

Securities Regulation in the Web3 Era Keynote Speech at Hong Kong Web3 Festival 2023

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Good morning. It's an honour to be invited to deliver a keynote speech at the Hong Kong Web3 Festival 2023.

Over the past few years, there have been so many amazing developments and breakthroughs across various technologies. For example, we are seeing enterprises incorporating artificial intelligence (**AI**) within their businesses, and central banks and financial institutions exploring the benefits of distributed ledger technology (**DLT**).

Just a few weeks ago, I experienced first-hand the wonders of ChatGPT¹. The potential applications of this technology and their ramifications for the financial services industry are huge. We have seen news reports of financial firms testing similar tools and using them to write research reports. I must confess that the thought of using ChatGPT to write this speech had also crossed my mind, but I thought better of it. And that's because this novel technology has its own limitations and flaws, including the fact that it sometimes provides plausible sounding but incorrect or nonsensical responses to questions.

One example of this phenomenon involved an asset manager asking ChatGPT to name 10 stocks that would benefit from virtual reality as a theme. When ChatGPT only provided seven names and the asset manager prompted it for the remaining three stocks, ChatGPT made up three fake ones.

This story highlights the importance of harnessing the benefits of innovative technologies in a responsible way.

And just as the emergence of Web3, which is built on DLT, promises to bring with it enormous economic benefits and the potential to change the internet and the way we interact, we must also be aware of the potential risks this entails and manage them properly.

To be clear, the Securities and Futures Commission (**SFC**) recognises the opportunities presented by Web3. Indeed our Chief Executive Officer Ms Julia Leung already stated in her remarks at last year's Hong Kong FinTech Week that the SFC is attuned to the potential impact on our daily lives brought by Web3, virtual assets (**VA**), non-fungible tokens (**NFTs**), the Metaverse and GameFi, and that we are supportive of the underlying DLT and other responsible innovation².

Note: This is the text of the speech as drafted, which may differ from the delivered version.

¹ A text-generating AI chatbot.

² [Embracing Innovation, Regulation and the Future of Finance - Keynote address at Hong Kong FinTech Week 2022](#) by Ms Julia Leung, 31 October 2022.

So let me take the opportunity today to talk about two topics at the intersection of Web3 and securities regulation – the SFC’s regulatory stance and policy initiatives in relation to centralised VA trading platforms (**VATPs**) and decentralised finance (**DeFi**). Let’s start with DeFi first.

DeFi

Just as the evolution from Web2 to Web3 seeks to decentralise the internet and redistribute the power from “Big Tech” and platforms back to users, DeFi seeks to decentralise the financial ecosystem and disintermediate traditional financial intermediaries in the provision of products and services using DLT, VA and smart contracts. The original idea behind DeFi was to “democratise” finance, such that any user with an internet connection and a wallet for storing VA could access DeFi services.

Proponents believe that if the ethos behind DeFi is implemented, then this could cause a seismic, paradigm shift in the financial services industry. We already see that many traditional financial products and services have equivalents in DeFi, including trading, borrowing and lending, asset management, insurance and derivatives.

Regulatory issues presented by DeFi

However, DeFi presents its own set of regulatory issues.

First, there are financial stability implications arising from the interconnectedness within the DeFi and VA ecosystems, as well as between DeFi and the traditional financial worlds. Financial stability concerns also arise from leverage obtained by, for example, posting VA borrowed from one DeFi borrowing and lending protocol as collateral to obtain further loans.

Second, there is limited transparency on these interconnections and linkages due to a lack of data, partly because many firms and activities are currently not regulated.

Third, the DeFi ecosystem is exposed to market integrity issues, such as price oracle manipulation, front running transactions and other types of abusive behaviours.

And last but not least, there are investor protection concerns arising from the increasing number and scale of cyber attacks, smart contract code exploits, as well as frauds and scams involving DeFi protocols. For example, one of the largest hacks resulted in USD 625 million being stolen from the NFT gaming platform Axie Infinity in March 2022.

Challenges with regulating DeFi

Now you may ask, given the unique features of DeFi, whether it is possible to regulate it. After all, you may have heard that regulating DeFi is not a straightforward task due to various factors.

First, who should be held accountable when things go wrong? There is no traditional financial intermediary or smart contract run autonomously. In some DeFi protocols, the developer or operator has no ability to alter the smart contract’s code once it has been deployed on the blockchain.

Additionally, the governance of a DeFi product or service may be decentralised to varying degrees and may involve the use of governance tokens or decentralised autonomous

organisations (**DAOs**). Governance token holders, which may include the original developer of a smart contract, as well as the users of a DeFi product or service, may be able to vote on product changes such as new product features. With such decentralised governance, it may be difficult to identify the persons responsible for a DeFi product or service. These issues beg the question of whether a DeFi service is “controlled” by the smart contract developer, some or all holders of the governance tokens or the members of a DAO.

Second, the pseudonymous nature of DeFi renders the identification of the developers and operators of a DeFi protocol in real life challenging.

This challenge is further compounded by the cross-border nature of DeFi products and services, whose developers and operators may be based in multiple jurisdictions.

The SFC’s views on DeFi

Let me share with you the SFC’s current thinking on DeFi, which is not all that profound and is rather mundane even.

In short, the SFC views DeFi activities through the same existing regulatory framework that applies to the financial activities we regulate. As such, as long as a DeFi activity falls within the scope of the Securities and Futures Ordinance (**SFO**), it would be subject to the same regulatory requirements applicable to a traditional finance activity, under the “same business, same risk, same rule” approach that the Financial Secretary alluded to earlier. The person operating or performing such activity would be subject to our licensing requirements and be regulated by the SFC.

By way of illustration, the provision of automated trading services is a regulated activity under the SFO³. If a decentralised platform allowed trading in VA which constitute securities or futures as defined under the SFO, then the platform and its operators may be required to be licensed for the Type 7 regulated activity of providing automated trading services.

The offer of collective investment schemes (**CIS**) to the public in Hong Kong is subject to authorisation requirements under the SFO. As such, the marketing of a DeFi liquidity pooling protocol to Hong Kong which falls within the definition of a CIS may be subject to such legal requirements. The SFC issued a statement on virtual asset arrangements claiming to offer returns to investors in December 2022⁴, which warned market participants of the risks associated with VA platforms offering VA “deposits”, “savings”, “earnings” or “staking” services to investors in Hong Kong. Amongst other things, we reminded market participants that some of these arrangements may constitute CIS under the SFO and may in fact be unauthorised CIS.

The challenges associated with identifying the persons who should be held accountable in DeFi may not actually be insurmountable.

To understand who to hold to account, the SFC will assess each DeFi service or activity on a case-by-case basis after understanding the inner workings and arrangements of a DeFi protocol. But with regards to some of the challenges outlined earlier, I would like to point out some DeFi protocols may be decentralised in name only. In reality, a small group of developers, operators or their related parties may be in de facto control, as they may, for

³ Type 7 regulated activity (providing automated trading services).

⁴ [Statement on virtual asset arrangements claiming to offer returns to investors](#), 13 December 2022.

example, hold the vast majority of the governance tokens, or have the power to vet governance proposals put forward by others. As such, when analysing this issue, it is important to look through to the actual substance of the DeFi arrangements, rather than how they are labelled.

Centralised VA trading platforms

Next, I want to talk about centralised VATPs.

The existing VATP regime

To date, the SFC has focused more on centralised VATPs as this is where the majority of VA trading activities takes place, and this touch point with the investing public poses investor protection concerns. This explains why the SFC introduced in 2019 a comprehensive opt-in regime for the regulation of VATPs which provided trading services in at least one security token. This regime covered requirements which were applicable to traditional brokers and automated trading venues, with certain adaptations to cater for the specific risks of VAs, in line with the “same business, same risk, same rule” mantra I alluded to earlier. This meant that we regulated VATPs from not just an anti-money laundering perspective, but also from an investor protection standpoint, with requirements encompassing areas such as the safe custody of client assets, conflicts of interest, cybersecurity, prevention of market manipulative and abusive activities, as well as the admission process for listing VA for trading.

The proposed new VATP regime

As you may be aware, following on from the passage of the Anti-Money Laundering and Counter-Terrorist Financing (Amendment) Bill 2022 by the Legislative Council, the SFC is looking to implement a new licensing regime covering centralised VATPs which enable trading in non-security tokens. When this new regime comes into effect on 1 June 2023, all centralized VATPs operating in Hong Kong, regardless of whether they offer trading in securities tokens or non-securities tokens, must be licensed by the SFC.

Now the events of the crypto winter have only reinforced our resolve and conviction that it is necessary to set rigorous standards for the regulation of VATPs with appropriate guardrails in place to protect investors, market integrity and market stability. Although those events demonstrated that the size of the VA market is not yet large enough to cause systemic risk concerns, we must not forget that real consumer harm was caused. For example, retail investors lost money from the implosion of the Terra/Luna algo stablecoin and the collapses of the VA lending platform Celsius Network and the centralised exchange FTX.

News reports of the post-mortem on FTX’s failure highlighted a whole host of issues, including the lack of basic governance and risk management controls, conflicts of interest and the misuse of client assets, which simply cannot be tolerated in any entity that is subject to regulation. Such failings underscore how critical it is for VATPs to have a robust risk management mindset accompanied with proper and effective controls spanning the areas already covered under our existing VATP regime.

That’s why when the SFC released its consultation paper, we effectively transposed the existing regulatory requirements under our current opt-in regime into the proposals for the new regime, with certain amendments to account for market developments and the lessons learned from operating the existing regime.

Under the current regime, the SFC imposed a condition on VATPs' licences which restricted them to only serving professional investors. The SFC proposed to relax this condition to allow VATPs to serve retail investors as well, subject to additional guardrails being put in place to protect investors.

These include requiring a VATP to understand the risk profile of a client during the onboarding process to assess whether the provision of its services to that client is suitable, as well as setting appropriate limits by reference to the client's financial situations and personal circumstances to ensure that the client's VA exposure is reasonable.

Aside from requiring a VATP to establish criteria on the due diligence and admission of VA for trading, the SFC also proposed that a VA made available to retail clients should satisfy additional admission criteria which would qualify it as an "eligible large-cap virtual asset".

As I am sure you would all agree, in light of the recent turmoil and scandals seen in the VA ecosystem, it is critical that SFC-licensed VATPs have appropriate controls and risk management measures in place to prevent the occurrence of similar incidents in Hong Kong.

The SFC's consultation on the proposed regulatory requirements under this new regime closed on 31 March. I would like to thank those market participants and interested parties who reviewed the consultation paper and provided feedback on the proposals. I cannot emphasise enough how important such engagement and constructive dialogue with the industry is to the SFC's policy formulation. We will of course diligently review all the comments received to ensure that Hong Kong implements a robust regime for centralised VATPs which is fit for purpose and strikes the appropriate balance between investor protection and support for innovation.

Conclusion

In conclusion, the SFC fully supports the use of novel technologies to deliver financial services and products in Hong Kong. We should be bold in embracing innovation, alert to the potential risks, and steadfast in our commitment to protecting investors and market integrity.

I sincerely believe that the collective efforts of the government, regulators and industry will ultimately bear fruit and culminate in the establishment of Hong Kong as not just an international financial centre, but the premier hub for Web3 and virtual assets.

I hope you enjoy the festival. Thank you very much.