

Nina Reiser* / Basil Wächli**

Whitepaper Decentralised Finance

Decentralised Finance Symposium, 24th of March 2024

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I. Overview

On the 24th of March 2024, expert speakers from the Swiss Financial Market Supervisory Authority (FINMA), the industry and academia shared their perspectives on the prospects and challenges of Decentralised Finance (DeFi) at the Decentralised Finance Symposium in Zurich. The contributions of the speakers, representing various stakeholders of DeFi, provided valuable insights into the legal and practical intricacies of the most important business models in DeFi and the applicable regulatory framework in Switzerland.

A comprehensive exploration of FINMA's perspective on the regulation of DeFi allowed participants to gain clarity on FINMA's evaluation methodologies for DeFi projects, potential regulatory anchor points, and the expectations and compliance requirements facing licensed financial institutions seeking to integrate DeFi solutions into their business models. The Symposium was organized by the University of St. Gallen's Centre for Financial Services Innovation (FSI-HSG) as a hybrid event held in English.

Prof. Dr. Nina Reiser opened the Symposium with reference to a Uniswap Foundation proposal from the end of February 2024 regarding modifications to Uniswap's community governance. The proposal contained changes in the protocol's fee mechanism to reward users who delegate and stake their UNI tokens.¹ As a decentralised Exchange, Uniswap is a DeFi infrastructure.² Would this change in the protocol's fee mechanism create an anchor point for regulation? Would Uniswap tokens be treated as securities by supervisors? And if so: What would be the consequences? Would an authorisation be required? What would this mean for regulated financial institutions such as banks, which provide custody for these tokens? The opening of the Symposium was followed by three keynote presentations by *Dr. Lidia Kurt*,³ *Michael Svoboda*,⁴ and *Matthias Obrecht*.⁵ Subsequently, the keynote speakers were joined by *Björn Flückiger*⁶ for a panel discussion moderated by *Prof. Dr. Nina Reiser*.

¹ JAMES HUNT, Uniswap Foundation token rewards proposal passes temperature check vote (The Block, 6 March 2024), <https://www.theblock.co/post/280809/uniswap-foundation-proposal-temp-check> (last accessed 23 April 2024). The proposal was, however, ultimately rejected. See hereto Coinpedia, Uniswap Governance Once Again Rejects the Fee Switch Proposal (11 March 2024), <https://www.binance.com/en-IN/square/post/5257517752729> (last accessed 23 April 2024).

² See Uniswap Labs Blog, Introducing Uniswap v3 (21 March 2021), <https://blog.uniswap.org/uniswap-v3> (last accessed 23 April 2024).

³ Founder of vision&. As a digital asset business studio, vision& builds digital asset and blockchain based offerings for clients.

⁴ CEO of Liquity.

⁵ Head Market Analysis & Lead Fintech Desk at FINMA.

⁶ Head Legal & Member of the Executive Committee at SIX Digital Exchange AG (SDX). SDX is operating a DLT-based stock exchange and central securities depository, see below Section III.

* *Prof. Dr. Nina Reiser*, Rechtsanwältin, LL.M., is Associate Professor of Financial Markets Law at the University of St. Gallen (HSG). She is also Vice-Director at the Institute for Law and Economics (ILE-HSG) and affiliated with the Center for Financial Services Innovation (FSI-HSG).

** *Basil Wächli*, MLaw, LL.M., is a research assistant at HSG.

II. Keynote presentations

1. Bridging DeFi and traditional finance: an industry outlook

1.1. Introduction

Dr. Lidia Kurt opened the first keynote by outlining the promise of DeFi: a financial system where security is provided solely by relying on decentralised blockchain protocols, or, in other words, a world in which insurance does not require insurers, trading does not require exchanges, settlement does not require central securities depositories (CSDs), banking does not require banks, and the creation of derivatives does not require issuers.

Many of these examples are currently being developed and are gaining in importance as the Total Value Locked in DeFi protocols has recently risen to a substantial level of around USD 100 billion.⁷ Simultaneously, DeFi and traditional financial markets are becoming increasingly interconnected. On one hand, a growing number of traditional financial institutions are seeking to engage in DeFi. On the other hand, many DeFi protocols rely on traditional finance for the performance of their services. For example, Tether Holdings Ltd., the issuer of the stablecoin Tether, became one of the top 25 holders of United States Treasury bills in 2023, with a position valued at approximately USD 63 billion as of 31 December 2023.⁸

Recognising the increasing interconnectedness of DeFi and traditional finance, the speaker identified key challenges to bridging the gap, exemplified bridges between DeFi and traditional finance based on selected use cases, and highlighted potential focal points for future regulation from an industry perspective.

1.2. Key challenges and potential solutions

The first challenge highlighted during the keynote presentation was the compliance of DeFi applications with Know-Your-Customer (KYC) obligations under current Anti-Money Laundering (AML) regulations. Emphasis was placed on the failure of current DeFi applications to properly comply with KYC obligations. Other challenges mentioned include data privacy and cybersecurity risks, the lack of adequate recourse mechanisms, immature governance models and regulatory uncertainty.

To bridge the gap between DeFi and traditional finance, the speaker first highlighted the importance of ensuring interoperability between DeFi applications and tradi-

tional finance platforms, pointing to the potential benefits resulting from the combination of on- and off-chain elements. Secondly, the speaker underlined the significance of fostering fruitful collaborations between traditional financial institutions and DeFi protocols. Thirdly, it was noted that bridging the gap between DeFi and traditional finance is contingent on a regulatory framework that adequately accommodates DeFi applications.

Following this, the speaker called upon regulators to rethink the regulatory approach for DeFi applications rather than pigeonholing them within the confines of the existing regulatory framework, which predominantly focuses on financial intermediation. Furthermore, traditional financial institutions were urged to adapt their mindset when seeking to engage in DeFi. In particular, the speaker stressed the significance of breaking away from traditional «silos» in leveraging the benefits of DeFi.

1.3. Selected use cases

In a first use case exemplifying bridges between DeFi and traditional finance, the speaker introduced the Distributed Ledger Technology (DLT) Trading System currently under development by BX Digital. BX Digital will provide a trading and settlement infrastructure for tokenised securities without a CSD by orchestrating Delivery vs. Payment between on-chain assets and fiat Swiss francs. The project therefore contributes to the interoperability of DeFi and traditional finance. The second use case concerned the provision of an institutional-grade recovery system for non-custodial wallets, where the responsibility of storing and securing the private key lies solely with the wallet owner. The recovery system is based on the identification of the owners of smart contract-based wallets by selected guardians if the private key is lost. Lastly, the speaker introduced a potential solution for bridging the gap between public permissionless blockchains, which are available to everyone to participate in the consensus process for validating transactions and data, and existing KYC/AML obligations currently being developed in the industry. A non-transferable identity non-fungible token (NFT) issued by a regulated institution is thereby used to verify and monitor the identity associated with a non-custodial wallet.

1.4. Potential focal points for future regulation: an industry perspective

In relation to the regulation of DeFi, the speaker highlighted the importance of distinguishing between DeFi and Centralised Finance (CeFi). Drawing from a recently published research paper by SCHULER/CLOOTS/SCHÄR,⁹

⁷ See DefiLlama (n.d.), <https://defillama.com> (last accessed 23 April 2024).

⁸ See Tether Holdings Ltd., Independent Auditors' Report on the Consolidated Reserves Report of 31 December 2023, <https://tether.to/en/transparency/?tab=reports> (last accessed 23 April 2024), p. 3.

⁹ KATRIN SCHULER/ANN SOFIE CLOOTS/FABIAN SCHÄR, On DeFi and On-Chain CeFi: How (Not) to Regulate Decentralized Finance, *Journal of Financial Regulation* 2024, p. 1 *et seq.*

the speaker presented the concept of on-chain CeFi, which refers to blockchain-based applications that are subject to centralised control and therefore not truly decentralised from an economic point of view. In line with the proposal of SCHULER/CLOOTS/SCHÄR, the speaker suggested applying the current regulatory framework for CeFi to on-chain CeFi applications, citing their similar risk profiles. This corresponds with FINMA's approach to assessing DeFi projects, which is based on the principle of «same business, same risks, same rules».¹⁰ At the same time, regulators and financial market supervisors were urged to treat truly decentralised applications differently as they eliminate many risks addressed by current regulations.

In determining whether blockchain-based applications qualify as DeFi services, the speaker highlighted the importance of taking into account all layers of a DeFi stack, including the underlying blockchain protocol.¹¹ At the same time, the need to determine potential effects of specific centralisation vectors for regulatory purposes was emphasised. The speaker argued that regulatory intervention is warranted only when such centralisation vectors demonstrably amplify the risks addressed by financial market regulations.

2. Liquidity protocol as a DeFi example

2.1. Introduction

Michael Svoboda started the keynote with a brief overview of the history of modern finance and financial regulation. The speaker contended that financial institutions were primarily introduced to enhance the efficiency and convenience of transactions rather than to address security concerns. Correspondingly, the intermediation of finance introduced new risks associated with the centralisation of power and control, prompting the necessity for financial regulation. By leveraging digital technology to enable peer-to-peer transactions on a global scale, DeFi applications allow users to transact without relying on financial intermediaries. As a result, the speaker argues that DeFi is able to mitigate the risks associated with centralised power structures. Building on this historical perspective, the speaker presented the Liquity protocol and provided a practical outlook on the regulation of DeFi.

2.2. The Liquity protocol

The speaker described the Liquity protocol as an internet-based ATM enabling users to secure margin loans against Ether. By posting Ether as collateral, users are able to obtain loans denominated in the protocol's own currency LUSD, which is pegged to the US Dollar and backed by collateralised Ether at a ratio of at least 110%. LUSD can in turn be used in other DeFi applications or swapped for crypto or fiat currencies. Furthermore, LUSD can be redeemed against Ether at any time. Underscoring the absence of a governance mechanism and the protocol's immutable nature, the speaker emphasised that its developers wield no control over assets, revenues, or the protocol itself.

The speaker highlighted several advantages of Liquity over intermediated financing, including low financing costs, a high loan-to-value ratio enabled by instant programmatic collateral liquidation, and a short time-to-loan. Additionally, the speaker drew attention to the transparent backend of Liquity (the code of the application has been published as an open-source repository on GitHub¹²), which provides an alternative to the opaque structures inherent to traditional finance. It was further noted that Liquity unlocks new opportunities for CeFi institutions. For example, financial institutions may reduce capital costs by facilitating direct transactions between their clients and the Liquity protocol, which enables off-balance sheet treatment for capital adequacy purposes and reduces counterparty risks for clients under Swiss bankruptcy laws. As was mentioned by the speaker, a first use case for a respective DeFi gateway service is currently being offered by Bitcoin Suisse.¹³

2.3. A practical perspective on the regulation of DeFi

At the outset, the speaker emphasised the need to understand the risks associated with DeFi in deciding on the most suitable regulatory safeguards. Building upon FINMA's risk-based supervisory approach¹⁴ and the principle of «same business, same risk, same rules»,¹⁵ the presentation set forth a brief comparison of the risks associated with Liquity and margin loan offerings provided by traditional financial institutions. The speaker noted that clients of traditional financial institutions are exposed to comparatively high risks related to the cus-

¹⁰ See below section II.3.1., see also FINMA, Risk Monitor 2022 (10 November 2022), <https://www.finma.ch/en/documentation/finma-publications/reports/risikomonitor/> (last accessed 23 April 2024), p. 19.

¹¹ For further information hereto see THOMAS JUTZI/ANDRI ABBÜHL, Fintech und DLT, Bern 2023, N 1349.

¹² See Liquity, liquidity / dev (GitHub, 2019), <https://github.com/liquity/dev> (last accessed 23 April 2024).

¹³ See Bitcoin Suisse, Collateralized Loans, Factsheet (June 2023), https://files.bitcoinsuisse.com/assets/pdf/Factsheet_Collateralized_Lending_Bitcoin%20Suisse.pdf (last accessed 23 April 2024).

¹⁴ See below section II.3.2, see also FINMA, Risk Monitor 2023 (10 November 2023), <https://www.finma.ch/en/documentation/finma-publications/reports/risikomonitor/> (last accessed 23 April 2024), p. 6; FINMA, Risk Monitor 2022 (fn. 10), p. 5.

¹⁵ See above section II.1.4.

tody of assets, counterparty risk, risks related to information asymmetries regarding the liquidity and solvency of the relevant counterparty or financial institutions, and risks arising from changing terms and conditions. Compared to clients of traditional financial institutions, clients of Liquity do not face these risks introduced by financial intermediaries but are exposed to higher technological risks, such as the loss of assets due to bugs in the application.

Pointing to the distinct risk profiles of DeFi applications and traditional financial services, the speaker argued that the principle of «same business, same risks, same rules» does not warrant applying regulations aimed at mitigating risks posed by financial intermediaries to truly decentralised applications. Instead, the speaker suggested that alternative approaches such as the adoption of product liability regimes and self-regulation may be a better fit for addressing the risks posed by DeFi applications.

3. Regulatory anchor points of DeFi-services and their use by regulated institutions

3.1. Introduction

In line with art. 4 FINMASA,¹⁶ *Matthias Obrecht* first pointed to FINMA's overarching objectives of protecting individuals and the functioning of financial markets as a whole, thereby «sustaining the reputation, competitiveness and sustainability of Switzerland's financial centre.» Following this, the speaker outlined FINMA's approach to supporting innovation and fintech, which adheres to the principle of technology neutrality and is guided by a functional perspective in assessing new business models, along the principle of «same business, same risks, same rules».

The speaker pointed out that FINMA is not a regulator and therefore primarily deals with the application of existing regulations. At the same time, it was mentioned that the regulatory framework provides for a high degree of flexibility due to its technology neutral and principle-based architecture. Correspondingly, the speaker emphasised that FINMA focuses on establishing legal certainty by explaining how the regulatory framework might apply to new circumstances, technologies and ideas. This was illustrated using the examples of the ICO and Stablecoin Guidelines^{17, 18} published by FINMA in 2018 and 2019 respectively. According to the token tax-

onomy introduced with the ICO Guidelines, FINMA differentiates between payment tokens as an AML-subordinated means of payment, unregulated utility tokens and asset tokens, which are, in most cases, regulated as securities. The Stablecoin Guidelines contain an indicative supervisory classification of stablecoins under various financial market acts based on the specific characteristics of individual use cases and outline respective regulatory requirements for issuers and users.

Drawing from the overarching principles governing FINMA's approach to innovation and fintech, the speaker examined the challenges shaping FINMA's policy approach towards DeFi, outlined FINMA's evaluation methodologies, identified potential regulatory anchor points and articulated FINMA's expectations and requirements facing licensed institutions seeking to integrate DeFi applications into their business models.

3.2. FINMA's policy approach in evaluating DeFi projects

The speaker first highlighted FINMA's commitment to the overarching principle of technology neutrality in applying existing regulations to DeFi applications. Correspondingly, the evaluation of DeFi applications by FINMA is marked by an abstraction from the use of specific technologies or procedures. Additionally, the speaker noted that FINMA follows the principle of substance over form. As a consequence, licensing requirements are uniformly applied to DeFi applications involving new technical or legal implementations if they engage in activities that would otherwise require licensing under financial market laws. Thereby, FINMA follows an economic perspective in determining if such activities would be subject to respective licensing requirements. Applying the principle of «same business, same risks, same rules» to DeFi, the speaker further noted that the rules applicable to financial intermediaries should apply to DeFi applications to the extent that they offer the same services and pose the same risks as traditional financial intermediaries.

3.3. Risks associated with DeFi

The speaker differentiated between risks for consumers, risks for financial institutions and risks for the integrity of financial markets and financial stability. The primary risk identified for consumers was the loss of assets as a result of input errors, bugs in the DeFi application, hacking or fraud. For financial institutions seeking to integrate DeFi solutions, the main risks identified were operational risks, which are amplified by the inherent lack of control mechanisms, legal and reputational risks as well

¹⁶ Federal Act of 22 June 2007 on the Swiss Financial Market Supervisory Authority (Financial Market Supervision Act, FINMASA), SR. 956.1.

¹⁷ FINMA, Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) (16 February 2018), <https://www.finma.ch/en/authorisation/fintech/unterstellungsanfragen-und-icos/> (last accessed 23 April 2024).

¹⁸ FINMA, Supplement to the guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) (11 September

ber 2019), <https://www.finma.ch/en/authorisation/fintech/unterstellungsanfragen-und-icos/> (last accessed 23 April 2024).

as market and counterparty risks that may occur depending on the specific setup of DeFi applications. The speaker noted that FINMA has currently not identified any systemic risks associated with DeFi, as the volume of the DeFi market has not yet reached a systemically relevant level. Nevertheless, it was mentioned that systemic risks may arise in the future as the DeFi market develops. In relation to market integrity, the speaker highlighted AML and Combating the Financing of Terrorism (CFT) risks as well as the evasion of sanctions as potential risk factors. Lastly, the speaker pointed to the potential risk to financial stability posed by interlinkages between DeFi and the traditional financial system.

3.4. Regulatory challenges and potential anchor points

Similar to the challenges previously identified by the representatives of the industry, the speaker highlighted the fact that current financial market regulations are primarily framed around financial intermediaries as their point of reference. In particular, the speaker pointed to the challenge of attempting to find corresponding anchor points in relation to fully decentralised applications, which could call existing regulatory concepts into question.

At the same time, the speaker drew attention to the phenomenon of alleged decentralisation, which illustrates the prevalence of central control mechanisms or centralisation vectors in DeFi applications. Without dismissing the idea of true decentralisation, the speaker acknowledged the contention among some scholars that a certain level of centralisation in DeFi applications is inevitable.¹⁹ Apart from the fundamental question of whether policy makers accept that truly decentralised DeFi applications would not be subject to financial market supervision, the speaker consequently highlighted the importance of determining potential regulatory anchor points of DeFi projects.

With reference to the aforementioned notion of on-chain DeFi,²⁰ the speaker highlighted the lack of a framework for differentiating between fully decentralised applications and DeFi projects that are, in substance, centralised. Following this, the speaker presented a non-exhaustive list of potential anchor points that could be used to differentiate between DeFi and (on-chain) CeFi applications, including:

- persons controlling the development of the smart contracts, especially if they hold an admin key required to implement upgrades to the application,

- the majority holders of governance tokens enabling the determination of the further development of the smart contracts,²¹
- third parties such as oracle providers (entities facilitating the execution of smart contracts by providing real-world input and output data) if the functioning of the smart contracts significantly depends on their input,
- persons who accrue income from a DeFi application,
- persons maintaining a permanent relationship with the users,
- and persons who control access to the DeFi application, e.g. by way of whitelisting.

3.5. Use of DeFi applications by licensed institutions

Pointing to the aforementioned risks associated with DeFi, the speaker noted that the risk-based supervisory approach of FINMA warrants the fulfilment of certain requirements by traditional financial institutions seeking to engage in DeFi projects. Correspondingly, the speaker mentioned that FINMA expects such institutions to conduct an in-depth analysis and risk assessment of the respective DeFi project. Thereby, the institution must analyse the prudential status of the project as well as the involved parties, the monitoring and risk management of the project, the management of conflicts of interests as well as the handling of AML risks and suitability issues. In relation to cross-border offerings, the speaker noted that the institution is required to conduct a regulatory analysis of the project in relation to all target markets. Moreover, it was pointed out that the institution's risk framework and organisational rules, which are subject to authorisation by FINMA, must adequately depict the planned activities. The speaker remarked that the challenges observed by FINMA primarily concern the lack of transparency of many DeFi applications, as banks are struggling to obtain the information necessary for a conclusive risk analysis.

Following this, the speaker presented FINMA's recently published data insights,²² which are based on the introduction of quarterly cryptoasset reporting for all securities firms and banks engaging in the crypto sector. Cryptoasset reporting includes information on client categories, cryptoasset exposures and tokens held in custody, including tokens held for staking purposes, as well as information relating to third-party service providers. The presented results revealed that 34 banks and secur-

¹⁹ See, e.g., SIRIO ARAMONTE/WENQIAN HUANG/ANDREAS SCHRIMPE, DeFi risks and the decentralisation illusion, Bank of International Settlement (BIS) Quarterly Review (December 2021), https://www.bis.org/publ/qtrpdf/r_qt2112b.htm (last accessed 23 April 2024), p. 21 *et seq.*

²⁰ See above section II.1.4.

²¹ It was noted that this anchor point could be particularly relevant in practice, as the distribution of governance tokens is often highly concentrated.

²² FINMA, Annual Report 2023, <https://www.finma.ch/en/documentation/finma-publications/annual-reports--and-financial-state-ments/> (last accessed 23 April 2024), pp. 29–34.

ities firms were engaged in activities related to cryptoassets as of 31 December 2023. The speaker highlighted that 29 institutions provided services related to the custody of cryptoassets. However, a majority of banks outsourced the effective custody of cryptoassets to a small number of key players, leading to a highly intermediated market with custody chains of up to five banks within Switzerland.

3.6. Q&A

The first question referred to the prudential treatment of cryptoasset exposures for capital adequacy purposes proposed by the Basel Committee on Banking Supervision (BCBS).²³ Arguing that the capital requirements for cryptoasset exposures under the proposed amendment of the Basel Framework seem to go beyond the principle of «same business, same risks, same rules», the participant asked if regulators intend to prevent traditional financial institutions from entering the crypto sector. In addressing the question, the speaker first noted that the illustrated example shows that there are different approaches to regulating DeFi and the crypto sector in general. It was pointed out that the principles of «same business, same risks, same rules» and technology neutrality are adhered to by FINMA regarding the application of existing regulations. The speaker emphasised that this does not rule out the adoption of technology specific regulations in the future. At the same time, he noted that the Basel Framework is an international standard, not Swiss law, and therefore needs to be implemented by the legislative branch. Whether the implementation of the Basel Framework will lead to the adoption of technology specific legislation in Switzerland is therefore ultimately a political question that needs to be decided in the appropriate political process, according to the speaker.²⁴

A participant further asked the speaker how FINMA is facilitating the establishment of a framework to distinguish between regulated CeFi institutions and DeFi institutions falling outside the scope of existing regulations. The speaker noted that the establishment of a comprehensive framework to differentiate between CeFi and DeFi applications is challenging, as there is currently no common understanding among scholars and practitioners on how to approach the topic. As a result, the speaker did not anticipate the development of a consolidated

framework accommodating the different viewpoints of various stakeholders in the near future.

Pointing to the emergence of self-regulatory audits by the industry before a protocol is deployed, a participant enquired about the speaker's perspective on ongoing audit requirements in relation to DeFi protocols. The speaker agreed that recurring audits can help to increase the transparency of projects, noting that both the protocols and the risks associated with DeFi application can be subject to change. He further pointed out that DLT Trading Facilities²⁵ are currently subject to annual audit requirements if a public blockchain is used for settlement and custody purposes.²⁶

Referring to their pivotal function in the DeFi industry, a participant asked the speaker about FINMA's perspective on the regulation of stablecoins such as Tether.²⁷ The speaker first noted that FINMA's territorial reach is limited to activities conducted in Switzerland. Since Tether is not issued in Switzerland, FINMA lacks jurisdiction over the issuance of Tether. However, the speaker pointed out that Tether is classified as an AML-subordinated payment token under FINMA's token taxonomy.²⁸ As a result, projects and individuals making use of Tether in Switzerland may be subject to Swiss AML/CFT regulations.

III. Panel Discussion

On the basis of the last keynote, the moderator opened the panel by inquiring about the industry's perspective on potential regulatory anchor points used to distinguish DeFi applications from projects that are, in substance, centralised. *Dr. Lidia Kurt* noted that identifying regulatory anchor points of projects that have a clear connection to traditional financial systems is mostly unproblematic. For example, clear anchor points have been defined in relation to DLT Trading Facilities, which are subject to licencing by FINMA.²⁹ In contrast, difficulties arise regarding the identification of anchor points where DeFi applications are not yet linked to traditional financial markets. Pointing to the different risk profiles of fi-

²³ See BCBS, Prudential treatment of cryptoasset exposures (16 December 2022), <https://www.bis.org/bcbs/publ/d545.htm> (last accessed 23 April 2024).

²⁴ Critical of the implementation of the respective amendments to the Basel Framework in Swiss law HANS KUHN/ROLF H. WEBER, Zur Umsetzung des Basler Krypto-Standards in der Schweiz, Wie verhält sich nationale Finanzmarktpolitik zu internationalen Standards? Jusletter-IT (15 February 2024), para. 53 *et seq.* In accordance with the authors, such implementation would not be compatible with the principle of technology neutral regulation and would raise serious constitutional concerns.

²⁵ See art. 73a *et seq.* Federal Act of 19 June 2015 on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FinMIA), SR. 958.1.

²⁶ See art. 58g para. 2 Ordinance of 25 November 2015 on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructures Ordinance, FinMIO), SR 958.11.

²⁷ For further information regarding the role of stablecoins in DeFi see OECD, Why Decentralised Finance (DeFi) Matters and the Policy Implications (19 January 2022), <https://www.oecd.org/finance/why-decentralised-finance-defi-matters-and-the-policy-implications.htm> (last accessed 23 April 2024), p. 37 *et seq.*

²⁸ See above section II.3.1.

²⁹ See art. 73a *et seq.* FinMIA.

financial intermediaries and DeFi applications, the panelist encouraged debate in relation to the adoption of new anchor points for DeFi applications.

On the basis of this, *Michael Svoboda* highlighted the importance of evaluating the risks associated with specific anchor points in determining the regulatory treatment of DeFi applications. The panelist pointed out that, for example, the distribution of revenues does not inherently introduce new risks. In relation to Uniswap, the panelist noted that activating the fee switch neither adds a centralisation vector nor does it change the risks facing users. Following the principle of «same business, same risks, same rules», adjusting the protocol's fee mechanism would therefore not necessitate the imposition of additional requirements or different regulatory treatment of Uniswap. Similarly, the panelist argued that the provision of a user interface that facilitates access to a DeFi protocol does not introduce the same risks as those posed by financial intermediaries that enable transactions by taking control over the assets. Consequently, the panelist highlighted the importance of addressing these different technological and financial risks appropriately and proportionally.

Moving on from the topic, the moderator asked *Björn Flückiger* about the need for DeFi-specific financial market regulation from the perspective of a regulated institution. At the outset, the panelist noted that SIX Digital Exchange (SDX) is regulated both as a stock exchange³⁰ and a CSD and is therefore already operating under a stable regulatory framework.³¹ Highlighting the importance of looking at the different parts of the value chain, the panelist pointed out that for centralised financial market infrastructures such as SIX Group, the benefits of blockchains and DLT need to be assessed on a per service and per asset class-basis. For digital securities, advantages can be observed primarily for custody and post-trade services, including more efficient clearing and settlement operations. In relation to the clearing and settlement of transactions, the panelist pointed to the creation of a digital Swiss franc (wholesale central bank digital currency; wCBDC) in collaboration with the Swiss National Bank (SNB) as a practical, in production-example part of Project Helvetia,³² which allows participating banks to use wCBDC for the settlement of token-transactions in a Delivery vs. Payment fashion.³³ Furthermore, the panelist emphasised that the Swiss regulatory framework already accommodates

digital settlement and clearing of transactions, rendering an additional significant overhaul of the regulatory framework beyond the Swiss DLT-bill unnecessary. In relation to the possible intersection of regulated financial market infrastructures and DeFi projects based on public permissionless blockchains, the panelist referred to the keynote of *Matthias Obrecht* in highlighting the importance of conducting an in-depth analysis and risk assessment of the respective DeFi applications as well as the underlying technology.

Continuing the debate, the moderator asked the panelists to share their views on whether new regulations are necessary. Following FINMA's risk-based supervisory approach *Dr. Lidia Kurt* held that determining the application of existing regulations to DeFi infrastructures should extend beyond anticipating the potential emergence of new risks by acknowledging that DeFi is also able to mitigate many risks associated with traditional financial institutions. According to the panelist, this raises the fundamental question of whether truly decentralised applications should be regulated in the first place. The panelist emphasised the importance of adhering to the principle of technology neutrality to prevent the regulatory penalisation of new technologies.

Following this, *Matthias Obrecht* observed that, due to the broad terminology and range of applications, DeFi does not inherently imply lower risks. Consequently, the speaker emphasised the importance of analysing the specific protocols in evaluating the risks associated with DeFi applications. While acknowledging that some DeFi applications eliminate certain risks to the benefit of the users, the panelist pointed out that they might simultaneously increase other risks. Furthermore, the panelist noted that FINMA is inherently risk-oriented due to its statutory mandate.

Similarly, *Björn Flückiger* pointed out that while certain risks can be eliminated by DeFi applications (such as counterparty risks), the use of DeFi may introduce new risks (such as inherent operational risks related to the underlying blockchain protocol), leading to a shifting of the risk profiles rather than an overall decrease in risk.

Following-up on this, *Michael Svoboda* contended that DeFi is mostly associated with technical risks, highlighting the importance of transparency in relation to the technical implementation of DeFi applications. Simultaneously, the panelist reiterated that the introduction of a product liability regime may be a better fit for addressing technical risks. Using on-chain asset management as an example, the panelist further argued that the overall lower risk profile compared to traditional asset management should warrant a reduction of the regulatory requirements for this activity. In particular, the panelist pointed out that transparency is increased and the risk of misappropriation of funds can be eliminated, leaving only the risk associated with potentially poor in-

³⁰ Art. 26 let. b FinMIA.

³¹ Art. 61 FinMIA.

³² See BIS, Project Helvetia: a multi-phase investigation on the settlement of tokenised assets in central bank money (13 January 2022), <https://www.bis.org/about/bisih/topics/cbdc/helvetia.htm> (last accessed 23 April 2024).

³³ This includes the settlement of primary digital bond issuances in digital Swiss francs as well as cross-infrastructure settlements of digital bonds in wCBDC.

vestment decisions made by the asset manager and the technical risks of respective DeFi applications.

Picking up the example of on-chain asset management, *Dr. Lidia Kurt* highlighted the potential requirement of a centralised custodian under current regulations, noting that DeFi applications should not be forced to adopt centralised control mechanisms by regulators. Similarly, the panellist advised regulators against insisting on centralised governance mechanisms for smart contracts, citing concerns about security implications in relation to the underlying technology.

Returning to the question of whether new regulations are necessary, *Matthias Obrecht* highlighted the advantages of principles-based, technology neutral regulations. Noting that while technology specific, rule-based regulations might offer simplicity from a supervisory perspective, technology neutral and principles-based regulation has proven to enable FINMA to react swiftly and effectively to technological innovation. When asked

by the moderator about the supervisory point of view on self-regulation, *Björn Flückiger* pointed out that self-regulation for DeFi in particular could leverage the methodology of the current capital markets' self-regulatory framework (e.g., self-regulations of SIX Exchange Regulation AG applicable to SIX exchanges),³⁴ which allows for product-agnostic rulesets but sets minimal technical standards for service providers and operators.³⁵

³⁴ With respect to self-regulations for crypto assets, SIX Exchange Regulation has issued a Directive on Crypto-Assets as Underlying Instruments, which entered into force on 1 April 2024. See SIX Exchange Regulation AG, Directive on Crypto-Assets as Underlying Instruments (29 November 2023), <https://www.ser-ag.com/dam/downloads/regulation/listing/listing-rules/dca-en.pdf> (last accessed 23 April 2024).

³⁵ For DeFi, corresponding self-regulations could generally include minimum standards for the technical operation of smart contracts, their associated governance or listing requirements for the admission of tokens to trading.

Anzeige

Olivier Baum

Hybride Anleihen (hybrid bonds)

Wie lassen sich hybride Anleihen unter dem geltenden und unter dem neuen Aktienrecht mit Aktien unterlegen? Die vorliegende Dissertation analysiert diese wichtigen Finanzinstrumente aus juristischer und ökonomischer Sicht und stellt die bedeutenden Ausgestaltungsformen eingehend dar.

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