

# Fintech Forum

## Kryptoaktiver og fremtidig regulering

4. februar 2020

# Dagsorden

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## 1) Velkommen

*v/Formand for Fintech Forum, Tobias Thygesen*

## 2) Finanstilsynets overvejelser og syn på regulering af kryptoaktiver samt introduktion til Kommissionens høring

*v/Finanstilsynet*

## 3) Oplæg fra Finans Danmark og Danske Bank

*v/Mads Clemmensen, Danske Bank*

## 4) Oplæg fra Dansk Industri og MakerDao

*v/ Christian Hannibal, Dansk Industri og Søren Peter Nielsen, MakerDao*

## 5) Diskussion

## 6) Evt. og næste møde

*Herunder drøftelse af emner til eventuelt særmøde.*

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# Finanstilsynets overvejelser og syn på regulering af kryptoaktiver samt introduktion til Kommissionens høring

V/ Danny Dehghani

# Finanstilsynets stillingstagen indtil videre



## Advice

Initial Coin Offerings and Crypto-Assets



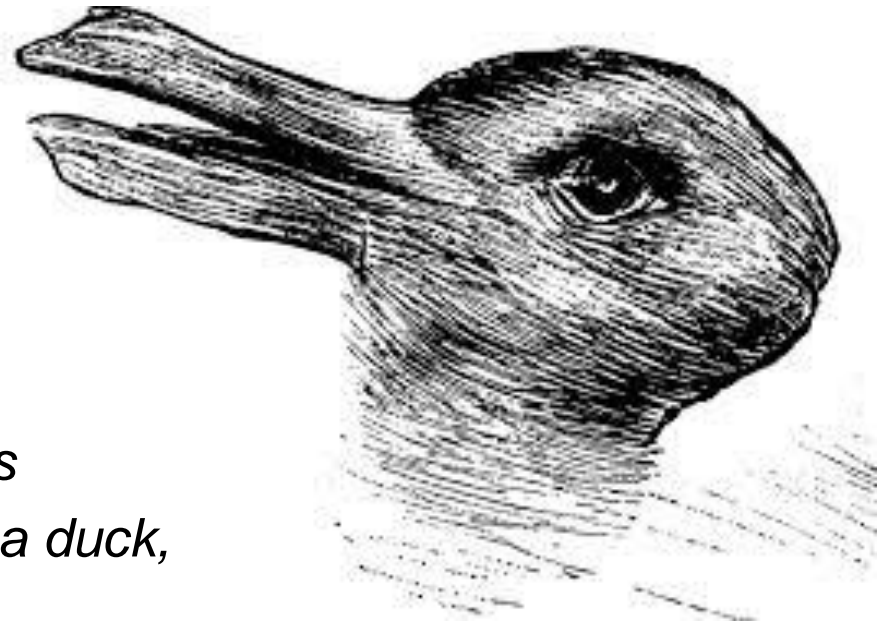
EU myndighederne har også en holdning

## Kryptoaktiver er ikke direkte reguleret i dag

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- Hverken entydig definition på kryptoaktiver eller konkret regulering af kryptoaktiver i dag.
- Den regulatoriske håndtering er derfor baseret på en konkret vurdering – den såkaldte "Duck Test":

*"When I see a bird that  
walks like a duck and swims  
like a duck and quacks like a duck,  
I call that bird a duck".*



## Håndholdt regulering ressourcekrævende

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- Fortsat stigende diversitet i henvendelserne, eksempelvis:
  - Kryptoaktiver som betalingsmiddel.
  - Kryptoaktiver som investeringsobjekt, både direkte og indirekte.
  - Kryptoaktiver som en service.
- Case-by-case regulatorisk afklaring tager tid.



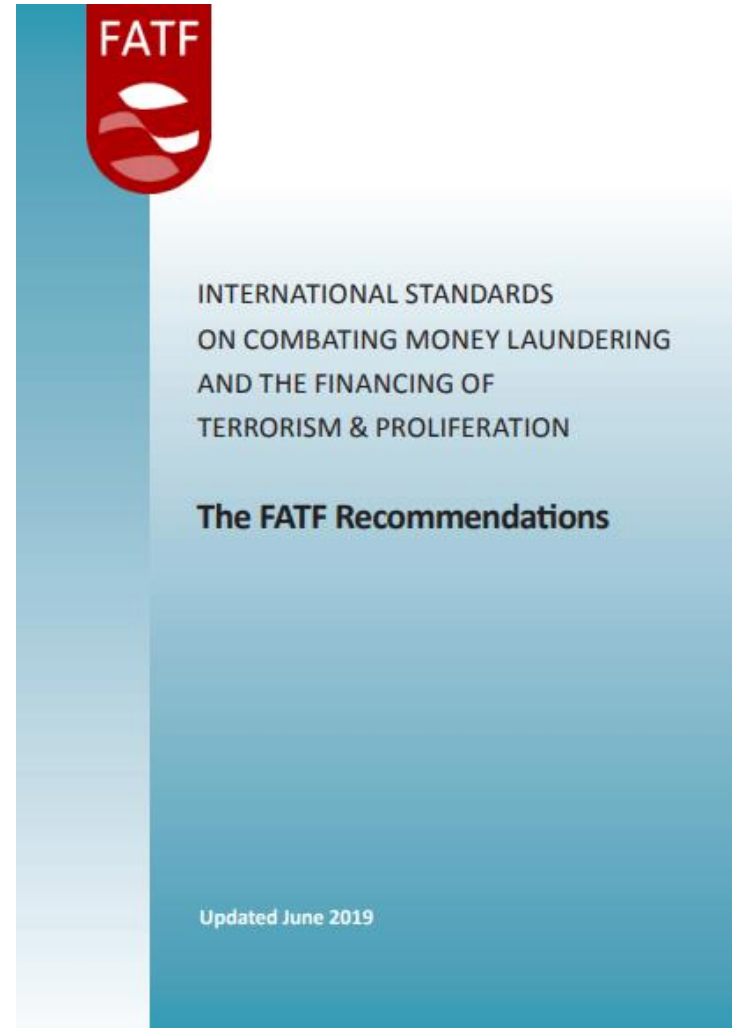
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Og virksomheder efterspørger rammer og vejledning

## Nye hvidvaskregler fra 10. januar 2020

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- AMLD5 omfatter "wallets" og "fiat-to-crypto exchanges"
- Pt. fire virksomheder registreret hos Finanstilsynet
- FATF guidelines vil også ligge til grund for fremtid regulering, men kun i relation til bekæmpelsen af hvidvask og terrorfinansiering



## Meddelelse fra Kommissionen

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*”Europe needs a common approach on cryptos such as Libra. I intend to propose new legislation on this.”*

Valdis Dombrovskis den 8. oktober 2019

- Libra skabte øget fokus på regulering af kryptoaktiver.
  - Første skridt er den høring, som EU-Kommissionen offentliggjorde den 19. december 2019.
  - Frist for besvarelse af høringen den 19. marts 2020.
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## Formålet med høringen

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- Kommende regulering skal harmoniseres på tværs af EU
  - Høringen er første skridt – afdækning af den generelle holdning til kryptoaktiver, med et todelt fokus:
    - Hvordan skal ikke-regulerede kryptoaktiver håndteres, samt
    - I hvor høj grad eksisterende regulering kan ligge til grund for reguleringen af kryptoaktiver der tilsvarende kendte finansielle aktiver (finansielle instrumenter, E-penge mv.)
  - Kommissionens fokus er på at mitigere risikoen forbundet med kryptoaktiver uden at kompromittere muligheden for at innovere (teknologi neutralitet).
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## Høringens 4 afsnit

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- Del 1: Generelle spørgsmål
  - Del 2: Klassificering af kryptoaktiver
  - Del 3: Uregulerede kryptoaktiver
  - Del 4: Regulerede kryptoaktiver
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# Finanstilsynets tre overordnede synspunkter

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1. Det regulatoriske fokus bør rettes mod aktiviteten
  - Og bør ikke baseres på enkeltstående fænomener, så som såkaldte "stablecoins".
2. Reguleringen skal sikre velfungere markeder og "level playing field"
  - Nyt regulatorisk rammeværk
  - Inspiration fra eksisterende regulering for aktiviteter med kryptoaktiver, der afspejler de i forvejen regulerede aktiviteter vi kender (eksempelvis e-penge).
3. Særligt hensyn til muligheden for retshåndhævelse
  - Det decentrale element ved den bagvedliggende DLT-teknologi kan vanskeliggøre muligheden for at udpege et pligtsubjekt

## Hvorfor er det vigtigt nu?

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- Fragmentering af den regulatoriske tilgang på tværs af EU.
  - Forventer derfor bred enighed i EU om behovet for harmoniseret regulering.
  - Kommissionen vil sandsynligvis fremsætte et lovgivningsforslag senere i år – formentligt i 3. kvartal.
  - Diskussion her samt høring i EU-specialudvalget vil blive inddraget i udarbejdelse af et dansk høringssvar.
  - Det er nu byggestene for den fremtidige regulering skabes.
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# Oplæg fra Danske Bank

V/ Mads Clemmensen

# Perspektiver på regulering af kryptoaktiver

Presentation / FT FinTech Forum / 3. Februar 2020 - Mads Clemmensen

## Hvordan vil krypto omforme finansielle tjenester – og bør vi understøtte det?

- **Kryptoaktiver (og DLT) kan på sigt føre til omfattende transformation af finansielle tjenester**
  - Mere åben og lige adgang
  - Effektivisering eller overflødiggørelse af nuværende processer (f.eks. reconciliation)
- **Manglende klarhed omkring regulering er p.t. en stopklods for udvikling**
  - Bankerne tør ikke engagere sig i krypto
  - Nuværende kryptoaktiver er ofte ugenomsigtige og forbundet med høj risiko
- **Regulering bør ske på europæisk eller om muligt globalt niveau**
  - DLT og krypto-projekter er ofte cross-border og afhængige af ”netværkseffekt”
  - Regulering af globale aktører (f.eks. Libra) bør koordineres internationalt
- **Level playing field bør være et bærende princip for reguleringen**
  - ”same business, same risks, same rules”
  - Teknologi-neutralitet

## Kan eksisterende lovgivning bruges til at regulere kryptoaktiver?

- **Eksisterende lovgivning bør gælde hvor krypto-aktivitet kan ligestilles med konventionel finansiel aktivitet**
  - Men kan man regulere "decentraliserede" aktiver?
  - Mange krypto-aktiviteter bliver i praksis udført af centraliserede mellemhænd
  - Fokuser på at regulere aktiviteten snarere end aktiverne
- **Udfordring: hvordan adskiller vi reelle "decentraliserede" aktiviteter fra konventionel aktivitet?**
  - Nuværende klassifikationer fokuserer kun på økonomisk funktion (security, payment & utility tokens)
  - Vi mangler nuanceret terminologi som tager højde for aktører og aktiviteter
- **Eksempler på problemstillinger**
  - Bør ICO/STO'er reguleres som værdipapir-udstedelse?
  - Bør projekter som Libra reguleres som finansiel virksomhed?
  - Bør/kan man regulere Bitcoin?
  - Hvordan skal krypto-exchanges reguleres?



## Har vi behov for særregulering af kryptoaktiver?

- **Visse aktiviteter kan ikke reguleres under eksisterende lovgivning**
  - Men hvordan og om denne aktivitet overhovedet skal reguleres er mere et politisk spørgsmål end et praktisk
- **De reelt innovative aspekter af krypto er indtil videre blevet overset af lovgiverne**
  - Udstedelse af nye aktiver som en "incentive mechanism"
  - "Mining" (E.g. Bitcoin) og decentraliseret validering (e.g. USC) er reelt en ny form for finansiel aktivitet
  - Nuværende lovgivning har det svært med decentralisering - har vi brug for decentraliseret regulering?
- **Teknologien vil fortsat udvikle sig hurtigt – hvordan sikrer vi at reguleringen kan følge med?**
  - Nye aktiv-typer og aktiviteter vil opstå i de kommende år
  - Lovgiverne bør sikre sig at de har ressourcer og kompetencer til at følge med udviklingen

# Oplæg fra Dansk Industri og MakerDao

V/ Søren Peter Nielsen



# Key issues in the emerging EU framework for crypto-assets

Fintech Forum hos Finanstilsynet

4. Februar 2020

Søren Peter Nielsen

Maker Foundation

# Agenda

1. About the Maker Protocol
2. Background and context
3. Definition of “crypto-assets”
4. Key topics in the EU consultation
5. Summary



# Agenda

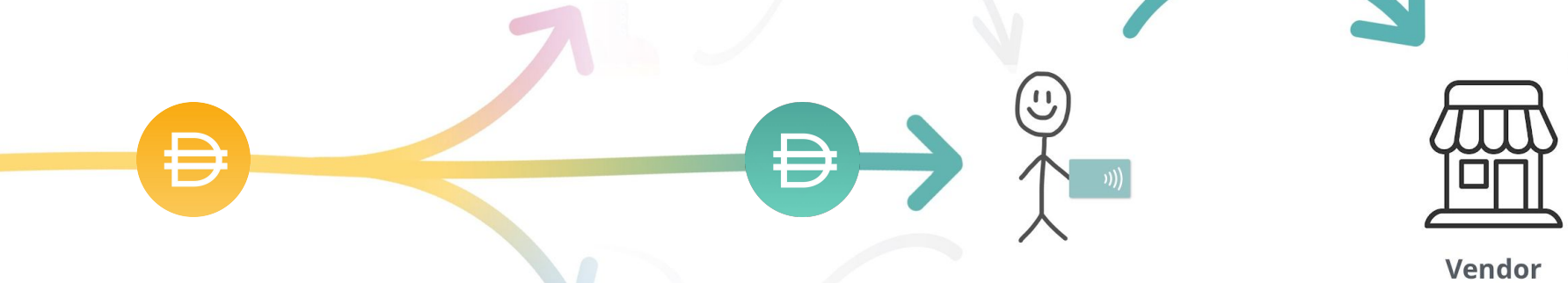
1. **About the Maker Protocol**
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**Maker is an open source  
protocol for a financial  
ecosystem with Dai stablecoin.**

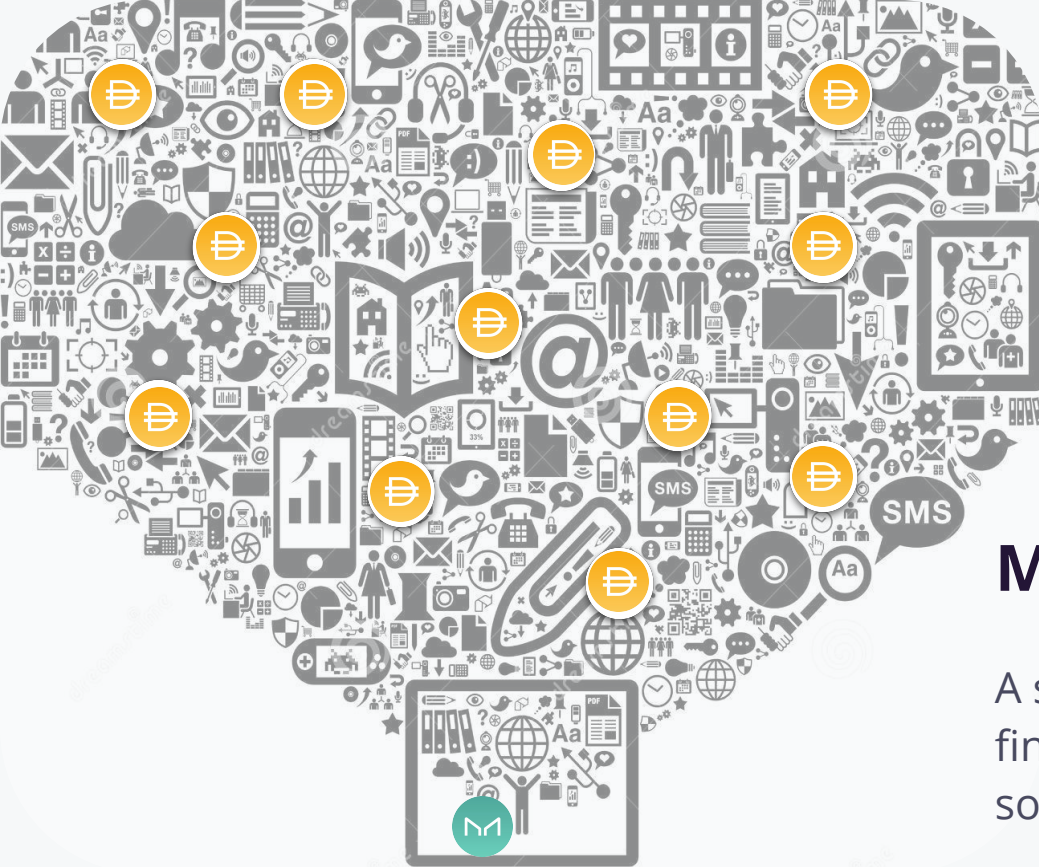


**Decentralization means a free  
and open ecosystem...**



**...in which anyone can participate...**

**...to build new products, businesses, and industries.**



**What is a protocol?**

**Protocols like Maker  
are public resources...**

**Maker is a public toolkit**

A set of rules and principles governing a financial system enforced by a set of open source smart contracts.

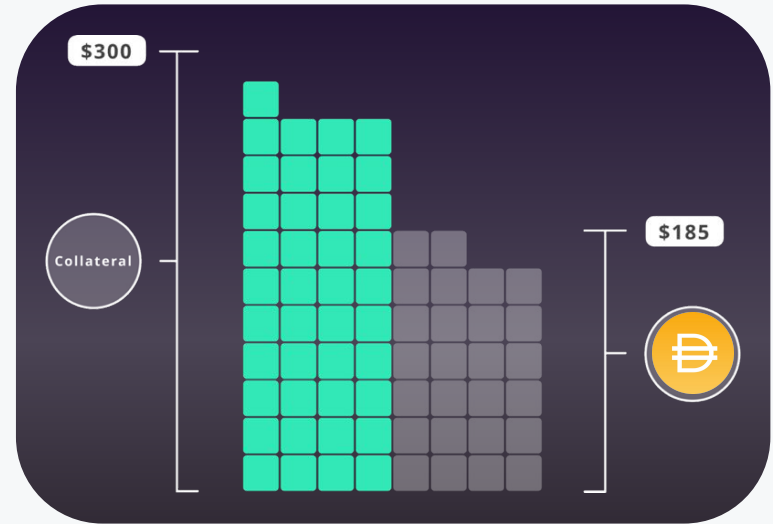


# Maker Protocol

## Vault

- Borrow Dai through locking up collateral
- Repay Dai + fee to retrieve collateral
- Safe, over-collateralized Vault

*For every Dai, there is an excess of collateral.*



# Through the looking glass: Dai ecosystem in real time

## Public block explorers/dashboards:

System wide views on total

- Dai supply
- Collateralization levels
- No. of Vaults

**Top 10 MCD CDPs**

MCD ID	Debt
719	12m DAI
163	8.3m DAI
3931	7.1m DAI

**107.9m DAI** (2/3/2020)

**Owner: 0x2536...936f**

Collateral: 37.30 ETH | Debt: 2422.86 DAI | Ratio: 290.80%

Current price: \$188.89 | Liquidation price: \$97.43

Value Invested: \$5509.04 | Value Withdrawn: \$2400 | CDP Balance: \$4622.74 | Lifetime Profit: \$1513.69

**History**

Activity	Collateral Change	Debt Change	Ratio Before	Ratio After	Date
Generate DAI	0 ETH	200 DAI	232.62%	213.24%	Nov 25, 2019, 04:28
Add Collateral	3.50 ETH	0 DAI	210.79%	232.62%	Nov 25, 2019, 04:27

**Total Value Locked (USD)**

**\$896.3M**

**Total Value Locked (USD) in DeFi**

TVL(USD) | ETH | BTC | DAI | All | 1 Year | 90 Day | 30 Day | 7 Day

Line chart showing TVL in DeFi from Dec to Feb, with values ranging from \$650M to \$950M.

**Maker Dominance**

**57.76%**

Navigation: ALL | LENDING | DEXES | DERIVATIVES | PAYMENTS | ASSETS

DEFI PULSE	Name	Chain	Category	Locked (USD)	1 Day %
1.	Maker	Ethereum	Lending	\$517.8M	-2.9%
2.	Synthetix	Ethereum	Derivatives	\$153.5M	-3.8%
3.	Compound	Ethereum	Lending	\$110.0M	-1.7%

DEFI PULSE

Granular views on each Vault

- Search by Vault ID
- Individual Vault statistics



## Comparing Dai with other stablecoin models

Collateral type	Examples	Collateral owner	Who mints or burns stablecoin	Stability mechanism
Fiat Cash (e-money)	Tether, USDC, Gemini Dollar	Central issuer Tether Limited	Central issuer Tether Limited	Trusted audits of bank accounts
Fiat Govt Bonds: "money market"	Facebook Libra	Central issuer Libra Association	Central issuer Libra Association	Reserve portfolio management, trusted audits of accounts
Digital assets	Dai	Users	Users	On-chain auditability and built-in safeguards, distributed governance
None	Basis	N/A	Algorithm	Algorithmic buying and selling of debt and equity tokens

# Comparing Dai with other stablecoin models



EUROPEAN CENTRAL BANK  
EUROSYSTEM

## Occasional Paper Series

Dirk Bullmann, Jonas Klemm, Andrea Pinna

In search for stability in  
crypto-assets:  
are stablecoins the solution?

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# Background and context

Comprehensive reform of the  
digital financial markets  
regulatory frameworks

**VS**

Immediate regulatory  
response to some aspects  
of crypto-assets



# Background and context

Comprehensive reform of the  
digital financial markets  
regulatory frameworks

**VS**

Immediate regulatory  
response to some aspects  
of crypto-assets

**Digital Finance Strategy**

**Proposal on Crypto  
Assets (Q3 2020);**



# Background and context

Comprehensive reform of the  
digital financial markets  
regulatory frameworks

**VS**

Immediate regulatory  
response to some aspects  
of crypto-assets

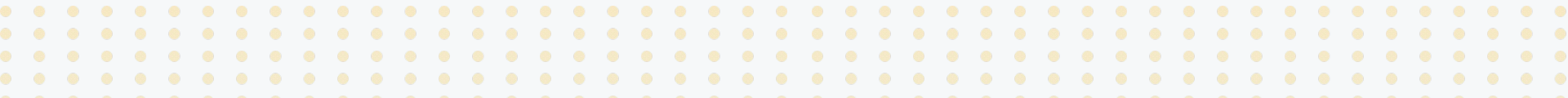
**Both are needed!**





# Background and context

1. Immediate regulatory actions need to be compatible with the (future and unknown) Digital Finance Strategy
2. It has to be assumed that any immediate regulatory action will have real impact for the years to come
3. Consultation touches upon some of the fundamental aspects of future financial markets, but does not cover them in full
4. The purpose should be to define which topics deserve immediate regulatory attention, and which should be further discussed to form a part of a deeper Strategy



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# Definition of “crypto-assets”

- For the purpose of this consultation, they will be defined as *“a digital asset that may depend on cryptography and exists on a distributed ledger”*.
- Accurate definition which ensures technological neutrality.

# Current regulatory regime

1. Virtual currencies
  2. E-money
  3. Financial instruments, including transferable securities
- 

The current regulatory classification remains adequate and proportional, also in the context of stablecoins.

What is required, is more clarity regarding scope and boundaries of existing regulatory categories at the EU level.

Potential change: “global stablecoins”, as they introduce a new type of risk (financial stability). Other risks are addressed by e-money and financial instruments legislation.



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# Key Topics

1. Centralized business models related to crypto-assets
2. Technological neutrality
3. Decentralized activities related to crypto-assets
4. Tax issues

# Centralized business models related to crypto-assets (1/2)

- "Same business, same risks, same rules" approach should be followed
- If a given activity is largely similar to particular traditional financial services or products, and causes the same risks, in principle the same rules should apply
- Examples:
  - Issuance of centralized stablecoins
  - Centralized exchanges and trading platforms
  - Provision of custodial wallet services for crypto-assets

# Centralized business models related to crypto-assets (2/2)

- In line with this approach, there are some cases in which the conducted business and risks involved do not substantiate application of financial regulation
- Examples:
  - Processing services, also known as 'mining' or 'validating' services in a DLT environment (e.g. 'miners' or validating 'nodes' constantly work on verifying and confirming transactions)
  - Services provided by developers that are responsible for maintaining/updating the underlying protocol



# Technological neutrality

## Consultation:

“Technology neutrality is one of the guiding principles of the Commission’s policies. A technologically neutral approach means that legislation should not mandate market participants to use a particular type of technology. It is therefore crucial to address any obstacles or identify any gaps in existing EU laws which could prevent the take-up of financial innovation, such as DLT, or leave certain risks brought by these innovations unaddressed.”

**Correct and very much needed approach,  
which has to be implemented in practice**



# Decentralized activities related to crypto-assets (1/3)

## Consultation:

“The Commission services’ understanding is that **permissionless networks and decentralised platforms** are still in their infancy”

“Permissionless decentralised platforms could potentially develop only at a longer time horizon when further maturing of the technology would provide solutions for a more efficient trading architecture. Therefore, it could be **premature at this point in time to make any structural changes** to the EU regulatory framework.”

**Correct conclusion, which should however not serve as an excuse for omitting this topic. Discussion at the EU level should start now.**



## Decentralized activities related to crypto-assets (2/3)

### Consultation:

“To conclude, depending on the feedback to this consultation, a **gradual regulatory approach** might be considered, trying to provide first legal clarity to market participants as regards permissioned networks and centralised platforms before considering changes in the regulatory framework to accommodate permissionless networks and decentralised platforms.”

**Correct conclusion. However, any changes regarding permissioned networks and centralised platforms should be made in a way which would not impede positive innovation stemming from permissionless networks and decentralised platforms.**

**Maker's approach: walled gardens regulation**



## Decentralized activities related to crypto-assets (3/3)

- Also, it is already clear that there are obstacles for development of innovative and secure solutions based on permissionless networks and decentralised platforms.
- Example: CSDR.



# Tax issues

- Prior to 2015 (Court of Justice ruling in Skatteverket v David Hedqvist Case C-264/14), VAT used to be one of the key EU regulatory topics for cryptocurrencies
- Since then, buying and selling bitcoins or other cryptocurrency is in practice VAT exempt
- It is uncertain whether this conclusion would apply to any crypto-assets, especially if a separate regulatory category is created

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# Summary

Comprehensive reform of the digital financial markets regulatory frameworks

VS

Immediate regulatory response to some aspects of crypto-assets

- Technological neutrality
- Comprehensive approach to decentralized activities related to crypto-assets

- Tax issues
- Centralized business models related to crypto-assets
  - Issuance
  - Exchanges
  - Custody
- **Selected identified issues** associated with decentralized activities related to crypto-assets

# Diskussion



# Evt. og næste møde i Fintech Forum

## Næste møde og fremtidige emner

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1. Finanstilsynet modtager gerne forslag til emner
2. Finanstilsynet forventer, at der afholdes et møde i Fintech Forum+ i løbet af 2. kvartal.
3. Vi vil også gerne have input til emner der.