Blockchain: Status and regulatory issues

Client Event

Zurich – 21 March 2019
Overview

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   C. FinTech License by 1 January 2019
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1. Blockchain – the development in recent years

- 3 October 2013: Bitcoin Association Switzerland; 2014 BTC ATM in Coffee-Shop «Schoffel»:
- Summer 2015: Etherum 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?

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

Source: Securities and Markets Stakeholder Group advice to ESMA, 19.10.2018
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?


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.

At today’s tipping point, many prototypes have been built but blockchain technology has not yet seen widespread application at scale, and the future remains uncertain.
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-departemented 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.

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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