*Cambridge Law Journal*, **74(3)**, November 2015, pp. 505–533
doi:10.1017/S0008197315000598

# CUSTODY CHAINS AND ASSET VALUES: WHY CRYPTO-SECURITIES ARE WORTH CONTEMPLATING

EVA MICHELER*

ABSTRACT. *Computerisation facilitates instantaneous and direct links between all of us in our work and social lives. At the same time, and counter-intuitively so, securities are increasingly held indirectly through chains of custodians that operate between issuers and investors. This disconnects investors from issuers and can significantly reduce the value of assets. The regulatory framework does not prevent this effect. UK-regulated holders of client securities should be required to hold these directly in the name of the investor. At an international level, it is worth asking whether the technology underlying bitcoin and other cryptocurrencies can be used to create an un-intermediated securities ledger connecting investors and issuers directly.*

KEYWORDS: *shares, debt securities, securities, interests in securities, custodian, depositary, client asset rules, cryptocurrency, financialisation.*

## I. INTRODUCTION

Computerisation arrived with the promise of better connecting people. While it has delivered instantaneous and direct links between all of us in our work and social lives, it has done no such thing for our financial assets. On the contrary, and counter-intuitively so, introducing electronic securities has increased indirect patterns of holding securities and thereby disconnected investors from financial assets and issuers.

Securities used to be held directly with names of investors appearing on the registers of issuers of registered securities. Investors received paper certificates evidencing their position. Investors of bearer securities owned the certificate representing the assets. Direct holdings are still possible but have largely been replaced with indirect holding structures when electronic

* I am grateful for comments on earlier versions of the paper to two anonymous referees, Joanna Benjamin, Jo Braithwaite, Michael Bridge, Jason Donaldson, Leonardo Felli, Philip Goed, Steven Elliott, Paul Hewitt, David Kershaw, Matteo Solinas, Sarah Wilson, and the participants of the conference on "Intermediated Securities and Investor Rights" held at LSE on 24 March 2014 and the participants of the Workshop on EU Securities Regulation and Company Law held in Vienna on 5 December 2014. All mistakes are mine. Address for Correspondence: Department of Law, London School of Economics, Houghton Street, London, WC2A 2AE, UK. Email: E.Micheler@lse.ac.uk.

securities were introduced in the UK. Investors now and increasingly so hold securities through custodians.[1]

What is more, frequently there is not just one custodian operating between an investor and an issuer, but a series of custodians. This happens in the context of cross-border investments,[2] but also at a domestic level.[3]

Security holdings used to look like this:

Investor
Issuer

They have come to look like this:

Investor
Custodian 1
Custodian 2
Custodian 3
Central Securities Depositary (CSD)
Issuer

Investors think they continue to own shares, debt, or hybrid securities. They receive statements showing that certain securities are held for them. Such communications suggest that, while these securities are now mostly held indirectly, investors still have what they had when such assets were held in paper form. It is true that investors who hold securities through custodians own something, but that may not be what they think they own.

From the perspective of property law, the change from direct to indirect holdings has received a significant amount of analysis. The conclusions are: investors used to have their names entered on the issuer register and were legal owners of the securities. The investor holding through the chain above has an equitable interest in another equitable interest of another equitable interest of a legal interest. From the perspective of the investor, legal rights have been replaced with equitable rights.[4]

[1] Custodians safeguard and administer securities on behalf of investors. The rules on alternative investment funds (AIFs) and undertakings for collective investment in transferable securities (UCITS) use the term "depositary", which is also used in this article when the respective rules are discussed.

[2] M. Yates and G. Montagu, *The Law of Global Custody*, 4th ed. (London 2013), at [1.1]–[1.12].

[3] The Kay Review of UK Equity Markets and Long Term Decision Making, Final Report, July 2012, at [12.15]; see also J. Benjamin, *Financial Law* (Oxford 2007), at [19.4]. The phenomenon that computerisation leads to intermediation can also be observed in the context of trading, where it has been said that "[t]he initial promise of computer technology was to remove intermediaries from the financial market . . . . The reality turned out to be a windfall for financial intermediaries", M. Lewis, *Flashboys* (Allen Lane 2014), 135.

[4] L. Gullifer, "Transfer of Equity and Debt Securities" in M. Bridge, L. Gullifer, G. McMeel, and S. Worthington (eds.), *The Law of Personal Property* (Oxford 2013), ch. 32; E. Micheler, *Property in Securities* (Cambridge 2007); J. Benjamin, *Interests in Securities* (Oxford 2000).

This approach adopted by English law is sometimes characterised as "no look through". The term refers to the fact that investor rights are indirect. Investors can only claim against their immediate custodian and not against a sub-custodian or the issuer.[5] Academic commentators also refer to custody chains as consisting of a trust and sub-trusts and the term "interest in securities" has been coined to refer to the investor's rights.[6]

The "no look through" approach has been credited with a number of advantages. Professor Gullifer and Professor Goode, for example, point out that it allows the issuer to deal with a relatively small number of large players who in turn deal with a small number of smaller participants creating a pyramidal structure which leads to the investor. They observe that, in a paper-based environment where securities certificates need to be issued and delivered, this reduces the volume and movement of paper and the risk of loss or theft of negotiable instruments.[7] It enables custodians to effect securities transfers in-house, thereby reducing the number of transactions and the amount of paper that needs to be moved. It is worth keeping in mind that these observations are articulated against the background of paper-based securities. Once paper is eliminated, the benefits of intermediation become less apparent.

Professor Gullifer and Professor Goode also mention that indirect holding systems facilitate the pooling of assets from different clients and thus create pools of collateral that can be lent or used for other securities financing transactions.[8] This has advantages from the perspective of custodians who facilitate the transactions. It will be shown later in this article that it also creates disadvantages for investors that have not been adequately addressed by regulation.[9]

Academic contributors take comfort from the fact that equitable interests provide investors with priority in the insolvency of a custodian. Some raise doubts as to whether equitable interests are proprietary.[10] But, in terms of the effect of custody chains for investors, this is the point at which the debate stops. Whatever they are, equitable interests are perceived to be safe.

Professor Benjamin articulates this perception by reference to a metaphor. She compares custody chains with Russian dolls. At the centre, there is a jewel (the security) and it is protected by a series of tightly fitting wooden wrappers protecting the jewel for the benefit of investors.[11]

[5] See for example L. Gullifer, "Ownership of Securities" in L. Gullifer and J. Payne, *Intermediated Securities* (Oxford 2010), 15.
[6] Benjamin, *Interests in Securities* (Oxford 2000).
[7] L. Gullifer (ed.), *Goode on Legal Problems of Credit and Security*, 5th ed. (London 2013), at [6–07].
[8] Ibid., at para. [6–07].
[9] See section V below.
[10] A. Pretto-Sakmann, *Boundaries of Personal Property* (Oxford 2005); B. McFarlane and R. Stevens, "Interests in Securities" in L. Gullifer and J. Payne (eds.), *Intermediated Securities* (Oxford 2010), 33; contrast with Benjamin, *Financial Law*, at [19.4], [16.2], who characterises interests in securities as proprietary; see also P. Jaffey, "Explaining the Trust" (2015) 131 L.Q.R. 377.
[11] Benjamin, *Interests in Securities*, at [1.108].

That suggests that, if anything, custody chains do more for investors than direct ownership. More padding is surely good for both the jewel and the investor.

Another metaphor that is frequently used to illustrate custody chains is that of a kebab stick connecting issuers and investors, suggesting that the custodians in between are units pierced by a solid connection between issuer and investor.[12] No harm is done by adding more. The connection is strong, rigid, and safe.

Metaphors can be misleading. In this case, the images used overlook the effect of custody chains on investor rights. In reality, one custodian does not neatly fit into the other. There is no stick and no connection between issuer and investor. We are looking at a series of independent contractual links reflecting the preferences of the custodians concerned.

The term "no look through" exudes less comfort, but also does not provide us with a complete picture of the effect created by custody chains. The term only highlights the indirectness of investor rights. It does not capture the fact that the chain also affects the content of the rights of investors. Custody chains do more than transform direct into indirect rights. They modify rights. Custody chains reduce investor rights to the least favourable custody term operating in the chain.

This article will analyse this phenomenon. It will show that, compared to a directly held asset, an indirectly held asset can be significantly reduced in value. Custody chains make it next to impossible for investors to claim against issuers (section III). They can cause securities to become affected by security interests of sub-custodians (section IV) and securities financing transactions (section V). Equitable interests are compromised by shortfalls caused by negligence or fraud (section VI). Custody chains also significantly reduce the accountability of custodians (section VII). The article will demonstrate that these effects are not adequately addressed by the regulatory framework.

Custody chains allow each custodian to operate a simple model, but what custodians save does not add up to benefit investors or the financial system overall. They are an example of a situation where what is good for one group of participants is not good for the system overall. This is not an uncommon phenomenon. Milton Friedman famously observed in 1980 that "Almost any interesting economic problem has the following characteristic: what is true for the individual is the opposite of what is true for everybody together".[13]

[12] See e.g. L. Gullifer, "Ownership of Securities", pp. 3, 13; or Benjamin, *Interests in Securities*, at [1.106].

[13] Videorecording, Money and Inflation, made by Harcourt Brace Janovich for WQLN (public broadcasting service in Eire, Pennsylvania).

The prescription of the article is that UK-regulated holders of client securities should be required to hold these directly in the name of the investor. At an international level, it is worth asking whether the technology underlying bitcoin and other cryptocurrencies can be used to create an un-intermediated securities ledger connecting investors and issuers directly.

## II. Investor Rights in a Custody Chain

### *A. Issuer's Terms*

Admittedly, the rights of investors are related to what the issuer has promised, but only in the sense that an investor does not receive more than the issuer has undertaken to deliver. The promise made by the issuer sets the ceiling. The investor is also exposed in full to the downside risk associated with the underlying asset. Custody chains do not shield investors against issuer risk.

At the same time, however, they also do not provide the investor with the complete set of rights associated with the underlying asset. The scope of the investor's position is determined not only by the issuing documentation, but also by the contract he made with his custodian and by the contracts that operate at the levels of the sub-custodians.

### *B. Custody Terms*

The insight that the interest is indirect (no look through) and equitable in nature tells us very little about the position of the investor. In particular, it does not reveal the content of the rights that investors have. It just states that the custodian holds certain rights on trust. Which rights are held for the benefit of investors is determined by the contracts that govern the arrangement with his custodian.

This contract determines the extent to which a custodian passes on dividends, voting rights, or rights in relation to corporate actions or restructurings to investors. It regulates whether and to what extent the custodian assists the investor in enforcing rights against the issuer. It contains provisions on liens, pledges, rights of retention, set-off, and other security interests supporting the claims of the custodian against his contractual partner. Custody contracts also determine whether and to what extent the custodian is allowed to use assets, such as lending them to third parties or using them for other securities financing transactions. They set the standard to which the custodian is liable for mistakes that may occur in the provision of custody services. They shape the rights of investors.

### *C. Sub-Custody Terms*

The rights of investors depend not only on what is set out in the contract between him and his immediate custodian, but also on all other contracts

entered into between the sub-custodians forming the chain. The terms of these contracts accumulate but not to form extra cushioning. The rights of the investor revert to the lowest denominator. Any term in a custody chain that qualifies or limits the rights of a sub-custodian also reduces the rights of the investor. Taken together, the least favourable terms determine which rights investors have. That can have the effect of causing the position of an indirect investor to be significantly reduced when compared to a direct investor in the same asset.

This phenomenon occurs when a custody contract between and investor and a custodian has a term enabling the custodian to outsource services. Examples of terms that allow custodians to appoint sub-custodians can be found in the general terms of Euroclear and Clearstream Banking Luxembourg (CBL). Euroclear is under its terms allowed "to hold securities" with "any subcustodian … directly or indirectly".[14] A sub-custodian "with which securities are held may, in turn, redeposit or hold securities … without the requirement of our [Euroclear's] approval".[15] Clearstream's terms are very similar. Clearstream Banking (Luxembourg) (CBL) "may hold securities at any other place or deposit them with other Sub-custodians …. Any such entity may, in turn, redeposit or hold Securities with one or more other entities used by it without the prior approval by CBL."[16]

In both examples, the custodians also have extensive permission to agree terms with sub-custodians. They are able to make such arrangements upon terms and conditions "as may be customary" with the sub-custodian and also upon such terms and conditions "as may be approved" by them.[17] By accepting these terms, the investor is taken to have agreed to the terms upon which his custodian and any further sub-custodian outsources the holding of assets to a sub-custodian. As a result, he is affected by those terms, but only in so far as they limit his rights.

Contracts between custodians do not widen the scope of investors' interests. The investor is not normally a party to these contracts and the contracts do not normally give rights to investors in the form of third-party rights. The doctrine of privity of contracts prevents the investor from benefiting from terms at another level that are more favourable than the terms with

[14] Euroclear (Belgium), Terms and Conditions governing use of Euroclear: The clearance and settlement system for internationally traded securities (Euroclear Terms and Conditions), art. 4(b)(i), available at <https://my.euroclear.com/dam/EB/Legal%20information/Terms%20and%20conditions/public/LG310-terms-and-conditions-governing-use-of-euroclear.pdf>.

[15] Ibid., art. 4(b)(ii); see also art. 11(a)(i): "We may, from time to time, appoint banks or legal entities (other than Euroclear Bank) as additional depositories … for securities held in the Euroclear System."

[16] Clearstream and Deutsche Borse Group (Luxembourg), General Terms and Conditions (CBL Terms and Conditions), art. 13, see also art. 47, available at <http://www.clearstream.com/blob/11088/aa624aadbd37147f75e57591378cf9f6/migrated-8ffbcl196nsgden-terms-and-conditions-cbl-en-pdf-data.pdf>.

[17] Euroclear Terms and Conditions (note 15 above), art. 4(b)(i); CBL Terms and Conditions (note 17 above), art. 13.

his immediate custodian. It would be possible for a sub-custody contract to give direct rights to investors.[18] But the standard approach in the market is to contract out of that Act.[19] Euroclear's terms, for example, explicitly state that "No customer or other entity or individual for which you [Euroclear's immediate client] may be acting will, in that capacity, have or be entitled to assert any rights, claims or remedies against us".[20]

### *D. Arithmetic*

Focusing on the content of investor rights, the effect of the custody chain set out above can be illustrated in the following arithmetical terms:

Rights contained in the issuer's documentation
- Qualifications and limitations contained in the contract between the CSD and Custodian 3
- Qualifications and limitations contained in the contract between Custodian 3 and 2
- Qualifications and limitations contained in the contract between Custodian 2 and 1

Rights available to the investor

Note that there are only subtractions and no additions. The fact that Custodian 2, Custodian 3, or the CSD give their respective clients better terms does not trickle through to the investor because his rights are exclusively against his immediate custodian. The contract between investor and his custodian, however, passes on all limitations from the sub-relationships without necessarily allowing the investor to rely on more favourable terms from the levels above. That is the result of the combination of standard documentation authorising custodians to make outsourcing arrangements at terms set by the custodian and sub-custody contracts excluding third-party rights.

It is also worth noting that it can easily happen that custody contracts at different levels have different content. The contracts between custodians and sub-custodians are set up independently of the contracts between investors and custodians.[21] They are based on standard terms[22] which have been put together by different individuals within each of the organisation concerned, at different times and with different aims. Moreover, custody services are

[18] Contracts (Rights of Third Parties) Act 1999 (1999 c. 31).
[19] G. Fuller, *The Law and Practice of International Capital Markets*, 3rd ed. (London 2012), at [1.153]; see also Yates and Montagu, *The Law of Global Custody*, at [6.20].
[20] Euroclear Terms and Conditions (note 15 above), art. 18, second para.
[21] See the facts underlying the recent FCA Final Notice, Barclays Bank PLC (122702) 23 September 2014, at [4.5]–[4.6], [4.11].
[22] FCA, Policy Statement, Review of the client asset regime for investment business, Feedback to CP13/5 and final rules (June 2014) (PS14/8), at [5.24]–[5.25]).

frequently coupled with other services such as securities financing or foreign exchange transactions.[23] This causes sub-custodians to use different terms depending on the content of the bundle operating at the respective level.

The ability to outsource custody at terms approved by custodians reduces investor rights to the least favourable terms prevailing in a chain. The phenomenon can be observed in a number of contexts which will be illustrated in this article. Before that, the regulatory regime will be examined briefly.

### *E. Regulatory Boundaries*

Custody services are subject to regulation. The Financial Conduct Authority (FCA) has adopted rules on client assets (CASS).[24] Chapter 6 CASS concerns the custody of financial instruments belonging to a client.[25] Compliance with the CASS rules is monitored through an auditor with special obligations towards the regulator.[26] The CASS rules also apply to a firm which is acting as a trustee or depositary of an alternative investment fund (AIF) or of an undertaking for collective investment in transferable securities (UCITS).[27] In addition, there are special rules concerning depositaries of AIFs[28] and UCITS.[29]

In the context of this article, there are two particular questions that need to be investigated. Does the regulatory regime permit custodians to use terms that enable them to appoint sub-custodians? Are custodians allowed to use terms that give them permission to set the terms at which they employ sub-custodians? The answer to both questions is yes.

The CASS rules explicitly permit the outsourcing of custody.[30] This also applies to depositaries of UK funds.[31] A slightly different regime governs AIFs and UCITS. Depositaries of such funds are only permitted to delegate the safekeeping of assets if they can demonstrate that there is "an objective reason for the delegation".[32] Moreover, tasks may not be delegated "with the intention of avoiding the requirements of the" AIFM and UCITS

[23] European Commission, SWD/2012/184 final, 13.
[24] The FCA adopts these rules relying on Financial Services and Markets Act 2000, s. 138.
[25] CASS 6.1.1 R FCA.
[26] SUP 3.10 FCA; the rights and duties of CASS auditors are set out in SUP 3.8 and SUP 3.10. CASS auditors are assisted by client asset guidelines published by the Financial Reporting Council (October 2011) (FRC CASS Guidelines) available at <https://www.frc.org.uk/Our-Work/Publications/APB/Bulletin-2011-2-Providing-Assurance-on-Client-Asse.pdf>.
[27] CASS 6.1.1(1C and 1D) R FCA.
[28] Alternative Investment Fund Managers Regulations 2013 (SI 2013/1773) (AIFM Regulations 2013); these implement Directive (EU) No 61/2011 (OJ 2011 L 174 p. 1) (AIFM Directive); see also Commission Delegated Regulation (EU) No 231/2013 (OJ 2013 L 83 p. 1) (AIFM Regulation).
[29] Directive (EC) No 65/2009 (OJ 2009 L 302 p. 32) last amended by Directive (EU) No 91/2014 (OJ 2014 L 257 p. 186) (UCITS Directive); implemented in the UK by the Undertakings for the Collective Investment in Transferable Securities Regulations 2011 (SI 2011/1613).
[30] CASS 6.2.3(2)d R FCA.
[31] COLL 6.6.16(1)G FCA together with SYSC 8.1.6 R FCA PRA.
[32] FUND 3.11.28(2) R FCA.

Directive, respectively.[33] There is not much further guidance on what constitutes an "objective" reason.[34] It is difficult to predict how the regulator will interpret the term, but it would seem that cost savings are likely to qualify as a reason justifying delegation. Other reasons might be the expertise or the geographical access of a provider. This does not prevent custodians from using terms that give them permission to employ sub-custodians. It would also seem that, even in cases where custody is delegated in breach of the regulatory framework but where the investor has given his custodian unlimited scope to delegate, the investor would be taken to have agreed to and be affected by the outsourcing arrangement.

The CASS rules instruct custodians not to use certain terms in sub-custody arrangements.[35] They also stipulate a list of topics that should be covered in the contract with a third party without prescribing the content of the arrangement.[36] But this does not prohibit custodians from agreeing with their customers that they determine the content of sub-custody terms.

There also exists a general clause expressing the level of skill and care that is to be applied by a custodian when contracting with a sub-custodian. A custodian must exercise "all due skill, care and diligence in the selection … and periodic review … of the arrangements for the holding and safekeeping" of client assets.[37] This also does not prohibit custodians to receive from their clients permission for setting such terms and it does not prevent investors from being affected by the terms.

## III. Claims against Issuers

Having established that custodians are allowed to seek authorisation from investors permitting them to employ sub-custodians at terms to be set by the custodians, we can go back to examining the effect of this practice on investor rights. The first area where we can observe that custody chains cause investor rights to revert to the lowest denominator is the right to claim against the issuer.

### *A. Standing in Court*

If an investor holds securities directly, his name will be on the issuer register if they are registered securities. If they are bearer securities, he will own the paper certificates. In both cases, taking the issuer to court is

[33] AIFM Directive (note 29 above), art. 21(11)(a); UCITS Directive, art. 22a(2)a.

[34] When assessing the reasons for delegation, competent authorities should consider the structure of the delegation and its impact on the structure of the AIFM (AIFM Regulation, whereas 83).

[35] See sections IV and V below.

[36] CASS 6.3.4B G FCA and the recently introduced requirement for written documentation CASS 6.3.4.A R FCA; see also AIFM Regulation, whereas 112.

[37] CASS 6.3.1 R FCA and CASS 6.3.2 G FCA; see also FUND 3.11.28(3) R and AIFM Regulation, art. 98.

straightforward. The investor has standing against the issuer because he is the legal owner of the assets.

If the securities are held through a custody chain, the custodian whose name is on the issuer register or who holds the paper certificates is the legal owner and has therefore standing in court. The terms of the custody contract determine the extent to which each custodian passes on this right to the next member of the chain. The investor can only claim if all contracts facilitate enforcement. His position is determined by the lowest denominator.

Euroclear, for example, states in its terms that it makes "no investigation with respect to … any issuer".[38] CBL states in its terms that it has "no obligation to take any action with respect to any rights, options or warrants … except to the extent that CBL has been explicitly instructed by the Customer, and has, in writing, agreed to take such action, or as otherwise provided in the Governing Documents".[39] Investors who use a custodian who uses Euroclear or CBL or has a sub-custodian who uses Euroclear or CBL have therefore no right to assistance in enforcing claims against issuers.

This applies also when the contract with their immediate custodian provides them with enforcement rights. In the circumstances, the immediate custodian has promised to help with claiming against the issuer in one section of the contract. In another section of the same contract, however, the custodian receives permission to delegate custody to someone else and authority to set terms upon which this third party performs these services. It is worth asking whether the authority to outsource should be taken to be limited by the level of service specified between the investor and his immediate custodian. The answer to this question depends, of course, on the exact wording of the documentation. Looking at the terms used by Euroclear and Clearstream as an example, we can observe that they have permission to make outsourcing arrangements upon terms and conditions "as may be customary" or "as may be approved" by them.[40] This is unambiguous. It is also not qualified by reference to anything else in the contract. The terms of sub-custody arrangements are set by Euroclear/Clearstream. Their client has accepted this. If such terms are used, the conclusion is most likely that the investor is taken to also have accepted that his rights may be modified by outsourcing arrangements.

On the other hand, then, if all sub-custodians promised to help with enforcement, but the immediate custodian excluded this the investor, not being party to the other contracts and having no third-party rights arising out of them, cannot request help from sub-custodians.

[38] Euroclear Terms and Conditions, art. 12(e).
[39] CBL Terms and Conditions, art. 15.
[40] Euroclear Terms and Conditions, art. 4(b)(i); CBL Terms and Conditions, art. 13.

Alternatively, the investor could collapse the chain and become the legal owner. Again, this requires the investor to approach one custodian after the other along the chain and starting with his immediate custodian. When assets are held in omnibus accounts, they will have to be moved out of the pool. At each level, terms will have to be examined to determine whether the arrangement can be collapsed at the request of the investor. Again, it is possible for this option to become blocked by terms at the level of any of the sub-custodians. The ability of the investor to become the registered owner is determined by the lowest denominator.

The same is true for bearer securities issued in paper form. The investor's custodian can only deliver the certificates to him if delivery is facilitated by all other custodians.[41] For the investor to receive the certificates, all of the outsourcing contracts have to allow for the physical delivery of the paper certificate. If only one of them excludes delivery, no delivery will be possible.

Custody chains can operate to block the ability of investors to claim against issuers. The more custodians there are, the more likely it is for such a block to occur. This can reduce the value of assets.

### *B. Effect on Asset Values*

Two recent UK High Court decisions illustrate that the inability to sue the issuer can reduce asset values. The cases concerned investors who held securities through a custody chain. In both cases, the custody chain prevented investors from having standing in a law suit against the issuer. *Eckerle v Wickeder Westfalenstahl GmbH* concerned listed shares.[42] *Secure Capital SA v Credit Suisse AG* related to bonds that were privately placed.[43] The two cases will be analysed in turn below.

#### *1. Eckerle v Wickeder Westfalenstahl GmbH*

In *Eckerle v Wickeder Westfalenstahl GmbH*, investors owned shares issued by a UK-registered company, DNick Holding plc. (DNick).[44] The shares were listed on German exchanges. The issuer was gradually taken over by a group of shareholders led by the chief executive officer of the company. It was then transformed from a public limited to a private limited company and removed from the German exchanges. The investors' claim was that, as a result of this, the shares lost value.

Normally, such a change in ownership would have triggered a mandatory bid rule requiring the majority shareholder to offer to purchase the shares of

[41] It is possible for custody terms to exclude physical delivery. See e.g. the general terms of one of the custodians who acted for the investors in *Eckerle v Wickeder* [2013] EWHC 68 (Ch); [2014] Ch. 196: Special Terms—Brokerage (Besondere Bedingungen—Brokerage) of Postbank, s. 18, available at <https://www.postbank.de/privatkunden/depot_eroeffnen.html>.

[42] *Eckerle v Wickeder* [2013] EWHC 68 (Ch); [2014] Ch. 196.

[43] *Secure Capital SA v Credit Suisse AG* [2015] EWHC 388 (Comm) 25 Febrary 2015.

[44] See note 42 above.

the minority shareholders. This case, however, was not subject to the UK Takeover Code, because the company was not listed in the UK.[45] It was also not subject to the German takeover rules because the company was not registered in Germany.[46] Nevertheless, the Companies Act 2006 (CA 2006) contains provision designed to protect investors. Section 98 of CA 2006 applies when a company is transformed from a public to a private company. The "holders of not less . . . than 5% in nominal value of the company's issued share capital" may apply to court for a cancellation of the shareholder resolution authorising the transformation. Instead of cancelling the resolution, the court may make an order that "an arrangement" "be made to the satisfaction of the court for the purchase of the interests of dissentient members".[47]

The minority shareholders applied to court asking to be bought out at a price that reflected the value of their shares before the takeover and transformation. Their understanding was that they owned 7.2% of DNick's shares. This had been supported by the company's referring to them as shareholders in correspondence and press releases.[48]

If they had held the shares directly, their name would have appeared on the shareholder register and they would have had standing in court. They were, however, not registered as shareholders. On the register of shareholders were entered the name of the chief executive officer, Dr. Platt, as holding one share and the name of the Bank of New York Depository (Nominees) Ltd. (BNYM) as holding 5,671,317 shares. BNYM was the sub-custodian for Clearstream AG. Clearstream AG kept accounts of Clearstream Interests. Clearstream account holders are not individuals, but banks or other financial institutions. The reported judgment reveals that one of the investors used both Citibank and Postbank as custodians,[49] but it does not mention whether these two service providers held accounts directly with Clearstream or whether an additional sub-custodian operated between them and Clearstream.

In any event, the effect of this indirect holding structure was that the investors were not able to claim against the company. They were not legal owners. They were only holders of "the ultimate economic interests in underlying securities amounting to a specified percentage of shares held by BNY[M] trust for the Clearstream account holders whose customers the claimants are".[50] This was not good enough for them to be able to exercise rights under CA 2006, s. 98.[51]

[45] UK Takeover Code, s. 3(a)(i).
[46] German Wertpapiererwerbs- und Übernahmegesetz, § 1(3).
[47] CA 2006, s. 98(4)b.
[48] *Eckerle v Wickeder Westfalenstahl GmbH* [2013] EWHC 68 (Ch); [2014] Ch. 196, at [14(l and m)], [30].
[49] Ibid., at paras. [14(k)], [14(m)], respectively.
[50] Ibid., at para. [14(g)].
[51] Ibid., at paras. [20]–[23].

The investors also relied on provisions in DNick's articles that were based upon CA 2006, s. 145(1) and enabled Clearstream Interest Holders to exercise shareholder rights. The investors took the position that they were Clearstream Interest Holders. Unfortunately for them, however, a Clearstream Interest Holder was defined in the articles as the entity that appears on the electronic register maintained by Clearstream. The court found that those were the banks or financial institutions that had an account with Clearstream, but not the investors themselves.[52] The articles did not confer any rights on the investors. Justice Norris concluded that if they "have any rights it is because of the terms of their contract with an account holder".[53] That does not enable them to claim against the company under CA 2006, s. 145(1).

The case does not reveal on what terms the securities were held by BNYM, Clearstream, or Postbank/Citibank. We do not know whether these custodians had passed on the right to claim against the issuer to the investors. But, even if they had, it would seem that this would not have helped the investors. Justice Norris remarked that he had considered whether proceedings might have been saved by adding BNYM as a party.[54] BNYM in that case would have acted as the legal owner, but presumably taking instructions through Clearstream/Postbank/Citibank from the investors.

In addition to all the contracts having to facilitate enforcement, another peculiar hurdle exists that prevents such claims in the present context. An application under CA 2006, s. 98 is not open to a person who voted in favour of the resolution authorising the transformation of the company from public to private. BNYM acted as a custodian for all DNick investors and therefore voted both in favour and against the resolution. It was therefore unable to rely on CA 2006, s. 98. The effect of this for indirectly held securities is that a remedy under CA 2006, s. 98 is not available. The Jenkins Committee pointed out the problem and recommended change, but that recommendation was not adopted.[55]

It seems that, in addition to the problem associated with chains of custody contracts highlighted in this article, the Companies Act has not yet been fully adapted to indirect holding structures. Justice Norris was "conscious" that his reading of the CA 2006 deprived the claimants as indirect investors of the sort of protection which those who formulated the Act would have extended to minority shareholders. He also mentioned that "This is not a particularly comfortable conclusion at which to arrive".

[52] Ibid., at para. [24].
[53] Ibid., at para. [24], last sentence.
[54] Ibid., at para. [32].
[55] Ibid., at para. [32].

But any other conclusion would have amounted to "an impermissible form of judicial legislation".[56]

From the perspective of this paper, we need to note that the custody chain deprived the investors of a remedy they would have otherwise had and consequently reduced the value of their assets.

### 2. *Secure Capital SA v Credit Suisse AG*

In *Secure Capital SA v Credit Suisse AG*, an investor was unable to claim against the issuer of a longevity bond that had been sold to him in a private placement.[57] The investor claimed that the issuer was in breach of a term whereby they had given assurance that they had taken all reasonable care to ensure that the information provided in the pricing supplement taken together with the other issue documentation was accurate and that there were no material facts the omission of which would make any statements contained in the relevant documents misleading.[58]

The investors took the view that this term had been breached by the issuer. The securities were connected to certain insurance policies. The return depended on the mortality of individuals which formed part of a risk pool that was sold to the investor. The return decreased with the longevity of the members of the risk pool. The investor's case was that he was sold the securities in August 2008 on the basis of mortality tables provided by a third-party life-expectancy provider. In September 2008, the provider issued predictions of an increase in life expectancy which rendered the securities valueless. The investor contended that the issuer knew of the imminent change and misled him by not disclosing this information to him.[59]

Rather than engaging in a trial about what he knew or did not know, the issuer responded by requesting delivery of the bearer certificate which had been issued for the bond. The investor was unable to produce that certificate. The certificate was deposited with the Bank of New York Mellon (BNYM) who was a sub-custodian of Clearstream who was a sub-custodian of RBS Global Banking (Luxembourg) SA (RBS) who was the investor's immediate custodian.[60]

The reported facts do not reveal why the investor failed to present the certificate. We can assume that the investor, having been asked to present the certificate in court, would have tried to request delivery by first approaching his immediate custodian, RBS. We do not know why he failed. It is clear, however, that he would only have succeeded if RBS,

[56] Ibid., at para. [31].
[57] *Secure Capital SA v Credit Suisse AG* [2015] EWHC 388 (Comm) 25 February 2015.
[58] Ibid., at para. [3].
[59] Ibid., at paras. [3], [8].
[60] Ibid., at paras. [7]–[11].

Clearstream, and BNYM used terms that facilitated the physical delivery of the certificate.

Under Luxembourg law, the clients of RBS are characterised as indirect owners of the securities that are held for them and are able to claim against the issuer directly notwithstanding the fact that there may be more than one custodian between them and the asset. Secure Capital therefore claimed as an indirect owner under Luxembourg law.[61] That failed because the question of who is entitled to enforce the bond was characterised as a contractual issue which was subject to English law.[62]

We do not know whether the investor would have succeeded in proving the alleged facts and we cannot therefore conclude that the investor lost value. But the custody chain nevertheless prevented him from trying to prove his case. The issuer benefitted from the fact that there was a custody chain between him and the investor and avoided having to answer difficult questions.

### *C. Conclusions*

This section has illustrated that an indirect investor is only able to claim against the issuer if his custodian and all sub-custodians pass along this right to him or facilitate enforcement. If only one of them does not, the investor is unable to claim against the issuer. The rights of investors are shaped by the least favourable term. The section has also shown that the inability to sue the issuer can reduce the value of an asset.

## IV. Security Interests of Sub-Custodians

The phenomenon that the lowest denominator prevails can also be observed in relation to the terms regulating the ability of custodians to attach security interests for their own benefit to client assets. If a sub-custodian uses a term that provides him with a security interest that stretches over all securities held by him for another sub-custodian, that interest, if not limited, affects all securities held for that sub-custodian.

An example of a sub-custodian with standard terms that create a security interest is CBL. CBL's terms contain a general right of retention over all customer accounts.[63] CBL also has a pledge over all accounts held by a customer in favour of that customer's "entire present or future obligations".[64] This wording is wide enough to capture all securities of a CBL customer irrespective of whether they are the customer's own assets or client assets.

[61] Ibid., at paras. [4], [23]–[28].
[62] Ibid., at paras. [52]–[57].
[63] CBL Terms and Conditions, art. 43.
[64] Ibid., at art. 44.

It is therefore possible that a Clearstream security interest attaches to client assets.

This is not a hypothetical scenario limited to CBL. In a recent Final Notice, the FCA found that Barclays Bank had not adequately restricted the rights of the third-party sub-custodians to claim a lien or right of retention or sale over the assets. The assets were at risk of being used to satisfy any claim of the third-party sub-custodians against Barclays Bank without the client's agreement.[65] Another example is JPMorgan Securities Limited where client money was transferred out of segregated accounts overnight following the introduction of an internal funding mechanism. The internal mechanism was automated and caused client money to become desegregated without the approval of clients.[66] The staff handling client money was unaware of the arrangements made by other departments in relation to the accounts concerned.[67] The case came before the Disciplinary Tribunal of the Financial Reporting Council, which concluded that the auditors of JP Morgan Securities Limited had provided a defective client asset report and were liable to pay a penalty.[68]

In both cases, third-party interests attached to the assets of investors. Investors become affected by these security interests when they have permitted their custodians to set the terms with sub-custodians. By agreeing to outsourcing on "terms as may be customary" or "as may be determined by the custodian", the investor would be taken to have also accepted any liens or other security interests that are contained in sub-custody terms.

But, even if no such permission has been given, the contract between the investor and his immediate custodian does not restrict the ability of the immediate custodian to validly agree terms with a sub-custodian. If the custodian accepts terms that create a security interest for the benefit of a third party, he may be in breach of contract. But the third-party interest attaches regardless of whether the client of that custodian permitted him to do this.

The regulatory regime does not prevent this. According to CASS 6.3.5 R FCA, a firm must ensure that any agreement with a third party relating to the custody of client assets "does not include the grant to that party, or to any other person, of a lien or a right of retention or sale over the safe custody assets, or a right of set-off over any client money derived from those safe custody assets". There are exceptions. Security interests are, for example, permitted to secure charges and liabilities arising

[65] FCA Final Notice, Barclays Bank PLC (122702), 23 September 2014, at [4.11].

[66] Accountancy and Actuarian Discipline Board in the Matter of an Investigation into the Conduct of PricewaterhouseCoopers LLP Re JP Morgan Securities Limited Client Monies, Agreed Statement of Facts (July 2011) (JP Morgan Agreed Facts), at [17], available at <https://www.frc.org.uk/Our-Work/Conduct/Professional-discipline/Tribunals/Tribunal-reports/JP-Morgan-Securities-Limited.aspx>.

[67] Ibid., at para. [19].

[68] *The Accountancy and Actuarial Discipline Board (Accountancy Scheme) v Pricewaterhousecoopers LLP Re JP Morgan Securities Limited*, Tribunal Decision 6 December 2011, at [43], available at <https://www.frc.org.uk/FRC-Documents/AADB/Decision.pdf>.

from the provision of custody services in respect of the client assets concerned.[69]

But this does not stop third-party security interests from attaching to assets. The CASS rules are regulatory in nature. A violation may trigger a fine. The rules do not state that contracts between investors and custodians that permit third-party interests to arise are void. They also do not affect the validity of sub-custody contracts creating such interests.

In *Re Lehman Brothers International (Europe)*, the CASS rules were construed with an emphasis on their objective of achieving a high level of investor protection of client money.[70] A trust was held to arise upon receipt of client money. Contractual terms were interpreted in light of the regulatory requirements. Academic commentators have criticised the decision for disrupting the security of segregated assets.[71] It has also been pointed out that regulation does not normally affect the content of client rights.[72]

Taking inspiration from the Lehman approach, a court could nevertheless conclude that the regulatory requirements limit the ability of custodians to receive permission from investors in relation to third-party interests. But, even if a court was to decide along those lines, this would only modify the contract between the investor and his immediate custodian. To protect investors against the effect of third-party interests, the court would then have to go on to conclude that the CASS rules also affect the content of the contract between that custodian and his sub-custodian and all other sub-custody contracts. It is difficult to see how this could be achieved given that the sub-custodians are under no regulatory obligation to respect restrictions imposed upon their clients.

Notwithstanding the CASS rules, the security interest of a sub-custodian can attach even if the investor did not explicitly authorise this. If more than one set of sub-custody terms provides for a security interest, these accumulate and all affect the rights of investors and the value of their portfolio.

## V. Securities Financing Transactions

Another example of how custody chains reduce the content of the interest of investors to the lowest denominator are securities financing transactions. These are contracts whereby the owner of securities transfers them to a third party. The third party undertakes to return securities of the same kind at a

[69] CASS 6.3.6(1) R FCA.

[70] *Re Lehman Brothers International (Europe)* [2012] UKSC 6; [2012] 3 All E.R. 1.

[71] J. Braithwaite, "Law after Lehmans", LSE Working Paper Series 11/2014, 14, available at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2391148>; D. Sabalot, "FSA's Client Money Rules: Are Clients the Authors of Their Own Misfortune?" [2012] *Butterworths Journal of International Banking and Financial Law* 331; M. Bridge and J. Braithwaite, "Private Law and Financial Crises" [2013] *Journal of Corporate Law Studies* 361, at p. 382, note 96.

[72] A. Hudson, *The Law of Finance*, 2nd ed. (London 2013), at [9–86]–[9–97].

later point in time. Examples of securities financing transactions are securities lending or repurchase agreements. They transform a legal or equitable interest into a contractual right.[73] That contractual right is sometimes secured by collateral.

Securities finance transactions can be a source of income for an asset owner. They are also associated with risk which may not suit all investors.[74] Investors can benefit from such arrangements irrespective of whether they hold securities directly or indirectly. Custodians, however, help to arrange such transactions.

In a custody chain, it is possible that the investor does not explicitly authorise the use of his assets for financing purposes in the terms that apply between him and his custodian, but that at the level of a sub-custodian such a use is permitted. Again, an investor who has permitted the outsourcing of custody at terms set by the custodian will be taken to have authorised terms that facilitate securities financing arrangements by sub-custodians. But also an investor who has not authorised this will be affected because the contract he has with his immediate custodian does not limit what a sub-custodian agrees with another custodian. Either way, the risk associated with such transactions will filter through to the investor. Different considerations apply to the return generated. If the terms between the investor and his custodian do not provide for this, the investor does not necessarily benefit from the income that has been generated by the financing arrangements.

The regulatory regime does not prevent this. CASS 6.4.1(1) R FCA states that a firm "must not enter into arrangements for securities financing transactions in respect of safe custody assets … unless the client has given express prior consent".[75] This also applies to assets held in omnibus accounts.[76] For the purpose of obtaining consent from a retail client, "the signature of the retail client or an equivalent alternative mechanism" is required.[77] The rules also give instructions for contracts that a custodian enters into with a sub-custodian.[78] The custodian must not give permission to his immediate sub-custodian to use assets in certain ways.

[73] Benjamin, *Financial Law*, ch. 13; P. Paech, *Shadow Banking: Legal Issues of Collateral Assets and Insolvency Law* (European Parliament IP/A/ECON/NT/2012, 30 June 2013), 33–35.

[74] Professor Benjamin points out that investors such as short/long hedge focus on maximum speed dealings and benefit from income arising out of third-party arrangements such as lending. She observes that such investors are less interested in asset protection and concludes that separate regulatory and legal regimes are required for different types of investors (J. Benjamin, "The Law and Regulation of Custody Securities: Cutting the Gordian Knot" (2014) 9 C.M.L.J. 327). From the perspective of this article, the value of securities can be significantly reduced by an indirect holding structure and this would seem to be of concern also to those who are interested in speed and lending. It would also seem counter-intuitive to conclude that transactions channelled through various levels of custodians can be carried out with greater speed than transactions that are effected directly on one common ledger.

[75] CASS 6.4.1(1) R FCA.

[76] CASS 6.4.1(2) R FCA.

[77] CASS 6.4.1(3) R FCA and CASS 6.4.1A G–6.4.2 G FCA.

[78] CASS 6.3.6.R states that "A firm may conclude an agreement with a third party … only if". CASS 6.4.1(1) R states that "A firm must not enter into arrangements…"; see also AIFM Directive, art. 21(11)(d)(iv); FUND 3.11.28(4)(d) R FCA and UCITS Directive, art. 20(7).

But, as in the case of security interests of sub-custodians, the CASS rules do not affect the validity of custody or sub-custody contracts. Notwithstanding the regulatory prohibition, securities financing transactions can occur at the level of sub-custodians. Investors bear the risk associated with financing arrangements entered into by sub-custodians. Their rights are governed by the lowest denominator. They are exposed to risks they may not be aware of and without being entitled to evaluate whether the income generated by the third-party arrangement is reflected in their own terms. This can reduce the value of their portfolio.

## VI. Equitable Interests

In addition to causing the interest of an investor to revert to the least favourable term, custody chains also undermine equitable interests. Again, the position of the investor is shaped by the lowest denominator in the chain.

It has been mentioned already that an equitable interest gives the investor's claim priority in the insolvency of the custodian.[79] An equitable interest is, however, only valuable if the custodian holds an asset which the interest can attach to. If a custodian has not appropriated any securities for the benefit of the investor or if he no longer holds such securities and there are no traceable proceeds, there is no equitable interest.

If a chain operates between an investor and an issuer, the investor's equitable interest is only available in full if all of the custodians forming the chain have appropriated sufficient assets for an equitable interest to attach to. A shortfall at only one level reduces the equitable interest of the investor. The interest of the investor depends on all of the custodians at all levels holding sufficient assets for all of their immediate clients.

This is not a theoretical problem. Custodians make mistakes. The BNYM, for example, was fined on 15 April 2015 by the FCA because of their failure to keep sufficient assets. They did not keep accounts for client assets on an entity basis. This meant that they did not ensure that each member of the group had sufficient assets to correspond to the promise they had made to their respective clients.[80] They used third-party custodians without segregating client assets causing them to become mixed with their own assets.[81] They used the assets of clients without their consent to settle the trades of other clients.[82] The FCA also noted that the irregularities happened throughout a period of significant market stress when the regulator would have expected regulated firms to have heightened regard

[79] See section I above.
[80] FCA Final Notice, The Bank of New York Mellon London Branch (122467) The Bank of New York Mellon International Limited (183100), 15 April 2015, at [4.8]–[4.10], [2.3].
[81] Ibid., at paras. [4.19]–[4.20].
[82] Ibid., at paras. [2.3], [4.17]–[4.18].

to the requirements of client asset protection.[83] The more custodians there are in a chain, the more sets of records need to line up and the more likely it is for mistakes to occur.

Moreover, assets can disappear as a result of fraud. A number of European custodians who used the US broker Bernard Madoff Investment Securities as a sub-custodian later found that the assets that they had received statements for had not in fact been held for them by their sub-custodian.[84] If there are no assets, there is no equitable interest.

The regulatory regime attempts to mitigate the problem. With a view to protecting investors, the CASS rules require that custodians appropriate to and hold sufficient assets for clients. They instruct investment firms to "take the necessary steps to ensure" that client assets are identifiable separately from the financial instruments belonging to the firm and from the financial instruments belonging to that third party "by means of differently titled accounts on the books of the third party".[85] This should be reflected in the agreement of a custodian with a sub-custodian.[86] In order to comply with client separation rules, assets are sometimes held in the name of a nominee company who hold the securities on trust for the sub-custodian.[87]

In addition to that, custodians need to carry out "internal reconciliations of the safe custody assets held for each client with the safe custody assets held by" the custodian and its sub-custodian.[88] Reconciliations are designed to reduce mistakes and protect client assets in the insolvency of a firm.[89] A custodian must also conduct external reconciliations between its internal accounts and those of any third party by whom those safe custody assets are held.[90] CASS auditors test reconciliations and obtain external confirmations.[91]

Each custodian needs to reconcile its records with his immediate sub-custodian's records. All custodians need to reconcile, but this does not fully protect investors. Custodians other than the investor's immediate service providers only have information about their two immediate contractual partners. They cannot verify whether there are sufficient securities to satisfy the interest of the investor.

[83] Ibid., at paras. [2.10(5)], [6.11(6)], [6.30(1)].
[84] European Commission, SWD/2012/0185 final, 3.
[85] CASS 6.3.4A(1) R FCA, CASS 6.2.5 R FCA, FUND 3.11.21R FCA; see also AIFM Directive, art. 21(8)a; AIFM Regulation, art. 99; ESMA Consultation Paper, Guidelines on Asset Segregation under the AIFMD 1 December 2015 ESMA/2014/1326 and UCITS Directive 2014/91/EU, whereas 17.
[86] CASS 6.3.4A R and 6.3.4B G FCA; FUND 3.11.28R FCA.
[87] A. Hainsworth, "The Shareholder Rights Directive and the Challenge of Re-Enfranchising Beneficial Shareholders" (2007) 1 L.F.M.R. 11; Manifest, Safe Custody and Shareholder Rights, The Impact of Pooled Accounts, A Manifest Discussion Paper (August 2007), 4.
[88] CASS 6.6.13 R–6.6.14 R FCA; AIFM Regulation, art. 98(1)(c) and (e); FRC CASS Guidelines, p. 24, at [105].
[89] FRC CASS Guidelines, at [9], [15], [16], [42], [78]–[80], [85(d)].
[90] CASS 6.5.6.R CASS 6.6.33R–6.6.46R FCA.
[91] SUP 3.10 FCA; CASS 6.6.58 G FCA.

Moreover, reconciliations are carried out at each level at a different time. No one checks whether, at a given point in time, numbers add up at all levels starting from the investor and following through the records of all custodians operating between him and the issuer. This can mask irregularities which can remain unnoticed for a significant period of time. In the Final Notice served on Barclays Bank PLC, the FCA dealt with a situation in which a regulated firm had not noticed irregularities in third-party arrangements that persisted for over three years.[92] In the case of BNYM, inadequate record keeping and reconciliations remained unnoticed for a period of five years and nine months.[93] In both cases, investors who used the two custodians, but also those investors who used a different custodian but where Barclays or BNYM acted as sub-custodians at some other level in the chain, would have been affected by the shortfalls.

Custody chains can undermine the proprietary interest of investors. The CASS rules operate at the level of each custodian independently and do not require verification that sufficient assets are held throughout the chain. By approving outsourcing arrangements and permitting the custodian to set the terms at which custody services are outsourced, investors also accept the risk that sufficient securities are maintained by all sub-custodians. Their equitable interest and the value of their portfolio are reduced if any one of them has a shortfall.

## VII. Accountability for Custody Services

The previous sections have shown that custody chains erode investor rights and reduce portfolio values by exposing investors to the least favourable terms operating between custodians. They also undermine equitable interests.

The fact that securities can disappear as a result of negligence or fraud of a custodian is a risk introduced by the intermediated holding structure. When securities are held directly, this risk does not arise. There is no custodian who can cause damage by making mistakes.

If there is one custodian, there is a risk that mistakes will occur but the custodian will be liable for his own negligence. If there are more custodians, the potential for mistakes increases, but counter-intuitively the liability regime is modified in a way that makes it less likely for any of the custodians to become liable.

This happens for two reasons. The first reason is a function of the fact that custody liability is subject to the same contractual erosion as applies to issuer liability. The second reason is that outsourcing custody modifies

[92] FCA Final Notice, Barclays Bank PLC (122702), at [2.7].
[93] FCA Final Notice, The Bank of New York Mellon London Branch (122467) The Bank of New York Mellon International Limited (183100), at [2.10(4)].

the responsibility of custodians. The two reasons will be examined in turn below.

### A. Claiming for Negligent Services

An investor can only sue his own custodian because he does not have a contract with any of the sub-custodians. By having authorised the outsourcing of custody on the custodian's terms, he bears the risk of the sub-custodians negligence but is not necessarily entitled to claim against the negligent sub-custodian.

It is possible that a custodian has an obligation to act for his client to claim against his sub-custodian. But that obligation is unlikely to be onerous. Euroclear, for example, will take such steps to claim against a sub-custodian "as … [*it*] *deem*[*s*] *appropriate under all circumstances*".[94] Clearstream has similar terms. If a customer "suffers any loss or liability as the result of any act or omission of … CBL's …. Sub-custodians … CBL may take such steps in order to effect a recovery as it *shall reasonably deem appropriate under all the circumstances*".[95]

Terms like "reasonably deem appropriate" give custodians wide permission to decide whether or not to recover loss on behalf of customers. The investor is only able to sue a sub-custodian for negligence if all custody contracts between him and that sub-custodian facilitate this. Like the ability of an investor to sue the issuer, his ability to claim for the negligent provision of custody services against a negligent sub-custodian reverts to the least favourable terms prevailing in the chain between him and the sub-custodian.

Moreover, from the perspective of English law, an investor is also unlikely to be able to claim in tort against a sub-custodian. In English law, investors only have a proprietary interest in assets held by their immediate custodian. There is a remote possibility that, in the circumstances of a case, an investor may be able to claim against a sub-custodian directly relying on the tort of unlawful interference or unlawful means but that would require the investor to show intent on the part of the sub-custodian.[96]

### B. Reduction of Liability Exposure

The accountability of custodians in a custody chain is also modified by an additional effect associated with outsourcing that is not caused by contractual erosion. Outsourcing modifies what a custodian is responsible for and as a result reduces the custodians' liability exposure.

[94] Euroclear Terms and Conditions, art. 12(d), second para., emphasis added.
[95] CBL Terms and Conditions, art. 48, at [3], emphasis added.
[96] *Clerk and Lindsell on Torts*, 21st ed. (London 2014), at [24–70]–[24–89]; H. Carty, *An Analysis of the Economic Torts* (Oxford 2010), at [78–100].

Each custodian is liable for his own negligence. This includes liability for employees and other individuals that work within the custodian's own organisation. An example of negligent behaviour by a custodian employing sub-custodians can be found in the case underlying the Final Notice served on Barclays Bank PLC by the FCA on 23 September 2014. Barclays held £16.5 billion of safe custody assets in 95 external accounts with third-party sub-custodians. They failed to ensure that accounts with sub-custodians were properly named, suggesting that assets belonged to Barclays Bank rather than its clients.[97] Moreover, the records held by Barclays were inconsistent with the information provided for by the third-party custodians.[98] There were no legal agreements in place relating to the provision of custody services by sub-custodians.[99] The FCA pointed out that the failure to document the basis on which the assets are held could create uncertainty as to how assets should be treated in the event of insolvency.[100] Along similar lines, BNYM was recently fined for not adequately recording and segregating client assets.[101]

If a loss had occurred in these cases, Barclays and BNYM would very likely have been liable to their immediate clients. This liability for the negligent provision of services can be modified by contract.[102] But the law imposes limits on the extent to which liability can be excluded by contract.[103]

Outsourcing custody to a sub-custodian reduces liability to an extent that goes beyond what is permitted by the law for a custodian's own liability. A custodian is not liable for the acts or omissions of the staff of a sub-custodian in the same way as it is liable for its own staff.[104] When custody is outsourced, the custodian is only liable for having inappropriately selected or inadequately supervised a sub-custodian.

In the context of the Barclays/BNYM cases, this means that a custodian, who used Barclays/BNYM as a sub-custodian, would only be liable to his

[97] FCA Final Notice, Barclays Bank PLC (122702), at [2.9].
[98] Ibid., at para. [4.8].
[99] Ibid., at para. [4.11].
[100] Ibid., at para. [4.11].
[101] See note 80 above.
[102] Euroclear Terms and Conditions, for example, state that Euroclear is liable for "negligence or wilful misconduct on … [its] part". The liability "for indirect losses such as, but not limited to, loss of business or loss of profit or for unforeseeable losses" is limited to "gross negligence or wilful misconduct on … [its] part" (art. 12(a)). Under its terms, CBL is liable for its own negligence or wilful misconduct (CBL Terms and Conditions (note 17 above), art. 48). It is not liable for "indirect or unforeseeable loss, claim, liability, expense or other damages unless such action or omission constitutes gross negligence or wilful misconduct on the part of CBL" (CBL Terms and Conditions, art. 48, third sentence). CBL is not liable for events beyond its "reasonable control" (CBL Terms and Conditions, art. 48, fourth sentence).
[103] See e.g. Unfair Contract Terms Act 1977, ss. 2(2), 3; Unfair Terms in Consumer Contracts Regulations 1999; COB 2.1.2R FCA; Yates and Montagu, *The Law of Global Custody*, at [6.5]–[6.16].
[104] The new CASS rules on shortfalls specify that a firm does not need to make good a shortfall when it concludes that another person is responsible (CASS 6.6.54(3) R FCA). The firm must take all reasonable steps to resolve the situation without undue delay with the other person. It must also consider whether it would be appropriate to notify the affected clients (CASS 6.6.54(3) FCA).

clients if he had failed to adequately monitor his outsourcing arrangement with Barclays/BNYM. This is a standard that is less likely to trigger liability of the custodian than the standard that applies if custody remains in-house.

Examples of terms further illustrating the problem can be found in the standard terms of Euroclear and CBL. Euroclear is "not liable for the acts or omissions of . . . any . . . sub-custodian".[105] CBL also excludes liability for the "acts or omissions of . . . any of CBL's . . . . Sub-custodians".[106]

The CASS rules condone this. They do not impose a standard as to the liability of a sub-custodian. The CASS rules only stipulate that the contract between a custodian and a third party should detail the "extent of the third party's liability in the event of the loss of a safe custody asset caused by fraud, wilful default or negligence of the third party or an agent appointed by him".[107]

Custody chains reduce asset values. They expose assets to custody risk but at the same time make it more difficult if not impossible for investors to claim for the negligent provision of services. This effect has not remained completely unnoticed. The rules on AIF and UCITS attempt to put forward a solution.

### *C. Statutory Liability for the Loss of Financial Instruments*

The regime governing AIFs and Undertakings for the Collective Investment in Transferable Securities contains a special rule imposing liability on the depositaries for the loss of financial instruments. It will be shown in the two sub-sections below that this has limited effect.

#### *1. Alternative Investment Funds*

AIFM Regulations 2013, para. [29–31] state that a "depositary shall be liable . . . for the loss by the depositary or *a third party* to whom the custody of financial instruments . . . has been delegated".[108] If the instruments have been lost, the depositary "shall return a financial instrument of identical type or corresponding amount to the AIF . . . without undue delay". The liability is independent of the depositary's negligence. It can only be avoided if the depositary "can prove that the loss has arisen as a result of an external event beyond its reasonable control, the consequences of which would have been unavoidable despite all reasonable efforts to the contrary".

The term "external event" is defined in AIFM Regulation, whereas 118 in a way which points towards a wide scope of application for the liability.

[105] Euroclear Terms and Conditions, art. 12(d); see also art. 17: for securities that are mutilated, lost, stolen, or destroyed, Euroclear has no obligation to but can "elect" to obtain reissuance. If instructed by a participant, they will obtain reissuance, but only "to the extent practicable"; see also CBL Terms and Conditions, art. 48.
[106] CBL Terms and Conditions, art. 48, sentence 5.
[107] CASS 6.3.4B(7) G FCA.
[108] SI 1773/2013 (AIFM Directive, art. 21(12)), emphasis added.

A loss caused by a failure to apply the segregation requirements or a loss of assets because of disruption in the third party's activity in relation to its insolvency cannot be seen as an external event beyond reasonable control.[109] But natural events and acts of public authority can exonerate the depositary from liability. This limits the ability of the depositary of an AIF to modify its liability standard by outsourcing custody.

However, even if initially broadly defined, the scope of the liability is significantly limited by its trigger. Liability only arises in circumstances where financial instruments are lost. AIFM Regulation, art. 100 sets out the circumstances in which a lost is deemed to have occurred. It lists three alternative scenarios:

- a stated right of ownership of the AIF is "demonstrated" not to be valid;
- the AIF has been "definitely deprived" of its right of ownership;
- the AIF is "definitely unable" to directly or indirectly dispose of the financial instrument.

In the event of an insolvency of a sub-custodian, the conditions need to be met "with certainty". There shall be certainty as to whether any of these conditions is fulfilled "at the latest at the end of the insolvency proceedings".[110]

AIFM Regulations, art. 100 defines loss narrowly.[111] In particular, the focus on the loss being "certain" or "definite" significantly reduces the effect of the liability regime. Time is a critical factor in this area of the law. Assets can become affected by insolvency proceedings in a way which makes it impossible to conclude with certainty that they are lost. A substantial amount of time can pass before certain conclusions can be reached.

The potential effect of a delay in time is magnified by the fact that the depositary's liability is limited to the return of financial instruments of the same type. By the time certain conclusions can be drawn, a claim to receive the same kind of assets may no longer have value to the AIF. This is notwithstanding the fact that, once certainty can be established, assets have to be returned "without undue delay".

Claims for all other losses are subject to the depositary's negligence or intentional failure to properly fulfil its obligations.[112] They are therefore subject to the delusive effect of outsourcing custody identified above.[113]

[109] AIFM Regulation, whereas 118; European Commission, SWD/2012/386 final, 12 and 36–41; European Commission, SWD/2012/387 final, 6.
[110] AIFM Regulation, art. 100(4).
[111] See also AIFM Regulation, whereas 114, which stresses that it is important that there is "no prospect" of recovering the financial asset. Situations where an instrument is only temporarily unavailable or frozen should not count as losses.
[112] AIFM Regulation, art. 21(12), last para.; AIFM Regulations 2013, at [31].
[113] See subsection A above.

*2. Undertakings for the collective investment in transferable securities*

A similar regime will shortly apply to UCITS. The latest amendment of the UCITS Directive, which was adopted on 23 July 2014 and needs to be implemented by 18 March 2016, requires Member States to ensure that the depository of a UCITS fund is liable for the loss of securities by the depositary itself or by a third party. If such assets are lost, the depositary shall return financial instruments of identical type or corresponding amount.[114] As in the case of AIFs, the liability is only removed if the loss is caused by an external event, which is also narrowly defined.[115]

There is no further explanation as to what triggers liability, but it is probably safe to assume that the term "loss" is to be defined along the same lines as in the context of AIFs. The UCITS Directive does not require the Member States to implement a more effective regime than the one in place for AIFs.

*3. Conclusions*

Depositaries of AIFs and UCITSs are liable for the loss of financial instruments caused by a sub-custodian. The trigger of this liability is, however, narrowly defined. Liability arises only if the loss is certain. If assets are caught in insolvency proceedings and there is uncertainty as to whom they belong to, the delay in time can significantly reduce the value of the remedy.

### *D. Arithmetic Revisited*

From the perspective of investors, custody chains place on them the risk that assets are lost by custodians as a result of negligence or fraud. Chains of custodians increase that custody risk but at the same time reduce the ability of investor to claim redress for the negligent provision of services. Statutory provisions that apply to depositaries of AIFs and UCITSs have only limited affect. This can cause investors to suffer a loss to the value of the assets in his portfolio without being able to claim redress.

Adding the phenomenon of contractual erosion to the effect of custody chains on custodian liability, the position of the investor can be illustrated as follows:

Rights contained in the issuer's documentation
- Losses resulting from mistakes made by CSD
- Qualifications and limitations contained in the contract between the CSD and Custodian 3
- Loss resulting from mistakes made by Custodian 3

[114] UCITS Directive, art. 27(1).
[115] Directive (EU) No 91/2014 (OJ L 257 p. 186), whereas 27.

- Qualifications and limitations contained in the contract between Custodian 3 and 2
- Losses resulting from mistakes made by Custodian 2
- Qualifications and limitations contained in the contract between Custodian 2 and 1

Rights available to the investor

## VIII. Conclusions and Pointers towards a Solution

Custody chains can significantly reduce asset values. Investor rights are determined by the contract that operates between them and their immediate custodian. If that contract authorises the custodian to employ sub-custodians at terms to be set by the custodian himself, the investor accepts the effect that these terms have on his position. Sub-custody terms only limit his position. They do not give an investor more rights than he has under his contract with his custodian because normally no third-party rights are extended to investors by such sub-custody arrangements.

Custody chains thus modify the rights of investors, causing them to be determined by the least favourable term operating in the contracts used by his custodian and all the sub-custodians. They can deprive the investor of the ability to sue the issuer. They can cause assets to become affected by third-party interests or lending arrangements in circumstances where this was not explicitly authorised in the contract between the investor and his immediate custodian. The investor is also exposed to shortfalls that may occur at the level of his custodian or a sub-custodian. This can reduce the equitable interest of investors. At the same time, the liability regime does not adequately compensate for the risk associated with custody chains.

The regulatory regime as it stands does not prevent this. The rules operate on the level of each of the custodians, but do not span across the whole chain starting with the investor and ending with the issuer. They also do not affect the validity of contractual terms.

Custody chains are an example of a situation where what is good for one group of individuals is not good for the whole system. They make the lives of custodians easier by simplifying their view of the world. Sub-custodians can operate without having to verify the circumstances of their immediate clients or the investor.

The diluting effect associated with custody chains also benefits issuers. Credit Suisse was, for example, spared having to engage in a trial about whether or not they had misled a client.[116] The majority of the investors in DNick Holdings plc. was able to carry out a takeover and a delisting without having to buy out the minority.[117]

[116] See subsection 2 above.
[117] See subsection 1 above.

Custodians and issuers save money, but this does not add up to benefit investors or the financial system overall. From the perspective of investors, custody chains complicate the infrastructure. The risk created by this complexity is borne by them. A situation can arise where their rights are so diluted that, if something goes wrong, they are hardly worth having. Investors would be forgiven for not fully appreciating what they have done by providing a custodian with the authority to outsource custody. Statements are unlikely to reveal that their interest is modified by the terms operating the levels of his own custodian and at the levels of all sub-custodians. They are more likely to simply state that a certain number of securities is held for him.

From the perspective of the robustness of the financial market infrastructure, the effect of custody chains on the liability of custodians and issuers can cause moral hazard. Custodians against whom service levels are difficult to enforce have less of an incentive to comply with the standard required. Issuers against whom terms are impossible to enforce have less of an incentive to abide by them. This is problematic for investors, including those who are providers of financial services. Investors and the financial system depend on securities continuing to have value precisely when things go wrong. Market participants accept and evaluate the economic risk associated with issuers. They should be entitled to assume that the infrastructure that claims to connect them to the rights against these issuers does not expose them to additional legal risk. The present framework not only exposes investors to significant additional risk, but also masks this fact, making impossible for those bearing this risk to evaluate their position.

What, then, is the way forward? Neither custodians nor issuers have an incentive to advocate change to current system. In the UK market, the law should require that all domestic client assets are held directly with the investor's name appearing on the issuer register. This does not compromise the ability of investors to benefit from third-party arrangements. Directly held interests can be lent and repurchased in the same way as indirectly held interests.

At an international level, it is worth asking whether a system can be created that facilitates direct holdings across the border. From an IT perspective, a starting point may well be the recent advances facilitating the common ledger operating for bitcoin and other cryptocurrencies. This would support a direct way of holding securities while preserving confidentiality and without making the system overall dependent on one central service provider.[118] At present, numerous different IT ledgers of various

[118] For a short overview on how the technology underlying cryptocurrencies works, see "Blockchains", *The Economist*, 9–15 May 2015, Special Report International Banking, 15–17; see also P. Vigna and M.J. Casey, *Cryptocurrency* (London 2015).

custodians are lined up and there is a significant risk that they deliver preciously little for the investor if a problem arises. There is something to be said for an un-intermediated solution connecting investors and issuers directly.