

Podcast Episode 2 - Tokenisation of Real-World Assets

Perspectives of Benefits & Risks

Peter

Hi everyone. You are tuning in to our podcast today on the topic of digitalisation.

Today, we focus our attention on tokenisation of real-world assets. This area has gained attention for many players globally including the financial services industry.

I am Peter, the host for today. I have with me, Yeo Lay Geok, who is the Founder of LG&D, and she will lead us through the discussion of tokenisation with blockchain technology. Lay Geok is a consultant in regulatory strategy and compliance, with over two decades of experience in the public and private sectors.

So Lay Geok, what is the global attention on tokenisation with blockchain technology about? And why the private sector attention on real-world assets?

Yeo Lay Geok

Thank you Peter. Now let me first talk about blockchain technology, which was made popular in recent years. And we have seen its different use cases in cryptocurrencies like Bitcoin, and non-fungible tokens.

Now in tokenisation with blockchain technology, the tokens are representation of assets that allow information and value to be transferred, stored and verified with efficiency and security in a blockchain system. Now these tokens can represent tangible assets or intangible assets and these assets include real estate, shares, bonds, artwork, intellectual property rights etc.

How there have been initiatives in recent years for issuers to tokenise assets and sell them in fractions to many investors. It is a strategy for issuers to gain economies of scale and provide the means for the mass market to invest in assets that were originally out of their reach due to the huge ticket size.

Now tokenisation enabled by blockchain technology potentially makes the processes involving issuance and trading of assets more efficient, such as shortening the settlement cycle which reduces the settlement risk. In essence, any asset can be tokenised if there a benefit out of it that cannot be achieved in traditional finance.

So let me give you some use cases in tokenisation of real-world assets.

Now for example, in October this year, JP Morgan Chase & Co. carried out its first collateral settlement for customers using its blockchain network. Its Tokenized Collateral Network was used by BlackRock Inc. to convert shares in one of its money market funds into digital tokens which were then transferred to Barclays Plc as collateral for an OTC derivatives trade. This collateral was moved almost instantaneously instead of over the course of a day that you tend to see in traditional finance.

Now we also noted that a licensed digital asset exchange in Singapore called SDAX Exchange, facilitates issuers to fractionalise real-world assets to list for access to the accredited and institutional investors at its exchange. Now one issuer that we noted, the Straits Trading company, had tapped into SDAX to list a tokenised note which offered exposure to a freehold condominium at a prime district in Singapore some time ago.

In February this year, we also see that the Hong Kong government became the first government in the world to issue a tokenised green bond. Now this is very interesting because it combines the bonds, blockchain and sustainable finance concepts, and the settlement time was also shortened to T+1 basis compared to the traditional settlement time of T+3 basis.

Peter

Thank you Lay Geok. So what are some benefits in tokenisation of real-world assets that you see?

Yeo Lay Geok

Thank you, Peter for your question. Let me use three different perspectives to explain the benefits.

If I come from an investor's point of view, I believe that tokenisation of real-world assets would provide an option for investors to invest in a variety of assets including the less liquid assets. It would also provide an avenue for investors to seek out interesting assets to place as part of their portfolio, without a huge commitment to such assets.

Now if I come from an issuer's perspective, tokenisation would serve to allow issuers to reach out to many more investors in the market. Investors don't have to own the entire share. They just have to go through fractionalised ownership of tokenised assets. So I see a potential for higher liquidity in the trading of such tokenised assets in the market.

Now if I am coming from a counterparty's perspective, I believe that tokenisation would help to mitigate settlement risk and hence provide me as a counterparty greater bandwidth to trade with other counterparties.

Peter

Once again. Thanks for your insights. So Lay Geok, since you are an ex-regulator, can you share some of the risks that regulators would be concerned about?

Yeo Lay Geok

Thank you Peter. Now generally, the financial regulators would consider the implications of tokenisation of real-world assets on consumer protection and financial stability in their own jurisdiction.

I come to the area of consumer protection at the beginning. How one of the key consideration in this area, would be - would these investors, particularly the retail investors, truly and fully understand how tokenisation of real-world assets work? Now many investors in the retail market are very used to the traditional ways of investing in investment products like unit trusts, REITS etc. So they either use platforms or financial advisers that have been around for some time. Now these platforms and financial advisers need to be licensed and regulated, and there are available safeguards set by the regulators such as the need for adequate risk disclosures, responsible advertising and segregation of customer assets from the financial institution's own assets. Now a consumer can only be protected if there is a regulatory framework in place. So that's consumer protection area.

Now let's talk about financial stability implication which can be more complex than we think. There can be financial stability implications for Decentralised Finance, or what we call DeFi, which involves adapting the DeFi protocols in the financial services market using tokenised real-world assets. Now such risk implications were highlighted by the Financial Stability Board in their paper called "Financial Stability Risks of Decentralised Finance" which was published this year. And in this paper, it was mentioned that banks' involvement in facilitating the DeFi activities, such as tokenising real-world assets, may raise additional operational risks including fraud and cyber risks, legal and reputation risks,

and the AML/CFT risk. Tokenisation of real-world assets by banks would increase the collateral pool available in the DeFi space, which in a way, is an entry of DeFi into financing real economic activity. Now should these inter-linkages grow and to the extent that the too-big-to-fail financial institutions get involved, there is potential for increase in concentration risks across DeFi and traditional finance.

So the lines can become very blur and that's where it creates more complexity.

So what happens in the world? Some regulators already started to express their policy thinking and approach in their own jurisdiction. So let me give you a few examples.

Now at the Australian Financial Review Cryptocurrency Summit in October this year, the Assistant Governor of Financial System at the Reserve Bank of Australia spoke about the uncertainty around governance and risk management responsibilities. For example, as the cross-border and AML responsibilities do not disappear if you go into tokenised finance, so who is going to be made accountable if a smart contract on a programmable ledger goes wrong?

Now in another example, last year in October, the Monetary Authority of Singapore, took an which is collaborative, to start to work with financial institutions under a project called Project Guardian. This is a project that takes the opportunity to test the feasibility of applications in asset tokenisation and DeFi, while the Monetary Authority of Singapore or MAS, sought to manage the risks to financial stability and integrity.

Now we also noted that Australia's Treasury is leading the work on a regulatory framework for tokenised assets and the UK Financial Conduct Authority is also working with the Treasury's Asset Management Taskforce on a blueprint for fund tokenisation.

We also noted that some regulators are even having combined efforts now to work on identifying potential risks and possible gaps in policies and legislation relevant to tokenised solutions. Now just lately, it was announced that the financial regulators from Singapore, Japan, Switzerland and UK would partner to advance digital asset pilots in fixed income, foreign exchange and asset management products.

Peter

Now from what I am hearing from you of the different perspectives in the private and public sectors, what then do you think would be the future of tokenisation of real-world assets?

Yeo Lay Geok

Well that's a pretty good question and I thank you for that. Personally, I think that there is a big potential for tokenisation of real-world assets to grow, for two good reasons. Now firstly, there is a real case of digitalisation of tangible assets that can benefit the growth of a real economy, through the wider reach to investors and the creation of new jobs such as digital technology, risk and compliance functions. Secondly, from the use cases we have seen, there is indeed the benefit of faster settlement of some types of transactions, that would significantly reduce settlement risk and promote efficiency in the financial market.

Now however, given the recent adverse events in the cryptoasset space which also involve tokens, blockchain technology and DeFi, I think that regulators are taking a cautious approach to facilitate the tokenisation of real-world assets that is still in the nascent phase.

We must not forget also that regulators need to familiarise with the different risks present in the processes relating to tokenised solutions, and decide if their existing regulatory framework can accommodate such innovations, or if the regulators would have to come up with a new framework.

I also think that private sector experts in blockchain would need to help to empower risk and compliance personnel, who are generally more familiar with traditional finance, to understand and to appreciate, and to get used to the mechanisms of tokenisation enabled by blockchain technology, and know how to manage and mitigate the risks. Now ultimately, regulators around the world would look towards the risk and compliance functions to be able to explain, and assure the regulators that the financial institution has adequate governance and risk management processes for such models.

Peter

Thank you Lay Geok. We have come to the end of this podcast. We hope that our audience have enjoyed it. We have provided relevant references at LG&D website. Please also refer to the disclaimer relating to this podcast at the same page. Thank you for listening in, and do tune in to other topics at LG&D website.

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