

NIEDERER KRAFT FREY

Blockchain: Status and regulatory issues

Client Event

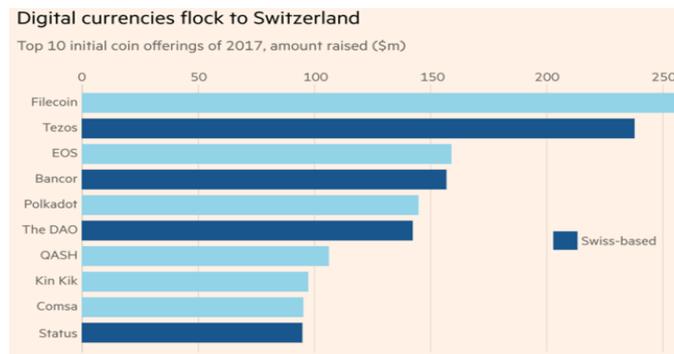
Zurich – 21 March 2019

Overview

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3. Trends
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 - A. Bankers' Association
 - B. National Risk Assessment
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1. Blockchain – the development in recent years

- 2008: Satoshi Nakamotos white paper: «Bitcoin: A Peer-to-Peer Electronic Cash System»: Blockchain-based DTL
- 3 October 2013: Bitcoin Association Switzerland;
- 2014 BTC ATM in Coffee-Shop «Schoffel»:
- Report of the Swiss Federal Council dated 25 June 2014 on virtual currencies: «no need for regulatory action»
- Summer 2015: Ethereum ICO; Summer 2017: ICO Boom in the Crypto Valley
- FT, 25 January 2018: «Switzerland embraces cryptocurrency culture»

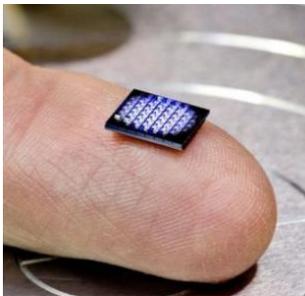


1. Blockchain – the development in recent years

Use of Blockchain without DLT:

Blockchain Technology can also be used without a distributed ledger, e.g. if there is a central, controlling party that should also be able to make changes to the content and blocks.

Examples of applications are e.g. the tracking of goods through a centralized control unit (e.g. manufacturer or freight carrier), possibly the tracing of vehicles (AXA Project).



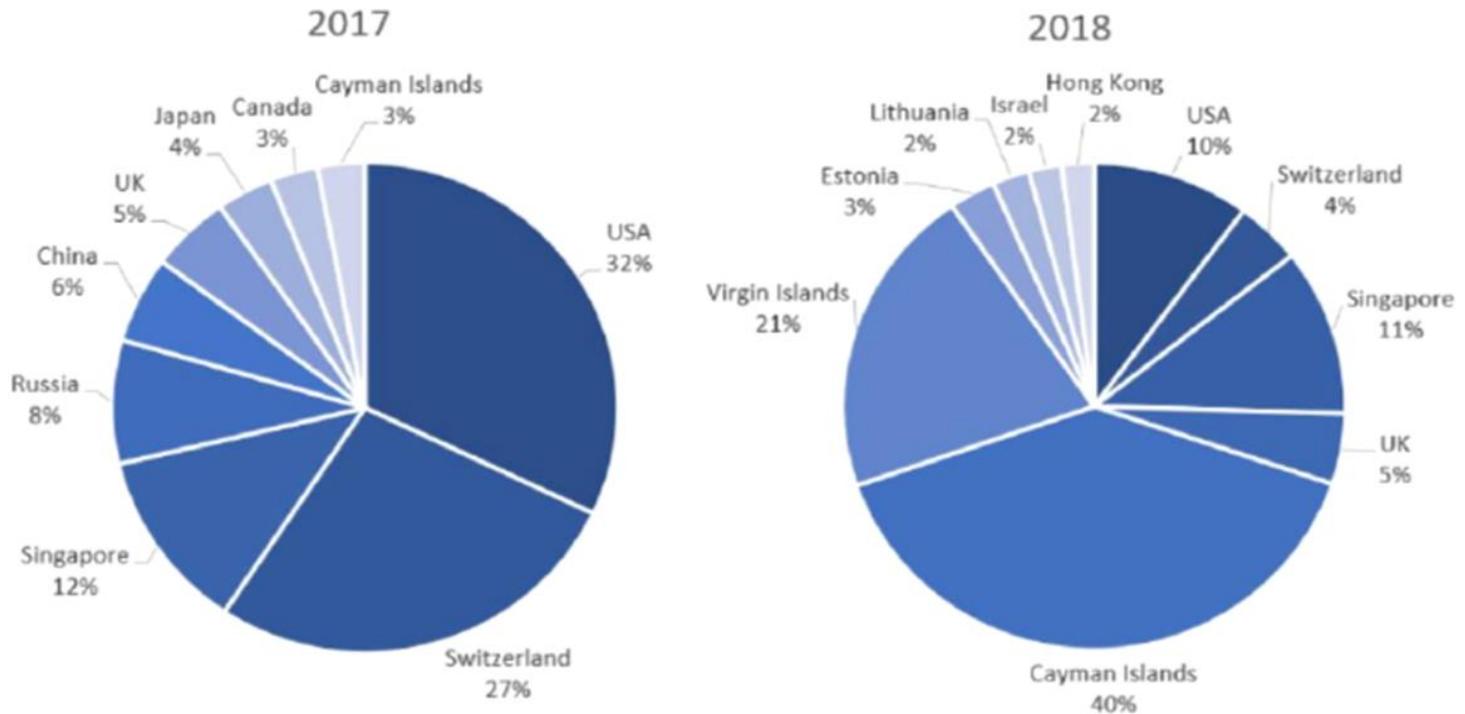
To promote such applications, IBM introduced a micro computer in March 2018: On the chip shown are 64 such micro computers; the final price is supposed to be 10 cents.

2. Where are we today?

- **FINMA Guidelines** February 2018: 3 Types of Tokens:
 - Payment-Token: AML
 - Asset Token (Security): Represent assets such as a debt or equity claim on the issuer. E.g. project «C-share»: Prospectus
 - Utility Token: intended to provide access digitally to an application or service by means of a blockchain-based infrastructure («cinema ticket»); derivative?
 - Hybrid Token: functions of asset token/utility token/cryptocurrency
- «**Technology-neutral regulation**»: e.g. no longer requirement for written asset management contracts; FINMA-Circular Video- and Online Identification
- Civil law problem of transfer (assignment)
- «Crypto Valley Code of Conduct»: limited acceptance

3. Trends

ICOs: The end of the Crypto Valley-Boom?



Source: Satis Research

Source: Securites and Marktes Stakeholder Group advice to ESMA, 19.10.2018

Instead: Infrastructure projects: Stock exchanges, brokers, wallets, funds?

3. Trends

2019: The year of the Asset Token?

Stage 1: Cryptocurrencies: Bitcoin and Altcoins

Stage 2: Utility Token: Ether and others

Stage 3: Asset Token? → C-Share; PS; «*Continental and Siemens trade Commercial Paper via Blockchain*» («The Treasurer» 22 February 2019)



3. Trends

Criticism: Blockchain and its successors?

Bank for International Settlements (BIS) Annual Report of 17 June 2018

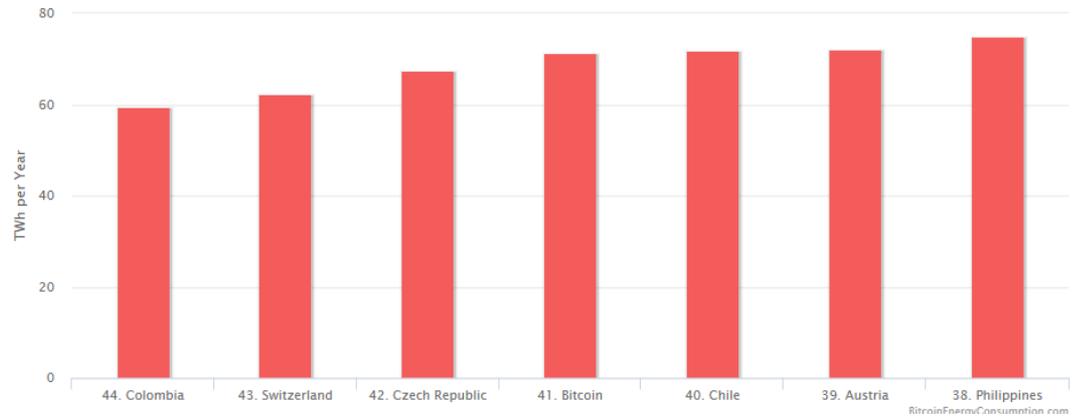
(on crypto currencies):

Operational problems:

- **Scalability:** not possible (energy/computing power/storage)
BTC transaction takes 10 min; February 2018: 40 hours

Example: Energy consumption of Bitcoin (approx. mid 2018):

- **Stability of value:** no central bank stabilizes volume; even pegged currencies (e.g. 1DAI=1\$) are volatile. 1600 – 4000 Currencies.
- **Trust in finality of payments:** only when ledger is updated; only if no one controls more than 50%. E.g. 2013: BTC-fork was rolled-back by miners. BTC Lightning?
- **Regulatory problems:** AML (example: 2013 drop in BTC value when Silk Road was closed down); fraudulent ICOs; theft from exchanges (estimate: 1/5 of all BTC are missing; USD 1 bio stolen from exchanges in 2018 alone); stability of financial system



3. Trends

Criticism:

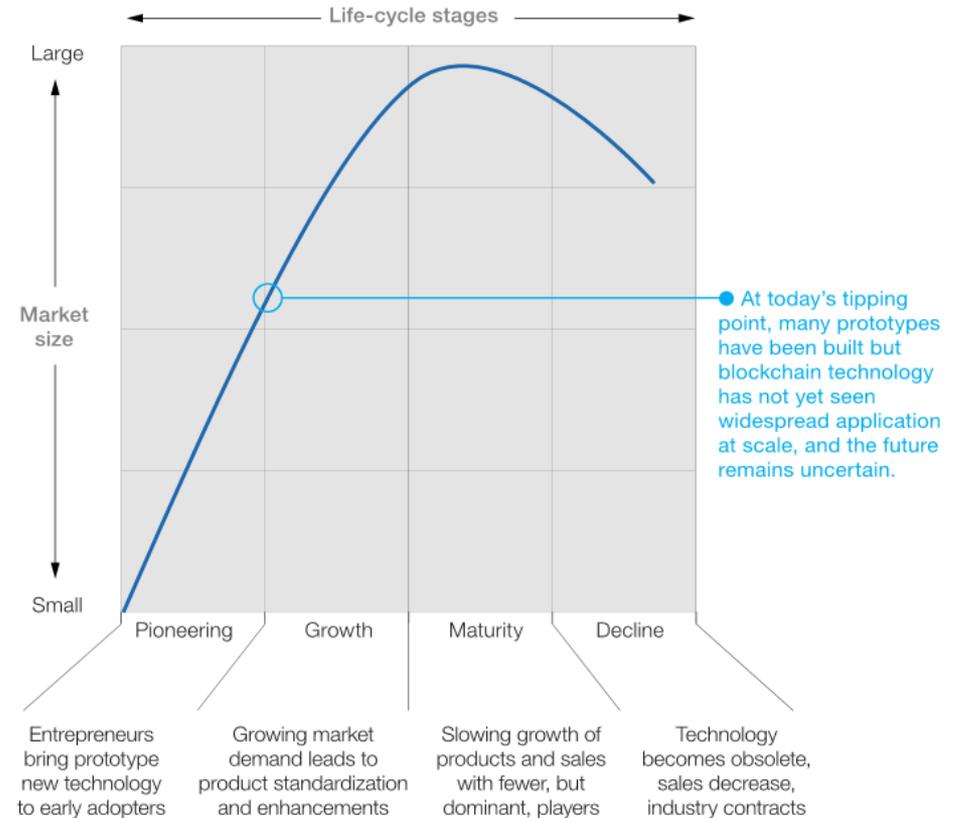
McKinsey, January 2019:

«Blockchain’s Occam problem»:
«little of substance has been achieved»

«growing sense that blockchain is a poorly understood (and somewhat clunky) solution in search of a problem»

Blockchain is struggling to emerge from the pioneering stage.

Blockchain life-cycle stage by market size



4. A. Latest developments – Bankers' Association

«Guide of SBVg on the Opening of Corporate Accounts for Blockchain Companies» (September 2018)

Key elements:

- General: KYC; Compliance in the company
- At ICO: Bank assumes AML applicability, until the company proves the contrary. If financing via crypto currency:
Conversion to Fiat via equivalently regulated stock exchange/bank.
- Above investment amount of CHF 15'000: AML identification (for payment tokens: only up to CHF 3'000 facilitated identification);
in-depth verification above CHF 100'000.
Analogously, when company sells goods against crypto.
- Change Crypto–Fiat and Crypto–Crypto is financial intermediation.

4. B. Latest developments – National Risk Assessment

«Risk of money laundering and terrorist financing through crypto assets and crowdfunding» (October 2018)

(inter-departmented coordination group); key elements:

Risk analysis crypto (but: few cases):

- Anonymity of transaction/BO difficult to identify (especially: Monero; tumbler): faster and higher amounts than cash
- Mining-Pools (for proof of work) with > 50%?; hacking of wallets/errors of the smart contracts (DAO)
- Other offences (snowball/price manipulation/AML/payment of illegal transactions/phishing)

Recommendation:

Open; creation of Cyberboards in June 2018, int. cooperation

4. C. Latest developments – FinTech License

New Art. 1b in Banking Act, valid from 1 January 2019:

Art. 1b Promotion of Innovation:

The provisions of this Act shall apply mutatis mutandis to persons who are primarily active in the financial sector, and:

- (a) accept or publicly recommend themselves for deposits from the public of up to **CHF 100 million** on a professional basis; and
- (b) neither invest nor pay interest on these public deposits.

Already previously (from 1 August 2017):

Bank Ordinance Art. 5 para 3 lit. c: Not considered deposits are: Credit balances on customer accounts of securities or precious metal dealers, asset managers or similar companies which serve solely to settle customer transactions, if:

- 1. no interest is paid for it; and
- 2. if the accounts are not client accounts of securities dealers:
the settlement takes place within 60 days.

Bank Ordinance Art. 6 para 2: Who permanently accepts or publicly recommends himself for more than 20 deposits from the general public is not a professional within the meaning of the Banking Act, if he

- (a) accepts deposits from the general public totaling not more than CHF 1 million; and
- (b) neither invests nor pays interest on the deposits; and
- (c) informs the customers.

4. D. Latest developments – Report of the Swiss Federal Council

Legal basis for *Distributed Ledger-Technology* and *Blockchain* in Switzerland (7 December 2018)

Adoption of current fields of application: primarily financing (ICO), payment transactions and securities trading.

Data protection problems: are only touched on («requires detailed examination»)

Legal questions and recommendations etc. :

- No ownership of data/token: in bankruptcy? → no ownership of data, but segregation in bankruptcy
- Civil law transfer? → possible token as book securities
- As a rule, a company may only operate one financial market infrastructure: → possible creation of a new financial market infrastructure (integrated)

5. Conclusion (for today...)

- Over the last ten years, the blockchain has been a concern of the (financial) industry, in part of the pharmaceutical and supply industry.
- The actual effects are not yet clear, but potentially large, perhaps through successor technologies.
- In Switzerland, the first use-cases are in the financial sector (financing token, infrastructure) and with distributors (pharma).
- Various reports and guidelines (end of 2018) presume, that an adjustment of regulations only has to take place in specific points (differently: e.g.: LI, Malta, Gibraltar).
- Problems with data protection law have been identified, but are still to be examined in detail.

THANK YOU

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