

Kilian Schärli / Luzius Meisser / Reto Luthiger

Classification of cryptocurrency staking under financial market law

"Staking" is the use of cryptocurrencies or other crypto-assets as collateral for the purpose of actively participating in a blockchain-based system with a decentralised organisation. Due to the technical complexity, holders often do not "stake" their crypto-assets themselves but transfer them to an intermediary with the necessary operational expertise. The article discusses the consequences of staking on the separability of the deposited crypto-assets and derives the requirements under financial market law that the service provider must fulfil. The authors conclude that crypto-assets can be used as collateral and therefore also for staking without compromising their separability. If crypto-assets of clients are held collectively during staking, professional service providers usually require a banking or fintech licence.

Article type: Article

Region: Switzerland

Legal fields: FinTech and RegTech; blockchain

Suggested citation: Kilian Schärli / Luzius Meisser / Reto Luthiger, Finanzmarktrechtliche Einordnung des Stakings von Kryptowährungen, in: Jusletter IT 30 September 2021

Table of Contents

1. Introduction
2. Staking of crypto-assets
 - 2.1. What is staking?
 - 2.2. Different forms of staking
3. Bankruptcy appraisal
 - 3.1. Legal development
 - 3.2. Separability according to art. 242a SchKG
 - 3.2.1. Obligation of availability (art. 242a para. 2 SchKG)
 - 3.2.2. Assignability (art. 242a para. 2 SchKG)
 - 3.2.3. Effect of staking on separability
 - 3.3. Separability acc. to art. 242b SchKG
4. Financial market law appraisal
 - 4.1. Unauthorised staking
 - 4.2. Authorised staking
 - 4.2.1. No investment by depository (art. 1b para. 1 lit. b BankG)
 - 4.2.2. Who bears the risk of staking?
 - 4.2.3. No interest paid by depository (art. 1b para. 1 lit. b BankG)
 - 4.2.4. Types of fintech licenses?
 - 4.2.4.1. Fintech license for cryptocurrencies held in collective custody
 - 4.2.4.2. Fintech license for public deposits
 - 4.2.5. Applicability of art. 4^{sexies} BankG
5. Result

1. Introduction

[1] In September 2020, Parliament adopted a set of legislative amendments to provide a better legal foundation for various applications of blockchain technology.¹ Together with the associated covering ordinance, these amendments bring about various improvements to the Swiss legal framework in connection with the use of decentralised technologies and crypto-based assets or crypto-assets². A total of ten federal laws were amended, including the Federal Debt Collection and Bankruptcy Act (SchKG) and the Banking Act (BankG).

[2] The SchKG now expressly regulates the segregation of crypto-based assets and data from the bankruptcy estate. This recognises the property-like characteristics of crypto-assets under bankruptcy law. Some voices would have welcomed an even more fundamental classification as chattel according to art. 713 of the Swiss Civil Code (ZGB); however, this was rejected due to the legal consequences that were difficult to foresee.³ At the same time, the banking insolvency provisions of the BankG were harmonised with the amendments to the SchKG and the "fintech licence" under art. 1b BankG, which had been little used until then, was upgraded. In the SchKG, the legislator has explicitly granted the holders of crypto-assets held in collective custody the right to separation. The depositories of cryptocurrencies in collective custody⁴ require a licence

¹ The authors would like to thank MLaw Julia Pugliese for her valuable assistance with this article.

² In this article, the terms "crypto-based assets" and "crypto-assets" are used synonymously.

³ See for example Ronald Kogens/Catrina Luchsinger Gähwiler, Blockchain: neue Rechtsgrundlagen müssen wasserfest sein, in: NZZ dated 20 June 2019, <https://www.nzz.ch/meinung/herausforderungen-von-blockchain-ld.1488163?reduced=true>.

⁴ "Cryptocurrencies" are crypto-based assets or crypto-assets of a payment nature.

under the BankG for their activities. This fits into the concept of the fintech licence, which was already geared to the safekeeping of client assets without the associated differential interest business. At the same time, this addressed the concern that, due to the changes in the SchKG, "bank-like" business models based on collective safe custody would not have been subject to any supervision by FINMA, even if they were large in scale.⁵

[3] This article focuses on the very specific issue of the right to separate staked crypto-assets and the associated consequences under financial market law. Staking received little attention at the time of the consultation on the draft law and can be seen as the first major test of the future viability of the legislative package.⁶ The core question is how the process of staking with the help of a third party can be classified economically and legally.

2. Staking of crypto-assets

2.1. What is staking?

[4] A blockchain is a decentrally organised data structure that allows globally consistent execution of transactions. Its most important application is the protection of cryptocurrencies and other crypto-assets. Their decentralised nature necessitates a consensus-building mechanism within the system.⁷ There are two main methods that are important for public blockchains: "proof-of-work" and "proof-of-stake". Unlike the proof-of-work method, validation in the proof-of-stake method is not based on computing power ("mining"), but on the use of crypto-assets by the network participants ("staking").⁸ Proof-of-stake is significantly more energy-efficient than proof-of-work and is generally considered the more sustainable option.⁹

[5] Only those who are willing to provide a minimum amount of crypto-assets as collateral and immobilise them for the duration of their participation in the system may actively participate in systems based on proof-of-stake. This "blocking" serves to punish the participant by destroying a part of his crypto-assets if he or she violates the rules of the system ("slashing"). At the same time, the participant receives a reward ("staking reward") for system-compliant behaviour in line with the majority of participants.¹⁰ While

⁵ Federal Department of Finance FDF, Consultation procedure on the Ordinance on the Adaptation of Federal Law to Developments in the Technology of Distributed Electronic Registers, Results Report dated 18 June 2021, P. 3 (cited EFD Results Report 2021).

⁶ In the context of the consultation, only the Swiss Blockchain Federation SBF referred to the issue of staking. The SBF already assumed that staking should not affect the separability of crypto-assets. This assumption was not contradicted in the Federal Council's consultation report - but it was not confirmed either, https://fedlex.data.admin.ch/filestore/fedlex.data.admin.ch/eli/dl/proj/6019/15/cons_1/doc_5/de/pdf-a/fedlex-data-admin-ch-eli-dl-proj-6019-15-cons_1-doc_5-de-pdf-a.pdf.

⁷ DANIEL RUTISHAUSER/RALF KUBLI/Rolf H. WEBER, Grundlagen, in: Rolf H. Weber/Hans Kuhn (Hrsg.), *Entwicklungen im Schweizer Blockchain-Recht*, Basel 2021, P. 9 et seq., N 22.

⁸ RUTISHAUSER/KUBLI/WEBER (Fn. 7), N 27.

⁹ In this context, see already Postulate 21.3199 Molina "Climate protection and cryptocurrencies. Promoting energy-efficient blockchain technologies", which points out the enormous energy consumption of proof-of-work blockchains and the related climate problem.

¹⁰ Bitcoin Suisse, *What is staking?*, 27 October 2020, <https://www.bitcoinsuisse.com/de/fundamentals/was-ist-staking>.

rewards are continuously credited, slashing, for example due to a deliberate rule violation or operational error, is very rare in practice.

[6] Those who wish can also participate several times and therefore increase the reward proportionally to the capital invested. This suggests the fallacy that the staking reward is an interest rate for lending capital to a third party. However, this analogy must be rejected on closer examination, because the capital invested is not transferred to a third party and remains allocated to the holder in the system, albeit in a blocked state. In economic terms, this transaction is therefore not a loan, but the use of an asset as collateral.

[7] For the sake of completeness, it should be noted that, unlike traditional collateral, for example to secure a loan, the stake in slashing is not realised but destroyed. So even in the event of slashing, no third-party gains power of disposal over the blocked crypto-assets. In our opinion, however, it should make no difference in the further analysis whether the crypto-assets are utilised or destroyed in the event of slashing. The decisive factor is that they are not used by any third party as long as they serve as collateral.

2.2. Different forms of staking

[8] Staking takes on different forms. In the simplest case, the holder of the crypto-assets and the operator of the technical infrastructure are one and the same person. Legally more interesting, on the other hand, are cases in which the holder of the crypto-assets and the technical operator of the network node are not identical.

[9] Contractually, a service provider can structure staking to apply as a deposit under banking law. This is the case if the holder transfers the cryptocurrencies in their entirety to the operator, thereby only creating a claim in the amount of the transferred cryptocurrencies, but not a right of separability. In general, however, it is more advisable to deposit the crypto-assets with the operator in separable manner.

[10] Some systems have explicit functions for the appointment of a third party as operator by the holder ("nominated" or "delegated" staking). In this case, the holder does not have to give the operator power of disposal over the crypto-assets but remains exposed to the risk of slashing if the operator makes a mistake. In delegated staking, it is already apparent from the data available on the blockchain that the delegated service provider is acting on behalf of his client. In contrast, the question of whether the operator is staking in his own name or in the name of the client can only be answered on the basis of the present contractual relationship.

[11] The minimum stake in staking is often significant. In the Ethereum system, it is 32 Ether and therefore currently around CHF 100,000. For this reason, joint or non-segregated staking is also offered in practice ("pooled" staking). Although this variant is legally the most demanding, it is often the most sensible economically.

3. Bankruptcy appraisal

3.1. Legal development

[12] Crypto-assets are often not held in custody by the beneficial owner himself, but by a corresponding service provider. Depending on how it is structured, safekeeping by a depository can pose various advantages for the holder of crypto-assets, such as the secure storage and management of private keys or the simple exchange of crypto-assets for state currencies.¹¹

[13] Whether or under what conditions the crypto-assets in question could have been separated in the event of the bankruptcy of the depository on the basis of art. 242 SchKG and to what extent there was a gap to be filled is disputed in the literature and has not been clarified by case law.¹²

[14] The legislator has eliminated this legal uncertainty with the introduction of art. 242a and 242b SchKG by legally anchoring the material prerequisites for the separation of crypto-based assets (hereinafter often referred to simply as "crypto-assets") in the bankruptcy of the depository. In this respect, it must be assumed that art. 242a and 242b SchKG create a final regulation for the separability of crypto-assets, which is why art. 242 SchKG can no longer be invoked for the separation of crypto-assets.

[15] Under certain conditions, the clients of such service providers now enjoy an explicit right to separation and therefore a similar legal position under bankruptcy law as the holders of objects held in custody.¹³

3.2. Separability according to art. 242a SchKG

[16] Provided that the client does not have his own access to the crypto-assets and the depository has all the necessary keys to access the crypto-assets, the crypto-assets would fall into the bankruptcy estate in the event of the bankruptcy of the depository, unless otherwise specified.¹⁴ For clients who cannot directly access their crypto-based asset rights due to a lack of (exclusive) actual power of disposal¹⁵, the right of separation legally enshrined in art. 242a SchKG is therefore of central importance.

¹¹ STEFAN KRAMER/DOMINIC WYSS, Verwahrung von digitalen Aktiven, in: Rolf H. Weber/Hans Kuhn (Hrsg.), Entwicklungen im Schweizer Blockchain-Recht, Basel 2021, P. 145 et seq., N 5.

¹² Message on the Federal Act on the Adaptation of Federal Law to Developments in the Technology of Distributed Electronic Registers of 27 November 2019, BBl 2020 233, P. 265 with references to relevant doctrinal opinions.

¹⁴ BBl 2020 (Fn. 12), P. 291 f.

¹⁵ BBl 2020 (Fn. 12), 291 f.; KRAMER/WYSS (Fn. 11), N 38; DOMINIK VOCK/DAVID MEIRICH, Aussonderung krypto-basierter Vermögenswerte und Zugang zu Daten im Konkurs, DLT-Mantelverordnung schafft Rechtssicherheit im SchKG, September 2021, https://www.mme.ch/de/magazin/aussonderung_krypto-basierter_vermoegenswerte_und_zugang_zu_daten_im_konkurs/.

¹⁶ Actual power of disposal is to be assumed, for example, if (1) the access key is known only to the client and only the client can directly dispose of it, if (2) the client and the depository have the identical access key and therefore both have direct access or (3) if there is a so-called multi-signature address. In these cases, the crypto-assets do not form part of the bankruptcy estate.

Art. 242a

¹ *The bankruptcy trustee shall make an order for the surrender of crypto-assets over which the bankrupt party has the power of disposition at the time of bankruptcy, and which are claimed by a third party.*

² *The claim is well-founded if the bankrupt party has undertaken to keep the crypto-assets for the third party at all times and these:*

a. are individually assigned to the third party; or

b. are assigned to a community and it is evident which share of the community assets the third party is entitled to.

³ *If the bankruptcy trustee considers the claim to be unfounded, a time limit of 20 days shall be set for the third party to file an action with the court at the place of bankruptcy. If this time limit is not met, the claim is forfeited.*

⁴ *The costs of surrender shall be borne by the person who requests it.*

The bankruptcy trustee may demand a corresponding advance payment.

[17] Pursuant to art. 242a para. 1 SchKG, crypto-assets are the subject of the separation proceedings. For the purposes of this provision, crypto-assets are all assets for which the power of disposition is exclusively conveyed by means of a cryptographic process.¹⁶ All blockchain-based tokens are therefore covered by the separation rule – irrespective of their design as a register value right.¹⁷

[18] According to art. 242a SchKG, the claim against the bankruptcy estate for the separation or transfer of the crypto-assets concerned is subject to two (cumulative) conditions. Firstly, the bankrupt depository must have given an undertaking to the client to keep the crypto-assets available for him at all times (para. 2). Secondly, it must be possible to allocate the value units held either to the client individually (para. 2 lit. a) or to a community (para. 2 lit. b).

3.2.1. Obligation of availability (art. 242a para. 2 SchKG)

[19] With the first condition for separability under art. 242a SchKG, the obligation of the depository to keep the crypto-assets available for the client at all times, it becomes clear that separability depends on the contractual relationship between the parties. These can choose via the structure of their contractual relationship whether the transfer of crypto-assets to the service provider constitutes a non-separable deposit under banking law or whether a separable custody exists. The decisive factor here is the obligation of the depository to keep the crypto-assets available at all times. Whether this obligation is actually complied with seems to be irrelevant for the assessment of separability under SchKG.

[20] The contractual relationship can be structured in such a way that it is possible at any time to convert crypto-assets held in custody into deposits with the client's consent

¹⁶ BBl 2020 (Fn. 12), P. 292.

¹⁷ DOMINIC WYSS, Gegenstand und Übertragung von DLT Wertrechten, Gemäss den vorgesehenen Gesetzesanpassungen im Zusammenhang mit verteilten elektronischen Registern, in: Jusletter 1 July 2019; KRAMER/WYSS (Fn. 11), N 37; STEFAN KRAMER/Urs MEIER, Tokenisierung von Finanzinstrumenten, in: GesKR 1/2020, P. 60 et seq., P. 72.

and vice-versa, provided that the respective requirements are met. Likewise, the separability of the crypto-assets in question is not affected if crypto-assets are exchanged for other crypto-assets, reallocated to different clients or otherwise replaced with the client's consent, provided that the respective requirements for the crypto-assets resulting from these processes are met.¹⁸

[21] However, the question arises as to when the obligation to hold crypto-assets available is breached by immobilisation or other restriction of the power of disposal. Such a breach of duty is likely to occur at the latest when the power of disposal over the crypto-assets is transferred to a third party. This means that crypto-assets are treated differently from physical objects in this context, but analogously to securities. For example, if a garage owner lends a car entrusted to him to a third party, the client's ownership rights to the car remain unaffected. On the other hand, a client of a depository of crypto-assets would lose his separation rights against the depository if the depository transfers the crypto-assets to a third party. The same applies to securities lending.¹⁹

[22] In contrast, when securities are used as collateral, for example for a Lombard loan, the client retains his ownership rights.²⁰ Likewise, it is permissible to use crypto-assets as collateral in favour of the client. When the realisation event occurs, the crypto-assets are also transferred to a third party, but at this point the client is no longer the holder. Therefore, the depository has complied with the requirement to keep the crypto-assets available at all times during the entire period of the client's entitlement to the crypto-assets and has fulfilled his obligation. Any immobilisation during this period should not constitute a breach of duty, provided that this is done with the consent of the holder.

3.2.2. Assignability (art. 242a para. 2 SchKG)

[23] The second prerequisite is the assignability of the crypto-assets to the client. Such assignability requires that the crypto-assets held are actually present. The criterion is therefore also decisive for the fulfilment of the obligation to be available at all times. Assignability ensures that in the event of bankruptcy it is evident who owns which crypto-assets and therefore represents a natural prerequisite for separation. It can be fulfilled in two ways:

[24] In analogy to property law, art. 242a para. 2 lit. a SchKG provides that the crypto-assets must be individually assignable to the client at the time of bankruptcy. Such individualised allocation can be achieved by holding the crypto-assets on a system address assigned to the client, i.e. technically directly in a wallet segregated on the blockchain.²¹ According to almost unanimous criticism²² in the consultation

¹⁸ BBl 202 (Fn. 12), P. 292; KRAMER/MEIER (Fn. 17), 73; KRAMER/WYSS (Fn. 11), N 40.

¹⁹ ALEXANDER VOGEL/CHRISTOPH HEIZ/RETO LUTHIGER (Hrsg.), in: FIDLEG/FINIG Kommentar, Bundesgesetz über die Finanzdienstleistungen und Bundesgesetz über die Finanzinstitute und weiteren Erlassen, Zürich 2020, art. 19 N 1 et seq.

²⁰ ELISABETH MOSKRIC, Der Lombardkredit, in: SSBR, Vol. 74, Zurich 2003, P. 84.

²¹ BBl 2020 (Fn. 12), P. 293.

²² BBl 2020 (Fn. 12), P. 245 f. and 251; a.M. FINMA, cf. BBl 2020 (Fn. 12), P. 246 f.

on individual assignability in the register at any time as a prerequisite for the assignment, however, it is now already sufficient if the assignment of specific crypto-assets results from an internal register (e.g. an accounting system) of the depository.²³ Therefore, the custody of the crypto-assets in a separate wallet can even be dispensed with altogether if it is technically possible for the depository to individualise the crypto-assets in question in another way, for example by means of a separate serial number. In such cases, it is sufficient that the crypto-assets specified with numbers can be assigned to the client concerned by means of an assignment table available from the bankrupt party.²⁴ Such individual assignment is likely to be possible especially in the case of NFTs held in collective custody.

[25] Art. 242a para. 2 lit. b SchKG also provides for possible separation in the case of crypto-assets held in collective custody. The regulation applies if the crypto-assets cannot be individually assigned to the authorised client but belong to a community. It must be clear which share of the joint assets each client is entitled to. As in the case of individual assignability, it is sufficient in the case of collective custody that the assignment results from an internal register of the depository. Analogous to deposit relationships, the share of the crypto-assets still held in a collective account is separable in each case.²⁵ This regulation applies, for example, to collectively held bitcoins.

[26] It is therefore crucial that the value units owed are kept at the client's disposal at all times. This regulation is based on the idea that the clear separation of crypto-assets in the event of the insolvency of the depository should primarily serve to protect the client. It does not matter whether the crypto-assets are held in an individual account or a collective account,²⁶ as long as they are assignable to the specific client and are actually present.

3.2.3. Effect of staking on separability

[27] The law is designed to protect clients in the best possible way. This is done by granting them far-reaching rights of separation and preventing proprietary trading by the depository with the crypto-assets held.²⁷ In this context, it is to be assumed that lending or proprietary business, by analogy with art. 1b para. 1 lit. b BankG, means lending of value, transfer to ownership or to a limited right *in rem* in the sense of banking asset business.²⁸ If the terms and conditions of business allow the depository to conduct transactions on his own account, it is no longer possible to speak of an obligation to keep the assets available at all times, which means that the prerequisites for separability are no longer fulfilled and a claim

23 The message repeatedly emphasises that it was expressly refrained from requiring individual assignment in the register at any time for the surrender of the assets. The objectives of the revision could also be achieved if assignment takes place outside the actual registry, cf. BBl 2020 (Fn. 12), P. 245 f., 265 and 293.

24 BBl 2020 (Fn. 12), P. 293; KRAMER/MEIER (Fn. 17), P. 73.

25 BBl 2020 (Fn. 12), 293; Kramer/WYSS (Fn. 11), N 41; Vock/MEIRICH (Fn. 14).

26 BBl 2020 (Fn. 12), P. 247.

27 BBl 2020 (Fn. 12), P. 265 f. and 292 f.

28 Cf. KRAMER/MEIER (Fn. 17), P. 73 Fn 123; EFD Results report 2021 (Fn. 5), P. 34.

or deposit now exists. However, in the case of staking for the account and at the risk of the client, one cannot speak of a proprietary transaction of the depository, and it may therefore be assumed that staking for the account of the client does not stand in the way of separability from this point of view. The same should generally apply to the provision of collateral for the account of the client.

[28] Furthermore, immobilisation during staking should not stand in the way of separability. This already follows from the wording of art. 242a SchKG, which stipulates that crypto-assets must be assignable. Accordingly, the only decisive factor is that the assets are available at all times and not that they can be moved at any time. This deliberately chosen formulation was based on the legislator's intention, as just described, to prevent asset or proprietary transactions and at the same time enable the greatest possible separability at the level of debt and bankruptcy law in order to strengthen the rights of the clients. The same result is reached when looking at similar constellations; constellations in which crypto-assets are subject to a legally prescribed, contractually agreed or other lock.²⁹ These cases in particular make it clear that it could not have been the intention of the legislator to prevent separation in the event of bankruptcy.

[29] Separation of crypto-assets held for the account of a client in the event of bankruptcy is therefore possible, irrespective of whether the assets are held individually (at separate addresses per client) or collectively (at a common address for several clients), provided that they can be assigned to the client. This is also not changed by any lockup period. As long as the bankrupt depository has the (de facto) power of disposal, e.g., through the private keys located at the depository, and therefore the crypto-assets can be issued by the bankruptcy trustee, e.g., by handing over the private keys, separation must be possible.

3.3. Separability acc. to art. 242b SchKG

[30] The power of disposal over the crypto-assets assigned to an address is exercised by means of one or more cryptographic keys (private key). As mentioned above, only those crypto-assets to which the beneficiary does not have his own access and for which the depository has all the necessary keys to be able to dispose of them directly fall into the bankruptcy estate. If, however, the bankrupt party does not have the necessary keys to be able to dispose of the assets directly himself, surrender on the basis of art. 242a SchKG is out of the question.

[31] In addition to the right to separation for crypto-assets under art. 242a SchKG, the legislator has therefore created art. 242b SchKG, which grants the custody client a legal right of access to data and therefore to private keys and addresses over which the bankruptcy estate has power of disposal. The power of disposal over the crypto-assets can therefore alternatively also be secured by issuing the private key.

²⁹ Examples: (i) tokens frozen by the depository for compliance reasons to fulfil AML obligations, as the depository can continue to dispose of them at any time and the AML serves as a justification for it, (ii) crypto-assets acquired by the client that are subject to a lockup period determined by the protocol (e.g. LQTY tokens), (iii) crypto-assets acquired by the client that are subject to a lockup period contractually determined with a third party (e.g. BZZ tokens).

Art. 242b

¹ *If data are in the bankruptcy estate's power of disposal, any third party who proves a legal or contractual entitlement to the data may, depending on the nature of the entitlement, demand access to the data or their release from the bankruptcy estate's power of disposal.*

² *If the bankruptcy trustee considers the claim to be unfounded, the third party shall be set a time limit of 20 days within which it may file an action with the court at the place of bankruptcy. The data may not be destroyed or used until the court's decision has become final.*

³ *The costs for access to the data or for their release shall be borne by the party who requests access to the data. The bankruptcy trustee may demand a corresponding advance payment.*

⁴ *The right to information under the data protection provisions of the Federal Government or the cantons is reserved.*

[32] Based on art. 242b SchKG, data must be released to the applicant if there is a legal or contractual entitlement. In the case of the safekeeping of crypto-based assets by a depository, there is a contractual claim against the wallet provider in each case, whereby the private key can be separated. The only prerequisite is that this contractual claim was already established before the opening of bankruptcy proceedings – i.e., the client already had a claim to access to the data or the private key prior to the opening of the bankruptcy proceedings, the access to the data does not lead to an unjustified devaluation of the bankruptcy estate and the claim is due³⁰, whereby it is irrelevant whether the deposited crypto-assets are staked or not.

4. Financial market law appraisal

[33] The following section describes the extent to which staking can be carried out without a licence (4.1) and the situations in which a fintech or even bank licence is required (4.2).

4.1. Unauthorised staking

[34] In order to assess whether staking without license is permissible, it is first necessary to briefly discuss some principles of the regulation of banks and fintech companies. Banking regulation is concerned, among other things, with minimising the risk of default by the depository for depositors, which is why it is particularly relevant whether (i) the depositor incurs a risk of default in the event of the bankruptcy of the depository, whether (ii) the depositor has a right of separation in respect of his assets, or whether (iii) his need for protection is reduced³¹ for other reasons.³² In the event of

³⁰ BBl 2020 (Fn. 12), P. 295 f.

³¹ Typical other grounds can be found in the exception catalogues of art. 5 para. 2 and 3 BankV.

³² Cf. NINA REISER, Ist der Bankbegriff im Lichte aktueller technologischer Entwicklungen noch zeitgemäss?, in: AJP 7/2018, P. 811 et seq., P. 815 with additional references.

separability, the investor's need for deposit protection is usually denied and neither the bank licence nor the fintech licence for public deposits applies. The fintech license for cryptocurrencies held in collective custody already includes per se the separability of the cryptocurrencies held in collective custody in the event of bankruptcy.

[35] In analogy to the practice described above for the non-applicability of the deposit regulation in the event of separability in bankruptcy, before the DLT legislation came into force on 1 August 2021, FINMA's practice was that a banking licence was not required for virtual currencies under the strict conditions that the assets in virtual currency (e.g., Bitcoin) could only be transferred for safekeeping and that these virtual currency units could be held separately per client on the blockchain and assigned to individual clients at any time.³³

[36] This FINMA practice was developed at the time in an act of official gap-filling. On the one hand, art. 197 SchKG states that only what falls into the bankruptcy estate also "belongs" to the debtor. This suggests that crypto-assets held on behalf of clients do not fall within the bankruptcy estate. On the other hand, however, the owner lacked the instrument of an action for separation under art. 242 SchKG, since this presupposes corporeality.³⁴ The legislator has filled this legal gap with the two new art. 242a and 242b SchKG as *lex specialis* with regard to crypto-assets and data.

[37] Particularly in the following cases, staking can in principle be operated as a bank or fintech company without a licence:

- a. The requirements of art. 242a para. 2 lit. a SchKG or art. 16 para. 1^{bis} lit. a BankG regarding individualisability and availability at any time are fulfilled; or
- b. the requirements for the separation of the private keys pursuant to art. 242b SchKG are met; or
- c. the crypto-based assets do not meet the requirements of art. 16 para. 1^{bis} lit. b BankG, but qualify as a public deposit and an exemption from the public deposit or from the deposit pursuant to art. 5 para. 2 or 3 BankV applies; or
- d. the concept of commercial activity (incl. sandbox regime up to CHF 1 million) is not fulfilled.

[38] Without going into more detail here, it should be noted that in most of these cases there is at least an obligation to submit to the Money Laundering Act (GwG).

4.2. Authorised staking

[39] A bank engages in interest rate derivatives business with maturity transformation, i.e., by accepting deposits from the public on the liabilities side of the balance sheet, it enters into short-term obligations against payment of an interest rate, with which it grants medium to long-term loans on the assets side of the balance sheet against payment of an interest rate. Fintech companies

³³ Swiss Financial Market Supervisory Authority FINMA, Fact Sheet Virtual Currencies, as of 1 January 2020, P. 2.

³⁴ CHRISTIAN MEISSER/LUZIUS MEISSER/RONALD KOGENS, Verfügungsmacht und Verfügungsrecht an Bitcoins im Konkurs, in: Jusletter IT 24 May 2018.

often only engage in deposit-taking business, which is why they lack the maturity transformation typical of banks and, in particular, the associated liquidity and interest rate risks, and why the licensing requirements of the Banking Act are also very excessive.³⁵ For this reason, the legislator created the fintech licence in art. 1b BankG for the acceptance of public deposits of up to CHF 100 million, which came into force on 1 January 2019 and, in contrast to the banking licence, imposes lower requirements in terms of organisation, minimum capital, capital and liquidity requirements, accounting, auditing and deposit insurance (fintech licence).

[40] As explained above, separation based on art. 242a SchKG is also possible in the case of crypto-assets held in collective custody, provided that it is evident to which share of the joint assets the respective custody client is entitled. This separability means that the crypto-assets are off-balance sheet and therefore do not qualify as a public deposit, which is why no banking licence is required. Since the legislator considered this circumstance to be questionable³⁶ from the perspective of investor protection as well as from the perspective of a level playing field for institutions that accept customer deposits and thus require a licence, it was decided to extend the fintech licence to collectively held cryptocurrencies or crypto-assets that actually or according to the intention of the organiser or issuer serve to a significant extent as a means of payment for the acquisition of goods or services or the transfer of money or value (art. 5a para. 1 BankV in connection with art. 1b para. 1 BankG).

[41] The fintech license to accept deposits from the public differs qualitatively from the authorisation to accept crypto-assets held in collective custody, which is why we can speak of two subcategories or two types of fintech licenses. This article focuses primarily on the new sub-category of fintech license for crypto-based assets held in collective custody.

[42] In the following, the common features of both types of fintech licences are presented first, which lie in the investment prohibition of the depository (4.2.1), in the allocation of risk bearing (4.2.2) and in interest prohibition (4.2.3). In a next step, the characteristics of the two types of fintech licences are examined (4.2.4), before concluding with a brief comment on the applicability of maximum amounts pursuant to art. 4^{sexies} BankG (4.2.5).

4.2.1. No investment by depository (art. 1b para. 1 lit. b BankG)

[43] For the fintech licence to be applicable, the licensee must not "invest" the deposits or public assets (art. 1b para. 1 lit. b BankG). This requirement is intended to enforce the banks' renunciation of lending business. Public deposits or assets of the clients must therefore be available on a permanent basis³⁷ and may not be invested for proprietary transactions in the name and for the account of the fintech institution.³⁸ Risks for the

³⁵ Federal Department of Finance FDF, Consultation draft concerning the amendment of the Banking Act and the Banking Ordinance (FinTech), Explanatory Report of 1 February 2017, P. 17 (cit. EFD-Fintech Explanatory report 2017).

³⁶ BBl 2020 (Fn. 12), P. 301.

³⁷ EFD-Fintech Explanatory report 2017 (Fn. 35), P. 34.

³⁸ Federal Department of Finance FDF, Revision of the Banking Ordinance (BankV) "Fintech License", Explanatory Notes of 30 November 2018, P. 6 (cit. EFD-BankV Explanations 2018).

client must be largely excluded and public deposits must be available in liquid form as well as crypto-assets in the form in which they were accepted, so that they can be forwarded or refunded within a reasonable period of time in accordance with their intended purpose.³⁹ In addition, the clients' public deposits or crypto-assets held in collective custody must be kept separate from the fintech institution's funds. Alternatively, these must at least be recorded in the fintech institution's books in such a way that they can be shown separately from its own funds at any time, but in this case an ordinary audit must be carried out in accordance with art. 727 CO due to the mere accounting separation⁴⁰ (art. 14f para. 1 BankV).

[44] The deposit of client funds as a demand deposit with a bank or other person shall not be deemed to be an inadmissible investment⁴¹ pursuant to art. 1b BankG, provided they are held as high-quality liquid assets (HQLA) of category 1 in accordance with art. 15a of the Liquidity Ordinance (LiqV) (art. 14f para. 2 BankV e contrario). In addition, such an investment must be held in the currency in which the client's claim for repayment is denominated (art. 14f para. 3 BankV).

[45] Cryptocurrency held in collective custody must be held (i) in Switzerland and (ii) in the form in which it was received (art. 14f para. 4 BankV). This does not affect the conversion of the form in consultation with the client.

[46] If a service provider makes a mistake when staking for his clients, some of the crypto-assets deposited can be lost. To the extent that the service provider is liable for such errors vis-à-vis the client, the question arises whether the former, due to the risk incurred, must be considered an "investor". This is not the case, as slashing is an operational risk in connection with safekeeping and not an investment risk. Insofar as staking is carried out for the account of the client, this does not constitute a violation of the investment prohibition.

4.2.2. Who bears the risk of staking?

[47] The FDF's explanatory notes to the Banking Ordinance explicitly state that the investment prohibition (4.2.1) does not apply if staking is initiated in the name of the fintech institution but on the account of the depositor.⁴² Although this is neither directly stated in the law nor in the ordinance, this position is supported insofar as the banks' lending business, which is prohibited under the fintech license, also constitutes a classic proprietary business of the bank, i.e. a business of the bank in its own name and for its own account.⁴³ Conversely, in the case of fiduciary transactions, i.e. transactions in one's own name but for the account of the client, the long-standing practice of the SFBC (FINMA's predecessor authority) must be taken into account in order not to fall under the banking licence requirement – probably also within the

³⁹ EFD-BankV Explanations 2018 (Fn. 38), P. 17.

⁴⁰ EFD-BankV Explanations 2018 (Fn. 38), P. 17.

⁴¹ EFD-BankV Explanations 2018 (Fn. 38), P. 17, explicitly mentions that the deposit must be made with "another" person in accordance with art. 1b BankG.

⁴² EFD-BankV Explanations 2018 (Fn. 38), P. 6.

⁴³ BEAT KLEINER/RENATE SCHWOB/STEFAN KRAMER, in: Dieter Zobl et al. (Hrsg.), Kommentar zum Bundesgesetz über die Banken und Sparkassen dated 8 November 1934, Zurich 2011, art. 1 N 49.

scope of the investment prohibition of the fintech license:⁴⁴ It must therefore be stated in legally binding form vis-à-vis the client that the investment is made for the client's account, i.e. that all risks and therefore also the del credere and transfer risk are borne by the client.⁴⁵ However, the relevant lending business for banking purposes is affirmed if client funds are pooled, i.e. held in collective custody, in order to make investments that do not correspond in currency and maturity to the obligations entered into vis-à-vis the clients, the investors are promised a minimum return or currency losses are assumed, and neither the details nor the type of investments made are evident from the client statements, which means that there can no longer be any fiduciary investments.⁴⁶

[48] Taking into account the materials on the DLT legislation and the old SFBC practice on fiduciary investments, investments or staking in one's own name but for the account of a third party would therefore probably have to be permissible under the fintech license and would not violate the investment prohibition, provided in particular that the type of crypto-asset is not changed and the client bears all risks. In this respect, the question arises as to whether slashing also represents a risk that must be borne by the client. In our opinion, slashing is an error in the validation process that is either hardware-related, software-related or due to human error, i.e. an operational risk. If the corresponding nodes as well as the validation services are operated by the fintech institution itself, slashing would be an error within the fintech institution's sphere of influence, which would also constitute a breach of the fintech institution's duty to act diligently. This is not a classic risk due to third-party involvement, which the SFBC's practice requires to be transferred to the client, but an (operational) risk within the fintech company's sphere of influence, which should not even occur if the fintech company acts with caution. For these reasons, we believe it must be permissible for the fintech company to assume the slashing risk itself.

[49] In the case of a systematic promise of reimbursement to all staking clients in the event of slashing, the possible existence of an insurance transaction subject to authorisation under the Insurance Supervision Act (ISA) must also be examined. Of the five criteria, the existence of insurance, i.e. (i) the existence of a risk or hazard, (ii) the payment of the insured (premium), (iii) the insurer's performance in the event of insurance/damage, (iv) the autonomy of the operation as well as (v) the compensation of the risks according to the laws of statistics (scheduled business operation),⁴⁷ at least criterion (iv) is unlikely to be met: The required independence of the organisation serves to distinguish insurance from other legal transactions in which the obligation to provide a service in the event of a claim is merely an ancillary agreement or modality of the other party to the contract, whereby in this respect it is not the formal arrangement but the inner connection between the promised services that is decisive.⁴⁸ In addition, as already mentioned, it could be argued that in those cases in which the wallet provider operates

⁴⁴ KLEINER/SCHWOB/KRAMER (Fn. 43), art. 1 N 63.

⁴⁵ EBK-Bulletin 17, P. 12 f.

⁴⁶ EBK-Bulletin 20, P. 16 et seq.; Judgement of the BG 2A.399/2004 and 2A.466/2004 dated 24 March 2005 E. 3.2.2.

⁴⁷ Cf. instead numerous BGE 114 Ib 224 E. 4.a.

⁴⁸ BGE 114 Ib 224 E. 4. c; 76 I 372.

the node for staking himself, no slashing should occur due to the obligation to act diligently or that this would have to be taken over by the operator of the node if it should occur nonetheless, which ultimately means that there should never be a sector-typical transfer of risk to the client.

4.2.3. No interest paid by depository (art. 1b para. 1 lit. b BankG)

[50] For the fintech licence to apply, the custodian may not pay interest on the public deposits or assets (art. 1b para. 1 lit. b BankG), otherwise the banking licence applies. As in the case of the ban on investing, the interest prohibition is mainly intended to prevent the lending business of the bank and therefore the interest difference business.⁴⁹ Therefore, only interest payments directed by the fintech institution itself can be prohibited.

[51] The staking rewards accrued during staking are paid by the system to the address of the staker. As the staking rewards do not originate from the fintech company itself but from the respective distributed ledger system, there is no prohibited interest in the sense of the fintech license requirements.

[52] If the fintech institution wishes to secure a portion of the staking reward as its own compensation, it should do so not by directly establishing ownership of a specific portion of the staking reward itself, but by establishing a separate, merely contractual claim against the client, and should account for it separately so that the obligation to separate client and own assets is not breached.

4.2.4. Types of fintech license?

[53] As explained above, the already existing Fintech license has been expanded so that there are now two subcategories of Fintech licenses: one for public deposits (4.2.4.2) and one for crypto-assets held in collective custody (4.2.4.1).

[54] Both licenses were created for different reasons and with different directions of impact: The fintech licence for public deposits in order to grant such fintech companies relief from the otherwise applicable banking licence, and the fintech licence for crypto-assets held in collective custody in order to not allow such fintech companies to operate without a licence due to the level playing field principle for all institutions holding collective custody and the corresponding need for investor protection.

[55] In relation to the banking licence, it should be noted that, according to FINMA's established practice, no licences are granted on a voluntary basis if they are neither necessary nor used, which is why an affected institution probably cannot voluntarily upgrade to a banking licence if one of the two fintech licences is also sufficient or applicable. Conversely, it can be said that, for example, if an investment and/or interest-bearing activity is prohibited under fintech legislation, a banking licence is required unless an exception⁵⁰ is applicable.

⁴⁹ EFD-Fintech Explanatory report 2017 (Fn. 35), P. 34.

⁵⁰ In particular, exceptions from the public deposit pursuant to art. 5 (2) BankV, exceptions from the deposit pursuant to art. 5 (3) BankV, non-existence of professional activity (incl. sandbox exception) pursuant to art. 6 BankV.

4.2.4.1. Fintech license for cryptocurrencies held in collective custody

[56] The fintech license for cryptocurrencies held in collective custody applies to persons who are primarily active in the financial sector and who accept cryptocurrencies held in collective custody on a professional basis or who publicly recommend themselves as such (art. 1b para. 1 lit. a BankG in connection with art. 5a para. 1 BankV). Cryptocurrencies are crypto-assets that actually or according to the intention of the organiser or issuer serve to a significant extent as a means of payment for the purchase of goods or services or the transfer of money or value and thus usually qualify as payment tokens according to FINMA ICO Guidelines⁵¹.

[57] Crypto-assets held in collective custody are crypto-based assets that are allocated to a community, whereby it is evident which share of the community assets the custody client is entitled to, provided that the bank or fintech institution has undertaken to keep them available for the custody client at all times (art. 16 para. 1^{bis} lit. b BankG). It is precisely these collectively held crypto-assets that are to be surrendered by the bankruptcy administration in the bankruptcy of the depository pursuant to art. 242a para. 2 lit. b SchKG and are therefore kept as depository assets outside the balance sheet of the fintech company. The separability of cryptocurrencies or payment tokens in bankruptcy would have led to the non-application of banking legislation in accordance with standard FINMA practice on banking legislation before the DLT legislation came into force, but the legislator wanted to expressly subject collectively held payment tokens to the fintech license requirement under the DLT legislation for investor protection reasons and for reasons of a level playing field in the context of the collective custody of various means of payment.

[58] On the other hand, according to art. 5a para. 1 BankV e contrario, the safekeeping of crypto-assets, which are separable according to art. 242a para. 2 lit. a SchKG or art. 16 para. 1^{bis} lit. a BankG, is not subject to fintech licensing. This applies to crypto-assets that are held directly on the blockchain in a wallet that is individual to the client, provided that the wallet provider has undertaken to keep them available at all times.

[59] In contrast to the fintech license for public deposits, the fintech license for cryptocurrencies held in collective custody does not have an upper limit of CHF 100 million for the permissible assets held in custody.

[60] However, the following assets are not considered crypto-based assets and are exempt from both the requirement for a Fintech license for crypto-based assets held in collective custody and the requirement for a Fintech license for retail deposits and the requirement for a banking licence:

- a. Assets held in client accounts as non-interest-bearing⁵² credit balances solely for the settlement of client transactions (i) by precious metals dealers, asset managers or similar entities, provided settlement takes place within 60 days, or (ii) by investment firms or DLT trading systems (so-called settlement account exception);

⁵¹ Swiss Financial Market Supervisory Authority FINMA, Guidelines for Submission Requests Regarding Initial Coin Offerings (ICOs) of 16 February 2018 (cit. FINMA-ICO-Guidelines).

⁵² The no-interest requirement for the settlement account exception is actually unnecessary under the fintech license, as the fintech license already contains a general ban on interest.

- b. of domestic and foreign banks or other state-supervised companies,
- c. of institutional investors with professional vaulting.

[61] With art. 5a para. 2 BankV, the Federal Council has explicitly defined the existing exceptions to crypto-assets. This in turn means that the exemptions from public deposits and deposits pursuant to art. 5 (2) and (3) BankV do not apply to crypto-based assets. In particular, the following exceptions, which are frequently encountered in practice, can therefore not be claimed:

- a. Art. 5 para. 3 lit. b BankV concerning bonds with information required by banking law;
- b. Art. 5 para. 3 lit. e BankV concerning funds that are supplied in small amounts to a means of payment or payment system and are used solely for the future purchase of goods or services; and
- c. Art. 5 para. 3 lit. f BankV regarding default guarantees.

4.2.4.2. Fintech license for public deposits

[62] The Fintech licence for public deposits applies to persons who are primarily active in the financial sector and who accept public deposits of up to CHF 100 million on a professional basis or who publicly recommend themselves as such (art. 1b para. 1 lit. a BankG).

[63] The Federal Supreme Court defines the central element of a deposit as entering into obligations towards third parties. The obligor therefore becomes the repayment debtor of the corresponding performance.⁵³ According to art. 5 para. 1 BankV, liabilities to clients shall be deemed to be public deposits subject to the exceptions to the definition of public deposits pursuant to para. 2 and to the definition of deposits pursuant to para. 3. Public deposits are therefore always carried on the balance sheet of the fintech institution.

[64] Public deposits are based on the concept of money or means of payment,⁵⁴ whereby the FINMA ICO Guidelines also qualify liabilities in the form of tokens with the character of debt capital, e.g. repurchase promises with guaranteed returns, also qualify as deposits under the Banking Act;⁵⁵ this practice applies in particular to the custody of payment tokens.

[65] In contrast to the Fintech licence for cryptocurrencies held in collective custody, the general exceptions for public deposits and deposits pursuant to art. 5 para. 2 and 3 BankV apply in full to the Fintech licence for public deposits. In return, the fintech licence for public deposits is limited to accepting public deposits up to a maximum of CHF 100 million.

⁵³ BGE 132 II 382 E. 6.3.1; 136 II 43 E. 4.2; cf. Reiser on the term deposit (Fn. 32), P. 814; FLORIAN SCHÖNKNECHT, Der Einlagebegriff nach Bankengesetz, in: GesKR 3/2016, P. 300 et seq.

⁵⁴ Cf. REISER (Fn. 32), P. 811 et seq.

⁵⁵ FINMA-ICO-Guidelines (Fn. 51), P. 5 f.

[66] The fintech license for public deposits can only be used for the depository of crypto-assets or for the staking of crypto-assets in the institution's own name, provided that:

- a. there is collective custody, but this does not meet the requirements of art. 16 para. 1^{bis} lit. b BankG with regard to separability (otherwise the fintech license for cryptocurrencies held in collective custody would be applicable); or
- b. there is individual custody, which does not meet the requirements of art. 16 para. 1^{bis} lit. a BankG with regard to separability.

4.2.5. Applicability of art. 4^{sexies} BankG

[67] For cryptocurrencies held by the bank as assets in custody for custody clients, FINMA may set a maximum amount on a case-by-case basis in accordance with art. 4^{sexies} BankG if this appears advisable in light of the risks associated with the transaction. In particular, it considers the function of crypto-assets, their underlying technologies and risk mitigating factors.

[68] It is important to note here that due to its clear wording, this provision only applies to banks, but not to fintech companies.

5. Result

[69] Staking is equivalent to the provision of collateral, whereby this is not transferred to a third party but merely blocked for the duration of the staking period. Accordingly, staking services can be offered without affecting the separation rights of the holders of the staked crypto-assets.

[70] In the case of individual custody of client assets, the staking service provider, similar to the custody of effects and other valuables, does not require any further license for this activity in addition to an affiliation with a self-regulatory organisation under the Anti-Money Laundering Act. Staking of crypto-assets held in collective custody that do not qualify as cryptocurrencies under art. 5a BankV, such as investment tokens, is also possible.⁵⁶

[71] The provision of staking services for cryptocurrencies held in collective custody, on the other hand, requires a fintech or banking licence. Instead of allocation on the block chain directly, it follows via a database or other method of accounting at the service provider. This not only saves operational costs, but also opens up the possibility of staking for those clients who wish to provide less than the respective minimum amount of the system.

[72] If the service provider accepts crypto-assets in non-separable manner, this constitutes a deposit and staking of the same is an inadmissible investment under the Fintech license for public deposits. Accordingly, a banking licence is required for the staking of crypto-assets originating from client deposits for the account of the service provider or in the name of the service provider and for the account of the client without compliance with the fiduciary investment requirements, unless the service provider has a bank guarantee (art. 5 para. 3 lit. f BankV) or the deposit falls under another exemption.

⁵⁶ In particular, the financial market regulatory requirements in relation to securities must be examined, which is not the subject of this article.

KILIAN SCHÄRLI, Dr. iur., LL.M., Attorney/Notary and Partner, MLL Meyerlustenberger Lachenal Froriep AG.

LUZIUS MEISSER, MSc Computer Science, MA Economics, Owner, Meisser Economics AG.

RETO LUTHIGER, Dr. iur., Attorney and Counsel, MLL Meyerlustenberger Lachenal Froriep AG.