all users are simply merged in liquidity pools

3) “Investment”:

→ Financial nature (+)

→ Investment business?



Exchanges for (only) crypto
currencies

→ Issue: CIU definition to step back where the DeFi application provides another regulated activity – e.g. involvement of fiat currency; potential classification as *credit institution*

4) “Third party management”: (+) / (-)

→ Understood broadly (+) → where one passive participant has not participated in investment decision

→ **Two counter-arguments:**

→ **Smart-contracts no third parties**

→ As to objective of UCITSD/AIFMD: no difference for investor protection if smart contract or humans (or algorithms!) take investment decision

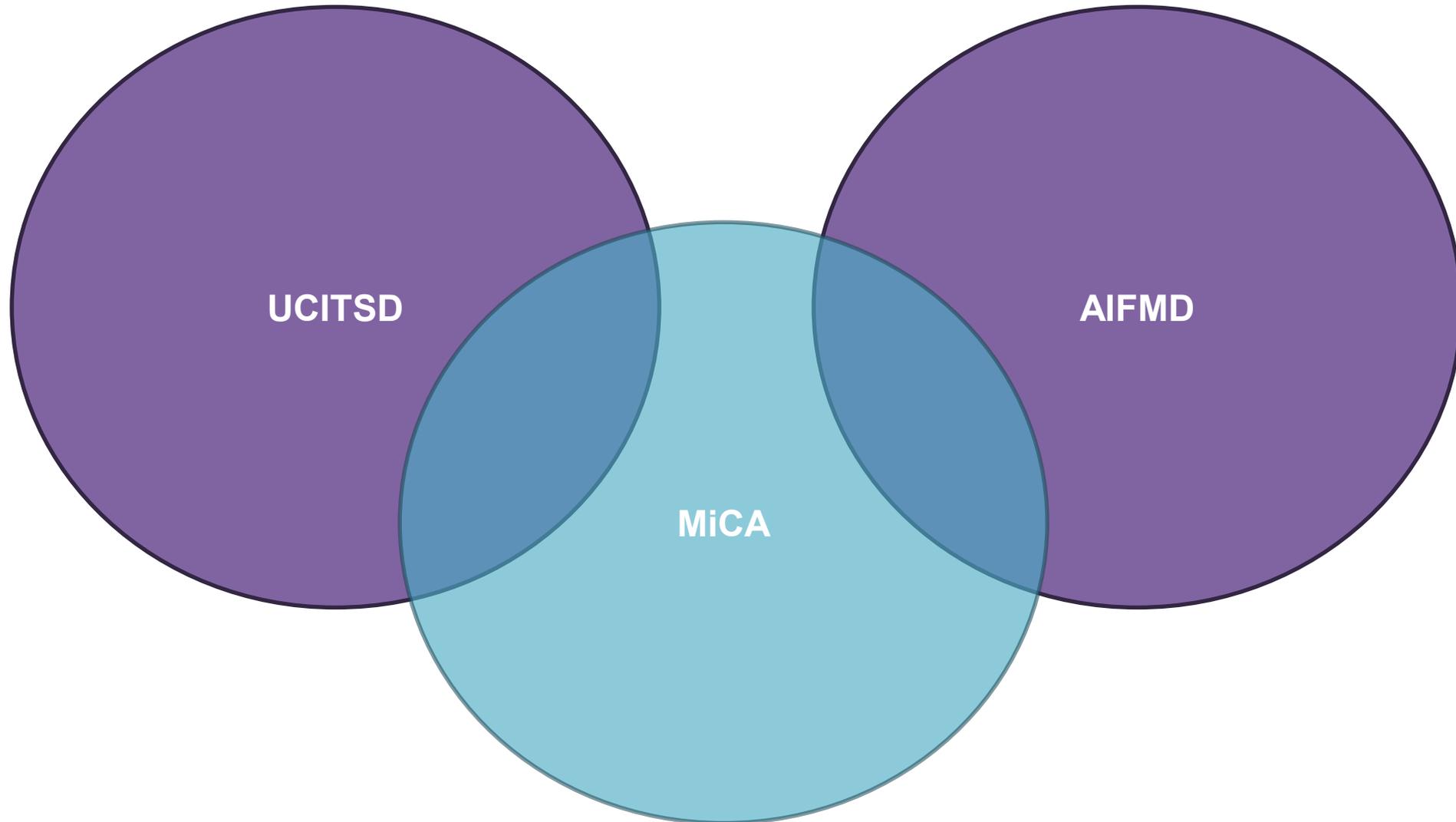
→ **Governance tokens in DLT protocols – involvements of token holders in decision-making**

→ Self- rather than third-party management. BUT: huge number of investors – therefore often transfer of (certain) governance decisions to DAO governance body

→ “Default consent” by way of smart contract = not sufficient to exclude third party management

C. Set-up Variants

□ FACULTY OF LAW, ECONOMICS AND FINANCE



1) Crypto-asset = Transferable Security or UCI unit (for instance, tokenized fund unit of a Money Market Fund) **or derivative thereof**, e.g.

- VanEck Crypto and Blockchain Innovators UCITS ETF
- Bitcoin ETFs

2) Securitized crypto-asset (SPV holds CAs, issues shares drawing on basket + listing)

3) Exchange-traded crypto-currency notes (ETNs):

- ETN issuer (FI) promises to pay an investor the return of the underlying cryptocurrency (index or Bitcoin) minus fees and other costs
- ETNs eligible *where underlying qualifies as UCITS eligible assets*
- If not: non-compliant “crypto-derivative”

Assets eligible under AIF's investment policy *and* not crypto-assets under MiCA → **only AIFMD / MiFID applies, e.g.**

- 1) **Crypto-asset = Transferable Security or supervised, regulated UCI unit**
- 2) **Securitized crypto-asset (SPV holds crypto-assets, issues shares drawing on basket)**
- 3) **Exchange-traded crypto-currency notes (ETNs), crypto-derivatives**

+

4) **NFTs**

5) **E-money**

=

! CASPs providing services for CA issued by fully decentralized applications without issuer = MiCA scope (recital 22) → cryptofunds investing in Bitcoin → Title V MiCA!

C. III. Cryptofunds under AIFMD + MiCA

□ FACULTY OF LAW, ECONOMICS AND FINANCE

- **Asset-referenced tokens**

“type of crypto-asset that is not an electronic money token and that purports to maintain a stable value by referencing another value or right or a combination thereof, including one or more official currencies” (Art. 3 (6) MiCA)

- **E-money tokens**

“type of crypto-asset that purports to maintain a stable value by referencing the value of one official currency” (Art. 3 (7) MiCA)

- **Crypto-assets other than asset-referenced tokens and e-money tokens**

Crypto-assets defined by Art. 3 (5) MiCA as “digital representation of a value or of a right that is able to be transferred and stored electronically using distributed ledger technology or similar technology”

! CASPs providing services for CA issued by fully decentralized applications without issuer = MiCA scope (recital 22) → cryptofunds investing in Bitcoin, fully DeFi tokens → Title V MiCA!

D. Additional MiCA Requirements for Cryptofunds?

□ FACULTY OF LAW, ECONOMICS AND FINANCE

- I. Collective portfolio management (-)
 - II. Depositary / custodian (+)
 - III. Delegated portfolio management, investment advice, brokerage (+)
- ⇒ But only for “in-scope crypto-assets” (see C.III.)

D. Additional MiCA Requirements for Cryptofunds?

MiCA vs CIS

	UCITSD, AIFMD	MiCA-qualifying assets only
Collective Portfolio Management by ManCos, AIFM	cf Art 6 UCITSD, AIFMD: managing CIUs	No additional rules
Depositaries	<ul style="list-style-type: none">▪ Depositary framework (Art. 21 AIFMD, UCITS Implementing Directive) + bespoke rule re FI in MiFID/MiFIR	Art. 70, 75 MiCA
<ul style="list-style-type: none">▪ Delegates of ManCo /AIFM<ul style="list-style-type: none">- Portfolio management- Investment advice- Brokers	<ul style="list-style-type: none">▪ Art. 20 AIFMD, UCITS Implementing Directive + bespoke rule re FI in MiFID/MiFIR	Title V MiCA

D. I. Collective Portfolio Management (incl. central administration)

□ FACULTY OF LAW, ECONOMICS AND FINANCE

➤ (-)

➤ But AIFMD requirements adjusted to crypto

- Enhanced operational risk
- Tailor-made valuation policy
- Etc.

■ Depository's Custody

- Prior to MiCA: subject to broad regulation under UCITSD, AIFMD
- MiCA: regulation for in-scope and fully decentralised crypto-assets, but facilitated for 'traditional' PMs (credit institutions, MiFID firms, AIFMs)
- MiCA: *additional* custody rules on crypto-assets in Art. 70, 75 MiCA
 - ⇒ Market on CA depositaries so far underdeveloped
 - ⇒ Incumbent Depositaries: risks ↔ returns?

- **Overview on General Rules on CASPs**
- Licensing requirements – European passport for regulated CA services
 - New passport or extension of existing one of financial institutions
- Fiduciary duties (Arts 66, 72 MiCA)
- Governance arrangement and complaints handling (Arts 68, 69 and 81 MiCA)
- Safekeeping (Art. 70 MiCA)
- Delegation and outsourcing (Art. 73 MiCA)
- Orderly wind-down of CA services (Art. 74 MiCA)
- Prudential requirements (Art. 67 MiCA)

- **Safekeeping – Art. 70 MiCA**
- Holding CA or means of access to CA (= private keys)
 - Adequate arrangements to safeguard clients' ownership rights, e.g. in case of CASP's insolvency, reuse/relending of CAs for CASP's own account
- Holding clients' funds other than e-money tokens (= fiat currencies)
 - Adequate arrangements to safeguard clients' ownership rights and to prevent use of clients' funds for own account → placing with credit institution or central bank in segregated accounts
- Provision of payment services *only* if authorized under PSD2 & under certain conditions

- **Depository's Custody – Art. 75 MiCA**
- **Objective: consider specificities of DLT and associated risks**
- **Measures:**
 - Agreement with clients with pre-defined duties and responsibilities
 - Holding of register of positions
 - Establishment of custody policy to minimise risk of loss of clients' CA or access to those CA
 - Provision of statement of positions at least once every three months
 - Ensure that procedures are in place to return CA to clients
 - Segregated holding of CA
 - Liability and delegation

Advice on CA and Portfolio Management of CAs (Art. 81 MiCA)

- Prior to MiCA: regulated only for financial instruments
- MiCA: regulation for in-scope crypto-assets, but facilitated for ‘traditional’ PMs (credit institutions, MiFID firms, AIFMs)
 - Initial license for many “crypto-only” players
 - General rules (see on depositaries) plus specific rules

⇒ Equivalent to financial portfolio management and advice on FI under MiFID

Brokerage (Art. 78-80 MiCA)

- Art. 3 (1) (20) MiCA
- Order reception and transmission; execution of orders on behalf of clients, Placing
- From non-regulated to regulated

⇒ Now regulation equivalent to MiFID

E. Remaining Issues of Cryptofunds

U FACULTY OF LAW, ECONOMICS AND FINANCE

- Interplay AIFMD, MiFID & MiCA?
 - Depends on “scope conundrum” – MiCA’s evergreen
 - Legal uncertainty prevails for some time
 - But MiCA foresees 7 tools to achieve certainty [not our topic]

E. Remaining Issues of Cryptofunds

□ FACULTY OF LAW, ECONOMICS AND FINANCE

- No fund without depositary
 - In the absence of MiCA: few serious depositary offer CA services; does MiCA change this?
 - Art. 70, 75 MiCA “lighter” than Art. 21 AIFMD; privilege sufficient?
 - Depositary mandatory
 - Liability only for “own mistakes” capped at market value at time of loss
 - Segregation of client CAs (vs omnibus accounts) => protection in insolvency
 - Sub-custody subject to same rules
 - Uncertainty on Level 2
- ⇒ Legal certainty! (but uncertain foundation in private law)
- ⇒ Operational risk? (Is loss of private key attributable to CASP custodian?)

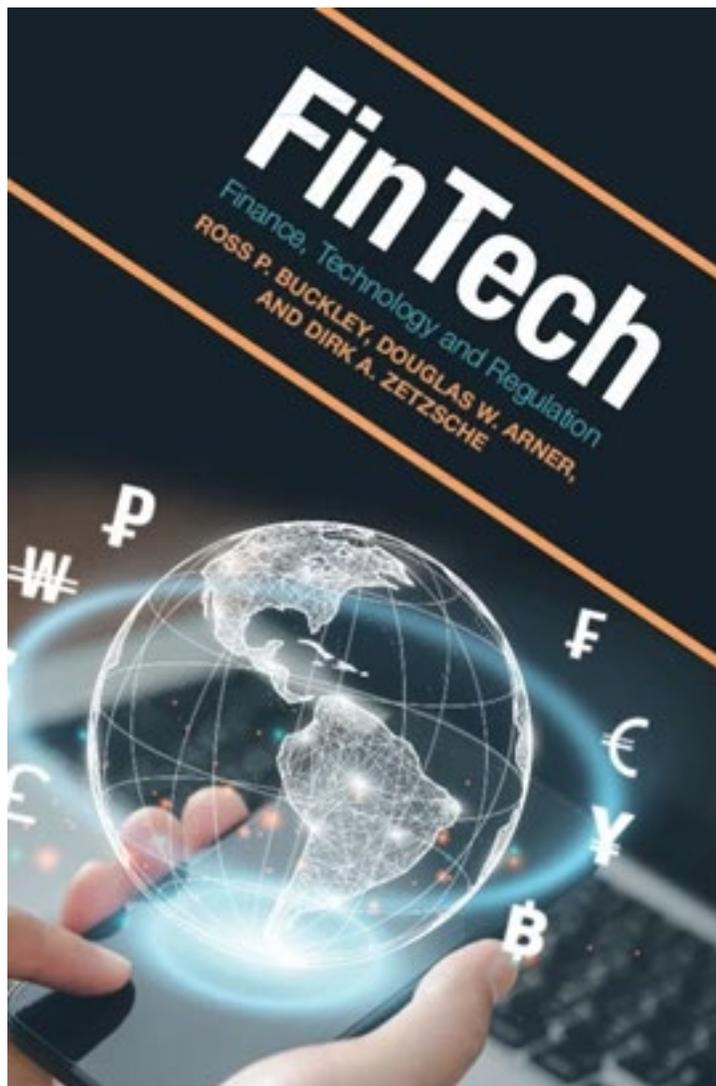
F. Conclusion & Theses

□ FACULTY OF LAW, ECONOMICS AND FINANCE

- Cryptofunds can be set up under UCITSD, AIFMD, and AIFMD+MiCA.
- **MiCA addresses some of the legal uncertainty:** Uncertainty on MiCA scope and terminology barrier to rational set-up choice.
- **MiCA addresses operational risks** procedurally(risk frameworks, operational resilience); effectiveness need to be seen.
- **CA funds do not work without mature and stable custodian. For depositaries Art. 75 MiCA > Art. 21 AIFMD. But OpRisk still present.**

Thank you!

□ FACULTY OF LAW, ECONOMICS AND FINANCE



Prof. Dr. Dirk Zetsche, LL.M.
ADA Chair in Financial Law / Inclusive Finance
Coordinator, Centre for Sustainable Governance & Markets
Faculty of Law, Economics & Finance
University of Luxembourg
Dirk.Zetsche@uni.lu

Please find our latest work at SSRN:
www.ssrn.com/author=357808

Coming out soon

Zetsche/Woxholth,
The EU Regulation of Cryptoassets
(Cambridge University Press, 2024).

More Readings on FinTech

Sandboxes vs Innovation Hubs
<https://ssrn.com/abstract=345587>



Covid 19, Sustainability Crisis
<https://ssrn.com/abstract=378360>



AI in Finance: Putting Humans
www.ssrn.com/abstract=3531711



Digital Finance Platforms
www.ssrn.com/abstract=3532975



TechFin / Data-driven Finance
www.ssrn.com/abstract=2959925



Regulatory Sandboxes
www.ssrn.com/abstract=3018534



FT4FI Roadmap
www.ssrn.com/abstract=3245287



Corporate Technologies (AI etc.)
www.ssrn.com/abstract=3392321



Regulating Libra
www.ssrn.com/abstract=3414401



eID / KYC Utilities
www.ssrn.com/abstract=3224115



Distributed Ledgers / Blockchain
www.ssrn.com/abstract=3018214



ICO Gold Rush
www.ssrn.com/abstract=3072298



Future of Data-Driven Finance
www.ssrn.com/abstract=3359399



Rise of Tech Risk
www.ssrn.com/abstract=3478640



Start date:
September

Collective Investment Schemes
Law & Regulation



Banking & Financial Law



Thank you!