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Capital Markets Union, Investment Securities and the Tradition of Casting Liquidity into the Law

Philipp Paech*

Abstract: Since the launch of the Capital Markets Union, the European Commission is again contemplating a reform of securities law, i.e. those substantive and conflict-of-laws rules that underpin transfer of securities and securities collateral. The plan aims at increasing liquidity in the securities lending market, thereby facilitating the financing of SMEs. The Commission may draw on experience from 150 years of law making in the Member States and other jurisdictions around the globe. Courts and statutes over the time have supported three subsequent developments in the mercantile practice, all of which aim at increased efficiency and liquidity: first, the concept of easy and safe transfer on the basis of negotiability or register entries; second, the centralisation of settlement through account structures involving multiple layers of intermediaries, and, last, the globalisation of finance and capital flows, allowing for assets being traded and collateralised in much wider and deeper markets. However, the development of the law became heavily path dependent and idiosyncratic, as legislators in many countries tried to uphold the idea of chattel-like rights even though there were no paper certificates any more. This paper analyses the legal landscape resulting from the tension between the drift towards ever-increasing liquidity and conceptual approaches to securities law. It concludes that the current state of the law does not leave much room for manoeuvre to improve the situation. The legislator can only overcome the current conundrum by returning to basic legal principles and combining them with technical solutions that only emerged recently as a result of modern computing power.

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1. INTRODUCTION

In the fable *The hare and the hedgehog*, made popular by the Brothers Grimm in the 19th century, the poor hare dies after running the same race 74 times, cocksure of its sprinter qualities, and quite failing to see that the race it was competing in was fundamentally flawed. The fable springs to mind in the case of the European Commission, which has been doggedly trying to reform European securities law for the past 15 consecutive years, and there is every chance that it will in the end drop the project in frustration if it fails to let go of old beliefs that have considerably distorted perception. Since its first fundamental study on the securities market was released in 2001,¹ countless meetings have been held, millions of pages printed and hundreds of business trips undertaken. Yet almost nothing has resulted so far. Now, in 2015, the topic is back on the agenda for the Capital Markets Union.² The aim is to increase liquidity in the securities lending market, thereby facilitating the raising of funds for small and medium-sized enterprises. The reform of securities law, including conflict of laws and property law, features amongst such liquidity-enhancing measures. However, the caveat that this area is ‘political’ and ‘complex’³ suggests there is some kind of no-go area somewhere. And, indeed, it is now time to learn from the past and discuss what has been avoided so far.

The idea of changing securities law with a view to facilitating financing channels in the economy is by no means a novel one. Rather, it is the continuation of a development that started a while back. In this paper, I intend to show that the market has always naturally pushed for more liquidity in securities transactions by inventing new practices that increased efficiency. The relevant legal development, by contrast, has tended, typically, to trail behind, adjusting rules to what was considered useful for the economy. It is a common phenomenon for market practice to move first and for the judiciary and the legislator to sanction the practice afterwards. However, in many jurisdictions, the development of the law in the area of securities law became heavily path-dependent or, in other words, legal concepts and vested interests were given an intrinsic value in determining what was and what was not good for efficiency and liquidity—thereby obviously distorting the results. As a consequence, the law underlying securities transactions is now locked in a catch-22 situation in some jurisdictions, preventing consistent law-making in Europe and beyond and thereby, in the end, unnecessarily curbing liquidity.

In Section 2, this paper examines how EU (and international) securities law ended up becoming what it is today. Three different phases can be identified

¹ See documentation of the development at http://ec.europa.eu/finance/financial-markets/securities-law/index_en.htm, accessed 15.11.2015.

² COM(2015) 63 final.

³ COM(2015) 63 final, 2, 6, 23, 26; also Commission Staff Working Document, Initial reflections on the obstacles to the development of deep and integrated EU capital markets, SWD(2015) 13 final, 15.

where the law reacted to liquidity boosts occurring in the wake of new market practices.

In a first phase, the concept of negotiability emerged as mercantile practice. Courts in England accepted it early to protect good faith acquirers⁴ and, before it was codified in England and on the Continent, from the 19th century, with a view to supporting the liquidity of participations in companies. *CF v Savigny*⁵ explained at the time that the liquidity of the securities market required a simple and legally safe method to pass on the investment to an acquirer. Assignment, however, was traditionally full of legal pitfalls, so legislators sanctioned the idea of negotiable bearer securities. The rights were represented by or incorporated into certificates and the acquirer of such could rely on acquiring legal title to the security together with all rights attached to it. In addition, the concept of registered securities emerged where a simple scriptural act, a change wrought in the issuer's register, would ensure that the rights were passed on to the acquirer. (See Section 2.1, below.)

The industrialised world very soon saw larger and deeper capital markets. In order to make the most efficient use of the available assets, the practice in developed markets moved to intermediation and centralised clearing and settlement of securities. Tightly knit networks of intermediaries⁶, typically banks and brokers, administered securities holdings and transactions, later supported by a high degree of computerisation. A considerable increase of liquidity could be achieved through efficiency gains on the basis of higher speed, facilitation, economies of scale and resulting cost savings. The main trait of this development was that securities were evidenced in accounts set up between intermediaries themselves, and between intermediaries and investors.⁷ Since then, security certificates no longer change hands but are centrally stored, and issuers' books no longer bear the investors' names but those of the intermediaries. What investors receive in both cases of bearer and registered securities is a credit entry in their securities account. In other words, the two carriers of the right previously developed by market practice and sanctioned by the law, i.e., the certificate and the register entry, became partly redundant and even proved impracticable for

⁴ *Shelden v Hentley*, 2 Show. 161, cited after W Cranch, Reports of cases argued and adjudged in the Supreme Court of the United States, Washington 1804, 389-390; *Miller v Race*, Court of King's Bench (1758) 1 Burr 452, 97 Eng. Rep. 398 (K.B. 1758), edited online version by N Szabo, <http://unenumerated.blogspot.be/2006/01/from-contracts-to-money.html>, last accessed 15.11.2015.

⁵ Savigny, Friedrich Carl von, *Das Obligationenrecht als Theil des heutigen römischen Rechts*, Berlin: Veit und Comp., 1853, 97.

⁶ I generally use the term 'intermediary' in order to describe an institution that maintains securities accounts for an account holder. This could be a bank, a broker, a central securities depository, a settlement system, central counterparty or other type of infrastructure. An account is either maintained for another intermediary or for the ultimate account holder which is also typically the investor.

⁷ Terminology is diffuse. While 'investor' typically describes the person that bears the economic risks and reaps the fruits of an investment, 'account holder' refers to a person in whose favour an intermediary maintains a securities account (which may be an investor or another intermediary). 'Shareholder' and 'bondholder' refer to the person that is entitled from the perspective of the issuer, which is not necessarily congruent with the terms 'proprietor' or 'owner', which refer to the attribution of the right to a person in terms of commercial law.

purposes of improving liquidity. Eventually, legal certainty required that the law be adapted to the new reality. However, balancing the various functions of the new set-up was a highly complex exercise. The law needed to address the risks of intermediation, i.e., any hazards that might result from the intermediated system such as, in particular, the risk of creating a number of securities in the accounts that exceeded the number of securities originally issued, or the misattribution of rights by intermediaries. At the same time, the earlier achievement of negotiability remained essential for the new set-up as well. This situation provoked legislators and courts alike to pursue goals that were difficult to consolidate or even mutually exclusive. As a consequence, laws became complex and inconsistent. The investor's rights mutated into legal 'ersatz' positions that were often hard-to-explain amalgams of membership, property and claims, as first comprehensively described for their respective jurisdictions by *Mooney*, *Benjamin*, *Einsele* and *Nizard*.⁸ (Section 2.2, below.)

Jurisdictions had not even quite digested the emergence of intermediation and central clearing and settlement when the third development began to gather pace. Since the 1970s, globalisation and the abolition of capital controls had made available a huge asset reservoir. Obviously, assets could be used more efficiently if their allocation across jurisdictional borders were a valid alternative to their purely domestic use. However, the international community, including the EU and its Member States, had first to realise that the international financial market (in the EU, about 40% of securities holdings are cross-border)⁹ was still underpinned by a set of idiosyncratic and complex national legal frameworks for securities holding and transfer, as just described. The cross-border use of securities was therefore riskier, more costly and less attractive as a consequence. *Gynn* was the first to voice concern about the resulting unnecessary limitation of liquidity.¹⁰ The EU reacted by adopting two directives¹¹ limiting the consequences of these divergences without, however, substantially harmonising or facilitating the law. More comprehensive harmonisation efforts that started at about the same time rapidly slowed to a trickle and were never implemented.¹² The harmonisation

⁸ CW Mooney, Property beyond negotiability, (1990) 12 Cardozo Law Review, 305-427; D Einsele, Wertpapierrecht als Schuldrecht, Mohr, Tübingen (1995); J Benjamin, Interests in Securities, Oxford University Press, 2000. F Nizard, Les titres négociables, Economica et Banque Revue, Paris (2003).

⁹ See P Paech, *Market Needs as Paradigm*, in Conac P-H, Segna U and Thévenoz L, Intermediated Securities, CUP 2013, 22, 35.

¹⁰ RD Gynn, Modernizing Securities Ownership, Transfer and Pledging Laws, International Bar Association 1996, 5-12.

¹¹ Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems (as amended by Directive 2009/44/EC); Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on financial collateral arrangements (as amended by Directive 2009/44/EC).

¹² Convention on the Law Applicable to Certain Rights in Respect of Securities held with an Intermediary ('Hague Securities Convention'), www.hcch.net/index_en.php?act=conventions.text&cid=72. UNIDROIT Convention on Substantive Rules for Intermediated Securities ('Geneva Securities Convention'); unidroit.org/english/conventions/2009intermediatedsecurities/main.htm. The Geneva Securities Convention has been signed by Bangladesh only. The Hague Securities Convention has been ratified by

efforts in their entirety, including the EU law currently in force, rely on the continued application of national substantive laws where minimal harmonisation is the norm, and co-ordination is achieved by an effective conflict-of-laws regime. Developing a conflict-of-laws regime proved difficult, however, as securities seemed to float, in terms of substantive law, between the concepts of membership, property and claim. The classical nomenclature of connecting factors does not fit; in particular *lex societatis*, *lex rei situs* and *lex contractus* all appear unsuitable. New approaches to conflict of laws in respect of the proprietary aspects of securities have been duly developed. They refer to the two-party relationship between an intermediary and its client (which may itself be intermediating for a third person), entailing two consequences that may be difficult to digest in conceptual terms: first, they introduce an *inter partes* perspective into the legal framework of securities, which in most jurisdictions are still regarded as rights *erga omnes*. Secondly, in case of cross-border securities holding and transfer, different laws may apply to the same security at any given point in time. (Section 2.3, below.)

In Section 3, this paper considers how the law that emerged as a result of these three moves towards more liquidity – negotiability, intermediation and globalisation – now appears to be locked in a quandary which, unless fundamentally addressed, will prevent any further improvement. Inconsistencies emerged as a result of a typical path-dependent development, as the legal concepts introduced earlier have continued to determine all further development of securities law although they have proved unsuitable in the context of intermediation and centralised clearing and settlement, and obviously are not compatible across jurisdictional borders.

The first paradox regards our expectations in respect of ‘property’. The property concept is supposed, on the one hand, to cater for safety of acquisition, including the phenomena of negotiability or good-faith acquisition, respectively. On the other hand, its *erga omnes* trait is supposed to protect investors against loss of their securities, notably as a consequence of intermediary failure. However, chattel-based property concepts cannot cater for these two functions at the same time. Rather, safety of acquisition is typically given priority. As both aims collide, safe acquisition is the feature that ultimately enables intermediaries to misappropriate securities or create electronic fakes that exceed the number of securities originally issued, because the beneficiaries of such acts typically acquire the assets free of adverse claims. (Section 3.1, below.)

A second paradox flows from the tension between property rights in a security, on the one hand, and the ability to exercise the corporate rights flowing from that security, e.g., voting rights, on the other hand. In practice, investors are often excluded from these rights even though they are share- or bondholders in

Switzerland and Mauritius, and signed by the United States of America. See Annex to the Commission Work Programme 2012, Brussels, 15 November 2011, (COM(2011) 777 final), 17. For the preparatory work see the sites of the European Commission ‘Harmonisation of Securities law’, http://ec.europa.eu/internal_market/financial-markets/securities-law/index_en.htm and ‘Legal Certainty Group, ec.europa.eu/internal_market/financial-markets/clearing/certainty_en.htm.

economic terms. Instead, the property-based holding concept misallocates the rights to an intermediary, typically the top-most intermediary in the holding chain. As a quirk of nature, there can even be more than one proprietor of the same securities in international situations. Again, the chattel-based property concept is unsuitable when it comes to consolidating these two fundamental functions of the holding system: the person who is the investor should also be the person who is entitled to exercise corporate rights. (Section 3.2, below.)

This paper accordingly goes on to investigate the true value of the *erga omnes* concept in modern securities markets. The earlier developments – intermediation and globalisation – have led to a situation in which relational rights, or *inter partes* rights, have grown in importance. Today, it is not the *erga omnes* nature of securities but the contractual and regulatory duties that keep securities issues intact and protect client assets. This has also promoted the opening up of areas formerly regarded as mandatory law, in particular property law and insolvency law, to contractual agreement. (Section 3.3, below.)

In a next step, I will show that the tensions between the notion of a right *erga omnes* and the current market practice that treats securities as rights *inter partes* are also evident in the framework of private international law. Here, one may observe a move away from the perspective that embraces all holdings and dealings in respect of a specific securities issue towards a relational or transactional perspective that envisages only securities in a specific situation between specific market participants. *Lex rei sitae* and *lex societatis* have been replaced by PRIMA, thus allowing for the relational perspective on the nature of securities to be elevated to the level of international transactions. This is also the background of the market's drift towards English law as the applicable law. (Section 3.4, below.)

Lastly, the analysis moves to the interplay between the practical set-up of holding and the legal framework based on PRIMA-coordinated national laws which causes *erga omnes* rights being transformed into something of a different legal nature. Changing these practicalities by building a system that avoids these features, for example, a system built on fully segregated client accounts from the top to the bottom tier, may indeed have a positive influence on legal certainty in the domestic set-up. However, in the cross-jurisdictional context, because of PRIMA, more than one law may apply to the same securities—a fact that will always have the potential to create legal uncertainty. Consequently, as long as there are multi-tiered holding chains across jurisdictional borders while the legal framework is based on PRIMA, technical improvements towards more segregation have no positive impact on the fact that the holding pattern is legally uncertain. (Section 4.5, below.)

Section 4 pulls these different aspects together and concludes that the idea of co-ordinating domestic laws on the basis of PRIMA is a flawed approach while we continue to regard securities as specific, identifiable, chattel-like rights with an *erga omnes* effect. The idea that different laws apply to such a thing at any given point in time is inconceivable, which could be regarded as purely academic problem if it

did not create that many tangible inconsistencies. The current PRIMA-based framework can only work if the law recognises the relational character of the relevant rights and admits that the protection of these rights is largely based on behavioural duties imposed on intermediaries and on sharing mechanisms that ensure that at no point in time more securities circulate in the system than were originally issued. However, systems built on the idea of *inter partes* rights come with their own disadvantages, risks and inefficiencies. The time has therefore come to make use of the available immense computing power and introduce a system in which securities are directly evidenced per client, be it in a system that is organised around a central entity (such as the so-called transparent systems which exist in a number of countries) or be it in a system without central entity, such as Blockchain, the concept underlying Bitcoin.

2. THREE MOVES FOR LIQUIDITY AND A LEGAL QUANDARY

2.1. TRANSFERABILITY

Both shares and bonds consist, in substance, of payment obligations and, most visibly in the case of shares, certain participatory rights.¹³ All rights in these bundles are, by their very nature, obligations between the parties. For more than five hundred years shares and bonds and their ancestors have been created and traded, first in Florence, later in Amsterdam and London.¹⁴ However, businesses have also in the past faced difficulties raising as much funds as they needed, while insufficient market liquidity was also a concern. A major limitation was the unsatisfactory transferability of these investments. Potential investors knew that it might be difficult to find secondary acquirers should they decide to divest, since transferring a bundle of mutual personal obligations to a secondary acquirer was anything but fail-safe. Concerns related to both the content of the object of transfer and to the process of transfer.

First, potential secondary acquirers were in an uncertain position as to the content of the relevant instrument, i.e., the exact legal and economic terms of these personalised instruments were difficult to assess. Secondly, it was equally difficult to ascertain whether the seller was empowered to dispose of the relevant rights and whether these were free of encumbrances. Thirdly, assignment as a method of transfer was often unsatisfactory, in particular where only rights could be assigned but not obligations, at least not without the other party's consent.¹⁵ Long before legislators intervened to enhance transferability and thus, liquidity,

¹³ Also bonds vest certain participatory rights in a bondholder, notably to participate and vote in the bondholders meeting. See A McKnight, *The Law of International Finance*, OUP 2008, 531.

¹⁴ JS Rogers, *Negotiability, Property and Identity*, 12 *Cardozo Law Review* (1990), 470, 471-478.

¹⁵ See McKnight, n 12, s12.9.1.

the market itself developed structures and mechanisms to allow potential investors to avoid an excess of what would today be called ‘due diligence’.¹⁶ Concepts emerged capable of enhancing trading in these instruments in a legal environment in which pricing was straightforward and transparent,¹⁷ and legally effective transfers easy to achieve.

The market responded to the first problem by increasingly standardising the object of the transfer in legal and economic terms. Thus, it became easier for secondary acquirers to assess the position they were interested in taking. Financial instruments were issued in batches of economically and legally identical units, up to the point where securities of the same issue became not only identical as regards their content but also not even identifiable any more on an individual basis.¹⁸ Still today there are movements towards further standardisation as a means to enhance transferability and liquidity.¹⁹

The second and third obstacles to transferability, i.e., ascertaining the authority to dispose and ensuring a legally effective transfer, concern the process of transfer itself. In this respect, the market developed two different concepts which are still in use today, notably transfer by delivery of a certificate, generally called negotiability, or transfer through register entries.²⁰

Negotiable securities, often called bearer securities, are transferred by delivery of a certificate to the acquirer. This had already been market practice for quite some time before the English courts recognised it in the 17th century²¹ and the statutory law sanctioned it in the 19th century in England and elsewhere.²² In civil law countries, the—very fictitious—basic legal idea used to explain why delivering a certificate to the acquirer transferred a bundle of obligations was to coat that bundle with a property hull by incorporating it in a certificate, resulting in the paper *being* the claim.²³ Apart from the fact that the paper legally entitled its bearer to receive payments or to exercise participatory rights, the mechanism of delivery of the certificate allowed for *bona fide* acquisition, protecting the acquirer from adverse claims.²⁴ Professor Rogers argues that marketability of claims did not

¹⁶ See Rogers, n 13.

¹⁷ Micheler, ‘The legal nature of securities’, in L Gullifer and J Payne (eds.), *Intermediated Securities, Legal Problems and Practical Issues*, Oxford, Hart Publishing, 2010, 145.

¹⁸ The latter phenomenon is called ‘fungibility’, meaning that securities of the same issue by the same issuer can only be identified in kind, not individually, because they lack any unique feature such as an individual number.

¹⁹ In particular, under the Dodd-Frank and EMIR Regulations in the US and the EU, respectively, derivatives contracts, which used to be non-standardised and over the counter are now being increasingly standardised.

²⁰ These concepts are known from movable and immovable property. Both are ultimately designed to avoid multiplication of rights out of the blue (the limited number is either limited by availability of tangibles, or by a single register which is in itself complete and consistent).

²¹ *Sheldon v Hentley* and *Miller v Race*, n 4.

²² Rogers, n 13; See also JS Rogers, *The Early History of the Law of Notes and Bills*, Cambridge University Press, 1995, Ch 8.

²³ Incorporating the rights into a securities certificate is of course strikingly fictitious. It is different from evidencing the rights on the basis of a certificate.

²⁴ Rogers, n 13, 479.

necessarily require the benefit of good faith acquisition;²⁵ however, this is precisely what seems to have been the feeling at the time. In 1853, Savigny wrote that ‘the desire was felt to create new concepts which would make it possible to apply the aforementioned advantages in respect of disposing of property to obligations as well.’²⁶ Other options would have been to hand, notably to provide for the possibility of good faith acquisition of this particular type of claims immediately.²⁷ However, legislators chose to take the property route according to which delivery of the possession of the certificate transfers property in the certificate and thereby transfers the relevant rights. In England, property and ownership concepts are generally different from Civilistic conceptions.²⁸ However, transferring bearer bonds²⁹ also occurred on the basis of delivery of the certificate, even though the latter does not incorporate the rights but remains a mere means of evidencing them.³⁰ Around the same time as Savigny’s proposal, in England the Bills of Exchange Act of 1882 recognised the mercantile practice of transferring obligations by endorsement (a scriptural act typically on the back of the certificate) and delivery to the acquirer.³¹ This act of ‘negotiation’ was understood to not only achieve the transfer of the rights but also ascertain that the *bona fide* acquirer received them unencumbered.³²

The second option to address difficulties in the process of transfer was to attribute rights on the basis of entries in a register kept by the issuer, generally called registered securities. The register ensures the integrity of the issue by excluding the creation of excess rights. At the same time, it is a good means of recording encumbrances and as such it protects the acquirer. The institute of good faith acquisition in the proper sense is therefore unnecessary.³³ In England, where registered securities were and still are the rule, they are regarded as intangibles, or

²⁵ Ibid.

²⁶ von Savigny, *Das Obligationenrecht als Theil des heutigen römischen Rechts*, 97 (translation by the author).

²⁷ Rogers, n 13, 479, rightly points out that the ‘credo’ that negotiability was essential to marketability was ‘one of the most intriguing phenomena in the sociology of Anglo-American law’. For instance, the General German Commercial Code (1871) protected the purchaser of securities against adverse claims without classifying securities as tangibles: Micheler, ‘The legal nature of securities’, n 17, 142. The modern German Civil Code has diverted from this line and only protects the good faith of securities acquisitions by way of negotiation but not by assignment (which is theoretically still possible): see Einsele, n 8, 8. The charm of the certificate solution is that it is very much in line with the idea of a fixed number of securities issues: as chattel cannot be created out of the nothing, certificates were equally exactly defined in numbers. However, two practical problems follow suit, falsification and loss. Whereas falsification is conceptually easy to explain (a falsified certificate does not carry a claim) it is more difficult with loss: if the claim is the certificate and the certificate, say, burns in a fire – how to explain that one can get a replacement from the issuer?

²⁸ Dalhuisen, Vol 2, 259.

²⁹ In England, both registered and bearer securities exist, though shares are always registered, and also bonds have rarely been issued as bearer securities since the last war, Benjamin, *Interest in Securities*, para 2.05.

³⁰ The practical differences are marginal, if any at all.

³¹ Benjamin, *Interest in Securities*, para 3.21.

³² Benjamin, *Interests in Securities*, para 3.22.

³³ M Yates and G Montagu, *The Law of Global Custody*, 3rd ed, Tottel, Haywards Heath 2009, 20: registered securities have never enjoyed negotiable status.

choses in action.³⁴ Historically, *choses* in action constituted a personal obligation and could therefore not be transferred by assignment without the debtor's consent,³⁵ and in any case assignment was only able to transfer the benefit, but not the burdens, of the contract.³⁶ The solution to this problem came with the acceptance of novation, i.e., a tri-partite contract between the alienator, the acquirer and the issuer. The issuer would typically manifest its consent by changing the register. Even though the statutory basis for transfer of securities by novation dates back to 1936 and 1985, novation was already the original basis in the common law.³⁷

2.2. CENTRALISED CLEARING AND SETTLEMENT

Later, the industrialised world saw larger and deeper capital markets with higher trading volumes and more frequent transactions. The increasing degree of 'financialisation' necessitated, again, more liquidity, which in turn was rooted in more efficient outright transfer and encumbrance procedures. Therefore, as the next step following increased transferability (see previous section), the concept of securities intermediation through banks and brokers emerged, again first driven by market practice, long before legislators sanctioned the new structures.³⁸ Banks, brokers and other 'intermediaries' were connected to one another through a cascade of accounts ultimately linked to a central account ledger maintained by a central depository that also kept securities certificates, if any. As a result, in both cases of bearer and registered securities, investors received a credit entry in their securities account with their bank or broker. This obliterated the need to move physical security certificates (and in England: endorsement letters³⁹) whenever a change in ownership occurred or when securities were pledged or otherwise encumbered. The first central securities depositories ('CSD') for security certificates were founded in Vienna in 1878 and in Berlin in 1882, both probably modelled on the 18th century London Clearing House⁴⁰ for cheques and bank notes. However, huge chunks of securities holdings still remained in separate bank custody or in private hands. It was not until the middle of the 20th century with the advent of computerisation that this practice, now referred to as central clearing and settlement, became prevalent, and it has become the norm only recently.⁴¹ A

³⁴ Benjamin, *Interests in Securities*, para 2.10. The certificate merely evidences the existence of the claims, *ibid.*

³⁵ Micheler, *Property in Securities – A comparative Study*, Cambridge University Press, 2007, 21.

³⁶ Benjamin, *Interests in Securities*, para 3.18.

³⁷ *Ibid.*, para 3.06.

³⁸ For instance, in Germany, securities intermediation was introduced in 1882, whereas the codification of the necessary legal changes occurred in 1937, see Einsele, n 8, 12-13.

³⁹ *Ibid.*

⁴⁰ *Ibid.*, 12; Huang, *The law and regulation of central counterparties*, 44 *et seq.*

⁴¹ See Article 3.1 Regulation 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012 (hereinafter, 'CSDR').

number of jurisdictions, typically smaller markets or late market entrants, were able to conceive holding systems that did not entail a cascade of accounts but where all investors were directly linked to a central ledger.⁴²

Holding securities through a cascade of accounts was bound to have consequences for the legal concepts earlier perceived as ascertaining transferability.⁴³ The practicalities of centralised clearing and settlement had fundamental legal significance. First and foremost, practice moved away from those elements that had hitherto been fundamental in explaining transferability. Notably, in respect of bearer securities, the security certificate lost its practical function and ceased to change hands, being kept in a central depository or even abolished altogether.⁴⁴ Thus, bearer securities, in their practical handling, were assimilated to registered securities. As regards registered securities, issuers' books generally no longer reflected the investors' name, as they had originally, but the names of the intermediaries first in the cascade, the so-called clearing members, generally the largest banks and brokers in a given jurisdiction.

The second practical trait with legal significance is that in the cascade of accounts, several intermediaries typically became involved in holding a security for the investor. In such a 'holding chain'⁴⁵ every security is mirrored in different accounts maintained by the different intermediaries involved, giving rise to the question as to which account entry actually carries the right itself and which one exists solely for purposes of intermediation. The third practical feature of the new holding pattern with legal consequences is that securities holdings were pooled, i.e., intermediaries tended to hold their clients' securities with another intermediary in fungible bulks of identical securities.⁴⁶ This has obvious consequences for the specificity of the asset and its attribution in insolvency since every security is in danger of being commingled, or confused, with those of other clients of an intermediary and with those of the intermediary itself, typically transforming the right into some kind of shared or proportionate ownership in the pool or a mere claim.⁴⁷

Obviously, these practical changes brought by centralised clearing and settlement placed the earlier achievement of easy transferability, achieved through negotiability or good faith acquisition, under some strain. This is all the more

⁴² The first study of these systems was conducted by Unidroit under the title 'Transparent Systems', Study 78 Doc 44 and Doc 44 Add., available at <http://www.unidroit.org/english/documents/2006/study78/s-78-044-e.pdf> and <http://www.unidroit.org/english/documents/2007/study78/s-78-044add-e.pdf>, last accessed 18.11.2015.

⁴³ See the fundamental works of Mooney, Einsele, Benjamin and Nizard, n 8.

⁴⁴ France was the first financial centre to dematerialise securities in 1984. See also Article 3.1 CSDR, n 41.

⁴⁵ The actual length of a 'holding chain', i.e., the number of intermediaries intervening between the investor and the issuer, depends on concrete circumstances. In some jurisdictions, there is no other intermediary besides the CSD, and investors hold their securities directly with the CSD ('transparent systems', see below). In other jurisdictions, the number of intermediaries may be limited to one. In yet other jurisdictions, the number is not limited in any way.

⁴⁶ Rogers, n 13, 485. Generally referred to as 'omnibus accounts'.

⁴⁷ Rogers, n 13, 485. There are now initiatives to limit commingling and the use of omnibus accounts. See section 3.5.

remarkable as the centralised clearing and settlement concept was conceived to allow for transactions in great numbers that were also generally anonymous. Since centralised clearing and settlement was introduced, acquirers of securities typically cannot even identify the relevant transferors, let alone verify whether the latter are entitled to dispose of the securities or whether the securities had been previously encumbered. As the possibility to acquire in good faith had emerged earlier, it now even became a fundamental prerequisite—however, how could the system possibly work in an environment lacking both certificates and register entries, where the number of account entries is a multiple of the number of securities issued, and where securities of different clients are pooled and commingled in anonymous bulks? In other words, with the advent of central clearing and settlement, the legal concepts allowing for negotiability or good faith acquisition were wiped out by the practicalities of intermediation. This crack in the edifice considerably endangered what is today referred to as ‘client asset protection’ and, to be realistic, has not been entirely papered over so far.

In attempting to resolve this problem, countries have relied on idiosyncratic approaches. Some countries took bold steps and adapted the law to the practice (in particular the US and Canada), others adapted the practice to the law (in particular the Nordic and East European countries, and China), others somehow continued to hover, confusingly, between the two alternatives (France, Germany, and Austria), and England changed nothing at all in legal terms. What can be observed in various countries is a paradigmatic path-dependent development, where existing market infrastructures and vested interests of financial service providers shape not only the practice but also the law, regardless of efficiency, legal certainty and international compatibility.⁴⁸ As a consequence, whereas the legal rights vested in the investor and, respectively, in a security or collateral taker, had remained comparable after the first market movements towards transferability, they now diverged significantly between jurisdictions. The legal position of investors is characterised as anything between a bundle of insolvency-proof claims against the intermediary (‘security entitlement’, US and Canada), an equitable interest either in securities or in an equitable interest in an equitable interest in securities (England), full and unshared property in remote securities (France), full and unshared property in direct rights (Nordic countries, Greece, Poland, and China), or shared or common property in a pool of chattels (Germany and Austria). Correspondingly, the relevant legal position of intermediaries towards the securities differs, too. They may consist of a security entitlement in the US (legal title is with a registrar), an equitable interest or legal ownership in England and Wales (depending on whether the relevant intermediary is at the top of the holding chain or not), ‘nothing’ in France, and a lesser, residual right

⁴⁸ See Micheler, *Custody Chains and Asset Values: Crypto-Securities are worth contemplating*, *The Cambridge Law Journal*, available on CJO 2015 doi:10.1017/S0008197315000598; last accessed 18.11.2015.

comparable to possession in Germany and Austria. In the Nordic and other countries that follow their approach, there are no intermediaries in legal terms because all accounts are directly maintained by the central securities depository.

Some jurisdictions, such as France, Germany and Austria, further developed their original property-based analysis to cope with the emerging new holding concepts, seeking to consolidate the need for transferability and the dangers posed by intermediation under the umbrella of their understanding of property. This approach was not necessarily compelling as from the very outset, securities had consisted of a bundle of obligations and their coating by a property hull occurred only as a vehicle to render them easier to transfer on the basis of negotiability and register entries. Their pure *inter partes* core remained unchanged. And, *de facto*, many other characteristics of these hybrids resembled claims rather than a property. Notably, there is no specificity or certainty regarding the asset, there is no direct access to it (comparable to ‘possession’) and intermediated securities are typically enforceable only against the account holder’s own intermediary but not against other intermediaries or the central depository. With slight variations depending on the jurisdiction, investors’ rights have acquired a status increasingly akin to claims. National laws were only able to handle these hybrids by denying the problem⁴⁹ or inventing further fictions⁵⁰, and generally by intimately aligning the operations of national central securities depositories, settlement architectures and customer account agreements (individual contracts!)⁵¹ with the domestic legal understanding of the right in securities.

This situation remained without significant consequences while securities markets were mainly domestic. However, the third move towards more liquidity, notably the abolition of capital controls and the introduction of the EU single market, rendered the financial market truly international—and the discrepancies between the various approaches became relevant.

2.3. FREE MOVEMENT OF CAPITAL

Jurisdictions had barely digested, from the legal viewpoint, the emergence of intermediation and central clearing and settlement when the third development gathered pace. Since the disappearance of the Bretton Woods System in 1971 globalisation and the abolition of capital controls made available a huge asset reservoir. Since then, markets have sourced assets globally with the natural consequence of an immense increase of liquidity. Cross-border investment and collateralisation had, of course, always existed. However, volumes were comparatively much smaller, as was the frequency of transactions. Today, cross-

⁴⁹ For example, Germany has no clear basis to recognise good faith acquisition of securities held through multiple tiers of intermediaries, see Einsele, n 8, 64-88, 97-112.

⁵⁰ For example, French law, though it treats securities as entirely dematerialised and therefore a register-based system, speaks of bearer securities (*titre au porteur*). Nizard, n 8, 655-662; Drummond, ‘Intermediated securities: reflections on a new concept’, 435.

⁵¹ See Micheler, n 48, 5-7.

border securities holdings can be roughly estimated to make up 40% of the total securities investments.⁵² However, the law—again—trailed behind market practice, unprepared for this internationalisation. Guynn⁵³ was the first to conceptualise shortcomings of private international law that drive up opportunity cost of cross-border transactions, thereby hampering the free movement of capital and consequently limiting liquidity. He argued that *lex rei sitae* and *lex societatis* as connecting factors for bearer and registered securities, respectively, were unsuitable to yield a consistent result in the intermediated set-up of securities markets, let alone in the cross-jurisdictional context. For lack of a valid alternative approach to conflict of laws, parties had continued to transact in a legally uncertain environment.⁵⁴ Central banks, the guardians of liquidity, developed a strong interest in this argument and legislators in Europe as well as at the Hague Conference on Private International Law rushed to address this concern by introducing an entirely new category of conflict-of-laws rules, based on a novel connecting factor called ‘place of the relevant intermediary approach’ or PRIMA.⁵⁵

This approach departs from the traditional connecting factors referring to location or incorporation. Instead, it refers to the law of the securities account to which the relevant securities are credited.⁵⁶ The label PRIMA is therefore somewhat misleading, first, because it does not connect to the place of the intermediary but to the account and, secondly, because it subsumes two different sub-species: in relation to what might be termed the *factual* PRIMA, the law of the account is the law of the place where the account is actually maintained. This

⁵² Data shows that between 5 per cent and 95 per cent of investments in the different European financial centres are allocated to cross-border securities; typically, in large financial centres like London, Frankfurt and Paris, between 30 per cent and 70 per cent are allocated to cross-border holdings. The share of cross-border *holdings* is mirrored by a correspondent percentage of cross-border *trading* activity. (Data extracted from Oxera, ‘Monitoring prices, cost and volumes of trading and post-trading services’, Report prepared for the European Commission, London and Brussels (2011), 73. Though the data itself relates to equity investments, the authors note, *ibid.*, that they have found a positive correlation between equity and debt securities in respect of cross-border holdings.) No data is available indicating the percentage of securities *collateral* provided across borders but, going by the aforementioned figures, a significant percentage may be assumed. It is probably justified, therefore, for ease of reference, to collapse these three elements into the figure of 40 per cent of all holding, trading and collateral operations by EU market participants in one way or another imply a cross-jurisdictional element.

⁵³ Guynn, n 10; see also Ooi, ‘The Choice of a Choice of Law Rule’, in Louise Gullifer and Jennifer Payne (eds.), *Intermediated Securities. Legal Problems and Practical Issues* (Oxford and Portland: Hart Publishing, 2010) 219–244.

⁵⁴ See Guynn, n 10.

⁵⁵ See C. Bernasconi, ‘The law applicable to dispositions of securities held through indirect holding systems’, Hague Conference on Private international Law, *Collateral Securities* Prel. Doc. 1 (November 2000). In Europe, the new rule was introduced through three sectoral Directives: Article 9(1) Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on financial collateral arrangements, Article 9(2) Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems; Article 24 Directive 2001/24/EC of the European Parliament and the Council of 4 April 2001 on the reorganisation and winding up of credit institutions. However, the European conflict-of-laws rules pose a difficulty in that there is no universal rule: these sectoral provisions (which, to complicate matters further, employ a slightly different connecting factor) apply in certain segments of market activity only. This leads to the co-existence of all three rules and autonomous national conflict-of-laws rules.

⁵⁶ Ooi, ‘The Choice of a Choice of Law Rule’, n 53, 221.

subcategory is, roughly, the approach taken by the relevant EU legislation.⁵⁷ In relation to what might be termed the *contractual* PRIMA, the law of the account is the law agreed upon to this effect by the parties. This is the approach underlying the Hague Securities Convention⁵⁸, and is used in Switzerland.⁵⁹ The difference between the two approaches is usually marginal, but it might matter in cases where the law agreed upon by the parties is not the law of the country where the account is maintained.

I will disregard the widely discussed⁶⁰ competition between both sub-approaches for now and rather look at their primary effect. Both follow the same basic *inter partes* approach by determining the law applicable to securities on the basis of an account, i.e., a two-party relationship. Where a security is held through chains of intermediaries, the chain comprises two or more *inter partes* relationships. This leads to a situation where different laws may apply, simultaneously, to these various two-party relationships, and consequently to what is at least economically the ‘same’ security. Jurisdictions have more or less difficulty in accepting this idea. Where the substantive law assimilates securities to tangibles even where they are held through holding chains, such as under French and German law, the fact that various laws may apply to the proprietary aspects of the same asset is difficult to explain, notably because proprietors are supposed to enjoy *erga omnes* rights. In jurisdictions where the substantive law regards the phenomenon of intermediation as leading to separate interests on each tier of the holding chain, such as the US and the England, PRIMA is easier to digest because there are somehow separate rights anyway. Further, all jurisdictions that link an investor’s interest to a specific right held somewhere, and that includes the trust concept in England, run into difficulties as regards the *nemo dat quod non habet* rule: an intermediary that receives an interest in securities under one law cannot provide its account holder with a legal position under a different law that is better than its own. Article 8 of the UCC is the only exception in respect of the *nemo dat* principle: the substantive law

⁵⁷ See n 55.

⁵⁸ Articles 2(1) and 4(1) Convention on the law applicable to certain rights in respect of securities held with an account provider, of 5 July 2006 (adopted in December 2002, the Convention however officially indicates the date of the first signature). The choice is restricted on the basis of a requirement that the intermediary has a qualifying establishment in the country the law of which has been chosen.

⁵⁹ Federal Intermediated Securities Act (Switzerland), Article 108c. See H Kuhn, B Graham-Siegenthaler, L Thévenoz, *The Federal Intermediated Securities Act and the Hague Securities Convention*, Stämpfli, Berne 2010.

⁶⁰ Bernasconi, Christophe and Sigman, Harry C., ‘Déterminer la loi applicable – Les facteurs de rattachement retenus par la Convention de la Haye’, in Bonomi, Andrea, Cashin-Ritaine, Eleanor and Volders, Bart (eds.), *La loi applicable aux titres intermédiés* (Zurich : Verlag 2006); Bloch, Pascale and de Vauplane, Hubert, ‘Loi applicable et critères de localisation des titres multi-intermédiés dans la Convention de La Haye’, [2005] *Journal du droit international – Clunet*, 3–40 ; Crawford, Bradley, ‘The ‘Prima Convention’: Choice of law to govern recognition of dispositions of book-based securities in cross border transactions’, *Canadian Business Law Journal* (2003), 157–163; Einsele, Dorothee, ‘Das Haager Übereinkommen über das auf bestimmte Rechte im Zusammenhang mit zwischenverwahrten Wertpapieren anzuwendende Recht’, [2003] *Zeitschrift für Wirtschafts- und Bankrecht (WM)*, 2349–2356 ; Ooi, n 53; Sigman, Harry C. and Bernasconi, Christophe, ‘Myths about the Hague Convention debunked’, [2005] *International Finance Law Review*, 31–35.

does not pretend that the entitlement of an account holder is connected to rights that the intermediary has itself.

3. CONCEPTUALISM ACROSS BORDERS?

Three main moves in the practice of holding and transferring securities have supported the increase of liquidity in this market, typically before being sanctioned later by legislators and courts: First, bundles of obligations were standardised and became transferable either as negotiable instruments or register-based rights. Then, in a second step, intermediation and central clearing and settlement rendered the market considerably more efficient, leading to the emergence of idiosyncratic national substantive laws that were conceived to explain the irrelevance of certificates and registers, and to counter the risks flowing from intermediation. The third move, the internationalisation of the market and the global sourcing of assets, was in turn supported by the invention of a novel connecting factor in private international law, replacing the absolute *lex rei sitae* by an *inter partes* perspective.

However, the legal patchwork resulting from this development represents an obstacle to further efficiency and liquidity gains. This explains the ongoing efforts to improve the legal situation, as most recently demonstrated by the EU Commission's initiative. Obviously, in Europe, any reform will have to run the gauntlet of 28 national legal frameworks; however, that process is typical of European law-making. The true difficulty consists in rethinking some fundamental elements and overcoming those intimately connected paradoxes and quandaries into which the current law has been locked by earlier legislative trends in what could be described as a case study of path dependency.

3.1. THE PARADOXAL DEMANDS ON PROPERTY FUNCTIONS (I)

Previous initiatives to harmonise securities law, such as the Geneva Securities Convention, have concentrated on achieving a high degree of functionality and conceptual neutrality so that not only could national laws continue to apply but they could basically remain unchanged.⁶¹ In particular, those jurisdictions where securities holding is organised on the basis of property concepts were wary of conceptual spill-over from 'indirect'⁶² holding systems, such as, in particular,

⁶¹ Geneva Securities Convention, Preamble, Recital 7.

⁶² The term 'indirect systems' is often used to describe those systems where the investor's interest is cut off from the direct connection to the issuer. However, it is probably too vague to be used without further specification, see Paech, n 9, 50-51.

Article 8 of the UCC.⁶³ Such was the political climate that the question of whether property or, speaking more broadly, absolute rights were *per se* able to effectively organise modern securities holding and disposition has been discussed only peripherally in Europe. However, the idea of maintaining property in its traditional understanding as an *erga omnes* right produces frictions and paradoxes, that is, situations in which it both serves and inhibits the functions it is supposed to have. The first paradox concerns negotiability and good faith acquisition, respectively.

The fiction⁶⁴ of a bundle of rights and obligations being represented by or incorporated in a piece of paper was initially effective in the physical environment in achieving easy and safe acquisition. However, it struggled to produce consistent results as soon as the market moved on to non-physical transactions. The non-physical environment boosted liquidity but came at the price of novel risks associated with intermediation against which in turn, market participants needed protection. However, strikingly, property concepts, though associated with safety in the general perception, have never been capable of addressing these risks, *precisely because* their application was originally conceived to serve a different function, that of easy and safe acquisition. That function was all the more needed in the intermediated world, as no acquirer in the anonymous environment of automated exchanges and centralised clearing and settlement would be able to verify whether the right itself or the acquisition process are free of any legal defects.⁶⁵ However, that very facilitation comes at the disadvantage of increasing the risks flowing from intermediation because only as a consequence of negotiability and good faith acquisition did intermediaries become able to deliberately or inadvertently misappropriate securities or create credit entries in their books that are not backed by any securities they themselves receive through the system. In an environment where rights are limited in number, any accrual of rights on one side must be matched by a diminution somewhere else, i.e., somebody must lose securities accordingly – and that somebody is typically the original owner.⁶⁶ In practice, it is behavioural obligations, but not the classification

⁶³ T Cremers, 'Reflexions on 'intermediated securities' in the Geneva Securities Convention', (2010) European Banking and Financial Law Journal (Euredia), 93–97; F Drummond, 'Intermediated securities: reflections on a new concept in French financial markets law', (2007) Law and Financial Markets Review, 435–442; PO Mülbert, 'Vom Ende allen sachenrechtlichen Denkens im Depotrecht durch UNIDROIT und die EU', (2010) Zeitschrift für Bankrecht und Bankwirtschaft (ZBB), 445–458; P Scherer and R Gallei, 'UNIDROIT draft Convention and German securities law: friend or foe?', (2009) Journal of International Banking Law and Regulation, 470–476; T Voß, 'Die Securities Law Directive und das deutsche Depotrecht', (2010) Europäisches Wirtschafts- und Steuerrecht (EWS), 209–211.

⁶⁴ See n 49 and n 50.

⁶⁵ It is not only anonymous, but even the system itself is unable to identify transferor and transferee as the securities are processed in batches.

⁶⁶ It has been a reality even before modern clearing and settlement systems emerged and investors dealt on a much more personal basis with their banks or brokers: once security certificates were physically delivered into custody, the investor had no choice but to trust its custodian that it would comply with segregation requirements to keep the property identifiable, and that it would, at the same time, abstain from unauthorised dealings in the securities. If the custodian breached these contractual or statutory obligations, the possibility of loss of the securities was always a real one. The first German law on indirect holding (Gesetz betreffend die Pflichten der Kaufleute bei Aufbewahrung fremder Werthpapier, 1896), recognised pooling (but not yet multi tier holding), and addressed the weak position of the investor by

of the relevant assets as property, that protect securities holdings. Thus, with the advent of intermediation, from the perspective of account holders, negotiability and good faith acquisition are both a boon and a bane.

3.2. THE PARADOXAL DEMANDS ON PROPERTY FUNCTIONS (II)

A second issue is the tension between property of a security, on the one hand, and the ability to exercise the rights flowing from that security, on the other hand. In practice, investors are often excluded from these rights. For instance, they may be unable to vote in the annual general meeting as they may find themselves in a situation where they are not invited to attend because they are not recognised as shareholders in legal terms.⁶⁷ The root of the problem is that issuer and investor are typically not in direct contact, either because there is no legal connection between them, or because operational hurdles inhibit the exercise of the rights even if that connection can still be construed. Again, the idea of property as a specific and absolute right adds to this confusion, primarily because commercial law, on the basis of market practice, attributes the property to a person that should *not* be the shareholder or bondholder because it is obviously not the person taking the risk of the investment in economic terms. Typically, the law is rather random in the way it identifies a proprietor in the holding chain, often the topmost intermediary.⁶⁸ In international settings, where different laws apply to the various tiers of a holding chain, the law may even identify more than one proprietor of what is the same security in economic terms.⁶⁹ This sounds like a quirk of nature, but it is obviously a consequence of path-dependent law-making and a market structure that while certainly historically grown, still remains too massively built around the vested interests of the incumbent service providers.

Whether or not investors are able to exercise their rights depends—again—on the compliance of intermediaries with behavioural obligations. This might or might not work smoothly in national systems, and it certainly does not work in the international context; however, the property right *per se* is of no help in this regard.

imposing segregation duties on the bank or broker, under threat of punishment (fine of 3000 Deutschmarks or imprisonment of up to two years) for non-compliance:

https://de.wikisource.org/wiki/Gesetz,_betreffend_die_Pflichten_der_Kaufleute_bei_Aufbewahrung_fremder_Werthpapiere,last accessed 20.11.2015.

⁶⁷ The problem exists in respect of all sorts of corporate rights in the context of distributions, reorganisation and general meetings. Dividend or coupon payments may be the only right flowing from a security that reliably reaches the investor. See, for instance, the relevant work of an ECB working group on Corporate Actions, <https://www.ecb.europa.eu/paym/t2s/governance/ag/html/subcorpact/index.en.html>.

⁶⁸ In England, the law identifies the participant in the CREST system as legal owner. In the US, the nominee of the securities depository DTC, Cede & Co, is legal owner of all securities deposited with DTC, see above, Section 2.2.

⁶⁹ See Paech, n 9, 36-38.

3.3. PROPERTY, CONTRACT AND BEHAVIOURAL RULES

The previous sections show the important role of behavioural duties of intermediaries in respect of the market participants' needs. Regulatory regimes such as the famous MiFID (EU) or CASS (UK) rules impose duties on intermediaries designed to make the loss of securities less likely. These duties are designed to protect account holders, or are established as duties vis-à-vis the public, directed towards protecting the functioning of the system as a whole. They may arise from contract or regulation. So what is the relationship between, on the one hand, the duties which in practice ensure account holders' interests, and, on the other hand, the idea of property as the concept underlying modern securities holding? In the common perception it is rather the *erga omnes* character of property that is seen as key for guaranteeing securities holders' rights. *Erga omnes* is a term typically used to distinguish absolute from relational rights, in particular to describe the difference between property rights and obligations. The exact nature of property as *erga omnes* right is still controversial but generally hovers around the elements of 'right to exclude' and 'right to use'.⁷⁰

Starting with the right to exclude, it is obvious that this does not mean that other parties are *de facto* prevented from exercising influence on an asset. It rather refers to a duty owed by the rest of the world to the proprietor to abstain from deliberate or careless interference with the right (typically a tangible),⁷¹ lacking any special permission. Notably, these duties prohibit unlawfully converting the right, or trespassing it, or damaging it.⁷² Transposing these ideas to modern securities holding, the picture looks quite straightforward at first sight: a holder of a security typically aims to exclude the whole world, notably the intermediaries involved in the holding, from enjoying rights flowing from the securities and using them economically; the creditors of these intermediaries from accessing the securities in the event of insolvency; and, other parties in general from using the securities for their economic purposes. However, taking the inverted perspective and asking who owes the duty not to interfere, the picture is more confusing. The focal point is the role of intermediaries alone—only they owe duties as only they have and can give access to the securities. Others can have access only through them, typically on the basis of a court or regulatory order. Therefore, it is not entirely clear whether duties are owed by 'the whole world'. However, this alone would probably not suffice in order not to classify intermediated securities as property. The fact that intermediaries are natural gatekeepers to something that exists only in electronic form is a reminder that some might think of securities as chattel, which securities are not. Consequently, the definition of property (right to exclude) used so far relates to tangibles and typically needs being modified when applied to non-tangibles: in that case, legislation specifies the precise content of

⁷⁰ See S Douglas and B McFarlane, *Defining Property Rights*, in J Penner and HE Smith, *Philosophical Foundations of Property Law*, Oxford University Press (2013) 219.

⁷¹ *Ibid.*, 220.

⁷² *Ibid.*, 224.

the duties⁷³ and who owes them. This more subtle approach to the right to exclude may also explain why the *numerus clausus* of property rights is blurred in relation to intangibles.⁷⁴

The more fundamental point is the question of who owes these duties to whom. Is the whole world obliged vis-à-vis the ultimate investor? That is probably not the case. For instance, a holding chain through which an investor holds a particular security might be built on intermediation through three intermediaries and the central depository. Only the investor's direct intermediary owes the duties *to her*. The other intermediaries would typically owe duties to their own account holder, which is another intermediaries further down the chain, and to the public for purposes of systemic stability and confidence. Those intermediaries at the upper tier are even unable to identify the ultimate investor because they maintain securities accounts for their clients that are other intermediaries but for nobody else. This is, again, a consequence of tiered holding and pooling. In other words, asking who owes duties to whom, it appears that there are as many property-like positions as there are tiers in the holding chain, in a series connection. It does not look as if the investor had an *erga omnes* right against the whole world.

This result can be tested considering an investor's options to trace lost securities or to demand restitution from an acquirer or beneficiary other than her own intermediary. The practicalities of the securities market (securities cannot be individualised, they are used and re-used in bulks that become commingled all the time) generally forbid any tracing, and the law in most jurisdictions affords protection of acquirers against adverse claims, not only on the basis of negotiability or good-faith acquisition but also following 'finality' rules⁷⁵ of settlement systems. This analysis could only change to the extent that a security is individually specified, that is, perfectly segregated from the intermediary's own as well as from its other clients' securities. As it would be impossible to put a label with the owner's name on the (intangible) property, the only possibility is to offer the client an individual account directly with the central depository or a holding pattern through a chain of individual, 'non-pooled' accounts. But this does not happen for reasons of cost and efficiency,⁷⁶ at least not while the current market practice survives.

A second trait of *erga omnes* is that the proprietor can do with the asset whatever she pleases: use it, abandon it, do nothing at all with it, and enjoy its fruits.⁷⁷ However, the ultimate holder's right will typically only be enforceable

⁷³ Douglas and McFarlane, 'Defining Property Rights', n 70, 239-240.

⁷⁴ *Ibid.*

⁷⁵ See Article 3, Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems.

⁷⁶ Clients must be offered the possibility of segregated accounts now under European rules, i.e., the legislator has identified the problem – however, this leads to segregation only at that level, if individualisation is not provided from bottom to top.

⁷⁷ Douglas and McFarlane, 'Defining Property Rights', n 70. 226, however denying its decisive character and concentrating their definition on the right to exclude.

against her direct intermediary but not against any other intermediaries involved in holding her securities or against the central depository: for lack of specificity and the ability to identify her assets, they will be unable to comply with her claim.⁷⁸ Consequently, the proprietor's freedom to do whatever she likes with her security is restricted to exactly one option apart from just holding it: she can instruct the intermediary to transfer it elsewhere. As regards the enjoyment of the relevant fruits, it has already been said that this is in all cases dependent on compliance with contractual and regulatory duties by the intermediaries, and often even cut off legally because the person that considers herself the investor is not clearly identified as the holder of the right.⁷⁹

In summary, in a scenario of centralised clearing and settlement which might in addition reach across national borders, a typical *erga omnes* right as known from the world of chattels does not exist. Specific legal rules or regulation define the duties that market participants owe to the ultimate investor in respect of her securities.⁸⁰ By contrast, it is not the nature of intermediated securities that defines the duties that other market participants owe to the owner. It is therefore irrelevant whether the law assumes that the ultimate investor's right is connected by a direct legal band to securities held in a CSD or whether the right is an equitable right, a claim or some other type of right. Whichever the case, behavioural rules and compliance with contractual duties will do the job. They ensure that the right does not become part of the insolvent estate, that intermediaries do not abuse their factual position to engage in unauthorised dealings, and that the investor can ultimately benefit from the rights flowing from the security itself. An absolute legal position, or an *erga omnes* right, is neither conceptually explicable nor would it serve its purpose in an intermediated context, let alone in an international setting. The fact that the security certificate as carrier of the right has already lost all practical importance⁸¹ is merely a symptom of this logic. The law has already accepted, silently so in most countries, that the market cannot, or is unwilling to, put into practice the concept of a specific security located in a specific place and attributed to a specific person. Instead, the law accepts that IT systems document securities in pools, that the same securities are documented in various pools and that regulation is needed to allocate the rights and duties in that system. That is, the law has accepted practicalities that are fundamentally incompatible with the nature of a right *erga omnes*, comparable to chattel. From a legal viewpoint, the market is organised on the basis of relational rights.

⁷⁸ Article 22 of the Geneva Securities Convention expressly excludes access to the investor's securities at the level of any intermediary other than the direct intermediary ('upper-tier attachment').

⁷⁹ See Micheler, n 48.

⁸⁰ See Douglas and McFarlane, 'Defining Property Rights', n 70, 240, using the example of a copyright.

⁸¹ See n 44 and accompanying text.

3.4. CONFLICT OF LAWS

The tension between the idea of a right *erga omnes* and the current practice that has assimilated securities to *inter partes* rights reflects on the private international law framework as well. Here, one can observe a move away from a perspective that embraces all holdings and dealings in securities belonging to a specific issue (*'all ABC shares'* – wherever they are) towards a relational and transactional perspective (*'those ABC shares administered by X for Y'*).

Traditional approaches to conflict of laws in respect of securities resulted in a situation where the law was able to guarantee the integrity of the issue. Say, an issuer has issued 1m securities, and at no point in time could there ever be more or less than 1m securities. *Lex rei sitae* or *lex societatis*⁸² guaranteed that no negative or positive conflicts could arise as a consequence of different laws governing 'the same' security. Apart from pathological cases such as forged or burned security certificates, the system was coherent in itself, of one piece, and therefore consistently able to settle conflicts occurring in the context of acquisition and disposition, including the decision as to which party had to lose in a scenario of good faith acquisition. The rights arising under that system were coherent and good against all parties that dealt in securities of the relevant issue. The ideas underlying the concept of *erga omnes* fit well into that environment. I have termed this kind of consistency 'vertical' because it connects the number of securities issued at the top to the number of securities in the hand of end investors.⁸³

By contrast, the introduction of PRIMA led to a situation in which the law applicable to a security is determined on the basis of an individual *inter partes* relationship involving parties and their intermediaries. The outcome of acquisitions and dispositions under PRIMA is therefore not linked to the root of the right but is more consistent with the contractual environment existing between these parties (I have termed this kind of consistency 'horizontal'). It is therefore much easier for parties to create a situation in which the law applicable to their contractual relations (loan, derivative, etc.), which they can freely choose, corresponds to the law governing their securities transactions. This is not that much of an issue where outright transfers for investment purposes are concerned. The important issue is that the law applicable to disposition and acquisition naturally stretches to the provision of collateral,⁸⁴ in particular in securities

⁸² The majority view is that *lex societatis* applies in case of registered shares, see M Ooi, *Shares and other Securities in the Conflict of Laws*, OUP 2003, mainly referring to the Court of Appeal decision [1996] 1 WLR 387 *Macmillan*. *Lex rei sitae* applies in case of bearer shares, where there are two scenarios: for those bearer shares in central custody that place would determine the law. For those bearer shares outside central custody, the law the jurisdiction of the location of the certificate applies.

⁸³ P Paech, *Intermediated Securities and Conflict of Laws*, Paper given at a Conference on 'Investing in Securities', Harris Manchester College, University of Oxford, 16 May 2014, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2451030, last accessed 5 December 2015.

⁸⁴ Collateral is mostly provided under a title transfer arrangement. It may also be based on a 'traditional' security interest, such as pledge, mortgage or charge.

financing transactions. Typically, this involves mechanisms allowing for the most efficient use of the collateral assets, such as, in particular, margining, substitution and right of use. I have described elsewhere the enormous efficiency and liquidity gains brought about by these techniques *per se*.⁸⁵ For them to work in an international setting and in relation to international securities portfolios it is necessary that one law apply to such a portfolio, i.e., all securities held in an account. If the parties are, in addition, allowed to align the law governing collateral with the law governing contractual relationships (mostly English law), transacting becomes even more efficient, thus further increasing liquidity.

Beyond the law applicable to contract and collateral, there is a third piece of that puzzle that needs to be added in order to understand why moving the law governing securities into the relational environment is so important. Increasingly, jurisdictions accept that parties choose the law governing their set-off and netting agreements, allowing this choice to be enforceable in insolvency.⁸⁶ Pulling these elements of a transactional relationship together under the same law, transacting becomes considerably easier. It is therefore fair to say that PRIMA (whether consensual or factual) is a necessity for modern securities financing transactions and therefore highly instrumental in supporting liquidity.

Thus, areas that were formerly in the realm of mandatory property and insolvency law are becoming increasingly shaped by contract. The resulting loss of vertical consistency has worried academic commentators and policy makers alike⁸⁷ and is probably the reason why, at some point, all reform beyond the introduction of factual PRIMA was halted in Europe, a stay advocated primarily by those that still regard securities as a right *erga omnes*. This is not to say that the introduction of PRIMA is a mistake—it is just incompatible with the understanding that securities vest *erga omnes* property rights in investors.

3.5. THE LIMITED EFFECT OF SEGREGATION

Earlier in this paper, it was shown how the practicalities of holding were able to change the nature of the right of the account holder. Two phenomena in particular, the commingling of client securities in omnibus accounts and multiple mirroring of the same security at different levels of a holding chain, mean that *erga omnes* rights have been transformed into something of a different legal nature. However, avoiding these phenomena in practical terms, in particular by keeping

⁸⁵ P Paech, *The Value of Insolvency Safe Harbours*, forthcoming in Oxford Journal of Legal Studies (2016), Section 2.

⁸⁶ Notably in the EU in respect of parties that are banks or investment firms (Art. 25 Banks Winding-up Directive), see P Paech, *Close-out Netting, Insolvency Law and Conflict of Laws*, (2014) 14 Journal of Corporate Law Studies 419, 423-436.

⁸⁷ Drummond, n 70, paras 22-26; Cremers, n 61. See also responses to a consultation launched by the EU Commission, notably of Deutsche Bundesbank, the French Authorities, and the Italian Treasury, available at <https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp>.

client securities separated or ‘segregated’ from those of the intermediary and those of other clients⁸⁸, will not be sufficient to restore a consistent legal analysis.⁸⁹

Segregation of securities holdings *per client* means that an intermediary has a separate account with the next intermediary in the holding chain for each of its clients. Segregation has a positive effect should an intermediary become insolvent. Non-commingled assets are less likely to become part of the insolvent estate. However, there are no immediate advantages beyond.

First, segregated accounts cannot avoid operational mistakes or fraud: if, at the moment of insolvency of the intermediary, there are 1000 Toyota shares standing to the credit of the investor’s account but the intermediary’s account with the upper-tier intermediary does evidence only 500 Toyota shares, there is a problem to which there is no easy solution, neither in legal, nor in practical terms. Further, in jurisdictions that see securities as an *erga omnes* right, segregation would be required on every tier of the holding chain, from the investor’s own intermediary up to the securities depository. Only then identifiable securities are attributed to an investor, and only then the chattel-like legal treatment makes sense. If commingling were to happen on only one of the tiers of the holding chain the legal result is immediately blurred. Here, it becomes apparent that the question of the nature of the right, notably whether it can be an *erga omnes* right, is dependent on the practicalities of holding and on the behaviour of interlocutors. The holding pattern shapes the nature of the right, while it is impossible for the law to impose an *erga omnes* right onto a holding pattern that does not offer the factual environment for it. In the cross-jurisdictional context, segregation is an insufficient remedy for a second reason: as a consequence of PRIMA, accounts in an international holding chain will be governed by different laws, regardless of whether they are fully segregated or not. Also in this case, the legal nature of securities will be determined on a *per tier* basis. The property that an investor enjoys in her jurisdiction is consequently unconnected to the right kept in the

⁸⁸ See Article 38 CSDR, n 41.

⁸⁹ In most, if not all, jurisdictions, the law prescribes that client securities would in principle never be part of the insolvent estate and are not accessible by the intermediary’s general creditors. Further, there are usually rules limiting the power of intermediaries to dispose of the securities exclusively in the interest of the relevant client. However, in case of an intermediary breaching these obligations or going beyond the power attributed to it by the law, the client might lose its securities to the insolvent estate or to a third person. However, recent court cases confuse this picture: in the UK, two Supreme Court decisions in connection with the insolvency of LBIE: [2012] UKSC 6 concerned the question as to whether client monies were held on trust despite the fact that LBIE did not comply with the relevant regulatory requirements, ‘CASS7’, to segregate them; [2012] UKSC 6 concerned the question as to whether trusts arise validly over securities in which the trustee was allowed to deal freely (under a repo scheme named *Rascals*); earlier, in *Hunter vs Moss*, the Court had to decide more generally whether a trust was validly created over un-segregated client assets: [1993] 1 WLR 934, and the appeal case [1994] 1 WLR 425. In France, the recent Appellate Court of Paris judgment 2008/22085 of 8 April 2009 – *RBC DEXIA Investor Services Bank France* (and two parallel cases) concerned hedge fund assets which the depositor (Dexia) had sub-deposited with Lehman Brothers International. After the securities were dragged into Lehman’s insolvency, there was uncertainty as to whether the depositor (Dexia) had to make up for the loss and ‘return’ the securities to the hedge fund at its own cost. The Appellate Court upheld an earlier decision by the regulatory authority in that sense.

central custodian. Or, in other terms, the law applying to the root of the right is not the same law that is supposed to vest that right in the ultimate investor.

4. TOWARDS AN ENTIRELY NEW SET UP

The previous sections have shown that the idea of different laws applying to securities at any given point in time is inconceivable and causes a number of tangible inconsistencies. The classification of securities as *erga omnes* rights in many jurisdictions further complicates the legal analysis. Instead, the current PRIMA-based framework ties in perfectly with a relational understanding of rights in securities. The half-hearted recognition of this fact in EU jurisdictions and the consequential reliance on behavioural rules to ascertain the interests of holders only contribute to the confusion. But what alternatives are there?

One possibility to remove these inconsistencies is to adopt the law to the market, as notably has been done in the US and Canada.⁹⁰ ‘Security entitlements’ are an entirely relational concept that was built around the existing market practice of intermediation. However, it comes at the price of disrupting the trait that distinguishes securities from mere claims that a client may have against his intermediary: securities are mutual rights and obligations between issuers and investors. Also that inconsistency is not only of academic relevance. Donald⁹¹ has shown in his work that the entitlement system comes with its own, significant weaknesses.

What keeps legislators back from taking bolder steps and designing a consistent legal framework for securities holding and securities transactions? Maybe the time has come to make use of the immense computing power available today and introduce a system in which securities are directly attributed to investors. Intermediation increased efficiency in the past due to a lack of alternatives ways to administer the fast moving holdings but these times are now gone. Why not built an integrated system within which investors have direct accounts in a central entity that keeps the issuers’ registers, as it exists in the jurisdictions where so called transparent holding is in place? Why not issue crypto-securities that travel between investors in a way comparable to Bitcoins under the so called Blockchain technology, one of the main traits of which is that they cannot be duplicated or lost and are centrally tracked?⁹² The answer is that obviously commercial law and regulation cannot change market practice easily. First, viable alternatives for a special legal framework with a more consistent

⁹⁰ See Section 2.2.

⁹¹ Donald, David C, *Market Quality and Moral Hazard in Financial Market Design*, Draft 18.8.2014, available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2483026, last accessed 18.11.2015; *Heart of Darkness: The problems at the Core of the US Proxy System and its Solution*, (2011) 6 Virginia Law & Business Review 41; *Disintermediating Securities Settlement*, (2008) available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1154850&download=yes, accessed 18.11.2015.

⁹² Micheler, n 48.

operational set up need to be conceived. Second, cost incentives need to be set to make market participants move to these new systems. The world has witnessed how this approach worked, basically within a time frame of eight years, with the introduction of centralised clearing of derivatives after the recent financial crisis.⁹³ Regarding securities, there is no such haste as the systemic dangers flowing from current securities holding patterns are limited and the main aim is to allow for more efficiency and liquidity within a clearer legal and operational framework. Certainly, the effort to conceive and implement such systems will be huge but probably worthwhile, given the increasing interconnection of markets and the very long term perspective policymakers should take: also the last big change of market practice and law towards intermediation lasted for nearly 150 year, starting in the late 19th century and still dominating the securities market of today.

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⁹³ In Europe on the basis of the EMIR regulation, in the US on the basis of the Dodd-Frank Act.