

Insideview

Blockchain and Financial Market Infrastructures

INTERVIEW WITH STEFAN TEIS

Blockchain technology and distributed ledgers are attracting massive attention across multiple industries. Specifically, the financial industry is triggering various initiatives to make use of the (allegedly) disruptive potential of the blockchain technology. What is your view on this disruptive potential?

The current discussion around blockchain is largely a hype as blockchain is generally attributed disruptive potential irrespectively of its use. I certainly expect continuous innovations as well as disruptive innovations driven by blockchain; however, always tied to a specific business model. Looking at current activities, I would classify its use in pure technology plays certainly with improvements in functionality, innovations improving existing business models, and finally disruption through the creation of new business models or through additions of truly new products and services to existing models.

What are – from your perspective – the potential application with respect to trading, clearing, or settlement functions?

The potential for blockchain applications in the area of settlement are most probable an increase of settlement efficiency, shorter settlement times, reduction of reconciliation efforts, more efficient asset servicing, etc. Further, in my opinion, it will be possible to realize clearing functionality via blockchain systems. However, I do believe that clearing houses will be necessary in the future as credit and counterparty risks are inherent in, e.g., derivative products and cannot be mitigated by new technologies but needs backing of a legal entity. Due to its large volume/throughput and low latency, I do not expect exchange trading like Deutsche Börse offers to move to blockchain in the near future. The evolution of blockchain-based trading applications will be an interesting topic for the future.

What are the main barriers of applying blockchain technology in a market infrastructure context?

Technological barriers are scalability and IT-security; and non-technological barriers are



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legal, regulatory, and tax treatment of blockchain-based business models as well as digitized assets within these models. I am confident that the scalability issues will be resolved through improved architectures, data sharding, and reduced data distribution. The later will also improve IT security as it reduces the vulnerability introduced through storing the same data across several instances. Observing the activities around legal and regulatory evaluation of blockchain business models and the involvement of central banks, regulators, and also governmental bodies increase my confidence in blockchain entering mainstream financial service business in the future.

Can you please provide us with some insights on what Deutsche Börse is doing with respect to blockchain technology?

At Deutsche Börse, we are currently pursuing three use cases.

(1) The settlement of digital securities against digital coins including asset servicing – a

research project which we have been conducting with Deutsche Bundesbank since 2016.

(2) The movement of collateral across geographical borders. This is a project within the Liquidity Alliance with four participating CSDs (TMX, VPS, Strate, and Clearstream).

(3) "CollCo" – short for "Collateralized Coin", which enables the direct exchange of commercial bank money between peers. To achieve that, we plan to utilize the collateralization mechanisms of our clearing house Eurex Clearing.

What is your vision on the status of real business applicants of the blockchain technology in five years from now?

As said before, I do expect blockchain to enter mainstream financial service applications in five years from now.

Thank you for this interesting conversation.