Faculty of Law,
Economics & Finance

Building Bocks of a Green Fintech System

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Based on the Working Paper 'Building Blocks of a Green FinTech System'
(co-authored with L. Anker-Sørensen)

EC Sustainable Finance Strategy (7/2021): „ Technological innovation […] has a significant role to play in SF”

Digital technologies to provide essential solutions for citizens, investors and SMEs for transition to sustainability.

- innovative solutions to help SMEs use DSF tools
- support retail investor to understand sustainability impact of FPs
- sustainability-related information in the European Single Access Point (ESAP) and Open Finance Framework

Concerns about the environmental impact and increasing energy needs of data centres and distributed ledger technologies, notably for crypto-assets.

Assess sustainability impact of digital finance technologies.

EU Taxonomy to include more activities for **developing sustainable digital solutions** and using sustainable crypto-assets.

Research Question

- How can Green FinTech support the Sustainability Transformation?
- What can regulation do to further this type of Green FinTech?

Overview

§ 1 – Introduction

§ 2 – Core Issues of Sustainable Finance

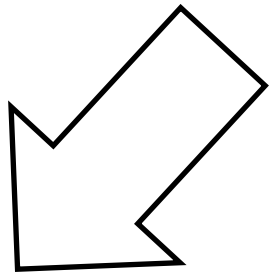
§ 3 – How can FinTech assist in addressing these issues

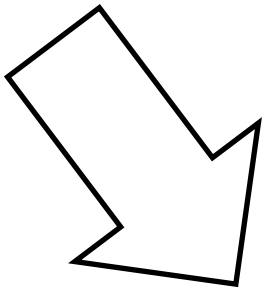
§ 4 – How law can support Green FinTech

§ 5 – Conclusion: Building Blocks of a Green FinTech System

Information asymmetry:
Who delivers truly on the Green promise?

Oversupply of Capital seeking Green cash-flows





Enhanced Agency Conflicts
(Greenwashing, variance of issuer-paid Sustainability Ratings etc)

Asset Price Bubble

- Develop Uniform Standards (Taxonomy, EFRAG)
- Enhanced Disclosures on sustainabiity-related data (sustainability risks, PIAs on sustainability factors)
- Capital Surchages for Sustainability Risks
- Better Oversight: Rating Agencies, Indices, Audits
- Fiduciary Duties: towards ‘double materiality’

⇒ Thinking in Old ‘human patterns’

⇒ Reliance on (human) intermediation

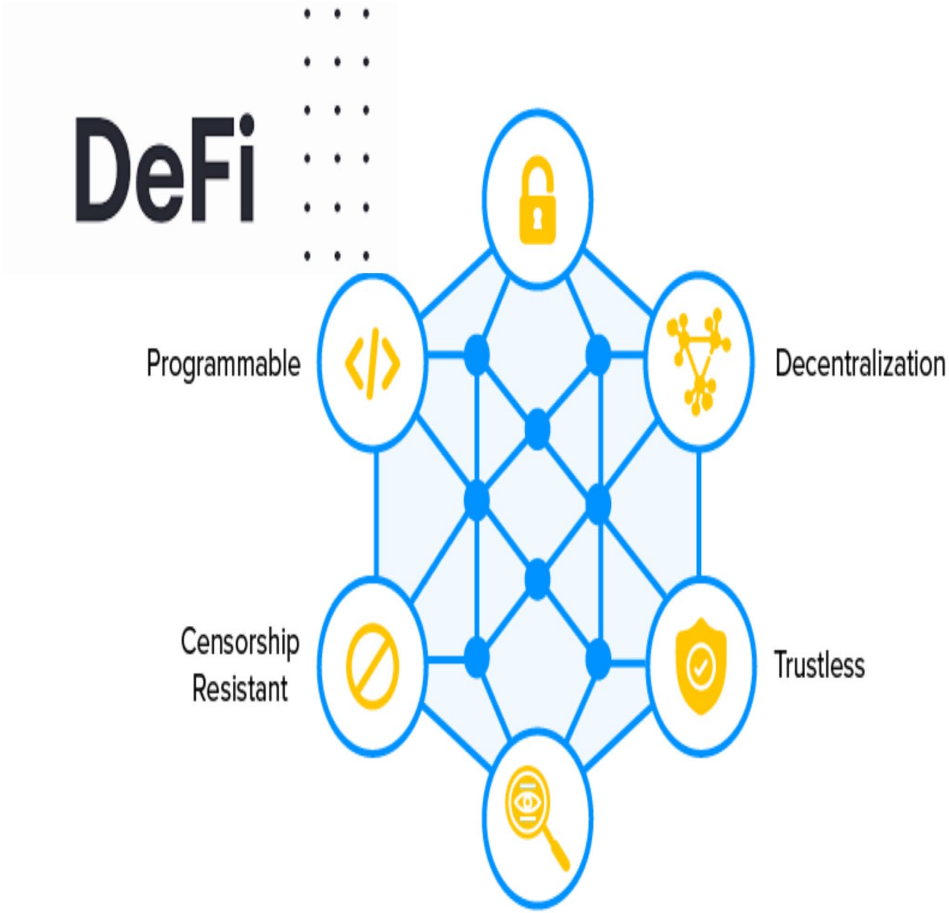
⇒ **Generating human follow-problems: enforcement vis-a-vis stealing & shirking**

⇒ No word of FinTech

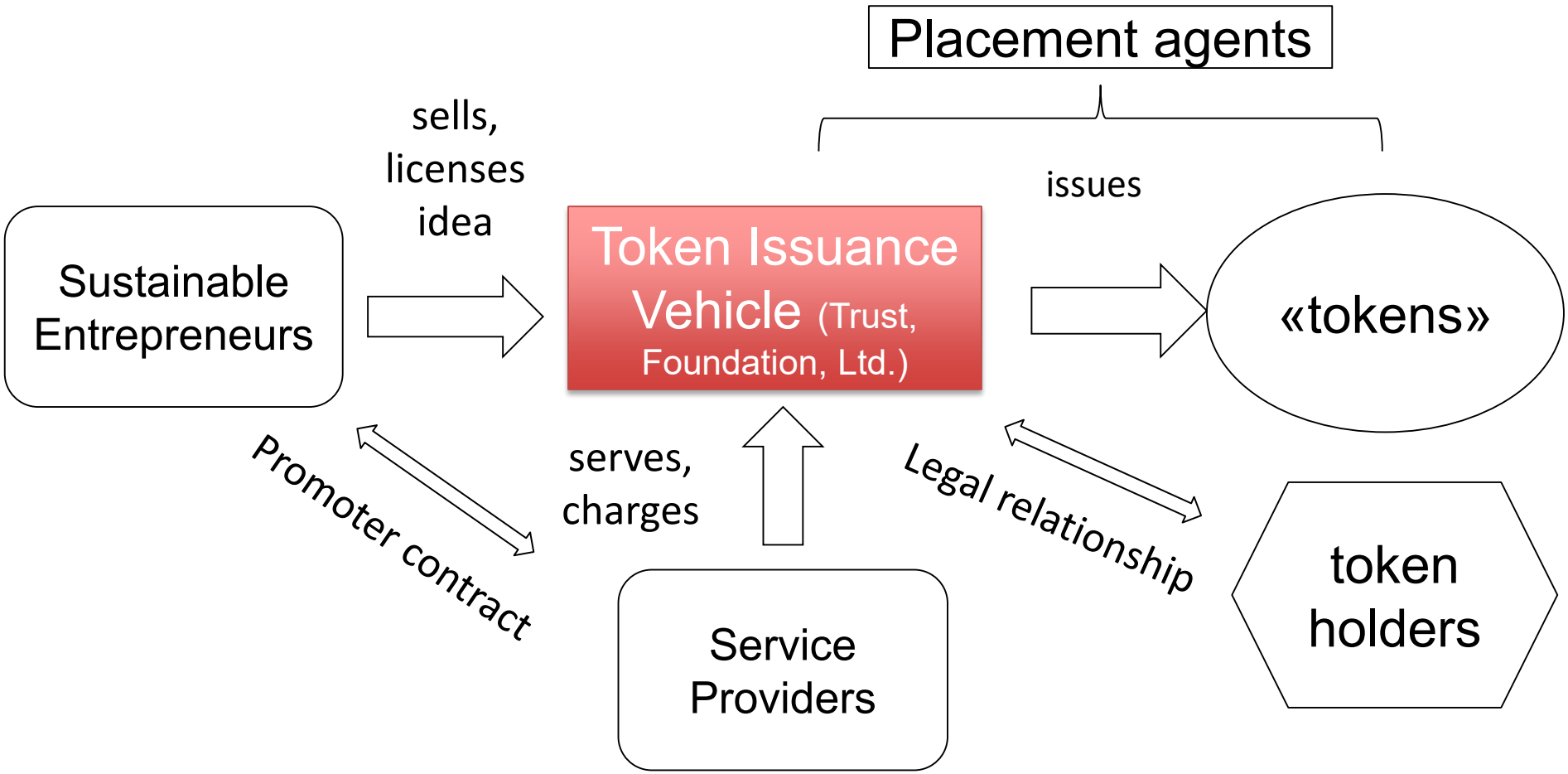
§ 3 - How can FinTech assist in addressing these issues?

- What is FinTech?
  - A - Algorithms
  - B - BigData
  - C - Cloud
  - D – Distributed Ledgers (with Blockchain&Smart Contracts)

⇒ General trend: decentralized finance, disintermediation



Tokenized Assets



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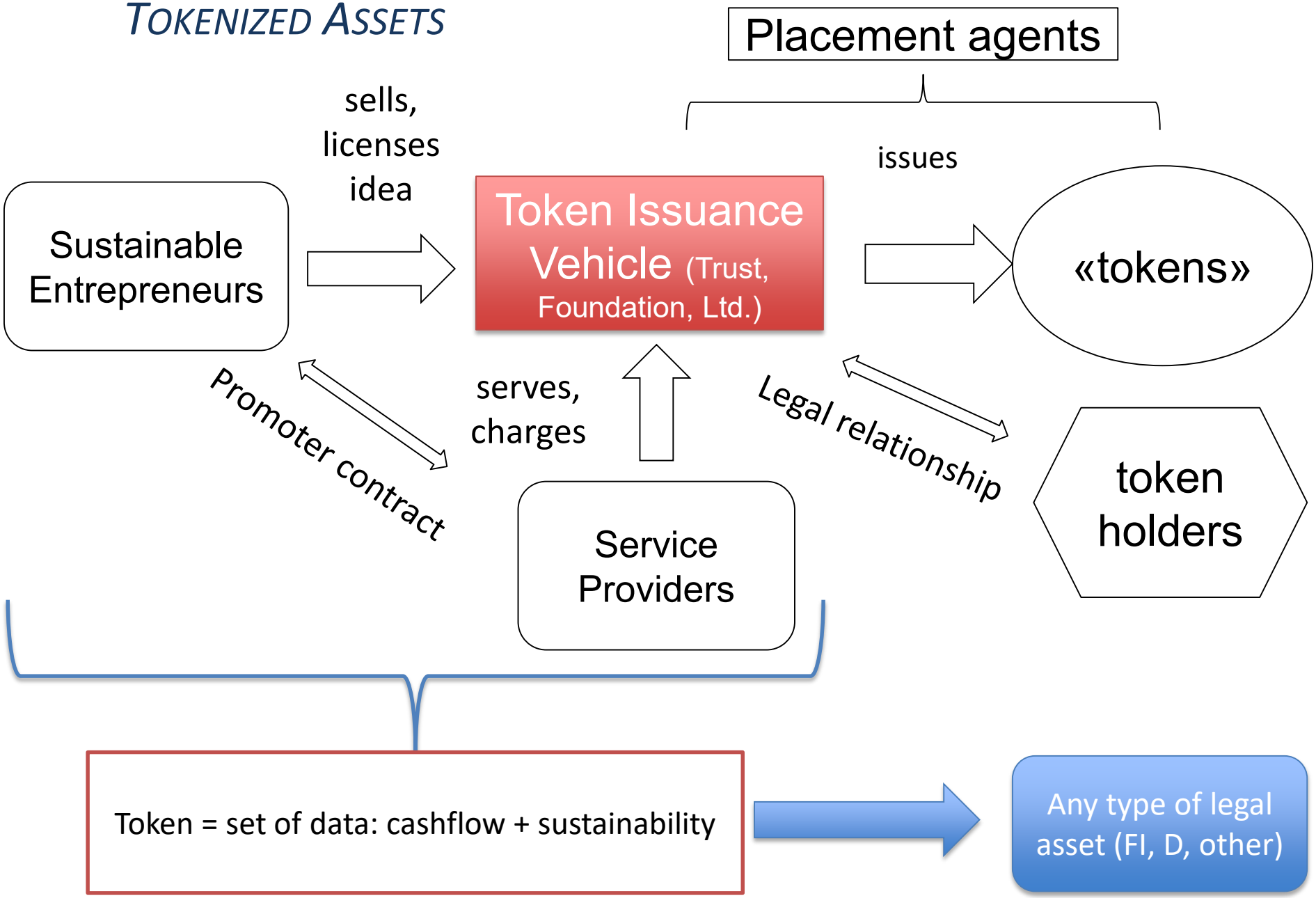

§ 3 - How can FinTech assist in addressing these issues?

- FinTech is « product neutral »: tokens can take shape of
  - Shares, bonds
  - derivatives,
  - CIS units
  - Personalized asset
  - Other cryptoassets (MiCAR)

§ 3 - How can FinTech assist in addressing these issues?

- FinTech can automatize all issuance elements
  - Reduce need for intermediaries
  - Reduce costs

- FinTech can bundle cash-flow and sustainability data in a non-corruptible way
  - Reduce need for rating agencies, external auditors, assessment further up in the value chain
  - Enhanced need for assessment / valuation / auditing at the beginning of the value chain

§ 4 - How law can support Green FinTech

- Embedding sustainability data in the product requires standardized language
  - Taxonomy (EC => work in this direction)

- What is embedded in the token (as mere peace of data) must be legally acknowledged across borders
  - Legal certainty crucial for company, securities and tax law
  - Classification of token types (EC => Micar project)
  - Securing fungibility of assets and asset value across borders (AML? Private law?)

- Data must be allowed to flow-through smoothly; primarily business-related data, also personalized data if the token shall be personalized
  - GDPR?

- The system works only if there is legal accountability and transparency of those who have embedded the data. As no legal duty works without accountability.
  - Liability and accountability rules for validity of assets and embedded data are of the essence
  - Harmonization of DLT/BC liability rules at infancy. Unidroit?

§ 5 – Conclusion: Building Blocks of a Green FT System

- Make use of disintermediation function of FinTech: reduced intermediation

- Tokenization allows for
  - linking information – assets – cash flows in a non-separable way
  - [Asset+information+cash-flow] transfer across the financial value chain
  - Straight-through-processing (STP) for the value+data bundle

- The bundle may be used for
  - **reducing agency costs**: information to be encoded into cryptoasset and read/evaluated by algorithms at end of value chain
  - **limiting substitutability of cash**: separating economy into Green/Brown
  - targeted subsidization (tax rebates, capital surcharges, etc.)

- Law can support Green FT by providing
  - Taxonomy of all sustainability data (for encodement via ISO standards)
  - Legal certainty for ‘content’ and ‘rights’ re crypto-assets across borders
  - A facilitating data protection environment
  - Liability and accountability rules for asset and data validity

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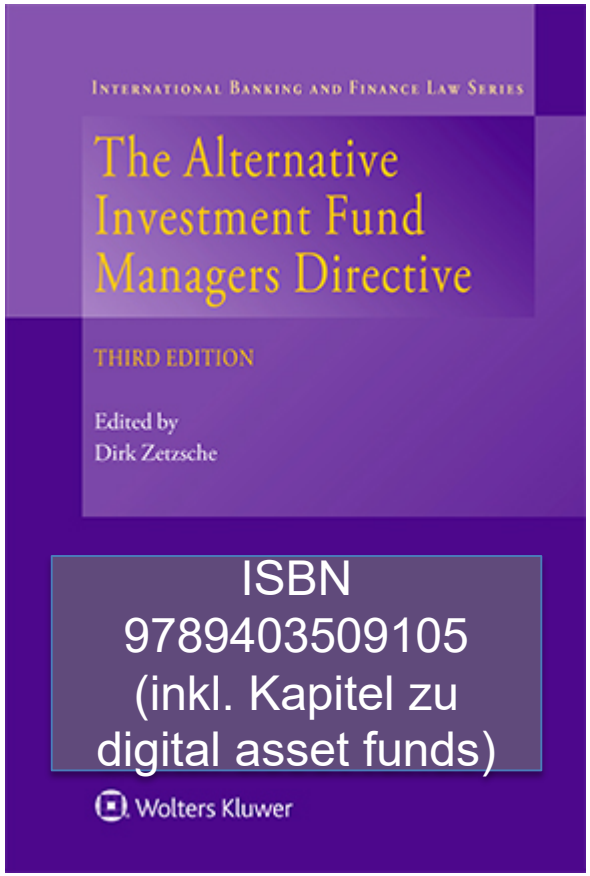
Zetzsche/Woxholt, DLT & PilotR, www.ssrn.com/abstract=3833766

Zetzsche/Annunziata/Buckley/Arner, The Draft MiCAR and the DF Strategy, www.ssrn.com/abstract=3725395

Anker-Sørensen/Zetzsche, Regulating DLT (Working Paper, 2021)



Thank you!

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Einige Lektüreempfehlungen rund um FinTech

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

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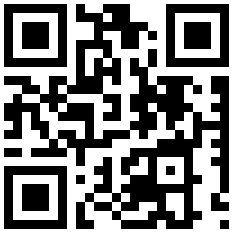

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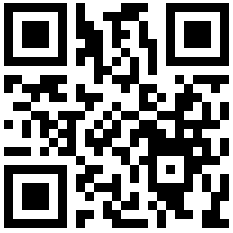
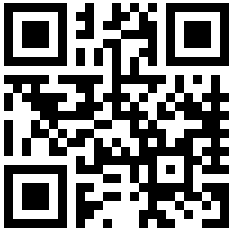
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