

Getting to grips with blockchain

Thomas Müller and Hugh Reeves of Walder Wyss explore blockchain and the new more stringent approach being taken by Swiss regulators

Back in 2017, people still mostly only thought about bitcoin when they heard the term blockchain. In fact, bitcoin (an intrinsic or native token which does not carry any embedded right against an issuer) was simply the first application of blockchain and distributed ledger technology (DLT).

Only one year after its remarkable rise at the end of 2017, the market value of bitcoin melted like the wax of Icarus' wings in the sun. During the previous hype around bitcoin as well as in its aftermath, start-ups and a few well-established companies became increasingly interested in the issuance of coins or tokens on blockchain as a new way of financing their business activities (initial coin offerings (ICOs), or what has more recently been called security tokens offerings; both are essentially the same thing). Many of these issuers benefited from the gold rush and blockchain technology to get simpler and more cost-efficient access to financing, even if their activity was not necessarily related to blockchain. Others are now developing decentralised businesses using a utility token, which gives its beneficiary the right to access and/or use the network, exchange services or valuables. It will be interesting to see whether such projects have the force to change the way we do business and transact with each other.

Today, the focus has shifted from bitcoin to other blockchain applications. Blockchain has been used for data storage and processing. One prominent example is B3i Services, a start-up formed by large insurance companies to explore the potential of using DLTs within the re/insurance industry for the benefit of all stakeholders in the value chain. Another is komgo, a joint-venture of 15 of the world's largest institutions, including banks, trading companies and a major energy player, seeking to digitalise the trade and commodities finance sector through an open blockchain-based platform.

Both examples show that joint efforts between market participants are required to get the technology off the ground. Obviously, the implementation is expensive and requires a good deal of time and finance. Also, a company may not want to embark on this journey alone. By definition, DLT may create added value by connecting

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market participants on the value chain. On the other hand, the technology still seems to be too immature, costly and inefficient to run a permissioned blockchain (which limits the parties who can transact on the blockchain) for the internal data processing of a company or an administration. As a rule, all technologies improve and we will in time see a wider application of DLT whether we want it or not.

As a result, more businesses will go digital. As a first step, the digital world will run in parallel to the real world and will increasingly take it over. Transactions will no longer only take place between people or companies but automatically by smart contracts. Smart contract is a term often used for (automated) transactions executed under predefined terms on a blockchain. Today, the term smart contract is rather misleading, given that these transactions are neither contracts (the agreement is still entered into by consistent declaration of intent among two parties but

executed on a blockchain) nor smart (the closing of the agreement follows predefined terms and does not allow for flexibility if required). In the future, however, we will see machines contracting directly with each other via blockchain (internet of things) and machines applying more and more sophisticated algorithms (artificial intelligence). We may of course argue that the application of algorithms will have nothing to do with intelligence nor with spirit, which differentiates humans from machines (some say also from animals). The tipping point of machines (and the digital world) taking over will not be the attainment of a certain level of algorithmic complexity but rather the level of interaction and coordination between machines. Humans have conquered and ruled the world based on the creation of small groups or larger societies. Blockchain and DLTs give means to computers/machines to copy this story. At some point, the digital world will dominate the analogue one.

Clearly, we should start thinking about the consequences of these developments and its effect on humanity (should we still give credit to humanity).

Obviously, there is a long way before the above scenario but the journey has been initiated both on the tech and on the legal side. Swiss law and regulation now foresee a new fintech license allowing companies to build bridges between fiat based financial services and the interaction with digital assets. Further amendments to corporate and bankruptcy law as well as financial infrastructure regulation are currently being evaluated by the Swiss government to reflect the recent technical developments and to allow a broader application for blockchain and DLT.

The fintech licence

In relation to companies active in fintech (whether using blockchain technology or not) Swiss banking regulation is being triggered rather quickly. A banking licence is required if a company is active in the financial sector and accepts deposits from more than 20 customers or publicly offers to accept public deposits. The term deposit basically means an obligation to repay the amount received to the customer. Accordingly, a company which lodges bitcoin or other different currencies from customers in wallets and manages accounts for its customers would require a banking licence. According the most recent position taken by the Swiss financial regulator FINMA, no banking licence is required where virtual currencies are transferred to a wallet provider for secure safekeeping only, provided that these virtual assets are being recorded on a blockchain for each customer separately and each deposit can be attributed to an individual customer at all times.

The new licence allows companies to build bridges between fiat-based financial services and the interaction with digital assets

A new fintech licence introduced at the beginning of 2019 now allows licence holders to accept deposits on a commercial basis up to CHF100 million (per the date of the report approximately USD99 million). The new licence may be a good fit for companies offering wallet and certain exchange services for virtual currencies and is an interesting addition to the already existing sandbox (an exemption of the banking regulation for companies accepting deposits of a total amount of less than CHF1 million). A company may offer the safekeeping of both fiat and virtual currencies and the exchange between the two and, therefore, act as a hinge between the traditional financial world and the new blockchain-based financial world. It is certainly noteworthy that a company holding a fintech licence will have access to the Swiss Interbank Clearing SIC operated by SI Interbank Clearing on behalf of the Swiss National Bank and to a giro account at the Swiss National Bank. On the other hand, a company holding a fintech licence is not permitted to pay interest on the deposit and the funds of the customers cannot be invested. Needless to say, both restrictions limit the attractiveness of the fintech licence.

A fintech licence holder is not subject to the Swiss Capital Adequacy Ordinance or Liquidity Ordinance. In fact, the company is only required to hold a share capital of at least 3% of the deposits it is holding on behalf of its customers but at least CHF300,000. In respect of substance, the law requires a compliance and risk management function managed by an internal control system. Outsourcing of both functions is permissible. The law offers further relief for companies pursuing a business model with low risk and a gross income of less than CHF1.5 million.

FINMA has to be notified should the mentioned threshold be exceeded and, as a consequence, the company has to file a request for a (full) banking licence within 90 days.

New legal framework for blockchain technology

In a press release of December 14 2018, the Swiss Federal Council adopted a detailed report on the legal framework for DLT and blockchain in Switzerland.

This report, which analyses the current Swiss legal landscape around blockchain and DLT, is based on the findings of a federal blockchain/ICO working group which had

already analysed the situation in January 2018. The report also takes into account the April 2018 whitepaper of the so-called Blockchain Taskforce, a private sector group which recommended improvements to the current Swiss legal framework.

In its report, the Federal Council takes a

something which market participants are clearly lacking today.

A further interesting example of contemplated legislative amendments is in the area of insolvency law, where the report calls for unambiguous rules on the segregation of crypto-based assets from the other assets of the

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nuanced and, in our view, very thorough approach. On a general level, it considers that the Swiss legal landscape provides an adequate and flexible framework for new technologies. On a more specific level, the Federal Council recognises the need for sector-specific legislation. In particular, the report envisages certain changes to the Anti-Money Laundering Act, as money laundering remains a concern in the blockchain and crypto-asset/virtual currency realm. The report also suggests some updates to securities laws, the aim of which would be to allow the transfer of uncertified securities over decentralised ledgers. More specifically, the report considers the introduction of a new technology-specific licence under the Swiss Financial Market Infrastructure Act (FMIA), which may be considered as a combination of the existing multilateral trading facilities (MTFs), organised trading facilities (OTFs) and a fully digital process on a blockchain. The new licensed token trading platform allows for the trading of payment, utility and security tokens multilaterally, without any discretionary elements, and (most importantly) by granting direct access to institutional and retail clients. Under the current regulation, an exchange or a multilateral trading platform (on which security tokens may be traded) may only interact with licensed financial intermediaries such as banks or securities dealers which, in turn, act on behalf of their clients. In addition, the new licence allows for matching services, as well as for all post-trading services such as transaction settlement. Whereas simultaneous trading and settlement on blockchain seems obvious, the services are currently treated separately by the FMIA (reflecting the traditional financial infrastructure). The token trading platform will in the near future allow for a regulated secondary market of security tokens,

bankrupt estate. The Federal Council will propose a new provision in the Swiss bankruptcy law providing for a right to release data in the event of the insolvency of the data holder to the beneficiary, including a claim to the transfer of digital assets. It will also consider a potential new provision applicable to bank insolvency proceedings regarding the segregation of digital assets.

Moreover, the report touches on many different detailed questions, such as the opening of bank accounts for blockchain-centric companies or data protection issues arising from the intrinsic qualities of blockchain. We expect that the amendment of the various laws will be published in March 2019 followed by consultation proceedings. The new laws may theoretically still be implemented at the beginning of 2020.

An apparent leitmotiv in all the envisaged legal amendments is the reliance on the tried-and-true “technology-neutral” philosophy (which will now be softened with the implementation of the new licence for a token trading platform, which specifically addresses DLT). Indeed, over the years, Switzerland has relied – extensively – on this technology-neutral approach, which can be found in a vast array of legislative areas, ranging from financial market legislation to data protection, for instance. At a time when technological breakthroughs occur with dizzying speed, this approach is perhaps more relevant than ever.

Looking to the future, the Federal Council repeatedly expresses in its report its optimism about Switzerland's role as a global player in the digital economy and seeks therefore to maintain or even increase its competitiveness on the international level with low barriers to entry. In saying so, the Federal Council makes a clear statement about its hopes of seeing Switzerland remain an innovation-friendly environment.