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# Regulating cryptocurrencies



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# Overview

- What are cryptocurrencies (CCs)?
- Why regulate cryptocurrencies?
- Regulatory initiatives in the US and the EU
- Challenges to regulators



# What are cryptocurrencies?

- N.Y. BitLicence : Virtual Currency means any type of digital unit that is used as a medium of exchange or a form of digitally stored value. Virtual Currency shall be broadly construed to include digital units of exchange that (i) have a centralized repository or administrator; (ii) are decentralized and have no centralized repository or administrator; or (iii) may be created or obtained by computing or manufacturing effort.
- Japan, Payment Services Act 2016 : (i) property of value, (ii) usable for payment to unspecified persons, (iii) purchasable from and sellable to unspecified persons and (iv) transferable by electronic processing devices.



- ECB (2015) : “A digital representation of value, not issued by a central bank, credit institution or e-money institution, which in some circumstances can be used as an alternative to money.”

# Currency, security, or commodity?

- From a legal standpoint: CCs are **neither money, nor currency**

Currency (legal tender): medium of exchange, unit of account, store of value : No CC strictly satisfies all the above criteria.

Mario Draghi & Janet Yellen: the ECB & the Fed have no authority to regulate CCs.

- CJEU : Case C-264/14, [Skatteverket v David Hedqvist](#), (22 Oct 2015):
  - Bitcoin is **a means of payment** & not a security
- different from e-money:
  - e-money: par value with fiat money;
  - cryptos: floating rate against fiat money



# Security?

ICO or network token presale: “an event in a project that uses cryptographic tokens where part of its token pool is exchanged for money, typically Bitcoin, to a community of developers and early adopters.” e.g., Ethereum, DAO, Mastercoin (now Omni)

## U.S. Securities and Exchange Commission (SEC) July 2017 :

[DAO token platforms](#) = exchange for securities

Howey test (SEC v. Howey) for identifying an investment contract (security):

1. Investment of money (& other assets),
2. Expectation of profits from the investment,
3. Common enterprise,
4. Profits coming from the efforts of a promoter or third party.



# Commodity?

**U.S. Commodity Futures Trading Commission (CFTC) :**

[Coinflip, Inc., d/b/a Derivabit](#), and Francisco Riordan (Sept. 17, 2015)

“Bitcoin and other virtual currencies are encompassed in the definition and properly defined as commodities.”

Section 1a(9) Title 7 U.S.Code “The term 'commodity' means wheat, cotton, rice, ... , and **all other goods and articles**, ... and **all services, rights, and interests ... in which contracts for future delivery are presently or in the future dealt in.**”



# The Bitcoin Ecosystem

1. inventors/developers
2. issuers
3. miners
4. processing service providers
5. users
6. wallet providers
7. exchanges/trading platforms
8. other service providers





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# Why regulate cryptocurrencies?

## Risks

### EP report on virtual currencies

- Consumer or user protection problems
- High volatility & potential for speculative bubbles
- Black market transactions, money laundering & terrorist financing, tax fraud, and evasion, etc.
- Lack of transparency on the technical documentation regarding the functioning of the CCs
- Legal uncertainty
- Limited regulatory capacity in new technology
- Energy consumption (proof of work, proof of stake, proof of burn) → more efficient forms of transaction verification



## Specific concerns for central bankers

- Monetary policy and price stability
- Financial stability
- Smooth operation of payment systems

## Opportunities

- Faster & more cost effective payment solutions
- Promoting financial innovation

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# Regulatory initiatives

- **Application of non-crypto laws:**
  - US: [CFTC on Coinflip](#) & [SEC on DAO](#)
  - Switzerland on [E-Coin](#): the QUID PRO QUO Association engaged in activities “similar to the deposit-taking business of a bank” which is illegal unless the company holds a banking license.
  - [Bitstamp Europe S.A.](#) licensed by the CSSF (Register of payment institutions authorised in accordance with the law of 10 November 2009 relating to payment services)
  - Italy on [OneCoin](#) (Ponzi scheme); [CSSF Warning](#) on OneCoin
- **New crypto-legislation !!!**
  - US: [NY BitLicense](#)
  - Japan: Payment Services Act 2016



# EU regulatory initiatives

- Smart regulatory hands-off approach
  - EBA Warning (4 July 2014): Banks better stay away from CCs until regulation is in place
- AML/CFT
  - Amendment of 4th AML Directive : providers of exchange services between virtual currencies and fiat currencies and custodial wallet providers become “obliged entities”
    - EC (2 February 2016): “Action Plan to strengthen the fight against the financing of terrorism” (proposal to regulate the Custodian Wallet Providers (CWPs) and Virtual Currency Exchange Platforms (VCEPs))
    - EP (3 May 2016): Draft report on virtual currencies (2016/2007(INI)) Committee on Economic and Monetary Affairs (Rapporteur: Jakob von Weizsäcker)
    - EC, Proposal (COM(2016) 450 final) of July 5, 2016 for a Directive amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing and amending Directive 2009/101/E
- PSD 2 ?



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# Challenges to regulators

- **anti-institutionalism of permissionless blockchains**
- **jurisdiction for global blockchains**
- **strategies to support disruptive technologies**



# Anti-institutionalism of permissionless DLTs

- who can/should be regulated ?
  - exchanges as interfaces between CC / fiat money
  - wallet providers
  - scheme governance authority (EBA, 2014)
- governance v. regulation
  - promoting self-governance
  - public standards/legal requirements for technical codes



# Jurisdiction for global DLTs

- limitations to national jurisdictions



# Regulatory strategies for disruptive tech

- **Smart regulation :**

N. Gunningham and P. Grabosky, Smart Regulation: Designing Environmental Policy (Oxford: Clarendon Press, 1998)

Zetsche, Buckley, Arner & Barberis, Regulating a revolution 2017)

- **Laissez-faire vs. regulatory clampdown** (preemptive & heavy-handed regulation)
- **Command-and-control** (e.g., outright ban) **vs. economic instruments**
- **Cost/benefit analysis**



# Supporting disruptive technologies

- **Design-based /Techno-regulation** (Lessig 1996, 1999, 2006)
  - requiring a certain % for transaction verification process (consensus mechanism/arbitration rules),
  - account segregation reqs/separation of clients accounts,
  - IT security requirements,
  - Separation of CC schemes from conventional payment systems.
- **Partial industry regulation** (Ayres & Braithwaite, 1992) e.g., regulating certain CCs to promote competition and race to the top by setting higher standards or probity, etc.
- **Pyramid approach:** escalating regulatory response using instrument sequencing, (e.g., Regulating CCs by the number of their user base/user adoption)
- **Regulatory sandbox approach**





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