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Corporate Financing through Crypto Securities and Financial Restructuring in the Case of Company Distress

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ABSTRACT

This paper focuses on companies that have issued *licensed* crypto securities. It takes the licensing under the German Electronic Securities Act of 2021 as an example, but draws parallels with similar licensing developments in France, Luxembourg, and Switzerland. These companies—as in issuers of licensed crypto securities—may face financial distress at a later stage and therefore require restructuring. In essence, the research idea of this paper is to combine preventive restructuring frameworks, as established in the European Union by the Directive on restructuring and insolvency of 2019 and subsequently transposed into national law, with this new type of decentralised corporate financing. We will show that preventive restructuring frameworks can restructure some issuers of crypto securities, but the technology used—mainly blockchain technology—will magnify the challenges of financial restructuring. The paper attempts to address both the hard law of the Directive on restructuring and insolvency and the specificities of distributed ledger technology (DLT). As the first initial public offerings (IPOs) of crypto securities have crossed the tens of millions of euros threshold, the gap in the legal literature on restructuring of crypto securities should be filled by the first proposals made in this paper.

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I. LICENSING OF CRYPTO SECURITIES IN EUROPE

1. Overview

A new trend is emerging in the financial market, more specifically in the crypto-asset market: corporate financing through crypto securities. As the market demands this type of corporate financing,[2] national legislators are now faced with the task of creating legally secure frameworks for this type of crypto-asset. Some countries in Europe have already taken up this challenge and created a legal framework for crypto securities. This paper will focus exclusively on licensed/regulated crypto securities and not address security tokens in general.

The French legislator was one of the first in Europe to create a legal framework for digital assets and securities based on DLT. Ordinance No. 2017-1674 of 8 December 2017 ('DLT Ordinance') and the Decree No. 2018-1226 of 24 December 2018 ('DLT Decree') amended the French Monetary and Financial Code ('Code monétaire et financier (CMF)') to the extent that it expressly authorises the use of distributed electronic registers for the issuance and transfer of unlisted securities (Art. I.211-3(1), I.211-7(2) CMF).[3] Those unlisted securities are transferred by registration in the acquirer's account or by registration in a distributed electronic register (Art. I.211-17 CMF).[4] In addition to this, Law No. 2019-486 of 22 May 2019 on the Growth and Transformation of Enterprises ('loi relative à la croissance et la transformation des entreprises') was introduced in 2019. This law establishes a legal framework for financing companies through the issuance of virtual tokens, which do not fall under the amended provisions of the French Monetary and Financial Code.[5]

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[2] This demand is for example explicitly expressed in the explanatory memorandum of the German Electronic Securities Act: 'In practice, there is a demand for enabling corporate financing also through securities issued electronically and, possibly, by means of blockchain technology' (Bundestags-Drucksache 19/26925, 1).

[3] See in detail Thomas Preuße and Karsten Wöckener and Daniel Gillenkirch, 'Der Gesetzesentwurf zur Einführung elektronischer Wertpapiere' [2020] Zeitschrift für Bank- und Kapitalmarktrecht 551, 553.

[4] Stefan Schulz and Karl-Alexander Neumann in Stefan Schulz and Karl-Alexander Neumann (eds), *eWpG*, (RWS Verlag 2023) Einleitung para 36.

[5] Thomas Preuße and Karsten Wöckener and Daniel Gillenkirch, 'Der Gesetzesentwurf zur Einführung elektronischer Wertpapiere' [2020] Zeitschrift für Bank- und Kapitalmarktrecht 551, 553.

In 2021, Luxembourg also introduced a technology-neutral legal framework allowing the issuing of dematerialised securities through registration in a secure electronic recording system, including distributed electronic ledgers or databases (cf. Art. 4 Law of 6 April 2013 on dematerialised securities)[6] (the so-called securities issuance account, Art. 1(1a) Law of 6 April 2013 on dematerialised securities). This securities issuance account is held with a supervised settlement organisation or a central account keeper (cf. Art. 21 Law of 6 April 2013 on dematerialised securities). Dematerialised securities under Luxembourg law are recorded as bookings only.[7]

In the same year, Switzerland amended its Code of Obligations ('Obligationenrecht') with the 'Bundesgesetz zur Anpassung des Bundesrechts an Entwicklungen der Technik verteilter elektronischer Register'.[8] It now allows the issuance of registered uncertificated securities ('Registerwertrechte'). The structure and establishment of the registers for these securities has been kept technology neutral ensuring the legal regime can keep pace with technological change.[9]

As a final example, Germany introduced its Electronic Securities Act in 2021 which will be examined in detail here.[10]

In conclusion, the European legislators seem to take the market's mandate on licensed/regulated securities based on DLT ('crypto securities') seriously. They show glimpses of a similar approach to licensing. These non-exhaustive examples show this clearly.

2. The German Electronic Securities Act

For a more detailed explanation of the licensing of crypto securities, a closer look at the aforementioned German Electronic Securities Act is necessary. This legal framework

[6] The Law of 6 April 2013 on dematerialised securities was last amended by the Law of 22 January 2021, which introduced the amendments mentioned in this paper.
[7] Thomas Preuße and Karsten Wöckener and Daniel Gillenkirch, 'Der Gesetzesentwurf zur Einführung elektronischer Wertpapiere' [2020] Zeitschrift für Bank- und Kapitalmarktrecht 551, 552.
[8] Corinne Zellweger-Gutknecht and Lucien Monnerat in Sebastian Omlor and Florian Möslein and Stefan Grundmann (eds), *Elektronische Wertpapiere* (Mohr Siebeck 2021), 7 et seq.
[9] Rolf H Weber, 'Neue Blockchain-Gesetzgebung in der Schweiz' [2021] Recht Digital 186, 189 et seq.
[10] Law on the introduction of electronic securities (3 June 2021, Bundesgesetzblatt 2021 I, 1423).

allows issuers to issue bearer bonds (Sec. 1 Electronic Securities Act)[11] that are not based on physical security certificates, but instead are (purely) registered in an electronic securities register.[12] The German Electronic Securities Act came into force on 10 June 2021 and regulates two types of electronic securities: central register securities (Sec. 4(2) Electronic Securities Act) and crypto securities (Sec. 4(3) Electronic Securities Act). Crypto securities are issued by the issuer effecting a registration in a so-called crypto securities register (cf. Sections 2(1) sentence 2, 4(3), 16 et seq Electronic Securities Act). The crypto securities register must, *inter alia*, contain the main content of the right (cf. Sec. 17(1) no. 1 Electronic Securities Act). Regarding the technological aspects of the register, the Electronic Securities Act is formulated in a technology-neutral manner in order to encompass future technological developments. However, decentralised systems, such as blockchain technology based on distributed ledger technology, are currently mainly used as recording systems for the crypto securities register.[13] In practice, crypto securities are usually issued in individual registration.[14] This means that a natural person or legal entity or partnership with legal capacity holds the crypto security for itself (Sec. 8(1) no. 2 Electronic Securities Act). Crypto securities pursuant to the German Electronic Securities Act also fall within the definition of crypto-assets under Sec. 1(11) sentence 4 German Banking Act[15] and Art. 3(1) no. 5 MiCAR[16] although this Regulation does not apply to them. However, it should be noted that not every crypto-asset is intended to be a crypto security

[11] The German government is currently planning to extend the scope of the Electronic Securities Act to allow the issuance of electronic shares in the future, cf. 'Regierungsentwurf eines Gesetzes zur Finanzierung von zukunftssichernden Investitionen' (16 August 2023) <https://www.bmj.de/SharedDocs/Downloads/DE/Gesetzgebung/RegE/RegE_Zukunftsfinanzierungsgesetz.pdf?__blob=publicationFile&v=2> accessed 27 October 2023.

[12] Bundestags-Drucksache 19/26925, 39; Karl Döding and Kilian L Wentz, 'Der Referentenentwurf zur Einführung von elektronischen Wertpapieren und Kryptowertpapieren' [2020] Zeitschrift für Wirtschafts- und Bankrecht 2312, 2313; Dimitrios Linardatos, 'Elektronische Schuldverschreibungen auf den Inhaber – des Wertpapiers neue Kleider' [2020] Zeitschrift für Bankrecht und Bankwirtschaft 329, 331.

[13] Dominik Skauradszun, 'Das Internationale Privatrecht der Kryptowerte, elektronischen Wertpapiere und Kryptowertpapiere' [2022] Zeitschrift für die gesamte Privatrechtswissenschaft 56, 67. The German legislator expressly did not want to commit to distributed ledger technology or any of its variants (Bundestags-Drucksache 19/26925, 59 et seq).

[14] Matthias Casper in Florian Möslein and Sebastian Omlor (eds), *FinTech-Hdb.* (2nd edn, CH Beck 2021, § 28 para 22.

[15] See in detail Dominik Skauradszun, 'Das Internationale Privatrecht der Kryptowerte, elektronischen Wertpapiere und Kryptowertpapiere' [2022] Zeitschrift für die gesamte Privatrechtswissenschaft 56, 64.

[16] Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 [2023] OJ L 150/40. Art. 3(1) no. 5 MiCAR defines "crypto-asset" as "a digital representation of a value or of a right that is able to be transferred and stored electronically using distributed ledger technology or similar technology"

within the meaning of the Electronic Securities Act.[17] For issuers of crypto securities, there are no additional obligations arising from MiCAR, as crypto securities pursuant to the Electronic Securities Act do not fall within the scope of this regulation (Art. 2(4)(a), Art. 3(1)(49) MiCAR),[18] as they qualify as financial instruments under MiFID II[19] (Art. 4(1)(15), Annex I Section C MiFID II). Since the amendment introduced by the DLT pilot regime[20] in 2022, MiFID II additionally encompasses financial instruments that have been issued through DLT.

The crypto securities register is operated by a registrar (Sec. 4(10) Electronic Securities Act). Besides the issuer and, of course, the investor, the registrar is also an important party involved in crypto securities, especially due to being the main intermediary. The operation of a crypto securities register is considered a financial service under Sec. 1(1a) sentence 2 no. 8 German Banking Act and subject to authorisation, which is why registrars are supervised by the German Financial Supervisory Authority. Another possible intermediary involved could be a crypto custodian (Sec. 1(1a) sentence 2 no. 6 German Banking Act). The crypto custodian usually organises the segregated or omnibus wallets and holds the private keys of the investors, thereby relieving the investor of the need to learn how to access a blockchain network without intermediaries and removing the risk of the investors losing their private keys.[21] It is also supervised by the German Financial Supervisory Authority which enhances corporate governance compliance, client protection and reduces the likelihood of client crypto-assets being compromised.

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[17] Bundestags-Drucksache 19/26925, 30.

[18] Cf Alireza Siadat, 'Markets in Crypto Assets Regulation – erster Einblick mit Schwerpunktsetzung auf Finanzinstrumente'[2021] Recht der Finanzinstrumente 12, 14; Andreas Dieckmann in Christian Conreder and Johannes Meier, *eWpG*, (Erich Schmidt Verlag 2022), § 4 WpPG para 8; Stefan Schulz and Karl-Alexander Neumann in Stefan Schulz and Karl-Alexander Neumann (eds), *eWpG*, (RWS Verlag 2023) Einleitung para 14.

[19] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast) [2014] OJ L 173/349; last amended by Directive (EU) 2022/2556 of the European Parliament and of the Council of 14 December 2022 amending Directives 2009/65/EC, 2009/138/EC, 2011/61/EU, 2014/59/EU, 2014/65/EU, (EU) 2015/2366 and (EU) 2016/2341 as regards digital operational resilience for the financial sector [2022] OJ L 333/153.

[20] Regulation (EU) 2022/858 of the European Parliament and of the Council of 30 May 2022 on a pilot regime for market infrastructures based on distributed ledger technology, and amending Regulations (EU) No 600/2014 and (EU) No 909/2014 and Directive 2014/65/EU [2022] OJ L 151/1.

[21] Cf Christian Pieper in Michael F Müller and Christian Pieper, *eWpG* (CH Beck 2021) § 8 para 13.

In order to better understand some aspects of the restructuring later on, it is essential to be aware of Sec. 5 Electronic Securities Act. According to Sec. 5(1) sentence 1 Electronic Securities Act the terms and conditions of issue must be recorded by the issuer with the registrar and thus made available to the public. This recording is required prior to registration and after any amendment to the already recorded terms and conditions of issue (Sec. 5(4) sentence 1 Electronic Securities Act). This re-registration is of paramount importance because Sec. 5(3) Electronic Securities Act stipulates that amendments only become effective when the amended terms and conditions are registered with the registrar. Although the provision does not explicitly mention crypto securities, it uses the term 'electronic securities' which also includes crypto securities (cf. Sec. 4(3) Electronic Securities Act). It therefore also applies to them. To make the main content of the right resulting from the crypto security easily available to the public, the crypto security register may refer to the recorded terms and conditions of issue on the website of the registrar (cf. Sec. 17(1) no. 1 Electronic Securities Act, Sec. 7(1) sentence 1 Regulation on Requirements for Electronic Securities Registers 1 (eWpRV)).

II. ADVANTAGES OF CORPORATE FINANCING THROUGH CRYPTO SECURITIES

The German Federal Financial Supervisory Authority currently lists 55 crypto securities that have been issued in the last two years.[22] Considering the time it takes to technically prepare for an IPO and get the registrar or crypto custodian service licensed, this is a remarkably high number.[23] There is also an increase in the number of companies offering the financial service of a crypto securities registry or crypto custody.[24]

To answer the question as to what makes crypto securities so interesting and what the advantages of corporate financing via crypto bonds are, the landmark case of Siemens

[22] List of crypto securities at the Federal Financial Supervisory Authority according to Section 20(3) Electronic Securities Act (16 October 2023) <https://www.bafin.de/DE/PublikationenDaten/Datenbanken/Kryptowertpapiere/kryptowerte_node.html> accessed 27 October 2023.
[23] Of course, compared to all bearer bonds issued by German issuers in 2022 (more than €440bn), the 55 crypto securities IPOs are not significant. For German statistics on bearer bond issues, see <https://de.statista.com/statistik/daten/studie/190740/umfrage/umlauf-von-unternehmensanleihen-mit-sitz-in-deutschland-seit-1998/> accessed 27 October 2023.
[24] In total, there are around ten financial service providers that maintain crypto securities registers whose crypto securities are listed with the German Federal Financial Supervisory Authority.

Germany is a prominent example. Siemens Germany recently issued a bearer bond on a public blockchain in accordance with the German Electronic Securities Act: a crypto security.[25] It has a relatively high volume of 60 million euros.[26]

The Siemens case illustrates several advantages of crypto securities. Firstly, a crypto security creates a direct and somewhat personal relationship between the issuer and the investors. The main reason for this is that crypto securities offer greater independence from *traditional* intermediaries, especially investment banks. In the case of traditional securities, these investment banks usually stand between the issuer and the investors and also manage investor relations.[27] The more streamlined approach of crypto securities enhances transparency and promotes a direct link between issuer and investor, potentially leading to a more efficient and secure investment process. As far as *new* intermediaries, such as crypto custodians, are concerned the market seems to increasingly accept them and does not see them as a foreign entity in the relationship with the issuer.

Another benefit of not having multiple traditional intermediaries is the ability to execute transactions more quickly and (cost) efficiently.[28] Last but not least, issuing a crypto security is less expensive than issuing a traditional bond, at least in the long run. For example, as there is no need to involve investment banks in the process, there is no need to pay for their advisory service. However, pioneers such as Siemens have probably first had to deal with typical pioneer issues, which are likely to result in substantial advisory fees. Once these key questions have been answered, crypto securities can be issued more cheaply, giving them an advantage over traditional physical securities.

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[25] Siemens AG, 'Siemens issues first digital bond on blockchain' (press release, 14 February 2023) <https://press.siemens.com/global/en/pressrelease/siemens-issues-first-digital-bond-blockchain> accessed 27 October 2023.

[26] Siemens AG, 'Siemens issues first digital bond on blockchain' (press release, 14 February 2023) <https://press.siemens.com/global/en/pressrelease/siemens-issues-first-digital-bond-blockchain> accessed 27 October 2023.

[27] Cf Mark K Oulds in Klaus J Hopt and Christoph H Seibt (eds), *Schuldverschreibungsrecht* (2nd edn. Otto Schmidt Verlag 2023) Chapter 1 para 1.44 et seq.

[28] Cf for the German Electronic Securities Act Stefan Schulz and Karl-Alexander Neumann in Stefan Schulz and Karl-Alexander Neumann (eds), *eWpG*, (RWS Verlag 2023) Einleitung para 4. However, these transactions on a blockchain are not free. Depending on the cryptographic mechanism—for example, proof of work or proof of stake—the blockchain address sending a transaction usually has to pay for the proof of transfer.

III. CRYPTO SECURITIES IN PREVENTIVE RESTRUCTURING FRAMEWORKS

Given the obvious practical demand for crypto securities and their rapidly growing popularity, it is reasonable to assume that sooner or later some of the growing number of companies having issued a crypto security may face a scenario in which it is difficult to deliver the performance promised in the terms and conditions of issue. This may occur when the issuer is in financial distress. Such financial distress occurs when there is a likelihood of insolvency[29] according to Articles 1(1)(a), 4(1) Directive on restructuring and insolvency.[30] In this case, it is quite conceivable that issuers of crypto securities will try to use a preventive restructuring framework to rescue their business.

1. Preventive Restructuring Frameworks under the Directive on Restructuring and Insolvency

The main instrument of financial restructuring under the Directive is the restructuring plan (cf. Art. 8 et seq Directive). This instrument is used to achieve the primary objective of the preventive restructuring frameworks under the Directive: namely to overcome the strategic holdout problem[31], thereby preventing insolvency and ensuring the viability of

[29] According to the Directive on restructuring and insolvency the concepts of insolvency and likelihood of insolvency are to be understood as defined by national law (Art. 1(2)). Recital 24 second sentence reads "A restructuring framework should be available before a debtor becomes insolvent under national law, namely before the debtor fulfils the conditions under national law for entering collective insolvency proceedings, which normally entail a total divestment of the debtor and the appointment of a liquidator". The German transposition act, for example, understands likelihood of insolvency as imminent illiquidity and defines this as follows: "The debtor faces imminent illiquidity if it is likely to be unable to meet existing payment obligations when they fall due. In general, a forecast period of 24 months is to be taken as a basis." (sec. 18(2) German Insolvency Code).

[30] Directive (EU) 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (Directive on restructuring and insolvency) [2019] OJ L172/18.

[31] A strategic holdout is a situation in which a stakeholder, such as a counterparty, insists on following the initial contract ('contracts must be honoured') and refusing to make any changes, because that party anticipates that other stakeholders who have been asked to support the debtor's restructuring will forgo more in order to compensate for the holdout party's withheld contribution. Strategic holdouts can lead to market failure and prevent the ideal allocation of goods and resources. Allowing the debtor to define the affected parties, and thus the market, and allowing the majority of affected parties to decide on the changes with binding effect on the minority—with judicial or administrative confirmation—is essentially the idea of a preventive restructuring framework to overcome strategic holdouts. See for the holdout problem also Stephan Madaus and Bob Wessels, 'Business Rescue in Insolvency Law – A Challenge for Private Law?' [2020] ZEuP 800, 814 and for the market failure Dominik Skauradszun, 'Restructuring Companies During and After the Covid-19 Pandemic: A Law & Economics Approach', (2021) 9 NIBLeJ 1.

the debtor (cf. Art. 1(1)(a) Directive).[32] It is the debtor—in this case the issuer—who is responsible for drafting a restructuring plan and proposing it to the affected parties which are also selected by the debtor. The plan must contain at least the information referred to in Art. 8(1) Directive. In particular, it must contain 'any proposed restructuring measures' (Art. 8(1)(g)(i) Directive).

The Directive on restructuring and insolvency defines the term 'restructuring measures' in Art. 2(1)(1) Directive rather broadly as

> '*measures aimed at restructuring the debtor's business that include changing the composition, conditions or structure of a debtor's assets and liabilities or any other part of the debtor's capital structure, such as sales of assets or parts of the business and, where so provided under national law, the sale of the business as a going concern, as well as any necessary operational changes, or a combination of those elements'*.

Therefore, possible restructuring measures may include reductions, deferrals, subordination and collateral arrangements.[33] In addition, a debt-equity swap or a debt-debt swap may be included.[34]

Although the European Parliament and the Council give the debtor considerable autonomy in drafting the plan, the affected parties also play a vital role. Their most important contribution is to vote on the proposed restructuring plan. The restructuring plan is then adopted by the affected parties if a majority in the amount of their claims or interests is obtained in each class (Art. 9(6) Directive). This entire process and the restructuring plan are subject to judicial or administrative review if the adopted plan shall even be binding on dissenting affected parties based on a judicial or administrative authority's confirmation (Art. 10(1)(a) Directive). If the competent judicial or administrative authority confirms the restructuring plan, all affected parties are bound by the plan, even if they voted against it (cf. Art. 10(1)(a) Directive). Finally, even a dissenting class can be bound by

[32] Dominik Skauradszun, 'Grundfragen zum StaRUG – Ziele, Rechtnatur, Rechtfertigung, Schutzinstrumente' (2021) 82 KTS Zeitschrift für Insolvenzrecht 1, 7.
[33] Christoph Paulus and Reinhard Dammann in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 2 Directive on restructuring and insolvency para 4.
[34] Christoph Paulus and Reinhard Dammann in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 2 Directive on restructuring and insolvency para 4.

the majority of classes (cross-class cram-down, Art. 11 Directive).[35] For example, the dissenting class might be the class of investors in a crypto security.[36]

As mentioned above, there is a wide array of restructuring measures available (cf. Art. 2(1)(1) Directive). In the case of crypto securities, two different options could be subject to restructuring. It seems possible to restructure either the rights resulting from the crypto security (option 1) or the terms and conditions of issue[37] of the crypto security (option 2). In the following, both options are assessed.

2. Applicable Law

However, before analysing these two options for restructuring crypto securities, it is necessary to determine the applicable law. Crypto securities registered in crypto securities registers and based on decentralised blockchain networks may be connected to the laws of various states. Not only are decentralised blockchain networks typically distributed across the world on the computers of network participants, but the issuer's investors may also be located across the globe.[38] In international insolvency law, and particularly in European insolvency law, the principle of lex fori concursus applies as a conflict of law rule (cf. Art. 7(1) EIR Recast[39]).[40] In international restructuring law,[41] however, there is

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[35] See in detail on the cross-class cram-down Michael Veder in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 11 Directive on restructuring and insolvency para 3 et seq.

[36] See for the formation of classes IV. 2.

[37] Inter alia, Sec. 4(7) Electronic Securities Act uses the term 'Emissionsbedingungen' which directly translates to 'terms and conditions of issue'.

[38] Dominik Skauradszun, 'Das Internationale Privatrecht der Kryptowerte, elektronischen Wertpapiere und Kryptowertpapiere' [2022] Zeitschrift für die gesamte Privatrechtswissenschaft 56, 67. However, *Wendelstein* criticises the thesis that blockchain technology always involves a connection to the laws of various states: Christoph Wendelstein, 'Der Handel von Kryptowährungen aus der Perspektive des europäischen Internationalen Privatrechts' (2022) 86 Rabels Zeitschrift für ausländisches und internationales Privatrecht 644, 659 n 48.

[39] Regulation (EU) No 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast) [2012] OJ L351/1; last amended by Regulation (EU) 2021/2260 of the European Parliament and of the Council of 15 December 2021 amending Regulation (EU) 2015/848 on insolvency proceedings to replace its Annexes A and B [2021] OJ L455/4.

[40] Annerose Tashiro in Eberhard Braun (ed), *German Insolvency Code* (2nd edn, CH Beck 2019) International Insolvency Lawpara 6.

[41] Restructuring law and insolvency law share some similarities, yet both areas of law are founded on different principles and pursue diverse objectives. See for an elaborate reasoning why these two subsystems of civil procedure do not coincide Dominik Skauradszun, 'Grundfragen zum StaRUG – Ziele, Rechtnatur, Rechtfertigung, Schutzinstrumente' (2021) 82 KTS Zeitschrift für Insolvenzrecht 1, 7 et seqq, 36 et seqq. For those preventive restructuring frameworks listed in Annex A of the European Insolvency Regulation,

no similar generally applicable conflict of law rule allowing the application of the restructuring law of the state in which the restructuring proceedings were initiated.[42]

In terms of private international law, the applicable law to the preventive restructuring framework can be clearly determined, as far as the frameworks added to Annex A EIR Recast in 2022 are concerned.[43] The preventive restructuring frameworks listed in Annex A of the EIR Recast are legally to be understood as insolvency proceedings pursuant to Art. 2(4) EIR Recast. For all proceedings listed in Annex A, all provisions of the EIR Recast are directly applicable.[44] The applicable law is thus determined in accordance with Art. 7(1) EIR Recast. For preventive restructuring frameworks not listed in Annex A, there is currently no cut-and-dried answer as to how the applicable law is to be determined.[45]

In addition to this, there is also the question of the law applicable to the restructuring of a crypto security. A possible solution could be a choice of law clause according to Art. 3(1) Rome I Regulation[46]. In order to apply Art. 3(1) Rome I Regulation, the Regulation itself must first be applicable to crypto securities. However, Art. 1(2)(d) Rome I Regulation contains an exclusion for 'obligations arising under bills of exchange, cheques

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however, the European legislator has blurred the boundaries by encouraging the Member States in Recitals 13 and 14 Directive to notify national preventive restructuring frameworks for Annex A EIR.

[42] Cf Stephan Madaus in Bruno Kübler and Hanns Prütting and Reinhard Bork and Florian Jacoby (eds), *Insolvenzordnung* (90th edn, RWS Verlag 2021) Art 7 EIR Recast para 36 et seq; Dominik Skauradszun in Dominik Skauradszun and Alexander Fridgen (eds), *BeckOK StaRUG* (10th edn, CH Beck 2023) § 2 para 12.

[43] This for example includes preventive restructuring frameworks from: The Netherlands, Poland, Lithuania, Austria and Germany. The EIR Recast was amended by EU Regulation 2021/2260 of the European Parliament and of the Council on the 15 of December 2021 amending Regulation (EU) 2015/848 on insolvency proceedings to replace its Annexes A and B.

[44] Dominik Skauradszun in Dominik Skauradszun and Alexander Fridgen (eds), *BeckOK StaRUG* (10th edn, CH Beck 2023) § 84 para 36; Stephan Madaus in Rolf Stürner and Horst Eidenmüller and Heinrich Schoppmeyer and Stephan Madaus (eds), *MüKoStaRUG* (CH Beck 2023) § 84 para 20; Nicholas Palenker in Christoph Seibt and Lars Westpfahl (eds), *StaRUG*, (Otto Schmidt Verlag 2023) § 84 para 44.

[45] For the ongoing debate in German literature, see Jessica Schmidt, 'Präventiver Restrukturierungsrahmen: Internationale Zuständigkeit, Anerkennung und anwendbares Recht' [2021] Zeitschrift für das gesamte Insolvenzrecht 654 et seq; Dominik Skauradszun, 'Restrukturierungsverfahren und das Internationale Privatrecht' [2021] Neue Zeitschrift für Insolvenz- und Sanierungsrecht 568 et seq; Stephan Madaus, 'Darf der StaRUG-Plan Rechtsverhältnisse gestalten, die ausländischem Recht unterliegen?' (Blog, 31 August 2021) <https://stephanmadaus.de/2021/08/31/darf-der-starug-plan-rechtsverhaeltnisse-gestalten-die-auslaendischem-recht-unterliegen/> accessed 27 October 2023 and Christoph Thole, 'Vertrauliche Restrukturierungssachen: Internationale Zuständigkeit, anwendbares Recht und Anerkennung' [2021] Zeitschrift für Wirtschaftsrecht 2153 et seq.

[46] Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I) [2008] OJ L177/6.

and promissory notes and other negotiable instruments to the extent that the obligations under such other negotiable instruments arise out of their negotiable character'.[47] This exclusion must be interpreted autonomously and in a contemporary manner.[48] Thus, for example, neither the previous German understanding of the certification requirement nor the understanding of the German legislator in Sec. 2 Electronic Securities Act according to which a security can now also be issued electronically, can be relied upon.[49] However, the legal concept of securities under European law also seems to cover securities that are not based on physical certificates in the traditional sense.[50] Consequently, the exclusion contained in Rome I Regulation is likely to apply to crypto securities as they fall under the catch-all provision 'other negotiable instruments'.[51] Therefore, although crypto securities concern contractual obligations in civil and commercial matters (cf. Art. 1(1) Rome I Regulation), the Rome I Regulation is not applicable due to Art. 1(2)(d) Rome I Regulation.

While Art. 3(1) Rome I Regulation does not apply to (electronic respectively crypto) securities, a court-approved solution is that a choice of law nevertheless is permissible for securities.[52] This is also common practice in Germany: crypto securities issued under the German Electronic Securities Act—as far as publicly accessible—mostly[53] contain a choice of law clause in favour of German law in the terms and conditions of issue. Then

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[47] In the German text of the Regulation—that is equally important as all other language versions—, the term 'Wertpapier' is used in place of the term 'instrument', which is the term used in the German Electronic Securities Act (Gesetz über elektronische 'Wertpapiere').

[48] Dominik Skauradszun, 'Das Internationale Privatrecht der Kryptowerte, elektronischen Wertpapiere und Kryptowertpapiere' [2022] Zeitschrift für die gesamte Privatrechtswissenschaft 56, 69.

[49] Dominik Skauradszun, 'Das Internationale Privatrecht der Kryptowerte, elektronischen Wertpapiere und Kryptowertpapiere' [2022] Zeitschrift für die gesamte Privatrechtswissenschaft 56, 68.

[50] Whether or not a physical certificate is issued for the security makes no difference Lars Klöhn and Nicolas Parhofer and Daniel Resas, 'Initial Coin Offerings (ICOs)' [2018] Journal of Banking Law and Banking 89, 102.

[51] Dominik Skauradszun, 'Das Internationale Privatrecht der Kryptowerte, elektronischen Wertpapiere und Kryptowertpapiere' [2022] Zeitschrift für die gesamte Privatrechtswissenschaft 56, 69. On the general inapplicability of the Rome I Regulation to bonds, see German Federal Court of Justice 15 July 2014, XI ZR 100/13, [2014] Neue Zeitschrift für Gesellschaftsrecht 1234, 1236 para 26; Simon Schwarz in Klaus J Hopt and Christoph H Seibt (eds), *Schuldverschreibungsrecht* (2nd edn. Otto Schmidt Verlag 2023) Chapter 15 para 15.7.

[52] See for Germany, Federal Court of Justice 25 October 2005, XI ZR 353/04, [2006] Neue Juristische Online-Zeitschrift 1035, 1037 et seq.

[53] See for example Section 15(1) of the terms of issue of the crypto security of GreenRock Energy Austria GmbH (7 September 2023) <https://www.datocms-assets.com/84319/1694089828-grebii_schuldverschreibung_v2.pdf> accessed 27 October 2023 and No. 11.1 of the terms of issue of the crypto security of EMAAR Investment GmbH (6 April 2023), <https://cashlink.de/wp-content/uploads/2023/04/GRE8_DubaiPortfolio_Anleihebedingungen_Final.pdf> accessed 27 October 2023.

German restructuring law therefore also applies to the restructuring of such crypto securities. If this practice were to change in the future or if other countries present a different approach regarding crypto securities, a broader and more detailed review of the applicable law would be required. However, this is beyond the scope of this paper.

3. Restructuring of the Rights Resulting from a Crypto Security

In principle, there is a contractual relationship between the investor and the issuer of the crypto security. This contractual relationship is defined by the terms and conditions of issue.[54] Therefore, in the moment the investor acquires a crypto security, they also acquire claims against the issuer based on the terms and conditions of issue. Those claims for example include the right to repayment and the right to payment of interest.

It may be possible to restructure these rights independently from the terms and conditions of issue. Looking at traditional insolvency proceedings, such claims would usually rank as non-lower-ranking or—in case subordination is agreed upon in the terms and conditions of issue—subordinated claims.[55] In a preventive restructuring framework, claims that would be insolvency claims in an insolvency proceeding can generally also be subject to restructuring measures (cf. Art. 2(1)(1) Directive). Therefore, a restructuring measure affecting the rights resulting from the crypto security independently from the terms and conditions of issue is possible. It is even permissible if the claims are not due yet.[56] All restructuring measures mentioned under III. 1. are possible in this regard and may be part of a restructuring plan of the issuer.

In the case of crypto securities, however, it may be that a further condition needs to be met in order for the restructuring to be effective. If the claims resulting from a crypto security are successfully restructured by means of a restructuring plan, the actual legal situation after the restructuring will differ from the legal situation reflected in the crypto securities register. However, it is one of the tasks of the registrar to ensure the crypto securities register accurately reflects the actual legal situation at all times throughout the

[54] Josepha Rüberg, *Die Anleihe in der Insolvenz* (Duncker & Humblot 2019) 30.
[55] As above, but in the context of traditional bonds Christian Becker and Lutz Pospiech in Thorsten Bieg and Peter-Alexander Borchardt and Frank Frind (eds), *Unternehmenssanierung und Betriebsfortführung* (CH Beck 2021) Chapter IV paras 60 and 62.
[56] For instance, explicitly stated in the German transposition act, cf Sec. 3(1) StaRUG.

life cycle of the crypto security (cf. Sec. 7(2) sentence 1 Electronic Securities Act).[57] It is therefore questionable whether the restructuring of rights resulting from the crypto security will only be effective if the terms and conditions of issue are subsequently amended and re-recorded with the registrar.

In German Law, according to the legal definition in Sec. 4(7) Electronic Securities Act, the terms and conditions of issue are

> *'the recorded content of the right for which an electronic security is registered'*.

Like the crypto securities register, the terms and conditions of issue and their recording with the registrar serve to protect the market and especially its trust in the publicity of the crypto securities register.[58] If the rights resulting from the crypto security are restructured, the '*content of the right'* of the crypto security will inevitably change. The market will no longer be able to rely on the terms and conditions of issue, as the actual legal situation will no longer be reflected. If an investor sells the crypto security after the restructuring, the new investor cannot see that, for example, the repayment claim no longer fully exists. The restructuring would thus undermine the protective and publicity function of the recorded terms and conditions of issue and the crypto securities register. For the German restructuring law it is already acknowledged that other acts of publication and execution—such as an entry in the land register under Sec. 873(1) German Civil Code or an entry in the commercial register—must be carried out separately in order to successfully implement the restructuring plan.[59] These acts will neither be effected by judicial or administrative confirmation nor by unanimous adoption in the case of an out-of-court restructuring plan.[60] Amending the terms and conditions of issue following the restructuring

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[57] See Christian Pieper in Michael F Müller and Christian Pieper (eds), *eWpG* (CH Beck 2021) § 7 para 8 et seq; Greta Gaumert in Christian Conreder and Johannes Meier, *eWpG*, (Erich Schmidt Verlag 2022), § 7 para 12 et seq; Michael Hippeli in Stefan Schulz and Karl-Alexander Neumann (eds), *eWpG*, (RWS Verlag 2023) § 7 para 41 et seq.

[58] Cf Jan Lieder in Sebastian Omlor and Florian Möslein and Stefan Grundmann (eds), *Elektronische Wertpapiere* (Mohr Siebeck 2021), 117.

[59] Thomas Hoffmann and Andrea Braun in Lucas F Flöther (ed), *StaRUG* (CH Beck 2021) § 68 para 2; Rüdiger Bauch in Eberhard Braun (ed), *StaRUG*, (CH Beck 2021) § 68 para 3; Anna Katharina Wilke in Dominik Skauradszun and Alexander Fridgen (eds), *BeckOK StaRUG* (10th edn, CH Beck 2023) § 68 para 6.

[60] Jürgen D Spliedt in Florian Jacoby and Christoph Thole (eds), *StaRUG* (CH Beck 2023) § 68 para 6. Also see the checklist pursuant to Sec. 16 StaRUG, p 21: 'The legal acts required for the change of legal form, such as transfers of ownership or entries in registers, are not replaced by the inclusion of the declarations of intent in the plan. These acts must be performed separately from the plan.'

of the rights resulting from the crypto security and the subsequent constitutive recording with the registrar or amendment of the register is very similar to an entry in the land register or the commercial register.[61] Therefore, it is reasonable to conclude that amending and recording the terms and conditions of issue as an act of publication must also be carried out separately.[62]

For this reason, the terms and conditions of issue must be amended by the issuer after the restructuring and then re-recorded with the registrar (cf. Sec. 5(3) Electronic Securities Act). In some cases, it might even be necessary to amend the register itself if the essential content of the right is also to be recorded in the crypto securities register and the register does not refer to the terms and conditions of issue.[63] It is the issuer's obligation to carry out this procedural act of execution separately from the restructuring proceedings (cf. Sec. 5(4) sentence 1 Electronic Securities Act).

Finally, the restructuring of the rights resulting from the crypto security is only effective after the issuer has taken these two steps.

4. Restructuring of the Terms and Conditions of Issue

If the issuer still needs to amend the terms and conditions of issue to restructure the rights resulting from the crypto security, it might be more favourable to restructure the terms and conditions of issue directly rather than said rights. As mentioned above, the terms and conditions of issue define the contractual relationship between the investor and the issuer.[64] Thus, all rights resulting from the crypto security are created in accordance with the terms and conditions of issue. A change in the terms and conditions of issue would therefore directly affect these claims. For German law, this idea is supported by the

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[61] So for the entry in the electronic securities register Johannes Meier, 'Elektronische Wertpapiere in der Zwangsvollstreckung' [2021] Zeitschrift für IT-Recht und Recht der Digitalisierung 381, 382; Sebastian Omlor, 'Elektronische Wertpapiere nach dem eWpG' [2021] Recht Digital 371, 373.

[62] The same conclusion regarding the restructuring of terms and conditions of issue has already been reached, albeit with a brief explanation Dominik Skauradszun, 'Vertragliche Pfandrechte und Pfandverwertung betreffend elektronische Wertpapiere' (2022) 222 Archiv für die civilistische Praxis 736, 750 n 56.

[63] However, this is usually unnecessary under German law since the electronic (crypto) securities register generally references the recorded terms and conditions of issue for the essential content of the right, cf Christoph Gleske and Daniel Klingenbrunn in Klaus J Hopt and Christoph H Seibt (eds), *Schuldverschreibungsrecht* (2nd edn. Otto Schmidt Verlag 2023) § 13 Electronic Securities Act para 32; cf also Sec. 7(1) sentence 1 Regulation on requirements for electronic securities registers (eWpRV).

[64] Josepha Rüberg, *Die Anleihe in der Insolvenz* (Duncker & Humblot 2019) 30.

above-mentioned Sec. 4(7) Electronic Securities Act, according to which the terms and conditions of issue are the *'recorded content of the right'*.

The Directive on restructuring and insolvency explicitly allows the change of conditions of a debtor's liabilities (Art. 2(1)(1) Directive). Consequently, it also seems permissible to restructure the terms and conditions of issue of a crypto security under the Directive's preventive restructuring frameworks. The possible restructuring measures are essentially the same as for the restructuring of the rights resulting from the crypto security (see III. 3). For example, the debtor could opt for a reduction of the interest rate, a cut of the repayment claim, subordination or even a debt-equity swap.[65] In addition, restructuring the terms and conditions of the issue also allows the covenants contained therein to be modified, which is not possible under option 1.[66] Restructuring of the terms and conditions of issue is even possible if they do not contain a clause that allows amendments by majority vote of the investors.[67]

Additionally, the terms and conditions of issue must also be re-recorded with the registrar in the case of a direct restructuring of the terms (cf. Sec. 5(3) Electronic Securities Act). This is done after the restructuring plan has been adopted by the affected parties and—in case it shall even be binding on dissenting affected parties—confirmed by the judicial or administrative authority (Art. 10(1)(a) Directive). If the crypto securities register specifies the rights resulting from the crypto security, the register needs to be amended too.[68] Only after this recording or this amendment the restructuring does become effective, and the restructured terms and conditions of issue apply.

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[65] Christoph Paulus and Reinhard Dammann in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 2 Directive on restructuring and insolvency para 4.
[66] Likewise for the German transposition law and bonds in general Wolfram Desch in Wolfram Desch (ed), *Das neue Restrukturierungsrecht* (CH Beck 2021) § 3 para 8; Dominik Skauradszun in Dominik Skauradszun and Alexander Fridgen (eds), *BeckOK StaRUG* (10th edn, CH Beck 2023) § 2 para 77; cf Franz Bernhard Herding and Jonah Krafczyk in Christoph H Seibt and Lars Westpfahl (eds), *StaRUG* (Otto Schmidt Verlag 2023) § 2 para 195.
[67] See for the German transposition act Sacha Lürken, 'Das StaRUG aus schuldverschreibungsrechtlicher Sicht' [2021] Zeitschrift für Wirtschaftsrecht, 1305, 1307; Dominik Skauradszun in Dominik Skauradszun and Alexander Fridgen (eds), *BeckOK StaRUG* (10th edn, CH Beck 2023) § 2 para 69; Franz Bernhard Herding and Jonah Krafczyk in Christoph H Seibt and Lars Westpfahl (eds), *StaRUG* (Otto Schmidt Verlag 2023) § 2 para 158; H Philipp Esser in Eberhard Braun (ed), *StaRUG*, (CH Beck 2021) § 2 para 23. Cf also Christoph Paulus and Reinhard Dammann in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 2 Directive on restructuring and insolvency para 4.
[68] As mentioned above, under German law this is usually unnecessary, cf n 62.

IV. VOTING ON THE RESTRUCTURING PLAN

1. Selection of the Affected Parties

The debtor determines not only the content of the restructuring plan regarding restructuring measures. In accordance with Art. 2(1)(2), Art. 8(1)(c) Directive, it also defines the affected parties. This is another indication that the legal nature of preventive restructuring frameworks needs to be differentiated from insolvency proceedings and clearly demonstrates the influence the debtor exerts over the restructuring undertaking.[69] Since a preventive restructuring framework is not necessarily a collective proceeding, the debtor is given the right to act in its discretion when it comes to deciding which creditors or equity holders are to be included in the restructuring plan and therefore deemed affected parties.[70] This selection process will be heavily influenced by the strategical goal of ensuring the restructuring plan is eventually adopted. The reason for this is the affected parties' vital role in the restructuring undertaking. It is up to them to decide whether the restructuring plan is adopted or rejected by exercising their voting rights (Art. 9(2) sentence 1 Directive). Only affected parties are insofar permitted to vote on this matter (Art. 9(2) sentence 2 Directive).[71] This also means that creditors or equity holders who were not involved in the adoption of the plan cannot be affected by it, even if the plan has been confirmed by a judicial or administrative authority.[72]

This gets more complicated as soon as crypto securities are involved in the restructuring plan. There will be limits to the debtor's discretion in selecting affected parties. It will not be permitted to include only certain investors of the crypto security in the restructuring

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[69] Dominik Skauradszun, 'Grundfragen zum StaRUG – Ziele, Rechtnatur, Rechtfertigung, Schutzinstrumente' (2021) 82 KTS Zeitschrift für Insolvenzrecht 1, 10 f; cf Dominik Skauradszun in Rolf Stürner and Horst Eidenmüller and Heinrich Schoppmeyer and Stephan Madaus (eds), *MüKoStaRUG* (CH Beck 2023) § 29 para 6.

[70] Michael Veder in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 8 Directive on restructuring and insolvency para 9. Some transposition acts might limit the debtor's discretion slightly as the German StaRUG does (cf § 8 StaRUG).

[71] Michael Veder in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 8 Directive on restructuring and insolvency para 11. However, 'affected parties', who are only 'affected' by a prohibited restructuring measure, do not formally have the right to vote, but must be able to express their opposition, Dominik Skauradszun and Johannes Schröder, 'Prohibited Restructuring Measures and Disguised Non-Market Conformity in Restructuring Plans' (2023) 20 ICR International Corporate Rescue, forthcoming.

[72] Cf Art. 15(2) Directive.

plan and exclude other investors of the same crypto security. Such a different treatment of investors of the same rank and legal position cannot be justified. In other words, an issuer whose crypto security is held by 5000 investors will not be allowed to only select 1500 investors as affected parties. While this restriction of the debtor's discretion to select the affected parties is substantial, it appears to be the only feasible approach when it comes to crypto securities being subject to restructuring measures. There is no valid reason to treat investors differently. This is based on the assumption that in most cases, the economic situation of the investors will be more or less the same. When purchasing a particular crypto security, each investor agrees to the same terms and conditions of issue. The same train of thought applies to their respective contractual basis concerning the crypto security. If the investors were to be treated differently, this would cause frictions regarding the nature of crypto securities. A different treatment of owners of the crypto security would ultimately lead to it losing its fungibility and thereby one of its main characteristics.[73] Eventually this would lead to the crypto security becoming difficult to trade on the market. Clearly, this is neither a desirable nor a sensible outcome.

2. Formation of Classes

Apart from deciding which creditors and equity holders are affected parties, the debtor needs to form classes of said affected parties (cf. Art. 9(4) Directive). They need to be treated in separate classes in order to vote on the restructuring plan. However, Art. 9(4) Directive does not specify the concept of 'class formation'. According to the first paragraph of this article, classes should be formed based on *'sufficient commonality of interest'* and at least secured and unsecured creditors shall be treated in separate classes. Thus, the formation of a separate class for investors in a crypto security is not mandatory, and the debtor is given a high degree of flexibility to tailor the class formation to the plan's objectives.[74] The investors will usually fall into the class of unsecured non-lower ranking

[73] In the case of unequal treatment, fungibility can no longer be guaranteed after the restructuring, cf Christoph Thole in Klaus J Hopt and Christoph H Seibt (eds), *Schuldverschreibungsrecht* (2nd edn. Otto Schmidt Verlag 2023) § 5 SchVG para 32.
[74] Jörn Kowalewski and Jan-Philipp Praß in Christoph Morgen (ed), *Präventive Restrukturierung* (RWS Verlag 2019) Art 9 Directive on restructuring and insolvency para 43.

creditors or unsecured lower-ranking creditors. Therefore, they will normally be grouped into a class with other creditors of the same rank.

In addition to Art. 9(4) Directive, Recital 44 states that:

> *'Member States should, however, be able to require that more than two classes of creditors are formed, including different classes of unsecured or secured creditors and classes of creditors with subordinated claims'.*

Consequently, it seems possible to form a separate class for these investors by subdividing a class of the same ranking.[75] In the case of additional classes, the concept of 'sufficient commonality of interest' mainly comes into play in order to justify such classes.[76] Therefore, the formation of a separate class for the crypto security investors could be based on their economic interests, which may differ from other non-lower ranking or lower-ranking creditors. Different economic interests between these investors and, for example, suppliers appear rather likely. Their outlook on or preferred outcome of a restructuring undertaking may also present itself in an entirely different shape. This leads to the possibility to form a separate class, as it fulfils the requirement of sufficient commonality of interest. Forming a separate class may even be preferable from a strategic point of view. In forming a separate class, a cross-class cram-down of a certain class of affected parties could be prepared.[77] This could potentially permit a cram-down of the investors of the crypto security.

V. CONCLUSION AND THESES

1. Corporate financing through crypto securities will become both more important and more common in the global economy. It presents an attractive financing option for market participants. Some countries in Europe—such as France, Luxembourg, Switzerland, and

[75] Reinhard Dammann in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 9 Directive on restructuring and insolvency para 39.
[76] Reinhard Dammann in Christoph G Paulus and Reinhard Dammann (eds), *European Preventive Restructuring* (CH Beck 2021) Art 9 Directive on restructuring and insolvency para 39.
[77] According to initial voices in German literature and according to rulings of the Karlsruhe Local Court and of the Munich Local Court, this intention is an impermissible restructuring modality if it is the sole objective of the class formation, see regarding this Karlsruhe Local Court 25 March 2022, 102 RES 2/21, [2022] Zeitschrift für Wirtschaftsrecht, 651, 657; Munich Local Court 15 February 2023, 1507 RES 3229-22, [2023] Zeitschrift für Wirtschaftsrecht 603, 605; Alexander Fridgen in Dominik Skauradszun and Alexander Fridgen (eds), *BeckOK StaRUG* (10th edn, CH Beck 2023) § 9 para 89a.

Germany—have already taken up the challenge and created a legal framework for licensed crypto securities. They all show signs of a similar approach to licensing.

2. The licensing of market players such as the crypto registrar and crypto custodian will create a sense of confidence in the crypto securities market. Where there is market regulation and supervision, a certain level of trust in the market will eventually be established. However, this does not exactly reflect the original idea of crypto-assets, which were supposed to function largely without intermediaries or regulators.

3. Given the practical demand for crypto securities and their growing popularity, issuers of crypto securities in financial distress might use preventive restructuring frameworks to save their businesses in the future. A possible restructuring plan may then include these crypto securities.

4. The nature of the distributed ledger technology raises questions about the applicable law for the restructuring of the crypto security. Not only are decentralised blockchain networks typically distributed across the world on the computers of network participants, but the issuer's investors may also be located across the globe. This ultimately leads to a connection with the laws of different states. In terms of private international law, the applicable law to the preventive restructuring framework is easy to determine, provided the framework is listed in Annex A EIR Recast. For all proceedings not listed in Annex A, there is currently no cut-and-dried answer regarding the legal situation.

5. The Rome I Regulation does not apply to crypto securities. However, the question of the law applicable to the restructuring of a crypto security may still be answered by a choice of law clause. Even if the Rome I Regulation is not applicable, a court-approved solution is that a choice of law is permissible for securities. Ultimately, such a choice of law clause will determine the applicable law in this case.

6. Restructuring plans may focus on two different measures. On the one hand, the focus may be on the rights resulting from the crypto security itself. On the other hand, the restructuring may focus on the terms and conditions of the issue. Regardless of the measure at hand, the crypto security register must always reflect the true content of the crypto security. This is in order for said register to fulfil its main purposes: protecting the market and especially its trust in the publicity of the crypto securities register.

7. The issuer is not permitted to include only certain investors of the crypto security in the restructuring plan and exclude other investors of the same crypto security. This limits the debtor's discretion in selecting the affected parties, but it is the only way to ensure the fungibility of the crypto security, to prevent the crypto security from becoming difficult to trade on the market, and to avoid an unjustifiable unequal treatment of the investors.

8. It is not mandatory for the issuer to form a separate class for the investors of the crypto security in the restructuring plan. However, forming a separate class is possible and may even be preferable from a strategic perspective regarding a potential cross-class cram-down.