Risk, Uncertainty, and Financial Law Beyond the State: Observations from the Over-the-Counter Derivatives Market

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List of Abbreviations

AIG	American International Group Inc.
Art.	Article
BBAIRS Terms	British Bankers Association Recommended Terms and Conditions for London Interbank Interest Rate Swaps
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority)
BCBS	Basel Committee on Banking Supervision
BGB	Bürgerliches Gesetzbuch (German Civil Code)
BGH	Bundesgerichtshof (German Federal Court)
BIS	Bank for International Settlements
BRRD	Bank Recovery and Resolution Directive
BSNP	Banco Santander de Négocios Portugal SA
BST	Banco Santander Totta SA
BT-Drucks.	Bundestagsdrucksache (German Legislative Materials)
B2B	Business-to-Business
B2C	Business-to-Consumer
CCP	Central Clearing Counterparty
CDS	Credit Default Swap
CPSS	Committee on Payment and Settlement Systems
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CSA	Credit Support Annex
CVA	Credit Valuation Adjustment
DF	Dodd-Frank Act
DRV	Deutscher Rahmenvertrag für Finanztermingeschäfte (German law master agreement for financial derivatives transactions)
EMIR	European Market Infrastructure Regulation
EMU	Economic and Monetary Union
EUR	Euro
EURIBOR	Euro Interbank Offered Rate
FCA	Financial Conduct Authority
FIDIC	Fédération Internationale des Ingénieurs Conseils (International Federation of Consulting Engineers)
FpML	Financial products Markup Language
FSA	Financial Services Authority
FSB	Financial Stability Board
FSF	Financial Stability Forum
FSMA	Financial Services and Markets Act
FX	Foreign exchange
GAL	Global Administrative Law
GBP	Pound Sterling

GFC	Global Financial Crisis (of 2007-08)
GMRA	Global Master Repurchase Agreement
G-SIB	Global Systemically Important Bank
G20	Group of Twenty
G16	Group of Sixteen (largest OTC derivatives dealer banks)
G30	Group of Thirty
HM Treasury	His Majesty's Treasury
IAIS	International Association of Insurance Supervisors
ICC	International Chamber of Commerce
ICMA	International Capital Market Association
IIFM	International Islamic Financial Market
IMF	International Monetary Fund
INCOTERMS	International Commercial Terms
InsO	Insolvenzordnung (German Insolvency Code)
IOSCO	International Organization of Securities Commissions
ISDA	International Swaps and Derivatives Association
ISDA MA	ISDA Master Agreement(s)
LBHI	Lehman Brothers Holdings Inc.
LBIE	Lehman Brothers International (Europe)
LBSF	Lehman Brothers Special Financing Inc.
LMA	Loan Market Association
LTF	The Legal Theory of Finance
MAS	Monetary Authority of Singapore
MNA	Model Netting Act and Guide
MTM	Mark-to-Market Value
NIE	The New Institutional Economics
OTC	Over-the-counter
Para.	Paragraph
PCA	Permanent Court of Arbitration
P.R.I.M.E. Finance	Panel of Recognised International Market Experts in Finance
Repo	Securities Sale and Repurchase Agreement
Sec.	Section
SIFI	Systemically Important Financial Institution
SIFMA	Securities Industry and Financial Markets Association
SRR	Special Resolution Regime
TBTF	Too-Big-To-Fail
TUF	Testico Unico della Finanza (Italian Consolidated Law on Financial Markets and Investment Services)
UCP	Uniform Customs and Practices for Documentary Credits
UK	The United Kingdom of Great Britain and Northern Ireland
US	United States (of America)
USD	United States Dollar
UNIDROIT	International Institute of the Unification of Private Law
VaR	Value-at-risk
WpHG	Wertpapierhandelsgesetz (German Securities Trading Act)

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Introduction

One consequence of the Global Financial Crisis of 2007-08 ('GFC') was that it plucked a particular class of financial instrument, the 'over-the-counter'[1] ('OTC') financial derivative, and the Credit Default Swap ('CDS') in particular, from relative obscurity and moved it into a broader public consciousness.[2] While OTC derivatives had by that time been employed for several decades and for a number of different commercial purposes, some of the more catchy, albeit not always particularly informative labels, which have come to describe them to a broader audience in the course of the GFC, have since become firmly embedded in the wider public discourse. Perhaps the most infamous of these is Warren E. Buffett's description of derivatives as 'financial weapons of mass destruction'[3].

From the perspective of financial regulation, the years following on from the GFC have seen nothing less than a tidal wave of regulatory intervention to finally tame 'the wild beast of finance'[4] and fill in the gaps of what was widely perceived and substantively decried as a segment of international Finance somewhat resembling a Wild West of chronically unregulated financial innovation.[5] The validity of this rationale and its implementation will, however, not be the subject of this thesis.[6] Rather, its focus will lie on a perhaps somewhat less appreciated page in this wider story beyond the financial regulatory narrative. This is the normative plurality that has to an extent always

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[1] The trading modalities for derivative financial instruments can be broadly distinguished between two categories, exchange-trading on an official exchange (ie, the exchange-traded derivatives market) and private over-the-counter trading, which takes the form of bilateral contracts between market participants, so-called counterparties (cf Chapter 1 (n1)).

[2] See, eg, the New York Times bestseller: M Lewis, *The Big Short: Inside the Doomsday Machine* (W W Norton & Company 2011) and its subsequent cinematic adaptation to Hollywood blockbuster.

[3] WE Buffett, *Berkshire Hathaway 2002 Annual Report* (2003) 15.

[4] As is the eponymous book title inspired by the role derivatives played in the 'financial drama' of the financial crises during the 1990s: A Steinherr, *Derivatives – The Wild Beast of Finance* (2nd edn, John Wiley & Sons 2000) xv.

[5] See, paradigmatically, The Financial Crisis Inquiry Commission, *The Financial Crisis Inquiry: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States* (January 2011) xxiv ('We conclude over-the-counter derivatives contributed significantly to this crisis. The enactment of legislation in 2000 to ban the regulation (…) of over-the-counter (OTC) derivatives was a key turning point in the march toward financial crisis.').

[6] For a nuanced account of the role OTC derivatives generally played in the GFC, including the fact that the overwhelming majority of OTC derivatives other than CDSs, in terms of asset class and trading volumes, were in fact not at all negatively implicated, see: D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (Oxford University Press 2022) paras 2.54-2.80.

undergirded the global OTC derivatives market[7]. The normative space which regulators have sought to populate was far from a barren wasteland.[8] In fact, the OTC derivatives market is today, and to an extent has always been, embedded in a particularly crowded normative space, populated by norms flowing from a variety of different sources and generated by a multitude of actors.[9] These include different national laws, predominantly those of contract and insolvency, as well as supranational European Union law, often the source of a panoply of norms of financial regulation, and – crucially – also the norms embodied in the provisions of a standardised contractual 'architecture'[10], drafted and developed on the basis of freedom of contract and broad party autonomy by the International Swaps and Derivatives Association ('ISDA'), a private trade organisation.

The global OTC derivatives market has since its fledgling beginnings seen a staggering trend of economic growth. The sheer size of the sums in the market across risk categories is difficult to overstate. According to statistics provided by the Bank for International Settlements ('BIS'), the notional amounts referenced in contracts at the end of the second half of 2025 stood at USD 844.6 trillion, with USD 22.8 trillion at risk without, and USD 3.4 trillion at risk with enforceable netting provisions.[11] This growth sits upon the legal evolution of its foundations over the course of several decades, with the OTC derivatives market today being a paradigmatic example of a transnational market that stands in stark contrast to the fragmented jurisdictions in which its participants are incorporated. In this sense, the object of study also connects to

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[7] In the following, the singular form will be used as the abstract overarching term to refer to and include all individual OTC derivative asset classes, which, *sensu stricto*, constitute individual markets.

[8] S Deakin and others, 'Legal institutionalism: Capitalism and the constitutive role of law' (2017) 45 Journal of Comparative Economics 188, 198, ascertaining the 'literal impossibility of complete de-regulation, or of an unregulated economy and market' and, on the basis of this determination, raising the issue of varying degrees of appropriateness of different nature rules in varying contexts.

[9] C Scott and J Biggins, 'Guest Editorial' (2012) 13 European Business Organization Law Review 305, 305 as well as the articles contained within the issue.

[10] This is the description employed by ISDA itself: ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 Edition)* 1.

[11] As summarised in ISDA, Research Note, *Key Trends in the Size and Composition of OTC Derivatives Markets in the Second Half of 2025* (July 2026) 2-3; These figures are based upon consolidated data available from the BIS: BIS, *OTC derivatives statistics – Tables*; The key measurement metrics referenced are: (1) notional amounts outstanding, ie the gross nominal of OTC derivative contracts concluded but not yet settled at a particular reporting date; (2) gross market value, ie the sum of the absolute values of all outstanding OTC derivative contracts, based on their negative or positive replacement values; and (3) gross credit exposure, ie gross market value factoring in enforceable bilateral netting agreements, but disregarding collateral, as the most meaningful measure of actual overall counterparty credit risk in the market, which is then reduced further still factoring in collateralisation of transactions (in each case as defined and further expanded on in the BIS, *Glossary*).

theories of law which challenge and transcend the strict traditional nexus of law and the nation state. In this regard, the OTC derivatives market is ideally placed as an object of study, as a paradigmatic example of what Paul Schiff Berman has described as 'the realities of diversity and the existence of multiple norm-generating communities operating simultaneously in the same social space'[12].

As will be shown, the various norms, which lay claim to regulating different aspects of the OTC derivatives market, do not, however, exist in independent silos. Rather, in the everyday workings of the market they interact in sometimes novel ways. As will be made visible through an in-depth bottom-up analysis of the OTC derivatives market and exemplary case studies, in the course of a process of observable 'interlegality'[13], statal and transnational private normativity mutually influence and shape each other at various intersections or '"touchdown" points'[14]. Traditional doctrinal distinctions, such as 'public' or 'private' in the context of modes of regulation become increasingly blurred in the process.

Again, the OTC derivatives market is an ideal candidate to lend itself as an object of study through the lens of legal pluralist thought, which has increasingly moved from observing localised manifestations of pluralism to casting its gaze toward instances of 'hybrid legal spaces created by a different set of jurisdictional assertions (…) in the global arena'[15] under the guise of 'global legal pluralism'[16]. In this sense, the global OTC derivatives market, emanating out of and shaped in the past decades by the contractual standardisation efforts of ISDA serves as an example of a global law not 'without'[17] but rather 'beyond'[18] the state. Tracing the contours of the observable reality of such an effective financial law beyond the state in this specific area of the financial markets will be the object of this thesis.

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[12] PS Berman, 'Global Legal Pluralism as a Normative Project' (2018) 8 UC Irvine Law Review 149, 151.

[13] B de Sousa Santos, 'Law: A Map of Misreading. Toward a Postmodern Conception of Law' (1987) 14 Journal of Law and Society 279, 298.

[14] R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (2002) 40 Columbia Journal of Transnational Law 209, 266.

[15] PS Berman, 'Global Legal Pluralism as a Normative Project' (n12) 151.

[16] For a monographic treatment, cf, PS Berman, *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (Cambridge University Press 2012).

[17] G Teubner, '"Global Bukowina": A Legal Pluralism in the World Society' in G Teubner (ed), *Global Law Without a State* (Dartmouth Publishing 1997) 3.

[18] R Michaels, 'The True Lex Mercatoria: Law Beyond the State' (2007) 14 Indiana Journal of Global Legal Studies 447.

At their functional core, OTC derivatives are financial instruments for the transfer of financial risk, which is generally defined in terms of stochastically quantifiable uncertainty. However, another less appreciated and soon forgotten side effect of the GFC was to draw attention to the inherent limits to such a concept of risk and the residual role played and dangers posed by 'true' or 'radical' uncertainty eluding such quantification in the financial markets.[19] This thesis will endeavour to include such pervasive uncertainty and the conceptual value it offers as an analytical category and as a starting point to illuminate the integral role played by law in the construction of derivative products and the global market in which they trade – as well as in the effective mitigation of such uncertainty. OTC derivatives, due to their dual nature as products of financial mathematical engineering as well as legal contracts, are well placed as an object of study to pursue the interplay of these distinct theoretical categories of uncertainty. What is more, as will be shown in the course of this thesis, since the OTC derivatives market is constituted globally, or, with a view to the nation state concept 'transnationally'[20], the unique processes of legal transformation observable in the OTC derivatives market, emanating in a global law beyond the state, are the direct result of the need to consistently and predictably mitigate the distinct challenges of (legal) uncertainty transcending territorial boundaries. This is achieved through a standardised set of specific norms, which emanate – bottom-up – from market practice itself and as such characteristically are imbued with a distinctly functional rather than territorial logic.[21] As will be illustrated, statal responsiveness to this functional logic is already empirically observable in various legal settings, if seldom expressly communicated in these terms. As an overarching goal, this thesis seeks to marry both an in-depth bottom-up and a functional approach, tracing the development of OTC derivative products and the global market on which they trade as well as the unique economic function they serve, as the requisite foundation to shedding some light on the particular resulting legal transformations they have set in motion.

By way of a broad outline, this thesis will proceed by in Chapter 1 describing the products themselves, conceptually unpacking their core functional purpose and the constitutive role law plays in this regard. Chapter 1 then looks beyond the individual products to the transnational market on which these products are traded and introduces

[19] As explicitly recognised from a regulatory perspective: Financial Services Authority ('FSA'), *The Turner Review: A regulatory response to the global banking crisis* (March 2009) 45.

[20] With the implications on the conceptualisation of law discussed in Chapter 2.

[21] On this shift: D Wielsch, 'Global Law's Toolbox: Private Regulation by Standards' (2012) 60 The American Journal of Comparative Law 1075, 1078.

the concept of ‘transnational legal basis risk’ as the determinative driving force of legal transnationalisation in the global OTC derivatives market and illustrates the central role played by ISDA in its mitigation. Chapter 2 provides some of the theoretical underpinnings of this transnationalisation of the law. In exploring the reasons for this phenomenon, Chapter 2 draws, i.a., on insights from the New Institutional Economics, and case studies both from the judicial and regulatory spheres to demonstrate how transnationalisation is in fact already manifestly observable in legal practice. Chapter 3 then analyses the role played by dispute resolution fora in this context, particularly in the interpretation of transnational contractual norms, also providing an insight into the potential role for international arbitration in OTC derivatives disputes as an alternative to the recourse to state courts.

Chapter 1: Foundations – Over-the-Counter Derivatives and their Market

§ 1 Derivatives Definitions

The natural starting point to this thesis is to commence by answering the preliminary question of what a derivative, or for that matter, an OTC[1] derivative in its abbreviated form, actually is. The term 'derivative', which etymologically stems from its Latin root 'derivare', i.e. to derive from or draw on something, is used in a number of ways across diverse disciplines and depending on context will be taken to mean quite different things. In the world of modern finance, the term has come to generically denominate a certain class of financial transactions.

A. Expert Commentator and Judicial Definitions

Somewhat muddying the waters of this preliminary definitional exercise, not only do expert commentators' definitions vary in terms of the methodology employed in their respective fields, but also in terms of the emphasis placed on which features characterise a derivative. As Alastair Hudson notes, the judicial attempts to provide a derivatives definition have been few in number, 'but the attempts (…) made illustrate that a legal analysis of those products is not always the same as a mathematical or commercial analysis of those products'[2]. There now exists a vast array of definitions in legal and financial economic literature, some of which have been adopted by the courts and have thereby found entry into English jurisprudence. As regards the legal side of things, the GFC, and the Lehman Brothers insolvency in particular, in terms of the uncharacteristic flurry of litigious activity in the derivatives markets that followed in its wake,[3] has renewed the judicial focus on derivatives. For the purposes of this thesis, the following textbook definition, put forward by Simon Firth, one of the leading legal commentators on derivatives, which was also cited in a central case of post-GFC jurisprudence – and thus also evidently informs the English[4] courts' understanding of the matter – comprehensively captures the core definitional elements of a derivative:

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[1] 'Over-the-counter' or 'OTC' refers to the way in which these derivatives are traded, ie, otherwise than on an organised exchange: SK Henderson, *Henderson on Derivatives* (2nd edn, Lexis Nexis 2010) 6 (fn 1); In more detail on the structural differences between OTC and exchange trading see § 4.A.

[2] A Hudson, *The Law on Financial Derivatives* (6th edn, Sweet & Maxwell 2018) para 5.01.

[3] See, in more detail, Chapter 3.

[4] 'English' will be used in the following in the interest of brevity. Any references to the English courts, however, are to the courts of England and Wales.

'*[a] derivative is a transaction under which the future obligations of one or more of the parties are linked in some specified way to another asset or index, whether involving the delivery of the asset or the payment of an amount calculated by reference to its value or the value of the index. The transaction is therefore treated as having a value which is separate (although derived) from the values of the underlying asset or index. As a result, the parties' rights and obligations under the transaction can be treated as if they constituted a separate asset and are typically traded accordingly*.'[5]

In purely legal terminology, financial derivatives are conceived with reference to the legal notion of contract in that '[a] derivative is a contract which gives rise to rights and obligations in respect of an underlying asset or other factor, which is usually referred to as just the "underlying"'[6]. Beyond this notion of derived value, Timothy Lynch brings the *aleatory* nature of derivatives to the fore. Under Lynch's definition, '(…) payments due under a derivatives contract depend in part on some unknown future contingency, typically referred to as an "underlying" (…). All of these future contingencies are extrinsic to the derivatives contract and to the counterparties (…).'[7]

B. 'A Dance with Time' as the Overarching Characteristic of Derivatives

As indicated in the definitions above, aside from the name-giving characteristic of derivation, i.e. the fact that its value derives from an underlying reference value, the central feature of a derivative lies in its immanent futurity.[8] As somewhat poetically put by Gillian Tett: 'At the heart of the business is a dance with time'[9]. This is manifest in both the purpose and the challenges posed by derivatives. The fact that the derivative contains the obligation to exchange a volatile underlying asset or its economic benefit according to contractually defined terms at some agreed time in the future conceptually

[5] S Firth, *Firth on Derivatives Law and Practice* (Sweet & Maxwell 2022) para 1.004 (as cited in *Lomas & Ors v JFB Firth Rixson Inc & Ors* [2012] EWCA Civ 419 at [2] from an earlier version of Firth's looseleaf commentary).

[6] J-P Castagnino, *Derivatives: The Key Principles* (3rd edn, Oxford University Press 2009) para 1.01.

[7] TE Lynch, 'Derivatives: A Twenty-First Century Understanding' (2011) 43 Loyola University Chicago Law Journal 1, 16-17.

[8] See, eg, CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (John Wiley & Sons 2004) 84 ('The single most important characteristic of derivatives that distinguishes them from other financial products is the explicit time dimension of a derivatives contract').

[9] G Tett, *Fool's Gold* (Little, Brown 2009) 10.

makes the financial 'risk transfer'[10] element inherent to derivatives possible.[11] However, stipulating future performance in such a 'long-term'[12] or 'executory'[13] contract does of course not make the future itself any more knowable. Therefore, while the derivative contract through the pay-offs it generates can re-order the economic impact an uncertain future economic variable may otherwise have on a counterparty,[14] this is premised on the contracts' legal enforceability and thus transposes economic uncertainty to the level of law.[15] As a consequence, legal risk is a central analytical category in relation to OTC derivatives.[16] What is more, abstracting from the individual transactions to the wider markets, contractually providing or in other words 'contractually governing'[17] for legal uncertainty at the market level – at a global scale at that – proves an existential challenge.[18]

§ 2 The Building Blocks of Financial Derivatives

A. The Building Block Approach

All OTC derivative transactions can be deconstructed into basic 'building blocks'[19], i.e. that of the forward, the option, and depending on the conceptualisation, the swap.[20]

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[10] DM Chance, *Essays in Derivatives* (2nd edn, John Wiley & Sons 2008) 15 ('(…) we know [derivatives] are instruments in which the performance is *derived* from some other instrument or asset. But more fundamentally, we need to see derivatives as instruments that permit the transfer of risk from one party to another.').

[11] As discussed under § 3.

[12] RE Scott, 'Conflict and Cooperation in Long-Term Contracts' (1987) 75 California Law Review 2005.

[13] D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (2016) 91 New York University Law Review 1104, 1108 and 1126-1127 with further references.

[14] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (2017) 11 Virginia Law & Business Review 309, 323.

[15] As surmised by Bruce Carruthers, '[u]ncertainty about currency values or interest rates bec[omes] uncertainty about law': BG Carruthers, 'Economy and Law', in P Aspers and N Dodd (eds), *Re-Imagining Economic Sociology* (Oxford University Press 2015) 141.

[16] See, § 5.A regarding legal risk at the transactional level, and § 7.D.IV.2 as regards the market level and the phenomenon of 'transnational legal basis risk'.

[17] On the general concept of 'Contract Governance': F Möslein and K Riesenhuber, 'Contract Governance – A Draft Research Agenda' (2009) 5 European Review of Contract Law 248-289; S Grundmann, F Möslein and K Riesenhuber, 'Contract Governance: Dimensions in Law and Interdisciplinary Research' in S Grundmann, F Möslein and K Riesenhuber (eds), *Contract Governance: Dimensions in Law and Interdisciplinary Research* (Oxford University Press 2015) 3-57.

[18] This very challenge has, as will be detailed under § 7, been organisationally taken up by ISDA.

[19] NM Feder, 'Deconstructing Over-The-Counter Derivatives' (2002) 2002 Columbia Business Law Review 677, 691.

[20] In the prevailing literature there is some variance as to the exact number of these building blocks, since technically some of these can be deconstructed further, and the legal and financial analysis do not completely align. For example, noting differences between their financial and legal conceptualisation, Alastair Hudson with reference to finance theory classifies the option as the 'basic technique which underpins all other derivatives in the mathematics of finance theory' and consequently structurally the

From these building blocks it is possible to structure any number of derivatives with increasing degrees of complexity. Conversely, even the most innovative and complex transactional structures, which are ever-evolving, subject to novel risk management needs, can ultimately be functionally broken down to their basic building blocks. The following account will – to employ market parlance – thus retain a distinctly 'vanilla' flavour.[21] On the one hand, focusing on the vanilla components adequately reflects the realities of derivatives trading as exchange-traded – and most OTC derivatives – are in fact fairly simple and standardised structures.[22] On the other hand, financial markets are in a constant state of innovative flux. Specifically, financial markets are subject to a dynamic process whereby standardised products frequently engender the creation of new customised products in order to improve market completeness, which in turn leads to increased trading volumes in the novel market by creation of more of these instruments.[23] This process is driven due to financial intermediaries at the heart of these markets seeking to hedge their own exposures created by the novel instruments.[24] In light of the 'financial spiral effect'[25] or 'financial-innovation spiral'[26], as applied to the derivatives markets, this means that the individual derivative building blocks can be

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forward as 'a series of options': A Hudson, *The Law on Financial Derivatives* (n2) para 5.55; Others treat options and forwards as distinct, swaps however as a bundle of forward transactions: E Murray, 'Derivative Transactions' in S Paterson and R Zakrzewski (eds), *McKnight, Paterson and Zakrzewski on the Law of International Finance* (2nd edn, Oxford University Press 2017) para 11.1.5; For ease of illustration and because of their distinctness (at least in legal terms), the following will detail the three separate building blocks, namely options, forwards and swaps. In this vein: NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 691.

[21] The basic derivative building blocks are figuratively often referred to as being 'vanilla' as distinct from more structured or 'exotic' permutations: See, RW Kolb and JA Overdahl, 'Types of Financial Derivatives' in RW Kolb and JA Overdahl (eds), *Financial Derivatives – Pricing and Risk Management* (John Wiley & Sons 2010) 74 ('As financial markets have matured, the variety of products available has gone far beyond the plain vanilla instruments of forwards, futures, options, and swaps (…) The exotic category embraces a tremendous range of derivatives ranging in complexity from those quite simple to those that are extremely complex.').

[22] D Murphy, *OTC Derivatives: Bilateral Trading & Central Clearing* (Palgrave Macmillan 2013) 23, who as the reason for this identifies the dealer need for highly liquid simple products to meet own hedging requirements, as well as valuation risks regarding complex products, and the increased costs involved in creating them; Similarly, E Murray, '*Lomas v Firth Rixson*: 'As you were'' (2013) 8 Capital Markets Law Journal 395, 397 ('The alleged 'complexity' of derivatives, so troubling to politicians and journalists, but characteristic of only a small percentage of over-the-counter derivatives traded worldwide (…)').

[23] RC Merton, 'Financial Innovation and Economic Performance' (1992) 4 Journal of Applied Corporate Finance 12, 18.

[24] *Ibid*; The integral role of dealer banks as 'market makers' in the OTC derivatives market is discussed under § 6.C.

[25] RC Merton, 'Financial Innovation and Economic Performance' (n23) 18.

[26] *Ibid*.

combined or adapted to attain a (theoretically) limitless degree of structural complexity.[27]

B. Derivative Contract Types

Since, with consideration of the above as a practical matter, attempting to provide a comprehensive taxonomy of derivative contractual structures promises to be a futile undertaking, the following will detail the basic functioning of the individual derivative building blocks or contract types. As regards the more complex ('exotic') structured instruments, often figuratively named, such as the better known *snowball interest rate swaps*[28] to name but one example, the reader is referred to the already rich and ever-increasing body of literature for a current overview.[29]

I. Forwards

At its most abstract level, a forward[30] is a contract which for the parties creates the binding obligations to buy and to sell an underlying asset at a future date (the delivery or payment date) for a (forward) price, fixed at the time of the contract.[31] As any market fluctuations in the relevant underlying value do not have any bearing on the price agreed in the contract,[32] the price for the underlying is effectively contractually locked in.[33] The forward thereby has the economic effect of 'insulat[ing]'[34] the parties from any unfavourable price movements in the underlying spot market in the interim period between contract conclusion and contract maturity (the *settlement date*).[35]

In the case that the contract stipulates *financial* or *cash* settlement, if the value underlying the transaction increases, one party is entitled to receive payment from the other party on the settlement date. Inversely, if the underlying value decreases, it is the

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[27] TE Lynch, 'Derivatives: A Twenty-First Century Understanding' (n7) 1, 11 (fn 40): ('(…) the number of categories and the complexity of derivatives have exploded in the last couple of decades, obliterating any clean difference between options, forwards, and swaps.').

[28] Which were at the heart of the case study discussed under Chapter 2 § 2.

[29] See, eg, JC Hull, *Options, Futures and Other Derivatives* (9th Global edn, Pearson Education 2018).

[30] Or 'future', when traded on an exchange, since the payment profiles of both transactions are identical: J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.257.

[31] *Ibid* paras 4.10-4.11.

[32] TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (Cambridge University Press 2015) 10.

[33] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.11.

[34] *Ibid*.

[35] *Ibid*.

other party which is entitled to receive payment.[36] As the parties are exposed to movements in the underlying value in either direction,[37] the flip side or immanent trade-off to this transaction, of course, is that in exchange for the commercial certainty resulting from having locked in a specified price, the opportunity to profit from any advantageous spot market price movements is forfeited.[38]

II. Options

An option is a contract that, in contrast with a forward, confers upon one party (the *option buyer*) the right, but not the obligation, to buy or sell the underlying asset in the future at a price predetermined in the contract (the *strike price*).[39]

An option conferring the right to buy the underlying is referred to as a *call* option, an option conferring the right to sell is termed a *put* option.[40]

The option holder's discretion in exercising the option comes in exchange for payment of a risk-based fee, a so-called *premium*, paid up-front to the seller of the option.[41] The ability to calculate this premium in the face of underlying value volatility is based on a major innovation in financial mathematics that lies at the heart of the rapid growth and development of modern option markets as well as the wider derivatives markets in general, the Black-Scholes option pricing model.[42] The economic effect of the option can thus be summed up as assigning any profit from advantageous movements in the value of the underlying to the option holder without exposing it to any corresponding losses.[43] 'Vanilla' options can be structured in more complex ways to suit more customised risk management needs.[44]

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[36] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.027.

[37] *Ibid*.

[38] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (3rd edn, Sweet & Maxwell 2019) para 11.017.

[39] Group of Thirty, Global Derivatives Study Group, *Derivatives: Practice and Principles* (July 1993) 30.

[40] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.32.

[41] A Hudson, *The Law on Financial Derivatives* (n2) para 5.56.

[42] See, § 6.B.II.1.

[43] Group of Thirty, Global Derivatives Study Group, *Derivatives: Practice and Principles* (n39) 30.

[44] By way of an example, in the case of a *barrier option* a provision is added, whereby even though the option buyer has paid the relevant premium, the option can either expire prematurely (*out option*) or does not even come into existence (*in-option*), contingent on the option's underlying reaching a predetermined value, i.e. the *barrier*. Barriers can also be incorporated into the other basic derivative contract types, such as forwards and swaps, in each case altering the instrument's payoffs: DM Chance, *Essays in Derivatives* (n10) 219-220.

III. Swaps

The basic derivative structures discussed above have a long history.[45] However, it is the advent of the novel swap structures, in the context of the wider economic upheaval of the 1970s, that is considered the watershed moment that ushered in the age of modern financial derivatives.[46] In contrast with forwards (and futures) as well as options, the swap is considered 'very much a modern innovation'[47]. The first such 'genuine' swap was reportedly arranged in 1976 in the wake of the capital market turmoil of 1974-5 and the resulting problems posed to banks, due to significant interest rate increases and exchange rate volatility.[48]

Again, at the most abstract level, a swap is a contract which creates for the parties the right or obligation respectively to make future payment to or receive future payment from the other party.[49] More specifically, a swap contract creates the obligation to exchange, i.e. *swap*, future cash payments on a series of predetermined dates (*payment dates*) based on the movement of an underlying reference value for the duration[50] of the contract.[51] Thus, a swap, when broken down into its component parts is essentially 'a series of cash-settled forward transactions'[52]. The extent of the counterparties' respective payment obligations can either be contractually fixed or is, on each

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[45] Examples of (at least something akin to) what would today be referred to as physically settled non-financial derivatives historically reach as far back as into antiquity. One particularly frequently cited example refers to the Greek philosopher and mathematician Thales of Miletus: See, ia, RE Whaley, 'Derivatives' in GM Constantinides, M Harris and RM Stulz (eds), *Handbook of the Economics of Finance, Volume 1B – Financial Markets and Asset Pricing* (Elsevier 2003) 1133; Originally, the incident was detailed by Aristotle in book one, section xi, of his Politics in the context of practical ways of wealth acquisition (and philosophers' general disinterest with such material things). He describes how using his knowledge of astronomy, Thales was able to predict a particularly good olive harvest already in winter. Utilising this superior knowledge, he then executed what today would be classed an option contract. First, he acquired the rights to use all oil-presses in Miletus and Chios come harvest season in exchange for a small premium. Then, once the abundant harvest did in fact materialise, Thales exercised his rights and monetised his monopoly by hiring the presses out for a profit: Aristotle, *Politics: Books I and II* (TJ Saunders tr, Oxford University Press Repr 2002) 17.

[46] See, SK Henderson, *Henderson on Derivatives* (n1) paras 1.11-1.12.

[47] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.69.

[48] This first swap was 'according to market sources' entered into between Bos Kalis Westminster Group NV and ICI Finance limited, but at the time not publicised due to the structure's proprietary nature. Today, more widely cited as the landmark moment of the first swap, also due to the publicity it created at time, is the swap entered into between IBM and the World Bank in 1981: In greater detail, SK Henderson and JAM Price, *Currency and Interest Rate Swaps* (Butterworths 1984) 3-4.

[49] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.69

[50] Which can be considerable. The lifetime of a typical swap agreement can span several years or even decades: *ibid*.

[51] This is a distillation of the definitions provided by S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.006.

[52] E Murray, 'Derivative Transactions' (n20) para 11.2.5.1.

settlement date, calculated by multiplication of the amount of the respective underlying (*notional amount* or *notional principal*)[53] by the respective reference value (e.g. an interest rate), underlying the respective obligation.[54] The individual payment streams swapped by the counterparties under the agreement are each calculated on a separate reference value basis.[55] If, for example, the reference value is indeed an interest rate,[56] the interest rate swap – in its most basic form – will oblige one party to make future payments based on a variable interest rate (referred to as the *floating* interest rate) and the other party to make future payments on a *fixed* interest rate.[57] Such a transaction is then quite self-explanatorily referred to as a fixed-floating interest rate swap.

It is when taking a broader perspective, beyond the exchange of payments effected by the swap contract *inter partes*, that the commercial rationale for the instrument becomes clear. At least one party to the swap will be subject to an already existing obligation it owes to an independent third party; for example, the obligation to make variable or floating payments under an existing loan agreement.[58] If the party to a loan agreement providing for payments under a floating interest rate considers payment of a floating rate undesirable – for whatever reasons – it may at least *economically* pass this obligation on to its swap counterparty in exchange for the obligation to make payment under a fixed interest to the swap counterparty.[59] *Legally*, of course, the obligation to make payment under the terms of the loan agreement remains.[60]

Lastly, mention must in this context be given to a comparatively novel OTC derivative, which has featured very prominently in the media coverage, literature and policy response for its implication in the GFC, the Credit Default Swap or CDS.

Although nominally classed as a swap, this is something of a misnomer[61] since the CDS, at least structurally, does not correspond to the broadly accepted swap definition

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[53] For example, money, in the case of an interest rate swap. The notional amount generally is not exchanged between the parties. One exception being the currency swap, where the notional principal or amount ('currency amount') is usually exchanged at the beginning and end of the transaction: See, S Firth, *Firth on Derivatives Law and Practice* (n5) para 14.004; Group of Thirty, *Derivatives: Practice and Principles* (n39) 29.

[54] Group of Thirty, Global Derivatives Study Group, *Derivatives: Practice and Principles* (n39) 29.

[55] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.006.

[56] Interest rate derivatives are, in fact, by far the most significant asset class in the OTC derivatives market: See, most recently, ISDA, Research Note, *Key Trends in the Size and Composition of OTC Derivatives Markets in the Second Half of 2025* (July 2026) 2.

[57] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.006.

[58] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.71.

[59] *Ibid*.

[60] *Ibid* para 4.72.

[61] And 'potentially confusing': E Murray, 'Derivative Transactions' (n20) para 11.2.5.5.

provided above as it cannot be unbundled as a series of forward transactions.[62] In addition, rather than referencing an underlying measure of value,[63] as do the basic derivative building blocks presented above, the CDS is the most common type of credit derivative, the underlying of which is credit risk, which the counterparties to a CDS seek to transfer.[64]

In its broadest sense, a CDS operates as follows: The CDS contract sets out a so-called *reference entity*, e.g. the issuer of a debt security, and one or more so-called *credit event(s)* – most illustratively the bankruptcy of the reference entity – in relation to an obligation of that entity, the *reference obligation*.[65] The buyer of a CDS (the *protection buyer*) is obliged to make periodic payments (the *protection premium*) to its counterparty (the *protection seller*), calculated with reference to the notional amount of credit risk traded.[66] In return, should the contractually defined credit event relating to the reference entity occur during the contract period, the protection buyer is entitled to demand settlement of the CDS contract.[67] The contractual nature of a CDS, rather than a series of forwards, is from the perspective of the CDS buyer therefore one of a put option on the reference obligation, contingent on occurrence of the credit event as contractually defined.[68] Settlement of the CDS can occur through physical delivery to the protection seller of the reference obligation[69], a debt security in the form of a government or corporate bond,[70] in exchange for the fixed CDS price.[71] Alternatively, and more commonly,[72] the CDS contract can be settled financially through payment of the difference of the reference obligation value fixed in the CDS contract and its

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[62] *Ibid*.

[63] And thereby transferring associated market risk between counterparties: NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 706.

[64] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.03; NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 706.

[65] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 11.029; E Murray, 'Derivative Transactions' (n20) para 11.2.5.5.

[66] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.173.

[67] *Ibid*.

[68] E Murray, 'Derivative Transactions' (n20) para 11.2.5.5.

[69] In case of physical settlement referred to as 'deliverable obligation': SK Henderson, *Henderson on Derivatives* (n1) para 5.2.

[70] E Murray, 'Derivative Transactions' (n20) para 11.2.5.5.

[71] SK Henderson, *Henderson on Derivatives* (n1) para 5.2.

[72] Whereas in the early days of the market physical delivery was the market standard for settlement, the market gradually evolved towards cash-settlement: J Williams and V Aravind, 'Credit default Swaps: Lessons on the Role of Private Ordering in Mitigating Systemic Risk' (2010) Capital Markets Law Journal 267, 269-270.

'collapsed market value'[73], as typically determined via auction, upon occurrence of the credit event.[74]

§ 3 Risk Transfer and Exposure Modification as Functional Raison d'Etre

In light of the difficulty of finding a universally useful abstract definition of derivatives, prone as they are to be subject to continuous innovation and change,[75] it is helpful to complement the perspective of what derivatives are, with what they actually do. Prominently, Robert C. Merton and Zvi Bodie have highlighted the utility of such a 'functional perspective' for analysing the financial system and the individual components within it.[76]

The authors propose a taxonomy consisting of six core financial functions:

(1) Clearing and settling payments;

(2) Pooling of resources;

(3) Transfer of economic resources;

(4) *Managing risk*;

(5) Providing price information;

(6) Dealing with incentive problems.[77]

Of the above functions, the most intuitive are those relating to the distribution of economic resources. A large part of modern wholesale financial markets deals in the mobilisation and allocation of capital, primarily via *primitive* financial assets, such as

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[73] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 11.029.

[74] *Ibid*.

[75] See, already, SS Cohen, 'The Challenge of Derivatives' (1995) 63 Fordham Law Review 1993, 1997 ('Attempting to define derivatives is very difficult because instruments capable of bearing that label are infinitely protean; they evolve too rapidly to be encompassed under any preexisiting regulatory structure.').

[76] Pointing to the utility of focusing on function as an analytical 'conceptual "anchor"' due to the criterion's stability over time and across borders: RC Merton and Z Bodie, 'A Conceptual Framework for Analyzing the Financial Environment' in DB Crane and others (eds), *The Global Financial System: A Functional Perspective* (Harvard Business School Press 1995) 4; See, also, RC Merton, 'Financial Innovation and Economic Performance' (n23) 13 ('(…) the basic functions of a financial system are essentially the same in all economies – past and present, East and West.'); More recently, against the backdrop of the GFC, the benefits of a *functional* instead of an *institutional* analysis of the financial system has presently been reiterated as the basis for devising future financial regulation: J Armour and others, 'The Financial System' in J Armour and others (eds), *Principles of Financial Regulation* (Oxford University Press 2016) 50.

[77] RC Merton and Z Bodie, 'A Conceptual Framework for Analyzing the Financial Environment' (n76) 5 [emphasis added]; See also, illustratively, Reserve Bank of Australia, *Submission to the Financial System Inquiry* (March 2014) 9 ('The financial sector should provide the following services: 1. Value exchange (…) 2. Intermediation (…) 3. Risk transfer (…) 4. Liquidity (…)').

various debt or equity claims.[78] The aim is to supply agents in the so-called real economy with those financial resources they may require at any specific time and thereby channelling them to their most productive use.[79] In contrast, *derivative* assets are employed for the transfer of discrete categories of risk, frequently stemming from price volatility of capital allocating *primitive* assets,[80] to those parties willing and ideally better able to bear and manage these risks.[81] According to Joanna Benjamin, with the rise of financial derivative instruments, the risk management function has, arguably, even become 'the dominant economic function of financial markets'[82].

In other words, derivatives are *financial* transactions. However, they are not *financing* transactions, since no funds are raised, but risks (re-)allocated and exposure modified by way of the transactions. This having been said, any financing transaction entails the creation and assumption of credit risk by a party to the transaction, risk transfer consequently also being a relevant if 'less obvious'[83] feature of other transactions concluded in the financial markets.[84] Conversely, certain derivatives may indeed also be described as indirectly performing a financing function: First, in the form of leverage embedded in many transactions.[85] Second, in a more indirect sense, in that they enable derivatives market participants to raise capital, while avoiding the economic uncertainties arising from fluctuating currency or interest rates,[86] or through sharing the comparative

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[78] PH Huang, 'A Normative Analysis of New Financially Engineered Derivatives' (2000) 73 Southern California Law Review 471, 484; These include bonds and other loan facilities, structured finance by way of securitisation etc. Whilst these are not derivatives, derivatives may be embedded within theses financial structures: S Paterson, 'Introductory Matters' in S Paterson and R Zakrzewski (eds), *McKnight, Paterson and Zakrzewski on the Law of International Finance* (2nd edn, Oxford University Press 2017) para 1.1.2.

[79] RC Merton and Z Bodie, 'A Conceptual Framework for Analyzing the Financial Environment' (n76) 14.

[80] PH Huang, 'A Normative Analysis of New Financially Engineered Derivatives' (n78) 471, 484.

[81] This constitutes one of the fundamental functions of any financial system: J Armour and others, 'The Financial System' (n76) 26.

[82] J Benjamin, *Financial Law* (Oxford University Press 2007) para 1.26.

[83] *Ibid* para 1.25.

[84] J Benjamin, places an emphasis on risk (transfer) as a central element to all financial transactions, see, *ibid* ('The business of these (…) sectors is traditionally understood to be moving money, not risk. However, the approach of this book is to focus, not on the money, but on the credit risk that attends it.').

[85] TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (n32) 27.

[86] For example, an interest rate swap transaction creates the opportunity for a borrower of locking in a fixed rate of interest, thus creating some economic certainty and planning reliability. Alternatively, a party can aim to reduce its financing costs by obtaining the possibility of a better rate of interest on an outstanding loan through swapping its fixed for a floating rate of interest: Specifically in a developing markets context, *ibid* '(…) they perform a *financing function*. Without currency and interest rate swaps, it would be far more risky for companies in developing countries to raise external borrowings in foreign currency since the currency and interest rate risks might make them too risky. Thus, these instruments

advantage enjoyed by one party with the counterparty to a swap transaction[87]. Nevertheless, the distinction for illustrating the primary function of a financial derivative as a means of transferring risks between entities within the real economy holds.[88]

A. The Status Quo of Neoclassical Financial Economic Theory and Modelling: Risk as Quantifiable Uncertainty

'The revolutionary idea that defines the boundary between modern times and the past is the mastery of risk: the notion that the future is more than a whim of the gods and that men and women are not passive before nature."[89]

To fully understand the emphasis placed on risk transfer as the core function of derivatives as well as the ubiquity of use of the term in general,[90] it is, for present purposes, necessary to shed some additional light on the abstract concept of risk itself, since, through its omnipresent use, it threatens to become a broad projection surface deprived of any analytical value. Conversely, within different academic fields – and industries – risk, as a conceptual term of art, has acquired very distinct yet diverging meanings.[91] The danger, then, is that context-dependent specificities get lost in translation between strands of academic theory, but also, at a more practical level,

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clearly do facilitate the movement of capital across borders and thereby create welfare.' [emphasis in the original].

[87] See § 2.B.III on the operation of swap transactions.

[88] See, JC Hull, *Options, Futures and Other Derivatives* (n29) 23.

[89] PL Bernstein, *Against the Gods: The Remarkable Story of Risk* (John Wiley & Sons 1996) 1.

[90] As a broad indicator, 'risk' is at the time of writing ranked number 3125 of the most frequently used American English words based on data from the more than one billion-word 'Corpus of Contemporary American English' ('COCAE'). The 5000-word list is freely available at <www.wordfrequency.info/samples/lemmas_60k.txt> accessed 7 September 2026.

[91] From a legal perspective: J Steele, *Risks and Legal Theory* (Hart Publishing 2004) 3 ('In general, the appearance of a broadly shared theoretical interest in 'risk' is apt to mislead. Common use of this shared term masks huge variation in what is thought significant about it'); J Gray and J Hamilton, *Implementing Financial Regulation: Theory and Practice* (John Wiley & Sons 2006) 4 ('(…) risk is a concept that may be taken for granted by those involved in the everyday practices associated with it, and deserves to be unpackaged before looking at it further in the context of financial services regulation.'); Even within the economic discussions of risk, there is no single unifying understanding: For example, Clive Granger identifies six major groups within the economy who depending on their perspectives beyond a basic common denominator take risk to mean different things. These are (1) 'Uncertainty Economists'; (2) 'Financial economists and econometricians'; (3) 'Insurance agents and economists'; (4) 'Financial agents and managers'; (5) 'Professionals in other industries' (including lawyers); (6) 'The Public': CWJ Granger, 'Risk: A Decision Maker's Perspective' 'in FX Diebold, NA Doherty and RJ Herring (eds), *The Known, the Unknown, and the Unknowable in Financial Risk Management* (Princeton University Press 2010) 31-32.

between the diverse groups of risk practitioners engaging with their own conceptions of risk on a daily basis. Prime exponents of the latter category include the quantitative analysts or *quants*[92] devising the complex financial models, used by a financial institutions' trading desks, but also the transactional lawyer, tasked with assessing or facilitating a, for specific legal or regulatory reasons, *risky* transaction. What is more, reliance on the output of one specific methodology and the narrowing of perspective this entails, can mask out what, at the same time, it does *not* express.[93] Namely, where a particular (quantitative) risk measure signals no significant risk, this may be misconstrued as objective reality, disregarding the inherent limitations of the particular measure chosen. The danger, in effect, is that of a being lulled into a false sense of confidence and security as a result: Potentially, as has been poignantly noted, the illusion of comprehensive risk control can even induce excessive risk taking, not dissimilar to provision of a seatbelt inducing reckless driving.[94] Against this background, the following will provide a brief conceptual introduction into, in the words of an eponymous account on the subject, 'the remarkable story of risk'[95].

I. Uncertainty and Pre-Probabilistic Management Strategies

Early expositions of economic uncertainty, as well as examples of strategies for uncertainty management, are numerous.[96]

Strategies can be identified in the earliest forms of insurance contracts, the precursors to the maritime 'contract of loans on Bottomry'[97]. For example, merchants in Babylon, as early as before 2000 BC, granted traders fixed-interest loans in money or goods to

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[92] Who to illustrate the mathematical complexity of their task are often illustratively afforded the label of financial 'rocket scientists'. In some cases, this indeed applies literally. For example, the *Long-Term Capital Management* hedge fund did actually employ rocket scientists in devising its – ultimately disastrous – trading strategies: See, eg, P Jorion, 'Medium-Term Risk Management Lessons from Long-Term Capital Management' in P Field (ed), *Modern Risk Management: A History* (Risk Books 2003) 475.

[93] See, J Gray and J Hamilton, *Implementing Financial Regulation: Theory and Practice* (n91) 38 ('It is also a truism to say that mathematical risk models only measure what they measure (…) what cannot be measured will not be measured.').

[94] MF Hellwig, 'Systemic Risk in the Financial Sector: An Analysis of the Subprime-Mortgage Financial Crisis' (2009) 157 De Economist 129, 188.

[95] PL Bernstein, *Against the Gods: The Remarkable Story of Risk* (n89).

[96] See, DC North, *Understanding the Process of Economic Change* (Princeton University Press 2005) 14 noting that '[uncertainty] has been the underlying condition responsible for the evolving structure of human organization throughout history and pre-history.' [insertion added]; Specifically, North emphasises the importance of uncertainty mitigation through marine insurance, as a growth factor for international trade in early modern Europe, *ibid* 17.

[97] CF Trenerry, *The Origin and Early History of Insurance: Including the Contract of Bottomry* (King & Son 1926) 50 (better known today as maritime insurance contracts).

finance their voyages. As the trade routes were also frequented by robbers, the total loss of goods was always a possibility. Therefore, merchant and trader agreed that the debt, comprising the amount borrowed as well as interest, did not have to be repaid if the trader was robbed on the way without any negligence on its part, thus shifting the uncertain risk of robbery to the lending merchant.[98] Derivatives also lend themselves to this list, as their basic structures also have far-reaching historical precedent. Edward J. Swan suggests the possibility that, for example, agreements for future payment of long distance traded commodities may even have existed before 5000 BC.[99]

However, even though these strategies might conceptually appear strikingly familiar today, they cannot be construed to represent historical examples of risk transfer and management in any modern sense. Rather, they were informed and shaped by the conceptions of uncertainty of the future prevailing at the time. As the English Classicist Mary Beard observes in the context of Roman society in the first centuries AD, '(t)rade in particular, for the Romans, with all its hazards was a bit like a game of dice; it depended on luck – that is, it was *aleatory*'[100]. Beard, drawing on an earlier study of Roman dicing, uses the centrality of gambling in Roman society, as a way to frame pre-probabilistic Roman perception and ways of addressing future uncertainty.[101] Notably, in her account, she moves away from the idea that the inhabitants of Roman society were simply passively resigned to 'capricious whim, or chance, or the gods'[102].[103] However, there is a clear distinction between engagement with uncertainty in what she terms ancient 'aleatory society' and the concerns of those inhabiting what is discussed under the concept of a post-industrial 'risk society'.[104] Crucially, ancient economic actors did perceive and seek to address the uncertainties of the future, but they did not employ any uniform identifiable methodology, much less an underlying theoretical

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[98] *Ibid* 5-7.

[99] See, EJ Swan, *Building the Global Market – A 4000 Year History of Derivatives* (Kluwer Law International 2000) 30: At the latest the rise of the city-states in Ancient Mesopotamia created the need for forms of trade that ensured the steady supply with agricultural commodities 'distant both in time and geography' in war-torn surroundings. The cuneiform-scripts preserved from this age may indeed be evidence of the earliest use of derivatives in ancient commerce. *Ibid* 28-29 and 36.

[100] M Beard, 'Risk and the humanities' in L Skinns, M Scott and T Cox (eds), *Risk* (Cambridge University Press 2011) 92 [emphasis in the original].

[101] 'They constructed other areas of hazard in their lives on the model of dicing, so that the luck of the board game became a way of seeing, classifying and understanding what in our terms might be thought of as risk.': *ibid*.

[102] *Ibid* 91.

[103] *Ibid* 98.

[104] *Ibid* 92.

framework, of measuring or calculating – and, by extension, pricing them.[105] The commercial practice of isolating and transferring the uncertainty or '*resicum'*[106] of the outcome of a future voyage as the object of a commercial transaction, as in the case of bottomry, for example, through the antecedents of modern derivatives described by Swan, was therefore possible even at this stage in history. However, the actors engaging in this commodification and commercialisation of uncertainty, although capable of 'rough calculation of the value of the risk they were incurring (…) in any transaction involving uncertainty'[107], were ultimately doing little else than taking an informed gamble based on experience and common sense.[108]

Taking a leap in time, this was to change after developments in the field of mathematics had seen the linkage of probability with 'numerical ideas of randomness'[109]. Whereas earlier in time, individual subjective judgment was the basis for the commercialisation of uncertainty in practice,[110] mathematical probability theory opened up the path to following 'general rules to determine the fair price of risk'[111] in dependence on the probability of financial loss.[112] Indeed, mathematical probability theory, after the first theorems were put forward by mathematicians, such as Pascal and Fermat,[113] in the 17th century, soon became a valuable tool for linking information to commercial decision making processes in an emergent and expanding international trading system.[114]

However, although in early economic discussions reference was made to probability, and the understanding of commercial risk evolved in a way that it was to be

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[105] *Ibid* 98.

[106] Instructively, a concept distinct from '*fortuna'*, in that it could be made the object of commercial transaction and contract: C-O Doron, 'The experience of "risk": Genealogy and transformations' in A Burgess, A Alemanno, and JO Zinn (eds), *Routledge Handbook of Risk Studie*s (Routledge 2016) 18.

[107] CF Trenerry, *The Origin and Early History of Insurance: Including the Contract of Bottomry* (n97) 153.

[108] As Lorraine Daston notes, regarding much later developments, before, however, the emergence of mathematical theories of risk, '(…) insurance premiums, gambling stakes, and annuity rates all represented a kind of quantification of risk but not necessarily one based on probabilistic or statistical intuitions, much less calculations and data.': L Daston, *Classical Probability in the Enlightenment* (Princeton University Press 1988) 124.

[109] I Hacking, *The Emergence of Probability: A Philosophical Study of Early Ideas about Probability, Induction and Statistical Inference* (2nd edn, reprint, Cambridge University Press 2007) 18.

[110] L Daston, *Classical Probability in the Enlightenment* (n108) 112 with new information evaluated and priced subjectively, the result was a large spread in the pricing of uncertainties, eg, in the case of maritime insurance premiums, *ibid*.

[111] *Ibid*.

[112] *Ibid*.

[113] For an overview, see, PL Bernstein, *Against the Gods: The Remarkable Story of Risk* (n89) ('Chapter 4: The French Connection') 57-72.

[114] C Dannreuther and R Lekhi, 'Globalization and the Political Economy of Risk' (2000) 7 Review of International Political Economy 574, 576-577.

distinguished from the overarching state of general uncertainty, the two categories had not been connected in any coherent manner and no distinctive concept of risk itself had yet emerged within economic theory until the early 20th century.[115]

II. The Knightian Risk-Uncertainty Distinction

This was to change in the form of the theoretical account provided by the American Economist[116] Frank Hyneman Knight in his doctoral thesis, published in renamed and reworked form in 1921[117]. Knight takes up the formal distinction between decisions made under risk and decisions made under uncertainty, but undertakes to define it clearly[118] by first developing a 'simple scheme for separating three different types of probability situation'[119]:

First, there is '[*a*] *priori* probability'[120] which is reserved for 'absolutely homogeneous classification of instances (…)' and is 'on the same logical plane as the propositions of mathematics (…)'.[121]

Secondly, there is '(s)tatistical probability', gained on the basis of 'empirical evaluation' of relative frequencies.[122]

And, thirdly, there are '(e)stimates', which provide for '*no valid basis of any kind* for classifying instances'.[123]

Within this scheme, Knight designates as *risk* the first two instances of a probability situation, a priori probability and statistical probability; i.e. 'measurable uncertainty'[124]. Only the last category, estimates, as 'unmeasurable' uncertainty encapsulates '*true uncertainty*'[125].

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[115] OG Wood Jr, 'Evolution of the Concept of Risk' (1964) 31 The Journal of Risk and Insurance 83, 83-87; As illustrated in the concise assessment of one of the early authors on the subject of risk: J Haynes, 'Risk as an Economic Factor' (1895) 9 The Quarterly Journal of Economics 409 ('The word risk has acquired no technical meaning in economics (…)').

[116] An instrumental figure in the inception of the Chicago School of economics, although, as will be seen in the following, at odds with the methodology the school is best known for today: See, eg, RB Emmet, *Frank Knight and the Chicago School in American Economics* (Routledge 2009) 145-155.

[117] FH Knight, *Risk, Uncertainty, and Profit* ([1921] Kelley 1964) Preface i.

[118] As he puts it, in order to eliminate the 'fatal ambiguity in these terms': *ibid* 233.

[119] *Ibid* 224.

[120] *Ibid* [emphasis in the original].

[121] *Ibid*.

[122] *Ibid* 225.

[123] *Ibid* [emphasis in the original].

[124] *Ibid* 20, 233.

[125] *Ibid* 232 [emphasis in the original].

While open to criticism as regards some of the more specific details,[126] the distinction is, for present purposes, a valuable one going forward. Within the Knightian taxonomy of uncertainty, *risk* thus refers to decisions in relation to outcomes, which, although uncertain, can be described by a type of probability distribution.[127] In contrast, *(Knightian) uncertainty*, as it has since become known, refers to those decisions where a decision-maker is at least partially incapable to ascribe a probability distribution to a situation.[128] As put by Joachim Runde, Knight's legacy of 'using the term "risk" to describe decision-situations in which "probabilities are available to guide choice" and "uncertainty" to describe decision-situations in which "information is too imprecise to be summarised by probabilities" is deeply ingrained in both economic theory and decision theory.'[129]

III. Knightian Risk as the Basis for Neoclassical Financial Economic Theory

Whereas a conceptual elaboration of risk, as opposed to other forms of uncertainty within the field of economics, occurred only as late as the early 20th century, the beginnings of modern financial economic theory and its analysis of *financial* risk must be traced to several decades later still, beginning in the 1950s.[130]

As in the discussions of uncertainty by Knight, risk in financial theory initially developed in relation to microeconomic analysis, principally in the field of capital markets and investment decisions.[131] The understanding of financial risk underlying the financial risk categories detailed in the following are synonymous with the so-called

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[126] In detail: J Runde, 'Clarifying Frank Knight's discussion of the meaning of risk and uncertainty' (1998) 22 Cambridge Journal of Economics 539-546.

[127] *Ibid* 540.

[128] *Ibid*; According to Knight, only successfully dealing *true uncertainty*, can account for an economic actors profit: FH Knight, *Risk, Uncertainty, and Profit* (n117) 232 ('It is this *true uncertainty* which (…) gives the characteristic form of "enterprise" to economic organization as a whole and accounts for the peculiar income of the entrepreneur.') [emphasis in the original].

[129] J Runde, 'Clarifying Frank Knight's discussion of the meaning of risk and uncertainty' (n126) 539 (citing LG Epstein and T Wang 'Intertemporal asset pricing under Knightian uncertainty' (1994) 62 Econometrica 283).

[130] As the prominent object for analysis of modern finance theory: As Robert C Merton stresses, '[d]uring most of this period [i.e. before the middle of the 20th century], finance was almost entirely a descriptive discipline with a focus on institutional and legal matters. Finance Theory was little more than a collection of anecdotes, rules of thumb, and shufflings of accounting data. (…) Modern finance begins only in the late 1950s and 1960s.': RC Merton, 'Influence of Mathematical Models in Finance on Practice: Past, Present and Future' (1994) 347 Philosophical Transactions: Physical Sciences and Engineering 451, 452-453.

[131] *Ibid* 453.

'traditional'[132] or 'neoclassical'[133] approach to financial theory. As a discipline, finance under this conception, although a subfield of economics, is distinct both in respect of its methodology and its analytical focus.[134] Abstracting, at the core of finance lies the 'valuation of cash-flows that *extend over time*'[135] and as a result tend to be *uncertain*. However, uncertainty within this neoclassical financial paradigm is conceptualised in a very distinct way. It is operationalised under the heading of (financial) risk which, as a concept, underpins financial markets and financial activity generally.[136]

This approach is dominated by models assuming given probability distributions for all future states of the world and thereby making mathematically possible the securitisation, pricing and subsequent transfer of risk.[137] Therefore, it is characterised by a rigorously quantitative approach to finance and by extension the measures of uncertainty it employs. Julia Köhn refers to this as the 'Neoclassical Uncertainty Paradigm, which conceptualises uncertainty for methodological reasons as a form of [quantifiable] risk'[138], in contrast with the 'Fundamental Uncertainty Paradigm'[139] as originally conceptualised by Knight, which encapsulated a form of unquantifiable uncertainty.[140] At a broader level, the methodology is a reflection of the shift from *classical* to what is today referred to as *neoclassical* economics, with its roots as far back as the second half of the 19th century and attempts to create an independent, scientifically rigorous academic discipline of economics, delimited from political science and the paradigm of political economy associated with the classical school of

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[132] See, eg, V Ricciardi, 'Risk: Traditional Finance versus Behavioural Finance' in FJ Fabozzi (ed), *Handbook of Finance, Volume III – Valuation, Financial Modelling, and Quantitative Tools* (John Wiley & Sons 2008).

[133] For an overview, see, eg, SA Ross, 'Finance' in Macmillan Publishers (ed), *The New Palgrave Dictionary of Economics* (3rd edn, Palgrave Macmillan 2018) 4578.

[134] *Ibid*.

[135] SA Ross, *Neoclassical Finance* (Princeton University Press 2005) 1 [emphasis added].

[136] PH Huang, 'A Normative Analysis of New Financially Engineered Derivatives' (n78) 471, 491.

[137] As, for example, in the now so-called Arrow and Debreu general equilibrium framework put forward in KJ Arrow and G Debreu, 'Existence of an Equilibrium for a Competitive Economy' (1954) 22 Econometrica 265-290: See, AG Haldane and V Madouros, *The dog and the frisbee,* Speech at the Federal Reserve Bank of Kansas City's 366th economic policy symposium, (31 August 2012) 1-2; Against this background, one author has therefore termed this the 'neoclassical probabilistic hypothesis': A Orléan, 'The Impossible Evaluation of Risk' (Richard Crabtree tr, Cournot Centre for Economic studies, April 2010) 1 and 14.

[138] J Köhn, *Uncertainty in Economics: A New Approach* (Springer International 2017) 4 [insertion added].

[139] *Ibid*.

[140] *Ibid*.

economics.[141] The central aspect of this analytical shift, for the purposes of this thesis, is the fact that it was marked by an increasing and today ideal-typical mathematical formalisation of (neoclassical) economic theory in an attempt to align it with natural science methodology.[142] Viewed through the neoclassical lens, the object of economic analysis is conceived as *natural* rather than *social* behaviour.[143] Consequently, it can be investigated using universally applicable rules and methods as one would, for example, with a phenomenon in physics, as is very illustratively exemplified by William Stanley Jevons' adoption of the physical concept of *equilibrium* to economic exchange.[144] Equilibrium and similar 'physicalist metaphors'[145] are, as a result, pervasive in neoclassical economic analysis.[146]

Under such a methodology, there is little residual room for uncertainty in the Knightian sense and Knightian risk – even more so before the GFC – largely reigned supreme with 'probability-based tools dominat[ing] models and discourse'[147] as regards risk quantification and pricing.[148]

B. Financial Market Risks and Derivatives

A corollary to the wild beast of uncertainty having been (ostensibly)[149] conceptually framed and methodologically tamed in the form of its translation into quantifiable risk, is the rise of strategic and institutionalised approaches facing up to it; i.e. the rise of risk management.[150] Derivatives, today, play an essential role in the wider context of financial

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[141] P Söderbaum, 'Economics as Ideology' in E Fullbrook (ed), *Pluralist Economics* (Zed Books 2008) 121; JT Harvey, *Contending Perspectives in Economics* (Edward Elgar 2015) 38; P Mirowski, 'Physics and the 'marginalist revolution'' (1984) 8 Cambridge Journal of Economics 361, 362.

[142] See, eg, P Mirowski, 'Physics and the 'marginalist revolution'' (n141) 362, noting 'the successful penetration of mathematical discourse into economic theory' as defining aspect of the marginalist revolution.

[143] JT Harvey, *Contending Perspectives in Economics* (n141) 41.

[144] See, P Mirowski, 'Physics and the 'marginalist revolution'' (n141) 363, with metaphors drawn from the contemporaneously emergent unified discipline of physics pervasive in the work of the early 'neoclassicals', *ibid* 363-366.

[145] GM Hodgson, *Conceptualizing Capitalism: Institutions, Evolution, Future* (University of Chicago Press 2015) 3.

[146] *Ibid*.

[147] N Firoozye and F Ariff, *Managing Uncertainty, Mitigating Risk: Tackling the Unknown in Financial Risk Assessment and Decision Making* (Palgrave Macmillan 2016) 11.

[148] *Ibid*.

[149] See, § 5.B on the critiques of this assertion.

[150] N Firoozye and F Ariff, *Managing Uncertainty, Mitigating Risk: Tackling the Unknown in Financial Risk Assessment and Decision Making* (n147) 13 ('Modern finance's focus on measurable risk was significantly narrower than the initially broad approach to risk and uncertainty taken by early 20th-century economists. This narrowing of focus was due to risk's tractability and the significant successes of

risk management exercised by financial institutions, corporates and even sovereigns and various public bodies. Risk management is a process that, regardless of its application to the micro-level of an individual firm or institution or the macro (policy) level, is carried out following a standard set of constituent steps.[151] According to the stylised framework, provided by Andreas Oehler and others, risk must be: (1) identified and measured using quantitative and qualitative inputs (i.e. statistical risk measures and/or expert testimony respectively); (2) evaluated in relation to potential consequences for the respective risk bearer; (3) then adjusted in line with the risk preference determined in the applicable corporate or institutional risk strategy; and, as a final step (4) the risk management process itself must be continuously evaluated and, if necessary, adapted.[152]

According to conventional economic theory, derivatives come into play and are integral to step 3 of this risk management process as a means of aligning actual risk exposure with the given risk preference by way of financial contracting.[153] From the perspective of the respective counterparties, derivative transactions are, therefore, with a view to prior exposures sometimes also referred to as 'risk-modifying transactions'[154].

The myriad of risks encountered by participants in the financial markets are, by way of a first broad distinction, typically divided into two categories: those of a financial and those of a non-financial nature.[155] With regard to OTC derivatives, four principal risk categories have, from an early stage, been identified. These are market, credit, legal, and operational risk.[156] The categories are, of course, by no means exclusive to derivatives. However, they take on a crucial significance in the derivatives context since isolating, contractually modifying and transferring discrete categories of risk is, as detailed above, at the core of the derivatives technology.[157]

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risk-based tools which enabled risk transfer and significant value creation and it was in this era that financial risk management was born.').

[151] A Oehler and others, 'Risk assessment and risk management in economics' in H-W Micklitz and T Tridimas (eds), *Risk and EU Law* (Edward Elgar 2015) 41-43.

[152] See *ibid* 42-43; These general steps are widely accepted as part of a *lege artis* risk management process: See, also, eg, DM Chance, K Grant and J Marsland, 'Risk Management' in JL Maginn and others, *Managing Investment Portfolios* (3rd edn, John Wiley & Sons 2007) 581 (Exhibit 9.1).

[153] See, A Oehler and others, 'Risk assessment and risk management in economics' (n151) 42-43.

[154] In the sense of reduction or expansion of risk: DM Chance, K Grant and J Marsland, 'Risk Management' (n152) 583.

[155] See, eg, *ibid* 586 ('Financial risk refers to all risks derived from events in the external financial markets; nonfinancial risk refers to all other forms or risk.') [emphasis omitted].

[156] See, eg, Group of Thirty, Global Derivatives Study Group, *Derivatives: Practice and Principles* (n39) 2.

[157] S James, *The Law of Derivatives* (LLP 1999) 14 ('The basic pattern [of derivatives]').

Whilst the focus of this thesis is primarily on derivative transactions and therefore on the *contract* and by extension *market level*, rather than on the financial institutions themselves, risk is, of course, a prevalent concern at both levels and they frequently intersect. As a result, *corporate governance* cannot in any meaningful way be extricated from *contract governance*.[158] Namely, the risks originating in sometimes complex financial contracts directly impact the wellbeing of financial institutions, as well as other corporates that enter into them, making the understanding, valuation and management of these contractual risks also a central concern of corporate governance.[159]

Central to a comprehensive understanding of derivatives as risk modifying transactions is recognition of their 'Janus-faced' nature. This means that it is important to distinguish between those risks which derivatives are designed to transfer, an overview of which is given in the following, and those risks which originate from the risk transfer in the form of the derivative transaction itself. The former are generally referred to as *financial risks.* The latter can be divided into either financial risks, the most important of which for the purposes of this discussion being *credit risk* and *systemic risk*, when with regard to the latter shifting the perspective from individual transactions to the broader macro perspective of interconnected financial markets. In addition, and central to this thesis, a derivative transaction, when viewed through the legal lens, constitutes a legal contract and as such also creates a distinct category of non-financial risk, primarily in the form of *legal risk*.

I. Financial Risks

The primary category of risks encountered in the financial market are financial risks. These can by way of a more granular distinction be further divided into *market* and *credit* risk. Both can be transferred by means of the use of derivatives.

1. Market Risk

Market risk, sometimes also referred to as 'price risk'[160], is a generic heading assigned to those risks stemming from uncertain movements in market values.[161] These include,

[158] F Möslein, 'Contract Governance und Corporate Governance im Zusammenspiel – Lehren aus der globalen Finanzkrise –' (2010) 65 JuristenZeitung 72, 78.

[159] *Ibid* 79-80, emphasising the focus on markets and contract governance as an important lesson following from the GFC.

[160] See, eg, J-P Castagnino, *Derivatives: The Key Principles* (n6) para 12.07.

[161] Ie, market prices or rates.

for example, interest rates, currency exchange rates and stock prices, which expose a range of *primitive*[162] positions, i.e., debt, currency or equity positions, to market risk. The (re-)allocation of these risks, albeit resulting from different trading motivations[163], lies at the core of derivatives' risk management function.

a) Primitive Market Risks

These risks result from supply and demand fluctuation in a diverse range of marketplaces.[164] Commonly, and particularly in the risk management and regulatory context, the definition is restricted to *unfavourable* price movements: i.e. movements that through a commercial entity's or bank's exposure to the respective category of market risk lead to an economic loss.[165] The principal market risks addressed via OTC derivatives include fluctuations in intangible underlyings such as interest rates, foreign exchange ('FX') rates and equity values.[166]

Depending on their respective field, market participants will, next to the risks inherent to their core business, be naturally exposed to different categories of market risk whilst engaging in their everyday operations. A commonly used example in this context is the business operations of an airline company. Through its dependence on jet fuel in conducting its core business of air transportation, it is naturally exposed to changes in its value, meaning that when fuel prices increase, the company's earnings decrease.[167] At the same time, the airline company may have chosen to at least partially finance its fuel purchase through a floating rate debt instrument.[168] As such, it will be exposed to

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[162] *Primitive* securities are those financial claims which have an intrinsic price, as opposed to the price being a (derivative) function of one or more other primitive securities: C Alexander, *Market Risk Analysis. Volume III: Pricing, Hedging and Trading Financial Instruments* (John Wiley & Sons 2008) 1.

[163] As they are discussed in under § 4.

[164] DM Chance, K Grant and J Marsland, 'Risk Management' (n152) 587.

[165] B Penn, 'Banking Regulation' in S Paterson and R Zakrzewski (eds), *McKnight, Paterson and Zakrzewski on the Law of International Finance* (2nd edn, Oxford University Press 2017) para 2.2.2.1; J-P Castagnino, *Derivatives: The Key Principles* (n6) para 12.07.

[166] See the latest breakdown of global OTC derivatives notional amounts outstanding by asset class: ISDA, Research Note, *Key Trends in the Size and Composition of OTC Derivatives Markets in the Second Half of 2025* (July 2026) 2.

[167] And the other way around: LA Stout, 'Betting the Bank: How Derivatives Trading under Conditions of Uncertainty can increase Risks and Erode Returns in Financial Markets' (1995) 53 The Journal of Corporation Law 53, 55.

[168] Such as so-called floating rate notes or bonds. Depending on the prevailing interest rate climate, financing costs incurred through issuance of floating rate debt may at times in fact be lower relative to fixed rate debt even taking into account the expectation of rising interest rates and hedging costs in times of high demand: M Dalal, 'Companies Find Savings in Issuing Floating-Rate Bonds' *The Wall Street Journal* (New York, 17 May 2018).

market risks in the form of fuel price volatility, as well as interest rate risk, i.e. fluctuations in the interest rate on which its variable coupon payments are calculated.
As discussed in greater detail under § 4.A, the airline may therefore decide to protect its earnings by hedging its exposure to these economic variables by entering into a derivatives transaction and *lock in* exposure to market risk at a predetermined level, achieving a degree of planning certainty and protecting the profitability of the airline company in the face of volatile economic variables.[169]

b) Derivatives Market Risk

As with any primitive position, the individual derivatives position, or multiple positions aggregated in a derivatives portfolio, are subject to market risk conveyed via movements in the underlying measure(s) of value. However, market risk inherent in the derivative is not identical to the respective underlying's market risk, since the respective derivative contract through its respective structural design creates a customised exposure to the underlying market risk, which is the principal purpose of its use. This can be the case, *inter alia*, in relation to the sensitivity of derivatives positions to movements in the underlying prices. The derivative contract offers various ways to modulate the underlying market risk. For example, it can be structured as a *leveraged*[170] transaction. Potentially, small changes in the underlying may thus lead to comparatively large 'in-the-money' or 'out-of-the-money' moves for the derivatives position.
In addition, the derivative contract may stipulate various additional *contractual* provisions with a direct impact on its risk and payoff profile.[171] Uniquely or severally these serve to create a distinct profile, such as, for example, by including in the swap terms an option for premature cancellation of the transaction for a counterparty.[172]
Since the underlying to a derivative transaction may be another derivative which may in turn be derived from yet another derivative, and so on, derivatives offer the opportunity to create highly complex structures with the risk and payoff profile of the ultimate

[169] For a direct glimpse into commercial practice: Lufthansa Group, *Annual Report 2022* 180 ('In accordance with its internal guidelines, the Lufthansa Group uses derivative financial instruments to hedge interest rate and exchange rate risks and to hedge fuel price risks. This is based on the hedging policy defined by the Executive Board and monitored by a committee.').
[170] See, in greater detail, § 4.B.
[171] C Koehler, 'The Relationship between Complexity of Financial Derivatives and Systemic Risk' (31 May 2011) 17.
[172] See, with an illustrative graphical representation, J Roberts, *Rechtliche Behandlung von Derivaten: Ein Casebook* (De Gruyter 2012) 225.

underlying potentially being altered with each degree of derivation.[173] The end result can be such that for all the mathematical modelling sophistication, information on value movements observed in the financial markets are insufficient to predict the actual payoff of the multiply derived derivative.[174]

The Value-at-risk ('VaR') methodology for the quantification of market risk through statistical analysis is addressed under § 6.B.II.2.

2. Credit Risk

Credit risk is pervasive in the financial markets. Its assumption in exchange for acceptable levels of return is at the core of financial institutions' business models.[175] Credit risk, in the OTC derivatives context – reflecting the fact that it is a contract entered into with a counterparty – is referred to as 'counterparty credit risk'[176] or simply 'counterparty risk'[177]. It has, in a regulatory sense, been concisely defined as 'the potential that a (…) counterparty will fail to meet its obligations in accordance with agreed terms'[178]. Any such failure to perform obligations is therefore equal to a potential[179] crystallisation of credit risk, where the transaction's economic value is positive for the counterparty at the time of its obligor's failure to perform. The motivation of market participants to enter into a derivative transaction, i.e. the transaction's economic rationale, is irrelevant to the extent of credit risk that attends to it.[180]

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[173] See, in detail, C Koehler, 'The Relationship between Complexity of Financial Derivatives and Systemic Risk' (n171).

[174] SL Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87 Washington University Law Review 211, 224.

[175] J Benjamin, *Financial Law* (n82) para 2.02.

[176] J Overdahl, 'Counterparty Credit Risk' in RW Kolb and JA Overdahl (eds), *Financial Derivatives – Pricing and Risk Management* (John Wiley & Sons 2010) 283.

[177] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 12.07.

[178] Basle Committee on Banking Supervision, *Principles for the Management of Credit Risk* (September 2000) 1.

[179] To what extent credit risk does indeed crystallise, ie, how large a financial loss the non-defaulting counterparty ultimately suffers, is dependent on whether it can replace the individual derivative transaction (or a portfolio of derivatives, as the case may be) with the defaulting counterparty by entering into transactions replicating the previous risk profile with a new counterparty at the same price. Where this is at the point of replacement, eg, due to market factors, only possible at an increased cost relative to the transactions originally entered into with the defaulting counterparty, the additional costs equal a financial loss and a crystallisation of credit risk in the respective amount: D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (Oxford University Press 2022) para 1.10.

[180] SK Henderson, 'Unintended consequences of misconceived reforms: Pt II' (2013) 28 Butterworths Journal of International Banking and Financial Law 439, 439.

Credit risk is of particular significance to derivative transactions due to the already touched upon particular time dimension inherent in the nature of performance obligations. Whereas in the so-called *spot* or *cash* markets performance under the terms of a given contract is immediate or at least nearly immediate,[181] in derivatives transactions settlement of obligations is by the very nature of the transactions necessarily deferred.[182] As touched upon above, futurity, i.e. the passage of a length of time between execution and settlement of the transaction, is a defining feature and lies at the heart of the contract.[183] The time period to maturity can be considerable, with envisaged performance of obligations even exceeding a decade not unheard of.[184] This leads to the increased risk that a counterparty may fail to fully perform its obligations on the legal terms of the executory contract in the considerable amount of time that can elapse between trade execution and scheduled final settlement of obligations.[185] Against this background, as well as being one of the main risks inherent to derivative trading, credit risk is conversely one of the key concerns in derivatives regulation.[186] In addition, it bears emphasis that through entering an OTC derivative transaction, the respective counterparties are exposed to two-way credit exposure, depending on the movement of the respective underlying – in contrast to more traditional financial transactions such as a conventional loan – which poses particular challenges to the particular modes of contractual credit risk mitigation.[187]

Credit risk, when entering into an OTC derivative transaction, is a function of several constituent elements. Broadly, these consist of: (1) future exposure to the counterparty

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[181] DH Goldenberg, *Derivatives Markets* (Routledge 2016) 5-6.

[182] JT Moser and D Reiffen, 'Clearing and Settlement' in RW Kolb and JA Overdahl (eds), *Financial Derivatives – Pricing and Risk Management* (John Wiley & Sons 2010) 265.

[183] See also, RR Bliss and RS Steigerwald, 'Derivatives clearing and settlement: A comparison of central counterparties and alternative structures' (4Q/2006) Economic Perspectives (Federal Reserve Bank of Chicago) 23.

[184] See, eg, *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWHC 465 (Comm) at [409](1)(ii) ('[payment obligations under the swaps in question] over the substantial period (averaging 14 or so years) (…)').

[185] JT Moser and D Reiffen, 'Clearing and Settlement' (n182) 265; 'Settlement' is employed in this context pursuant to the definition provided by the Committee on Payment and Settlement Systems ('CPSS') and the International Organization of Securities Commissions ('IOSCO') as '[t]he completion of a transaction through final transfer of securities and funds between the buyer and the seller', i.e. in the derivatives context the final discharge of the contract through complete performance of payment or delivery obligations: CPSS and IOSCO, *Recommendations for securities settlement systems* (November 2001) 48.

[186] D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (n179) para 1.5.

[187] SK Henderson, *Henderson on Derivatives* (n**Fehler! Textmarke nicht definiert.**) para 1.8; This aspect is discussed in more in the context of credit risk mitigation effected by way of the ISDA Master Agreement in § 7.C.I.

due to advantageous market changes in the underlying, which increase the mark-to-market value ('MTM') of the derivative; (2) the probability of future counterparty default; as well as (3), the expected recovery rate from the defaulting counterparty.[188] The probability of counterparty default is in financial practice mirrored in the respective valuation of the derivative through what is known as *credit valuation adjustment* ('CVA').[189] Although quantitative modelling of credit risk has attained a high degree of sophistication, it lags behind the precision associated with market risk models.[190]

While in terms of pure theory, market and credit risk exist completely independent of each other,[191] at the practical level credit and market risk concerns are interlinked.[192] Schuyler K. Henderson even defines credit risk as the 'flipside' of market risk.[193] As such, an OTC derivative transaction converts or transforms various categories of market risk into credit risk.[194]

In addition to this practical nexus, through the reference to *performance of obligations*, the structural nexus of market and credit risk and legal considerations, such as the enforceability of contractual rights, comes into view. Legal considerations become constitutive of credit risk as a financial risk category since any performance obligation must ultimately be recognised in law in order to become ultimately enforceable.[195]

II. The Macro-Perspective: Systemic Risk

Beyond the categories of risk described thus far, systemic risk is a different animal altogether in that it constitutes the risk posed to the financial system as a whole. Systemic risk, more so than ever following the GFC, lies at the heart of financial entity

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[188] In relation to dealer-bank credit exposure: R Grove, 'Valuation in the context of derivatives litigation' (2011) 6 Capital Markets Law Journal 149, 160.

[189] D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (n179) 10.

[190] A Kuritzkes and T Schuermann, 'What We Know, Don't Know, and Can't Know about Bank Risk' in FX Diebold, NA Doherty and RJ Herring (eds), *The Known, The Unknown, and the Unknowable in Financial Risk Management: Measurement and Theory Advancing Practice* (Princeton University Press 2010) 115.

[191] D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (2019) 36 Yale Journal on Regulation 495, 504.

[192] *Ibid* (fn 35): 'In practice, of course, the two may be correlated where, for example, the exposure under a derivative contract represents a significant proportion of a counterparty's total liabilities (where adverse price movements in the underlying could have an impact on the counterparty's solvency)'.

[193] SK Henderson, 'Unintended consequences of misconceived reforms: Pt II' (n180) 439.

[194] Or, in other words, counterparty risk is 'the necessary by-product' to attain the desired risk exposure through the derivative transaction: D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (n191) 507; SK Henderson, 'Unintended consequences of misconceived reforms: Pt II' (n180) 439.

[195] This will be explored further under § 5.C.

and market regulatory policy and has been said to ultimately trump any other regulatory objectives in case of conflict.[196] The causes and conceptualisation of systemic risk have become contested over recent years,[197] with the so far dominant 'domino effect' conceptualisation of one entity's failure setting in motion a failure cascade of other mutually contractually connected entities – at the heart of much of the financial regulatory architecture – deemed by some to paint an at best incomplete picture of the systemic risk landscape.[198] While an in-depth conceptual analysis of systemic risk is beyond the scope of this thesis, some of the central conceptual aspects underlying it will be discussed in connection with the policy rationale for the so-called close-out netting 'safe harbours' in Chapter 2 § 3.

§ 4 The Uses and Users of Risk Transfer Through OTC Derivatives

The individual motivation to effect the transfer of a particular financial risk and modify existing exposure through derivatives varies depending on the market participant. The following will give an overview of the core motivations and strategies in relation to the market participants typically involved.

A. Hedging

The principal economic use of derivatives lies in their *risk management* function, generally referred to as *hedging*.[199] It is at the same time the most uncontroversial facet of derivatives use. Commercial counterparties using derivatives for hedging purposes are interchangeably referred to as 'end-users'[200], 'customers'[201], or 'buy side'[202] market participants. These designations are, of course, not limited to a derivatives context and generally refer to the instance of economic agents using a particular market to address a

[196] J Armour and others, 'The Limits of Financial Regulation' in J Armour and others (eds), *Principles of Financial Regulation* (Oxford University Press 2016) 89.
[197] See, eg, HS Scott, *Connectedness and Contagion: Protecting the Financial System from Panics* (The MIT Press 2016) Part I with an overview of the distinct 'three Cs of systemic risk', *ibid* 1, ie asset and liability connectedness, correlation and contagion.
[198] See, eg, for a highly critical account of the 'domino' systemic risk narrative, RJ Mokal, 'Liquidity, Systemic Risk, and the Bankruptcy Treamtent of Financial Contracts' (2015) 10 Brooklyn Journal of Corporate, Financial & Commercial Law 15- 96.
[199] TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (n32) 22.
[200] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 1.05.
[201] NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 729.
[202] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 2.05.

given problem they face.[203] Specifically in relation to derivatives hedgers, this particular problem lies in an existing operative risk exposure.[204]

Employing the common categorisation used by the BIS, this category can be further broken down into two groups: Firstly, *non-financial institutions*, consisting of corporate entities from a wide range of sectors, including, for example, transport and energy, as well as sovereign entities; i.e. governments.[205] The latter may for example seek to hedge an interest rate exposure incurred through a bond issuance.[206] Secondly, there are *other financial institutions*, consisting of different types of funds, including pension funds, mutual funds, hedge funds and money market funds as well as insurance companies, building societies, leasing companies and commercial and investment banks[207].[208] More precisely, of course, the hedging decision falls to those individual agents responsible for the firm's decision-making as part of any risk management strategy.[209]

I. The Protective Function of Hedging

Hedging is synonymous with a financial risk reduction strategy which entails using derivatives to protect against the financial impact of an uncertain future.[210] It is the prime exponent of the financial risk transfer function performed by derivatives, with the goal of reducing or wholly eliminating financial risk on the part of the hedger and shifting it to a counterparty which is willing and better placed to manage it.[211] This, in turn, enables the hedger, freed up of these incidental risks, to focus on those essential

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[203] In relation to buy side traders, see L Harris, *Trading and Exchanges* (Oxford University Press 2003) 32-33.

[204] See, *ibid* 33, table 3.1.

[205] ISDA, ISDA Research Study, *Dispelling Myths: End-User Activity in OTC Derivatives* (August 2014) 10.

[206] *Ibid*.

[207] Ie, banks which do not participate as market making dealers (so-called 'non-dealer banks').

[208] ISDA, ISDA Research Study, *Dispelling Myths: End-User Activity in OTC Derivatives* (n205) 10.

[209] For a classical reference cautioning against the common personalisation of the firm, see, MC Jensen and WH Meckling, 'Theory of the Firm; Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of Financial Economics 305, 311 ('*The firm is not an individua*l') [emphasis in the original].

[210] NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 717 ('Hedging is protecting'); Commercial hedging is of course by no means limited to financial hedging through use of derivatives. For an overview of commercial hedging strategies: CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (n8) 301-311.

[211] TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (n32) 22.

risks which lie at the core of its operations and which it is in the business of managing for profit.[212]

II. Hedging and Risk Transfer

At the practical level, the risk transfer objective is implemented as follows. The future development of various economic or financial variables or occurrence of economically significant events is uncertain. However, derivatives enable economic agents to manipulate their existing exposure to these changing variables or events in the present.[213] Where derivatives are employed to hedge, this means decreasing exposure to unfavourable movements of respective variables or the occurrence of detrimental events during the lifespan of the transaction.[214]

1. The Basic Mechanism

The basic hedging mechanism through OTC derivatives entails creating an *offsetting*, i.e. *equal but opposite* exposure to the underlying risk via the separate derivative transaction. Where the existing exposure to an underlying risk potentially results in an economic loss (negative payoff), the hedge creates an inverse position which generates a profitable cash-flow (positive payoff) ideally offsetting the loss in its entirety.[215] In view of this, *risk transfer* must be understood as more of an overarching abstract concept rather than an actual description of the economic mechanism that implements it.[216]

The following example illustrates the abstract principle. It describes a transaction involving two hedgers with opposite hedging needs, drawing on the example of the

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[212] CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (n8) 27 ('The core risks facing a firm may be defined as those risks that the firm is in business to bear and manage so that it can earn excess economic profits. Noncore risks, by contrast, are risks to which a firm's primary business exposes it but that the firm does not necessarily need to retain in order to engage in its primary business line. The firm may well be exposed to noncore risks, but it may not wish to *remain* exposed to those risks.') [emphasis in the original].

[213] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 323 ('(…) a derivative contract reorders the normal impact of that change or that occurrence on each counterparty during the term of the contract an, in this way, functions as a vehicle for the transfer of financial risk.').

[214] J-P Castagnino, *Derivatives: The Key Principles* (n6) paras 1.05 and 1.13.

[215] A Hudson, *The Law on Financial Derivatives* (n2) para 5.32; CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (n8) 67.

[216] *Ibid* ('In this sense, the term *risk transfer* is itself a bit deceiving.') [emphasis in the original]; D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (n13) 1104, 1126 (fn 92) ('In the case of derivatives (…) a single contract both creates the instrument and *conceptually at least*, facilitates the "transfer" of economic risk.') [emphasis added].

airline company reliant on external financing described under § 3.B.I.1.a). As the agreement the airline has entered into with a third party stipulates a variable rate of interest to be paid – with reference to a selected benchmark rate – it is exposed to the risk of volatile interest rates. As such, it is concerned with the possibility of increasing rates which would make its financing arrangements more expensive. If it suspects such an imminent rise, it might look to find a counterparty willing to bear the exposure to floating interest rates. Conversely, banks perform the essential function of *maturity transformation*. This involves, on the one hand, collecting comparatively short-term customer deposits in exchange for a *variable* rate of interest. On the other hand, the bank extends long term housing and real estate loans – due to popular demand today – predominantly at a *fixed* rate.[217] As a result, the bank bears the risk of this 'maturity mismatch' in that it is exposed to an increase in interest rates with regard to its savings deposits without an offsetting exposure in its fixed loan portfolio.[218] It might therefore seek exposure to a floating interest rate to prevent mismatches in its income and expenditure and a potentially fatal refinancing problem.[219] In light of their diverging appetites for exposure, both parties can then, economically speaking, swap places; for example, by entering into a mutually beneficial long-term interest rate swap.[220]

2. The Impact of Basis Risk on Hedging Effectiveness

In economic terms, hedging transactions often do not perfectly offset an existing exposure, at least not throughout the transaction's lifespan. This is because absolute effectiveness would require the terms of the reverse transaction – i.e. the hedge – to replicate exactly those of the hedged exposure, excluding, i.a., the possibility of early termination of the hedging transaction.[221] This fact was once expressed by banker and former vice president and treasurer of the World Bank, Eugene H. Rotberg, with the catchy *bon mot* that 'the only perfect hedge is a Japanese garden'[222].[223] This specific

[217] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.008; R Romano, 'A Thumbnail Sketch of Derivative Securities and Their Regulation' (1996) 55 Maryland Law Review 1, 65; For greater detail on the predominance of fixed-rate mortgages in the Western economies and the risk they pose to mortgage lenders with further references: ISDA, ISDA Research Study, *Dispelling Myths: End-User Activity in OTC Derivatives* (n205) 13-14.

[218] In detail: MF Hellwig, 'Systemic Risk in the Financial Sector: An Analysis of the Subprime-Mortgage Financial Crisis' (n94) 135-136.

[219] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.008.

[220] R Romano, 'A Thumbnail Sketch of Derivative Securities and Their Regulation' (n217) 65.

[221] SK Henderson, *Henderson on Derivatives* (n1) 375.

[222] See, GH Rotberg, Speech, *The Only Perfect Hedge is a Japanese Garden*.

risk is referred to as *basis risk*, i.e. 'the risk that the hedge does not move precisely inversely to the instrument hedged'[224]. Basis risk fluctuation can be due to different factors. For example, it may arise because of diverging expiration dates or prices between the hedge and the underlying not moving in perfect tandem.[225]

Significantly, a transaction's legal terms effectively can just as much function as gateways for legal or more specifically '"documentation" basis risk'[226]. The consequence of basis risk crystallising is that an undesirable element of uncertainty is introduced into the risk transfer.[227] Basis risk in this sense must be differentiated from those cases in which a company deliberately chooses not to completely offset its existing exposure but rather seeks to mould exposure to fit a desired risk profile.[228] In the case of an airline company, this might mean choosing to forego the hedging of all fuel price risk in order to retain a residual opportunity to profit from falling fuel prices.[229]

B. Speculation

Another economic rationale is using derivatives for speculating. In broad terms, speculation differs from the hedging function in that rather than protecting against unwanted risks by offsetting an existing risk exposure, the derivative employed creates a novel position, a new exposure to an underlying risk category.[230] Derivatives are suited for speculative purposes at least for two core reasons.

Due to their core feature of *derived value* in combination with the possibility of *cash-settlement*[231], derivatives functionally make it possible for a speculator to participate in

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[223] In financial terms, '[a]n ideal hedge would be one that is market neutral, meaning that moves in market prices for the two legs are aligned.': R Heckinger, I Ruffini and K Wells, 'Over-the-Counter (OTC) Derivatives' in Federal Reserve Bank of Chicago, Financial Markets Group, *Understanding Derivatives: Markets and Infrastructure* (Federal Reserve Bank of Chicago 2013) 28.

[224] SK Henderson, *Henderson on Derivatives* (n1) 375.

[225] R Heckinger, I Ruffini and K Wells, 'Over-the-Counter (OTC) Derivatives' (n223) 27-28.

[226] SK Henderson, *Henderson on Derivatives* (n1) 375.

[227] R Heckinger, I Ruffini and K Wells, 'Over-the-Counter (OTC) Derivatives' (n223) 34 (fn 2) ('The actual result of a hedge that is subject to basis risk will be uncertain, because the changes in the value of the legs of the hedge relative to each other will not necessarily offset each other exactly. While this risk can be managed to a degree, such management adds to the cost of the hedge, thereby reducing the efficiency of the hedge.').

[228] This applies when a hedger is not 'completely risk averse'. Here, the optimal hedge requires taking a directional position on expected future prices: See G Poitras, *Risk Management, Speculation, and Derivative Securities* (Academic Press 2002) 112-113.

[229] See, eg, The Lufthansa Group, *Annual Report 2018*, 67-68.

[230] JC Hull, *Options, Futures and Other Derivatives* (n29) 36.

[231] See § 2.B.I.

the performance and thereby risk of a vast number of underlying values. This is referred to as taking a *synthetic* position or synthetic trading, since the derivative simply economically recreates the cash-flow generated (naturally) by the underlying without the need for actual trading and ownership of the same.[232] Taking a cash-settled synthetic rather than an actual position is advantageous to a speculator for several reasons. In particular, actual ownership may be subject to specific legal requirements, fulfilment of which is either impossible or perceived to be unduly burdensome on the part of the speculator.[233] In addition, speculation becomes possible on values which are either derived from illiquid assets or are, as such, not amenable to physical trading; for example different indices.

Complementing these advantages, the derivative transaction can be structured in such a way that its payoff disproportionately reflects changes in that of the underlying measure of value.[234] *Leverage* in this sense is a modification of a counterparty's market risk exposure by contractual means.[235] The ability to leverage derivative transactions makes them especially attractive to speculators.[236] This is because with minimal to no capital outlay[237] they can theoretically generate profits which can significantly exceed those generated by the underlying depending on the strength of the lever; i.e. the respective leverage factor.[238] The higher the leverage factor of a transaction is, the higher the relative bang for a speculator's buck. The feature appeals to market participants seeking to maximise investment returns, such as hedge funds, which actively participate as end-users in the OTC derivatives market.[239]

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[232] NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 682; This characteristic of a synthetic transaction and its related advantages (in a hedging context) are described by AN Rechtschaffen, *Capital Markets, Derivatives and the Law: Positivity and Preparation* (2nd edn, Oxford University Press 2019) 242-243.

[233] This aspect intersects with the notion of *arbitrage* and as such is discussed under § 4.C.

[234] K Krawiec, 'More than just "New Financial Bingo": A Risk-Based Approach to Understanding Derivatives' (1997) 23 The Journal of Corporation Law 1, 12.

[235] In more detail on leverage as contractual exposure modification, see, § 5.B.5.

[236] K Krawiec, 'More than just "New Financial Bingo": A Risk-Based Approach to Understanding Derivatives' (n234) 12.

[237] Typically, an OTC derivative transaction – option premium and applicable margin requirement aside – requires no upfront payment up to its actual settlement on the maturity date. Similarly, an exchange-traded derivative at inception may also require only payment of initial margin.

[238] In addition to the leverage structurally embedded in the derivative, the terms of the derivative can be further fashioned in such a way that the 'out-of the money' party's payment obligations on the payment date are a multiple of the actual difference between respective market price and contract price. Such is the case with *leveraged swaps*.

[239] ISDA, ISDA Research Study, *Dispelling Myths: End-User Activity in OTC Derivatives* (n205) 16-17.

Of course, inversely, the same applies to potential losses, making leveraging a double-edged sword for any derivatives user.[240] What is more, the macro-financial flip side of such embedded leverage is that it can serve as a source for systemic risk by amplifying originally non-systemic risks at the level of individual contracts to systemic status when systemically important counterparties fail due to excessive payment obligations.[241]

Derivative transactions, including those entered into for a speculative purpose, are *zero-sum games* – whatever one party gains on a transaction, the other party to the transaction loses.[242] In other words, the sum of the payoffs generated by the transaction, excluding transaction costs, is zero.[243] However, taking a broader view beyond the individual transaction, speculation increases market liquidity as there are more counterparties available.[244] Liquidity, in concise terms, is in this regard 'the ability to trade, if you want to trade'[245].

The social disutility of liquidity constraints in the derivatives market becomes evident where a hedger does not find a party willing to take the opposite side of the hedging transaction it requires to lay off an unwanted risk. Where there is no counterparty willing to take the opposite side of a trade, the would-be hedger is stuck with an unwanted exposure which ties resources which would be better invested in its core business operations. Hedger-hedger transactions, where the hedging needs of one hedger can be met by the complementary (i.e. opposite) needs of another – although possible – are not a very common feature in the derivatives market. Primarily, this can be attributed to the prohibitive search-costs involved in identifying a suitable counterparty to execute such a transaction.[246] Therefore, it can fall to a speculator to meet this demand and take the opposite side to a transaction with a hedger possessing a

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[240] This was famously experienced by *Procter & Gamble* after entering into two highly leveraged OTC interest rate swaps with *Bankers Trust* in 1993. When against its expectations interest rates rose, the at the time novel mathematical formula embedded in the contracts meant Procter & Gamble incurred leveraged losses totalling USD 157 million on the transactions. See: RM McLaughlin, *Over-The-Counter Derivative Products: A Guide to Business and Legal Risk Management and Documentation* (McGraw-Hill 1999) 205-206.

[241] See, eg, IOSCO, Technical Committee, *Mitigating Systemic Risk: A Role for Securities Regulators* (February 2011) 20.

[242] K Krawiec, 'More than just "New Financial Bingo": A Risk-Based Approach to Understanding Derivatives' (n234) 15; LA Stout, 'Regulate OTC Derivatives by Deregulating Them' (2009) 32 Regulation 30, 32.

[243] PH Huang, 'A Normative Analysis of New Financially Engineered Derivatives' (n78) 471, 486.

[244] S James, *The Law of Derivatives* (n157) 2.; TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (n32) 24.

[245] L Harris, *Trading and Exchanges* (n203) 32.

[246] R Heckinger, I Ruffini and K Wells, 'Over-the-Counter (OTC) Derivatives' (n223) 29; CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (n8) 63.

legitimate hedging need.[247] This is the prototype of a derivative risk-transfer transaction.[248] It also evidences the 'highly symbiotic'[249] relationship of hedging and speculation in the market context.

Under one of the dominant economic explanatory models which has been termed the 'differential risk aversion model'[250], this occurs because the speculator is less risk-averse than the hedger and therefore more willing to incur the risk via the transaction.[251] In such a constellation, the liquidity generating effect of speculation is viewed as enhancing general economic welfare, as is the case in the constellation of two hedgers with opposite hedging needs who reduce their respective exposure[252].[253]

A 'purely speculative derivative contract'[254] entered into between two speculators does, however, not conform to the theoretical risk-transfer model with its implicit general welfare enhancing properties.[255] This is because, rather than zero-sum, these transactions, on aggregate, become negative-sum games since no existing risk is being transferred. In fact, additional risk is created as well as positive transaction and

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[247] K Krawiec, 'More than just "New Financial Bingo": A Risk-Based Approach to Understanding Derivatives' (n234) 15; In practice, this transaction is for the same reasons commonly intermediated by a dealer bank.

[248] Which conforms to an underlying economic theory of speculation that has been termed the '*risk-transfer hypothesis'*, see J Hirshleifer. 'The Theory of Speculation under Alternative Regimes of Markets' (1977) 32 The Journal of Finance 975, 975; An informative overview and evaluation of competing explanatory economic theories of speculation is provided by, L Klöhn, *Kapitalmarkt, Spekulation und Behavioral Finance* (Duncker & Humblot 2006) 23-39.

[249] C Pirrong, 'Comment' (2009) 32 Regulation 38, 40.

[250] LA Stout, 'Betting the Bank: How Derivatives Trading under Conditions of Uncertainty Can increase Risks and Erode Returns in Financial Markets' (n167) 58.

[251] The core elements of the theory of speculation under the risk-transfer model were (as part of a fundamental critique hereof) recapped by American economist Jack Hirshleifer. See, J Hirshleifer. 'The Theory of Speculation under Alternative Regimes of Markets' (n248) 977; As Hirshleifer notes, the 'risk-transfer hypothesis' rests on diverging attitudes towards risk of counterparties. In order to profit, risk-tolerant speculators accept price risks from risk-averse hedgers, see, *ibid* 975; The hypothesis is said to be closely associated with the contributions of economic thinkers *John M Keynes* and *John R Hicks*, see *ibid* 975, with further references; See also, already, FH Knight, *Risk, Uncertainty, and Profit* (n117) 256 ('The typical illustration to show the advantage of organized speculation to business at large is the use of the hedging contract. By this simple device the industrial producer is enabled to eliminate the chance of loss or gain due to changes in the value of materials used in his operations during the interval between the time he purchases them as raw materials and the time he disposes of them as finished product, *"shifting" this risk to the professional speculator*.' [emphasis added].

[252] See the hypothetical airline-bank hedging transaction described under § 4 A.II.1.

[253] TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (n32) 24.

[254] See, TE Lynch, 'Gambling by Another Name; The Challenge of Purely Speculative Derivatives' (2011) 17 Stanford Journal of Law Business & Finance 67, 71.

[255] EA Posner and EG Weyl, 'An FDA for Financial Innovation: Applying the Insurable Interest Doctrine to Twenty-First-Century Financial Markets' (2013) 107 Northwestern University Law Review 1307, 1309.

opportunity costs incurred on top of this by entering into such a transaction.[256] By extension, the same would apply to transactions only hedging an exposure originally created by such a speculative derivatives position.[257]

C. Arbitrage

Lastly, derivatives may also have numerous applications when used as part of an *arbitrage* strategy.

I. Financial Arbitrage

Generally, in contrast to the prior two trading motivations, financial arbitrage from a theoretical standpoint entails neither reducing an existing risk exposure, as in hedging, nor increasing risk via a novel exposure, as in speculation. Rather, from a risk perspective, the key element of arbitrage is that it generates a *riskless* profit.[258] This occurs as regards pricing mismatches in different markets. Pricing mismatches are theoretically possible when new information affecting one market is not simultaneously incorporated into the market prices of separate but related markets.[259] This potentially opens up a time window in which the arbitrageur can generate a profit from the price discrepancy.[260] In financial markets, textbook riskless arbitrage opportunities are a rare occurrence.[261] What is more, even where real-world arbitrage opportunities exist, for example, because of informational inefficiencies, they are limited by the arbitrageurs themselves, since arbitrage activity drives the diverging prices together in line with the forces of supply and demand, thus eliminating the arbitrage opportunity and correcting

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[256] TE Lynch, 'Gambling by Another Name; The Challenge of Purely Speculative Derivatives' (n254) 73; See also, Posner and Weyl referring to gambling (in their contribution used interchangeably with speculating) as a 'negative-sum activity' *inter partes* as well as in the context of increasing overall systemic risk: EA Posner and EG Weyl, 'An FDA for Financial Innovation: Applying the Insurable Interest Doctrine to Twenty-First-Century Financial Markets' (n255) 109.

[257] LA Stout, 'Regulate OTC Derivatives by Deregulating Them' (n242) 33.

[258] LA Stout, 'Betting the Bank: How Derivatives Trading under Conditions of Uncertainty Can Increase Risks and Erode Returns in Financial Markets' (n167) 55; According to a textbook definition arbitrage refers to '[t]he simultaneous purchase and sale of the same, or essentially similar, security in two different markets for advantageously different prices.': WF Sharpe, GJ Alexander and JV Bailey, *Investments* (6th edn, Prentice Hall 1999) 907.

[259] A Hudson, *The Law on Financial Derivatives* (n2) para 5.40.

[260] *Ibid*.

[261] At least in informationally *efficient* capital markets, where asset prices immediately reflect all available information, so much so that some authors state that strategies based on arbitrage are deemed not to exist: T Hens and M O Rieger, *Financial Economics* (Springer 2010) 8.

the price.[262] More common, thus, are arbitrage strategies, which although low-risk are *not riskless*, and are therefore sometimes referred to as 'risk arbitrage'.[263] Derivatives may be employed to create complex risk arbitrage trading strategies. For example, it is possible to create a derivatives portfolio consisting of a range of options which may even be automatically executed once predefined price thresholds are reached.[264] This, as a result, makes the exploitation of the most fleeting of arbitrage opportunities between markets possible.

II. Regulatory Arbitrage and the Emergence of Swaps

A slightly different, if related, facet of the concept is that of *regulatory arbitrage*. Here, the motivation to enter into the derivative transaction is not to exploit price discrepancies between assets or markets. Rather, the goal is to exploit differences between legal and regulatory regimes.[265] In fact, innovative contracting for the purposes of regulatory arbitrage was one of the major factors in the genesis of the global OTC derivatives market of today. Initially, the rise was driven by an attempt to circumvent the Bretton Woods[266] system of strict national controls on international capital flows and, only after its demise, principally by hedging and speculation applications due to ensuing market volatility.[267] This circumvention was achieved through a specific financial innovation, so-called *parallel loans*, a precursor to the financial swaps of today.[268] Briefly summarising the detailed account provided by Perry Mehrling, these so-called parallel loans functioned as follows:[269] If parent company A wanted to finance the expansion of its foreign subsidiary, it would have to supply it with the currency valid in its subsidiary's respective domicile.[270] This presented a dilemma, however, as

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[262] SA Ross, *Neoclassical Finance* (n135) 2; TV Somanathan, V Anantha Nageswaran and H Gupta, *Derivatives* (2nd edn, Cambridge University Press 2018) 29; Z Bodie, A Kane and AJ Marcus, Investments (10th edn, McGraw-Hill Education 2014) 328.

[263] Z Bodie, A Kane and A J Marcus, *Investments* (10th edn, McGraw-Hill Education 2014) 328.

[264] A Hudson, *The Law on Financial Derivatives* (n2) para 5.39.

[265] Seminally, F Partnoy, 'Financial Derivatives and the Costs of Regulatory Arbitrage' (1997) 22 The Journal of Corporation Law 211, 227; See, also, V Fleischer, 'Regulatory Arbitrage' (2010) 89 Texas Law Review 227, 244 who specifically emphasises the structural similarities of financial and regulatory arbitrage.

[266] See, § 6.B.I.1.

[267] GJ Schinasi and others, *Modern Banking and OTC Derivatives Markets* (IMF 2000) 64.

[268] For a detailed description of their functioning: P Mehrling, *The New Lombard Street* (Princeton University Press 2011) 72-74; D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (n13) 1104, 1140-1141.

[269] In detail, P Mehrling, *The New Lombard Street* (n268) 72-74.

[270] *Ibid* 72.

the capital controls prohibited any form of direct investment across political borders.[271] If, however, parent company A could find a foreign parent company B domiciled in the country of its subsidiary and faced by the exact same, but opposite, dilemma regarding its own subsidiary in parent company A's country of domicile, both could bypass the problem by cooperating in the following way. Each of the parent companies could – in parallel – issue loans denominated in their respective domestic currency to the respective other's subsidiary.[272] Importantly, for those involved, this would mimic the economic effect of direct investment without any money ever having to cross borders, resulting in 'the letter of Bretton Woods, if not its spirit, being strictly observed'[273].[274] The basic mechanism applies to OTC derivatives today. Since they can recreate near on any cash-flow, they can also be used to economically mimic ownership of an asset that would otherwise be subject to a differing, restrictive or beneficial, regulatory regime.[275]

§ 5 The Significance of Legal Risk as a Non-financial Risk Category

Introducing legal risk as a distinct risk category has manifold implications on the conceptualisation of derivative products and the market upon which they trade.

A. The Legal Construction of Financial Derivatives

Financial products, such as OTC derivatives, are fundamentally different from the tangible products of commercial trade in that they do not derive their value from their physical properties.[276] Rather, as intangibles, they represent a legal claim to a future benefit such as most commonly a future cash-payment.[277] Put differently, they are 'coded in law'[278] and consequently operate in a real-world legal environment. Of

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[271] *Ibid* 72-73.
[272] *Ibid* 73.
[273] D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (n13) 1104, 1140.
[274] *Ibid*; P Mehrling, *The New Lombard Street* (n268) 73.
[275] F Partnoy, 'Financial Derivatives and the Costs of Regulatory Arbitrage' (n265) 227; For example, a *total-return swap* can transfer the economic substance of an asset (ie its market and credit risk) to a counterparty. This is done instead of actually selling it to avoid an otherwise arising tax liability which is premised on an actual sale taking place: G Rauterberg and A Verstein, 'Assessing Transnational Private Regulation of the OTC Derivatives Market: ISDA, the BBA and the Future of Financial Reform' (2013) 54 Virginia Journal of International Law 9, 12.
[276] FJ Fabozzi and FJ Jones, *Foundations of Global Financial Markets and Institutions* (5th edn, The MIT Press 2019) 5.
[277] *Ibid*; On the lifecycle of a financial product: J Benjamin, *Financial Law* (n82) para 1.50 ('[F]inancial assets are intangible claims, not physical things. They are enforced not by delivery of possession, but by performance, and performance serves to end them so that fulfilment is extinction').
[278] K Pistor, 'Regulating Financial Markets – An LTF Perspective' in E Avgouleas and DC Donald (eds), *The Political Economy of Financial Regulation* (Cambridge University Press 2019) 21.

course, law also impacts the value of transactions referencing physical objects of exchange. Some economically minded contract theory even levels out any conceptual distinction between the object of exchange and the terms of contract under which it is exchanged in that both are contributory features to its economic value.[279] However, the value of an OTC derivative (exclusively) resides in and is dependent on the legal claim to that future benefit.[280] In light of this, as much as OTC derivatives are the end-result of financial engineering by the quants involved in their inception for a particular commercial purpose, they are fundamentally also '"creatures" of law'[281] or the product of 'legal engineering'[282].[283] Under this conception, they come into being, exist and take effect under the law as legal contracts.[284] Thus, law may be said to be the *conditio sine qua non* of financial products. This observation shifts the analytical emphasis from OTC derivatives as *financial* to OTC derivatives as *legal products* consisting of a particular composition of contractual rights and obligations, as well as operating in a

[279] See, for a concise summary and comment on this 'contract-as-product' approach: MJ Radin, 'Boilerplate Today: The Rise of Modularity and the Waning of Consent' in O Ben-Shahar (ed), *Boilerplate: The Foundation of Market Contracts* (Cambridge University Press 2007) 194-196 ('[T]he terms become part of the product which is a unified set of disparate features: a battery, a forum-selection clause, a microprocessor, and an anti-reverse engineering clause.') *ibid* 195.

[280] R McCormick and C Stears, *Legal and Conduct Risk in the Financial Markets* (3rd edn, Oxford University Press 2018) para 1.01.

[281] *Ibid*.

[282] Making use of the term to illustrate the intrinsic connection of financial engineering and the law, G Reiner, 'Financial Engineering und Legal Engineering' in F Möslein (ed), *Finanzinnovation und Rechtsordnung* (Schulthess 2014) 127-242; Reiner distinguishes three possible meanings to the term, *ibid* 129-132: First, the placing of legal engineering in the service of financial engineering, ie acknowledging the legal nature of financial instruments and making creative use of private autonomy and freedom of contract to pursue certain financial goals with the pursuant legal risks that attend to this; Second and somewhat related to the first purpose, instrumentalising financial engineering as a means to pursue genuinely legal objectives, such as eg evading applicable legal regimes through regulatory arbitrage; Third, the reaction of the (in his study German) legal order to the building block approach inherent to financial engineering. Specifically, whether the law is capable of recognising and reacting with legal equivalence to the functional equivalence of *synthetic*, ie creatively assembled financial structures with other assets; Whilst Reiner proceeds with his detailed investigation on the basis of the third understanding of the term, this thesis is primarily concerned with its first meaning under Reiner's taxonomy.

[283] See, A Hudson, 'The Regulatory Aspect of English Law in Derivatives Markets' in A Hudson (ed), *Modern Financial Techniques, Derivatives and Law* (Kluwer Law International 2000) 70, emphasising the function performed by lawyers alongside that of financial engineers, who creatively bring the commercial objectives into contractual form.

[284] S James, *The Law of Derivatives* (n157) 21; See, also, N Davrados, 'OTC Derivatives and the Conflict of Laws' (2012) 65 Revue hellénique de droit international 181, 193, noting that in contrast to a sales contract, with a primary derivative contract, 'the object of the contract (i.e. the financial position) is not pre-existent, but is created from the contract itself'; F Galgano, 'The New Lex Mercatoria' (1995) 2 Annual Survey of International & Comparative Law 99, 99 ('Once contracts were used for the circulation of goods, but today they are also used in the creation of financial products').

wider legal environment impacting on the content of these rights and obligations.[285] It has also more recently given rise to several novel research approaches emphasising the constitutive role of law in the relationship of law and markets as well as financial markets and products specifically.[286] Whilst this observation does not factor into neoclassical financial theory nor the financial models it engenders for the quantification, hedging and pricing of risk, it does have significant implications for the development[287] and the ultimate economic efficacy of these instruments.[288]

B. Fundamental Economic Uncertainty and the Role of Law

The elementary insight that at their core derivatives are legal contracts is at the same time both simple yet highly significant when tying it back to the particular traditional understanding of financial risk as quantifiable uncertainty. If one economic insight is to be drawn from the GFC for the purposes of this thesis, it is a renewed focus on the existence of a type of economic uncertainty beyond probabilistically quantifiable risk. Notably, the – retrospectively misguided – overconfidence in the analytical value of (financial) risk quantification within the financial industry in the context of commodifying and commercialising uncertainty,[289] also extended to the financial

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[285] J Köndgen, 'Policy Responses to Credit Crises: Does the Law of Contract Provide an Answer?' in S Grundmann and YM Atamer (eds), *Financial Services, Financial Crisis and General European Contract Law* (Kluwer Law International 2011) 39; The nomenclature of a *legal product* ('Rechtsprodukt') was originally developed in German insurance law scholarship: *ibid*, with further references; See also, F Möslein, 'Finanzinnovation und Rechtsordnung: Eine Einführung' in F Möslein (ed), *Finanzinnovation und Rechtsordnung* (Schulthess 2014) 16.

[286] See, ia, K Pistor, 'Law *in* Finance' (2013) 41 Journal of Comparative Economics 311-314; K Pistor, 'A Legal Theory of Finance' (2013) 41 Journal of Comparative Economics 315-330; S Deakin and others, 'Legal institutionalism: Capitalism and the Constitutive Role of Law' (2017) 45 Journal of Comparative Economics 188-200.

[287] F Möslein, 'Finanzinnovation und Rechtsordnung: Eine Einführung' (n285) 16, stating that due to financial innovation being interwoven in such a way with its legal framework, law also has a greater impact on financial innovative capacity than in does in instances of more conventional product innovation.

[288] As well as – viewed in pathological terms – providing an additional perspective in explaining the GFC: See, eg, LA Stout, 'Derivatives and the Legal Origin of the 2008 Credit Crisis' (2011) 1 Harvard Business Law Review 1-38, who portrays the GFC as having had *statutory origins* in the progressive wholesale legalisation of OTC derivative contracts, including those of a speculative nature, culminating in the US Commodties Futures Modernization Act of 2000 ('There is (…) another and deeper lesson to be learned from the 2008 crisis. That lesson is that law matters. All significant markets, including financial markets, must be built on some underlying legal infrastructure.') *ibid* 37.

[289] See, ia, RA Posner, *A Failure of Capitalism: The Crisis of '08 and the Descent into Depression* (Harvard University Press 2009) 60 ('To understand how the difficulty of determining the riskiness of new financial instruments contributed to the financial crisis, it is helpful to recall a distinction, made long ago by the economist Frank Knight, between two types of risk. One, which he called "risk", is a risk to which a probability can be assigned, and is the kind that insurance companies insure against because the

regulators tasked with monitoring risks perceived as danger in line with their regulatory mandates[290].

Prominently, for example, the so-called Turner Report published by the chairman of the FSA[291], Adair Turner, under the immediate impression of the GFC, contained an in-depth evaluation of crisis origins as well as a series of recommendations for a future stable and effective banking system, which was to address existing deficiencies.[292] Significantly, for present purposes, the Turner Report was not restricted to the evaluation of regulatory detail and technical fixes but also included a fundamental re-appraisal of the theoretical backbone of financial markets, including drawing attention to the presence of a particular non-quantifiable kind of 'Knightian' uncertainty.[293]

The following will, therefore, provide an overview of the dominant theoretical conceptualisation of uncertainty as quantifiable risk and its critique, which has given rise to the recognition of more fundamental forms of uncertainty beyond quantifiable risk. The latter shine a spotlight on the particular role of legal institutions, including the central institution of contract, in mitigating such uncertainty, which will be discussed thereafter.

I. Critique of the Neoclassical Financial Risk Model and Alternative Uncertainty Paradigms

The theoretical assumptions and exclusively quantitative mathematical methodology of the neoclassical microeconomic approach still pervade economics and by extension finance and the derivatives markets especially.[294] While an analysis of these assumptions is beyond the purview of this thesis, suffice it to say here that the conceptualisation of risk as at all times quantifiable uncertainty under the neoclassical approach is the result of it resting on a number of idealised assumptions, or axioms,

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can calculate a premium that will cover the risk. The other called "uncertainty", is a risk that cannot be quantified. Anyone who insures such a risk is gambling; anyone who rates it (AAA, BB, etc.) is guessing.').

[290] See, J Gray and J Hamilton, *Implementing Financial Regulation: Theory and Practice* (n91) 38-47, notably emphasising at 46 the 'illusion of control suggested by the formal risk assessment process'; Specifically, financial regulators' acceptance of institutions' internal mathematical risk models as a the basis for capital allocation under the then Basel II capital accord, 'entail[ed] a legitimation of normative assumptions concerning nature, time, and calculability that are rarely made explicit in financial discourse': M de Goede, 'Repoliticizing financial risk' (2004) 33 Economy and Society 197, 213 (cited in J Gray and J Hamilton, *Implementing Financial Regulation: Theory and Practice* (n91) at 38).

[291] At the time, the United Kingdom's financial regulator.

[292] See, FSA, *The Turner Review: A regulatory response to the global banking crisis* (March 2009).

[293] See, *ibid* Section 1.4 ('Fundamental theoretical issues').

[294] A Andrikopoulos, 'Financial Economics: objects and methods of science' (2013) 37 Cambridge Journal of Economics 35, 35-36.

which in sum combine to represent a simplified and to a large degree idealised 'general model of individual behaviour'[295], including a particular conceptualisation of rationality. As David Dequech notes, '[d]ifferent views on uncertainty are associated with, or even lead to, different views on rationality'[296]. The methodological vantage point for traditional economic analysis is to model economic behaviour based on the actions of an ideal type of individual agent. As a concept, this is termed the 'methodological individualism' of economics and is largely regarded as axiomatic of neoclassical economic thought.[297] The perspective taken is as such distinctly microeconomic.[298] As far as macroeconomic phenomena, such as financial market outcomes are considered, they are analysed as an aggregate of individual agents' behaviour, as for example that of financial market participants in standard financial theory.[299]

The point of departure for neoclassical analysis consequently is the individual decision situation with various alternative possible courses of action (choices) open to a decision-maker under conditions of scarcity.[300] The core assumption as to the nature of *homo oeconomicus* is that in these decision situations he acts out of self-interest, or even selfishly in more value-laden language.[301] Economic theory has developed a

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[295] G Kirchgässner, *Homo Oeconomicus* (Springer 2008) 11.

[296] D Dequech, 'The new institutional economics and the theory of behaviour under uncertainty' (2006) 59 Journal of Economic Behavior & Organization 109, 125

[297] See, eg, LE Blume and D Easeley, 'Rationality' in Macmillan Publishers (ed), *The New Palgrave Dictionary of Economics* (3rd edn, Palgrave Macmillan 2018) 11276; See also, from a critical perspective, defining neoclassical economic theory with the view to replacing it with a *pluralist* approach to economic thinking, C Arnsperger and Y Varoufakis, 'Neoclassical Economics: Three Identifying Features' in E Fullbrook (ed), *Pluralist Economics* (Zed Books 2008) 14-16; Critical in this regard is Mirowski who rather sees neoclassical economics defined by 'the adoption of mid-nineteenth century physics as a rigid paradigm, a hard core it has preserved and nourished throughout the twentieth century, even after physics has moved onwards to new metaphors and techniques' which in turn explains the symbiosis of neoclassical theory and mathematical formalism: P Mirowski, 'Physics and the 'marginalist revolution'' (n141) 372.

[298] See, eg, JT Harvey, *Contending Perspectives in Economics* (n141) 47.

[299] See, eg, A Andrikopoulos, 'Financial Economics: objects and methods of science' (n294) 38; See also more generally with regard to standard economic theory, LE Blume and D Easeley, 'Rationality' (n297) 11285.

[300] See, paradigmatically, L Robbins, *An Essay on the Nature and Significance of Economic Science* (Macmillan & Co 1932) 15 ('Here, then, is the unity of subject of Economic Science, the form assumed by human behaviour in disposing if scarce means (…) Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses'); The latter part is quoted by Oliver Williamson, who contrasts this 'science of choice' with the alternative 'science of contract' as it is encapsulated in Transaction Cost Economics: OE Williamson, 'Transaction Cost Economics' in C Ménard and MM Shirley (eds), *Handboook of New Institutional Economics* (Springer 2008) 42.

[301] In detail, see, G Kirchgässner, *Homo Oeconomicus* (n295) 41 onwards.

formal analytical framework which encapsulates this notion. Under it, generally[302], the ultimate purpose of any choice is that of individual utility maximisation.[303] In broad strokes, the decision-maker is capable of making its subjective utility maximising decision because it is through the lens of neoclassical economics portrayed as endowed with fully ordered preferences combined with perfect information as well as the cognitive computing power up to the task of correctly processing this information.[304] Lastly, under the idealised conception, *homo oeconomicus* is also capable of learning: As new information becomes available to it, this information is incorporated into its existing probability beliefs which are revised accordingly and economic and financial theory equate a very particular method of information incorporation with rational economic behaviour, the application of *Bayes's Law*.[305]

Namely, neoclassical theory representatively assumes a largely rational individual economic actor, acting with perfect foresight, thereby laying the groundwork for comprehensive formal economic and financial modelling. However, these assumptions have – at least in their absoluteness – increasingly been challenged, both with regard to their realism, as well as, even more importantly, regarding the subsequent explanatory value and predictive power of the models they engender. This holds true particularly in the light of perceived discrepancies when measured against real-world market phenomena, particularly as evidenced against the backdrop of the GFC.[306]

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[302] As *Kirchgässner* notes, in principle, the utility values of others could be incorporated into an agent's utility function. However, as he concedes, such a representation of altruism is – if it happens at all – a very rare occurrence: *Ibid* 41.

[303] *Ibid* 14.

[304] SH Heap and CG Clark, 'Economic Man' in SN Durlauf and LE Blume (eds), *The New Palgrave Dictionary of Economics* (3rd edn, Palgrave Macmillan 2018) 3364.

[305] *Bayes's law* is regarded as a central tenet of individual rationality in the 'traditional finance paradigm', see, from a critical perspective, eg, N Barberis and R Thaler, 'A Survey of Behavioral Finance' in RH Thaler (ed), *A Survey of Behavioral Finance – Volume II* (Princeton University Press 2005) 1; In concise terms, *Bayes Law* is a formal mathematical statement of how an agent updates any existing probability assessment (*prior*) to producing an updated assessment (*posterior*) in the face of new information: JM Bernardo, 'Bayesian Statistics' in M Lovric (ed), *International Encyclopedia of Statistical Science* (Springer 2011) 114.

[306] See, ia, FSA, *The Turner Review: A regulatory response to the global banking crisis* (March 2009) 41 ('(…) people often don't make decisions in the rational front of brain way assumed in neoclassical economics (…)'; See also, BS Bernanke, *Implications of the Financial Crisis for Economics*, Remarks at the Conference co-sponsored by the Bendheim Center for Finance a and the Center for Economic Policy Studies, Princeton, New Jersey (24 September 2010) 14.

II. Empirical Deviations

The bedrock of mainstream economic and finance theory, from financial risk management to its pricing, rests on the use of relative frequency probabilities assuming that by imputing data derived from historically observed frequencies the future can be modelled with a stochastic process.[307]

In large part due to the relative ease of its use, outcomes were in financial practice and economics extensively modelled as conforming to a *Gaussian* or normal probability distribution.[308] The distribution is for this reason by some even seen as the very foundation of neoclassical finance and portfolio theory.[309] The practical convenience of the normal distribution is largely due to the fact that it can be fully described by only two parameters: its *mean* (μ) and its variability in terms of *standard deviation* (σ) or *variance* (i.e. standard deviation squared, σ^2).[310] Standard deviation is the statistical measure of the dispersion of outcomes around the mean and as such serves as a kind of statistical 'unit of uncertainty'[311]. In finance, and financial risk management specifically, these statistical terms of art are commonly referred to somewhat differently, with the statistical parameter of standard deviation referred to as *volatility* and the mean as the *average*.[312] In this context, broadly speaking, valuation models are primarily concerned with the average or mean of an asset's payoff distribution, whereas risk management models, for example VaR, focus on the variability of payoffs.[313]

Probability distributions can be divided into two subcategories, referred to as *parametric* and *nonparametric* distributions, each with their own advantages and drawbacks.[314] A defining feature of the former is that they can be described by a mathematical function subject to certain mathematical assumptions, whilst the latter cannot and are, in their most simple form, merely the depiction of specifically collected data.[315] The normal distribution belongs to the group of parametric distributions in that

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[307] EG McGoun, 'The History of Risk "Measurement"' (1995) 6 Critical Perspectives on Accounting 511, 512.

[308] MB Miller, *Mathematics and Statistics for Financial Risk Management* (2nd edn, Wiley 2014) 69.

[309] BM Mandelbrot and NN Taleb, 'Mild vs. Wild Randomness' in FX Diebold, NA Doherty and RJ Herring (eds), *The Known, the Unknown, and the Unknowable in Financial Risk Management* (Princeton University Press 2010) 47.

[310] R Friberg, *Managing Risk and Uncertainty: A Strategic Approach* (The MIT Press 2015) 35.

[311] DW Hubbard, *The Failure of Risk Management* (John Wiley & Sons 2009) 182.

[312] MB Miller, *Mathematics and Statistics for Financial Risk Management* (n308) 39.

[313] P Jorion, *Value at Risk: The New Benchmark for Managing Financial Risk* (3rd edn, McGraw Hill 2007) 20-22.

[314] See, MB Miller, *Mathematics and Statistics for Financial Risk Management* (n308) 61.

[315] *Ibid*.

it can be described by a mathematical function, which, however, entails assumptions regarding the dispersion of outcomes: Specifically, choosing a normal distribution to describe a phenomenon assumes that 68% of outcomes will fall within one standard deviation of the mean, 95% of outcomes within two standard deviations, and 99.7% within three standard deviations; i.e. 369 out of 370 outcomes will fall within three standard deviations.[316] Consequently, this means that when looking at a relative frequency histogram of outcomes of a normally distributed phenomenon, with each bar indicating a measure of how frequently an outcome has occurred, the majority of outcomes are grouped around the statistical average, with larger, less probable, deviations from the average declining towards both sides (the so-called *tails*) of the distribution, creating a characteristic symmetric bell curve when overlaying the histogram with a graph.[317]

Under the condition that the variable in question does in fact conform to a normal distribution, these two statistical measures provide workable mathematical tools for summarising the range or 'spread' of potential future values regarding the respective random variable.[318]

1. Leptokurtosis (Fat Tails)

Even in non-crisis times, staying with the normal distribution example, empirical evidence from the financial markets points to deviations from the model's predictions, when for example applied to financial instruments' payoffs, which do not, in fact, conform to a normal distribution.[319] This is only exacerbated in times of crisis-induced market volatility.[320] What is more, in addition to the uncritical use of the normal distribution, alternatively relying on historically observed data alone, especially with

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[316] L Chew, *Managing Derivative Risks: The Use and Abuse of Leverage* (John Wiley & Sons 1996) 161.

[317] See, eg, RA Brealey, SC Myers and F Allen, *Principles of Corporate Finance* (10th edn, McGraw-Hill 2011) 186, Figure 8.1; Alexander Thiele provides a chronological account of the development of mathematical finance theory, starting with its origins in the adaption of equations initially developed in the field of physics to describe Brownian movement to the forecasting of share price movements in French mathematician *Louis Bachelier's* 'Théorie de la Spéculation' with both following a normal distribution: A Thiele, 'Bachelier, Black & Scholes oder Mandelbrot? – Anforderungen and das Recht im Falle divergierender Riskomodelle am Beispiel des „Weltrisikos" Finanzmarkt –' in J Scharrer and others (eds), *Risiko im Recht – Recht im Risiko* (Nomos 2011) 228-234.

[318] RA Brealey, SC Myers and F Allen, *Principles of Corporate Finance* (n317) 163-165.

[319] In fact, while certain variables such as human height, weight or IQ can be fairly accurately described by the Gaussian distribution, financial market variables such asset returns cannot. See, ia, R Friberg, *Managing Risk and Uncertainty: A Strategic Approach* (n310) 27-30; BM Mandelbrot and NN Taleb, 'Mild vs. Wild Randomness' (n309) 49-50.

[320] K Dowd and M Hutchinson, *'From Excess Stimulus to Monetary Mayhem'* (2017) 37 Cato Journal 303, 317.

relatively short observation periods, can prove to be a dangerously unreliable guide to the future.[321] For example, the stock market crash of 1987 is statistically considered a more than 22 (!) standard deviation event, which is roughly equal to a probability of 1 in 10^{100}.[322] Therefore, although theoretically possible statistically, it certainly was not anticipated by either market participants or risk managers. Similarly, during the GFC investment strategies relying heavily on the use of quantitative strategies were severely negatively impacted by price moves previously deemed statistically negligible.[323]

The phenomenon of extreme deviations being observed in real world financial markets, meaning that values occur more frequently and are of greater magnitude than a given distribution would predict, is in statistics referred to as *leptokurtosis*, or more commonly as the *fat-tailedness* of the distribution.[324] What happens at the tails of a distribution where probability of occurrence should be steadily decreasing towards zero, can lead to extreme real world outcomes in financial practice. This is primarily because adequate precautionary measures are not implemented in the light of such an outcome's extreme unlikeliness.

2. Black Swans

The following will briefly deal with a metaphor which, in addition to its best-selling appeal and popular association with the GFC, has been widely received in more formal treatments,[325] as well as taken centre stage in the GFC's regulatory aftermath[326].

The metaphor of a *Black Swan* event was conveyed to a broad audience by Nassim Nicholas Taleb.[327] It is drawn from the discovery of black swans in Australia at the end

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[321] See, eg, FSA, *The Turner Review: A regulatory response to the global banking crisis* (March 2009) 22-23.

[322] BM Mandelbrot and NN Taleb, 'Mild vs. Wild Randomness' (n309) 51.

[323] See, eg, the following quote by then Goldman Sachs CFO, David Viniar: 'We were seeing things that were 25-standard deviation moves, several days in a row.' (quoted in PT Larsen, 'Goldman pays the price of being big' *Financial Times* (London, 13 April 2007)).

[324] R Friberg, *Managing Risk and Uncertainty: A Strategic Approach* (n310) 28-29; BM Mandelbrot and NN Taleb, 'Mild vs. Wild Randomness' (n309) 49; A Oehler and M Unser, *Finanzwirtschaftliches Risikomanagement* (2nd edn, Springer 2002) 97.

[325] See, eg: P Faulkner, A Feduzi and J Runde, 'Unknowns, Black Swans and the risk/uncertainty distinction' (2017) 41 Cambridge Journal of Economics 1279, 1287-1290; From a behavioural economic and finance perspective: N Barberis, The Psychology of Tail Events: Progress and Challenges (2013) 103 American Economic Review 611-616; J Runde, 'Dissecting the Black Swan' (2009) 21 Critical Review 491-505.

[326] See, eg: FSA, *The Turner Review: A regulatory response to the global banking crisis* (March 2009) 19; See, also, House of Lords, European Union Committee, *The future regulation of derivatives markets: is the EU on the right track?* (31 March 2010) 13 with Lord Myners, Member of the House, and then Financial Services Secretary to the Treasury, making explicit reference to 'black swan events' and the need for margin and capital requirements to ensure their mitigation.

of the 17th century, previous to which it was in the 'Old World', purely on the basis of past experience, assumed that all swans were white.[328] One single sighting therefore sufficed to invalidate a statement held to be certain on the basis of millions of sightings to support it.[329]

Taleb's Black Swan exhibits three defining characteristics:

(1) '[I]t is an *outlier*, as it lies outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility'; (2) '[I]t carries an extreme impact'; (3) Its occurrence is rationalised *ex post*, with explanations provided for it after the fact making it seemingly predictable with the benefit of hindsight.[330]

The immediate attractiveness of the metaphor is apparent in its applicability to real world market phenomena. For example, viewing the 2007 financial markets through the neoclassical lens of rational expectations theory, events for the vast majority of observers exhibited a similar quality of unimagined eventualities.[331] What is more, a further component of Taleb's contribution is that he directs attention to the relationship between states of normality and exception in approaches to uncertainty. Whilst the standard approach in economic and financial statistical conceptions of risk is to proceed from the assumption of normality, epitomised in the Gaussian ('normal') distribution, Taleb's approach, rather than relegating the extreme occurrences to ancillary aberrations, is to take them as the starting point of analysis because of the extreme impact these events carry if they do occur.[332]

Black Swans also illustrate the limitations of, for practical convenience, basing statistical models on historical data alone. The past in financial modelling is not always a reliable guide to the future. This is because this modelling approach implicitly presupposes relative stability of the parameters relevant to historical market data and will not reflect extreme structural discontinuities in the market, leading to potentially significant estimation errors and an extreme monetary impact.[333]

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[327] P Faulkner, A Feduzi and J Runde, 'Unknowns, Black Swans and the risk/uncertainty distinction' (n325) 1290 (fn 8); NN Taleb, *The Black Swan: The Impact of the Highly Improbable* (2nd edn, Random House 2010).

[328] NN Taleb, *The Black Swan: The Impact of the Highly Improbable* (n327) xii; J Runde, 'Dissecting the Black Swan' (n325) 493.

[329] NN Taleb, *The Black Swan: The Impact of the Highly Improbable* (n327) xxi.

[330] *Ibid* xxii.

[331] J Runde, 'Dissecting the Black Swan' (n325) 496.

[332] See, BM Mandelbrot and NN Taleb, 'Mild vs. Wild Randomness' (n309) 48.

[333] C Koehler, 'The Relationship between Complexity of Financial Derivatives and Systemic Risk' (n171) 15.

III. Fundamental Uncertainty Theories

The GFC did not only destabilise the financial system at a practical level, but also served as a catalyst in shaking up the dominant neoclassical framework, bringing economic approaches to the fore which had previously existed in the shadows of the latter.[334] The approaches sit in the mould of the pre-neoclassical early modern economic expositions of fundamental uncertainty.

Although the first, Knight was not the only economic thinker to emphasise a distinction between phenomena susceptible to probabilistic estimation and those falling into an entirely different category. Rather, several economic thinkers to various degrees carved out a role for a concept of true uncertainty in their work. This has been subsequently built on by economic schools of thought, which in part for this reason, in contrast to the dominant neoclassical school, are typically classed as *heterodox*.[335] Prominent amongst these was John Maynard Keynes.[336] Importantly, the centrality of the concept of uncertainty developed within it forms the basis for the heterodox strand of 'Post-Keynesianism' and the development of the concept of 'Keynesian uncertainty'.[337]

Some years after Knight and Keynes, Ludwig von Mises, a leading exponent of the Austrian school of economics, also introduced a very similar notion of uncertainty

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[334] The following will, for present purposes, disregard the significant inroads being made in questioning the neoclassical uncertainty paradigm and refining its models through the range of diverse approaches in the continuously developing fields of *behavioural* economics and finance more specifically. As an overarching theme, these approaches depart from the standard assumption of at all times fully *rational* economic agents: N Barberis and R Thaler, 'A Survey of Behavioral Finance' (n305) 1; The overarching goal is to instil a greater degree of empirical realism on the basis of cognitive science into standard theory and its conception of rationality: CF Camerer and G Loewenstein, 'Behavioral Economics: Past, Present, Future' in CF Camerer, G Loewenstein and M Rabin (eds), *Advances in Behavioral Economics* (Princeton University Press 2004) 3; See also, LE Blume and D Easeley, 'Rationality' (n297) 11285.

[335] See, T Lawson, *Reorienting Economics* (Routledge 2003) 6, who states: 'If the mainstream mathematising endeavour is so dominant that its contributors often take it to be the whole discipline, this is nevertheless a mistake. Though marginalised, there are (…) various highly productive heterodox traditions that pursue understanding in economics whilst rejecting the mainstream insistence on mathematical modelling models. Amongst the more prominent of the latter traditions we find, for example, Austrianism, (…) [and] post Keynesianism (…).' [insertion added].

[336] Illustrative is the following famous quote in which Keynes expands on the nature of uncertainty: JM Keynes, 'The General Theory of Employment' (1937) 51 The Quarterly Journal of Economics 209, 213-214: 'By "uncertain" knowledge (…) I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty; nor is the prospect of a Victory bond being drawn. Or, again, the expectation of life is only slightly uncertain. Even the weather is only moderately uncertain. The sense in which I am using the term is that in which a European war is uncertain, or the price of copper and the rate of interest twenty years hence (…) About these matters there is no scientific basis on which to form calculable probability whatever. We simply do not know.'.

[337] See eg, SC Dow, 'Addressing uncertainty in economics and the economy' (2015) 39 Cambridge Journal of Economics (2015) 33, 42.

different from risk under the heading of 'case probability'. Here, very broadly, the uniqueness of certain events makes probabilistic reasoning futile.[338]

A practical contemporary reboot of these antecedents is the formation in 2009 of the Institute for New Economic Thinking bringing together academics under the banner of working towards 'a new vision of the economy that aims to serve society'[339]. Of particular interest for present purposes is that one research programme is dedicated entirely to 'Knightian Uncertainty Economics', which has developed out of the more general 'Imperfect Knowledge Economics' approach and aims to revive the original Knightian distinction between risk and uncertainty.[340]

IV. The New Institutional Economics and its Implications for OTC Derivative Contracting

On the one hand, the renewed focus on a unique kind of uncertainty eluding mastery through purely stochastic modelling, brought home the need for financial modelling that integrates uncertainty and the occurrence of extreme outliers or black swan events, which have the ability to skew previous risk assessments and which is being implemented by continual advances, i.a, in uncertainty modelling[341] and scenario planning[342].

On the other hand, and the focus of the following, it crucially requires an appraisal of the role played by the law and legal institutions in addressing fundamental uncertainty of the kind described above. As regards this latter aspect, the New Institutional Economics ('NIE') provides valuable insights.

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[338] L von Mises, *Human Action: A Treatise On Economics* (Hodge 1949) 110: 'Case probability means: We know, with regard to a particular event, some of the factors which determine its outcome; but there are other determining factors about which we know nothing.'; And, *ibid* 113: 'Case probability is not open to any kind of numerical evaluation. What is commonly considered as such exhibits, when more closely scrutinized, a different character.'.

[339] See, Institute for New Economic Thinking, 'About'.

[340] See, Institute for New Economic Thinking, 'Knightian Uncertainty Economics (KUE)'.

[341] See, eg, N Firoozye and F Ariff, *Managing Uncertainty, Mitigating Risk: Tackling the Unknown in Financial Risk Assessment and Decision Making* (n147) 178 for some proposals of integrating uncertainty into existing financial risk models, eg, by allowing the quantitative probability and historic data focused approach to be supplemented with qualitative inputs.

[342] GM Hodgson, 'The great crash of 2008 and the reform of economics' (2009) 33 Cambridge Journal of Economics 1205, 1217.

As observed by Nobel Laureate and name-giver[343] to the New Institutional school of economic thought, Oliver Williamson, financial economics in its neoclassical variety is essentially noninstitutional in its theoretical approach.[344] More to the point, it is fundamentally 'a theory without law'.[345] Whilst, under this view, the existence of legal institutions themselves is of course not negated, they are not deemed to impact economic outcomes and as such can be readily ignored.[346] The microeconomic neoclassical paradigm is, in other words, effectively institutionally neutral.[347] Against this background, the in many respects diverse approaches subsumed under the NIE can be condensed into one very broad unifying statement; namely, that 'institutions matter'[348]. What is more, this analytical assertion becomes useful for the present analysis in combination with a more specific strand of NIE scholarship which encompasses a focus on fundamental forms of uncertainty. Specifically, NIE enables the integration of the discussed conceptions of uncertainty in the analysis, which differ from the neoclassical quantifiable risk paradigm of finance.[349] What is more, and centrally for present purposes, in this context it extends the scope of economic analysis to include the institutional framework within which economic and financial activity takes place. By doing so, it bridges the gap between economic and legal approaches to specifically include legal institutions, such as, for example, contracts that underpin economic activity.[350]As such, economics has grown increasingly cognisant of the significance of social institutions with the capacity of shaping real-world outcomes. This function is inherent in the concise definition proposed by Douglass C. North of

[343] OE Williamson, *Markets and Hierarchies* (The Free Press 1975) 1 ('A broadly based interest among economists in what might be referred to as the "new institutional economics" has developed in recent years').

[344] OE Williamson, 'Corporate Finance and Corporate Governance' (1988) 43 The Journal of Finance 567, 587.

[345] With regard to neoclassical economics generally, see S Grundmann, 'Privatrecht und (Institutionen-)Ökonomik' in S Grundmann, H-W Micklitz and M Renner (eds), *Privatrechtstheorie. Band I* (Mohr Siebeck) 171 ('Die neoklassische Ökonomik war eine Theorie ohne Recht').

[346] EG Furubotn and R Richter, *Institutions and Economic Theory* (2nd edn, The University of Michigan Press 2005) 12.

[347] *Ibid* 1-2.

[348] R Richter, 'The New Institutional Economics: Its Start, its Meaning, its Prospects' (2005) 6 European Business Organization Review 161, 163.

[349] See D Dequech, 'The new institutional economics and the theory of behaviour under uncertainty' (n296) 109-131.

[350] Describing law as the core institution ('Kerninstitution') of post-neoclassical economic strands of theory: S Grundmann, 'Privatrecht und (Institutionen-)Ökonomik' (n345) 171.

institutions, as 'the humanly devised constraints that shape human interaction'[351]. By way of a two-pronged distinction, these constraints may be divided into either the 'informal'[352] or 'formal'[353] category. While the former contains, among other things, 'sanctions, taboos, customs, traditions, and codes of conduct', the latter comprises constraints such as 'constitutions, laws, property rights'.[354] With these constraints comes a degree of predictability which is manifest in that '[i]nstitutions reduce uncertainty by providing a structure to everyday life'[355]. With regard to the latter category of formal legal institutions the original contribution performed by legal innovation is, as phrased by Alastair Hudson, that '[l]awyers create models, in the form of case law, statute and regulation, in an effort to lay a patina of order across the chaos and unpredictability of modern life'[356].

1. Informal Institutions and the Privatisation of Normative Control

As evident in the definition put forward by Douglass C. North, the institutional framework does not exclusively consist of state-based institutions of law and enforcement. Corresponding with this, at least as regards the implications, is the observation made by Avinash Dixit that 'conventional economic theory does not underestimate the importance of law; rather the problem is that it takes the existence of a well-functioning institution of state law for granted'[357]. In contrast, for example, socio-legal scholarship in the systems theory tradition has been at pains to illuminate that while legal certainty via the 'stabilisation of normative expectations'[358] is the core reserve of the legal system, this is not the exclusive domain of formal law in the mould of the rigid state-law nexus invoked in the legal centralist tradition.[359]

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[351] DC North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press 1990) 3; Furobotn and Richter provide a collation of further definitions, settling on the definition of 'a set of formal and informal rules, including their enforcement arrangements' for the purposes of their exposition on the 'New Institutional Economics': EG Furubotn and R Richter, *Institutions and Economic Theory* (n346) 6-7.

[352] In more detail, DC North, *Institutions, Institutional Change and Economic Performance* (n351) 36-45.

[353] *Ibid* 46-53.

[354] DC North, 'Institutions' (1991) 5 Journal of Economic Perspectives 97, 97.

[355] DC North, *Institutions, Institutional Change and Economic Performance* (n351) 3.

[356] A Hudson, 'The synthesis of public and private in finance law' in K Barker and D Jensen (eds), *Private Law: Key Encounters with Public Law* (Cambridge University Press 2013) 231.

[357] AK Dixit, *Lawlessness and Economics: Alternative Modes of Governance* (Princeton University Press 2004) 2.

[358] N Luhmann, *Das Recht der Gesellschaft* (Suhrkamp 1995) 138 [own translation].

[359] Such a challenge to legal centralism has been articulated by a range of groups including legal pluralists and culminates in its most extreme form in the complete separation of law and state within what has been

This latter theoretical assertion is borne out in a broad range of empirical studies homing in on the jurisgenerative capacity of different societal groups, both in the domestic but particularly in the transnational setting.[360] Examples of alternative institutional arrangements abound, which illustrate that compliance with obligations need not necessarily exclusively or in all cases be dependent on state recognition of these obligations, backed up by official enforcement mechanisms and the ultimate threat of compulsory enforcement. Rather, the *Leviathan'*s reach and hold over 'coercive social control'[361] is far from absolute, and its grip can loosen further still where the regulated subject matter transcends nation-state boundaries. Rather, in various settings reliance on state institutions for the support of private contractual commitments thus gives way to alternative informal normative systems with their respective avenues of enforcement.[362] A host of different mechanisms have been described which either supplement or even serve as functional equivalents to the state's public legal system. Their common point of departure is that the available (state) legal orders alone are deemed to no longer provide a conclusive and adequate regulatory framework, but only form part of a wider tool-box available to actors from which to craft workable solutions.[363] As a result, reliance on state institutions is to varying degrees supplemented or even supplanted by genuine forms of 'private ordering'[364], where in cumulation '[d]ifferent governance mechanisms, namely social norms, alternative dispute resolution and social sanctions, may eventually be bundled into effective private regimes'[365].

Depending on the disciplinary nuances of the accounts, this broader phenomenon of governance alternatives or supplements to those afforded via the centralised monopoly of the state and its legal system in the control and steering of social order, has also

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referred to as the 'privatisation of law model': T Sagy, 'What's So Private about Private Ordering' (2011) 45 Law & Society Review 923, 923-26.

[360] See, eg, for such an in-depth socio-legally grounded study of the privately generated, transnational law of the international maritime trade, A Maurer, *Lex Maritima: Grundzüge eines transnationalen Seehandelsrechts* (Mohr Siebeck 2012).

[361] T Sagy, 'What's So Private about Private Ordering' (n359) 923.

[362] G-P Calliess and others, 'Transformations of Commercial Law; New Forms of Legal Certainty for Globalized Exchange Processes?' in A Hurrelmann and others (eds), *Transforming the Golden-Age Nation State* (Palgrave Macmillan 2007) 84.

[363] G-P Calliess and P Zumbansen, *Rough Consensus and Running Code* (Hart Publishing 2010) 121.

[364] See, in detail, SL Schwarcz, 'Private Ordering' (2002) 97 Northwestern University Law Review 319.

[365] G-P Calliess and others, 'Transformations of Commercial Law; New Forms of Legal Certainty for Globalized Exchange Processes?' (n362) 84.

variously been analysed under the headings 'private regulation'[366], 'private governance'[367], or even 'private *law*making'[368].

The common thread linking these approaches together is that the formal law of the nation state is displaced as the sole determinative reference point. The state nexus remains strongest where the state legal system still provides the ultimate fallback and the expected outcome under its rules structures the private resolution process. In these cases, even when only a remote possibility, recourse to formal fora of dispute resolution serves to 'delimit threat positions' which in turn beneficially impacts private ordering.[369] As classically stated by Mnookin and Kornhauser, private ordering in this way takes place 'in the shadow' of (formal) law.[370]

When framed in terms of regulatory competition, disregard of formal law may be explained by its perceived inferiority by those falling under its ambit in favour of a more efficient, lower cost private or hybrid institutional alternative to organise and coordinate affairs.[371]

Maintaining a relatively strong connection to state law are empirical descriptions of the transactional practices by private communities in specialised industry sectors; i.e. cases of 'commercial private ordering'[372]. Although these fall into the formal ambit of state law, recourse to it constitutes something of a last resort at the end of an ultimately unsuccessful private attempt at resolution. For example, within law and society scholarship, Stewart Macaulay, in his seminal 1963 empirical inquiry, found that the American manufacturers he studied in their commercial dealings whenever possible did

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[366] See, eg: D Wielsch, 'Global Law's Toolbox: Private Regulation by Standards' (2012) 60 The American Journal of Comparative Law 1075-1104.

[367] Particularly in economic scholarship: See, eg, EP Stringham, *Private Governance: Creating Order in Economic and Social Life* (Oxford University Press 2015).

[368] DV Snyder, 'Private Lawmaking' (2003) 64 Ohio State Law Journal 371 [emphasis added].

[369] OE Williamson, *The Mechanisms of Governance* (Oxford University Press 1996) 10 (fn 6).

[370] In their seminal contribution the authors develop this metaphor using negotiations of American divorce agreements as a case study. Against this specific background, they introduce the more broadly applicable idea that contract negotiations, although occuring outside the formal setting of a courtroom with top down imposition of (family) law, nevertheless are influenced by the latter which provides a framework within which negotiation can take place: RH Mnookin and L Kornhauser, 'Bargaining in the Shadow of the Law: The Case of Divorce' (1979) 88 Yale Law Journal 950-997.

[371] On the idea of competition between public and private systems of regulatory control, specifically in the areas of contract law and dispute resolution, see, H Eidenmüller, 'Regulatory Competition in Contract Law and Dispute Resoluton' in H Eidenmüller (ed), *Regulatory Competion in Contract Law and Dispute Resolution* (CH Beck/Hart/Nomos 2013) 5-6 and the separate contributions in that volume, particularly with regard to the ISDA Master Agreement: H Collins 'Regulatory Competition in International Trade: Transnational Regulation through Standard Form Contracts' 121-141.

[372] SL Schwarcz, 'Private Ordering' (n364) 319-320 ('Nowhere is [private ordering's] expansion as prevalent as in the commercial, financial, and business sectors') [insertion added].

not rely on their contractual terms and formal contract law.[373] According to Macaulay, '[c]ommitments [were] to be honoured in almost all situations [and] one does not welsh on a deal'[374] or else be faced with the resulting relational and reputational sanctions and loss of future business.[375]

Further removed from instances involving some kind of recourse to state-sponsored institutions, are instances of specialist community norms providing the normative reference points. A classic, widely cited example is Robert C. Ellickson's field study of cattle herders in rural Shasta County, California.[376] Here, actors eschew the formal (i.e. state) legal system, including its prescriptions of liability, in structuring their interactions and settling their disputes. Rather, they favour recourse to informal norms ('social norms') relating to how they deal with specific community problems.[377]

At a larger operative scale, the national and international cotton industry has historically for the purchase and sale of cotton developed an elaborate system of specialised industry norms enforced through 'reputation-based nonlegal sanctions'[378]. Another example are the extra-legal contractual relationships formed in the close-knit membership of the New York Diamond Dealers Club, described by Lisa Bernstein towards the end of the 20th century in her law and economics grounded analysis.[379] Here, the diamond industry had 'systematically rejected state-created law'[380] in favour of an elaborate private governance regime. This regime consisted of intra-industry customary rules, rather than state law, which were validated not by potential recourse to public fora but through internal enforcement backed up by an arbitration mechanism[381],

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[373] S Macaulay, 'Non-Contractual Relations in Business: A Preliminary Study' (1963) 28 American Sociological Review 55-67; For example, manufacturers upon cancellation of an order would not enforce their position under the applicable law for breach of contract, which would have entitled them to damages for incurred expenses and expectation loss. Rather, they simply accepted the order cancellation. See, *ibid* 58.

[374] *Ibid* 63 [insertions added].

[375] *Ibid* 63-64.

[376] RC Ellickson, *Order without Law: How Neighbors Settle Disputes* (Harvard University Press 1991).

[377] *Ibid*.

[378] L Bernstein, 'Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, And Institutions' (2001) 99 Michigan Law Review 1724, 1749.

[379] L Bernstein, 'Opting out of the Legal System: Extralegal Contractual Relations in the Diamond Industry' (1992) 21 The Journal or Legal Studies 115.

[380] *Ibid*.

[381] Substantively, as described by Bernstein, the New York Diamond Dealers Club's (DCC) arbitration panel does not decide any dispute on the basis of New York law of contract and damages but rather draws on trade customs and usages. Some of these are codified in the bylaws, others, although uncodified, are generally accepted, whilst in complex cases with directly applicable norms not immediately evident, custom is supplemented with a mix of 'a little common sense, some Jewish law, and, last, common-law legal principles': L Bernstein, 'Opting out of the Legal System: Extralegal Contractual Relations in the

with the enforcement of its judgments premised on strong reputational bonds[382].[383] In addition, the diamond market's transition towards an 'information-intermediary regime'[384] ensured that reputational information could be disseminated quickly and cost-effectively within the increasingly heterogeneous industry.[385]

The realm of international finance also lends itself to the list of examples of transactions pre-dating the concept of a modern sovereign European nation state, which evade the purview of formal law, but ensure compliance with obligations through their grounding in various religious or ethnic societal norms and non-state institutions of enforcement. Although from a state-centric perspective these transactions can against this background only ever be informal (and give rise to concern as to compliance with regulatory provisions or even criminal law), they nevertheless cater to a real economic need and in this regard prove to be highly effective in practice. This includes, for example, the *hawala*[386] system of value transfer. Its roots trace back to long before the emergence of enforcement mechanisms associated with the territorial nation state and even before the European trade fairs or the arrival of Islam, namely to 'shared commercial techniques and instruments among various merchant communities reveal[ing] an intensely interactive social economic and cultural base that overrides the delimited space of political boundaries'[387]. *Hawala* remains pervasive today and despite its (often undifferentiated) association with anonymous illicit financial flows and nefarious

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Diamond Industry' (n379) 115, 126; The personal intertwinedness of the predominantly Jewish membership with the local Jewish community as well as structural connections of the DCC with community institutions of dispute settlement, such as rabbinical courts and the Jewish Court of Arbitration, has lead Tehila Sagy to develop the thesis that private ordering here is not so much the result of industry-specific economic efficiency considerations, but rather due to its embeddedness in a wider hierarchical community with its own historically grown legal culture: In detail, T Sagy, 'What's So Private about Private Ordering' (n359) 932-938.

[382] L Bernstein, 'Opting out of the Legal System: Extralegal Contractual Relations in the Diamond Industry' (n379) 115, 116.

[383] See also from a global perspective: BD Richman, 'Ethnic Networks, Extra-legal Certainty and Globalisation: Peering into the Diamond Industry' in V Gessner (ed), *Contractual Certainty in International Trade* (Hart Publishing 2009) 31-47.

[384] L Bernstein, 'Opting out of the Legal System: Extralegal Contractual Relations in the Diamond Industry' (n379) 116.

[385] *Ibid* 143-145.

[386] *Hawala*, as the Arabic term is commonly understood today, is at its most basic level a system of value transfer between two geographically distant locations relying on local money dealers or *hawaladars*. A customer wishing to transfer money pays a fee to a remittance agent who in turn contacts a local agent at the destined location with information and instructions as to the intended recipient, who in turn within 24 hours can collect the money from the local agent and in the respective local currency if required. See, EA Thompson, 'An Introduction to the Concept and Origins of Hawala' (2008) 10 Journal of the History of International Law 83, 96.

[387] *Ibid* 107.

misuse for money laundering and terrorism financing, it supports funding of rapid relief and development efforts in war-torn areas or is used by migrant workers to transfer income earned abroad to support their families in their respective home countries, thus serving as an effective functional equivalent to the – often not accessible – formal banking infrastructure.[388] While its roots predate Islam, *hawala* has become closely intertwined with the Islamic legal tradition and those involved in the hawala transfer feel bound by Islamic law.[389] In this sense, it conceptually ties in with typical informal institutional enforcement mechanisms. In other words, sanction in the case of misconduct involves loss of deposit but also reputation within the religious or ethnic community concerned due to the breach of trust and results in the loss of future dealings.[390]

2. *Formal Legal Institutions*

In contrast to the examples of largely domestic private ordering described above, there also exists a category of private regulatory regimes, which in commercial reality are purposefully constituted out of elaborate, legally enforceable contractual building blocks, as are legally constructed OTC derivatives.[391] As will be analysed below, these are particularly prevalent in commercial settings of a cross-border nature with a diverse range of market participants. In this manifestation of private regulation, commercial communities do not adopt a set of private rules as substitutes for state law. Rather than opting out of state legal systems, the private regulatory regime strategically avails itself of a governing national law that best suits its needs so as to be able to enlist the enforcement powers of the state.[392]

a) Insights from the Legal Theory of Finance

Beyond the micro-level of the individual transaction, the significance of law has been emphasised in relation to the financial systems as a whole. The 'Legal Theory of

[388] *Ibid* 83-84.
[389] P El-Samoudi, 'Kriminalität und Sicherheit im Lichte der Globalisierung' in T Mayer and others (eds), *Globalisierung im Fokus von Politik, Wirtschaft, Gesellschaft: Eine Bestandsaufnahme* (VS Verlag 2011) 140.
[390] *Ibid*.
[391] See, § 2.B.
[392] Namely, to ensure enforceability of contractual rights under the applicable law's judicial system: See, G Cordero-Moss, *International Commercial Contracts: Applicable Sources and Enforceability* (Cambridge University Press 2014) 25.

Finance' ('LTF') project is an interdisciplinary[393] approach to finance, the cumulative findings of which are presented in a paper by Katharina Pistor.[394] The theory is derived inductively from empirical insights drawn from observations collected in a series of case studies of real-world financial markets,[395] which flank her contribution in a special issue of the Journal of Comparative Economics.[396] At its core lies the realisation that 'law is essential to the very existence of contemporary finance'[397]. The source of a financial asset's value under this view resides in a valid and enforceable legal claim.[398]

As such, it is in some ways a legal counterpart of the NIE, where while law occupies a prominent position, the perspective remains rooted in economics. The economic perspective thus still reigns as the *primus inter pares* in the latter. In contrast, whilst also operating on the interface of law and (financial) economics, the LTF's analytical viewpoint is firmly grounded in law. It is not an economic theory of the law, but a genuinely legal theory of finance. Closely related to the LTF is a subsequent, broader approach which the authors present under the title of 'Legal Institutionalism', which reinforces the constitutive role of formal state backed law and legal institutions for economic activity.[399]

Analysing the interactions of law and financial markets and specifically the role law plays in financial market development and stability has already been the focus of a growing body of scholarly literature since the late 1990s. In general terms, this literature, drawing amongst other things on insights from institutional economics, premises that legal infrastructure plays a causal role in maintaining and developing the financial system and thereby fostering economic growth and development.[400] An important strand of this approach is the diverse research conducted under the broad

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[393] To name but a few contributors and their respective fields, these include contributions from the field of *law*: See, eg, K Pistor 'A Legal Theory of Finance' (n286); S Deakin, 'The legal theory of finance: Implications for methodology and empirical research' (2013) 41 Journal of Comparative Economics 338-342; As well as *economics*: See, eg, GM Hodgson, 'Observations on the legal theory of finance' (2013) 41 Journal of Comparative Economics 331-337; And also *sociology*: BG Carruthers, 'Diverging derivatives: Law, governance and modern financial markets' (2013) 41 Journal of Comparative Economics 386-400.

[394] K Pistor, 'A Legal Theory of Finance' (n286).

[395] *Ibid* 317.

[396] Cf the Special Issue: Law in Finance (2013) 41 (1) Journal of Comparative Economics 311-446.

[397] K Pistor, 'A Legal Theory of Finance' (n286) 325.

[398] *Ibid* 315.

[399] For an overview, see: S Deakin and others, 'Legal institutionalism: Capitalism and the Constitutive Role of Law' (n286) 188-200.

[400] See, eg: DW Arner, *Financial Stability, Economic, Growth, and the Role of Law* (Cambridge University Press 2007) 13-19 and 46-50.

heading of Law *and* Finance.[401] However, LTF goes further than these approaches in positing a conceptual framework premised above all else on emphasising the central and constitutive role played by law in this interrelationship.[402] Born out of a perceived neglect of non-neoclassical approaches in law and economics and by extension in regulatory policy,[403] LTF develops a frame where law is not merely a beneficial adjunct to finance, but rather is intrinsic to it in that law constructs finance.[404] According to Simon Deakin, this general finding can be broken down into two more specific related claims: Firstly, that it is possible to differentiate law from the economy.[405] Secondly, that law does in fact impact economic behaviour and outcomes.[406] Significantly, for present purposes, the paradigmatic case invoked for observing this phenomenon is in the emergence of the global OTC derivatives market.[407]

One of the key insights to be taken from the LTF and Legal Institutionalism is that, in contrast to the accounts of localised instances of commercial interaction effectively governed by informal institutions of private ordering or spontaneous generation of law detached from the state, it draws on existing economic scholarship to reinforce the significance of the nexus to state law and its institutions of enforcement as the structural prerequisite for (transnational) financial market scalability and operation.[408] During the past decades, the financial system has seen a structural transformation, marked by an increase in 'market-based finance' which consists of the use of developed securities

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[401] See, with regard to its evolution and Law and Finance's main point of distinction from the LTF, namely its treating law and finance as only 'related in a causal, unidirectional fashion, not as structurally intertwined'; K Pistor, 'A Legal Theory of Finance' (n286) 325-326; DW Arner, *Financial Stability, Economic, Growth, and the Role of Law* (n400) 46-50; Seminally, R La Porta and others, 'Law and Finance' (1998) 1096 Journal of Political Economy 1113-1155.

[402] K Pistor, 'Law *in* Finance' (n286) 314; Similarly, recently, in the context of private international law theory: H Muir Watt, 'Financial Governance Through Private International Law and the Global Political Economy' in H Muir Watt and others (eds), *Global Private International Law: Adjudication without Frontiers* (Edward Elgar 2019) 280 ('It is also important (…) [to] acknowledge the constitutive role of private (international) law [in financial markets]') [insertions added].

[403] S Deakin, 'The legal theory of finance: Implications for methodology and empirical research' (n393) 338; D Awrey, 'Toward a supply-side theory of financial innovation' (2013) 41 Journal of Comparative Economics' 401, 402.

[404] K Pistor, 'A Legal Theory of Finance' (n286) 317-318.

[405] S Deakin, 'The legal theory of finance: Implications for methodology and empirical research' (n393) 339.

[406] *Ibid*.

[407] K Pistor, 'A Legal Theory of Finance' (n286) 318; See, in this regard, the case studies conducted by Dan Awrey and Bruce G Carruthers: D Awrey, 'Toward a supply-side theory of financial innovation' (n403) 401-419; BG Carruthers, 'Diverging derivatives: Law, governance and modern financial markets' (n393).

[408] S Deakin and others, 'Legal institutionalism: Capitalism and the Constitutive Role of Law' (n286) 190 with further references.

markets for financing relative to the more traditional institutionally 'intermediated' bank financing.[409] Besides raising regulatory concerns regarding the migration of systemic risk from the bank to the market domain[410], this places an emphasis on the essential role of law in making the modern, globally interconnected financial system work. Specifically, as LTF contends, this occurs by lending credibility to contractual commitments concluded in a environment of heterogeneous largely anonymous 'arms-length'[411] market settings, insofar as they are in accordance with and thus enforceable under the applicable law.[412]

b) *Pacta sunt Servanda* as the Principal Uncertainty Mitigating Mechanism

As already noted above, the uncertainty reducing function performed by formal and informal institutions has been a particular focus of the NIE.

A key strand emphasises the economic uncertainty reducing function performed by formal, legal institutions, including horizontally between individuals through legal contracts in the realm of private law. In this context, the basic mechanism of fundamental uncertainty mitigation by means of the legal principle of *pacta sunt servanda* has been emphasised by eminent scholar of the NIE, Rudolf Richter.[413] The mechanism by which this is realised is in simple terms illustrated by economist David Dequech: Contracts do – of course – generally not make an exogenous real world outcome as such more knowable.[414] However, contracts provide a normative basis for parties' expectations: Namely that, regardless of any actual real-world outcome, the economic variables they contractually make reference to will in fact economically materialise as stipulated in the contract.[415] As such, parties, rather than continuously having to adapt to new information, can rely on their mutual commitments and orient

[409] For elaboration on the driving factors and with further references: J Armour and others, 'Introduction' in J Armour and others (eds), *Principles of Financial Regulation* (Oxford University Press 2016) 4-6.

[410] *Ibid*; The significance of legal contracts to systemic risk has been highlighted through the lens of financial system stability regarding the dangers caused by 'domino effects through contractual relations': AR Admati and MF Hellwig, *Comments to the UK Independent Commission on Banking* (4 July 2011, revised 6 July 2011) 14.

[411] K Pistor, 'A Legal Theory of Finance' (n286) 325.

[412] K Pistor, 'Law *in* Finance' (n286) 311; K Pistor, 'A Legal Theory of Finance' (n286) 325.

[413] R Richter, 'Efficiency of Institutions: From the Perspective of New Institutional Economics With Emphasis on Knightian Uncertainty' in WA Kaal, M Schmidt and A Schwartze (eds), *Festschrift zu Ehren von Christian Kirchner: Recht im ökonomischen Kontext* (Mohr Siebeck 2014) 1289; In fact, Richter places the function of legal institutions at the heart of Institutional Economic analysis, which he conceives as having at its core an analysis of responses to true uncertainty in the Knightian sense: R Richter, *Essays on New Institutional Economics* (Springer International 2015) v.

[414] D Dequech, 'Fundamental Uncertainty and Ambiguity' (2000) 26 Eastern Economic Journal 41, 53.

[415] See, *ibid* 53-54.

their behaviour accordingly. Conceived in this way, a contract acts as an 'island of certainty'[416] in an uncertain future for commercial parties.[417] This function is embodied in the general legal rule of the binding force of contract, the fundamental legal principle of *pacta sunt servanda*, or the *sanctity of contracts* in its English expression.[418] The principle is, in some iteration, today accepted in all commercially relevant national legal systems. This is particularly evident in the Civilian tradition with the general principle contained in various European national private law codifications.[419] Broadening the jurisdictional perspective, Islamic jurisdictions in which to varying extents the body of Islamic religious law – the *Shari'ah* – is incorporated into secular commercial law,[420] also recognise the general principle of the binding nature of contractual obligations.[421]

V. The Legal Engineering of Financial Exposure

Tying the financial risk and legal perspectives together, the practical significance of law can thus be identified at the micro-level of an individual derivative transaction. As stated by *Nassim Taleb*, '[r]isk management is less about understanding random events

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[416] D Philippe, '"Pacta sunt servanda" et "rebus sic stantibus" in *L'apport de la jurisprudence arbitrale: Séminaire des 7 et 8 avril 1986* (ICC Publishing 1986) 183 ('un îlot de sécurité face aux realites mouvantes de l'avenir') (cited in F Dasser, *Internationale Schiedsgerichte und lex mercatoria* (Schulthess 1989) 111).

[417] German jurist Josef Kohler eloquently encapsulated this notion from the legal perspective more than a century ago when writing on the foundations of the law of obligations. As stated by Kohler, 'obligatory relations bring the future to the aid of the present. Just as they ignore distance (…) they bridge over time, and press what the future has to bring into the service of the present.' Kohler expands on this by stating that, '[a] great variety of values lie in the future, and for the time being, do not exist in the present: time is the stepmother of humanity: it suppresses values that deserve full recognition and application. And, in this contingency, it is the province of the law of obligations to draw the future into the present': J Kohler, *Philosophy of Law* (A Albrecht tr, The Macmillan Company 1921) 135.

[418] Seminally, DH Parry, *The Sanctity of Contracts in English Law* (Stevens and Sons 1959).

[419] On the long historical genesis of *pacta sunt servanda* from its Roman roots, over the transformation from formalism to consensualism in the enforcement of *pacta* under canon law, towards its final elevation to a fundamental principle within the Civilian tradition: R Hyland, 'Pacta Sunt Servanda: A Meditation' (1994) 34 Virginia Journal of International Law 405, 405-433; Paradigmatic examples of its hold on Civilian private law are, eg, article 1103 of the French *Code civil* which affords legally formed contracts the binding force of law amongst those who concluded them ('*Les contrats légalement formés tiennent lieu de loi à ceux qui les ont faits'*) or, similarly, article 1372 of the Italian *Codice civile* ('*Il contratto ha forza di legge tra le parti'*).

[420] See, PR Wood, *Maps of World Financial Law* (Sweet & Maxwell 2008) 37, 53 who identifies hybrids, such as the Napoleonic-Islamic jurisdictions, where Napoleonic commercial law to varying degrees gives way to shari'a principles, eg most significantly in a financial context the prohibition on interest-bearing assets.

[421] Although the exact derivation varies. See, eg, in more detail, L Rosen, *Islam and the Rule of Justice: Image and Reality in Muslim Law and Culture* (The University of Chicago Press 2018) 66; Noting the principle's religious basis: H Wehberg, 'Pacta Sunt Servanda' (1959) 53 American Journal of International Law 775, 775.

as much as what they can do to us'[422]. This statement evidences Taleb's fundamental distinction between a given variable (x) and individual *exposure* (f(x)) to that variable (i.e., $x \neq f(x)$),[423] against the background of their – as he notes – common conflation by non-practitioners.[424] To use an analogy, it may of course be useful to analyse rainfall patterns with a view to predicting future rainfall probabilities. However, with a margin for error always remaining, resources may at first be better spent in constructing a waterproof roof.

A basic vanilla stock option serves as a case in point: The stock option holder when looking at the stock ticker is not concerned with stock movements *per se*, but rather its exposure to any market movements as relayed via the option.[425] This exposure, however, is to a large extent the result of the particular legal design of the option contract and can be modified through the design of various contractual rights and obligations.

It is at this point that the legal professional takes on the role of 'risk manager' by making use of the legal toolbox at its disposal, including particular contracting strategies, to legally structure financial risk exposure to fit a client's needs.[426] A legal contract as a formal institution in finance generally and in the derivatives context specifically, thus has the capacity to shape the individual contractual payoff generated by real-world uncertainty.[427] Importantly, regardless of whether the most improbable or even *ex-ante* completely unpredictable scenario does in fact unfold, a contract may provide a limit to what one party owes the other, capping the maximum payoff. This could be realised, for example, by including a termination option in a swap contract for a counterparty.

Thus, from a practical perspective, actual exposure and the contractual design of the derivative instrument used to modulate it to design a specific payoff to counterparties is

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[422] NN Taleb, *The Technical Incerto, Vol 2: Convexity, Risk and Fragility* (2018) 33. The Technical Incerto is a mathematical parallel version to Taleb's multivolume *Incerto* collection.

[423] *Ibid* 31.

[424] *Ibid* 32.

[425] See, *ibid* 30.

[426] Within the legal academy, this particular function of the legal professional has been stated most clearly by Alastair Hudson. See, eg: A Hudson, *The Law on Financial Derivatives* (n2) para 6.03 ('[A] lawyer dealing with derivatives transactions is in truth a species of risk manager in that such a lawyer will be advising on ways of managing commercial risks by using legal concepts and will also be advising on risks posed by the law itself').

[427] See NN Taleb, *The Technical Incerto, Vol 2: Convexity, Risk and Fragility* (n422) 30 ('When you use the services of a lawyer for a contract, you are working on limiting or constructing your exposure, where your risk and liablility start and end').

of greater practical importance than the exact stochastic qualities of the underlying risk. Tying the discussion back to the core uses of derivatives, the contractual design of a particular transaction can thus both increase exposure to a wanted risk (for example, by speculating on a particular market risk by including a leverage provision) or mitigate the impact of unwanted risk, by contractually reducing exposure to it (via a hedging transaction). When shifting the perspective to exposure as the relevant category in risk and uncertainty management, it becomes clear that – viewed purely through the economic lens – a firm wishing to contractually modulate its exposure so as not to be exposed to, for example, price volatility in extreme ranges, in achieving this result, does not have to be concerned with whether in fact in the real-world 'randomness is risk or uncertainty'[428].[429]

C. Legal Risk as the Flip Side of the Legal Construction of Derivatives

The capability to control at least the impact of financial risk by modulating exposure by legal means as required, in the sense described above, finds its limits, where the contracts employed for this purpose do not function in the way intended – or, in other words – where uncertainty spills over to the legal sphere. This is because legal modulation of exposure effectively transforms the problem of economic uncertainty and its attendant costs into one of legal uncertainty. As put by Schuyler K. Henderson, '[w]hile one of the principal uses of derivatives has been the reduction of [financial] risk, legal uncertainty was itself an underlying risk factor in the derivatives market. It unfortunately cannot be modelled or priced, such as those risks which are managed through derivatives.'[430] The pervasive presence of uncertainty, including also its fundamental form and the various 'unknown unknowns'[431] the future holds in store is thus not eliminated, as if by some miraculous interdisciplinary sleight of hand, but of course also affects a contract drafter seeking to address potential future

[428] CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (n8) 28.
[429] *Ibid*.
[430] SK Henderson, *Henderson on Derivatives* (n1) 23 [insertion added].
[431] The term 'unknown unknowns' was coined by former US Secretary of Defence Donald Rumsfeld to describe the 'things we do not know we don't know': See, D Rumsfeld, 'Press Conference by US Secretary of Defence, Donald Rumsfeld'. The term has come to describe those events which are so singular and unprecedented as to be in any way anticipated. One example would be a breakthrough technological development such as the invention of the internet with its far ranging consequences on all areas of society.

contingencies.[432] By legally constructing financial instruments and a desired exposure, however, the range of future outcomes is legally constrained, but real-world uncertainty is thus 'displaced to a different level'[433].[434] As illustratively surmised by Bruce G. Carruthers, '[u]ncertainty about currency values or interest rates bec[omes] uncertainty about law'[435].

I. The Regulatory Perspective: Legal Risk as a Component of Operational Risk

The established regulatory category in this regard is that of 'operational risk.' From its inception, operational risk has been notoriously difficult to define clearly.[436] It became institutionalised as a formal risk category in banking regulation, at a time when widely publicised scandals such as the sensational collapse of England's oldest merchant bank, *Barings*, had drawn attention to the significance of risks other than those of a purely financial nature to the wellbeing of financial institutions.[437] Importantly, for present purposes, these were risks not inherent in the instrument itself, but in the institutional operational framework within which they were employed.[438] Against this background, whereas the original Basel Accord of 1988 had defined capital requirements without any reference to the category of operational risk, 'Basel II' introduced the requirement for capital to be held by regulated entities against losses from crystallisation of operational risk. This was due in part also to the growing realisation that increasing use of financial innovation aimed at reducing credit and market risk, as well as techniques

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[432] On the implications on contract design under what has become known under the rubric of Incomplete Contract Theory, see Chapter 2 § 1.C.II.

[433] BG Carruthers, 'Economy and Law' (n15)141.

[434] With the legal doctrinal toolbox having different tools available for addressing Knightian uncertainty: See, eg, R Richter, 'A short Note on "Ordoliberalism: A German Oddity"' (2018) 19 European Business Organization Law Review 677, 677 ('"pacta sunt servanda" (…) takes Knightian uncertainty into account with excuses like impossibility, impracticability and frustration of purposes'); Similarly, R Richter, 'Efficiency of Institutions: From the Perspective of New Institutional Economics With Emphasis on Knightian Uncertainty' (n413) 1289.

[435] BG Carruthers, 'Economy and Law' (n15)141.

[436] BCBS, *Operational Risk Management* (September 1998) 3; C Goodhart, 'Operational Risk' (2001) 1 Special Paper 131, Financial Markets Group.

[437] M Power, *The Invention of Operational Risk*, Centre for Analysis of Risk and Regulation, Discussion Paper No 16 (June 2003) 2-3; *Barings* failed due to losses caused by the failed and until the end undetected fraudulent exchange-traded derivative trading strategy of rogue trader Nick Leeson: See, M Nicholls, 'Singapore Sting – Barings' in *Modern Risk Management* (Risk Books 2003) 527; In detail, see also, LJ Jacque, *Global Derivatives Debacles* (World Scientific 2010) 143-196.

[438] Ie, structural failures of management and internal supervision of derivative positions: See, eg, the contents of 'Leeson's Seven Lessons': LJ Jacque, *Global Derivatives Debacles* (World Scientific 2010) 174-176.

aimed at optimising exposures such as netting arrangements[439], in turn created increased levels of operational risk as a kind of side effect.[440]

Operational risk in the banking supervisory sense has, under the current definition, been defined as: '[T]he risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition *includes legal risk*, but excludes strategic and reputational risk'[441]. The identical definition was employed within the reformed Basel III framework which was devised in response to the global financial crisis.[442] It has also substantively been transposed into European Union legislation via the Capital Requirements Directive ('CRD')[443] and the Capital Requirements Regulation ('CRR')[444].[445]

II. The Transactional Perspective: What is Legal Risk?

Legal risk may also be analysed more directly via a bottom-up perspective at the level of an individual financial transaction concluded between two counterparties. Here, the concern is not to measure and retain funds against legal risk in compliance with supervisory obligations. Rather, recognising that financial contracts such as derivatives are at their core '"creatures" of law'[446] and configured as legal contracts as much as they are priceable cash-flows, the goal is to proactively shape contractual practice in such a way as to minimise legal risk's detrimental impact on the contract's commercial objective. As a term, legal risk first originated in economic considerations of financial practice and related publications.[447] In the broadest of terms, in transactional practice it

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[439] See, on the operation of close-out netting, Chapter 2 § 3.C.III.1.

[440] BCBS, *Sound Practices for the Management and Supervision of Operational Risk* (February 2003) 1.

[441] See, eg BCBS, *International Convergence of Capital Measurement and Capital Standards* (June 2006) 144 [emphasis added; footnote omitted].

[442] See, BCBS, *Basel III: Finalising post-crisis reforms* (December 2017) 128.

[443] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC [2013] OJ L 176/338.

[444] Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 [2013] OJ L 176/1.

[445] Article 3(1)(48) of Directive 2013/36/EU of the CRD refers to the definition of operational risk provided under point (52) of article 4(1) of the CRR: Here, under the current version '"operational risk" means the risk of loss resulting form inadequate or failed internal processes, people and systems or from external events, including, but not limited to, legal risk, model risk or information and communication technology (ICT) risk, but excluding strategic and reputational risk'.

[446] R McCormick and C Stears, *Legal Risk and Conduct Risk in the Financial Markets* (n280) para 1.01.

[447] Noting this provenance of the term, G Reiner, *Derivative Finanzinstrumente im Recht* (Nomos 2002) 44; Group of Thirty, Global Derivatives Study Group, *Derivatives: Practice and Principles* (n39) 48-49.

refers to 'the risk of loss because a contract cannot be enforced'[448]. As a concept, legal risk is naturally somewhat alien to legal discourse. This is because the various operations of the legal system, including, for example, the enactment of subject-matter legislation and its subsequent juridical interpretation are in the legal sphere not conceived as risk-generating with regard to the particular transaction within its scope, but rather as the core preserve of legislative, juridical and also academic practice.[449] Reference to legal risk thus necessarily requires adopting an extra-juridical, i.e. external and economically-oriented perspective, in evaluating legal arrangements against a particular commercial goal. In contrast with the intra-juridical perspective, the fact that OTC derivatives are configured as legal contracts under this functional perspective means that the operations of the legal system are treated as an economic risk factor in and of themselves. The disruptive potential attributed to law and the legal configuration of financial instruments with regard to a specified economic purpose thus crystallises in the definition of legal risk as 'the risk that a bank's products, services and operations do not achieve from a legal perspective what they were intended to achieve and were priced for'[450]. In this sense, law in some way frustrates the counterparties' intended allocation of financial risk by contractual means. Legal risk, under this conception, is not too dissimilar to credit risk in that it also constitutes an unwelcome flip side, which parties must, however, necessarily incur as trade-off, in the case of legal risk for configuring their financial instrument in the form of a legal contract.[451] In Anglo-American legal treatments of the subject in particular, legal risk has long become an established and practically useful analytical category, also within legal scholarship.[452] From a genuinely legal perspective, legal risk has been referred to as 'a broad, imprecise concept used to describe the possibility of loss arising from unenforceable

[448] Including 'risks arising from insufficient documentation, insufficient capacity or authority of a counterparty (ultra vires), uncertain legality and unenforceability in bankruptcy or insolvency': Group of Thirty, *Derivatives: Practice and Principles* (1993) 48-49.

[449] From a German perspective: F Fuchs, *Close-Out Netting, Collateral und systemisches Risiko: Rechtsansätze zur Minderung der Systemgefahr im außerbörslichen Derivatehandel* (Mohr Siebeck 2013) 22.

[450] H Trust and R Harris, 'Trends in Legal Risk' (1997) 12 Butterworths Journal of International Banking and Financial Law 291, 291.

[451] See, S James, *The Law of Derivatives* (n157) 15 ('In entering into a derivatives contract, legal risk will usually be an unwelcome additional risk on top of the underlying risks the parties are seeking to address').

[452] See, eg: RM McLaughlin, *Over-The-Counter Derivative Products: A Guide to Buiness and Legal Risk Management and Documentation* (n240) 149-164; S James, *The Law of Derivatives* (n157) 15-20; The subject has even received an in-depth monographic treatment: See, in its newest edition, R McCormick and C Stears, *Legal Risk and Conduct Risk in the Financial Markets* (n280).

contract terms and from other exposure to loss, liability or sanction by reason of the application of laws, regulations or their interpretation'[453]. In purely practical terms, the flip side of being contracts facilitated by law, therefore, is that derivatives are also subject to mandatory normative constraints imposed by a legal environment consisting of all areas of law, including those which are not usually conceptualised in terms of financial regulation.[454]

III. Legal Risk as Constitutional Uncertainty at the Transnational Market Level

The difficulty associated with legal 'risk', or more specifically the uncertainty component that gives rise to it, is that it is of a distinctly different nature to financial risk categories. This is because it does already *ex-ante* not lend itself to the methodology of mathematical quantification under existing models.[455] Legal risk, therefore, by its very nature does not constitute risk in the sense of an event that is probabilistically quantifiable, but rather is fundamentally uncertain. As such, the strategies for managing legal risk are also fundamentally different from those regarding their financial counterparts. Rather than largely quantitative, these are qualitative in nature and entail, i.a., initial assessment of legal risk in the form of expert legal opinions.[456]

What is more, as will be shown in the further course of this thesis, this does not only encompass pro-actively drafting and adapting contracts to conform to the particular state legal order under which these contracts are intended to take effect, but also – significantly – reducing any divergence by moulding state legal systems to facilitate the particular (financial) risk management strategies contained within the contracts.[457]

The most clearcut case of the crystallisation of legal risk is the invalidation of a transaction. In the early days of the OTC derivatives market, the legal doctrine of *ultra vires* reared its head in the *Hazell* litigation, culminating in the House of Lords decision

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[453] SK Henderson, *Henderson on Derivatives* (n1) para 10.1.

[454] There are some notable exceptions: To name one example, Alastair Hudson explicitly frames and analyses the capacity of substantive norms of English private law as a regulatory mechanism: A Hudson, 'The Regulatory Aspect of English Law in Derivatives Markets' in A Hudson (ed), *Modern Financial Techniques, Derivatives and Law* (n283) 69-118.

[455] See, eg, SK Henderson, *Henderson on Derivatives* (n1) 23; See also, R McCormick, 'Legal risk, law and justice in a globalising financial market' (2007) 1 Law and Financial Markets Review 283, 290 ('[A]t both the micro and macro level, risk of this kind does not follow a predictable pattern').

[456] See, eg, § 7.C.VI.4 regarding the legal opinions centrally commissioned by ISDA.

[457] As paradigmatically illustrated in the case of the near universal recognition of close-out netting clauses, discussed in Chapter 2 § 3.C.III.2.

in *Hazell v Hammersmith and Fulham London Borough Council*[458], where the House of Lords ultimately held that it was not within the power of a local authority to enter into swap transactions,[459] in what has been described as 'the first cause célèbre of legal risk in the London financial markets'[460] and is to this day 'still (…) often cited as the epitome of legal risk'[461].[462] Local authority *ultra vires* cases and the alleged lack of contractual capacity to enter into OTC derivative transactions in the first place, in fact, continue to be a staple feature of the cross-border derivatives markets.[463]

Uncertainty is compounded where a transaction takes effect not in a purely domestic territorial setting, but operates at and is embedded in a cross-border or genuinely transnational setting and is as such potentially open to a multitude of regimes of law and regulation each vying for jurisdiction. This particular form of uncertainty has through an institutional economic lense been termed 'constitutional uncertainty'[464], which, in light of the existing landscape of a multitude of legally heterogeneous territorial nation states and in the foreseeable absence of a world state will continue to be a persistent feature of cross-border commerce and finance.[465]

Significantly, since the early days of the swaps market, with the growing interconnectedness of OTC derivatives market participants at the transnational level, *inter partes* legal risk at the micro-level of the transaction as detailed above, has – where the transaction is merely a link in a broader chain of standardised transactions hedging and re-hedging financial risk across a range of jurisdictions – morphed into a form of macro-legal risk, as will be analysed in greater detail under the heading of *transnational legal basis risk* under § 7.D.IV.2.

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[458] [1992] 2 AC 1 (HL).

[459] [1992] 2 AC 37 (HL).

[460] R McCormick and C Stears, *Legal Risk and Conduct Risk in the Financial Markets* (n280) para 20.16.

[461] J Braithwaite, 'Thirty Years of Ultra Vires: Local Authorities, National Courts and Global Derivatives Markets' (2018) 71 Current Legal Problems 369, 386.

[462] For an insightful overview of the background and course of the litigation from the Divisional Court to the House of Lords and its immediate impact: *ibid* 376-389.

[463] Joanne Braithwaite gives a concise overview of the 'second wave' of international *ultra vires* cases concerning local authorities to be brought before the English courts. Though the litigants were foreign nationals, these cases touched down in the English courts by way of the English choice of law and jurisdiction clause embedded in the International Swaps and Derivatives Asssociation's standard documentation to which these counterparties had availed themselves when entering into an ISDA Master Agreement: *ibid* 389-391.

[464] Recently: H-J Schmidt-Trenz, *Institutionenökonomik: Theorie der Governance* (Franz Vahlen 2023) 143 ('konstitutionelle Unsicherheit'), which can be expressed in the two fundamental questions of 'which law governs in the case of cross-border transactions?' and 'how is this law, if necessary, enforced?', *ibid* [own translation].

[465] *Ibid* 141-142.

D. Evaluation: Commodification of Financial Risk and Structural Interdependency of Risk Categories

As shown above, in the context of derivative transactions, financial risk in itself becomes a tradable commodity.[466] As illustrated, essential to this process of financial risk commodification, however, is the legal construction of financial instruments with the transformation of economic into legal uncertainty it entails. This emphasises the necessity of a comprehensive view of risk. A typical textbook approach to (financial) risk categories is to individually list the individual risk categories and their respective methodologies of quantification.[467] The textbook approach was, at least until the GFC, also pervasive at the level of financial groups. Here, it had traditionally been widespread standard practice to identify and measure risk categories individually as well as operationally manage these separately within business lines.[468] From a regulatory perspective, this was recognised as deficient following a review of the risk identification and management methodologies in financial conglomerates[469] conducted by the Joint Forum of the Basel Committee, consisting of the International Organization of Securities Commissions ('IOSCO') and the International Association of Insurance Supervisors ('IAIS').[470] The report defines this historically prevalent approach as the 'silo approach' to risk management, where individual risk categories (such as credit and market risk) are grouped separately and then each individually quantified using distinct

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[466] Dick Bryan and Michael Rafferty even place this 'commodification of risk' through financial derivatives transactions at the 'centre of the capitalist economy': D Bryan and M Rafferty, *Capitalism with Derivatives: A Political Economy of Financial Derivatives, Capital and Class* (Palgrave Macmillan 2006) 8; Or as Jakob Arnoldi sums up, '[c]apitalism has always been about taking risks by speculating on the future. (…) Now, the risk no longer consists in speculating in the future developments of a given asset that has been invested in. The risk of speculating in the asset has itself become an asset for investment.': J Arnoldi, 'Derivatives: Virtual Values and Real Risks' (2004) 21 Theory, Culture & Society 23, 39; See also, generally, J Vogl, *The Ascendancy of Finance* (Simon Garnett tr, Polity Press 2017) 165 ('Financial economic power is geared towards transforming future wealth into present-day profit, and towards capitalizing unpredictable futures').

[467] In similar terms already A Oehler and M Unser, *Finanzwirtschaftliches Risikomanagement* (n324) 405 criticising that in stark contrast to the intrinsic 'close interrelationship of market and credit risks (...) within practice-oriented as well as theoretical approaches, the independence of both [market and credit risk] categories is routinely assumed at the levels of analysis and control' [own translation, insertion added].

[468] See BCBS, The Joint Forum, *Cross-sectoral review of group-wide identification and management of risk concentrations* (April 2008) 3.

[469] In the report used to denote those groups who through their individual entities are 'active in two or more of the banking, securities and insurance sectors', see, *ibid* Abstract.

[470] *Ibid*.

methodologies within these separate vertical silos.[471] However, the report identifies the necessity of considering 'second order effects'[472] in order to arrive at a more comprehensive approach to risk concentration identification.[473] These second order effects are defined by the report as external 'indirect effects to a firm's exposure(s) caused by a change in economic or financial market conditions, from a shock or a change in policy.'[474] Importantly, for present purposes, such second order effects are explicitly identified as being able to take place in the form of 'contagion' between individual risk categories.[475] Whilst the textbook approach may thus be adequate for illustrative purposes, it carries the danger of masking that in commercial reality these categories in fact do not exist in isolation from each other. Rather, there are significant correlation effects across risk categories.

OTC derivatives are a prime exponent of the interrelationship of the *market* and *credit risk* categories. By entering into the transaction, the range of market risk categories effectively get transformed into credit risk exposure between counterparties engaging in these transactions under the conceptual mantle of *risk transfer*.[476] What is more, where counterparties choose to mitigate this credit risk exposure by posting collateral, the credit risk is effectively transformed into market risk in the posted collateral.[477] This is because where the value of posted collateral is subject to market volatility[478] and decreases during the transaction's lifetime, this creates a mismatch between credit risk exposure and the collateral value, resulting in open counterparty credit risk exposure up to the adjustment of posted collateral.[479]

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[471] *Ibid* 5.
[472] *Ibid* 4.
[473] *Ibid*.
[474] *Ibid.*
[475] *Ibid*; As one example of such an effect the report details the interplay of market and liquidity risk. If, for example, due to an external shock, certain assets sharply depreciate in value, this is primarily a crystallisation of *market risk*. In the immediate aftermath, there may not exist an active trading market for these assets so that liquidation is not immediately possible. This is generally referred to as (market) liquidity risk, *ibid* 8.
[476] *Ibid* 12.
[477] D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (n191) 510.
[478] According to market data, the most common form of regulatorily mandated collateral for derivatives transactions not subject to mandatory central clearing ('non-cleared derivatives') are government securities such as, eg, sovereign bonds. For collateral posted at the discretion of counterparties, ie outside the scope of a regulatory mandate, cash is preferred. See, ISDA, *ISDA Margin Survey Year-End 2018* (April 2019) 8; Both sovereign bonds as well as cash are subject to market volatility. In the latter case, this is due to fluctuations of the collateral currency value in relation to other currencies: D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (n191) 522 (fn 122).
[479] In detail, *ibid* 510-511.

Nevertheless, for all the renewed focus on the interdependence of risk categories, the particular role of legal risk has led a rather shadowy existence in these discussions. Having already laid out the practical and theoretical significance of conceptions of risk and uncertainty, this thesis will take the structural interdependency of financial and non-financial risk categories as its starting point to focus in the following on the particular strategies with which the legal or 'constitutional uncertainty'[480] inherent in cross-border OTC derivative contracting can be mitigated. Namely, the following will analyse the legal uncertainty mitigating efforts at the transnational market level, spearheaded by ISDA, and the implications this has had for an understanding of financial law in this distinct area of finance. In order to do so, this necessitates a preliminary understanding of the evolution of the OTC derivatives market and the particular structure defining it as a result.

§ 6 The Evolution and Structure of the OTC Derivatives Market

As noted by Roy Goode, neither is the word 'market' a term of art, nor does it have a fixed legal meaning.[481] Generally speaking, financial markets exist to bring together buyers and sellers looking to trade a specific kind of market product, a financial instrument, such as a certain type of derivative amongst many others.[482] A further general way of classifying these derivatives, regardless of the specific asset classes they cover or the particular form they take, is then by reference to where and how that trade takes place. After differentiating the two primary derivatives trading venues, the following will analyse the evolution and particular resulting structural characteristics of the OTC derivatives market.

A. Over-the-Counter Versus Exchange Trading

As touched upon in the Introduction, derivative financial instruments can be divided into two categories by virtue of the venue upon which trades are executed; namely, derivatives traded on an official exchange (i.e. the exchange-traded derivatives market) and bilateral over-the-counter trading (i.e. the 'OTC' or 'off-exchange'[483] derivatives

[480] H-J Schmidt-Trenz, *Institutionenökonomik: Theorie der Governance* (n464) 143.
[481] R Goode, 'The Concept and Implications of Market in Commerical Law' 24 Israel Law Review (1990) 185, 186.
[482] J Armour and others, 'Market Structure' in J Armour and others (eds), *Principles of Financial Regulation* (Oxford University Press 2016) 143.
[483] NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 678.

market).[484] Both, in principle, deal in and have to contend with the same taxonomy of risks inherent to the financial system, detailed under § 3.B. However, owing to their diverging structure, both have respectively developed and employed unique legal strategies of managing them, which – by extension – creates unique challenges to the effective management of legal risk and uncertainty.

It bears note that, in the immediate aftermath of the GFC, international political consensus mandated the application of a number of structural measures characteristic to the exchange-market to OTC derivative trading. The Group of Twenty ('G20') already formulated the regulatory trajectory in 2009, under the heading of '[i]mproving over-the-counter derivatives markets', stating that '[a]ll standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties (…). OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements.'[485] In combination, these regulatory reforms as well as technological advancement have in the intervening years resulted in a considerable degree of convergence and resemblance between the two historically and in a traditional sense conceptually distinct trading venues.[486]

Nevertheless, as detailed under § 6.A.II, there remains a genuine need for bilaterally cleared OTC derivatives and thus a residual space for the traditional dualism of trading venues and broad exercise of party autonomy and freedom of contract.

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[484] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.035 (adding as a third trading modality the trading of 'a security with an "embedded" derivative'); The instruments at the heart of this third trading modality are commonly referred to also as 'hybrid financial instruments': E Murray, 'Derivative Transactions' (n20) para 11.1.7; J-P Castagnino, *Derivatives: The Key Principles* (n6) para 1.15.

[485] G20, Leaders' Statement: The Pittsburgh Summit (24-25 September 2009); The focus will here be limited to these overarching international policy prescriptions, as their implementation at the national and supranational level, including through Title VII of the Dodd-Frank Act in the United States and the European Market Infrastructure Regulation ('EMIR') in the European Union, would exceed the remit of this thesis.

[486] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.038 ('(…) these distinctions are now being eroded, with the OTC market taking on many of the characteristics of the exchange-traded market.'); Market structures may today therefore be more appropriately depicted as 'a spectrum of degree of organization' with trading venues ranging from recognised exchanges at the most organized end, over relatively novel off-exchange trading systems, such as for example multilateral trading facilities in the EU (MTFs) or alternative trading systems (ATSs) in US parlance to cleared and to non-cleared 'pure' OTC trading on the less (publicly) organised end of the spectrum: E Dwyer, 'UK Derivatives and Commodities Markets' in M Blair, G Walker and S Willey (eds), *Financial Markets and Exchanges Law* (3rd edn, Oxford University Press 2021) para 11.54.

I. Exchange Trading as a Blueprint for Regulatory Reform

Modern[487] derivatives exchanges provide a formally organised market, which operates according to a detailed set of rules laid down by the exchange with regard to, amongst other aspects, membership eligibility, product range and trade execution as well as dispute resolution procedures.[488] Although trading is conducted exclusively between members of the derivatives exchange ('on-exchange trading'),[489] end-users who are not members of a particular exchange but wish to take advantage of any of its listed instruments may do so by accessing the market through use of brokerage services offered by an exchange member.[490] The ensuing sale of an instrument to the non-exchange member end-user is referred to as an 'off-exchange' transaction.[491]

Whereas the exchange market is 'order-driven' with buyers and sellers matched on the basis of fixed trading rules, the OTC market is 'quote driven' with dealer bank intermediaries creating market liquidity by quoting prices to their clients for the transactions in which they wish to enter.[492]

1. *Standardisation as Key Structural Characteristic of Exchange Trading*

For present purposes, one defining structural characteristic of exchange-trading, which enables a particular set of risk mitigation mechanisms, stands out, namely product standardisation. Fundamental to the functioning of any exchange is the concept of standardisation. The derivative instruments made available on an exchange are typically those for which the greatest market demand exists.[493] This may in part be attributed to the fact that as derivative exchanges are run as businesses and their revenues generated

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[487] As already touched upon, derivatives exchanges look back upon a long history. The most comprehensive account of derivatives' history, although cautioning against '(…) too quick[ly] (…) classify[ing] apparently similar activities of other cultures as early examples of modern occupations', traces the basic derivatives exchange structures as far back as to ancient Mesopotamia, even discussing the role of temples as ancient clearing houses: EJ Swan, *Building the Global Market – A 4000 Year History of Derivatives* (n99) 27 and 37-38; Major Exchanges today exist throughout the world. For an informative overview, see, eg: J C Hull, *Options, Futures and Other Derivatives* (n29) 867.

[488] E Dwyer, 'UK Derivatives and Commodities Markets' (n486) para 11.53; In other words, '[t]he exchange thus creates rules which constitute both the constitutional rules governing trading on that exchange and the contractually enforceable agreement between each seller on that exchange and the exchange itself.': A Hudson, *The Law and Regulation of Finance* (2nd edn, Sweet & Maxwell 2013) para 17.52.

[489] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 2.07.

[490] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 12.009; J-P Castagnino, *Derivatives: The Key Principles* (n6) para 2.08.

[491] *Ibid*.

[492] See, for a general overview of different execution systems: L Harris, *Trading and Exchanges* (n203) para 5.3.

[493] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 12.010.

from fees charged for transactions dealt on the exchange, they are in constant competition with other exchanges and therefore incentivised to secure greater market shares in line with popular demand.[494] As a result, exchange-traded derivatives are limited in terms of variety, but those listed are highly standardised.[495] Standardisation serves as the precondition for the 'virtuous cycle'[496] associated with the exchange-traded derivatives market. It leads to a reduction in transaction and search costs, as the number of transaction elements open for negotiation is reduced.[497] In this way, as well as through a sufficient degree of market participant heterogeneity[498], a high degree of liquidity for these instruments is ensured.[499] The term 'liquidity' as employed in this thesis is understood to be the 'ability to transact immediately with minimal price adjustment'[500]. This, in combination with the limitation of products in line with market demand, provides for a high degree of price transparency of exchange market activity.[501]

2. *Standardisation and Centralised Counterparty Credit Risk Management*

A high degree of standardisation is also central to a further advantage associated with the exchange markets, namely derivative exchanges' particular capacity to manage credit risk. Clearing is a mechanism whereby the exact obligations counterparties must perform under the respective transaction are established in order to bring about

[494] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 2.07.

[495] Standardized contractual specifications, for example, typically pertain to ia 'contract unit', eg x number of bushels in the case of a soybean commodity future traded on the Chicago Board of Trade 'price quotation', eg cents per bushel, 'settlement method', ie physical delivery or financial settlement, as well as maturity dates etc; The only variance is in the price at which these standardised contracts are bought and sold: J-P Castagnino, *Derivatives: The Key Principles* (n6) para 2.08.

[496] D Awrey, 'The Limits of Private Ordering within Modern Financial Markets' (2014) 34 Review of Banking & Financial Law 183, 185-186 and 192-194, illustrating the 'virtuous cycle' as it applies generally to private market structures.

[497] S Brown-Hruska, 'The Derivatives Marketplace – Exchanges and Over-The-Counter Market' in RW Kolb and JA Overdahl (eds), *Financial Derivatives – Pricing and Risk Management* (John Wiley & Sons 2010) 23.

[498] Meaning that the presence of traders with a range of differing risk profiles ensures that for example a risk averse (hedging) party can be matched with a party with a higher risk affinity (eg, a speculator) to take the opposite side of the trade: JT Moser and D Reiffen, 'Clearing and Settlement' (n182) 273-274.

[499] J Armour and others, 'Making Markets' in J Armour and others (eds), *Principles of Financial Regulation* (Oxford University Press 2016) 466-467; This is reinforced by existing liquidity attracting further order flow, 'and this in turn, lead[ing] to greater liquidity and still lower costs.': S Brown-Hruska, 'The Derivatives Marketplace – Exchanges and Over-The-Counter Market' (n497) 23.

[500] JT Moser and D Reiffen, 'Clearing and Settlement' (n182) 273.

[501] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 12.010.

settlement.[502] Exchange-traded derivatives transactions are submitted to a so-called central clearing counterparty ('CCP')[503] for clearing. This means that clearing is performed either directly by a department of the exchange, or through a separate clearing entity (the clearing house) appointed by it.[504] Legally, this involves the 'novation' of the transaction concluded by the counterparties on the exchange to the CCP.[505] Novation effectively discharges the original bilateral transaction and replaces it with two separate transactions, one between the one counterparty to the original transaction and the CCP, the other between the other counterparty to the original transaction and the CCP.[506] To repeat a commonly cited phrase in this context, the CCP through its interposition in the original transaction becomes the seller to every buyer and the buyer to every seller.[507] In addition, standardisation of contracts improves a CCP's risk management capability and operational efficiency.[508] The advantage of the clearing mechanism is that counterparty credit risk is transferred centrally from the parties to the CCP.[509] This dispenses with the necessity of having to conduct any lengthy counterparty credit risk assessments in a fast moving market, as the CCP ensures the transaction's settlement.[510]

In order to ensure CCP capitalisation and protect it against the potential losses associated with the risk of the trading parties' failure to perform their obligations, the relevant CCP requires its members to provide collateral, so-called 'margin'.[511] Outstanding contracts are then monitored and regularly *marked to market*, meaning they are 'valued at current market prices'[512] in order to calculate the margin required to adapt to underlying market movements.[513] If a party to the cleared transaction fails to perform

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[502] M Thomas, 'Use of Financial Collateral in UK Clearing Houses', in G Yeowart and R Parsons (eds) with E Murray and H Patrick, *Yeowart and Parsons on the Law of Financial Collateral* (Edward Elgar 2016) para 20.13.

[503] E Murray, 'Derivative Transactions' (n20) para 11.2.1.3.

[504] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.037; HS Scott and A Gelpern, *International Finance: Law and Regulation* (3rd edn, Sweet & Maxwell 2012) para 14.010.

[505] E Murray, 'Derivative Transactions' (n20) para 11.2.1.3.

[506] *Ibid*.

[507] See, eg, RL McDonald, *Derivatives Markets* (3rd edn, Pearson Education 2014) 17.

[508] CESR, *Standardisation and exchange trading of OTC derivatives,* Consultation Paper, CESR/10-610 (19 July 2010) 10.

[509] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 12.010.

[510] *Ibid.*

[511] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.037.

[512] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 12.010.

[513] If clearing is performed by a separate clearing house, only the larger exchange members tend to have accounts with the clearing house, they are the so-called 'clearing members'. Exchange members, who are

its obligations, the CCP will then use that party's collateral to ensure settlement of the transaction with the other party.[514]

II. The Continued Need for Bilaterally Cleared OTC Derivatives as a Means of Basis Risk Mitigation

If through (a combination of) the highly standardised instruments accessible through the exchange market, a hedger is not able to create an exact mirror offsetting exposure to the economic exposure it wishes to hedge, this is a manifestation of 'basis risk'[515]. In other words, basis risk is the difference between the underlying exposure and the derivative transaction intended to hedge it.[516] As a consequence, the more bespoke the hedging needs of a party regarding, for example, settlement dates and amounts,[517] the greater is the potential basis risk for this party when entering a standardised exchange transaction.[518]

This is where non-standardised, bilaterally cleared OTC derivatives provide a solution, which in broad exercise of freedom of contract can – within the constraints of applicable law – be contractually configured as is required. In other words, they are functionally ideally suited to minimise basis risk due to their nature as bespoke, customised transactions, capable of creating bespoke exposures.[519] In this way they are functionally capable of at least approximating the 'perfect hedge' even in the face of highly idiosyncratic exposures.[520] This genuine and particular commercial utility of and the resulting need for non-standardised, bilaterally cleared OTC derivatives thus persists

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not clearing members, however, are able to access the clearing house through the clearing members: J-P Castagnino, *Derivatives: The Key Principles* (n6) para 3.06.

[514] M Thomas, 'Use of Financial Collateral in UK Clearing Houses' (n502) para 20.15.

[515] As already described under § 4.A.II.

[516] J-P Castagnino, *Derivatives: The Key Principles* (n6) 431.

[517] Because of eg a 'relatively unique underlying' and the party's 'relatively unique risk profile': CESR, *Standardisation and exchange trading of OTC derivatives* (n508) 9 and 27.

[518] For some practical examples on the hedging effectiveness of exchange relative to OTC traded derivatives for parties with unique risk profiles, see I Popova and B Simkins, 'OTC vs. Exchange Traded Derivatives and Their Impact on Hedging Effectiveness and Corporate Capital Requirements' (2015) 27 Journal of Applied Corporate Finance 63.

[519] R Heckinger, I Ruffini and K Wells, 'Over-the-Counter (OTC) Derivatives' in Federal Reserve Bank of Chicago, Financial Markets Group, *Understanding Derivatives: Markets and Infrastructure* (Federal Reserve Bank of Chicago 2013) 27; I Popova and B Simkins, 'OTC vs. Exchange Traded Derivatives and Their Impact on Hedging Effectiveness and Corporate Capital Requirements' (n518) 63.

[520] R Heckinger, I Ruffini and K Wells, 'Over-the-Counter (OTC) Derivatives' (n223) 27; For an illustrative example of such a customised hedge using an OTC interest rate swap: I Popova and B Simkins, 'OTC vs. Exchange Traded Derivatives and Their Impact on Hedging Effectiveness and Corporate Capital Requirements' (n518) 67-69.

even after the tightening of transaction regulation, including additional collateral and regulatory capital requirements, and the increasing convergence of market infrastructures.

B. Contributing Factors to the Rise of OTC Financial Derivatives

A number of economic and state regulatory developments were necessary for modern financial derivatives to develop and evolve into the 'technology which in many ways drives international finance'[521]. These factors did not do so in isolation, but rather were to a large degree mutually dependent and occurred against the background of increasing financial globalisation.

I. The Economic Need for Financial Derivatives

The functional need for OTC financial derivatives was spurred by a cataclysmic shift in the international financial infrastructure and the economic trembles it brought with it.

1. Changes to the International Financial Infrastructure and the Emergence of Global Financial Risks: The Collapse of Bretton Woods

For the first couple of decades, the Post-World War II international monetary system had been shaped by the fixed currency exchange rates under the framework of the Bretton Woods agreement ratified in 1944.[522] The time period generally stands out for the dominant role afforded to the nation state in largely autonomously shaping domestic economic policy: Macroeconomic policy was generally defined by public price stabilisation schemes, protection of national industries as well as strict capital controls to defend national currency values, thereby crafting territorially closed economic systems.[523] Capital controls were integral to the system, as they served to overcome the 'contradiction' of creating an international monetary system based on fixed exchange rates, whilst leaving the design of macroeconomic policy at the level of the individual nation states.[524] As a consequence of this policy, private capital flows across political

[521] SK Henderson, *Henderson on Derivatives* (n1) 5.

[522] See, RA Mundell, 'A Reconsideration of the 20th Century' (2000) 90 The American Economic Review 327, 331.

[523] D Bryan and M Rafferty, *Capitalism with Derivatives: A Political Economy of Financial Derivatives, Capital and Class* (n466) 7; M Schularick, 'International Capital Flows' in Y Cassis, RS Grossman and CR Schenk (eds), *The Oxford Handbook of Banking and Financial History* (Oxford University Press 2016) 283; GRD Underhill, 'Market-Based Approach to Financial Architecture' in G Caprio Jr and others (eds), *The Evidence and Impact of Financial Globalization* (Elsevier 2013) 578.

[524] See, P Mehrling, *The New Lombard Street* (n268) 71-72.

borders were small.[525] However, cracks in the international regulatory framework were already beginning to appear in the shape of certain nominally 'off-shore' markets, facilitated by the open support of the governments of the United States and United Kingdom.[526]

To a degree the Bretton Woods era can be seen as the embodiment of Keynesian economic policy leading to the public 'absorption' of price volatility within the framework of the nation state and thereby to its domestic 'socialisation'.[527]

However, the Bretton Woods system of stringent governmental market regulation irrevocably collapsed in 1971, when the United States took the dollar off gold and countries severed their currencies' connection to the dollar.[528] This marked the beginning of the modern era of international capital flows and 'floating' currencies, with their value no longer governmentally imposed but subject to market forces of supply and demand.[529]

This new volatility of currency exchange rates, following the 'privatization of foreign exchange risk'[530] in combination with the oil crisis, rocketing inflation and rising interest rates in local markets, created a novel economic environment, marked by previously unheard levels of financial market rate volatility, which businesses, investors as well as governments had to respond to and quickly find equally novel techniques of

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[525] M Schularick, 'International Capital Flows' (n523) 283.

[526] Namely, the system had already begun to grow porous under the pressure exerted by novel 'off-shore' financial flows via the growing 'euromarkets', principally the 'eurocurrency' and 'eurobond' markets. Aided by the 'positive attitude of the British monetary authorities, in contrast to that of their European counterparts', these nominally off-shore markets were in their host jurisdiction freed up from the laws and regulations otherwise applicable to purely domestic transactions denominated in pound sterling, thereby upgrading the international attractiveness and status of the City of London. In this way, they allowed for unregulated international financial activity denominated in dollars or any other foreign currencies carried out on behalf of non-residents: Y Cassis, 'International Financial Centres' in Y Cassis, RS Grossman and CR Schenk (eds), *The Oxford Handbook of Banking and Financial History* (Oxford University Press 2016) 308; Similarly, the US government did not exercise its power to constrain the US banks and corporations which were the dominant participants in these novel market places: E Helleiner, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Cornell University Press 1994) 8.

[527] D Bryan and M Rafferty, *Capitalism with Derivatives: A Political Economy of Financial Derivatives, Capital and Class* (n466) 7.

[528] RA Mundell, 'A Reconsideration of the 20th Century' (n522) 334.

[529] M Taylor, 'Global Banks and Financial Intermediaries' in Gerard Caprio Jr. and others (eds), *Handbook of Key Global Financial Markets, Institutions and Infrastructure* (Elsevier 2013) 357, 359; Although an attempt was made at reviving the fixed-exchange system minus the gold convertibility of the Bretton Woods agreement which, however, ultimately also failed in the spring of 1973: RA Mundell, 'A Reconsideration of the 20th Century' (n522) 334.

[530] A Kern, R Dhumale and J Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006) 22.

managing on a global scale.[531] The emergence of foreign exchange and interest rate risks thus created the need for swaps as private 'risk control products'[532].[533]

2. *Financial Liberalisation and the International Mobility of Capital Flows Post Bretton Woods*

Since, after the transition to floating exchange rates post Bretton Woods, capital controls as a policy instrument for stabilising fixed currency values became obsolete, so did the main economic rationale for strictly regulating the scope of international financial transactions.[534] What followed were years of gradual financial liberalisation, the loosening of regulatory constraints on the cross-border flows of capital, equities and debt.[535] As a result, capital flows could gradually cross more freely across national borders than even the trade of goods.[536] In a sense, increasing mobility of capital flows then conditioned only further liberalisation of national regulatory and legal frameworks, since as noted in the context of the abolition of exchange control in the United Kingdom in October of 1979, '[c]apital that did not care for the UK's laws and regulations could now simply go elsewhere'[537]. The internationalisation of financial markets and financial intermediation thus compounded old and created new forms of risk on a global scale, predominantly foreign exchange and interest rate risk, faced by the respective banking counterparties engaging in these transactions across borders in the new volatile environment.[538]

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[531] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.002; J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.119; J Benjamin, *Financial Law* (n82) para. 4.30.

[532] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 4.119.

[533] *Ibid* para 4.119.

[534] M Schularick, 'International Capital Flows' (n523) 284.

[535] See, *ibid* with a dataset chronologically detailing the surge in global foreign investment from 1970 to 2007; Lawrence Baxter gives as examples the World Trade Organisation Annex on Financial Services as well as the financial provisions in free trade treaties: LG Baxter, 'Understanding the *Global* in Global Finance and Regulation*'* in RP Buckley, E Avgouleas and DW Arner (eds), *Reconceptualising Global Finance and Its Regulation* (Cambridge University Press 2016) 31-32.

[536] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (2nd ed, Cambridge University Press 2015) 10.

[537] R McCormick and C Stears*, Legal and Conduct Risk in the Financial Markets* (n280) para 20.20.

[538] LG Baxter, 'Understanding the *Global* in Global Finance and Regulation*'* (n535) 31; CW Smith Jr., CW Smithson, DS Wilford, *Managing Financial Risk* (Harper Business 1990) 14 ('The products themselves are not new at all (…) However, in practice these markets are new; without price risk no one cared (the opportunity cost was too high) to use these "derivative products". It was not until prices became volatile that anyone felt the need to create modern versions of these contracting techniques.').

II. Scientific-Technological Means for the Rise of OTC Financial Derivatives

Aside from the functional need for OTC financial derivatives against the background of a brave new world of market volatility, their rise causally coincided with breakthroughs in the functional methodology of risk calculation.

1. Derivative Pricing: The Black-Scholes-Merton Option Valuation Formula

Building upon the neoclassical theoretical groundwork of the quantifiability and by extension 'priceability' of financial risk,[539] a milestone in the rise of the OTC derivatives market was the capability to price European[540] stock options, as the prerequisite to their tradability and efficient allocation of risk, which became possible through the so-called Black-Scholes-Merton Options Pricing Model, articulated in the early 1970s and which proved to be a trailblazing 'pioneering contribution'[541].[542]

The Black-Scholes-Merton Model served to pave the way for the pricing of stock options, as well as for developing newer and more complex generations of pricing models for a wide range of derivative classes. Its assumptions have been adapted to inform the computerised models traders today employ in their day-to-day trading.[543]

2. Portfolio Risk Management: The Value-at-Risk Methodology

The priceability of financial risk at the transactional level ties in with advances of risk quantification as part of institutions' risk management. The quantifiability of financial risk in its downside form (i.e. potential loss) has become the basis for an entire industry of professionals specialising in the management of financial risk. The most widely used risk management model in this context is Value-at-Risk or VaR. Initially, VaR was developed as an internal model in the face of increased market volatility and its exposure incurred via its expanding derivatives business by the US Bank JP Morgan.[544] Ultimately, the publication of its *RiskMetrics* methodology in 1994 became a highly successful attempt at establishing an industry-wide standard measure for financial

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[539] See, § 3.A.

[540] Ie, 'an option that can be exercised only at the end of its life': JC Hull, *Options, Futures and Other Derivatives* (9th Global edn, Pearson Education Limited 2018) 848.

[541] Press Release, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1997.

[542] TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (n32) 10; JC Hull, *Options, Futures and Other Derivatives* (n29) 343.

[543] E Murray, 'Derivative Transactions' (n20) para 11.2.3.3; TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (n32) 10.

[544] Operating today as JPMorgan Chase & Co.

risk.[545] The goal of VaR is to provide risk managers trying to assess the downside risk, i.e. potential money loss, in relation to various areas of application[546] with a practical statistical tool that 'summarizes risk in a single, easy-to-understand number'[547]. There are different definitional variations of the VaR measure. Generally, however, the number expresses (1) the *minimum*'[548] or the *maximum*[549] potential loss in market value given (2) a specified 'probability'[550] or statistical 'confidence level'[551] for any position (3) during a specified time interval ('risk horizon')[552].[553] VaR is not a measure of the maximum loss the position can generate over the course of its contract term, but rather the risk horizon envisaged is the specific 'holding period' for that instrument.[554] For example, expressing VaR as a confidence level regarding potential maximum losses for a derivative portfolio[555], VaR could be stated as EUR 3 million with a 99% confidence level. This means that there is a 99% probability that the portfolio loss will not exceed a maximum of EUR 3 million over that day.[556] The quantitative methodologies for computing VaR have in the aftermath of the GFC been subject to criticism and adaptation with more qualitative inputs, which shall, however, be beyond the scope of this thesis.[557]

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[545] M Power, *Organized Uncertainty: Designing a World of Risk Management* (Oxford University Press 2007) 71; D M Chance, *Essays in Derivatives* (n10) 335; P Jorion, *Value at Risk: The New Benchmark for Managing Financial Risk* (n313) 27 ('VAR is a common language to compare the risks of different markets'); DM Chance, K Grant and J Marsland, 'Risk Management' (n152) 598 ('[T]he financial service industry's premier risk management technique'),

[546] For example, with regard to whole entities such as companies or financial institutions as well as funds, aggregated portfolios and individual transactions or even strategies: DM Chance, K Grant and J Marsland, 'Risk Management' (n152) 598.

[547] P Jorion, *Value at Risk: The New Benchmark for Managing Financial Risk* (n313) 105.

[548] DM Chance, *Essays in Derivatives* (n10) 335.

[549] See, DM Chance, K Grant and J Marsland, 'Risk Management' (n152) 599.

[550] *Ibid* 598.

[551] *Ibid* 599.

[552] P Jorion, *Value at Risk: The New Benchmark for Managing Financial Risk* (n313) 97.

[553] DM Chance, K Grant and J Marsland, 'Risk Management' (n152) 599.

[554] See, SK Henderson, *Henderson on Derivatives* (n1) 369.

[555] At a portfolio level, risk modelling increases in complexity as it will need to take into account and quantify correlations between individual positions: *ibid* 372.

[556] The example is in amended form based on DM Chance, K Grant and J Marsland, 'Risk Management' (n152) 599. Probabilities are typically stated as 0.05 or 0.01 and confidence levels correspondingly as 95% or 99% respectively, *ibid*.

[557] See, eg, RL Sollis, 'Value at risk: a critical overview' (2009) 17 Journal of Financial Regulation and Compliance 398; Telling of the confidence in financial risk quantification this regard is the following quote by Don Chance, stating that '[p]rior to the creation of VaR, firms often expressed their views on risk with more qualitative characteristics. If nothing else, VaR has brought most firms up to a higher level of quantitative sophistication.': DM Chance, *Essays in Derivatives* (n10) 339.

3. *Advances in Computer and Communications Technology*

Advances in quantitative finance alone are, however, not sufficient to explain the rise of modern financial derivatives as the favoured risk transfer tools. Rather, the theoretical advances were also accompanied by an evolution of the technological infrastructure underpinning the financial innovation. An anecdote from the infancy of the Chicago Board Options Exchange, established in 1973, illustrates the general trend. Within several months of the Black-Scholes model having been published in the same year, technology company *Texas Instruments* took out an advertisement in the Wall Street Journal promoting its calculator capable of finding the Black-Scholes option value.[558] Option traders quickly embraced these 'little hand-held calculators'[559] programmed to work out the fair option value as a basis for their trading decisions, crowding out those which did not resort to the novel technology.[560] The trend continued through the invention of the personal computer with its ever-increasing computing power, catering to more sophisticated models and increasing calculation speeds for existing models.[561] These advances in computing power were complemented with progress in communications technology.[562] This made possible, for example, near instantaneous dissemination of information such as business news, financial data as well as the improved connection of market participants in financial centres across the globe.[563] From the perspective of market participants, this very tangible 'compression of time and space'[564], seen as a defining characteristic of globalisation, became a defining feature in their financial dealings.

Whilst these developments and the subsequent increase in trading volumes originated in the exchange-traded options market, they soon extended to the OTC derivatives market which in the coming years grew increasingly important. *Merton* credits this with a 'learning-curve effect'[565] in the use of mathematical valuation models in the OTC markets. The development of sophisticated models and increasing confidence by their

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[558] As relayed by Peter Bernstein: PL Bernstein*, Capital Ideas: The Improbable Origins of Modern Wall Street* (John Wiley & Sons 2012) 372.
[559] *Ibid* 373
[560] *Ibid* 372-373.
[561] RC Merton, 'Influence of Mathematical Models in Finance on Practice: Past, Present and Future' (n130) 456.
[562] RC Merton and Z Bodie, 'A Conceptual Framework for Analyzing the Financial Environment' (n76) 6.
[563] SK Henderson, *Henderson on Derivatives* (n1) 14.
[564] D Harvey, *The Condition of Postmodernity* (Blackwell 1992) 284.
[565] RC Merton, 'Influence of Mathematical Models in Finance on Practice: Past, Present and Future' (n130) 457.

users in their accuracy then spurred further financial innovation, as well as in turn spurring the need for ever more sophisticated models.[566]

III. Genuinely Legal Means for the Rise of OTC Derivatives

In addition to these non-legal factors, the emergence of an OTC derivatives market on a truly global scale is premised on a specific set of legal structural prerequisites.[567] Aside from top-down regulatory facilitation (via a traditionally regulation-averse approach) of financial innovation,[568] the rise of OTC derivatives was centrally driven by a sophisticated bottom-up contractual standardisation project under the auspices of what would later become known as the International Swaps and Derivatives Association, discussed in detail under § 7.

C. Making the Market: The Integral Role of International Dealer Banks

While liquidity is an integral feature of any functioning market, the way liquidity is provided differs across market structures. The central function of liquidity provider in the OTC derivatives market falls to financial intermediaries, so-called *dealer* banks. This predominance is reflected in market terminology, with OTC derivatives sometimes alternatively also referred to as 'dealer-created derivative instruments'[569]. A dealer, also referred to as a *sell side* market participant,[570] in any market stands ready to execute transactions as a principal whenever a customer wishes to trade.[571] The availability of market making services is therefore an essential precondition for OTC derivatives users to have access to the instruments for whichever specific uses they require; e.g. to create or maintain a specific, sometimes highly idiosyncratic, risk profile.[572] Typically, dealer

[566] *Ibid*, illustrating 'that mathematical modelling both shapes and is shaped by the flow of financial innovation'.
[567] K Pistor, 'A Legal Theory of Finance' (n286) 318.
[568] This particular aspect to the growth of OTC derivatives contracting ist illustratively discussed, ia, in: BG Carruthers, 'Diverging derivatives: Law, governance and modern financial markets' (n393) 394-397.
[569] FJ Fabozzi and FJ Jones, *Foundations of Global Financial Markets and Institutions* (n276) 201.
[570] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 324 ('A relatively small number of dealers, acting as market makers and constituting the sell-side of the market, has long anchored the OTC derivatives market.').
[571] L Harris, *Trading and Exchanges* (n203) 33.
[572] The function of dealers is supplemented by that of other facilitating entities such as *swap brokers* which do not take a position in the market but facilitate trades between financial institutions: SK Henderson, *Henderson on Derivatives* (n1) 25 (fn 1), 26-27.

banks are investment banks, either affiliated with large commercial bank holding companies or independent investment banks.[573]

The primary motivation for dealer banks to perform this facilitative role is to earn a profit from the positive spread between the bid and ask quotes offered to counterparties: This is the amount by which the price the dealer-bank has transacted at with counterparty A[574] is exceeded by the price at which it transacts with counterparty B[575] which is willing to take the opposite side of the original transaction with counterparty A.[576] What is more, even in times of reduced profitability and market stress, the customer orientation of market making activity can induce banks to continue to provide liquidity in order to protect their client relationship.[577]

A large degree of OTC derivative product innovation and customisation comes as the result of a dealer bank solution to bespoke client risk management needs.[578] The key incentive to provide this innovative role lies in immediate client fees as well as prospective rents to be yielded from bid-offer spreads once the novel products attain a sufficient degree of liquidity.[579] In addition to this (catering to demand side needs) explanation to innovation, dealers may in fact also be incentivised by primarily intrinsic 'supply side' considerations.[580]

As will be illustrated in the following, the dominant role of dealer banks as liquidity providers in the OTC markets has developed historically.

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[573] FJ Fabozzi and FJ Jones, *Foundations of Global Financial Markets and Institutions* (n276) 187.

[574] Which, eg, is seeking exposure to an interest rate movement.

[575] Which, conversely, is seeking to reduce exposure to that interest rate movement.

[576] FJ Fabozzi and FJ Jones, *Foundations of Global Financial Markets and Institutions* (n276) 201; With an illustrative example: D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (n191) 511-512.

[577] BIS, Committee on the Global Financial System, *Market Making and Proprietary Trading: industry trends, drivers and policy implications* (November 2014) 9-10 specifically in relation to the OTC bond markets, although in principle also applicable to OTC derivatives.

[578] D Duffie, A Li and T Lubke, *Policy Perspectives on OTC Derivatives Market Infrastructure* (Federal Reserve Bank of New York, Staff Report no 424, January 2010) 10.

[579] *Ibid*.

[580] D Awrey, 'Toward a supply-side theory of financial innovation' (n403) 401-419, who identifies additional incentives for financial intermediaries to innovate which are pursued by different strategies potentially entailing graver regulatory concern, *ibid* 410: These are, firstly, innovation for purposes of regulatory arbitrage in order to circumnavigate capital requirements. Secondly, strategically leveraging the complexity of product innovation in order to mimic the monopoly effect of intellectual property rights which generally do not apply to financial innovations. In doing so, financial intermediaries may profit from this complexity through higher bid-offer spreads as well as informational advantages, for example in relation to the pricing of these products.

I. Origins and Content of the Dealer Bank Market Making Function

The end of Bretton Woods meant that 'parallel loans' as a means for functionally mimicking cross-border cash flow became obsolete as these flows were now able to cross borders directly.[581] However, as foreign exchange trading and the demand for foreign currencies increased rapidly internationally, so did the demand for innovative methods of hedging the new attendant financial risks, first and foremost foreign exchange risk.[582] In response to this, the parallel loan structure was modified to evolve into the first example of a modern OTC financial derivative, the currency swap.[583] Already during the early days of the parallel loan, banks[584] had been inserted into the transactional structure as a way of protecting against the risk of premature default by a counterparty.[585] Relative to an individual corporate counterparty, the intermediating bank was deemed to be in better position to bear these risks due to its more diversified balance sheet and access to sources of foreign exchange liquidity.[586] However, the bank had to record these loan positions on its balance sheet in their entirety, thus triggering regulatory capital reserve requirements and binding significant amounts of capital.[587]

A modification of the parallel loan transactional structure avoided this problem as follows: Under the terms of the transaction, company A paid currency X to and received currency Y from the bank; in turn company B paid currency Y to and received currency X from the bank; lastly the bank both pays and receives X and Y respectively.[588] With all parties to the transaction both making and receiving payment, what under the parallel loan structure had been 'a set of gross exposures (loans)' has now become 'a set of net exposures (swap)'.[589] This means the associated cash flows are calculated on the exchange rate fluctuations between X and Y rather than extending the actual loan to the commercial counterparties.[590] The mechanism constitutes the basic currency swap.[591]

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[581] See, on this facet of regulatory arbitrage § 4.C.II.

[582] C Kobrak, 'From Multinational to Transnational Banking' in Y Cassis, RS Grossman and CR Schenk (eds), *The Oxford Handbook of Banking and Financial History* (Oxford University Press 2016) 175.

[583] D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (n13) 1143 (fn 146).

[584] Typically, commercial and investment banks: *Ibid* 1104, 1141.

[585] P Mehrling, *The New Lombard Street* (n268) 73-74; This is the risk that the non-defaulting party would face in either not being able to replace the loan or having to replace it with a third party at less advantageous terms, hence the term 'replacement risk': D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (n13) 1141-1142.

[586] *Ibid*; P Mehrling, *The New Lombard Street* (n268) 74.

[587] P Mehrling, *The New Lombard Street* (n268) 74.

[588] *Ibid*.

[589] *Ibid*.

[590] D Awrey, *The Mechanisms of Derivatives Markets Efficiency'* (n13) 1143 (fn 146).

[591] In detail: SK Henderson, *Henderson on Derivatives* (n1) 15-17.

If, in this transaction structure, one of the commercial counterparties defaults, from the perspective of the intermediating bank, one (future) cash-flow stream dries up. However, the intermediating bank through its contact network is in a position to quickly 'offset' or 'hedge' its open position by finding another bank to replace the defaulting commercial counterparty; for example, by entering into another derivative with another bank, a so-called currency forward (i.e. agreeing on a future exchange of currencies X and Y, as the case may be, at a rate fixed in the present).[592] Out of these first transactions soon evolved a market, facilitated by banks no longer acting simply as brokers interposed between commercial counterparties for their superior capacity in default risk mitigation, but as *dealers* actively facilitating, i.e. *making*, the OTC swap market.[593] Making the market in this sense involved quoting bid and ask swap prices for different risk categories, starting with currency as well as, somewhat later, interest rate and, later still, credit default swaps to potential commercial counterparties.[594] This in turn further improved OTC market liquidity, since the dealer bank was at hand to, at any given moment, temporarily take the opposite position to a hedging counterparty where no continuous market for buyers and sellers of derivatives existed.[595] The dealer bank would then hold the position until such time as it could ideally locate a counterparty seeking to take a suitably opposed position.[596]

II. Features of Market Maker Trading Activity: 'Hedging the Hedge'

Today, financial institutions perform the market making function on a truly global scale, transacting with end-users from a multitude of different jurisdictions other than their place of incorporation.[597] In doing so, they provide the organisational structure for the global OTC derivatives market. For example, in 2010, the fourteen largest derivative dealer banks, also referred to as the group of fourteen or G14[598], accounted for 82% of

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[592] P Mehrling, *The New Lombard Street* (n268) 74-75.
[593] *Ibid* 74.
[594] *Ibid* 75, 79; GJ Schinasi and others, *Modern Banking and OTC Derivatives Markets* (n267) 64.
[595] GJ Schinasi and others, *Modern Banking and OTC Derivatives Markets* (n267) 64.
[596] *Ibid*.
[597] SK Henderson, *Henderson on Derivatives* (n1) 19.
[598] More recently referred to as 'G16', after also admitting Nomura and Crédit Agricole in addition to Bank of America, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan Chase, Morgan Stanley, Royal Bank of Scotland, Société Générale, UBS, and Wells Fargo: J Biggins and C Scott, 'Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform' (2012) 13 European Business Organization Law Review 309, 317 (fn 42).

this global market share by notional amount outstanding.[599] The remaining market share falls to smaller, local financial intermediaries, which in turn may hedge their exposure with local counterparties with one of the globally operational dealer banks.[600] As such, the global OTC market is essentially organised around a small number of major dealers.

In performing their market making function, banks generally seek to avoid open derivative exposure which is unhedged with another counterparty. In other words, they generally seek to maintain relatively low net risk positions.[601] Rather than take a market position through open derivative exposure, their goal is to maintain 'a matched book'[602] and focus solely on the positive bid-offer spreads to generate income.[603] Economically, a dealer bank is well placed to do this, since it is able to assemble the many different incoming cash-flows generated through its other derivatives and financing business to off-set the cash flows due under its derivatives portfolio, ideally balancing these out to zero.[604]

Where there is a residual mismatch of incoming and outgoing cash flows, the dealer bank will look to hedge this remaining exposure; for example, by entering into offsetting derivative transactions.[605] However, finding another end-user to pass on the risk assumed by the dealer in the original customer derivatives transaction may not always be possible. This applies especially in the case of complex, i.e. highly customised and therefore illiquid positions with unique economic terms,[606] as is the typical case with many OTC derivative transactions.[607] The dealer bank, due to its financial and legal sophistication, is in a position to 'decompos[e]' the market risk its client position entails into individual elements, which then can be individually priced and transferred (i.e. hedged) to third parties.[608] Commonly, the customer exposure is

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[599] D Mengle, *Concentration of OTC Derivatives among Major Dealers* (2010) 4 ISDA Research Notes 3.

[600] *Ibid* 5.

[601] D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (n179) para 1.29.

[602] CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (n8) 61.

[603] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 324.

[604] *Ibid*; A Hudson, 'The Regulatory Aspect of English Law in Derivatives Markets' in A Hudson (ed), *Modern Financial Techniques, Derivatives and Law* (n283) 86 ('banks can be considered warehouses for cash flows of this sort').

[605] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 324.

[606] For example with regard to 'currency types, contract amounts, maturities (…) and underlying reference rates': R Heckinger, I Ruffini and K Wells, 'Over-the-Counter (OTC) Derivatives' (n223) 29.

[607] See, § 6.A.II.

[608] S Firth, *Firth on Derivatives Law and Practice* (n5) para 1.052.

hedged with other dealers in the so-called *wholesale* market.[609] Indeed, this feature of simultaneously hedging any exposure incurred as a result of entering into a client transaction has been a historical constant from the very beginnings of the market.[610]

In fact, this pervasive market feature of 'hedging the hedge'[611], for the reasons detailed above, by entering into equal but opposite mirror or 'back-to-back' derivative transactions with other dealers, economically mirroring the concept of re-insurance,[612] can be distilled as one of the central OTC derivatives market defining features. As a result, just as the OTC derivatives market historically evolved through the dealings of internationally active banks, today it ostensibly continues to revolve around a group of internationally active dealer banks.

D. Evaluation: The OTC Derivatives Market as a Delocalised Global Contracting Market

At the most general level, any market concept, by way of definition, entails a form of exchange, traditionally 'the action or business of buying and selling' and is in this regard synonymous with a commercial transaction.[613] Economic analysis, however, has traditionally followed a rather rigid distinction of the modes of economic organisation along the dimensions of firm, contract, and market.[614] This legacy taxonomy necessarily presupposes a clear conceptual border between contract and market, with both thus constituting distinct modes of exchange.[615] The established view has, in recent more legally infused scholarship, been subject to criticism on the grounds that it disregards the fact that both concepts are closely intertwined in that today both 'every market transaction is implemented by contract'[616] and 'the vast majority of contract activity occurs in some form of market'[617].[618] As detailed above, the OTC derivatives market empirically lends weight to the criticism by providing a particularly illustrative instance

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[609] I Ruffini and RS Steigerwald, 'OTC derivatives – A primer on market infrastructure and regulatory policy' (2014) 3Q Economic Perspectives (Federal Reserve Bank of Chicago) 80, 86.
[610] D Cunningham, 'Swaps: Codes, Problems and Regulation' (1986) 5 International Financial Law Review 26, 27.
[611] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n38) para 11.042.
[612] *Ibid*; CL Culp, *Risk Transfer: Derivatives in Theory and Practice* (n8) 61.
[613] Oxford English Dictionary Online, 'Market' (December 2023).
[614] RE Scott, 'The Paradox of Contracting in Markets' (2020) 83 Law and Contemporary Problems 71, 71.
[615] *Ibid*.
[616] *Ibid*.
[617] *Ibid*.
[618] *Ibid*.

of the collapse of the distinction with contract and market concepts merging one into the other. For one, it cannot be tied to any particular physical location or identifiable formal organisational structure or trading venue.[619] Rather, as detailed above, its very defining element is that it operates outside of the regulatory environment provided by a traditional organised exchange.[620]

Therefore, it lacks any comparable formal organisational structure with a related uniform legal infrastructure of an exchange for its participants. As the epitome of globalised financial trading, the OTC derivatives market rather has instead evolved historically as a dealer intermediated aggregate of bilaterally negotiated transactions concluded on the back of a standardised documentation template between participants from around the world.[621] The real organisational nucleus of the OTC derivatives market, therefore, is contract. It is, in other words, a contracting market on a global scale.

A resulting core operational concern is thus creating contractual risk management techniques, in particular as regards counterparty credit risk, which are capable of operating as functional equivalents to the institutionalised risk management strategies pursued in an exchange-traded market,[622] and importantly, in light of the global scale of the market, capable of effectively doing so on a transnational scale.

§ 7 Building of a Global Market by Contract: The Role of the International Swaps and Derivatives Association (ISDA)

In stark contrast, the financial structures that were being developed at an ever greater pace on the basis of ever more sophisticated pricing and valuation models did, in the early days of the swaps markets, not encounter a legal infrastructure capable of incorporating them on a comparably mature footing. However, a bottom-up market initiative, advanced by the early dealer banks, oversaw the gradual evolution of the comprehensive contractual architecture that underpins the global OTC derivatives market today and in large part facilitated the evolution of the market itself.

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[619] G Walker, 'Financial Markets and Exchanges' in M Blair, G Walker and S Willey (eds), *Financial Markets and Exchanges Law* (3rd edn, Oxford University Press 2021) para 1.84.

[620] *Ibid*.

[621] Using the words of Rachel Harvey in describing the OTC foreign exchange markets, it is 'constituted by globe-spanning, individually negotiated bilateral contracts': R Harvey, 'The Legal Construction of the Global Foreign Exchange Market' (2013) 41 Journal of Comparative Economics 343, 343.

[622] NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 735.

A. The Origins of ISDA

A primary function of contract lawyers at the drafting stage of a transaction is to facilitate the transaction by 'translating' the economic substance of what parties have agreed into a written legal form that will ultimately be legally enforceable.[623] Beyond this facilitative role, a distinct contribution of a lawyer is performing a planning role that includes identifying contingencies, which might impact performance as well as drafting provisions allocating the risk of their occurrence between the parties.[624] At the time of the early beginnings of the international swaps market, this particular legal side of transactions, however, was a source of considerable uncertainty and expense for counterparties.

I. The Starting Point: Legal Heterogeneity in the Early Swaps Markets

In the early days of fledgling swap activity, even as trading volumes grew, there was no concerted and coordinated strategy to create a liquid and global OTC derivatives market. Rather, early swap agreements were concluded on an *ad hoc* basis, in reaction to the particular demands of individual market participants.[625] These would typically take the form of a complex and voluminous contractual document.[626] Only the largest institutional market participants, the early market makers, for ease of transacting already had framework[627] agreements in place, so-called master agreements, containing general provisions to govern individual swaps transactions amongst themselves.[628] However, far from being standardised, these exhibited a large degree of legal heterogeneity, with each

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[623] H Collins, *Regulating Contracts* (Oxford University Press 1999) 149.

[624] *Ibid* 150-151.

[625] SK Henderson, *Henderson on Derivatives* (n1) 14; D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27.

[626] SK Henderson and JAM Price, *Currency and Interest Rate Swaps* (n48) 87 ('Documentation for swap transactions ranges from four to thirty or more pages long. Occasionally the added length reflects particular credit considerations or additional complexities such as syndication or guarantees, but more often the length is the result of the draftsman's style and the client's expectations.'); D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27 ('typically a complex 15 to 25-page agreement').

[627] Framework- or 'Umbrella' Contracts are not particular to financial transactions. Rather, regardless of the sector or legal order under which they are concluded, they are a common contractual feature to undergird long-term, stable and regular commercial relationships: S Mouzas and M Furmston, 'A Proposed Taxonomy of Contracts' (2013) 30 Journal of Contract Law 1, 5-6.

[628] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (2001) 6 Harvard Negotiation Law Review 211, 235; D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27; C Stoakes, 'Standardising Swaps Documentation' (1985) 4 International Financial Law Review 11, 11, 14.

of the market makers' master agreements being proprietary and unique.[629] This heterogeneity was also reflected in the technical drafting approach employed by the different market making institutions. Early swaps agreements tended to visibly reflect the institutional bias of their drafters, with those drafted by commercial banks more similar to familiar comprehensive loan agreements, including the usual representations, covenants and defaults, while those drafted by investment banks were shorter in content and a reflection of the nature of the relatively novel financial product as a trading instrument.[630]

Jeffrey Golden paints an illustrative picture of the 'frustrating'[631] and time-consuming process of transaction negotiation from the perspective of those early market participants.[632] As there was no generally accepted common normative frame within which to transact, counterparties tended to wrangle over individual terms, with a preference for their own familiar terms.[633] Typical time-consuming sticking points in these negotiations included stipulations as to the payment mechanics, rate setting provisions, as well as liquidated damages upon early termination.[634] Where the lawyers or 'documentation experts'[635], tasked by individual institutions with devising contractual master templates for these transactions, had completed these proprietary templates, wrangling over individual terms shifted to the plane of a 'battle of the forms'.[636] Each swap dealer now made use of and insisted on its own standard documentation with overall inconsistent terms and definitions operating across the range of proprietary documentation versions.[637] As a result, transaction negotiations stalled because the counterparties' representatives were wary of deviating from their own familiar documentation and negotiation costs resulted from the need to reconcile the various standard form agreements.[638] Adding to the seriousness of any negotiation delays, in those cases where first generation derivatives transactions had been executed

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[629] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 235.
[630] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27.
[631] JB Golden, 'Setting standards in the evolution of swap documentation' (1994) 13 International Financial Law Review 18.
[632] *Ibid* 18-19.
[633] *Ibid* 18.
[634] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27.
[635] JB Golden, 'Setting standards in the evolution of swap documentation' (n631) 18.
[636] *Ibid* 18-19.
[637] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 235.
[638] *Ibid*; JB Golden, 'Setting standards in the evolution of swap documentation' (n631) 18.

without a documentary framework in place, the amount of time passing until documentation completion was critical, as it increased the legal and credit risk attending to these transactions.[639] Steadily increasing OTC derivative trading volumes, as well as an increasing market membership only served to further compound the problem of legal heterogeneity, as the significant *ad hoc* negotiation costs began to bear weight in the light of increasing price competition leading to reduced profitability of these transactions for market makers.[640]

II. First Wave Standardisation: ISDA Code and Menu Approach

Against the background of the deeply unsatisfactory state of affairs of having to essentially, to a degree, reinvent the wheel in each round of transaction negotiation, greater standardisation of the swaps market was a pressing item on the agenda. In light of this, a group of eleven major swap dealer banks, the early market makers,[641] first came together in New York on 31 May 1984, at the invitation of investment bank *Salomon Brothers*, to address the challenges besieging the fledgling market with a view to developing documentation standards.[642] Greater standardisation of the swaps market was, in addition, also thought to be the key for creating a liquid secondary swap market.[643] According to original participants in the meetings, the New York group was not exclusive, but rather open for anyone to join with drafts of the end-result of their consultations also disseminated to interested parties that had not themselves attended the meetings.[644]

Although the participating dealer banks shared the conviction of needing to rein in the existing legal heterogeneity, the initial ambition of creating a single mutually acceptable standard contract form did not materialise. In particular, consensus would break down, whenever a proposal of such a standard form looked to formally resemble an existing proprietary master agreement version too closely.[645] Presumably, this was, at least partly, for fear of handing a competitor a competitive edge due to its familiarity with

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[639] GD Gay and JT Medero, 'The Economics of Derivatives Documentation: Private Contracting as a Substitute for Government Regulation' (1996) 3 The Journal of Derivatives 78, 80.
[640] S Firth, *Firth on Derivatives Law and Practice* (n5) para 10A.002.
[641] See § 6.C.II.
[642] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 235; Providing a detailed chronology of the meetings: C Stoakes, 'Standardising Swaps Documentation' (n628) 13.
[643] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27
[644] C Stoakes, 'Standardising Swaps Documentation' (n628) 13.
[645] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 235.

those terms and a continuation of the battle of the forms at the drafting level. Considering these ultimately irreconcilable teething problems, the ambitious initial attempt of arriving at a mutually acceptable and comprehensive single standard form contract was abandoned.[646]

Instead, the dealer banks settled on an alternative approach to reduce existing variability in early swap contracting. This new approach comprised formulating standardised definitions for contract terms pervasive in the existing swap documentation versions.[647] The process was implemented by a committee consisting of a mix of expert dealer bank representatives, in-house as well as external legal counsel.[648] Here, the various standard forms in use were dissected into their individual components and existing definitions debated on their merits, until after amendments in various drafting rounds, mutually acceptable elements could be distilled and a final consensus on a preferred definition was reached.[649] Importantly, consensus, as reflected in the final standard terms, was not extrinsically imposed upon the participants, when differing views on a matter existed, but rather was allowed to evolve organically.[650] The specific approach to achieving industry-wide documentary standardisation based on broad consensus, evident already at this earliest stage, was maintained in subsequent standardisation initiatives in ISDA's various documentation committees.[651] Sean M. Flanagan has termed this general approach, grounded in gradual and organic evolution, as ISDA's 'three-tiered approach to standardization'[652], consisting of the following elements: Whereas uncontested market consensus may straightforwardly be codified into a standard term or definition, if contested, the majority view can be codified as the standard with the option for individual opt-out, or lastly, where there exist inconsistent views, this divergence could be translated as options into a menu form for market participants to choose from in line with their preferences.[653] In following this procedure, any standard wording, once it is ultimately adopted, has the benefit of being accepted broadly and voluntarily as reflecting the established market view.

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[646] *Ibid* 235-236; C Stoakes, 'Standardising Swaps Documentation' (n628) 11, 14.
[647] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 236.
[648] *Ibid*.
[649] In detail, *ibid* 236-237.
[650] *Ibid* 237, 259.
[651] *Ibid* 237-238, 259 ('[D]ocumentation committees seek only to codify consensus to the extent it already exists').
[652] *Ibid* 244.
[653] *Ibid* 244-245.

When ultimately a consensus regarding the relevant definitions in the first wave of industry-led market documentation standardisation was reached, it was encapsulated in the '1985 Code of Standard Wording, Assumptions and Provision for Swaps, 1985 Edition'[654] (or simply 'ISDA Code'[655], or 'SWAPS Code'[656]), revised and substantively expanded in 1986.[657] The ISDA Code contained a collation of essential contract terms specifically for US dollar-denominated interest rate swaps.[658] As emphasised by one of its co-creators, rather than being a contract, however, the ISDA Code furnished counterparties with 'a dictionary or a menu of relevant provisions including presumptions based on market practice'[659].[660] Staying with the metaphor, the ISDA Code codified existing experience and market practice and in doing so created an accessible common language[661], a contractual 'lingua franca'[662] of the OTC derivatives market, of which counterparties could voluntarily avail themselves in their future transactions. Market participants were free to adopt the ISDA Code in its entirety as the general backbone of their contract, or only selected portions for incorporation into their master agreements of individual transactions, as the case may be.[663] This included, for example, presumptions concerning payment mechanics,[664] the credit risk reducing 'flawed asset approach'[665], essential also to the subsequent ISDA MA form versions, as well as certain fallback provisions for unforeseen contingencies, which might

[654] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 26, 27.
[655] *Ibid* 26.
[656] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 234.
[657] JB Golden, 'Setting standards in the evolution of swap documentation' (n631) 18-19.
[658] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 26.
[659] JB Golden, 'Setting standards in the evolution of swap documentation' (n631) 18; This rejection of a standardised contract in favour of focusing on individual terms was a strategic decision by outside legal council, in order to ensure that participating dealer banks' opposition due to perceived similarities with an established contract version could be overcome: SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 236, 259.
[660] As stated by Patrick de Saint-Aignan, then principal at Morgan Stanley, functionally it 'acted as a menu from which one can select options' as cited in C Stoakes, 'Standardising Swaps Documentation' (n628) 15.
[661] This instructive metaphor is tellingly employed by the lawyers involved in the drafting of the ISDA Code: D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 26; JB Golden, 'Setting standards in the evolution of swap documentation' (n631) 18; See, also, with regard to the ISDA MA today: D Wielsch, 'Contract Interpretation Regimes' (2018) 81 The Modern Law Review 958, 978 ('It seems fair to say that the Master Agreement frames the relationships among market participants by supplying a kind of common language in which they interact').
[662] With regard to the ISDA framework today: A Hudson, *The Law on Financial Derivatives* (n2) para 6.08.
[663] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 26.
[664] *Ibid*.
[665] *Ibid* 27. The flawed asset approach is discussed in detail under the respective case studies in Chapter 2.

potentially impact performance[666]. However, reflecting the unresolved practical heterogeneity of individual market participants' transactional approaches in the early years of the market, the ISDA Code did not yet provide standardised solutions for other key transactional aspects, such as setting out the exact circumstances constituting events of default or non-default as contractual triggers of the close-out mechanism, the latter being equivalent to so-called Termination Events under the nomenclature of the ISDA MAs in use today.[667] As stated at the time by Daniel Cunningham, then partner at Cravath, Swaine & Moore and special drafting counsel through the drafting process of the ISDA Code, '[t]here is no need for a standard master agreement now, given the individual agreements between the major players, and any master agreement would be too complex on credit conditions to make it workable. But the code will be incorporated into many master agreements and will be useful for outsiders and end-users'[668]. The ISDA Code, in this way, constituted an auxiliary tool to aid negotiations by providing standardised language to be incorporated by market participants into those master agreements already in existence and into bespoke derivative contracts to the extent of their choosing.[669]

Nevertheless, the ISDA Code laid the foundation for all subsequent, more stringent, and ultimately highly successful, documentary standardisation efforts conducted by ISDA.[670] The regular meetings and ultimately successful publication of the ISDA Code by the original members of the drafting group in 1985 paved the way for the emergence of a more formalised structure to facilitate industry-wide collaboration, namely ISDA,

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[666] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 236 giving an example of an early fallback provision, namely stipulation of a 'fallback rate' in case of unavailability of a reference rate index for the calculation of the variable payment obligation in an interest rate swap.

[667] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 26; C Stoakes, 'Standardising Swaps Documentation' (n628) 14 (The article explicitly cites Gregory Palm, a then partner at law firm Sullivan & Cromwell advising investment bank First Boston in the drafting stages of the ISDA Code, as stating that '[i]nstitutions have different views of representations and events of default. The type of agreement an institution will sign with one counter-party will differ from one with another counter-party', *ibid* 14); The revised and expanded 1986 edition did, however, ia, for the first time include events of default: D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27.

[668] Cited in C Stoakes, 'Standardising Swaps Documentation' (n628) 14-15.

[669] See, regarding the creation of the ISDA Code, *ibid* 11; The approach taken in the ISDA Code can be found in other areas of financial market standard documentation, eg, with regard to the Loan Market Association's standard documentation underlying the syndicated loan markets. Cf, J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (Cambridge University Press 2020) 31 (fn 88).

[670] See, for a concise chronology of subsequent developments up to the 2002 ISDA Master Agreement: NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 737-740.

as it is known today. This is well illustrated by a contemporaneous quote given by Daniel Cunningham in 1985, who stated that '[t]he group is thinking about formalising itself and the general consensus is that it is worth serious study. As a minimum, it could sponsor the code and amend it from time to time'[671]. It so happened that, as the consultation process in the drafting committee drew to a close, its participants sought to protect the intellectual property they had collectively created by copyrighting the final definition versions.[672] For this specific purpose the *International Swap Dealers Association* was established as a formal entity – the name reflecting the composition of its membership at the time of its founding – as a not-for-profit corporation incorporated under the laws of New York.[673]

III. Second Wave Standardisation: The 1987 ISDA Master Agreement

Significantly, under the auspices of the newly formed ISDA, the nature and scope of documentary standardisation was to change from 1987, driven in large part by the London office of investment bank and ISDA member Morgan Stanley.[674] Taking a lead from the design approach underlying the British Bankers' Association's standard terms ('BBAIRS Terms), Morgan Stanley advocated the need for a comprehensively standardised master agreement.[675] Whereas such an ambitious project had previously failed in the context of the development of the ISDA Code, the London initiative could now draw on the trust that had developed between participants in the earlier ISDA Code drafting process, and the standardisation groundwork laid by the same, culminating in the 1987 ISDA MA, accompanied by definitions and a user's guide, and marking the transformation from menu approach to contract template form.[676] The result, collectively referred to as the '1987 ISDA Master Agreement', consisted of (i) the multicurrency 1987 'Interest Rate and Currency Exchange Agreement' (referred to as 'the 1987 Agreement' in early ISDA publications)[677] and (ii) the US dollar denominated

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[671] Cited in C Stoakes, 'Standardising Swaps Documentation' (n628) 15.
[672] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 236, 256.
[673] In detail on the history of ISDA up to the turn of the century: *Ibid* 227-251; See also, G Morgan, 'Market formation and governance in international financial markets: The case of OTC derivatives' (2008) 61 Human Relations 638-660.
[674] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 243.
[675] *Ibid* 243.
[676] *Ibid* 243-244; JB Golden, 'Setting standards in the evolution of swap documentation' (n631) 19.
[677] ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) 8.

1987 Interest Rate Swap Agreement.[678] The 1987 ISDA MA comprehensively contained the key provisions for OTC derivative transacting, including representations, events of default and termination events, as well as the corresponding provision for early termination and calculation methods to determine the scope of payment obligations or early termination amounts.[679] In this way, it, for the first time, introduced a standardised comprehensive master agreement structure for adoption by the OTC market participants. As characterised by ISDA with regard to the '1987 ISDA Interest Rate and Currency Exchange Agreement', it was a 'single form of master agreement that could be used to document the overall relationship between parties that wished to enter into transactions from time to time'[680]. Importantly, rather than embodying a pick and mix menu approach, in form of the 1987 ISDA MA, ISDA now provided counterparties with a comprehensive off-the-shelf complete contractual template, to be used by and large without individual amendment when transacting.[681]

While the initial standardisation efforts focused on the emerging swap market, the ISDA membership subsequently sought to expand the master agreement approach to also encompass all other OTC derivative categories beyond swaps, with the whole variety of underlying asset classes, which became possible for the first time under the ISDA 1992 Master Agreement.[682] As a result, the International Swap Dealers Association was renamed as International Swaps and Derivatives Association to reflect this expansion in scope, while, however, retaining the acronym 'ISDA'.[683]

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[678] SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 243-244; NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 343 (fn 93); JB Golden, 'Setting standards in the evolution of swap documentation' (n631) 19.

[679] See NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 343 (fn 93); See also, eg, ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) 8-9.

[680] ISDA, *Written Submission on Behalf of the International Swaps and Derivatives Association in the Matter of Lehman Brothers International (Europe)* 6; See also, ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) (Appendix D).

[681] J Golden, 'ISDA and ADR: A Brief History of a Long Relationship' in A Calissendorff and P Schöldström (eds), *Stockholm Arbitration Yearbook 2020* (Wolters Kluwer 2020) 11, 16; J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n669) 31.

[682] ISDA, *Written Submission on Behalf of the International Swaps and Derivatives Association in the Matter of Lehman Brothers International (Europe)* 6.

[683] Noting the inherent tautology as swaps are, of course, also a class of derivative: E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)', in G Yeowart and R Parsons (eds) with E Murray and H Patrick, *Yeowart and Parsons on the Law of Financial Collateral* (Edward Elgar 2016) para 17.22.

B. Normative Implications: From Menu to Global Normative Code

As far as the ISDA Code – a reflection of market conventions – was concerned, on the one hand, the presumptions included in it were indicative of the beliefs of the drafting committee as to early market conventions already in existence.[684] It bears emphasis, however, that such early market conventions were few and far between. This is evidenced by a practical example from the early swap markets. While counterparties already transacted large volumes of swaps in relatively short time frames, requiring them to focus only on key economic terms in telephone negotiations and oral confirmations with an implicit reliance on a shared common assumption as to the rest, frequently, and unbeknownst to them, their interpretation of the underlying market practices would in fact vary – which was inconveniently only discovered at the later documentation stage.[685] Against this background, as tellingly noted by Daniel Cunningham, the ISDA Code was not yet anything resembling an authoritative normative determination on the rules of the game of the growing swaps market, in that 'the Code contain[ed] alternate provisions and parties [were free to choose] other provisions if they desire[d]'[686] and '[r]ather than create a consensus of appropriate market practice, the ISDA Code provide[d] a menu of choices in certain areas and presumptions in others'[687].

In this regard, it is striking that when viewed from the degree of standardisation the ISDA documentary architecture enjoys today, at a global scale of use as the hallmark of OTC derivatives market practice, the ISDA Code at that time considerably lagged behind contemporaneous standardisation initiatives elsewhere in the world, particularly on the other side of the Atlantic. For example, it fell markedly short of the BBAIRS Terms, developed roughly at the same time, which already then were likened to something more closely resembling 'a normative code', containing a single set of standard terms jointly settled upon by the banks participating in the London inter-bank market for swaps with a maturity of up to two years.[688] The particular contractual strategy followed under the BBAIRS terms, namely of having the core legal provisions

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[684] D Cunningham, 'Swaps: Codes, Problems and Regulation'(n610) 26.

[685] *Ibid* 27, pointing to the measurement of payment periods and conventions regarding counting days within such payment periods as examples of such interpretation divergence.

[686] *Ibid* 26.

[687] *Ibid*.

[688] *Ibid* 28, also referring to the Australian Swap Market Committee's General Terms and Conditions of Australian Dollar Fixed-Floating Swaps, as an example of a single set of terms explicitly intended to establish standard market practice.

concentrated in one standardised agreement with individual confirmations specifying the specific economic terms from individual swap to swap,[689] elevated the master agreement approach to market standard and foreshadowed the later direction of travel for the ISDA contractual architecture. At that specific moment in time, however, 'the uniformity that the ISDA Code [sought] [was] a uniformity of vocabulary, not necessarily of practice'[690].

Against this particular background, the 1987 ISDA MA and with it the introduction of the standardised master agreement approach for market-wide adoption, marked a watershed moment in the creation of an established market practice and the transformation of the 1987 and subsequent ISDA MAs into a 'normative code' for the growing, and today global, OTC derivatives market. This was because the overarching provisions by their inclusion into all subsequent transactions were now not to be amended and thus effectively prescribed the contractual rules of the game for OTC derivative transacting. It was this shift in drafting technique that set in motion the process at the end of which stands the understanding of the norms embedded in the ISDA contractual architecture as 'the unified understanding of the market as a global whole'[691].

The implications of such transnational normativity and in particular questions regarding the 'if' and 'how' of its statal recognition are the focus of discussion in Chapter 2.

C. The ISDA Standard Documentation Architecture of Today

ISDA's self-proclaimed mission statement is to 'foster (…) safe and efficient derivatives markets to facilitate effective risk management for all users of derivatives products'[692]. This mission is pursued by strategically focusing on core areas of market concern, including the technical aspects of market infrastructure, including, for example, efficient trading, clearing, reporting practices, and of particular interest for present purposes the setting of global industry standards in documentation.[693] Since the first waves of standardisation swept across the OTC derivatives market, as illustrated above, a complex and comprehensive suite of standard documentation has developed, which, in its outlines, will be detailed in the following.

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[689] *Ibid*.
[690] *Ibid* 28.
[691] With regard specifically to the ISDA Definitions: A Riles, *Collateral Knowledge: Legal Reasoning in the Global Financial Markets* (The University of Chicago Press 2011) 31-32.
[692] ISDA, *Mission Statement*.
[693] *Ibid*.

While, as discussed under § 6.A.I, in the exchange-traded market for derivatives the operational terms and rules for trading are supplied by the exchange to its members, the OTC derivatives market – as an effectively decentralised market of locally dispersed participants which are linked only through bilaterally negotiated contracts – lacks such a localised provider of uniform legal infrastructure with all its associated benefits, including institutionalised counterparty credit risk management. Against this background, one of the ongoing contributions of ISDA is the provision of a variety of standardised documentary forms for counterparties to document their OTC transactions under.[694] ISDA becomes involved once market maturity has reached the point where dealers deem the creation of specific standardised documentation necessary to ensure uniformity of terms for continued market growth and liquidity for that transaction.[695] Typically, the dealers involved are already ISDA members, which provides the channels of communication to quickly set in motion the processes to put these transactions on a standardised documentary footing.[696] There are of course many variations to this blueprint of documentation genesis.[697]

Together, the interdependent documentary modules detailed in the following, dovetail to form what has become known as the ISDA 'documentation architecture'[698]. As such, the individual documentary building blocks functionally serve as legal equivalents to the basic financial building block approach discussed under § 2.A, as they can also be combined to create transactions of the highest order of complexity. As a contracting strategy, this approach serves as a prime example for a phenomenon which has been observed and characterised as 'legal modularity'[699] in contract practice.[700]

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[694] Alastair Hudson emphasises, the central role of international standard market documentation, discussed in the following, is controlling or 'commoditising' the risks emanating from derivative transacting itself; in this context he states that its role 'is to "commoditise" the risks which are created by providing for common, cross-border solutions to issues which arise in all derivatives products. By the term "commoditise" in this context is meant a process of rendering all of the risks of the products the same by using standard market documentation which provides for identical definitions of, and solutions to, those issues.': A Hudson, *The Law on Financial Derivatives* (n2) para 6.05.

[695] See, E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)' (n683) para 17.23.

[696] *Ibid*.

[697] For example, Michael Lewis in his book on the origins of the GFC describes how hedge fund manager Mike Burry prompted a new market to be created from scratch by identifying an investment opportunity in subprime debt, leading dealers to develop the instrument and ISDA the documentation for what has become known as subprime mortgage bond CDSs: M Lewis, *The Big Short: Inside the Doomsday Machine* (W W Norton & Company 2011) 47-49.

[698] This is the characterisation employed by ISDA, see, eg, its *User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) 1.

[699] MJ Radin, 'Boilerplate Today: The Rise of Modularity and the Waning of Consent' (n279) 189.

In performing its standardisation function, ISDA documentation must also master a balancing act amidst the tension created between the bespoke nature of OTC derivatives, on the one hand, and the drive towards documentary standardisation, on the other.[701] While the core utility of OTC traded instruments, in contrast to its exchange-traded counterparts, lies in the opportunity to customise them in order to address very idiosyncratic risk exposures, standardisation, by definition, places constraints on counterparties' freedom to negotiate customised risk management solutions.[702] Once standardisation has reached a sufficient degree, this tension can become especially pronounced, since there is then significant pressure on market participants to adopt standardised documentation in negotiations for the very reason that the terms are standard.[703] This apparent 'paradox'[704] is navigated as regards the ISDA contractual architecture in that while OTC trading does entail the potential for customisation, this generally occurs within the confines of a standardised documentary framework necessary for the functioning of the global market as a whole.[705] In this way, the ISDA contractual framework employs a strategy observed in the study of administrative policy of 'experimentalism', where by imposing uniformity through standardisation along certain essential dimensions, a broad scope for variation is permitted along others.[706] As such, the specific example of OTC derivative contracting mirrors observations within the contract theory of boilerplate more generally.[707]

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[700] The integral principle underpinning the ISDA contract framework is that the individual documentary modules are linked together in that they are intended to be interpreted as forming a single agreement. This 'Single Agreement' approach is explicitly set out in Sec 1(c) ISDA MA.

[701] Describing the 'optimal balance between standardization and customization in contracts' as the goal of contractual standards and emphasising the need of specialist transaction knowledge to achieve this goal with specific reference to derivative contract standardisation: M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (1997) 84 Virginia Law Review 713, 764.

[702] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 342;

[703] SK Henderson, *Henderson on Derivatives* (n1) para 1.14.

[704] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 342.

[705] *Ibid*, noting the ISDA documentation architecture entails 'the potential for (if not actual) customization of a financial product, and the ability to customize, within a standardized framework'.

[706] In reference to the political philosophy and 'democratic experimentalism' of John Dewey: CF Sabel and WH Simon, 'Minimalism and Experimentalism in the Administrative State' (2011) 100 The Georgetown Law Journal 53, 88 (cited and directly applied to the standardisation process in the case of ISDA documentation in C Ford, *Innovation and the State: Finance, Regulation, and Justice* (Cambridge University Press 2017) 178-179 and 325 (fn 33)).

[707] See, MJ Radin, 'Boilerplate Today: The Rise of Modularity and the Waning of Consent' (n279) 190 ('Standardization versus customization is a complex issue. The "versus" can mislead us. The two characterisations are not really opposed to each other. Instead, both apply to the same contracts when viewed with different levels of generality. Standardization serves customization and vice versa. Uniformity at one level facilitates customization at another. (…)').

In the ISDA case, this means that standardisation of certain core essential rights and obligations, as well as the availability of an array of standard forms harmonising essential terms, free counterparties up to invest their time in customising their individual transactions regarding the respective economic terms required to create particularly idiosyncratic risk exposures; for example, for hedging purposes.[708] The following will address the interoperable documentary modules, before analysing in more detail the crucial economic advantages of ISDA's standardisation project, as well as the foundational role standardisation plays for market functioning in a more general sense.

I. The ISDA Master Agreement Forms

While contract constitutes the organisational medium of the global OTC derivatives market, the ISDA Master Agreement ('ISDA MA') form is the nucleus of the ISDA documentation architecture.[709] As discussed under § 7.A.III, first published in 1987, the ISDA MA form has been since twice re-published in revised form in 1992 and, most recently, in 2002 to reflect changes to market and legal practice and evolving market needs.[710] While the 1987 form was designed specifically for the documentation of interest rate and currency swaps,[711] the 1992 ISDA MA was significantly broader in scope, in that it was the first to be designed to encompass the documentation of the whole range of other OTC derivatives, including, for example, forwards and options, as well as financial and physical settlement[712]. The 2002 ISDA MA is the outcome of a strategic documentation review of its 1992 predecessor initiated by ISDA in 1999, with a view to remedy deficiencies brought to light by a series of disruptive market events in the late 1990s.[713] While in large part conforming to the 1992 form, some of the changes made to improve its practical functionality in times of severe market stress include amendments regarding the standard provisions on so-called Events of Default and

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[708] In the same vein, C Ford, *Innovation and the State: Finance, Regulation, and Justice* (n706) 178-179 ('[t]he fact that (…) a "master agreement" (…) established background rules (…) created a substructure on which a range of innovative, purpose-built derivatives could then be erected').

[709] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 344 describing the ISDA MA as '[t]he core document in ISDA's array of documents'.

[710] *Ibid* 342-344; See, also, ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 edition)* i.

[711] ISDA, *'User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) 8.

[712] S Firth, *Firth on Derivatives Law and Practice* (n5) para 11.001; *Lomas v JFB Firth Rixson, Inc* [2010] EWHC 3372 (Ch) (21 December 2010) at [8].

[713] Including the Asian currency crises, the Russian debt default and the crisis of hedge fund Long-Term Capital Management: See, ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) i.

Termination Events, Early Termination and Close-Out Netting.[714] In particular, the 2002 version contains important changes to the standard methodologies of determining the amounts due upon early termination.[715]

While the 1992 version consists of two formats, one for purely domestic, local currency transactions ('Local Currency Master') and one for cross-jurisdictional transactions involving more than one currency ('Multicurrency – Cross Border' or 'Multicurrency Master') with some corresponding additional provisions, the 2002 version comes as only one universally applicable form, which contains no limitation in scope and is suited to international, i.e. cross-jurisdictional, multi-currency transactions.[716]

While, as set out above, differing in key provisions, both the 1992 as well as the 2002 versions are in active use today.[717] Although market participants were initially reluctant to migrate to the 2002 version, the majority of new transactions are concluded on the basis of a 2002 ISDA MA.[718] What is more, as observed in an HM Treasury Report, according to anecdotal evidence against the backdrop of the GFC, the close-out methodology in 1992 ISDA MAs in place between major market makers was amended in favour of the methodology employed by the 2002 ISDA MA in a considerable number of cases.[719] This amendment subsequently broadened in scope via ISDA's

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[714] *Ibid*.

[715] R Grove, 'Valuation in the context of derivatives litigation' (n188) 150-151.

[716] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 343; PC Harding, *Mastering the ISDA Master Agreements (1992 and 2002)* (3rd edn, Financial Times Prentice Hall 2010) 171.

[717] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n669) 116; Differences between both versions mean that the balance of provisions contained in the 1992 version is generally deemed more attractive to commercial end-users and the more economically powerful among that group are able to successfully assert its adoption in their negotiations with dealer banks. See, NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 344 (fn 100); Other than conducting any detailed comparison between the versions' provisions, some parties also choose to stick with the 1992 version as the result of ambiguity aversion simply because it is more familiar than the 2002 version: See, eg, *Lomas v JFB Firth Rixson, Inc* [2010] EWHC 3372 (Ch) (21 December 2010) at [8].

[718] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 344; See also, E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)' (n683) para 17.26 additionally noting that the updated provisions of the 2002 ISDA MA form have proved effective in their GFC stress test, as evidenced by the fact that most of the resulting litigation in England focused on interpretation of the 1992 rather than the 2002 ISDA MA form; HM Treasury, *Establishing resolution arrangements for investment banks* (December 2009) para 7.6.

[719] HM Treasury, *Establishing resolution arrangements for investment banks* (December 2009) para 7.6 (fn 29).

publication of the 'ISDA Close-out Amount Protocol'[720], which facilitated amendment also in the wider market by including other dealers and end-users.[721] The following will refer generally to the ISDA MA without distinction, except where differences between the versions become relevant for the purposes of this discussion.

At its core, the ISDA MA is a framework agreement that contains a suite of standardised essential clauses which, if adopted, govern all individual OTC derivative transactions entered into between the counterparties.[722] In this way, it lays down the elementary non-transaction-specific meta- or 'ground rules'[723] for the counterparties' overall future contractual relationship.[724] These elementary stipulations are of a very general and abstract 'normative'[725] nature, reflecting the fact that the ISDA MA was designed to be seamlessly utilised in a wide range of commercial settings, including diverse sets of counterparties, ranging from financial institutions to non-financial corporates and public bodies, as well as the normative basis for a wide range of transactions, ranging from 'plain vanilla' to exceedingly complex and bespoke 'exotic' transactions.[726] The level of generality exhibited by these relational provisions has in fact been credited with the growth of the document, as it is able to 'absorb within its initial legal architecture any new financial instrument created by the markets'[727] which might individually exhibit quite distinct economic and even legal characteristics.[728]

The drafting strategy underlying the ISDA MA is to minimise the scope for costly and time-consuming future dispute and especially formal litigation amongst the sophisticated counterparties that have adopted the ISDA MA by providing a range of 'sophisticated self-help remedies'[729].[730] Standard form contracts or master agreements

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[720] A brief overview and the original Protocol are available on ISDA's website: ISDA, *ISDA Close-out Amount Protocol*.

[721] HM Treasury, *Establishing resolution arrangements for investment banks* (December 2009) para 7.6 (fn 29); On the ISDA Protocol Mechanism, see, in more detail, § 7.VI.1.

[722] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 344; J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.19.

[723] NM Feder, 'Deconstructing Over-The-Counter Derivatives' (n19) 744.

[724] *Ibid*; E Murray, 'Derivative Transactions' (n20) para 11.3.1.3.

[725] *Lehman Brothers Finance SA v Sal. Oppenheim Jr. & CIE. KGAA* [2014] EWHC 2627 (Comm) at [25(iii)].

[726] *Grant & Ors v FR Acquisitions Corporation (Europe) Ltd & Anor (Re Lehman Brothers International (Europe))* [2022] EWHC 2532 (Ch) at [56].

[727] P Sebastianutti, 'What is this thing called international financial law? Part 4' (2009) 3 Law and Financial Markets Review 348, 352.

[728] *Ibid* 351-352.

[729] JP Braithwaite, 'Standard Form Contracts as Transnational Law: Evidence from the Derivatives Markets' (2012) 75 The Modern Law Review 779, 786 with reference to the notion of 'self-supervision'

promulgated by specialist trade associations have become widely used for various international transaction types beyond and increasingly also within the financial sector.[731] Specifically in the international finance context, transactional documentation has been judicially recognised as being 'of the essence of such transactions in the capital markets'[732]. This is in large part premised on the practical needs of an inherently cross-border, interjurisdictional market, where standard international documentation, such as the ISDA MA, is deemed to 'provide an orderly contractual structure, among other things facilitating both hedging and restructuring'[733].

Whilst operating in very different commercial contexts, what is common to all standardised sectoral contracting approaches is that the respective clauses are customised to reflect the specific needs of and challenges faced by the respective industry. In the case of the ISDA MA, beyond facilitating the efficient transfer of market risk, this regime is primarily tailored towards the mitigation of credit risk,[734] exposure to which is, as a flip side, necessarily assumed through entering into an OTC derivative transaction with another counterparty.[735] Credit exposure is, of course, a feature in every commercial and financial relationship. However, in contrast to other financial transactions, a unique characteristic of and challenge posed by the credit risk exposure incurred under most derivative transactions is its inherent variability.[736] Whereas in a loan agreement the position of creditor and debtor is fixed at the outset and remains stable through to maturity, individual derivative positions such as swaps

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described under the rubric of private governance by KP Berger, *The Creeping Codification of the New Lex Mercatoria* (2nd ed, Kluwer Law International 2010) 48.

[730] J Golden, 'ISDA and ADR: A Brief History of a Long Relationship' (n681) 18; As noted by Jeffrey Golden, this feature in fact constituted 'a selling tool' from the perspective of the ISDA drafters, aimed at facilitating widespread market adoption of the new contractual standard form in the early days of its existence, *ibid*.

[731] These range from the contracts underlying international construction and engineering projects, such as the *Fédération Internationale des Ingénieurs Conseil*s ('FIDIC') standard form construction contracts underlying international construction and engineering projects to various specialist financial transactions. The latter include eg the standard documentation relating to loan agreements promulgated by the *Loan Market Association* ('LMA') or the *Global Master Repurchase Agreement* ('GMRA') for securities sale and repurchase ('repo') agreements, which is published and regularly revised, most recently in 2011, by the *International Capital Market Association* ('ICMA') in conjunction with the *Securities Industry and Financial Markets Association* ('SIFMA').

[732] *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWHC 465 (Comm) at [398].

[733] *Ibid* at [400].

[734] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 341; E Murray, 'Derivative Transactions' (n20) para 11.3.1.3.

[735] See, § 3.B.I.2.

[736] P Koulafetis, *Modern Credit Risk Management: Theory and Practice* (Palgrave Macmillan 2017) 10.

move in- and out-of-the-money multiple times, even on a single trading day, contingent on value changes in their respective underlyings.[737] Where a counterparty is in-the-money over the range of its derivative transactions with a counterparty,[738] this means that it is exposed to its counterparty for that respective amount owing between them; i.e. the amount it stands to lose should its counterparty default on its performance obligations.[739] In this way, viewed on a net basis of all aggregated positions documented under an ISDA MA, the net payment obligation and thereby the roles of debtor and creditor can switch back and forth continuously over the course of the trading relationship. Figuratively speaking, credit exposure thus continuously travels along the two-way street of reciprocal performance obligations, ultimately depending on the movements of the respective underlying values. This feature of 'bidirectionality' of credit exposure in derivative contracting is further compounded by the fact that in market practice a derivative position is not adjusted by amending the terms of the specific contract, but by entering into an additional contract to create a cash-flow modifying overall exposure.[740] The longer-term the exposure, the more unpredictable these changes become as previously unanticipated market events may impact transactions as well as underlying values move unpredictably, or in other words, the more risk gets interlaced with fundamental uncertainty.[741]

What is more, even where a counterparty partly or wholly hedges an open derivative position with minimal basis risk through entering into an equal but opposite 'back-to-back contract' with a third (sometimes affiliated) party, as is common practice at a

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[737] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)' (n683) para 17.05; SK Henderson, *Henderson on Derivatives* (n1) 386, 392; However, transactions with an asymmetric pay-off, eg an option entered into for an up-front premium, are an exception to this principle. Here, the option holder – after payment of the premium – has no further liability to the option seller and thus will only ever be in-the-money on its transaction. Therefore, only the option holder incurs credit risk vis-à-vis its counterparty: *ibid* 394.

[738] To illustrate the considerable extent of this range, for market-making financial institutions it is not uncommon to at any given time maintain thousands of open contracts under one master agreement: P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (2016) 36 Oxford Journal of Legal Studies 855, 861.

[739] SK Henderson, *Henderson on Derivatives* (n1) 392.

[740] D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (n179) para 1.41; W Bergman and others, 'Netting, Financial Contracts, and Banks: The Economic Implications' in Federal Reserve Bank of Chicago (WP 2004-02) 30.

[741] This, and its systemic implications at the wider market level, were one of the reasons, why at the forefront of international post-GFC regulatory reform was the regulatory requirement of the provision of variation margin for non-centrally cleared OTC derivatives: In more detail, S Firth, *Firth on Derivatives Law and Practice* (n5) paras 6.01-6.02 and 6.07.

global level by dealer banks,[742] it bears emphasis that it merely lays off the market risk of the initial position and – since its legal obligations under original contracts, of course, remain unaffected by the hedging transaction – it retains the credit risk exposure to its original counterparty. The core transactional concern of mutual credit risk exposure consequently creates the need for institutional as well as legal, i.e. contractual and collateral credit risk mitigation arrangements.[743] Contractually, credit exposure is addressed through various substantive provisions in the ISDA MA acting as risk control mechanisms. Most importantly, this is implemented in the form of providing for 'early termination' or 'close-out' in response to the occurrence of certain pre-defined events[744] followed by the 'netting' of these transactions to ensure any exposure is limited to a net rather than gross basis.[745] One leading commentator has, in light of this, emphasised that '[t]he single most important technique for reducing credit risk in the OTC derivatives market is contractual termination and close-out netting'[746]. Aside from its close-out netting provisions, the 'flawed asset approach' embodied in Sec. 2(a)(iii) ISDA MA is a second major contractual credit exposure mitigation mechanism contained in the ISDA MA.[747] As has already been discussed under § 5, any credit risk concerns and contractual mechanisms for their mitigation in a cross-border market

[742] See, eg, with regard to this structural market feature in English jurisprudence, the 'back-to-back contracts' under consideration in *Dexia Crediop S.p.A. v Provincia di Pesaro e Urbino* [2022] EWHC 2410 (Comm) at [76(3)(b)] and [79]; *Banca Intesa Sanpaolo S.p.A. and another v Comune di Venezia* [2022] EWHC 2586 (Comm) at [64] and [341(iii)]; *Dexia Crediop SPA v Comune Di Prato* [2017] EWCA Civ 428 (15 June 2017) at [4]-[6]; *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWHC 465 (Comm) (04 March 2016) at [409(1)(i)] noting that such arrangements are 'entirely routine'; See, also, the back-to-back transactions entered into at an inter-company level in *Lehman Brothers International (Europe) v Lehman Brothers Finance SA* [2013] EWCA Civ 188.

[743] At the institutional level, credit risk management is exercised through an institutional policy setting out concrete procedures, such as, eg establishing credit limits for counterparties and credit parameters for its traders: SK Henderson, *Henderson on Derivatives* (n1) para 9.13-9.14.

[744] Ie, an event subsumable under one of the categories on the enumerative lists of events of default or termination event: Close-out netting is discussed in detail under Chapter 2 § 3.C.III.1.

[745] E Murray, 'Derivative Transactions' (n20) para 11.3.1.4.

[746] SK Henderson, *Henderson on Derivatives* (n1) para 11.1; See, also, the very similar wording used by ISDA itself: ISDA, *2018 ISDA Model Netting Act and Guide* (15 October 2018) para 1.1 ('Close-out netting of derivative transactions under a netting agreement, such as the ISDA Master Agreement, is the single most important mechanism for reduction of credit risk in the derivatives market.').

[747] As noted by Norman Menachem Feder, while some commentators discuss close-out netting and Sec 2(a)(iii) ISDA MA together under the 'flawed asset approach', these mechanisms are – at least conceptually – distinct: NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 366

become overlaid by and are inextricably linked with their universal legal enforceability and predictable operation.[748]

II. ISDA Schedule

The so-called Schedule affords parties the opportunity to negotiate provisions to reflect the particular idiosyncrasies of their trading relationship.[749] Together with the ISDA MA form, the Schedule, when signed, both constitute and are referred to as an ISDA MA.[750] In case of any inconsistency, the hierarchy stipulated in the ISDA MA provides that the respective provision in the Schedule prevails.[751]

III. ISDA Confirmations

The function of the so-called Confirmation is to document an individual transaction.[752] This means that while the ISDA MA sets out the overarching essential rules governing the counterparties' contractual relationship, including each individual transaction, the Confirmation sets out the economic terms as agreed for each individual transaction.[753] By way of example, in the case of an interest rate swap, a Confirmation would identify the specific series of payment dates, as well as the respective mathematical formulae necessary to determine any payable amounts.[754] As such, the Confirmation creates a documentary 'interface'[755] between the various groups of experts involved in creating an effective transaction.[756] Especially in more complex, customised transactions, this entails translating the desired economic effect of the transaction arrived at by quantitative analysts and expressed in sophisticated mathematical calculations into the wording of legally enforceable contractual terms encapsulated in the document by the legal counsel involved.[757] ISDA has published a range of Confirmation forms which can

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[748] This is a practical illustration of the interconnectedness of risk categories discussed in more abstract terms under § 5.D.

[749] S Firth, *Firth on Derivatives Law and Practice* (n5) para 11.122; NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 345.

[750] *Ibid*.

[751] Sec 1(b) ISDA MA stipulates that in case of any inconsistency between the Schedule and the other provisions of the ISDA MA, the Schedule will prevail over the other provisions of the ISDA MA.

[752] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.88.

[753] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 350-351.

[754] *Lomas v JFB Firth Rixson Inc & Ors* [2010] EWHC 3372 (Ch) at [10].

[755] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.89.

[756] *Ibid*.

[757] *Ibid*.

accommodate various derivative asset classes.[758] In the event of any inconsistency between the ISDA MA, i.e. the ISDA MA form and the Schedule, and a Confirmation, Sec. 1(b) ISDA MA provides that such inconsistency is resolved by giving priority to the Confirmation for the purpose of the relevant individual transaction. Given this documentary hierarchy created by the ISDA MA, Confirmation provisions are highly transaction-specific, as counterparties tend to refrain from including general stipulations in the Confirmation so as not to inadvertently override a provision in the ISDA MA.[759]

Although the general mechanics of the Confirmation remain constant, some more recent innovation has had an impact on the documentary process. For one, the general trend of a shift toward electronic trading, at least for eligible transactions[760], is evident in respect of Confirmations. Beginning in 2005, major dealers voluntarily began shifting towards electronic trade confirmations in an attempt to reduce the substantial backlog of unconfirmed transactions in order to lessen the associated lack of transparency as to potentially dangerous credit risk build up that follows from these.[761] As a result, certain asset classes, e.g. CDSs, have for some time now relied predominantly on electronic rather than written paper confirmations exchanged between counterparties even before the GFC.[762] The benefit of this is that electronic trade confirmations are automatically generated and matched in an electronic trading platform which has the potential of speeding up the confirmation procedure.[763]

Lastly, in a further bid to streamline and speed up the confirmation process, especially in more complex transactions, ISDA, amongst others, has applied the master agreement approach to the confirmation procedure by developing 'Master Confirmation Agreements', which contain the transaction type specific general terms applicable to all future Confirmations, with counterparties only having to agree the central economic

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[758] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 352-353.

[759] *Ibid* 351.

[760] Ie, sufficiently standardised transactions: CESR, *Standardisation and exchange trading of OTC derivatives* (n508) para 23.

[761] See, eg, Federal Reserve Bank of New York, *Summary of OTC Derivatives Commitments* (31 July 2008) 1.

[762] This trend is ongoing: ISDA, *2013 ISDA Operations Benchmarking Survey* (April 2013) 8, with data from respondents showing that as early as in 2013 already as much as 98% of credit and 86% of interest rate derivatives were confirmed electronically.

[763] CESR, *Standardisation and exchange trading of OTC derivatives* (n508) para 23: In practice, the automatic electronic confirmation process is implemented using the *Financial Products Markup Language* ('FpML') standard. In greater detail, ISDA, FpML 5 User Guide (2012 ed) 20-21.

terms of their individual trades.[764] The latter are then documented in brief supplements to the Master Confirmation Agreement.[765]

IV. ISDA Definitions

While, as detailed above, the ISDA MA contains the abstract overarching terms governing the counterparties' overall trading relationship and the Confirmations the economic specification of individual transactions, specific derivative transaction categories, or 'products' as they are referred to in market parlance, including currency, interest rate, equity as well as derivatives with less commonly referenced underlyings, require bespoke, i.e. 'product-specific'[766] terms, which are tailored towards the idiosyncrasies of the respective market involved.[767] Against this background, ISDA has published a multitude of standardised definitions booklets that can be used to document the different transaction types available in the market.[768] Counterparties can simply incorporate the applicable definitional booklet(s) by reference in their Confirmation,[769] which in turn allows counterparties to streamline the Confirmation since they can focus solely on the economic terms[770]. From the market perspective, standardisation of the respective Definitions ensures liquidity in the underlying transaction categories, since market participants can trade upon the same terms, i.e. trade the same product, with the benefit to individual counterparties of reduced transaction costs and increased speed of transaction conclusion.[771] The content of the authoritative Definitions is a collation of prevailing market practice and understanding: As such, they are reviewed and periodically updated through the publication of supplements if needed in the face of changes in market practice and conventions.[772] With this in mind, more recently on

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[764] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 353; CESR, *Standardisation and exchange trading of OTC derivatives* (n508) para 21.

[765] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14)) 353; CESR, *Standardisation and exchange trading of OTC derivatives* (n508) para 21.

[766] S Firth, *Firth on Derivatives Law and Practice* (n5) para 10A.007.

[767] Including, for example, as regards payment and delivery obligations regarding respective standard transaction categories and specific valuation and calculation procedures: J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.94.

[768] S Firth, *Firth on Derivatives Law and Practice* (n5) para 10A.007, also providing a current overview of the booklets in use.

[769] *Ibid*; J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.91.

[770] *Ibid* para 7.93; NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 354-355.

[771] S Firth, *Firth on Derivatives Law and Practice* (n5) para 10A.007

[772] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 309, 355; J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.91; See, also, eg, the ISDA, *2006 ISDA*

11 June 2021, the 2021 Interest Rate Derivative definitions replaced the 2006 ISDA Definitions consolidating and updating the over 75 supplements published with regard to the 2006 ISDA Definitions in the intervening years in line with developments in technology, regulatory change and market practice.[773] Significantly, while previous definitional booklets had been just that, taking physical paper form, for the first time the 2021 Interest Rate Definitions were published in a purely electronic format accessible via a web-based user interface, enabling greater ease of use and amendment.[774]

V. ISDA Credit Support Documentation

In the early 1980s swaps market, most transactions were uncollateralised.[775] This was because they were entered into either amongst the major swap dealers in the interdealer market or with commercial end-users who generally exhibited a high credit quality.[776] However, as the market expanded with market participants of lesser credit quality accounting for an increasing market share, credit risk concerns grew more pronounced as subsequently did the rate of transaction collateralisation to secure counterparty performance obligations – thus firmly entrenching collateral in the derivative and wider financial markets.[777] For this reason, the ISDA contractual architecture today encompasses model documentation fleshing out rules and procedures concerning the operative mechanics of financial collateral provision.[778] Credit Support Documentation typically takes the form of an annex to the ISDA MA governing the portfolio of individual transactions for which collateral is posted, so-called Credit Support Annexes ('CSAs').[779]

Functionally, the ISDA model credit support documentation in its various incarnations complements and completes the contractual credit risk mitigation objective of the model close-out netting provision. Namely, premised on the enforceability of the ISDA MA's

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Definitions (2006) vi, noting the possible future need for updating the 2006 Definitions via amendments and supplements as to keep them continuously aligned with market practice.

[773] J Martin and R Sandilands, 'Transformational Change' (February 2021) ISDA Quarterly.

[774] *Ibid*.

[775] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)' (n683) para 17.27.

[776] *Ibid*.

[777] *Ibid*.

[778] In detail on collateralisation of OTC derivative transactions and regarding the impact of post-GFC regulatory reform in initiating a transformation form bilaterally negotiated to regulation mandated collateral provision in non-centrally cleared OTC derivative transactions: S Firth, *Firth on Derivatives Law and Practice* (n5) 'Chapter 6: Collateral'.

[779] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)' (n683) para 17.27.

close-out netting provisions, the ISDA model financial collateral arrangements provide a back-stop function to the former by securing any residual net credit risk exposures remaining after the application of close-out netting.[780]

VI. Ancillary Contractual Standardisation Mechanisms

While the substantive elements of the ISDA documentary architecture, detailed above, serve to create a harmonised modular framework regarding legal terms and terminology, several further elements – aside from publishing model legislation as discussed in Chapter 2 under § 3.C.III.2.b) – serve to ensure the contractual standard is consistently maintained throughout the global OTC derivatives market.

1. ISDA Protocols: Ensuring Temporal Consistency of Contracts

The ISDA Protocols perform the key function of ensuring the consistency of past and future contracts.[781] Where a supervening external event necessitates changes to the current trading documentation, be it economic, such as a financial market crisis, or legal, such as an unanticipated court judgment or legislative change, ISDA, as the originator of the standard forms governing the global OTC derivatives market, has the centralised capacity to amend contractual language to accommodate that event in *future* generations of documentation. An ISDA Protocol, however, constitutes 'a multilateral contractual amendment mechanism'[782], which ensures that this amendment can be incorporated speedily into *already existing* contracts to ensure market-wide contractual consistency.[783] The mechanism is initiated by ISDA publishing the relevant Protocol on its website, to which market participants can then adhere by submitting a corresponding 'Adherence Letter' to ISDA until a designated 'Cut-off Date'. The particular amendments laid down in the Protocol then become effective between all those counterparties having adhered to the Protocol.[784] All adhering parties are subsequently published on the ISDA website together with their date of adherence, so that adhering market participants can verify in which of their trading relationships the Protocol amendments have been incorporated.[785] Notably, the Protocol mechanism has recently

[780] *Ibid* paras 17.52-17.53.
[781] D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (n13) 1108, 1154.
[782] ISDA, *ISDA Protocol Overview & Refund Policy*.
[783] Rather than individual and dispersed counterparties having to engage in time-consuming bilateral negotiations in an at worst uncoordinated and divergent fashion: NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n14) 358.
[784] *Ibid*.
[785] *Ibid*.

become digitalised and, as regards more recent Protocols, market participants are able to adhere to them electronically via the ISDA website.[786] This gives parties the benefit of being able to electronically generate, upload, manage and monitor their Protocol adherences in a centralised fashion via a personalised section after logging through to the ISDA website.[787] In this way, the ISDA Protocol offers an effective centralised mechanism for speedy and market-wide coordination across counterparties and jurisdictions. Where the Protocol is in reaction to an 'interpretive shock'[788], e.g. a domestic court judgment in contravention of established market understanding of a standard term, the ISDA Protocol mechanism provides a powerful vehicle for a centralised 'language-clarification response'[789], as a means of signalling to other courts the market's differing interpretation. This particular aspect sets the OTC derivatives market apart from other markets also reliant on the standard operation of boilerplate terms, but with dispersed participants lacking a similar coordinative mechanism.[790]

The first such Protocol, the 'ISDA EMU Protocol', was published in 1998 in reaction to the Economic and Monetary Union and the introduction of the Euro as single currency in order to clarify its impact on and ensure continuity of transactions concluded under existing master agreements by amending various clauses.[791] The mechanism has since been frequently used, crucially, increasingly also for the purpose of effectively transposing public regulatory requirements in support of global financial stability into the transnational market's private contractual architecture.[792]

2. ISDA User's Guides: Ensuring Consistency of Contractual Meaning

A second integral – if sometimes underestimated – feature of the centralised standardisation performed by ISDA is its publishing of various 'User's Guides' which provide authoritative commentary and guidance on the genesis, meaning and operation

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[786] ISDA, *ISDA Protocol Overview & Refund Policy*.

[787] See, the login mask on <www.isda.org/protocols/manage/> accessed 7 September 2026.

[788] SJ Choi and GM Gulati, 'Contract as Statute' (2006) 104 Michigan Law Review 1129, 1133.

[789] *Ibid* 1157.

[790] Namely, in those internationally operative industries where there is no central coordinative mechanism in place for the market to promptly amend standardised contract language in line with the market view in reaction to the decision. See, writing in relation to the fallout from judicial interpretation of a standard *pari passu* clause in a sovereign bond contract which against the established market view held that it also prohibited preferential payments to bondholders as part of a sovereign debt restructuring: *ibid* 1139.

[791] The original EMU Protocol from 1998 is available under <www.isda.org/a/iuPEE/EMUProtocol.pdf> accessed 7 September 2026.

[792] As discussed in detail in the case study in Chapter 2 § 3.C as evidencing the general phenomenon of private and public regulation mutually intersecting in the transnational realm.

of the standard forms it issues, including first and foremost the User's Guides to the ISDA MA forms as the core elements of its modular contract architecture.[793]

In this way, ISDA's User's Guides, in following their literal designation, function as 'interpretative document[s]'[794] for the benefit of the wide user base of ISDA documentation. However, the User's Guides also radiate beyond market participants, in that they are imbued with the 'authoritative weight'[795] of being the quasi-legislative commentary of the sectoral standard-setting organisation that has overseen the production of standardised language for the purpose of efficient market operation.[796] As such, although the ISDA MA does not explicitly designate ISDA as a 'designated legislative body'[797] in the sense of 'a standard-setting entity to provide a definitive source of interpretive authority for the contract'[798], the ISDA User's Guides have, all the same, been utilised as authoritative guides to the judicial interpretation of ISDA's standard contractual language in the major OTC derivatives jurisdictions. For example, in *Lomas & Ors (Joint Administrators of Lehman Brothers International (Europe)) v Burlington Loan Management Ltd & Ors*[799] Hildyard J stated that the 1992 and 2002 User's Guides 'contain explanations for, and guidance on the operation of, much of the content of the relevant ISDA Master Agreements'[800] and were as such 'both an admissible and useful tool in the interpretation of the agreements'[801]. Similarly, in *Lehman Brothers Special Financing Inc v National Power Corporation & Anor*[802] Knowles J held that the User's Guide formed part of the relevant background in light of which the ISDA MA was to be interpreted.[803]

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[793] See, ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) and *User's Guide to the 2002 ISDA Master Agreement (2003 Edition*).

[794] PC Harding*, Mastering the ISDA Master Agreements (1992 and 2002)* (n716) 31.

[795] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 765.

[796] *Ibid*; J Biggins and C Scott, 'Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform' (n598) 225 also noting ISDA's 'Best Practices' in this regard.

[797] SJ Choi and GM Gulati, 'Contract as Statute' (n788) 1162.

[798] As proposed by Choi and Gulati, *ibid*.

[799] [2016] EWHC 2417 (Ch).

[800] *Ibid* at [28].

[801] *Ibid*.

[802] [2018] EWHC 487 (Comm).

[803] *Ibid* at [39]; See, also, *Greenclose Ltd v National Westminster Bank Plc* [2014] EWHC 1156 (Ch) where in deciding that the notice provisions under Sec 12 of the 1992 ISDA MA were mandatory rather than permissive, while lamenting that she did 'not have the assistance of submissions from ISDA itself, and there ha[d] been no expert evidence on market practice', *ibid* at [5], Justice Andrews stated that she was 'fortified in [her] interpretation by strong indications that ISDA itself regards s.12(a) as mandatory. As this is a standard form, it is permissible to take into account published explanatory notes such as the

Seen in this context, the User's Guides are an important element in ISDA's general harmonisation mission. Namely, by ensuring that the efforts expended on standardised contract drafting are not simply counteracted by *ex-post* fragmentation of contract meaning through judicial interpretative interference in individual cases.[804] What is more, the User's Guides, and their reception by the English domestic courts, serve to illustrate the quasi-legislative power ISDA wields in the transnational sphere of OTC derivative contracting.

3. *Amicus Curiae Interventions: Communicating Established Market Understanding*

Although not strictly a part of ISDA's contractual architecture, ISDA's strategic interventions through *amicus curiae* briefs provide an important function in maintaining its overall integrity. Specifically, they provide an important channel for communicating the market understanding to domestic courts when interpreting individual elements of ISDA's standard contractual forms. The ISDA MA form channels derivatives disputes either to the English courts or the courts of the State of New York and the United States District Court located in the Borough of Manhattan in New York by traditionally restricting choice to these jurisdictions.[805] As such, ISDA's activity in this regard is concentrated on these Anglo-American jurisdictions.[806] The *amicus curiae*, or friend of the court, is firmly rooted in the Anglo-American legal tradition. It has become commonplace for collective interests, including those of professional trade associations, to be communicated to the courts in this way.[807] In the context of the OTC derivatives market, ISDA's submission of *amicus curiae* briefs forms part of its overarching

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User's Guide to the Master Agreement (…)', *ibid* at [107]; In addition, see, *Lehman Brothers International (Europe) v Lehman Brothers Finance SA* [2013] EWCA Civ 188 at [55] ('The 2002 ISDA Master Agreement must of course be interpreted in the light of the relevant background. That includes (…) the *User's Guide*'); See, in addition, already, *Australia And New Zealand Banking Group Ltd v Societe Generale* [2000] EWCA Civ 44 at [29] and at [32].

[804] In greater detail, Chapter 3.

[805] See the cases discussed throughout this thesis.

[806] Although, as noted by Joanne Braithwaite, it is not common for ISDA to join English proceedings as an 'intervenor', as is the English parlance, in contrast to its activity as *amicus curiae* in New York proceedings, with the *Lomas* litigation, discussed here in Chapter 3 § 2.A, proving an isolated exception. Rather, as she observes from her comprehensive analysis of English derivatives cases, the most important channels of communicating the established market understanding on the other side of the Atlantic are via expert witnesses retained by the parties, expert legal commentary, such as practitioner texts, as well as the ISDA User's Guides: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n669) 112-114.

[807] See, eg, PM Collins and LA Solowiej, 'Interest Group Participation, Competition, and Conflict in the US Supreme Court' (2007) 32 Law & Social Inquiry 955, 962.

mission to maintain the normative integrity of its contractual regime by effectively 'retain[ing] the institutionalisation of meaning'[808]. Specifically, ISDA's efforts in obtaining leave to intervene are motivated by the desire to shield the market understanding of purposefully drafted standard clauses from *ex-post* 'interpretive interference'[809] in the form of judicial (mis-)interpretation.[810] The OTC derivatives market is particularly vulnerable to such interpretative interference both in terms of cause as well as in terms of effect. In terms of cause, a generalist court, tasked with resolving a broad and diverse range of legal and factual issues, operates under constraints both of time and of expertise, which, depending on the case, will bear out to a greater or lesser extent. This is illustrated by Lord Briggs own admission, writing extrajudicially, that, notwithstanding his having been the first instance judge in some key decisions on the construction of the ISDA MA in the tumultuous aftermath of the GFC,[811] and his present role as a Justice of the UK Supreme Court, he cannot escape the constraints of being 'a jack of many legal trades, but master of none'[812].

These constraints carry the danger of impacting the quality of decision-making especially in those cases where the decision hinges on a sound knowledge of highly technical economic concepts underlying a particular market and a corresponding familiarity with market expectations.[813] Where the generalist court is called upon to interpret an ISDA clause that operates in a highly specific market setting and is drafted according to considerations comprehensible only with a considerable amount of specialist background knowledge, it necessarily exhibits a substantial information deficit relative to expert market professionals. In such a case, the generalist court's lack of expertise will seldom be compensated within a reasonable amount of time in such a

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[808] D Wielsch, 'Contract Interpretation Regimes' (n661) 978.

[809] J Black and D Rouch, 'The development of the global markets as rule-makers: engagement and legitimacy' (2008) 2 Law and Financial Markets Review 218, 225.

[810] D Wielsch, 'Contract Interpretation Regimes' (n661) 978; J Black and D Rouch, 'The development of the global markets as rule-makers: engagement and legitimacy' (n809) 225.

[811] Including the *Lomas* litigation discussed at length in Chapter 3 § 2.A.

[812] Lord Briggs, Speech, *Dispute Resolution in Uncertain Times: P.R.I.M.E. Finance conference* (22 January 2018) para 2.

[813] See, as *locus classicus* in the context of antitrust litigation observing how the courts' lack of economic literacy has in the application of economic antitrust analysis resulted in detrimental judicial errors: FH Easterbrook, 'The Limits of Antitrust' (1985) 21 University of Chicago Law Occasional Paper 1-24 (As stated by the author, then Chicago law professor and US Appeals Court judge Frank H Easterbrook: 'Even when people know why business practices work – which is not very often – the explanation is hard to convey. It may entail some fancy theory or complicated econometrics. What can be conveyed in the academic seminar or the corporate board room is hard to articulate in trial, when the judge and jury lack economic training and business expertise', *ibid* 6).

way as to place it in a position to satisfactorily understand the facts presented. The sheer scope of the requisite judicial 'education process' makes it impossible for the court to be placed in a position to sufficiently understand the intricacies of the case and thus pose the necessary questions to witnesses and counsel during the proceedings even if expert evidence were readily available.[814] Nevertheless, the costs and time of its efforts to do so will ultimately be borne by the litigating parties.[815]

The same can in principle, if to a far lesser degree, be said regarding a specialist judiciary which is gaining traction in the resolution of complex financial disputes,[816] since it also faces an uphill informational struggle in the light of both continuous financial innovation and ever evolving sector-specific contracting practices which are embedded in a transnational market setting.[817] Such a state of affairs is particularly unsatisfactory as regards OTC derivatives disputes pertaining to the ISDA contractual architecture. This is because, as illustrated above, for one, an individual ISDA clause forms part of a larger standardised contractual regulatory mechanism and, what is more, via the standardised nature of the clause any judicial interpretation is transported to the wider transnationally operative markets and its effects are therefore far reaching.[818]

Against this background, ISDA as the actual drafter of the market-making contractual architecture is in a unique position to alleviate the information deficit for the benefit of the court by injecting specialist subject-matter expertise into the proceedings as *amicus curiae*.[819] In addition, in doing so it communicates the collective market interests to the deciding court in an *inter-partes* litigation, where a judgment may impact the operation of the wider transnational OTC derivatives market. An example of this can be seen in ISDA's 'Statement of Interest' in its Amicus Curiae Memorandum to the United States Bankruptcy Court of the Southern District of New York in *Lehman Brothers Holdings*

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[814] See, D Baragwanath, 'How Should We Resolve Disputes in Complex International Financing Transactions' (2012) 7 Capital Markets Law Journal 204, 210-211 even framing this as a potential problem of 'natural justice'.

[815] *Ibid* 210.

[816] See, eg, the so-called Financial List, discussed in greater detail in Chapter 3 § 3.D.

[817] KP Berger, 'The Aftermath of the Financial Crisis: Why Arbitration Makes Sense for Banks and Financial Institutions' (2009) 3 Law and Financial Markets Review 54, 59.

[818] In greater detail, Chapter 3.

[819] Specifically regarding ISDA: D Wielsch, 'Contract Interpretation Regimes' (n661) 978; US Supreme Court Justice Breyer concisely encapsulates this functional aspect by stating that 'such [amicus curiae] briefs play an important role in educating judges on potentially relevant technical matters, helping make us not experts, but moderately educated lay persons, and that education helps to improve the quality of our decisions.': S Breyer, 'Interdependence of Science and Law' (1998) 82 Judicature 24, 26.

Inc. v Intel Corporation[820] which centred on the interpretation of 'Loss' under the 1992 ISDA MA form: 'ISDA does not [submit the amicus brief] for the purpose of taking sides in the dispute between the parties, but to offer this Court ISDA's view on the history and purpose of particular provisions in transaction documents that ISDA drafts and publishes. (…) [A] precedent departing from the plain language and intended meaning of Loss could materially and negatively impact other parties to transactions governed by ISDA Masters, who would find that the terms of their respective agreements have effectively changed'[821].

Again, the quasi-legislative role of ISDA and, by extension, the quasi-statutory nature of the ISDA MA in the transnational realm shine through these sentences.

4. ISDA Legal Opinions: Shoring Up the Contractual Standard

Finally, inextricably linked with the transnational standardisation project and ensuring that market participants can rely upon the various features of the ISDA contractual architecture being legally enforceable, if need be, are the so-called ISDA Legal Opinions. This predominantly is due to their attesting to the contractual standard being compliant with the applicable laws and regulation for regulatory purposes. Primarily and traditionally, this applies to the enforceability of the close-out netting provisions, specifically to jurisdictional recognition of the 'single agreement concept' essential to the operation of close-out netting, as well as that of its credit support documentation.[822] Significantly, for example, in return for a specialist legal opinion that the key risk reducing features of ISDA's standardised contractual architecture are valid and enforceable, less stringent regulatory capital requirements are imposed on market participants, thus freeing up liquid assets otherwise bound for such purpose and in some cases making transactions economically viable in the first place.[823] Throughout the

[820] No 08-13555 (SCC), 2015 WL 7194609 (SDNY Sept. 16, 2015).

[821] ISDA, *Proposed Amicus Curiae Memorandum of Law in re: Lehman Brothers Holdings Inc v Intel Corporation* 4-5; ISDA regularly publishes the *Amicus Curiae* briefs it submits on its website, available at <www.isda.org/category/legal/amicus-briefs/?subcategories=12> accessed 7 September 2026.

[822] In greater detail on the early ISDA Legal Opinions, see, § 7.C.VI.4; With the evolution of market infrastructure and technology, ISDA has, for example, more recently also commissioned Legal Opinions regarding these new contracting environments, eg through its E-contract Opinions opining ot the enforceability of electronically executed and confirmed contracts under a potentially also electronically concluded ISDA MA: See, ISDA, *Opinions Overview* <www.isda.org/opinions-overview/> accessed 7 September 2026.

[823] In the aftermath to the GFC, there has been a regulatory focus to ensure that aside from raising the requisite collateral thresholds, any collateral that is posted is of high quality meaning that assets posted against any credit exposure are highly liquid and can thus be liquidated without any time delay. This includes first and foremost cash collateral, next to, eg, gold, high-quality debt securities, bonds, or

years, starting in 1987 and 1988 regarding the enforceability of the close-out netting provisions in the 1987 ISDA MA under the insolvency laws of the main swap market jurisdictions,[824] ISDA has commissioned legal opinions from specialist counsel regarding the continued enforceability of close-out netting as well as the ancillary collateral documentation in form of its various CSAs in the majority of financial jurisdictions. These are made available to its members at no additional cost beyond that of membership.[825] This means that while the earliest netting opinions were addressed directly to regulators, they are nowadays addressed to ISDA and its members with a view to being made available by any member entity to its competent prudential regulator.[826]

An additional important facet, and tying in with the ISDA Legal Opinions, are the so-called 'Extension Opinions'. In practice, a market participant wishing to make amendments or go beyond the scope of the ISDA standard documentation, for example by transacting with an entity not covered by it, can make use of a so-called 'Extension Opinion'. The same applies to ISDA itself, where it wishes to provide legal certainty regarding uses of its standard documentation in novel settings for its members to rely upon. In such a case, a specialist law firm, generally the counsel also instructed by ISDA to draft the respective subject matter legal opinion, is instructed to draft an additional legal opinion to cover a specific additional question. Such an opinion serves the purpose of analysing and, as the case may be, attesting to the fact that the assertions of the respective jurisdiction's legal opinion, for example the current Netting Opinion, also extend to any envisaged amendment or variation in order to satisfy any regulator that they are equally valid and enforceable under domestic law. Keeping with the example of the Netting Opinion, this may relate to whether the validity and enforceability of close-out netting under the respective domestic law is preserved. In such a case, the market participant can rely on the opinion and – from the perspective of the regulator – due to the preserved credit risk mitigation function, granting the regulatory capital privilege, as for example under EU regulatory rules embodied in Arts. 295, 296 CRR, is warranted.

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equities: Y Diamant and others, 'Financial Collateral Transactions and their Standardization' in M Haentjens (ed), *Financial Collateral: Law and Practicel* (Oxford University Press 2020) para 3.313.

[824] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)' (n683) para 17.35.

[825] ISDA, *Opinions Overview* <www.isda.org/opinions-overview/> accessed 7 September 2026.

[826] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)' (n683) para 17.36.

D. ISDA's Contractual Standardisation Efforts as a Precondition to OTC Derivatives Market Functioning

In initial contrast to the legal academy,[827] economic-sociological scholarship has been more sensitive to the functions performed by standardisation processes. For one, standardisation has been identified as one of the prerequisite mechanisms underlying market liquidity.[828] Another strand of scholarship has noted the increasing need for and significance of standardisation processes as a co-ordination mechanism in a globalising world.[829] In the absence of formal organisational structures, such as the nation state at the domestic level, standardisation can at the global level fill this void by providing a stepping stone on the way to 'creating truly transnational markets'[830].[831] As observed by Harm Schepel, standardisation at the same time impacts upon established distinctions along different dimensions in that: 'Standards hover between the state and the market; standards largely collapse the distinction between legal and social norms; standards are very rarely either wholly public or wholly private, and can be both intensely local and irreducibly global'[832]. The ISDA MA largely serves as a case in point in this regard, in that it constitutes a standardised contractual vehicle for the functioning of the OTC derivatives market at the transnational level. Standardisation of the ISDA contractual architecture has and continues to fulfil several important functions from the perspective of individual counterparties, which will be detailed in the following. However, what is

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[827] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 762 (The authors towards the turn of the last century lament the relative absence amongst corporate and contract law scholars of any recognition of 'the conceptual value of contract standard-setting' and that indeed 'efforts at standard-setting have been largely ignored in the legal academy'); However, in this regard the past years, especially, have seen a rapidly increasing prioritisation of the topic also within legal scholarship: H Schepel, *The Constitution of Private Governance: Product Standards in the Regulation of Integrating Markets* (Hart Publishing 2005) in his general 'exercise in the non-existent discipline of "standards law"', *ibid* 2; With regard to sectoral private or hybrid legal regimes operating in cross-broder context: D Wielsch, 'Global Law's Toobox: How Standards Form Contracts' in H Eidenmüller (ed), Regulatory Competion in Contract Law and Dispute Resolution (CH Beck/Hart/Nomos 2013) 71-111; K Eller, 'Private Governance of Global Value Chains from Within: Lessons from and for Transnational Law' (2017) 8 Transnational Legal Theory 296, 311-313, who points to the function of standards as 'enlarging the normative portfolio of transnational law to encompass societal normativities', *ibid* 311.

[828] BG Carruthers and AL Stinchcombe, 'The social structure of liquidity: Flexibility, markets, and states' (1999) 28 Theory and Society 353.

[829] See, N Brunsson, 'Organizations, Markets and Standardisation' in N Brunsson, B Jacobsson and others (eds), *A World of Standards* (Oxford University Press 2000) 21-39.

[830] *Ibid* 38.

[831] *Ibid* 21-39.

[832] H Schepel, *The Constitution of Private Governance: Product Standards in the Regulation of Integrating Markets* (n827) 3.

more, abstracting from the counterparty to a wider market perspective, standardisation and the maintenance of the global standard is also the integral functional prerequisite. This crucial latter aspect will conclude this section.

I. Reduction of Transaction Costs and Increased Liquidity

Reducing the variation of contract terms through standardisation has provided several important benefits to derivatives users. From the perspective of individual counterparties, one central benefit is the reduction of *ex ante* transaction costs.[833] These are the costs accruing in the drafting and negotiation phase, including the anticipation of contingencies and suitable contract adaptations.[834] This has also been recognised in economically oriented legal scholarship, which in analysing the legal institutions underpinning the transaction, observes that standardised contractual terms can provide transaction cost efficiencies. In a nutshell, parties as well as their third party advisors tend to prefer a familiar tried and tested contractual framework to underlie transactions, since unfamiliar 'idiosyncratic' terms lack a benchmark and thus require further analysis, making the associated transaction more expensive.[835] In the evolution of the OTC derivatives market, lawyers were engaged to perform a key role in this standardisation process, effectively performing the role of 'transaction cost engineers'[836] in the budding market. As a result, the market participant as well as its legal and financial service providers profit from the economic efficiencies generated by familiar standard terms. As discussed under § 7, the search for such efficiencies in order to make laborious *ad hoc* contracting a thing of the past, was in fact the cradle of ISDA, in light of a 'regulatory void'[837] for novel financial contracts.

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[833] Groundbreaking in the conception of *transaction cost economics* and the differentiation and interrelationship of *ex ante* and *ex post* transaction costs was the contribution of (new institutional) economist Oliver Williamson: See, O Williamson, *The Economic Institutions of Capitalism* (The Free Press 1985) 20-22.

[834] *Ibid* 20; Specifically acknowledging this benefit in the context of standardised derivative documentation: GD Gay and JT Medero, 'The Economics of Derivatives Documentation: Private Contracting as a Substitute for Government Regulation' (n639) 79 and 81.

[835] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 723-724.

[836] By 'devising efficient mechanisms which bridge the gap between [the hypothetical world of perfect markets envisaged by neoclassical financial theory] and the less-than-perfect reality of effecting transactions in this world': RJ Gilson, 'Value Creation by Business Lawyers: Legal Skills and Asset Pricing' (1984) 94 Yale Law Journal 249, 255 [insertions added].

[837] Sigrid Quack identifies such a 'regulatory void' of a newly emerging market as one of the main gateways for private legal innovation by lawyers which in turn can evolve into 'legal standards' or 'soft

Standardisation also had a significant impact at the market level. A direct effect of reducing variability of contract provisions on the trading market is the increased liquidity in these standardised OTC derivative instruments. This is because otherwise, diverging substantive terms on the same subject matter might be priced differently, creating a market fragmented along these variations, reducing overall market liquidity.[838] Against this background, market-wide contract consistency achieved by standardisation enabled the creation of a more liquid secondary market.[839]

II. Standardisation as Prerequisite for Technological Advances and Scalability

Standardisation of the contractual documentation was a structural prerequisite for a dealing OTC market to evolve in the first place, as dealers could as a result make use of communications technology advances and execute transactions near on instantaneously electronically or by telephone.[840] This improved both the speed as well as the geographical scope of transactions. What is more, standardisation has played a similarly significant role in conjunction with more recent waves of efficiency-enhancing technological innovation, specifically in the area of trade processing. Firstly, standardised written documentation has made it possible to translate these fairly homogeneous written clauses into a data language, the open-source Financial Products Markup Language standard ('FpML').[841] This creates a format that makes the substantive obligations of financial instruments *readable* both for humans and for computers across a range of transaction categories, which has been termed 'data-oriented contracting'[842].[843] Counterparties can thus benefit from significant savings in operational costs as well as reduction of operational risk in the form of potential for human error, since the counterparties' contract clauses – as translated into the data

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law': S Quack, 'Legal Professionals and Transnational Law-Making: A Case of Distributed Agency' (2007) 14 Organization 643, 653-654.

[838] SK Henderson, *Henderson on Derivatives* (n1) 21-22 identifying the danger of such a less liquid 'tiered market' even in the presence of standardised financial provisions should these, however, not be uniformly adopted.

[839] D Cunningham, 'Swaps: Codes, Problems and Regulation' (n610) 27; SJ Choi and GM Gulati, 'Contract as Statute' (n788) 1163-1164.

[840] SK Henderson, *Henderson on Derivatives* (n1) 21.

[841] 'An XML-based "lingua franca" for derivatives trading': ISDA, FpML 5 User Guide (2012 ed).

[842] See, in detail, H Surden, 'Computable Contracts' (2012) 46 UC Davis Law Review 629, 635-636 ('A "data oriented" contract is one in which the parties have expressed some part of their contractual arrangement as computer-processable data').

[843] See, with more information, the FpML website at <www.fpml.org/about/what-is-fpml/> accessed 7 September 2026.

language – can be communicated, confirmed and processed through trading systems electronically.[844]

The standard, in turn, provides the basis for the newest wave of technological innovation, the development of self-executable smart contracts[845] implemented through distributed ledger technology, which could ultimately usher in complete automation of transaction execution, clearing and settlement.[846]

III. Standardisation, Market Opinions and Regulatory Recognition

Documentary standardisation also takes on a particular significance in the context of the interplay of financial contracting and financial regulation, since parties seeking to make material alterations to standard documentation would face a significant legal or regulatory risk as regards the applicability of the array of Legal Opinions[847]. One key collective benefit of standardising the contractual architecture lies in the fact that the legal analysis of enforceability and conformity with regulatory requirements can be streamlined to focus on this one standard, enabling it to be both rigorous and authoritative for each relevant jurisdiction – as well as having the benefit of any incurred costs being capable of being shared among market participants as members of ISDA, who rely upon the opinions in their transactional practice.[848] However, any material alterations carry the danger that the altered – and by extension increasingly less standard – documentation would no longer fall within the scope of the market opinions drafted by specialist law firms under instruction from ISDA in relevant jurisdictions.[849] Were this worst case to materialise, taking the ISDA Netting Opinions as an example, market participants would no longer be privileged as regards regulatory capital requirements for credit institutions, as exemplified by Arts. 295 ('Recognition of

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[844] See, the FpML website at <www.fpml.org/about/what-is-fpml/> accessed 7 September 2026.

[845] Where counterparties' contract obligations as inputted into a computerised transaction protocol and are subsequently executed automatically on occurrence of pre-specified future events. A straightforward example is the automatic execution of payment obligations, ie money transfer, on the settlement date of a derivatives contract. As such, a smart contract is *not* synonymous with the notion of a legal contract: C Kerrigan and K Lammiman, 'Law firms, artificial intelligence and smart contracts' (2016) 31 Butterworths Journal of International Banking and Financial Law 164, 165-166.

[846] See, eg, ISDA Whitepaper, *The Future of Derivatives Processing and Market Infrastructure* (September 2016) 23.

[847] On the ISDA Legal Opinions, see, § 7.C.VI.4.

[848] See, D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (n179) para 1.44.

[849] As noted by Joanne Braithwaite, the same rationale equally applies to deviation from the default choice of law and forum clauses: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n669) 61.

contractual netting as risk-reducing') and 296 ('Recognition of contractual netting agreements') of the CRR[850], thus most likely making trading economically unviable due to overly burdensome collateral requirements. Counterparties falling within the scope of capital adequacy regulation, foremost market-making dealer banks, operating on the ISDA standard, will therefore likely be highly reluctant to accept any such departure from the benchmark, at least not without a pricing premium deemed to satisfactorily reflect that risk.

IV. The Significance of Multifirm Contract Standardisation

As has been shown, OTC derivatives can transfer, but are – as a flip side – also subject to different forms of risk, most significantly credit, but also by virtue of their construction as legal contracts, legal risk. The ISDA documentation framework establishes a uniform contractual approach towards mitigating and controlling these respective risks. Importantly, although counterparties may be incorporated in jurisdictions around the globe, the contractual standard provides a universal reference point for market participants to adopt, thus 'commoditis[ing]'[851] these risks.

1. Learning Effects Through Legal Certainty

Standardisation of the contractual architecture underlying OTC derivative transactions must be seen in the context of market growth that followed. The overarching benefit associated with the ISDA contractual architecture is that it is not simply a standard contract adopted by one firm for its multiple future dealings, but rather promulgated by ISDA for adoption by the majority or near on all[852] market participants for multiple future dealings, a prime example of what has been termed 'multifirm contract standardization'.[853] This 'second layer of standardization'[854] goes beyond the more

[850] Pursuant to Art 296(2)(b) CRR a prerequisite for contractual netting agreements to be recognised is that 'the institution has made available to the competent authorities written and reasoned legal opinions to the effect that, in the event of a legal challenge of the netting agreement, the institution's claims and obligations would not exceed those [under an enforceable contractual netting arrangement, i.e. having to pay or being entitled to receive only the net sum of the positive and negative mark-to-market values of included individual transactions]'.

[851] A Hudson, *The Law on Financial Derivatives* (n2) para 6.05.

[852] For an approximation on the breadth of global use, see, *Lomas v JFB Firth Rixson Inc and others* [2010] EWHC 3372 (Ch) at [5] ('ISDA claims (and it is not challenged) that the Master Agreement serves as the contractual foundation for more than 90% of over-the-counter derivatives transactions, globally').

[853] For a critical examination of the phenomenon of multifirm contract standardisation: MR Patterson, 'Standardization of Standard-Form Contracts: Competition and Contract Implications' (2010) 52 William and Mary Law Review 327-414; Specifically regarding ISDA, *ibid* 381-385.

singular instances of standardisation both as regards the advantages and disadvantages it offers.[855] While the benefits are the focus of the following, its particular pitfalls are addressed under Chapter 3.

First, the core operational provisions of the ISDA MA, and the effect they are intended to have, are an embodiment of collective market experience to the benefit of all individual users availing themselves of the standardised contractual architecture regardless of their individual market competence.[856] Second, contractual standardisation in the OTC derivatives market ensured and continues to ensure a degree of legal reliability and predictability as regards the operation of these transactions. This has occurred through a well-established pattern of repeated use, which in law and economics scholarship has been likened to an evolutionary 'quasi-Darwinian trial and error process' at the end of which stand 'mature terms whose risks and performance characteristics are well known and understood by market participants'.[857] What is more, the resulting legal predictability through an established understanding of the functioning of standardised clauses is not limited to market participants, but has positive spill-over effects to other areas. By way of a practical example, in the realm of corporate finance, specifically mergers and acquisitions, lawyers conducting due diligence on a particular target's contracts will with an ISDA MA in place be faced with a more predictable – and priceable – contractual risk profile, rather than with a legal black-box. Insofar as the contract terms of commercial practice generally exhibit a balance (as ultimately prescribed by the governing law)[858] or even tension between prospective certainty and individual justice,[859] with regard to highly detailed boilerplate terms, the interest of

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[854] *Ibid* 332.

[855] *Ibid*.

[856] See, generally, on the use and utility of such 'preformulations': CJ Goetz and RE Scott, 'The Limits of Expanded Choice: An Analysis of the Interactions between Express and Implied Contract Terms' (1985) 73 California Law Review 261, 286 ('Preformulations bring to bear a collective wisdom and experience that parties are unable to generate individually'); Under the terminology of Kahan and Klausner this conforms to a 'learning benefit': M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 719.

[857] RE Scott, 'The Paradox of Contracting in Markets' (n614) 78.

[858] G Cordero-Moss, 'Conclusion: the self-sufficient contract, uniformly interpreted on the basis of its own terms: an illusion, but not fully useless' in G Cordero-Moss (ed), *Boilerplate Clauses, International Commercial Contracts and the Applicable Law* (Cambridge University Press 2011) 346-347.

[859] See, already, writing in relation to the common law of contracts having to accommodate the phenomenon of adhesion contracts: F Kessler, 'Contracts of Adhesion – Some Thoughts About Freedom of Contract' (1943) 43 Columbia Law Review (1943) 629, 631 namely by here turning away from the established attitude that ('(…) legal certainty and "sound principles" of contract law should not be sacrificed to the dictates of justice or social desirability'); Tracing the historical origins of this tension between prospective certainty and retrospective justice within Anglo-American contract interpretation as

sophisticated market participants transacting in the cross-border OTC derivatives market tips these scales in favour of legal certainty. As summarised by the 'first-hour documentation expert'[860] Jeffrey Golden, in the specific case of the OTC derivatives market this 'marked preference for certainty and sometimes above justice and almost everything else'[861] is due to the fact that as undesirable a financial position may be, the fact that it can be valued with certainty enables a market participant to act decisively and exact a trading strategy to reflect that position and suit its respective risk profile.[862] What is more, standardised 'B2B' transactions in the OTC derivatives market do (generally)[863] not give rise to equal concerns as to exploitation of bargaining power or information asymmetries raised in relation to 'B2C' boilerplate transactions. This is principally because, here, the characterisation of a stronger/better informed party being able to foist its terms on the weaker/less informed party, which in turn legitimises state intervention to level out the playing field, does not apply, or at least to a much lesser degree. Rather, generally, both the dealer banks as well as the majority of end-users active in the OTC derivatives market, advised by legal counsel and finance professionals, will satisfy the 'presumption of professional competence and equality of parties'[864] inherent to transnational commercial dealings. This is, of course, not to say

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manifested in the antagonism of textual vs contextual interpretation: RJ Gilson and CF Sabel and RE Scott, 'Text and Context: Contract Interpretation as Contract Design' (2014) 100 Cornell Law Review 23, 46- 54.

[860] In his own words, he 'as a young lawyer, [he] held the pen when the then-fledgling derivatives industry wrote its first standard set of terms, and (…) ha[s] advised what became known as ISDA (…) on its key contracts ever since': JB Golden, 'Do We Need a World Court for the Financial Markets' in D Vriesendorp, FA Nelissen and M Wladimiroff (eds), *The Hague Legal Capital? Liber in Honorem W. J. Deetman* (Hague Academic Press 2008) 260 (fn 7).

[861] J Golden, 'ISDA and ADR: A Brief History of a Long Relationship' (n681) 19.

[862] *Ibid* ('You can trade around a position that you know to be certain, however undesirable that position may be and whether or not you believe it to be fair. What is abhorred is not knowing where you stand. Eventually being told that you were correct in your earlier view, or a third-party view that you relied upon at the time, does not give a lot of comfort of you stand 'naked' to a market which has moved on and significantly against you while you waited for that answer of if you fixed a replacement hedge or transaction unnecessarily or at the wrong time.').

[863] As emphasised and discussed by Joanne Braithwaite, the increasing diversification of end-users of OTC derivatives and ISDA documentation, including small to medium-sized enterprises and even private individuals, are in the current absence of effective regulatory redress not well served under the modes of private law redress (including contract and tort) available to them in the English courts, which warrants a separate discussion for this specific category of 'non-sophisticated' end-users: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n669) 11, with an in-depth analysis in Chapter 4, 'The Regulatory Framework for Mis-selling', Chapter 5, 'Private Law Claims for Mis-selling', and Chapter 6, 'Defensive Drafting'.

[864] As is a feature of transnational commercial contracting: See, eg, *Principle No I.2.3* ('Presumption of professional competence and equality of parties') of the *TransLex-Principles* <www.trans-

that all end-users will in terms of competency transact at eye-level with an internationally active dealer bank, which has at its disposal quantitative analysts employed for the very purpose of advising the bank's structuring and trading divisions.[865] It does, however, mean that, where not so expert in dealing with complex financial products as to warrant the label of sophistication, the vast majority of commercial end-users will at least exhibit 'adequate [expertise]'[866] to understand the risks involved in the transaction. In any case, the prototypical situation of asymmetric transacting which serves as a justification for legislation protective of the weaker or less informed party is not present in the inter-dealer market, which serves as the backbone of the wider markets.[867]

Standardised contracts can face the test of legal practice, open to challenge in court or by a domestic regulator. This is, in fact, highly likely in the case of any initial legal uncertainty created by innovative contractual forms.[868] Therefore, innovative contractual forms regularly have to contend with the initial 'stigma of being unlawful'[869] under various settings. Crucially, however, standardised contracts hold an important advantage relative to the more singular and heterogeneous OTC contracts, which were entered into on an *ad hoc* basis. Where standardised contracts pass the test of legal challenge successfully, the resulting body of case law in which the contract language becomes embedded generates a 'learning effect', which creates legal certainty

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lex.org/909000/_/presumption-of-professional-competence-and-equality-of-parties> accessed 7 September 2026.

[865] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 12.003.

[866] *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWHC 465 (Comm) at [62].

[867] The extension of the protective scope afforded by the B2C regime to purely B2B standard terms in certain jurisdictions has been subject to criticism. This applies all the more, when international commercial contracts are at issue and the domestic regime comes into direct conflict with the values of international contract law with its comparatively stricter standards regarding the professional competence of commercial parties: See, eg, writing in relation to the German statutory regime applicable to B2B standard business terms (ie, 'Allgemeine Geschäftsbedingungen', 'AGB'): KP Berger, 'Die Einbeziehung von AGB in internationale Kaufverträge' in KP Berger and others (eds), *Zivil- und Wirtschaftsrecht im Europäischen und Globalen Kontext: Festschrift für Norbert Horn zum 70. Geburtstag* (De Gruyter 2006) 3-20.

[868] See, eg, Group of Thirty, Global Derivatives Study Group, *Derivatives: Practice and Principles* (n39) 48 ('In the early days of global derivatives activity, lawyers were presented with a host of issues (…) that grew out of the fact that existing laws and regulations had been written before these new transactions developed').

[869] As worded in the context of the at the time relatively new interest rate swap instruments in *Hazell v Hammersmith and Fulham Borough Council* [1992] 2 AC 47.

as to the proper meaning of terms and operation of clauses.[870] In the words of Charles J. Goetz and Robert E. Scott, a standardised term that in adjudication becomes interpreted consistently in a particular way as to make it recognisable and reliable 'is blessed with an official meaning'[871]. This has a positive signalling function to other users of the same documentation, as well as, even more importantly, the original drafters and providers of the boilerplate,[872] who now know where they stand as to the precise legal effect attached to the standard language. Specifically, it paves the way for significantly scaling up the trading in these instruments. This is because users can then have every confidence their contracts, based on the same boilerplate and documented under the same law, will similarly pass legal scrutiny in those jurisdictions where comparable standardised contractual arrangements have been held enforceable and, what is more, be interpreted in a uniform and consistent way by the courts.[873]

From a general economic viewpoint, the legal certainty of meaning is valuable in and of itself as – at least prospectively – it enables the parties to reliably price the judicial interpretation into their future transactions.[874] For example, going back to the above point regarding the overwhelming need for certainty in the OTC derivatives market made by Jeffrey Golden, even an economically disadvantageous interpretation – as long as it is consistently applied – may simply be priced into the bid-offer spread of the financial instrument by a dealer accordingly, rather than it seeking to amend its contractual documentation. However, in this regard the OTC derivatives market exhibits a unique adaptive dynamic, which sets it apart from other multilateral contracting markets, such as for example the sovereign bond markets, which are impeded by significant collective action problems.[875] Namely, whereas in other markets the pricing

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[870] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 719 and 722-23.

[871] CJ Goetz and RE Scott, 'The Limits of Expanded Choice: An Analysis of the Interactions between Express and Implied Contract Terms' (n856) 288.

[872] As noted by Michelle Boardman in the context of US insurance boilerplate, when interpreting boilerplate language, the courts enter into a 'private conversation' with its drafters rather than its users: ME Boardman, 'Contra Proferentem: The Allure of Ambiguous Boilerplate' in O Ben-Shahar (ed), *Boilerplate: The Foundation of Market Contracts* (Cambridge University Press 2007) 176.

[873] See, K Pistor, 'A Legal Theory of Finance' (n286) 318; Similarly, in relation to uniform judicial interpretation of boilerplate wording: R Calnan, *Principles of Contractual Interpretation* (2nd edn, Oxford University Press 2017) para 5.54 ('The great benefit (...) is the necessary certainty it provides in commercial transactions').

[874] Writing in relation to premium adaptation in the insurance industry: ME Boardman, 'Contra Proferentem: The Allure of Ambiguous Boilerplate' (n872) 179; On the effects of a decisional 'error' on parties wealth distribution through its effect on existing (open) contracts: SJ Choi and GM Gulati, 'Contract as Statute' (n788) 1151 (fn 81).

[875] RE Scott, 'The Paradox of Contracting in Markets' (n614) (n82).

response may be the only viable strategy available to a widely dispersed set of market participants in reaction to such a disadvantageous interpretation, ISDA has the unique capability to respond to an 'interpretive shock'[876] as a central coordinator and amend the contractual standard in line with the established market view.[877] As put by Robert E. Scott, ISDA in this way functions like a 'spider in the web' in that it fulfils the role of a controlling entity at the centre of the commercial network or contractual web of standardised documentation, maintaining stability and facilitating revision of terms whenever necessary.[878] As ISDA is financed collectively by its member institutions, the cost of contract-, and, by extension, market coordination is spread out among the majority of market participants.[879] In this way, ISDA performs a function which in a different context has been likened to engaging in a dialectical process with the state courts.[880] Counterparties, regardless of location or sophistication, are then free to adopt the amended standard language; for example, by adhering to an updated boilerplate version or a particular subject-matter ISDA Protocol.[881]

The end-result of this evolution is that counterparties in the global OTC derivatives market have today at their disposal a range of contractual modules consisting of interoperable and predictable standard terms, allowing market participants to metaphorically speak a common, but highly technical, contractual language to facilitate the desired economic outcomes. Where, keeping with the metaphor, technical terms of that language, for example core operative terms of the ISDA MA are mistranslated, for example by a domestic court, ISDA has the instruments at its disposal to swiftly coordinate a market reaction at a centralised transnational level.

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[876] SJ Choi and GM Gulati, 'Contract as Statute' (n788) 1133.

[877] Noting that 'standard-setting institutions' are capable of responding to 'the coordination problem': M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 762 (The authors also identify the pervasiveness of model contracts promulgated by the [then] International Swap and Derivative Dealers Association [*sic*] as a manifestation of contract improvement by standard-setting, *ibid* 763).

[878] RE Scott, 'The Paradox of Contracting in Markets' (n614) 84.

[879] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 762 (fn 106).

[880] SJ Choi and GM Gulati, 'Contract as Statute' (n788) 1139.

[881] Continuous review and updating of contractual standards is in fact deemed integral to a 'contract standard-setting institution': M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 764.

2. *Transnational Legal Basis Risk Minimisation*

When applying the insights of economic theory into network effects,[882] a core insight of economic contract scholarship is the recognition that a network of standardised contracts can be of greater value than the aggregate value of its individual component contracts.[883] The immediate question then is why and how exactly widespread use of contract terms generates additional value. A potential source for this additional value has been identified in specific 'network benefits'[884] derived from standardised contracting. Research on the economics of contract standardisation conducted by Marcel Kahan and Michael Klausner has pointed out the distinction between so-called 'learning benefits'[885] and 'network benefits'[886] as the key drivers or 'positive externalities'[887] in the standardisation of contract terms. The distinction is temporal in nature: While 'learning benefits' derive from the term's past use[888], 'network benefits' derive from the standard term's contemporaneous co-use by others[889]. In analogy to a standardised, tangible 'network product' such as a particular technical product, the 'network benefit' of a contract term goes beyond its 'inherent benefit', e.g. its superior drafting due to incorporation of accumulated past experience (i.e. the 'learning benefit') in that it is purely a function of its simultaneous use by others.[890] Since contemporaneous use is, under this framework, a defining feature of network benefit, it is of particular relevance with regard to long-term (executory) contractual relationships.[891] Crucially, this near on paradigmatically encompasses within its definitional scope the nature of swap transactions. As further identified by Kahan and

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[882] In broad strokes, *direct* network effects pertain to the individual user of a network good, whose payoff from adoption of that good increases as additional users adopt it in a complementary fashion, which, in turn, makes that network more attractive to current non-users. This dynamic is observable in a telecommunications network, for example. *Indirect* network effects are those which arise on a complementary market, such as for example the commercial incentive to provide better software for a certain hardware, the more users adopt that hardware: See, the overview provided in, P Klemperer, 'Network Goods (Theory)' in Macmillan Publishers (ed), *The New Palgrave Dictionary of Economics* (3rd edn, Palgrave Macmillan 2018) 9436-9439.

[883] Seminally, M Klausner, 'Corporations, Corporate Law, and Networks of Contracts' (1995) 81 Virginia Law Review 757 noting the potential applicability beyond the specific context of corporate contracts to long-term contracts and commitments more generally, *ibid* 766.

[884] *Ibid* 775.

[885] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 719.

[886] *Ibid* 725.

[887] *Ibid* 725-726.

[888] *Ibid* 724-725.

[889] *Ibid* 725-726.

[890] *Ibid*.

[891] *Ibid* 727.

Klausner, the network benefits derived from contemporaneously used boilerplate include increasing familiarity with frequently encountered terms by professional advisors with associated higher quality and lower cost advice,[892] greater ease of pricing, as well as clarification through judicial precedents.[893]

Both learning as well as network benefits, of the kind described in theoretical terms above, are readily identifiable with regard to the standardised ISDA documentation architecture, especially the ISDA MA. For example, where parties choose to document their trading relationship under a 2002 ISDA MA, in addition to the years of experience already incorporated into the form, they will automatically absorb the economic benefit of changes made as a result of the strategic documentation review of its 1992 predecessor with a view to remedying the deficiencies brought to light in the late 1990s.[894] This is a typical learning benefit deriving from past use of the term under the taxonomy proposed by Kahan and Klausner. Likewise, where a court judgment is made during the lifetime of an executory swap agreement documented under a 2002 ISDA MA originating from an *inter-partes* dispute, the multitude of other open swap agreements documented under the same master agreement form and under the same law will in the same way participate in the clarifying effect of that judgment.[895] This process is assisted by articles from specialist commentators within legal literature, as well as law firm bulletins addressed to clients, which typically will quickly follow any such judgment thereby increasing its publicity and clarifying its effects. This, in turn, conforms to an illustrative example of a network benefit. Against this background, as a matter of law, individual counterparties are, of course, within the confines of its mandatory provisions free to consensually deviate from the obligations laid down in the ISDA MA, or even exercise their freedom of contract to draft their contracts completely from scratch.[896] However, even where they are in a bargaining position to do so, counterparties may *de facto* be disincentivised from deviating too far from the benchmark set by the ISDA MA and its related documentation – at least with regard to

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[892] For instance, in the derivatives market context, as John-Peter Castagnino notes regarding OTC derivative transactions negotiated and documented *ad hoc* in the early 1980s swap market 'legal fees were predictably exceptionally high': J-P Castagnino, *Derivatives: The Key Principles* (n4) para 7.15.

[893] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 726.

[894] See, § 7.C.I.

[895] As concisely stated by M Klausner, 'Corporations, Corporate Law, and Networks of Contracts' (n883) 776 ('A judicial opinion that interprets one corporations contract term in effect embeds that interpretation in the contracts of all firms that use the same term.').

[896] A Hudson, *The Law on Financial Derivatives* (n2) para 6.01.

choice of law and forum as well as the core risk management clauses – due to them thereby foregoing its primary network benefits, including the legal certainty and predictability associated with the tried and tested documentary architecture.[897] The above phenomenon is described by Kahan and Klausner with regard to product standards in that '[e]ven where voluntary (…) the value of the network externalities associated with maintaining compatibility with other products gives these [voluntarily adopted] standards a compelling attractive force'[898]. What is more, this further supports the empirical finding under § 6.D, that the contract and market concepts in certain respects collapse into each other in the OTC derivatives market, since refusal to conclude an ISDA MA would in such a case also be functionally equal to barring market access.

a) The Derivatives Market as a Transnational Contractual Risk Network

While the above factors certainly are an important facet in uncovering the drivers of contract standardisation in the OTC derivatives market, they nevertheless do not yet go to the heart of the specific structural importance of standardisation in the OTC derivatives market. Rather, the crucial importance of contractual standardisation derives from the basic function of the derivative as a contractual risk transfer instrument and the particular market structure through which this risk transfer is effected and risk disseminated at the transnational market level.[899]

aa) The OTC Derivatives Market as a Network

'Networks' and their study through different varieties of 'network analysis' have in recent years blossomed into a vast body of scholarship, intent on capturing and conceptually analysing a host of different social, political and economic phenomena, not least under the impression of ever-increasing interconnectedness under the collective term of globalisation.[900] Peter Knaack has recently illustrated that the OTC derivatives market also lends itself well to analysis from a network perspective in three

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[897] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.19 ('The 2002 Master Agreement is extremely complex, and to tamper with one element of it may have an adverse and unforeseeable effect');. SJ Choi and GM Gulati, 'Contract as Statute' (n788) 1141; Similarly, D Wielsch, 'Contract Interpretation Regimes' (n661) 978.

[898] M Kahan and M Klausner, 'Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")' (n701) 763 [insertion added].

[899] Cf, § 3 and § 6.C.II respectively.

[900] With some examples of the varied use of the nomenclature in the social sciences: H Collins, 'Introduction to Networks as Connected Contracts' in G Teubner and H Collins (eds), *Networks as Connected Contracts* (M Everson tr, Hart Publishing 2011) 12.

central aspects.[901] Firstly, this applies in terms of the market itself due to the concentration of trades between market making dealer banks, which form the central network core.[902] Secondly, Knaack demonstrates how a network conceptualisation offers insights in terms of the OTC derivatives market's private, as well as, thirdly, its relatively weaker public governance arrangements.[903] Of particular interest for present purposes is his network account of private governance and how it relates to market structure. Here, Knaack identifies the ISDA MA – 'an instrument of private law'[904] – as the key to ISDA having attained the status as 'the central node in the network of global OTC derivatives governance',[905] for the reason that it has successfully addressed a central coordination problem for the transnational market.[906] As such, the private governance network structurally mirrors the network characteristic of the global derivatives market, with dealer banks forming both the 'dense core' of the market, as well as constituting the key members within ISDA, with other market participants making up the 'large periphery' both in terms of market share and membership privileges.[907] This, in turn, only serves to further entrench the ISDA MA at the core of the market's infrastructure.[908] To name but one particularly illustrative example, although Lehman Brothers was, before its failure, counterparty to more than one million derivatives trades documented under more than 6,000 ISDA MAs, about 85% of these trades were entered into with only twenty counterparties; with the major dealer banks Deutsche Bank, JPMorgan and UBS holding the majority of positions in that order.[909] The networked feature of contractual interconnectedness between market participants, principally the market making dealer banks sitting at the core of the characteristic 'hub

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[901] P Knaack, 'A Web without a Center: Fragmentation in the OTC Derivatives Trade Reporting System' in E Helleiner, S Pagliari and I Spagna (eds), *Governing the World's Biggest Market: The Politics of Derivatives Regulation After the 2008 Crisis* (Oxford University Press 2018) 226.

[902] *Ibid* 234-235 (citing an ESMA study making use of network analysis to study the structure of the European CDS market: L Clerc and others, *Monitoring the European CDS Market through Networks: Implications for Contagion Risks* (ESMA Working Paper, No 1, 2014)).

[903] On the latter, P Knaack, 'A Web without a Center: Fragmentation in the OTC Derivatives Trade Reporting System' (n901) 237-250; In his analysis the weakness of the public network in enacting transnationally effective regulation is a reason for the regulatory enlistment of ISDA's private governance mechanisms, which will be analysed in detail in the case study under Chapter 2 § 3.C.

[904] *Ibid* 236.

[905] *Ibid*.

[906] *Ibid*.

[907] *Ibid* 251.

[908] *Ibid* ('Ownership of the Master Agreement secures its central position among derivatives dealers').

[909] SJ Lubben, 'Lehman's Derivatives Portfolio: A Chapter 11 Perspective' in D Faber and N Vermunt (eds), *Bank Failure: Lessons from Lehman Brothers* (Oxford University Press 2017) paras 3.01 and 3.28.

and spoke'[910] networked market structure, has recently been noted in the context of systemic risk contagion.[911]

bb) The Legal Lens: 'Network as Connected Contracts'

For its prevalence in other disciplines, network is neither a genuine legal concept nor a legal term of art.[912] Nevertheless, insofar as the law, its concepts, and its conceptualisation must steadily evolve to reflect social and economic innovation, the network concept must also entail a legal dimension. The network concept does, however, not smoothly translate into the legal realm. Nestled on the organisational scale somewhere between market and hierarchy – or between exchange and organisational contract in legal terms – contractual networks do not sit easy with traditional doctrine, and do not readily fit into conventional distinctions of either contract or company law.[913] Where, in addition, networked contractual relationships transcend the frame of individual jurisdictions to take on a transnational dimension, the challenge posed to traditional legal doctrine becomes two-pronged and thus even more pronounced with its deficiencies thrown into relief.[914]

b) 'Back-to-Back' Contracting as Integral OTC Derivatives Market Feature

While the range of network phenomena share the characteristic of novelty, especially as regards their reception within established legal concepts, the configuration of the network in question and the challenges its effects throw up as regards legal reception is highly context-specific. The OTC derivatives market is particularly illustrative in this regard, not least because it paradigmatically combines the features of networked

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[910] With regard specifically to the Euro area interest rate market segment, S Dalla Fontana and others, *The Anatomy of the Euro Area Interest Swap Market* (European Central Bank Working Paper Series, No 2242, February 2019) 2.

[911] *Ibid* ('In the global financial crisis, the network structure of the OTC interest rate derivatives market created the risk of rapid propagation of distress across the financial system. In particular, the core of the market was highly concentrated on a few major dealers, which were connected with many other traders (banks as well as non-banks). This "hub and spoke" structure made the market conducive to contagion from distress at a dealer at the core to other parts of the global financial system.').

[912] As stated by Richard Buxbaum in his often-cited conclusion, '"[n]etwork" is not a legal concept': RM Buxbaum, 'Is "Network" a Legal Concept? (1993) 149 Journal of Instiutional and Theoretical Economics 698, 704.

[913] F Cafaggi, 'Contractual Networks and the Small Business Act: Towards European Principles' (2008) 4 European Review of Contract Law 493, 503-504.

[914] Writing in the context of 'traditional contract law': R Brownsword, RAJ van Gestel and H-W Micklitz, 'Introduction – contract and regulation: changing paradigms' in R Brownsword, RAJ van Gestel and H-W Micklitz (eds), *Contract and Regulation: A Handbook on New Methods of Law Making in Private Law* (Edward Elgar 2017) 5.

contracting and the transnational dimension of these contractual relationships. As has been shown under § 6.C, by way of its historical evolution, the OTC derivatives market is intermediated by and organised around the major dealer banks, with large swathes of the market today concentrated among these dealers, the so-called market makers. As detailed under § 6.C.II, market makers seek to square the transactions they enter into with clients and, as part of their business model, they do so by intermediating a transaction through standing between two end-users seeking equal but opposite risk exposures, making their money from the positive bid-offer spread. Crucially, where they cannot find a suitable counterparty, they will seek to hedge any (residual) market risk incurred through entering into client transactions, typically with other dealer banks in the inter-dealer market, which in turn will also seek to lay off this risk by (re-)hedging it. Significantly, along these lines, positions may be hedged and re-hedged repeatedly, with market risk figuratively flowing freely from one party to the other within the interconnected contractual risk network. These contractual risk networks are created primarily by the globally active dealer banks via multiple so-called 'back-to-back contracts'[915], concluded with third (sometimes affiliated) counterparties. The resulting contractual chains, assembled from individual contract links, which will typically span multiple jurisdictions, thus cannot be neatly localised in one specific territorial jurisdiction.[916]

Its conceptual nature as a dense transnational network of connected contracts in the above sense serves to distinguish the OTC derivatives market from broadly comparable instances of contractual symmetry between economically connected contracts in other industries. For example, construction projects have been described as an illustrative instance of a contractual network which is not captured adequately by the traditional legal analysis which hones in on bilateral contracts and thus turns a blind eye to the organisational nature and purpose of the project as a whole.[917] It does not seem to be by chance, therefore, that there is terminological overlap between the OTC derivatives market and international multiparty construction and engineering projects, where back-

[915] See (n742) regarding the reception of this structural market feature in English jurisprudence.

[916] Paradigmatically stated in by Blair J in *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWHC 465 (Comm) at [404] ('(…) transactions are part of a back-to-back chain involving other countries (…)'); Emphasising the crucial function of standardisation in this context: J Köndgen, 'Transnationale Regel- und Standardbildung auf Finanzmärkten – vor und nach der Krise' in G-P Calliess (ed), *Transnationales Recht: Stand und Perpektiven* (Mohr Siebeck 2014) 283.

[917] H Collins, 'Introduction to Networks as Connected Contracts' (n900) 72.

to-back transactions concluded on the basis of FIDIC standard form construction contracts are similarly a term of art in the allocation of construction risks.[918]

For all apparent similarities, however, the network characteristic in the transnational multi-link contract chains of the OTC derivatives market is even more pronounced. Firstly, this is due to their wider multi-jurisdictional territorial reach. Secondly, this is because of the absolute centrality of contractual symmetry built into the market, for the reason that the contractual object of financial risk itself is commodified by legal means, and only transferable through the synchronised design of contractual obligations effecting specifically priced cash-flows.[919] Against this background, it is paramount that the legal analysis and conceptualisation of the OTC derivatives market must take into account not only the bilateral derivative contracts in isolation, but rather the wider context of multilateral contracting within the respective (conceptually at least)[920] risk transfer networks,[921] and, indeed, on a global, i.e. multijurisdictional, scale. It is in this context that the functional significance of the genuinely legal construction of OTC derivatives, and by extension the legal commodification of financial risk comes into sharp relief. To illustrate the point, the defining physical properties of tangible object of sale itself, sold by its producer to a middleman and re-sold downstream multiple times across multiple jurisdictions until it reaches its ultimate buyer will remain constant across each individual sales contract. In contrast, the commodity of contractually configured financial risk may theoretically change with each transaction, as the consequence of diverging contractual terms, or where terms themselves are identical, by their diverging appraisal by different applicable legal regimes within the wider network. From a market perspective, the long-term, relational, or executory nature of these discrete individual contracts,[922] therefore becomes inextricably interwoven also with a

[918] See, eg, W Godwin, *International Construction Contracts: A Handbook* (Wiley-Blackwell 2013) 21.
[919] See, § 5.A.
[920] See, on the risk transfer concept at the product level, § 3.
[921] Similarly, writing in the specific context of CDS contracting and consistent market-wide contract interpretation by Credit Determination Committees, but conceptually transferrable to broader market segments as well: D Wielsch, 'Contract Interpretation Regimes' (n661) 980 ('ISDA has institutionalised a form of collective contractual interpretation that derogates from privity of contract in response to the aggregate risk of contracts that reference each other in their purpose of shifting individual risk. As market participants enter into multiple contracts designed to cancel out one another's risk, the function of each contract depends on its consistent interpretation with parallel contracts.').
[922] See, Chapter 1 § 1.B and Chapter 2 § 1.D.II.1.

network element[923], since market functioning depends on the many economically connected – if legally disparate – contracts working in multilateral unison. This means that, from the perspective of a functioning OTC derivatives market – premised on the tradability of financial risk as contractual commodity and the effective operation of credit risk mitigation provisions within these contracts – the different layers of regulation applicable to its transactions must facilitate the synchronised legal treatment of connected contracts. Viewed from the bottom up, at the contractual level itself, the first applicable regulatory layer or 'regulatory backcloth'[924] largely facilitates this objective through market-wide submission to the sectoral standards enshrined in the ISDA MA.[925] The second regulatory layer, aside from norms of financial regulation, is the applicable state law elected via the ISDA MA, which defines the ultimate boundaries of the private governance space according to, among other things, public interest considerations.[926] This second layer can potentially impede the smooth (conceptual)[927] flow of risk, where the applicable state legal regimes regulating the first standardised contractual layer diverge.

c) Transnational Legal Basis Risk

The notion of legal heterogeneity as an impediment to transactional functioning is embodied in concept of 'legal basis risk'[928]. As touched upon under§ 4.A.I.2, basis risk is commonly used with reference to the financial, but also the legal terms of transactions. In the latter case, effective market risk transfer is, just as much as in the case of a financial mismatch, impacted by a deviation between the legal terms, specifically 'an asymmetry in the rights and obligations'[929] of two supposedly

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[923] G Teubner, 'Networks as Connected Contracts' in G Teubner and H Collins (eds), *Networks as Connected Contracts* (M Everson tr, Hart Publishing 2011) 145 ('[T]he law of relational contracts will be infused with network logic').

[924] R Brownsword, 'Contract in a Networked World' in LA DiMatteo and others (eds), *Commercial Contract Law: Transatlantic Perspectives* (Cambridge University Press 2013) 134.

[925] Regarding sectoral standard forms in general: *Ibid* 134.

[926] *Ibid* 133-134 and 137-138.

[927] See, § 4.A.II.1.

[928] From financial literature: See, eg, S Allen, *Financial Risk Management* (2nd ed, John Wiley & Sons 2013) 38 ('Firms have started to worry about what may be termed legal-basis risk'); From legal literature, predominantly in the context of the CDS market: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n669) 93; A Gelpern and M Gulati, 'CDS Zombies' (2012) 13 European Business and Organization Law Review 347, 362; J Golden and P Werner, 'The Modern Role of Arbitration in Banking and Finance' in J Golden and C Lamm (eds), *International Financial Disputes* (Oxford University Press 2015) para 1.10; Describing legal basis risk: D Awrey, 'The Mechanisms of Derivatives Markets Efficiency' (n13) 1154-1155.

[929] J-P Castagnino, *Derivatives: The Key Principles* (n6) para 7.08.

economically offsetting transactions. Legal basis risk is, however, broader than its financial counterpart in that it may be introduced into transactions due to factors which themselves are external to these.[930]

Against this background, some commentators writing from both financial and legal perspectives have treated this potential pitfall under the heading of 'legal basis risk'[931] or with a specific focus on divergences in the documentation underlying transactions as 'documentation basis risk'[932]. In the latter case, a transaction that purely in relation to its economic terms appears to adequately offset a particular exposure from another transaction in reality falls short of adequately hedging that exposure due to differences in the underlying definitions of its contractual terms.[933] In other words, this is '(…) the risk to a dealer that it will be exposed as a result of a documentation mismatch, that is, having an obligation to pay out under the terms of one or more transactions but not necessarily having the right to receive payment (or a payment calculated precisely the same way) under what were thought to be hedging transactions.'[934]

However, the observation frame of basis risk as described above lies at the *transactional* or bilateral level. Broadening the perspective, legal basis risk can become lethal basis risk at the wider level of OTC derivatives *market* functioning, since the market is itself a contract market, i.e. essentially an economically interlinked 'aggregation(…) of transactions'[935]. Legal basis risk at the market level crystallises when a transaction takes legal effect differently than another at least economically connected transaction, i.e. in the multilateral context, where both transactions are embedded within the wider, often multi-jurisdictional setting of a contractual risk transfer network.[936] As such, its crystallisation constitutes a shattering of the contractual

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[930] SK Henderson, *Henderson on Derivatives* (n1) 375 ('Even if the hedge is precise, the unexpected, such as changes in law or force majeure, may also affect a derivative and its hedge differently').

[931] Cf (n928).

[932] SK Henderson, *Henderson on Derivatives* (n1) 375; SK Henderson, 'Unintended consequences of misconceived reforms: Pt II' (n180) 440; SF Flanagan, 'The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association' (n628) 234.

[933] *Ibid*.

[934] SK Henderson, *Henderson on Derivatives* (n1) 21.

[935] MK Borowicz, 'Contracts as Regulation: The ISDA Master Agreement' (2021) 16 Capital Markets Law Journal 72, 74.

[936] See, A Mugasha, 'International Financial Law: Is the Law Really "International" and is it "Law" Anyway?' (2011) 26 Banking & Finance Law Review 381, 391; Observing legal basis risk as emanating from the multi-jurisdictional nature of the market: A Downe, 'The Choice of French Law for the new ISDA Master Agreement: Part 1' (2019) 34 Butterworths Journal International Banking and Financial Law 658, 662.

standard and unwelcome legal fragmentation of the contractual uniformity intended by ISDA as the transnational standard-setter.

Legal basis risk traditionally came to the fore most clearly in the way it affected the market for the, in the aftermath to the GFC much maligned, CDSs.[937] As shown under § 2.B.III, a CDS offers protection against the credit risk associated with a reference obligation which crystallises upon a contractually defined credit event. As in the OTC derivatives market generally, dealer banks are central in intermediating; i.e. creating a 'two-way market' meaning that rather than terminate a particular CDS, customers can simply unwind or 'trade out of' their position by entering into an equal but opposite CDS with another dealer resulting in a 'flat' position in market parlance.[938] In keeping with the established 'matched book' business model,[939] a dealer bank, having sold credit protection to a corporate customer, and at the same time having bought a CDS on identical contractual terms from another dealer, would on the face of things have successfully hedged its exposure thus retaining no exposure and position in the market.[940] Against this background, the generations of ISDA Credit Derivatives Definitions included, among other things, standard stipulations of so-called Credit Events, as a contractual bulwark against basis risk by working towards the desired synchronicity of contracts and thus creating the essential 'fungibility' necessary for a liquid trading market.[941] However, standardised, congruent contract language alone is not necessarily a guarantee of synchronicity in practice. In such a multilateral, and multijurisdictional, contracting context, determinations of whether a particular set of factual circumstances did in fact constitute a credit event under the standard terms of the documentation were open to different interpretations, potentially a gaping gateway for legal basis risk, where under one contract a credit event was deemed to have occurred, whereas not on the (ostensibly) offsetting CDS entered into to hedge the initial transaction.[942] The creation of the suitably named Credit Derivatives Determinations

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[937] A Gelpern and M Gulati, 'CDS Zombies' (n931) 362; S Allen, *Financial Risk Management* (n931) 450 ('Default swaps, more than any other derivative instrument, have led to the concept of legal basis risk (…)').

[938] J Williams and V Aravind, 'Credit default Swaps: Lessons on the Role of Private Ordering in Mitigating Systemic Risk' (n72) 273.

[939] See, § 6.C.II.

[940] J Williams and V Aravind, 'Credit default Swaps: Lessons on the Role of Private Ordering in Mitigating Systemic Risk' (n72) 273.

[941] *Ibid*.

[942] A Gelpern and M Gulati, 'CDS Zombies' (n931) 362 ('(…) market participants entered into multiple contracts designed to cancel out one another's risk; but their role depended on consistent interpretation of

Committees to provide binding, and, most importantly, market-wide determinations on such contractual questions, are an illustrative institutional attempt at transnational legal basis risk minimisation.[943]

Of course, the standardised ISDA documentation architecture, in conjunction with standardised choice of law, to govern across transactions in the contractual risk network in principle itself serves as an effective mitigator of contractual basis risk.[944] However, it bears emphasis that the precise legal effects of standard contract language may differ depending upon the applicable law even within the same legal family; e.g. between English and New York law.[945] This became abundantly clear in the much-discussed conflicting decisions reached by US and English courts in parallel proceedings on identical fact patterns in the aftermath of the Lehman Brothers insolvency.[946] Therefore, extending standardisation also to the choice of governing law is crucial in achieving this predictability effect.[947] As put by Bryan Druzin, 'law-selection is an extension of the contract itself'[948]. The significance of the boilerplate choice of law clause will be discussed under Chapter 2 § 1.C.

Nevertheless, contractual standardisation as a legal basis risk minimising strategy reaches its limits where other forces are at play to selectively impact the legal operation of individual contractual links within the larger contractual network. As a kind of collateral damage, this may in unpredictable ways prevent their synchronous operation and the seamless transfer of financial risk. This includes, for example, instances, where

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the contracts. If this could not be assured, the dealer or clearing house faced legal 'basis risk': it might find itself paying out on some CDS but unable to collect on the offsetting ones.').

[943] The nature and operation of the Determinations Committees, in particular their approach to contract interpretation, have been discussed in-depth elsewhere: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n669) 93-97; D Wielsch, 'Contract Interpretation Regimes' (n661) 979-981; A Gelpern and M Gulati, 'CDS Zombies' (n931) 347.

[944] D Awrey, '*The Mechanisms of Derivatives Markets Efficiency'* (n13) 1154-1155.

[945] Which are the choices traditionally envisaged under Sec 13(a) ISDA MA form in conjunction with Part 4(h) of the Schedule.

[946] Noting a degree of '[legal] basis risk' between the New York and English governed ISDA MA versions in this regard, which however has not proved so significant as to impeded market functioning: A Downe, 'The Choice of French Law for the new ISDA Master Agreement: Part 1' (n936) 662.

[947] See, on the importance of the governing law on contract meaning and the effectiveness, G Cordero-Moss, 'International Arbitration and Commercial Contract Interpretation: Contract Wording, Common Law, Civil Law and Transnational Law' in P Lindskoug and others (eds), *Essays in Honour of Michael Bogdan* (Juristförlaget 2013) 40-42; Borrowing from the influential contract-as-product approach, choice of law may in this sense be seen as an essential feature determining the actual operation of the end-product. See, regarding this approach: MJ Radin, 'Boilerplate Today: The Rise of Modularity and the Waning of Consent' (n279) 194-196.

[948] B Druzin, 'Buying Commercial Law: Choice of Law, Choice of Forum, and Network Externalities' (2009) 18 Tulane Journal of International and Comparative Law 1, 34.

strategic sectoral choice of law is not validated at the meta-level of private international law[949], or, through 'interpretive interference'[950] in judicial construction of core operative provisions of the ISDA MA under a given applicable law. As a result, in the multi-jurisdictional context of the OTC derivatives market, outwardly contractually symmetrical swaps, including the choice of governing law, could end up generating unpredictable economically unequal outcomes in a crystallisation of what will be, for the purposes of this thesis, referred as transnational legal basis risk.

As observed by Fabrizio Cafaggi, '[i]t is not sufficient to have a multiplicity of linked contracts for a contractual network to emerge. (…) [T]here has to be (1) a strong collective interest to pursue (2) a common objective, and (3) a high level of interdependence among the contracts and the activities performed through contracts.'[951] In light of the above, it would appear that the cross-border 'back-to-back' hedging chains constitute prototypical instances of such a collective interest and common objective. The core operative concern with transnational legal basis risk conceived in the above way, and its mitigation, should be seen as the overarching network objective of transnational OTC derivative contracting. As identified by Catherine Mitchell in her distillation of network scholarship, 'several relevant features of networks may be problematic for traditional or classical accounts of contract law: [including that] (…) the network as a whole has an interest or purpose, which provides an important motivation from the participants even though not all participants share contractual links (…)'[952]. As will be analysed in the following chapters, this challenge, as regards the global OTC derivatives market, is not merely limited to contract law and contractual interpretation, but also extends to private international law, with the existing network of private governance, in addition, also having significant implications for transnational financial regulation.

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[949] See, on this dimension, in particular the case study in Chapter 2 § 2.

[950] J Black and D Rouch, 'The development of the global markets as rule-makers: engagement and legitimacy' (n809) 225.

[951] F Cafaggi, 'Contractual Networks and Contract Theory: A Research Agenda for European Contract Law' in F Cafaggi (ed*), Contractual Networks, Inter-Firm Cooperation and Economic Growth* (Edward Elgar 2011) 74 (cited in C Mitchell, 'Network Commercial Relationships: What Role for Contract Law' in R Brownsword, RAJ van Gestel and H-W Micklitz (eds), *Contract and Regulation: A Handbook on New Methods of Law Making in Private Law* (Edward Elgar 2017) 204).

[952] C Mitchell, 'Network Commercial Relationships: What Role for Contract Law' (n951) 207.

Chapter 2: ISDA's Contractual Architecture and the Emergence of a Global Financial Law 'Beyond the State'

The following chapter will, including through various case studies, endeavour to illustrate the quasi-statutory role the ISDA contractual architecture has taken on to cater for the particular functional needs of the transnational market that has evolved as described in Chapter 1.

§ 1 Conceptualising the ISDA Contractual Regime – The Emergence of a 'Global Law By Contract'?

Transnational legal basis risk minimisation in the OTC derivatives market has, as its starting point, the central observation of a marked contrast between what is essentially a global contract market and the existing heterogeneity of territorially based state laws.

A. Starting Point: Globalisation Without Global Law?

Regardless of any subjective value judgment ascribed to it, it is common ground that the processes subsumed under the abstract phenomenon of *globalisation* have had a transformative impact, manifested not least in the (re-)emergence of global financial markets.[1] Whether the zenith of its most current cycle has already been reached or not, globalisation has produced a world which is today more interconnected than at any time in human history,[2] and thus, in its financial manifestation, also amplified the reach of the productive as well as the destructive sides of the financial economy.

I. The Hallmarks and Challenge of Financial Globalisation for Territorial Law

Although globalisation, as a conceptual term, has become a rather wide projection screen for many different interpretations, financial globalisation is a prime example of its conception as the 'compression of time and space'[3] and related effects of ever-

[1] E Helleiner, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Cornell University Press 1994) 1; While often associated only with its most recent incarnation in the post Bretton Woods Era, the late 19th century could already lay claim to a world financial market centred around the City of London and for largely unconstrained cross-border capital flows: cf *ibid* 1; M Obstfeld and AM Taylor, *Global Capital Markets: Integration, Crisis, and Growth* (Cambridge University Press 2004) 126-129.

[2] Observing a cyclicality in the globalisation process, JH Coatsworth, 'Globalization, Growth, and Welfare in History' in MM Suárez-Orozco and D Baolian Qin-Hilliard (eds), *Globalization :Culture and Education in the New Millennium* (University of California Press 2014) 38-39.

[3] D Harvey, *The Condition of Postmodernity* (Blackwell 1992) 284.

increasing market interaction and interdependencies across borders. Financial markets, aided by information and instant communication technology, today operate to a great extent unconstrained by time zones. Equally, the location of participants has become of secondary importance as the geographical scope of markets has increased. One commentator has gone so far as to speak of '[t]he end of geography (…) as applied to international financial relationships'[4]. Against this background, the transformative impact of globalisation is perhaps nowhere more evident than in the transnational character of modern interconnected and interdependent financial markets generally and the OTC derivatives market specifically, where, as already illustrated in Chapter 1, mobile flows of capital and by extension risk are routinely created and exchanged the world over.

This state of affairs creates novel challenges, not least within the legal field, which is not immune to the transformational process towards an interconnected world economy and globalised financial markets. The question, in other words, must be whether the end of *geography* in international finance is flanked by a corresponding end or at least re-configuration of *territory* under the pressures of globalisation and specifically as regards its legal emanation, territorial law: As observed by O'Hara and Ribstein, 'the globalization of business has profoundly undermined the territorial basis for lawmaking'[5]. This initial finding is, in the financial market context, reinforced particularly in times of financial crisis, where the deep integration of globalised financial markets serves as a transmission belt for contagion and systemic effects do not conveniently make halt at jurisdictional borders.[6] Nevertheless, legal authority still remains rooted in the territorial paradigm, meaning that transnational finance is faced with a multiplicity of national laws in each case shaped by the respective polity's collective policies and values.[7] As concisely summed up by Francesco Galgano towards the end of the 20th century, 'the meta-national nature of the economy (…) is antithetical

[4] R O'Brien, *Global Financial Integration: The End of Geography* (Council on Foreign Relations Press 1992) 1.

[5] EA O'Hara and LE Ribstein, *The Law Market* (Oxford University Press 2009) 217.

[6] The transboundary nature of risk features prominently in social theory scholarship and has been identified as a characterising feature of modern 'World Risk Society' ('Weltrisikogesellschaft'), as was the title of the original German language publication of U Beck, *World at Risk* (C Cronin trs, Polity Press 2009); See, also, A Giddens, *Runaway World: How Globalisation is Reshaping our Lives* (Routledge 2003) 34 ('very few new-style risks have anything to do with the borders of nations').

[7] CA Whytock, 'Conflict of Laws, Global Governance, and Transnational Legal Order' (2016) 1 UC Irvine Journal of International, Transnational, and Comparative Law 117, 118.

to the national character of legal systems'[8]. This tension is felt in practice and in theory, as the challenges created by the transnational reality of finance can at the practical level not be adequately addressed by the national tool-kit of territorially confined law and regulation alone, nor can it be comprehensively described by the traditional theoretical tool-kit of legal theory.[9]

That the law adapts and changes in a constant ebb and flow of gradual evolution to remain sensitive to a changing world is of course not a new observation. Commercial law in particular, rather than being devised in the abstract on a drawing board, substantively evolves organically in response to novel challenges and the ever changing practices and needs of commercial actors.[10]

II. The Shifting Sands of Law under Financial Globalisation

When extending one's perspective beyond the unified nation state framework, a transnational regulatory space has opened up, populated not only by established categories of national and international law but also by different and novel 'norm entrepreneurs'[11] propagating, or at least participating in, the evolution of sets of norms which do not fit neatly into a hierarchical framework. Neither are they easily captured within the closed and finite categories of legal norms under the established sources of law. What results is an enriched normative landscape, populated by both norms rooted in the nation state and those norms following a primarily functionally oriented imperative or rather imbued with a particular 'operational logic'[12]. Against this background, it appears apt that cross-border contracting on the basis of a standard contract form, the ISDA MA, lies at the heart of the global OTC derivatives market.

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[8] F Galgano, 'The New Lex Mercatoria' (1995) 2 Annual Survey of International & Comparative Law 99, 104.

[9] Encapsulating the notion with regard to legal theory: K Tuori, 'Transnational Law: On legal hybrids and perspectivism' in MM Maduro, K Tuori and S Sankari (eds), *Transnational Law: Rethinking European Law and Legal Thinking* (Cambridge University Press 2014) 11 ('Legal theory is groping for conceptual tools to come to term with new phenomena that seem to shatter the solid foundations of our inherited legal worldview'); See also, with regard to legal practice: R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (2002) 40 Columbia Journal of Transnational Law 209, 273 ('Transnational business networks pose regulatory challenges for legal regimes grounded in sovereign states').

[10] R Goode, H Kronke and E McKendrick (eds), *Transnational Commercial Law: Texts, Cases and Materials* (2nd edn, Oxford University Press 2015) para 1.05.

[11] On this term: G-P Calliess and P Zumbansen, *Rough Consensus and Running Code* (Hart Publishing 2010) 25; JK Levit, 'A Bottom-Up Approach to International Lawmaking: The Tale of Three Trade Finance Instruments' (2005) 30 The Journal of International Law 125, 181.

[12] D Wielsch, 'Global Law's Toolbox: Private Regulation by Standards' (2012) 60 The American Journal of Comparative Law 1075, 1077.

Indeed, as early as 1933, German legal scholar Hans Großmann-Doerth in his commencement lecture identified the jurisgenerative potential of standard contract clauses as a legal source. Contrasting these with state-produced law, he termed them to be the 'self-produced law of commercial practice'[13]. More recently, Francesco Galgano observed the essential role played by sectorally delineated standardised contracting under the respective auspices of trade associations with quasi-statutory powers in world markets by observing that 'the dominant factor is the circulation of uniform contractual models'[14] the origins of which lie not with 'legislators but [with] the legal offices of multinationals or [with] the legal advisors of international associations of the various entrepreneurial categories'[15]. Transporting the notion that their *raison d'être* is to enable the legal infrastructure enveloping these markets to catch up with the speed of commercial and financial innovation, and at the same time echoing ISDA's mission, as he puts it, '[t]heir function is to create a legal unity within the unity of markets'[16].

Three aspects, in particular, intersect to constitute the singular role the ISDA MA occupies today as a transnational normative code for an entire financial market sector of particular economic importance and systemic relevance. For one, it is the particular master agreement approach, with its inherent disincentive against amendment, embodied in ISDA MA forms from 1987 onwards.[17] Legal standardisation, and contractual standardisation specifically, in the special manifestation of so-called standard form contracts, have been the subject of much scholarly interest and debate over the course of many decades. At the level of domestic legal contract law doctrine, these types of contracts have historically posed a challenge with established concepts grounded in theories of individual bargaining ill-suited to the novel phenomena of standardised mass contracting.[18] At its core, questions as to their proper legal treatment often home in on the prototypical situation of business-to-consumer ('B2C') contracting, and revolve around the fact that standard forms are not bargained for, but rather dictated one-sidedly on a 'take it or leave it' basis, raising the spectre of biased

[13] H Großmann-Doerth, *Selbstgeschaffenes Recht der Wirtschaft und staatliches Recht* (Fr Wagner'sche Universitätsbuchhandlung 1933) 5 ('das selbstgeschaffene Recht der Wirtschaft') [own translation in the main text from the German original].

[14] F Galgano, 'The New Lex Mercatoria' (n8) 105.

[15] *Ibid*.

[16] *Ibid*.

[17] See, Chapter 1 § 7.A.III.

[18] See, eg, already, from a US perspective, on the shift from individual bargaining to standardised mass contracting and 'contracts of adhesion' with their particular challenges to contract law doctrine: F Kessler, 'Contracts of Adhesion – Some Thoughts About Freedom of Contract' (1943) 43 Columbia Law Review (1943) 629, 631-642.

terms through the exploitation of bargaining power and information asymmetries.[19] On the more level playing field of business-to-business ('B2B') contracting, the quasi-statutory character of standard form contracts as a form of bottom-up private regulation takes on a particular significance, when shifting the perspective from the domestic to a transnational contracting setting, where sectorally specialised boilerplate does indeed by design perform a quasi-statutory function amongst counterparties incorporated in a multitude of different jurisdictions. Namely, in this context, the multitude of highly specialised norms emanating from financial market practice – as embodied, for example, in the 'financial lex mercatoria' of the close-out netting mechanism –[20] do not lead a counterexistence to state law, of the kind described by Großmann-Doerth in the German domestic setting, but are, rather, intended to provide a functional equivalent where state norms are in fact absent, or at least lag behind in adequately catering to a highly specialised contracting situation.

Taking a bottom-up perspective, freedom of contract thereby is the flexible instrument which endows parties with the capability to innovate, create new markets and regulate their dealings in thus far uncharted legal territory.[21] This is because, framing the issue in terms of new institutional economic theory, domestic lawmakers are of course invariably subject to the same limited capacities as any other agent, and as such incapable of writing complete law just as much as private individuals are incapable of drafting complete contracts.[22] Incompleteness may, in some cases, also be a conscious feature rather than a flaw. In addition to legislative gaps due to, i.a., the pervasive presence of Knightian uncertainty, the filling of gaps caused by deliberate ambiguity of wording, which characterises statutory general clauses, may be implicitly delegated to

[19] See, on this matter already, with further references, *ibid* 631.

[20] M Peeters, 'On Close-Out Netting' in T Keijser (ed), *Transnational Securities Law* (2nd edn, Oxford University Press 2022) para 3.05; See, in detail, on close-out netting, § 3.C.III.1.a).

[21] See, already, while asserting its important limitations in cases of one-sided exploitation and abuse: F Kessler, 'Contracts of Adhesion – Some Thoughts About Freedom of Contract' (n18) 629 ('To keep pace with the constant widening of the market the legal system has to place at the disposal of the members of the community an ever increasing number of typical business transactions and regulate their consequences. But the law cannot possibly anticipate the content of an infinite number of atypical transactions into which members of the community may need to enter. Society, therefore, has to give the parties freedom of contract (…)' and, *ibid* 641 ('society (…) in proclaiming freedom of contract has delegated to individual citizens a piece of sovereignty which enables them to participate constantly in the law making process. (…) As a result, law is not an order imposed by the state from above upon its citizens; it is rather an order created from below.').

[22] K Pistor and C Xu, 'Incomplete Law' (2003) 35 New York University Journal of International Law and Politics 931, 937; A brief insight into incomplete contract theory is provided in § 1.C.II.

the purview of the courts *ex post*.[23] Law is therefore always incomplete to some degree by virtue of design or due to the nature of the activity to which it relates.[24] Regarding these relative variations in incompleteness, there appears to be an inverse relationship between completeness of the law and the degree of creativity and speed of innovation involved in the area of economic activity to which it relates.[25] Put differently, law tends to be most incomplete where speed of innovation is at its highest. As such, in these constellations the described evolutionary deficiencies of state lawmaking, a rigidity and slowness in reaction to this innovation driven incompleteness, creating a pressing need for alternative modes of creation or supplementation of existing legal regulation, holds true. This is in part encapsulated in the statement by a leading commentator made against the background of the effects of the *ultra vires* doctrine with regard to the outcome of the *Hammersmith and Fulham* swaps litigation,[26] in that 'there was a growing feeling in the financial markets that the pace of development of concepts and products was much greater than that of development in the legal system. The concern that legal concepts and procedures were no longer able to cope was confirmed, as far as many market practitioners were concerned, by the Hammersmith & Fulham case.'[27].

All of this is not a novel insight. Austrian socio-legal theorist Eugen Ehrlich made the general observation already at the beginning of the 20th century in his often cited exposition of a *living law* of society.[28] Since Ehrlich's observation, technological and scientific innovation, have, however, been instrumental in the vast proliferation of such phenomena at a global scale. Against this background, his observation carries more weight than ever before. Today, this assertion is perhaps empirically nowhere more evident than in financial market practice. As stated by Florian Möslein, 'the tension

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[23] K Pistor and C Xu, 'Incomplete Law' (n22) 931-1013; See, also, for an early concise statement of the phenomenon: WM Landes and RA Posner, 'The Independent Judiciary in an Interest-Group Perspective' (1975) 18 The Journal of Law and Economics 875, 879 (cited in K Pistor and C Xu, 'Incomplete Law' (n22) at 932 (fn 2)) ('(…) the limits of human foresight, the ambiguities of language, and the high cost of legislative deliberation combine to assure that most legislation will be enacted in a seriously incomplete form, with many areas of uncertainty left to be resolved by the courts.').

[24] K Pistor and C Xu, 'Incomplete Law' (n22) 932-933 ('Environmental factors influence the relative incompleteness of law. Areas that are affected by a high pace of socioeconomic and/or technological change, for example tend to be more incomplete than areas unaffected by exogenous change.').

[25] *Ibid*.

[26] See, Chapter 1 § 5.C.III 4.

[27] C Bamford, 'The Financial Law Panel: A Review of its First Year' (1994) 10 Butterworth Journal of International Banking and Financial Law 475, 475.

[28] See, E Ehrlich, *Grundlegung der Soziologie des Rechts* (Verlag von Duncker & Humblot 1913) 322-323 ('The law is in a perpetual state of flux because humankind, whose relations the law is to regulate, perpetually confronts the law with novel problems (…) It is clear that lagging behind this ceaseless development of the law of society is the rigid and immobile law of the state.') [own translation].

between (financial) innovation and law (…) results from the contrast between the dynamic character of these innovations and the static nature of the legal system'[29]. Namely, in financial market practice, innovative financial contracting referencing huge money values may, as matter of course, clash with domestic legal doctrine developed in a different age without ever having envisaged the contracting practice in question, much less addressed it.[30] What is more, the private normative infrastructure for the OTC derivatives market – although itself incomplete[31] – in marked contrast to state law functionally exhibits a 'dynamic quality' of comparatively quick adaptation to sector specific concerns.[32] The ISDA Protocol Mechanism can be seen as the prime exponent of this.[33]

Secondly, and relatedly, where a standard form encapsulates the normative code of a particular industry, in the way detailed above, and is constituted of an accumulation of technical terms with a specific technical meaning, these provisions take on an abstract universal meaning, which is generally removed from the particularities of a specific contracting situation.[34] In this sense, the boundaries between contract and statute become increasingly blurred, with such standard form contracts conforming more closely to the latter category and consequently warranting a different treatment under the law than ordinary contracts.[35] Cumulatively, these factors tie together and the normative code embodied in the ISDA MA, shaped and informed directly by the operational necessities of the industry from which it emanates, does, in fact, begin to resemble something akin to a functional equivalent of a technical transnational statute. While today there also exist several other standard form master agreements for documentation of derivatives transactions, these are mainly adopted in local or very

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[29] See, F Möslein, 'Finanzinnovation und Rechtsordnung: Eine Einführung' in F Möslein (ed), *Finanzinnovation und Rechtsordnung* (Schulthess 2014) 41 [own translation].

[30] JB Golden, 'Do We Need a World Court for the Financial Markets' in D Vriesendorp, F A Nelissen and M Wladimiroff (eds), *The Hague Legal Capital? Liber in Honorem W. J. Deetman* (Hague Academic Press 2008) 256.

[31] See, in more detail, § 1.C.II.

[32] H Collins, 'Regulatory Competition in International Trade: Transnational Regulation through Standard Form Contracts' in H Eidenmüller (ed), *Regulatory Competition in Contract Law and Dispute Resolution* (CH Beck/Hart/Nomos 2013) 129.

[33] On the ISDA Protocol Mechanism, Chapter 1 § 7.C.VI.1.

[34] With regard to English jurisprudence, S Firth, *Firth on Derivatives Law and Practice* (Sweet & Maxwell 2022) para 3.057; The interpretation of provisions of the ISDA MA is discussed in detail as part of the case studies in Chapter 3.

[35] As illustrated in the programmatic title of professors' Choi and Gulati's essay developing this idea and the consequences for domestic legal orders flowing from it: SJ Choi and GM Gulati, 'Contract as Statute' (2006) 104 Michigan Law Review 1129; See, Chapter 3 § 2.B.I.

sector-specific market settings.[36] In contrast, the ISDA MA has attained a special status both in terms of universality of application across product types and underlying asset classes as well as in terms of its ubiquitous use by international market participants, as it now governs more than 90% of the global OTC derivatives market.[37] Against this background, it is not surprising that, from the macro perspective of the de-localised market as a whole, the ISDA MA has been described as a specialist 'industry code'[38] and has even been likened to an 'industry-wide constitution'[39] for the cross-border OTC derivatives market.[40] In this regard, a metaphor employed by the Right Honourable Lord Justice Briggs, writing extra-judicially, emphatically brings home its centrality to the market and the pervasiveness of its use today by stating that '(…) the international standard forms of contract of the International Swaps and Derivatives Association (ISDA) (…) lie at the heart of most derivatives in the same way as a Pentium microchip lies at the heart of most computers'[41].

Against the background of such evolving transnational regulatory spaces, populated by a variety of norms, the doctrinal *tertium non datur* of operating only on the strict law

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[36] See, E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation)', in G Yeowart and R Parsons (eds) with E Murray and H Patrick, *Yeowart and Parsons on the Law of Financial Collateral* (Edward Elgar 2016) para 17.05 with reference to, ia, the 'Deutscher Rahmenvertrag für Finanzermingeschäfte' in use in Germany as an example of a domestically limited master agreement and the Gas and Electricity General Agreements published by the European Federation of Energy Traders (EFET) as an example of sector-specific applicability.

[37] As noted by Briggs J in *Lomas v JFB Firth Rixson, Inc* [2010] EWHC 3372 (Ch) (21 December 2010) at [5] ('ISDA claims (and it is not challenged) that the Master Agreement serves as the contractual foundation for more than 90% of over-the-counter derivatives transactions globally') and at [53] ('The ISDA Master Agreement is one of the most widely used forms of agreements in the world. It is probably the most important standard market agreement used in the financial world.'). ISDA was granted leave to intervene in the case against the background of its 'understandable concern that any decision (…) about the interpretation of the Master Agreement may have potentially wide-ranging implications for the derivatives markets generally (…)', at [19]; For a similar perspective from a US court, see, eg, *Finance One Public Co Ltd v Lehman Bros Special Financing, Inc.* 414 F 3d 325, 328 (2nd Cir 2005) ('(…) a standard form contract known as the "Master Agreement," [*sic*] (…) is the industry standard in general use worldwide for formalizing derivatives trading arrangements').

[38] RJ Gilson and CF Sabel and RE Scott, 'Text and Context: Contract Interpretation as Contract Design' (2014) 100 Cornell Law Review 23, 46.

[39] A Gelpern and M Gulati, 'CDS Zombies' (2012) European Business Organization Law Review 347, 357 ('(…) in some respects [the ISDA MA] resembles an industry-wide constitution. This is because the core terms (representations, covenants, events of default, early termination procedures) apply across the derivatives industry and across all product categories.').

[40] In a similar vein, as put by Burton J in *Lehman Brothers Finance SA v Sal. Oppenheim Jr. & CIE. KGAA* [2014] EWHC 2627 (Comm) at [25(iii)] '(…) the ISDA Master Agreement is intended to be normative, and to apply in many different situations and with as much straightforward application as possible'.

[41] The Right Honourable Lord Justice Briggs, 'How has English Law coped with the Lehman Collapse?' in D Faber and N Vermunt (eds), *Bank Failure: Lessons from Lehman Brothers* (Oxford University Press 2017) para 6.04.

versus non-law (i.e. facticity)[42] distinction of state-centric legal positivism,[43] has been deemed to have become questionable and has been criticised as such in the legal literature.[44] This has coincided with an increasing interest from both legal practitioners and academics as to the legal status and place of the norms at play.[45] The unease is illustratively captured in novel descriptive labels developed in approximating the cross-border contractual practices, which have developed in segments of the financial industry to something at least akin to 'global law'[46] or even more specifically 'a kind of global law by contract'[47] in the specific case of OTC derivative transacting. The qualification of 'kind of' nevertheless gives some indication as to the absence of clear and neat categorisations felt by those describing these phenomena.

B. Evolving Legal Paradigms: Transnational Law and a (New) *Lex Mercatoria*

In essence, the commentators observing and grappling with these phenomena are, however, describing a familiar phenomenon manifesting itself under the specific guise of modern financial market practice.

I. Philip P. Jessup's Concept of *Transnational* Law

In February of 1956, Philip P. Jessup delivered three lectures as part of the Storrs Lectures on Jurisprudence at Yale Law School under the title of 'transnational law'.[48] The point of departure at the very start of his deliberations was the observation of 'the

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[42] See, J Köndgen, 'Privatisierung des Rechts: Private Governance zwischen Deregulierung und Rekonstitutionalisierung' (2006) 206 Archiv für die civilistische Praxis 477, 521 noting the obsolescence of old dichotomies of state (law) versus society or legal validity versus mere facticity in light of the reality of private rulemaking.

[43] Paradigmatically, eg, C van Bar, 'Einheitsprivatrecht, Rechtsvergleichung und Internationales Privatrecht' in C v Bar and P Mankowski (eds) *Internationales Privatrecht: Band I, Allgemeine Lehren* (2nd ed, CH Beck 2003) 81 (Statal law always has the last word; (....) what it does not authorise has no prospect of [legal] validity') [own translation; insertion added].

[44] Notably, Johannes Köndgen laments the analytical poverty of the state-centric traditional doctrine of legal sources ('Die Armut der traditionellen Rechtsquellenlehre') in offering any guidance with regard to the existing diversity of norms: J Köndgen, 'Privatisierung des Rechts: Private Governance zwischen Deregulierung und Rekonstitutionalisierung' (n42) 516-518.

[45] Recently, Johan Horst has developed a normative theory to encompass the ISDA regime: J Horst, *Transnationale Rechtserzeugung: Elemente einer normativen Theorie der Lex Financiaria* (Mohr Siebeck 2019).

[46] J Benjamin and D Rouch, 'The International Financial Markets as a Source of Global Law: The Privatisation of Rule-Making?' (2008) 2 Law and Financial Markets Review 78.

[47] JB Golden, 'The Future of Financial Regulation: The Role of the Courts' in IG MacNeil and J O'Brien (eds), *The Future of Financial Regulation* (Hart Publishing 2010) 86.

[48] Susbequently reproduced in, PC Jessup, *Transnational Law* (Yale University Press 1956).

complex interrelated world community'[49] and 'the difficulty of analyzing the problems of the world community and the law regulating them'[50].

Observing the terminological inadequacy of *inter*nationality both as an analytical category regarding the problems themselves and as used regarding the public and private international law applicable to them,[51] Jessup carved out a third category to describe the law regulating these problems. As stated by Jessup, '(…) I shall use, instead of "international law", the term "transnational law" to include all law which regulates actions or events that transcend national frontiers. Both public and private international law are included, as are other rules which do not fit into such standard categories'[52].

II. The Emergence of a (New) *Lex Mercatoria*

Much ink has since been spilled on interpreting and developing the legacy of Jessup's seminal conception, but, particularly noteworthy for present purposes, are the attempts to conceptually fill his latter category by reviving the Middle Age *lex mercatoria* of commerce.[53] While its very existence and scope have been contested, the idea of *lex mercatoria* conforming to a kind of spontaneous, organic law generation from within the merchant communities was explored by an influential group of academics in the middle of the last century.[54] Today, the (new) *lex mercatoria* concept also remains as alluring as it is controversial. The figurative nature of the language used in the context of its reception is a good indicator of this. Within the legal academy, the theoretical 'religious war'[55] and debates on existence, nature and scope of such a (new) *lex mercatoria*, and phenomena of law transcending the nation state in general, give no indication of being pacified any time soon, based on the continued flood of new publications ranging from support of some manifestation on the one side and categorical

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[49] *Ibid* 1.

[50] *Ibid*.

[51] *Ibid* ('But the term "international" is misleading since it suggests that one is concerned only with the relations of one nation (or state) to other nations (or states)').

[52] *Ibid* 2.

[53] G-P Calliess and A Maurer, 'Transnationales Recht – eine Einleitung' in G-P Calliess (ed), *Transnationales Recht: Stand und Perspektiven* (Mohr Siebeck 2014) 8-9.

[54] A comprehensive introduction into the (new) *lex mercatoria* topic is provided by KP Berger, 'History & Evolution of Transnational Commercial Law'.

[55] MJ Bonell, 'Die UNIDROIT-Prinzipien der internationalen Handelsverträge: Eine neue Lex Mercatoria? (1996) 37 Zeitschrift für Europarecht, Internationales Privatrecht und Rechtsvergleichung 152, 152 ('Religionskrieg[…]'), (cited in KP Berger, *The Creeping Codification of the New Lex Mercatoria* (2nd ed, Kluwer Law International 2010) 54).

denial of its existence on the other.[56] Indeed, going beyond what one might term a *lex mercatoria* '*generalis*', subsisting of general and abstract principles or usages of trade, a number of sectoral instantiations of a *lex mercatoria* '*specialis*' have been described in various specialised subsectors of society.[57] While it is far beyond the scope of this thesis to, even in a rudimentary sense, provide an overview of the current debate, for present purposes, one particular exposition of *lex mercatoria* present in many theoretical accounts warrants closer attention: Namely, somewhat echoing its intellectual heritage, the new *lex mercatoria* is sometimes conceptualised and discussed in terms of an independent[58], anational, more or less self-sufficient system, i.e. a global law 'without'[59] the state.

In light of its function as a specialist transnational 'industry code'[60], it is not surprising that such discussions have come to also extend to the OTC derivatives market. This is perhaps most plastically illustrated in some of the catchy attributions and buzzwords employed in attempting to capture or at least approximate the distinct 'otherness' of the ISDA contractual architecture, and specifically the ISDA MA at its core. For example, its broad acceptance and geographical scope of use had already in the mid-1990s spurred the description that '[w]hat has been accomplished may be described as no less

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[56] Illustratively, K Schmidt, 'Lex mercatoria: Allheilmittel? Rätsel? Chimäre?' in J Murakami, H-P Marutschke and K Riesenhuber (eds), *Globalisierung und Recht: Beiträge Japans und Deutschlands zu einer internationalen Rechtsordnung im 21. Jahrhundert* (De Gruyter 2007) 157 ('(…) The lex mercatoria triggers fundamentalist debates, is glorified by some as a globally bestowed blessing, and condemned by others as the work of the devil.') [own translation].

[57] Ia, these range from the 'lex maritima' of the international maritime trade to a 'lex crypographia' spurred by the advent of Blockchain technology, to name but two for present purposes: Cf the in-depth socio-legally grounded study of the privately generated, transnational law of the international maritime trade by A Maurer, *Lex Maritima: Grundzüge eines transnationalen Seehandelsrechts* (Mohr Siebeck 2012 on the former, and, on the latter: A Wright and P de Filippi, 'Decentralized Blockchain Technology and the Rise of *Lex Cryptographia*' (10 March 2015) <papers.ssrn.com/sol3/papers.cfm?abstract_id=2580664> accessed 7 September 2026; Further examples are provided in KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 290.

[58] KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 64 stating that '(…) the term [New Lex Mercatoria] denotes an independent, 'third' supranational legal system between domestic law and public international law, a legal system that is created and developed by the law-making forces of the international business community.'.

[59] As for example condensed in the socio-legal concept of 'global law without a state' not emanating from any polity but generated by societal subsystems through the autopoiesis of Luhmannian systems theory: See, illustratively, the eponymous volume, G Teubner (ed), *Global Law without a State* (Dartmouth Publishing 1997); Specifically, G Teubner, '"Global Bukowina": Legal Pluralism in World Society' in G Teubner (ed), *Global Law Without a State* (Dartmouth Publishing 1997) 3 ('Lex mercatoria, the transnational law of economic transactions, is the most successful example of global law without a state.')

[60] RJ Gilson and CF Sabel and RE Scott, 'Text and Context: Contract Interpretation as Contract Design' (n38) 46.

than the creation of a global law by contractual consensus'[61]. More recently, these words were echoed by eminent market practitioner Jeffrey Golden, referring to it as a market-generated 'kind of global law by contract'[62]. The 'kind of' qualification points to the definitional tension that, while evidently not law under a traditional understanding of legal sources, the effects of the standard form transcend those traditionally associated with the normative force of a contract. In this sense, the observation made by market practitioners ties into academic discussions on transnational law and a new *lex mercatoria*.[63] One of the earliest papers, if not the earliest, to explore this connection was presented at the W G Hart Legal Workshop 1998 on Transnational (Corporate) Finance and the Challenge to Law by Pedro Gustavo Teixeira.[64] Teixeira identifies 'as the main *motif* of transnational capital market law, the globalization of financial risk'[65] and regulatory difficulties posed by them, most prominently their de-territorialised effects.[66] As regards the bottom-up, self-regulatory dimension of legal innovation in the global financial markets, Teixeira sees the legal risk at the transactional level, i.e. that of the provisions of innovative financial transactions such as derivatives not being enforceable, as 'one of the factors inducing the transnational private regulation of the swaps market by ISDA'[67]. In light of this, he characterises the ISDA MAs as 'an exclusive *lex mercatoria* for its *specialised business community*'[68] which are crafted to conform to and thus enforceable under the general body of law in the main national jurisdictions, which serves to minimise (transnational) legal risk to those who choose to avail themselves of them.[69] Keeping with the quasi-statutory language, he, in turn, characterises ISDA as the originator of these standard

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[61] JM Robinson and H Schneider, 'Foreword' in DP Cunnningham and CT Abruzzo (eds), *Multibranch Netting – A Solution to the Problems of Cross-Border Bank Insolvencies* (Capital Markets Forum 1995) 1.

[62] JB Golden, 'The Future of Financial Regulation: The Role of the Courts' (n47) 86.

[63] As put by Joanne Braithwaite in the context of the ISDA MA, 'as particular standard form contracts come to enjoy widespread use on a worldwide basis, they metamorphose from simple creatures of national contract law, into something new and exotic (or, at least, less well understood)': JP Braithwaite, 'Standard Form Contracts as Transnational Law: Evidence from the Derivatives Markets' (2012) 75 The Modern Law Review 779, 780.

[64] PG Teixeira, 'Beyond the Lex Mercatoria: Transnational Finance and the Role of Economic Organisation in the Formation and Development of Law-Making Regulatory Regimes' (Paper prepared for presentation at the W G Hart Legal Workshop 1998 on Transnational (Corporate) Finance and the Challenge to the Law, Institute for Advanced Legal Studies, London.

[65] *Ibid* 19.

[66] *Ibid*.

[67] *Ibid* 31.

[68] *Ibid* 32.

[69] *Ibid* [emphases in the original].

forms as 'emulating the features of a private legislature'[70].[71] While capturing the central role ISDA plays in and the utility its standardised contractual architecture offers market participants, the added analytical value or consequence of ascribing to this the status of '*lex*' does, however, by virtue of this aspect alone not immediately become apparent. In addition, however, Teixeira also observes the interrelationship of private normativity with state law in the work of ISDA directly kick-starting legislative reform in jurisdictions to accommodate some of the contractual techniques used,[72] as well as the regulatory recognition of private risk mitigation techniques such as netting in the form of reciprocal capital requirement reductions under the Basel Accords.[73] While Teixeira stresses the 'heterarchical'[74] relationship of the actors in the transnational financial regulatory regime he describes, in the context of the ISDA regime, this statement is somewhat relativised by his simultaneous assertion, echoing the parlance of systems theory, that 'ISDA is also an exemplary case of how transnational contracts can be "self-validated"' pointing to the contractual standardisation performed by ISDA as functioning as a 'secondary contractual rule' that provides a reflexive reference of validity (and legal enforceability) for the contracting parties'.[75] This would at the very least relegate the importance of the nation state in the framework, thus positioning his account more closely to notions of a global law without the state, in line with a large strand in the academic discussions of the subject. Being, for present purposes, constrained to providing an overview of the current debate as specifically regards the

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[70] *Ibid.*

[71] In addition, he also notes further benefits, discussed in detail under Chapter 1 § 7.D, such as the reduction of transaction costs through use of standardised contractual forms as well as ISDA's function as a derivatives know-how interface amongst its members and a central institution for collective action: *ibid* 32.

[72] *Ibid*; The author references ISDA's Model Netting Legislation: As a cornerstone of its efforts in creating legal certainty as to the contractual techniques embedded in the ISDA MA, ISDA in 1996 published a Model Netting Acts to serve as a blueprint for substantive law reform, subsequently updated and re-published in 2002, 2006 and most recently in 2018 to reflect intervening market developments, flanked by a Guide aimed at 'provid[ing] practical advice and guidance to governmental officials and other policy makers in countries that are currently considering implementing netting legislation': ISDA, 2018 Model Netting Act and Guide, I; In more detail, see, § 3.C.II.2.b).

[73] PG Teixeira, 'Beyond the Lex Mercatoria: Transnational Finance and the Role of Economic Organisation in the Formation and Development of Law-Making Regulatory Regimes' (n64) 33.

[74] A term used in sociological systems-theory inspired legal scholarship, denoting the opposite to a hierarchical ie nonhierarchical interrelationship: See, ia, K-H Ladeur, 'The Theory of Auopoiesis as an Approach to a Better Understanding of Postmodern Law: From Hierarchy of Norms to the Heterachy of Changing Patterns of Legal Inter-relationships' (European University Institute Working Paper Law No 99/33, Florence 1999).

[75] PG Teixeira, 'Beyond the Lex Mercatoria: Transnational Finance and the Role of Economic Organisation in the Formation and Development of Law-Making Regulatory Regimes' (n64) 34.

global OTC derivatives market and the ISDA contractual architecture, this to date mirrors the broad range of interdisciplinary approaches.

III. Guiding Features for the Following Analysis of the ISDA Regime

1. Global Legal Pluralism and Interlegality as Lenses to Observe a Global Law Beyond the State

Similarly to transnational law and the new *lex mercatoria*, legal pluralism does not constitute a homogeneous body of theory.[76] The origins of the phenomena of norm coexistence and plurality underlying the theory stretch back far in history.[77] Most recently, the gaze of legal pluralism has – in a world of territorial nation states claiming the monopoly in the provision of formal law in their respective jurisdiction – turned from analysing phenomena of plurality within to, in its most current application, 'legal-regulatory phenomena that extend beyond nation-states'[78].[79] At the core of legal pluralism lies a shifting of the traditional coordinates of legal positivism, by postulating that legal regulation is not the sole and uncontested domain of the territorial nation-state, but that also various non-state normative communities are to varying degrees implicated in weaving the tapestry of legal order in their respective areas, with varying degrees of detachment from the state.[80] This is, however, only part of the overall picture. Global legal pluralism acknowledges that, although somewhat repositioned on the transnational map, the state retains a central role in supporting economic regimes which are themselves no longer easily captured by legal concepts premised on notions

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[76] B Tamanaha, *Legal Pluralism Explained: History, Theory, Consequences* (Oxford University Press 2021) 2-3; In fact, conceptual complexity as regards legal pluralism is a direct logical consequence of diverging conceptions of law, in that 'since each version of legal pluralism is shaped by how law is conceived, there are multiple versions of legal pluralism, each built around a different view of law': *ibid* 2.

[77] From a historical perspective, multiple coexisting systems of norm provision and interpretation as the result of an overaching concept of 'personal' or 'community' law, under which 'everybody was entitled to be judged by the law of their community', were in fact the generally accepted norm, rather than an oddity worthy of scholarly attention: *ibid* 19.

[78] *Ibid* 129.

[79] As such, as observed by Ralph Michaels, some conceptualise the 'globalization of legal pluralism' as the newest, third step on an evolutionary continuum, after the first generational step of legal pluralist analyses focused on the coexistence and interaction of norms of Western and non-Western origin in the context of colonial and postcolonial settings ('classical legal pluralism') and followed by the broadening of the concept of legal pluralism to include Western societies themselves and the interaction of formal state law with other unofficial forms of normativity (the 'new legal pluralism'): R Michaels, 'Global Legal Pluralism' (2009) 5 Annual Review of Law and Social Science 243, 245.

[80] PS Berman, 'From International Law to Law and Globalization' (2005) 43 Columbia Journal of Transnational Law 485, 507-511.

of nation-state territoriality.[81] Such an inclusion of the state and its formal legal institutions in the account proves valuable, since it at the same time complicates as it does enrich the task of mapping the reality of transnational law. In particular, it draws attention to the fact that the various norms, which lay claim to regulating different aspects of the OTC derivatives market, be they initially of nation state or of private origin, do not, however, exist in independent silos, but increasingly coalesce in a dialectical interplay. Famously, Boaventura de Sousa Santos in his proposition of a 'postmodern conception of law' in the abstract termed this interplay as 'interlegality', which he saw as the natural 'phenomenological counterpart of legal pluralism'.[82] In this vein, as put by Paul Schiff Berman regarding a globalisation-focused legal pluralism, '(…) although pluralists had often focused on clashes within one geographical area – where formal bureaucracies encountered indigenous ethnic, tribal, institutional, or religious norms – the pluralist framework proved highly adaptive to analysis of the hybrid legal spaces created by a different set of overlapping jurisdictional assertions (state versus state, state versus international body, state versus nonstate entity) in the global arena'[83].

2. *Focusing on Empirical Observability of the Process of Transnationalisation*

Focusing on phenomena of observable interlegality as the counterpart of (global) legal pluralism – as a more modest, but fruitful line of inquiry for present purposes, relative to setting out on the road of exploring what may or may not be possible as a matter of abstract legal theory –[84] requires mapping what is actually empirically observable in the OTC derivatives market.[85] What may generally be possible or impossible as matter of theory thus becomes a subordinated question. Framing the analysis in such a way also

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[81] PS Berman, *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (Cambridge University Press 2012) 62 (affirming the nation state's continued relevance due to its ability to deploy coercive force); See, also, G Handl, 'Extra-Territoriality and Transnational Legal Authority' in G Handl, J Zekoll and P Zumbansen (eds), *Beyond Territoriality: Transnational Legal Authority in an Age of Globalization* (Nijhoff 2012) 6; TC Halliday and G Shaffer, 'Transnational Legal Orders' in TC Halliday and G Shaffer (eds), Transnational Legal Orders (Cambridge University Press 2015) 13 ('We contend that the nation-state remains central to lawmaking, law recognition, and law enforcement in the world today, and it is not simply bypassed by transnational legal ordering.').

[82] B de Sousa Santos, 'Law: A Map of Misreading. Toward a Postmodern Conception of Law' (1987) 14 Journal of Law and Society 279, 298.

[83] PS Berman, 'The New Legal Pluralism' (2009) 5 Annual Review of Law and Social Science 225, 226.

[84] And thus jumping into the thus far unresolved controversies of providing a theoretical framework to draw the boundaries of the law/non-law dichotomy: B Tamanaha, *Legal Pluralism Explained: History, Theory, Consequences* (n76) 3.

[85] See, writing on the modern incarnation of the new law merchant: R Michaels, 'The True Lex Mercatoria: Law Beyond the State' (2007) 14 Indiana Journal of Global Legal Studies 447, 460.

promises to better serve those to which it actually pertains. As has been pointed out, commercial actors do not have a vested interest in theoretical explorations of the conceptual possibility of non-state law, but are motivated exclusively by functionality and efficiency of the normative regime chosen for a particular purpose.[86] This was, in fact, emblematically noted early on by one of the most distinguished critics of a resurgent new *lex mercatoria*, Lord Mustill, observing that 'the commercial man is a conspicuous absentee from the writings of the *lex mercatoria*, and so indeed is his adviser'[87]. This applies no more so than in the realm of finance, where, as already discussed under Chapter 1, the value of a financial asset to its users, intentionally configured as contract, is premised in large part on its formal legal vindication.[88] Against this background, the guiding theme in the following will be to make visible the actual operation of the transnational regulatory regime, of which the ISDA contractual architecture forms the core through a number of case studies. As will be shown, and as is perhaps most clearly evident in the ISDA MA explicitly containing choice of (state) law and forum clauses, OTC derivatives market participants availing themselves of the ISDA contractual architecture do not regard state institutions as a constraint from which to claim autonomy by 'contracting out of national law'[89] and out of its reach, but rather as a valuable facilitative tool.[90] Under such a perspective, the state may on the face of it very well have the last word in its determination of legality.[91] However, it is argued

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[86] Writing in the mould of Luhmannian systems-theory: *ibid* 452 ('From the perspective of commerce (representing the economic system), the distinction between state and non-state is simply irrelevant') and ('(…) whether commercial law is created in the state or in commerce is per se irrelevant to commerce itself. All that matters is the functionality of the law for commerce') *ibid* 463.

[87] See, The Rt Hon Lord Justice Mustill, 'The New Lex Mercatoria: The First Twenty-five Years' 4 (1988) Arbitration International 86, 86 and at 119 ('[T]he person whose interests lie at the heart of the *lex mercatoria* as of all commercial arbitration, is the businessman. All the debates proceed upon rival assumptions about his opinions and wishes on this or that topic. Yet all the literature is written by lawyers. *Perhaps the time has now arrived for the contestants to call a truce, and for the businessman to speak for himself*.') [emphasis added]; In a similar vein, G Cuniberti, 'The Merchant Who Would Not be King: Unreasoned Fears about Private Lawmaking' in H Muir Watt and DP Fernández Arroyo (eds), *Private International Law and Global Governance* (Oxford University Press 2014) 142 ('While the breadth of production of business norms is a fact which can barely be disputed, the goal pursued by private actors issuing and relying on those norms has not been clearly ascertained. This chapter will argue that it should be.').

[88] K Pistor, 'A Legal Theory of Finance' (2013) 41 Journal of Comparative Economics 315, 315.

[89] CR Drahozal, 'Contracting out of National Law: An Empirical Look at the New Law Merchant' (2004) 80 Notre Dame Law Review 523-552 (with the author, in the context of international arbitration, ultimately finding that empirically few parties do in fact opt to submit their disputes to an instantiation of transnational law, rather than domestic (state) law).

[90] See, § 1.C on the significance of the default choice of law clauses contained in the ISDA MA.

[91] Cf, C van Bar, 'Einheitsprivatrecht, Rechtsvergleichung und Internationales Privatrecht' in C van Bar and P Mankowski (eds), *Internationales Privatrecht: Band I, Allgemeine Lehren* (n43).

here that persevering in this formalistic perspective risks masking a large part of a wider story of legal reality. Namely, this is because, where that last word pertains to an overarching normative script, written in no small part by a transnational private regulator, the result is perhaps better conceived as in essence a *hybrid* law, originating at first instance from transnational commercial practice, but ultimately the result of private transnational norms moulding and transforming formal nation state law upon its enlistment in the larger transnational regulatory order in the process.[92] What is more, this on account of the private-public mixture of its interpenetrating components hybrid law, may also be termed 'cross-polity law'[93], when focusing on its regulatory scope, in that it encapsulates a form of legal regulation, which, tracing the global market from which it emanates, 'addresses matters between and across polities'[94].

For one, opting to focus on interlegality as an empirically observable phenomenon in this way may perhaps also go some way towards taking the sting out of some of the most poignant criticism levelled at concepts calling into question the exclusivity or conceptual adequacy of nation state positivism.[95] What is more, it frames the issue in terms of a dynamic process, a process of 'transnationalisation'[96], which will be argued in the following conforms closest to the actual operation of transnational financial law beyond the state.[97] Focusing on these observable processes and bringing them to light,

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[92] See, on the notion of hybridity: P Zumbansen, 'Transnational Legal Pluralism' (2010) 1 Transnational Legal Theory 141, 160 ('*Lex mercatoria* offers a good insight into the complexity of the concept of transnational *law*, precisely because of its multi-layered and *hybrid* nature, in particular as regards the interpenetration of public and private modes of norm creation and norm enforcement in this area.' [emphases in the original]; On the transformative impact of 'transnational legal ordering' on state institutions upon states' participation in transnational legal processes: G Shaffer and T Halliday, 'With, Within, and Beyond the State: The Promise and Limits of Transnational Legal Ordering' in P Zumbansen (ed), *The Oxford Handbook of Transnational Law* (Oxford University Press 2021) 1000-1001.

[93] B Tamanaha, *Legal Pluralism Explained: History, Theory, Consequences* (n76) 152.

[94] *Ibid*.

[95] See, eg, regarding the existence of a modern day 'lex mercatoria': C van Bar, 'Einheitsprivatrecht, Rechtsvergleichung und Internationales Privatrecht' (n43) 81 ('[S]omething which does not exist, cannot be created by giving it a name') [own translation].

[96] See, eg, JH Dalhuisen, 'Legal Orders and Their Manifestations: The Operation of the International Commercial and Financial Legal Order and Its Lex Mercatoria' (2006) 24 Berkeley Journal of International Law 129, 166 ('Ultimately there is also the evolutionary aspect: the law changing under pressure of a changed environment, therefore by outside forces, here the internationalization of business flows, which may itself contribute to the *transnationalisation of the applicable laws.'*) [emphasis added].

[97] See, in a similar vein, writing in relation to the phenomenon of 'Transnational Legal Orders' (and in relation to the processual nature 'transnational legal order*ing*' [emphasis added]): TC Halliday and and G Shaffer, 'Transnational Legal Orders' (n81) 16 ('[T]ransnational legal ordering is ultimately processual in nature (…) legal norms are directed at or directly engage, legal institutions within nation states'), and, ('[u]nlike pedigree concepts of law, a focus on the dynamic interaction of actors producing, interpreting,

where they may otherwise be lost from view when curtailing one's perspective strictly to conventional doctrinal categories alone, is perhaps an essential contribution of transnational legal theory, also in the interest of state institutions.[98] As observed by Gralf-Peter Calliess and Andreas Maurer, in espousing the view of 'transnationalisation of the law as a process'[99], 'such an understanding does not place the concept of transnational law at the centre of considerations in the sense of defining it, but encompasses an analytical framework for processes of transformation of state and law under globalisation (…)'. What is more, as the authors concisely state, '[t]his approach expands the scope of the concept [of transnational law] enormously (…). The discriminatory power of an understanding of a transnational law that is written solely by a private pen is largely lost through adopting this view. At the same time, however, it opens up new perspectives that an understanding of transnational law merely as a self-created law of global trade does not offer.'[100] Indeed, such broadening of perspective opens up the analytical capacity to, in the specific context of the global OTC derivatives market, home in on the combinatory transnational regulatory regime underlying it, as what Gralf-Peter Calliess and Peer Zumbansen illustratively refer to as 'tailor-made governance-cocktails'[101] consisting of a bespoke mixture of private and public institutions in the transnational realm.

What is more, again of central relevance from the perspective of state institutions themselves, this first step of visualising the processes of interlegality is a necessary precondition for the second step of its conscious 'recognition and processing'[102] within the structures of the state legal order.

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and otherwise engaging with legal norms lessens emphasis on sources of law, primary and secondary rules, and a rule of recognition') *ibid* 18.

[98] Writing in relation to transnational maritime law and highlighting the importance of making transnational law visible for state courts and state law in the interest of overall legal certainty: A Maurer, *Lex Maritima: Grundzüge eines transnationalen Seehandelsrechts* (n57) 225.

[99] G-P Calliess and A Maurer, 'Transnationales Recht – eine Einleitung' in G-P Calliess (ed), *Transnationales Recht: Stand und Perspektiven* (n53) 11 [own translation].

[100] *Ibid* 12 [own translation] which is, of course conceptually equally applicable to a global law of finance.

[101] G-P Calliess and P Zumbansen, *Rough Consensus and Running Code* (n11) 120.

[102] A Maurer, *Lex Maritima: Grundzüge eines transnationalen Seehandelsrechts* (n57) 225 [own translation].

C. Implications of Embedded Choice of Law: The ISDA MA as Central Component of Law 'Beyond' the State

In a sense, as will be detailed in the following, the ISDA MA itself contains a launchpad for its operative provisions to interact with state law by virtue of the boilerplate choice of law provisions contained in Sec. 13(a) ISDA MA in conjunction with Part 4(h) of the Schedule. In this way, interlegality has been hardwired into the ISDA MA and thus constitutes a feature, not a flaw, of the sectoral governance matrix of the OTC derivatives market.

I. The Significance of the ISDA Master Agreement Governing Law Clause – Qualified Normative Touchdown in State Legal Orders

As the OTC derivatives market is intrinsically international with transactions routinely concluded between multinational entities on a cross-border basis, an OTC derivative is the paradigmatic instance of a transaction which throughout its lifecycle can come into contact with the legal regimes of a range of different and sometimes overlapping jurisdictions, ranging from contract to tort and insolvency law.[103] Beyond the counterparty or transacting branch place of incorporation, potential connecting factors to different systems of law are manifold in a typical OTC derivative transaction and may stem from anything ranging from the currency or currencies a transaction is denominated in, the place a contractually stipulated calculation or other operation even nominally takes place, or even the place where a particular underlying is traded.[104] What is more, the efficacy of close-out netting provisions integrated into counterparties' commercial relationship will ultimately be determined when measured against the applicable insolvency law.[105] Insofar as different systems of law may have varying legal effects on a transaction, transnational contractual standardisation runs the risk of fragmentation when measured against the varying reference points of different national legal systems. In light of this, at least as far as applicable *lex contractus* is concerned,[106]

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[103] See, generally, R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (n9) 209.

[104] A Hudson, *The Law on Financial Derivatives* (6th edn, Sweet & Maxwell 2018) paras 14.02 and 14.07.

[105] See, in detail, § 3.C.III.1.c).

[106] As regards the risk of fragmentation upon counterparty insolvency, through diverging approaches of insolvency jurisdictions to the operation of the ISDA MA by virtue of the respectively applicable mandatory *lex concursus*, ISDA has pursued a different approach discussed under § 3.C.III.2; Noting the inherent limits of choice of law in this regard: J Biggins, '"Targeted Touchdown" and "Partial Liftoff":

the risk of fragmentation is limited through Sec. 13(a) ISDA MA in connection with Part 4(h) of the Schedule of both the 1992 and 2002 form versions, which provide a default choice of law ('Governing Law') provision in favour of either English[107] or New York substantive law[108].[109] Specifically, according to Sec. 13(a) ISDA MA, '[t]his Agreement will be governed by and construed with the law specified in the Schedule', with Part 4(h) of the Schedule allowing counterparties to exercise that choice by simply deleting the non-applicable default option.

For present purposes, what stands out is that the ISDA MA and the individual transactions entered into under it are consciously and, as will be shown in the following, strategically, designed and conceived as *contrats avec*[110] rather than *sans loi*[111]. This particular feature distinguishes the ISDA MA from certain other widely disseminated international model contracts in other sectors, such as, for example, those promulgated by the International Chamber of Commerce ('ICC'), which are explicitly drafted as a distillation of transnational commercial practice and generally discourage reference to any specific national law in favour of non-state norms, such as the *lex mercatoria*.[112]

Post-Crisis Dispute Resolution in the OTC Derivatives Markets and the Challenge for ISDA' (2012) 13 German Law Journal 1297, 1318.

[107] Ie, according to the Definitions set out in the ISDA MA, the law of England and Wales: Sec 14 ISDA MA.

[108] Under Sec 14 ISDA MA defined to include, 'any treaty, rule or regulation (as modified, in the case of tax matters, by the practice of any relevant governmental revenue authority)'.

[109] Aside from an also existing Japanese law version, against the backdrop of the United Kingdom's decision to leave the European Union, ISDA has since published two additional MA standard forms, one Irish and one French law governed version: ISDA, News Release, ISDA Publishes French and Irish Law Master Agreements (3 July 2018); At the time of writing, the scope of (future) adoption of these MAs by market participants is not clear and it is argued in more detail under § 1.D.III.2 that their transnational adoption seems doubtful from the perspective of potential market fragmentation.

[110] With this turn of phrase: K Eller, 'Private Governance of Global Value Chains from Within: Lessons from and for Transnational Law' (2017) 8 Transnational Legal Theory 296, 297.

[111] The private international law concept of 'contrat sans loi', or the lawless contract, was proposed in the middle of the 20th century as a radical challenge to state-centric legal positivism with the idea of the state as the exclusive source of all law. Namely, according to its proponents the contract itself speaks to its own legal validity and content without reference to an external legal system. See, generally, L Gannagé, 'Le contrat sans loi en droit international privé' in K Boele-Woelki and S van Erp (eds), *General Reports of the XVIIth Congress of the International Academy of Comparative Law* (Eleven Int 2007); As radical an idea the free-floating contract outside of a system of law is, its impact has been marginal and to date it has failed to gain any traction.

[112] In detail, G Cuniberti, 'Three Theories of Lex Mercatoria' (2014) 52 Columbia Journal of Transnational Law 369, 425-426; Cuniberti puts forward a 'production cost' account for this – from the available data not unequivocally successful – ICC push to promote the use of non-state norms with its model contracts. Under this account, from the perspective of the drafting agency, it is prohibitively costly to anticipate the enforceability of provisions of a model contract drafted for a transnational industry sector against the resulting panoply of potentially applicable (mandatory) national laws. Against this background, the *lex mercatoria* would act to circumvent the problem by providing a single choice,

This clear nexus between the ISDA regime and domestic law, hardwired into the ISDA MA by virtue of its choice of law clause and linking the transnational contractual regime to a system of state law is noted in some *lex mercatoria* scholarship on the topic.[113] Against this background, however, it becomes conceptually difficult to argue for the transnational contractual architecture engendered by ISDA as a genuine incarnation of anational law without the state, since rather than avoid state law, the ISDA MA actively seeks this connection. Rather, this connection to state courts and state law is the polar opposite of a governance arrangement premised on effective detachment from state institutions, the broadest conceivable degree of which could potentially be attained via the combination of choosing a non-state body of law to govern the contract, as well as providing for an arbitration agreement, since the ISDA MA boilerplate provisions very visibly eschew such a chance of 'emancipation'[114] of its sectoral norms from statal overview.[115] Tying in with the metaphor of the ISDA boilerplate choice of law provisions constituting a launch pad, Robert Wai very illustratively refers to this routing of transactions into domestic law as the 'touch down' of transnational transactions, which have achieved a degree of detachment from national legal orders in the form of 'transnational liftoff'.[116] What is more, as will be analysed in greater detail in the following, in allusion to Robert Wai's conceptual groundwork, sectoral boilerplate choice of law in the OTC derivatives industry entails a strategic element in that the choice of where to touch down stands in relation to a state's perceived 'friendliness' in the facilitation of OTC derivative transactions, justifying the qualification of this phenomenon as 'targeted touchdown'[117].

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capable of at the same time being broadly attractive to international actors for the lack of any apparent home bias and eliminating exposure to the unsatisfactorily wide range of national laws, *ibid* 428-432.

[113] See, eg, KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 27, nevertheless noting that the ISDA documentation is 'as much as possible, detached from the uncertainties of any applicable domestic law', *ibid*; G Cuniberti, 'Three Theories of Lex Mercatoria' (n112) 377.

[114] Characterising the impact of the success of international arbitration on international business in this way: S Clavel, 'The Challenges of Transnational Contractual Enforcement: The Relative Merits of Arbitration and State Courts Litigation' in H-W Micklitz and A Wechsler (eds), *The Transformation of Enforcement: European Economic Law in Global Perspective* (Hart Publishing 2016) 303.

[115] Noting the very apparent rejection of this option in the ISDA MA form: G Cuniberti, 'Choice of Law in Domestic Contracts: Towards a right to Access for Foreign Financial Markets?' in H Muir Watt and others (eds), *Global Private International Law: Adjudication without Frontiers* (Edward Elgar 2019) 469; G Cuniberti, 'Three Theories of Lex Mercatoria' (n112) 377-378 and 432 (fn 223).

[116] See, R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (n9) 209.

[117] J Biggins, '"Targeted Touchdown" and "Partial Liftoff": Post-Crisis Dispute Resolution in the OTC Derivatives Markets and the Challenge for ISDA' (n106) 1318 ('Targeted touchdown aims to minimize public regulatory interference in the ISDA [transnational private regulatory regime] (…)').

II. Why Touch Down? Insights from New Institutional Economic Incomplete Contract Theory

In light of the legal risks counterparties run through interaction with domestic legal systems, the immediate question is why counterparties do not intuitively seek to evade any form of touchdown altogether by completely detaching their transactions from any state legal order, but seek touchdown in state law in the first place.

As discussed in Chapter 1 § 5.B, one of the economic insights to be drawn from the GFC is a renewed focus on the existence of a type of economic uncertainty beyond probabilistically quantifiable risk, as this also requires a renewed focus on the role of legal institutions, including the central institution of contract, in mitigating this uncertainty.

New institutional economic theories of contractual incompleteness are a direct result of admitting knowledge constraints on the part of real-world contract parties result from various potential sources of uncertainty.[118] Human actors are in drafting their contracts described as agents which are limited in their cognitive abilities as well as in what they can feasibly foresee in terms of contractual contingencies.[119] Against this background, Oliver Williamson observed that '[a]ll contracts, but especially long-term contracts are incomplete and imperfect documents'[120]. Economic contract theory entails applying these insights to explain contracting behaviour and thereby also impacts the legal analysis of contract.[121] Applying the Knightian risk/uncertainty dichotomy to the

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[118] Including *bounded rationality* of contract parties as well as 'difficulties in describing or foreseeing contingencies': D Martimort 'Contract Theory' in Macmillan Publishers (ed), *The New Palgrave Dictionary of Economics* (3nd edn, Palgrave Macmillan 2018) 2212.

[119] OE Williamson, 'Transaction Cost Economics' in C Ménard and MM Shirley (eds), *Handboook of New Institutional Economics* (Springer 2008) 61.

[120] OE Williamson, *The Economic Institutions of Capitalism* (The Free Press 1985) 164.

[121] Notably, ia, in focusing the attention of legal contracts scholarship on the phenomenon of flexible contract renegotiation aside from the alternatives of performance or damages in case of breach of performance obligations when an uncertain, ie, improbable or completely unanticipated state of the world materialises and impacts the value of performance obligations. The necessity of investigating potential contract renegotiation's impact on contract parties' behaviour and ways of strategically incorporating this eventuality into contract design accordingly follows on from this perspective: See, eg, RE Scott and GG Triantis, 'Incomplete Contracts and the Theory of Contract Design' (2005) 56 Case Western Reserve Law Review 187, 194 ('From the perspective of lawyers and legal scholars (…) the most important contribution of economic contract theory is arguably [the] systematic incorporation of renegotiation and its feedback effects into the analysis of contracting); See, also, I Ayres, 'Valuing Modern Contract Scholarship' (2003) 112 Yale Law Journal 881, 892-897 ('A (…) fundamental contribution of the modern economic scholarship is a more systematic analysis of the impact of renegotiation on the optimal design of legal rules', *ibid* 892).

contractual legal plane, in the presence of only risk, a (derivatives) contract could theoretically anticipate all contingencies, providing for 'a series of "if X, then Y" clauses'[122]. In economic reality, however, most contracts will *ex ante* not encompass all theoretically ascertainable contingencies, since, for one, the exercise of identifying these would entail a prohibitive amount of transaction/information costs.[123] In any case, this applies after the introduction of an element of time into the contractual relationship, since in such a setting, uncertainty, including Knightian uncertainty, becomes particularly prevalent. Contractual incompleteness, here, is therefore logically present not (only) due to the cost factor of a prohibitive amount of effort involved in acquiring information or cognitive limitations in processing available information, but to the inherent *dynamic* rather than static nature of the world.[124] This perspective makes room for creativity and innovation within the economic process.[125] The consequence of this means acknowledging that there is not an exhaustive set of possible future states of the world at the time of contract drafting, but rather the set of future states is itself subject to indeterminable change, consistent with continuous indeterminable structural change of the economy.[126] In a nutshell, uncertainty is due to the fact that 'the future is yet to be created'[127]. This is recognised under the 'Incomplete Contract Model' of the New Institutional Economics.[128]

The functional necessity of the ISDA MA's institutional touchdown, i.e., its connection to state law and state bodies of enforcement, can thus be explained by recourse to these very insights. Under the incomplete contract model, the neoclassical idealised economic assumptions of an omniscient contract drafter are replaced by the realisation that especially long-term contracts, such as swap agreements documented under the provisions of the ISDA MA, will always be incomplete in a number of important

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[122] See, eg, RJ Gilson, CF Sabel and RE Scott, 'Contract, Uncertainty, and Innovation' in S Grundmann, F Möslein and K Riesenhuber (eds), *Contract Governance: Dimensions in Law and Interdisciplinary Research* (Oxford University Press 2015) 156-157. The authors identify this as the default in 'traditional contracting techniques and traditional contract law', *ibid* 156.

[123] See, eg, A Schwartz, 'Relational Contracts in the Courts: An Analysis of Incomplete Agreements and Judicial Strategies' (1992) 21 The Journal of Legal Studies 271, 278 (ie, '(…) the costs of solving the problem may exceed the parties' private gain from a solution').

[124] DC North, *Understanding the Process of Economic Change* (Princeton University Press 2005) in particular 'Chapter Two: Uncertainty in a Non-ergodic World' 13-22.

[125] *Ibid*.

[126] D Dequech, 'Fundamental Uncertainty and Ambiguity' (2000) 26 Eastern Economic Journal 41, 48.

[127] *Ibid*.

[128] EG Furubotn and R Richter, *Institutions and Economic Theory* (2nd edn, The University of Michigan Press 2005) 251-258.

respects.[129] This may in this context also be due to the prohibitively high transaction costs incurred to anticipate and contractually cater for all possible contingencies, making deliberate contractual incompleteness the rational economic choice. Similarly, certain contingencies might remain unaddressed by virtue of bounded rationality, as well as certain future states of the world simply being unknowable *ex ante* in the sense of true Knightian uncertainty.[130] Dan Awrey observes how these general insights apply to OTC derivatives documented under an ISDA MA, which although being 'highly detailed state-contingent contracts are fundamentally incomplete'[131]. Against this background, the legal principle of *pacta sunt servanda* is not a panacea in the mitigation of real-world uncertainty. This is principally, because the contracts themselves, although binding, will invariably contain gaps raising questions as to the actual substance of contractual obligation in such a case. As classically stated by Charles Fried, the concept reaches its limits since '[t]he gaps cannot be filled, the adjustments cannot be governed, by the promise principle'[132].

So, while the ISDA MA does contractually allocate foreseeable endogenous as well as exogenous risks between the counterparties,[133] the resolution of residual uncertainty flowing from contractual incompleteness is outsourced to statal legal norms and institutions, primarily by means of choice of law and forum clauses embedded in the ISDA MA. In this way, since ISDA generally[134] lacks an intrinsic quasi-judicial

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[129] In contrast, a complete contract would reflect anything and everything that may ever occur in the future with rights and obligations encompassing each and every possible future state of the world. The complete or perfect contract conceived in this way would pose no interpretive problems and could – come what may – be enforced by a third party adjudicator as written according to its plain meaning: R Cooter and T Ulen, *Law & Economics* (Pearson 2012) 291-292; Specifically on the inherent incompleteness of the ISDA MA, owing to its nature as a relational (as opposed to a one-off) contract: J Golden, 'Interpreting ISDA terms: when market practice is relevant, as of when is it relevant?' (2014) 9 Capital Markets Law Journal 299, 301.

[130] As described in Chapter 1 § 3.A.II; Under conditions of Knightian uncertainty a complete contract foreseeing all future contingencies becomes an impossibility since relevant stochastic variables cannot be attained: R Richter, *Essays on New Institutional Economics* (Springer International) 13.

[131] D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (2019) 36 Yale Journal on Regulation 534.

[132] C Fried, *A Theory of Contractual Obligations* (2nd edn, Oxford University Press 2015) 69.

[133] In economic contract scholarship, endogenous contingencies or risks are those risks directly tied to the substance of the contract, while exogenous risks are those which are located outside the contractual scope, yet at least indirectly impact the contract: See, eg, RE Scott, 'Conflict and Cooperation in Long-Term Contracts' (1987) 75 California Law Review 2005, 2012-2013; In the ISDA MA context, an example of the latter would be a counterparty insolvency, catered for, ia, by the ISDA MA's early termination and close-out netting provisions.

[134] For present purposes disregarding the ISDA Credit Event Determination Committees, which in the very delimited area of contractual determinations in the asset class of Credit Default Swaps, may be seen to internalise (quasi-)judicial functions: In greater detail, see, eg: J Horst, *Transnationale*

'enforcement capacity'[135], contractual gaps in the sectoral transnational normative architecture are thus filled by having recourse to a ready-made statal legal system as an external fall-back, which includes a comprehensive contract law, containing, i.a., abstract rules of contractual interpretation to close these gaps *ex post* in adjudication.[136]

D. Where to touch down? Sectoral Party Autonomy in the 'Transnational Law Market'

Considering the above, the question of 'why?' to touch down is followed up by the question of 'where?' to touch down. As will be seen, apart from historical path-dependencies relating to the genesis of the ISDA documentary architecture in Anglo-American jurisdictions, this is also related to the perceived 'friendliness' of jurisdictions to the operative logic of derivative financial instruments.

I. The Consequences of a Statal Legal System as Fall-Back

OTC derivative transactions are always entered into within a particular private law infrastructure. Broadly, this infrastructure encompasses the exercise of contractual freedom and the resulting private rights created and obligations assumed, occurring on the basis of, and interacting primarily with, what has been referred to as 'contract law in the narrow and usual sense'[137]. This is the substantive law which governs 'the contract itself'[138] rather than the financial regulatory regime governing the broader market infrastructure within which the derivative transaction is concluded.[139] In the case of the insolvency of a counterparty, the fate of contractual obligations, in addition, hinges on mandatory rules of insolvency law. Here, interaction of insolvency rules occurs with the contractual regime created specifically for the potential occurence of such an event in the form of provisions for close-out netting.[140]

Focusing at this stage specifically on private law, touchdown in a particular state legal system has a Janus-faced effect as regards the transnational sectoral regime. Namely, on

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Rechtserzeugung: Elemente einer normativen Theorie der Lex Financiaria (n45) 54-68, who categorises the ISDA Determination Committees as a genuine 'market court' [own translation], *ibid* 68.

[135] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (2nd edn, Cambridge University Press 2015) 92.

[136] This touchdown in the specific context of interpretation disputes is discussed in Chapter 3 § 1.

[137] S Whittaker, 'Contract Law' in HG Beale (ed), *Chitty on Contracts: Volume 1, General Principles* (33rd edn, Sweet and Maxwell 2018) para 1.001.

[138] *Ibid*.

[139] *Ibid*; See, also, *ibid* para 1.004 (fn 17).

[140] The ISDA MA's close-out netting regime and its particular interaction with insolvency law is discussed under § 3.C.III.1.

the one side, the transnational regime and the functionally oriented contractual norms it comprises benefits from a rich body of ready-made statal law, which it can draw upon to fill in any gaps it comprises. On the flip side, this also brings these private contractual norms into contact, and potentially into conflict, with mandatory provisions of the respective domestic body of contract law. In the present context, by way of brief binary differentiation, private and more specifically contract law provides two significant functions.

1. The Facilitative Function of Private Law

By steering the transnational body of norms encapsulated in the ISDA MA into a particular body of state contract law through an embedded choice of law clause, these private norms, operating at a high level of functional specificity, such as, for example, the core operative provisions of the ISDA MA designed to effect different modes of credit risk mitigation,[141] upon touch down, come into contact with and displace the otherwise applicable rules of dispositive private law in their sphere of functional operation.[142] In other words, the operative integrity of the highly functional transnational normative regime remains intact upon impact. Since the ISDA contractual regime is highly functionally specific in what it seeks to regulate, beyond the sources of incompleteness already discussed, it is far from self-sufficient and depends on normative fall-backs to properly operate along several additional dimensions, such as norms from the broad panoply of general matters of contract law, ranging from contract formation to interpretation.[143] The key utility of touching down in a particular contract law in the context of OTC derivatives market and the ISDA documentation architecture becomes evident with regard to the various 'defaults' it offers; i.e. 'rules that govern in

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[141] See, Chapter 1 § 7.C.I.

[142] Generally, G Cordero-Moss, *International Commercial Contracts: Applicable Sources and Enforceability* (Cambridge University Press 2014) 104.

[143] Writing specifically, ia, with regard to the ISDA MA: G Cordero Moss, 'International Contracts between Common Law and Civil Law: Is Non-state Law to Be Preferred? The Difficulty of Interpreting Legal Standards Such as Good Faith' (2007) 7 Global Jurist 25 ('These codifications are directed at regulating specific aspects of specific transactions; they do not have the ambition of replacing the governing law, they integrate it with regulations that are tailored for the specific needs of certain transactions. These compilations, therefore, do not contain rules on validity of contracts, legal capacity, prescription or other aspects regulating the effect of legal relationships as such; these aspects are left to the regulation of the governing law.'); In this regard, the ISDA MA falls into the same mould as other standardised international contractual instruments. For example, Guiditta Cordero-Moss points out this exact same situation regarding other private contractual sectoral harmonisation initiatives, such as the International Commercial Terms (INCOTERMS) or Uniform Customs and Practices for Documentary Credits (UCP) 600, published by the International Chamber of Commerce: G Cordero-Moss, *International Commercial Contracts: Applicable Sources and Enforceability* (n142) 37-41.

the absence of contrary agreement'[144] and availability of a broad body of rules to regulate the multitude of general aspects on which the ISDA MA stays silent. The value of state law as a fall-back in terms of completing the ISDA MA, specifically through the rules on contractual interpretation it provides, is explored further in Chapter 3.

2. The Regulatory Function of Mandatory Private Law

As a flip side, however, the operative integrity of the transnational regime faces a challenge where its individual contractual components come into conflict with provisions, which by virtue of statal order are deemed mandatory and as such trump and override any (from the perspective of the respective state) merely contractual norm, even if it is embedded in a widely used standardised (transnational) instrument.[145] While generally much smaller in number compared to their default counterparts,[146] mandatory rules in their curtailment of freedom of contract thus have potentially far-reaching effects regarding the efficacy of the transnational regime. According to the traditional distinction of functions, public regulation demands compliance and thus steers behaviour while private and especially contract law are reduced to a merely facilitative function.[147] However, mandatory provisions of domestic contract law curtail contractual freedom, thus, at least from an external perspective, functionally acting as a general mode of state regulation.[148] As Stefan Grundmann puts it, this regulatory flip side of private law is also part of its 'core characteristic – the *proprium* – of private law'[149] in that it is constituted 'not only in private autonomy but also in the interplay between autonomy and the protection of its prerequisites via regulation, that is, in a material concept of autonomous decision making by all parties affected'[150].

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[144] I Ayres, 'Default Rules for Incomplete Contracts' in P Newman (ed), *The Palgrave Dictionary of Economics and the Law (Vol 1)* (Macmillan Reference Limited 1998) 585.

[145] Expanding on this conflict with regard to, ia, the UCP 600: G Cordero-Moss, *International Commercial Contracts: Applicable Sources and Enforceability* (n142) 64-70.

[146] I Ayres, 'Default Rules for Incomplete Contracts' (n144) 585.

[147] R Brownsword, RAJ van Gestel and H-W Micklitz, 'Introduction – contract and regulation: changing paradigms' in R Brownsword, RAJ van Gestel and H-W Micklitz (eds), *Contract and Regulation: A Handbook on New Methods of Law Making in Private Law* (Edward Elgar 2017) 6-7.

[148] H Collins *Regulating Contracts* (Oxford University Press 1999) 56-62; With regard to the regulatory role of private law in answering the challenge posed by transnational economic phenomena: R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (n9) 274 ('In the broader context of changes in the global system that challenge traditional state roles, it becomes even more crucial that the regulatory aspect of private laws (…) is emphasized and creatively utilized').

[149] S Grundmann, 'On the Unity of Private Law form a Formal to a Substance-Based Concept of Private Law' (2010) 18 European Review of Private Law 1055, 1057.

[150] *Ibid*.

Of course, as a brief side note, what exactly constitutes *private law*, especially in delineation from *public law*, is in itself far from universally uncontroversial.[151] For one, the exact meaning not only rests on deep-seated legal traditions differing across jurisdictions, but its definition is amenable to diverging interpretations even within one and the same legal tradition.[152] Under English Common Law, there is no generally accepted systematic classification, much less a settled definition, although attempts at systematisation have been made within legal literature.[153] It appears, however, that whichever distinctions between public/administrative regulation and private law of contract as 'born enemies'[154] are invoked, these are becoming increasingly blurred. At the supranational level of the European Union, for example, this is evidenced by the comparatively novel concept of a (European) 'Regulatory Private Law'[155]. As regards contract law specifically, while not traditionally conceptualised as such, this may also be seen as entailing a genuinely regulatory function, as, for example, at the core of the research agenda set by the so-called Contract Governance approach, which encompasses a functional perspective in 'the design of contract law as an instrument for steering behaviour and for achieving regulatory goals'[156].

For present purposes, what from the perspective of market participants and the private transnational regime matters most is, of course, not so much whether a particular mandatory norm of private or more specifically contract law by conscious legislative design fulfils a particular regulatory function, but whether it is in its application hostile towards or even defeats the purpose of the particular type of transaction entered into and the commercial goal thereby pursued.

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[151] See, M Bridge and J Braithwaite, 'Private Law and Financial Crises' (2013) 13 Journal of Corporate Law Studies 361, 362-363.

[152] See eg R Michaels and N Jansen, 'Private Law Beyond the State? Europeanization, Globalization, Privatization' (2006) 54 The American Journal of Comparative Law 843, 849.

[153] For example, see in juxtaposition the two companion volumes: A Burrows, *English Private Law* (3rd edn, Oxford University Press 2013); D Feldman, *English Public Law* (2nd edn, Oxford University Press 2009).

[154] Specifically regarding the Civil Law tradition: J Köndgen, 'Policy Responses to Credit Crises: Does the Law of Contract Provide an Answer?' in S Grundmann and YM Atamer (eds), *Financial Services, Financial Crisis and General European Contract Law* (Kluwer Law International 2011) 38.

[155] See, eg, H-W Micklitz, The Public and the Private – European Regulatory Private Law and Financial Services (2014) 10 European Review of Contract Law 473-475.

[156] F Möslein and K Riesenhuber, 'Contract Governance – A Draft Research Agenda (2009) 3 European Review of Contract Law 248, 260 and 274-281; K Riesenhuber, 'A Need for Contract Governance?' in S Grundmann and YM Atamer (eds), *Financial Services, Financial Crisis and General European Contract Law: Failure and Challenges of Contracting* (Wolters Kluwer 2011) 62.

II. Specific Frictions between Freedom of Contract and Mandatory Domestic Law in the Context of OTC Derivative Transactions

OTC derivatives are traded globally. However, viewed from a global perspective, the degree with which individual domestic private law infrastructures facilitate OTC derivative transactions varies. Beyond domestic insolvency laws' interaction with netting agreements,[157] ISDA has itself identified several areas of mandatory domestic law, which can potentially conflict with and impede their effective functioning, including, i.a., gaming and wagering laws as well as more general principles of domestic law.[158]

This conflict originates, first and foremost, from the unique nature of OTC derivative contracts, namely that their figurative 'dance with time'[159] and by extension uncertainty, which economically defines derivatives as a financial *risk transfer* mechanism and also distinguishes these types of agreements from other contracts. The finding that legal contracts are at least in part mechanisms for (pre-)allocating risks in the sense of legal responsibility for different contingencies and in this way of coordinating party behaviour is, at least today, neither novel nor contentious.[160] Rather, at least beyond the scope of a model of 'discrete'[161], 'one shot' spot contracts, which provide for close to immediate

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[157] See, § 3.C.III.

[158] With regard to wagering, see, eg, ISDA, *Policy Framework for Safe and Efficient Derivatives Activity in Emerging and Developing Markets* (May 2022) para 41 ('Many jurisdictions have longstanding gaming and wagering laws that generally pre-date the development of modern financial markets. These my inadvertently be interpreted to cover derivatives transactions – despite the fact that these transactions are entered into for financial risk management purposes.'); Similarly, with regard to the enforceability of close-out netting provisions at the pre-insolvency stage, ISDA, *2018 ISDA Model Netting Act and Guide* (15 October 2018) para 3.10 ('[t]here has been some uncertainty under the laws in some jurisdictions where derivatives markets have developed as to whether derivative transactions (or certain types of derivative transaction) fall within the scope of gaming or wagering laws and, if so, whether they are therefore unenforceable.').

[159] See, Chapter 1 § 1.B.

[160] By way of an illustrative example, a collation of American case law highlighting this point, specifically contract opinions by Judge Richard Posner, is provided by R Kreitner, *Calculating Promises: The Emergence of Modern American Contract Doctrine* (Stanford University Press 2007) 155; This includes, ia, *Spartech Corp v Opper*, 890 F 2d 949, 955 (7th Cir 1989) ('A principal purpose of contracts (…) is to allocate the risk of the unexpected (…)').

[161] In contract law scholarship, the distinction between 'discrete' contracts with near on immediate performance on one side of the scale and long-term 'relational' contracts on the other is generally attributed Ian R Macneil. See, IR Macneil, 'The Many Futures of Contract' (1974) 47 Southern California Law Review 691-816; The temporal distinction has several important implications. In the relational case Macneil emphasises the necessity to take into account that contract terms are embedded in the context of the parties wider relationship. Suffice it to say here, that the distinction has significant implications for the extent of contractual completeness and, as a result, contractual interpretation. See, in concise terms: H Collins, 'Introduction: The Research Agenda of Implicit Dimensions of Contract' in D Campbell,

performance of obligations, this may perhaps be seen as the primary and core function of executory contracts, with mutual performance remaining due for some time such as is the case with derivatives.[162] However, what makes a derivatives contract distinct from a discrete contract such as one for the sale of goods, but importantly also various other longer term contractual undertakings[163], is that risk no longer is simply synonymous with some incidental undesirable potential for an unexpected disruption impacting on the performance and subjective commercial purpose of that contract.[164] Rather, derivatives belong to a category of contracts where *risk* is through the respective structuring of the contract's performance obligations elevated to the *object* or *subject matter* of the contract.[165] It is against this background that derivatives are also categorised 'aleatory' contracts.[166]

However, their unique legal categorisation as both executory as well as aleatory contracts also potentially brings them into the purview of certain specific domestic mandatory regulatory regimes. These vary between legal orders but share the capacity of significantly constraining the transactions' functioning. Although not within the scope of finance law in the narrow sense, they are of practical relevance, since where a transaction 'goes bad' they present a popular additional arrow in the quiver of

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H Collins and J Wightman (eds), *Implicit Dimensions of Contract: Discrete, Relational and Network Contracts* (Hart Publishing 2003) 18-19.

[162] A classic statement to this general effect is found in: PS Atiyah, *The Rise and Fall of Freedom of Contract* (Oxford University Press 1979) 176 ('In modern times, lawyers and economists are accustomed to think of contracts – executory contracts for future performance – as devices for allocating the risks of future events. So prevalent is this viewpoint that it is commonly assumed that this is the sole function of contracts, and that every contract must necessarily allocate the risk of future events affecting its performance').

[163] For example, the contracts underlying international construction and engineering projects, such as the *Fédération Internationale des Ingénieurs Conseil*s standard form construction contracts. These provide in great detail for varying allocations of risks between employer and contractor including eg 'design-related' risks, risks emanating from the construction process itself as well as the financial risks involved with the project. For a comprehensive overview, see W Godwin, *International Construction Contracts: A Handbook* (Wiley-Blackwell 2013) specifically regarding the issue of risk allocation at 9-10 and 15-25.

[164] P Chalioulias*, Der Swap im System aleatorischer Verträge* (Nomos 2007) 132.

[165] As Martin Henssler puts it in his innovative contribution on the general topic in German legal scholarship: M Henssler, *Risiko als Vertragsgegenstand* (Mohr 1994) 14-15; Similarly, R Kreitner*, Calculating Promises: The Emergence of Modern American Contract Doctrine* (n160) 98 ('transactions whose primary object is risk'); See, also, illustratively, P Chalioulias*, Der Swap im System aleatorischer Verträge* (n164) 33 and 132, defining risk as the contractual object of a derivative in the wider sense ('das Risiko als eigenständige[r] Leistungsgegenstand [im weiteren Sinne]'), *ibid* 132, as opposed to the content of the contract's primary obligations, eg payment, which constitute the contract's subject matter in a narrow sense ('Vertragsgegenstand im engeren Sinne'), *ibid* 88-89.

[166] As set out under Chapter 1 § 1.A.

strategically litigating parties.[167] However, what may present a welcome exit option from unfavourable transactions to an individual counterparty also has implications for the functioning of the market as a whole – especially when factoring in the transnational legal basis risk aspect of global derivatives transacting[168].

1. *Executory Contracts and the Doctrine of Rebus Sic Stantibus*

Changed circumstances can in principle, of course, affect any contract. However, in executory contacts, such as, paradigmatically, a multi-year swap agreement spreading out over time and envisaging mutual performance of payment obligations over the long-term, contingencies unforeseen by the parties at the time of contract formation are more likely to arise as a matter of course. In commercial and financial practice, both contractual and doctrinal or statutory regimes have a bearing on how these changed circumstances affect contractual obligations. A question, which has a profound impact on the efficacy of derivatives as risk transfer transactions, is how these regimes relate to a situation where the derivative's payment obligations become considerably more burdensome for one counterparty as the result of an unanticipated change in macroeconomic conditions – such as a fall in interest rates in a financial crisis – where the respective interest rate constitutes the underlying referenced in a derivatives transaction and (the transfer) of this market risk is, in fact, the core subject matter of the contract.[169]

a) Contractually Defined Limits of Risk Allocation: *Force Majeure*

In anticipation of uncertain future contingencies, parties are free to contractually define the boundaries of contractual risk allocation and frequently do so in commercial

[167] Already sketching the legal arsenal available to commercial end-users against the dealer bank in light of the increasing readiness of US counterparties to litigate their way out of unprofitable transactions in the 1990s, DM Forster, 'New Legal Weapons on the Derivative Battlefield' (1995) 14 International Financial Law Review 36, 36-38.

[168] See, Chapter 1 § 7.D.IV.2.

[169] For a comparative exploration of the legal effect of financial crises under different contract laws and contractual provisions on the binding force of financial contractual obligations, see Başak Başoğlu (ed), *The Effects of Financial Crises on the Binding Force of Contracts – Renegotiation, Recission or Revision* (Springer 2016); Similarly, Katharina Pistor emphasises the systemic implications of change of circumstance doctrines. Using as an example the German doctrine of 'Störung der Geschäftsgrundlage' as developed by the then German Supreme Court (Reichsgericht) in a financial context in reaction to the devaluation of credit contracts during the 1920s hyperinflation, now embodied in Sec 313 of the German Civil Code as a special manifestation of the general principle of good faith, she frames such doctrines as 'safety valves' which by adapting binding obligations to intervening circumstances may ensure the survival of the financial system as a whole in times of crisis characterised by fundamental uncertainty and low liquidity: K Pistor, 'A Legal Theory of Finance' (n88) 321.

practice by making express provision for the impact of certain events on contractual performance, which at the stage of contract formation are unforeseen or even unforeseeable – so-called 'force majeure' or 'hardship' clauses.[170]

In the context of cross-border financial transactions, such contractual provisions take on special importance. This applies all the more where the transaction is even potentially subject to the domestic legal regime of a jurisdiction where the doctrine of *rebus sic stantibus* is not recognised as a matter of law, and therefore not automatically applied by the courts, as is the case under English law in contrast to the legal situation in Civil law jurisdictions.[171] Inversely, where the potentially applicable legal regime is deemed to relieve the tension between the principles of *pacta sunt servanda* and *rebus sic stantibus* disproportionately in favour of the latter, the parties might prefer to supplant the general rules with a contractual uncertainty regime more suited to their needs. This is deemed generally possible due to the dispositive nature of the general rules.[172]

While many counterparties traditionally made provision for the impact of such extraordinary events in the Schedule to their derivative transactions,[173] for a long time there existed no uniform market standard – authoritatively defined in the ISDA MA – on how to contractually address *force majeure* in the OTC derivatives market. Although discussions were held in the drafting stage of the 1992 ISDA MA regarding the inclusion of a provision addressing the impact of 'the occurrence of a natural or man-made disaster, armed conflict act of terrorism, riot, labor disruption, or any other circumstance beyond a party's control'[174] on affected transactions, market participants involved in the drafting process could not agree on the substance of such a clause and some held the view that legal doctrines such as impossibility or the laws of frustration under the respective governing law would satisfactorily regulate the occurrence of such an event.[175] As a result, in the absence of a consensus, the *User's Guide to the 1992 ISDA Master Agreements* merely made a suggestion as to the particular wording of such a clause for inclusion in the Schedule in amendment of the 1992 Termination Events

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[170] Instructively, F Bartolotti and D Ufot (eds), *Hardship and Force Majeure in International Commercial Contracts* (International Chamber of Commerce 2018).

[171] See, S Paterson, 'Introductory Matters', in S Paterson and R Zakrzewski (eds), *McKnight, Paterson and Zakrzewski on the Law of International Finance* (2nd edn, Oxford University Press 2017) para 1.4.1.

[172] M Fointaine, 'The Evolution of the rules on Hardship' in F Bartolotti and D Ufot (eds), *Hardship and Force Majeure in International Commercial Contracts* (International Chamber of Commerce 2018) 15.

[173] A Hudson, *The Law on Financial Derivatives* (n104) para 6.69.

[174] ISDA, *User's Guide to the 1992 ISDA Master Agreements (1993 Edition*) 64.

[175] See, *ibid*.

through an additional Termination Event for 'Impossibility'.[176] The clause was, however, not adopted wholesale by market participants. It was only against the tragic background of the 9/11 terrorist attack on the World Trade Center in New York, and its immediate impact on much of the derivatives trading infrastructure, that ISDA provided market participants with a standardised approach to such events via the inclusion of a new provision in the form of Sec. 5(b)(ii) into the 2002 ISDA MA.[177] In concise terms, Sec. 5(b)(ii)(1) 2002 ISDA MA[178] becomes engaged where 'by reason of force majeure or act of state occurring after a Transaction is entered into' an event occurs, which is beyond the counterparty's control and prevents or makes it 'impossible or impractical' for 'the Office through which such party makes and receives payments or deliveries with respect to such Transaction' to make or receive such payment or delivery or to comply with 'any other material provision of [the] Agreement relating to such Transaction', and could, lastly, not be overcome 'after using all reasonable efforts'. Occurrence of a Force Majeure Event constitutes an independent Termination Event[179], which within the ISDA MA regulatory structure grants either counterparty a right of termination upon expiration of a waiting period.

Notably, the ISDA MA does not itself provide any examples of what constitutes a Force Majeure Event.[180]

Against this background, a question with potentially far-reaching implications is whether the force majeure provision could be triggered where unforeseen events radically alter the cash-flow and by extension risk profile of a derivative transaction; i.e. where, in other words, the risk transferred via the transaction as expressed in respective payment obligations is considerably higher than anticipated at the time of entering into the transaction. This question looms large in times of unforeseen market turmoil with radically altered macroeconomic conditions – for example the level of interest rates – leading to unanticipated effects on a counterparty's payment obligations under open transactions referencing those rates, such as in the GFC.[181] Could the aggrieved

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[176] See, *ibid* 65.

[177] A Hudson, *The Law on Financial Derivatives* (n104) para 6.69.

[178] Sec. 5(b)(ii)(2) 2002 ISDA MA contains a related provision with respect to a obligations under a Credit Support Document, which is disregarded for present purposes.

[179] Cf § 3.C.III.1.b) on the mechanics of the ISDA MA close-out netting mechanism.

[180] The ISDA User's Guide to the 2002 ISDA MA gives an indication of the kind of events envisaged by the drafters of the agreement stating that '[s]ome examples of Force Majeure Events under New York or English law would include occurrences such as natural or man-made disasters, labor disruptions or acts of terrorism.': ISDA, *User's Guide to the 2002 ISDA Master Agreement (2003 Edition*) 17.

[181] This factual matrix is in fact the core of the case study under § 2.

counterparty rely on *force majeure* as contractually defined under Sec. 5(b)(ii) ISDA 2002 MA to terminate outstanding transactions under such circumstances? Although not as yet decided in the context of derivatives transactions, English jurisprudence gives a firm indication that it would be highly restrictive in this regard and termination would, even in the light of severe economic consequences for a counterparty, most probably not be possible under English law.[182] In *Thames Valley Power Ltd. v Total Gas & Power Ltd.*[183] gas prices had risen and were expected to continue to rise to such an extent that the supplier in a multi-year gas supply agreement invoked a force majeure provision on the basis that the degree of loss incurred by the rise was beyond anything anyone had contemplated at the time of the agreement. The supplier made the case that inability to perform as stated in the force majeure provision should be construed as also encompassing instances of commercial, beyond mere physical, inability.[184] However, the High Court determined that the supplier could not rely on the contract‘s force majeure clause to relieve it of its obligations, pointing to consistent case law both on contractual force majeure clauses and on the doctrine on frustration ‘to the effect that the fact a contract has become expensive to perform, even dramatically more expensive, is not a ground to relieve a party on the grounds of force majeure or frustration’[185]. Regarding the facts of the case before him, Clarke J stated that ‘[i]n the circumstances in which the contract was entered into [the customers] were, in the absence of clear words to the contrary, entitled to expect that [the supplier] would supply them with gas against payment of the contract price throughout the 15 year term and would not be entitled to refuse to do so because the cost of so doing had increased even exponentially. That was [the supplier’s] risk (...)’[186].

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[182] The applicability of which to derivative transactions is assumed by legal commentators: See, eg, S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.091 (fn 2) (‘Even if it has become dramatically more expensive to perform a transaction, this is unlikely to be sufficient to trigger the provision’).

[183] [2005] EWHC 2208 (Comm) (cited in S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.091 (fn 2)).

[184] *Ibid* at [47].

[185] *Ibid* at [50(4)] citing *Tennants (Lancashire) Ltd v CS Wilson & Co Ltd* [1917] A.C. 495 (Lord Loriburn) (‘The argument that a man can be excused from performance of his contract when it becomes ‘commercially impossible’ seems to me to be a dangerous contention which ought not to be admitted unless the parties plainly contracted to that effect’).

[186] *Ibid* at [50(5)].

Furthermore, specifically against the backdrop of the GFC, in *Tandrin Aviation Holdings Ltd v Aero Toy Store LLC & Anor*[187], Hamblen J refused to accept the defendant's principal argument that 'unanticipated, unforeseeable and cataclysmic downward spiral of the world's financial markets'[188] constituted a force majeure event under the force majeure clause in an aircraft sale agreement when the macroeconomic downturn had made the purchaser run into financial difficulties.

A fortiori, it therefore appears highly likely that such a restrictive holding in the context of an aircraft sale agreement would be applicable all the more to an aleatory contract such as a hedging swap where financial risk and its allocation are in fact the contractual *raison d'être*.

b) Limits of Contractual Risk Allocation: The Doctrine of *Clausula Rebus Sic Stantibus*

Most legal systems include doctrines which go beyond the conventional contractual doctrines such as mistake, impossibility, constructive interpretation, etc. in enclosing counterparties' contractual risk allocation and specifically address supervening contingencies that in some way are deemed to fundamentally alter the original bargain and thus state exceptions to the fundamental private law principle of the binding nature of contracts; i.e. *pacta sunt servanda*.[189] These ultimate boundaries to parties' contractual risk distribution include the common law doctrine of *frustration*[190], as well as *clausula rebus sic stantibus* in Civil Law Jurisdictions, such as Spain and Portugal[191], or *Wegfall* or *Störung*[192] *der Geschäftsgrundlage* as it is known under German law[193]. At its core, any judicial evaluations and determinations in this area can be said to navigate a field of tension between contrasting principles, i.e. *pacta sunt servanda* and *rebus sic stantibus*, as well as values in the form of certainty and justice or equity in the

[187] [2010] EWHC 40 (Comm) (cited in S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.091 (fn 2)

[188] *Ibid* at [38].

[189] On the distinction between 'conventional' doctrines grounded in contract and 'exceptional' doctrines in addressing the impact of unexpected circumstances occurring: E Hondius and HC Grigoleit, 'Introduction and Context' in, E Hondius and HC Grigoleit (eds), *Unexpected Circumstances in European Contract Law* (Cambridge University Press 2011) 6-7.

[190] *Ibid* 7; The doctrine of frustration, in keeping with the English courts' approach to force majeure, is very restrictive and sets high bar for a contract to actually be frustrated: See, with regard to financial economic variables, including and foreign exchanges rates or the rate of inflation: E Hondius and HC Grigoleit, 'The Case Studies' in, E Hondius and HC Grigoleit (eds), *Unexpected Circumstances in European Contract Law* (Cambridge University Press 2011) 251-254.

[191] E Hondius and HC Grigoleit, 'Introduction and Context' (n189) 7.

[192] Now codified as *Störung der Geschäftsgrundlage* under Sec 313 of the German Civil Code.

[193] E Hondius and HC Grigoleit, 'Introduction and Context' (n189) 7-8.

sense that it is unfair to unilaterally burden one party with the resulting loss.[194] Significantly, the balancing of these principles and values can vary between jurisdictions, producing varying legal outcomes as a result.

The legal consequences of these doctrines encompass anything from duties to renegotiate and contract adjustment, up to the *ultima ratio* of termination.[195] As such, this particular regime of legal consequences is particularly attractive to an out-of-the-money derivatives counterparty which in the light of intervening extrinsic events might want to deploy *rebus sic stantibus* as a defence to payment in litigation in order to revise financially detrimental obligations and re-write the original risk-shifting contract. Against this background, it is perhaps not surprising that in the aftermath of the market turmoil created by the GFC, as a paradigmatic instance of changed factual circumstances, the doctrine was employed to this end in domestic litigation, and – perhaps somewhat surprisingly in light of the aleatory nature and risk transfer purpose intrinsic to derivatives – successfully so.[196]

In a Portuguese Supreme Court decision of 10 October 2013, dismissing the underlying appeal and confirming the lower instance court's decision, albeit on different legal grounds, *clausula rebus sic stantibus* was successfully raised by the commercial end-user counterparty to an interest rate swap, thereby affirming two lower instance decisions to that effect.[197] In broad strokes,[198] the plaintiff, a manufacturer of socks for export, had in the first half of 2008 concluded a real estate loan contract with the defendant, a bank, with the contract's variable interest rate referencing the EURIBOR rate. Fearing an increase in interest rates, and with a view to locking-in the loan contract's interest rate within certain barriers, the manufacturer then on 8 August 2008

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[194] RA Momberg Uribe, *The effect of a change of circumstances on the binding force of contracts: Comparative perspectives* (PhD thesis, Utrecht University 2011) 5.

[195] Illustrative is the German codification under Sec 313 BGB, which encapsulates these legal consequences in a tiered sequence.

[196] Rui Dias notes this very tension in observing with regard to this discussion within legal literature, that 'it is debated whether the rebus sic stantibus rule can also apply to contracts with a speculative element (alea), such as swap contracts are by their very definition: the unpredictability and uncontrollability that characterises such a contractual relationship are said to necessarily brings all risks under the "cover" of the contract', noting the, in light of this tension, more restrictive approaches under Italian and German law relative to Portuguese law: R Dias, 'Auslandsbezug des Sachverhalts nach Art. 3 Abs. 3 EVÜ/Rom I-VO und rebus sic stantibus-Klausel des portugiesischen Zivilrechts als nicht parteidisponible Bestimmung' (2019) 3 Zeitschrift für Europäisches Privatrecht 603, 618 [own translation].

[197] Supremo Tribunal de Justiça, judgment of 10.10.2013 (1387/11.5TBBCL.G1.S1).

[198] The following relies in large part on the detailed case note provided by R Momberg: 'Beyond the Risk: Swaps, Financial Crisis and Change of Circumstances. Comparative Case Note. Supreme Court of Portugal – 10.10.2013' (2015) 23 European Review of Private Law 81-84.

entered into a so-called barrier interest rate swap with the bank with a 5-year term, providing a so-called interest rate collar with a range between 3.95% and 5.15% EURIBOR, meaning that when EURIBOR rates remained within these barriers, the manufacturer would pay the bank a fixed rate of 4.55%. However, when, as of January 2009, interest rates fell sharply in the light of the GFC, the manufacturer argued this fall could not be seen to be covered by the contractual risk allocation, since the circumstances which triggered the crisis were by no means foreseeable, and led to the contract suffering a great and sudden contractual disequilibrium ('um grande e repentino desequilíbrio').[199] On this basis, the claimant sought termination of the interest rate swap with retroactive effect due to an abnormal change of circumstances on the basis of Art. 437(1) of the Portuguese Civil Code[200].[201] The court, after application of the statutory test, came to the conclusion that the subprime crisis did indeed fall within the statutory definition. What is more, and with more far-reaching implications of a general nature, the Portuguese Supreme Court decided that although swaps were indeed contracts of an aleatory nature, namely 'in the sense that it is the risk and uncertainty that provides the contractual cause and object itself'[202], this did not qualitatively exclude them from the scope of application of *clausula rebus sic stantibus*, as codified under Art. 437(1) Portuguese Civil Code. Rather, the test it applied in the context of aleatory contracts such as swaps was of a quantitative-normative nature in that 'the change of circumstances must be of appreciable size or extraordinary proportions: the loss justifies the termination or modification of the contract only when there is a deep imbalance of the contract, being intolerable with good faith that the injured party supports it'[203]. Regarding the specific case before it, the court held that the unforeseen sudden and sharp fall in interest rates in the wake of the GFC was not covered by the 'risks proper' allocated through the swap contract ('risco próprio do

[199] Supremo Tribunal de Justiça (n197) at [1].

[200] Art 437 Código Civil states:

> '(Conditions of Admsissability) 1. If the circumstances on which the parties based their decision to enter into a contract have undergone an abnormal change, the injured party is entitled to termination of the contract or to modify it in accordance with principles of equity if fulfilment of that party's obligations under the contract would be a serious breach of the principles of good faith and if the abnormal changes do not form part of the risks covered by the contract. (…)' [the translation into English is provided in *Banco Santander Totta SA v Companhia Carris de Ferro de Lisboa SA & Ors* [2016] EWHC 465 (Comm) at [460]].

[201] Supremo Tribunal de Justiça (n197) Sumário II [own translation].

[202] *Ibid* [own translation].

[203] *Ibid* Sumário V [own translation].

contrato').[204] As a result, the Portuguese Supreme Court, in its function as court of appeal, affirmed that the swap contract was declared retroactively terminated as of January 2009 and the bank was ordered to reimburse the plaintiff manufacturer for the sums paid from January 2009.[205]

The contrast between the needs of financial market participants reliant above all else on the certainty and predictability of financial positions they have entered into, not least for appropriately calculating current exposure, and the reliance of a court on a good faith doctrine – necessarily highly dependent on the individual specificities from case to case – in retroactively terminating legal obligations is particularly striking.

2. *Derivatives as Aleatory Contracts and Wagering Legislation*

Another area where OTC derivatives contracts potentially sit uneasily within domestic regimes of mandatory private law is within the ambit of rules restricting the enforceability of wagers. Agreements which have uncertainty as their subject matter, i.e. in which parties' performance obligations and by extension profit and loss are in principle and in scope conditioned upon the (non-)occurrence of uncertain future circumstances, are categorised as 'aleatory contracts'.[206] The Latin root of the category, still today perhaps evoking the mental image of a Roman fresco depicting players engaged in an animated game of dice, has not forfeited its significance in terms of pointing the way to their reception under the law. The legality and legal enforceability of aleatory contracts was traditionally viewed with scepticism at the level of legislation and regulation, as well as in the courts.[207] With the rise and spread of modern financial instruments, premised on stochastic appraisals of uncertainty, the particular tension underlying the default legal treatment of aleatory contracts has become visible. Roy

[204] *Ibid* Part 5.

[205] *Ibid* Part 7.

[206] Concisely defined as '[a]n agreement of which the effects, with respect both to the gains and losses, whether to all parties or to some of them, depend on an uncertain event.': J Law (ed), 'Aleatory Contract' in *A Dictionary of Law* (10th edn, published online, Oxford University Press 2022).

[207] J Biggins and C Scott, 'Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform' (2012) 13 European Business Organization Law Review 309, 327; This was in large part due to the social ills wagering was thought to inflict and thus contrary to public policy. Particularly illustrative in this regard is a 19th century judgment of the State Supreme Court of Minnesota in *Wilkinson v Tousley* 16 Minn 299, 305 (1871) according to which the enforceability of wagers at English common law was a 'perversion of the common law, and contrary to one of its fundamental principles; that it was based upon a false and mistaken notion of good morals, and sound public policy, and that as all such contracts are condemned by more enlightened views of morality and public policy which now prevail, they ought to be condemned by the courts.' (cited in: WR Anson, *Principles of the English Law of Contract and of Agency and its Relation to Contract* (2nd American edn, Callaghan and Company 1887) 228-229 (fn 1).

Kreitner, writing from the perspective of American contract law doctrine, condenses this underlying tension into the following question:

'[H]ow do we distinguish allocation of risk (legitimate and central to contract) from gambling or wagering (illegitimate and outside of contract)? This question becomes particularly acute in those cases where contracts allocate risk statistically (especially insurance contracts), or where contracts seem disconnected from any underlying business logic (in speculative trading of commodities futures). The problem for contract law with transactions like these is they look like regular, legitimate contracts, but at the same time, they look like gambling'[208].

Since this question also potentially extends to OTC derivatives, which purely in terms of their economic substance – namely transferring financial risk dependent on the (non-)occurrence of uncertain future extrinsic events in exchange for another risk or a premium – puts them in the conceptual vicinity of gaming or wagering contracts, the crucial question arises as to whether they fall within the scope of domestic gaming or wagering laws.[209] At the level of contract doctrine, the conceptual waters of the range of transactions with uncertainty as their subject matter; i.e. insurance, gambling as well as other contracts deemed *speculative* in nature, including derivatives, remain somewhat muddied to this day.[210] The issue can, from another perspective, also be seen as paradigmatic of the uncertainty creating tension between novel and sophisticated financial transactions and traditional concepts under the general law.[211]

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[208] R Kreitner*, Calculating Promises: The Emergence of Modern American Contract Doctrine* (n160) 97-98.

[209] E Murray, 'Derivative Transactions' in S Paterson and R Zakrzewski (eds), *McKnight, Paterson and Zakrzewski on the Law of International Finance* (2nd edn, Oxford University Press 2017) para 11.8.1; S Firth, *Firth on Derivatives Law and Practice* (n34) para 3.063.

[210] For example, as elaborated by Roy Kreitner, at the level of US contract doctrine so far no analytical formula has historically evolved to cleanly distinguish between legitimate and illegitimate forms of risk and in the broader sense transactions of legitimate (legally enforceable) and illegitimate (unenforceable) nature: R Kreitner*, Calculating Promises: The Emergence of Modern American Contract Doctrine* (n160) 99 ('(…) [o]ne basic puzzle about contract regulation, that of distinguishing legitimate form illegitimate risk, whole often taken for granted as definitively settled, is actually a problem for which no satisfying solution has been offered, much less adopted.'); This is explored in great detail part two of his book 'Speculations of Contract', *ibid* 97-147; Similarly, from a German law perspective, Martin Henssler takes issue with the general terminological vagueness about what is said to constitute a speculative transaction: M Henssler, *Risiko als Vertragsgegenstand* (n165) 285. Henssler states that virtually any type of contract may as a result of the objective uncertainty factors underlying it and the subjective interests of one of the parties' be construed in such a speculative way and speculative transactions as such do not form any discrete transaction category subject to a uniform legal regime, *ibid* [own translation].

[211] As was, although ultimately not material to the judgment, considered at length as a matter of Portuguese law in *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWHC 465 (Comm) at [433] ('(A)n important aspect of this issue relates to how the Securities

a) Statutorily Engrained Historic Hostility to Wagering and Gambling

When cursorily viewing the global jurisdictional landscape, domestic legal regimes have as a private law manifestation of *ordre public* traditionally been hostile towards lending the force of legal enforceability towards aleatory transactions deemed as falling into the wagering and gambling category. In the Civil Law tradition this is evident still today. For example, Sec. 762 subsection 1 sentence 2 of the German Civil Code ('Bürgerliches Gesetzbuch'; 'BGB') states that no legally enforceable obligation is created by way of a gaming or betting contract.[212] Similarly, in the United Kingdom, although 'morally neutral'[213] and enforceable at (English)[214] common law, at the level of statute, Sec. 18 of the Gaming Act 1845 stated that wagers were not recoverable at law.

b) Carving out Legislative 'Safe Harbours' for Aleatory Derivatives

Today, however, at least with regard to major derivatives market jurisdictions, the question of (un-)enforceability with regard to derivative transactions in this context can be seen to be largely academic. While, as a matter of contract doctrine, the waters of conceptual differentiation remain muddied, major Common as well as Civil Law derivative market jurisdictions have passed specific legislation to exempt derivatives from the application of gaming laws in order to prescribe legal certainty and facilitate these markets. At least where wholesale market participants are involved, as an overarching teleological consideration this is presumed to follow the rationale that where sophisticated institutions enter into these transactions there is no need for the social harm protection provided by gambling legislation.[215] As such, in most 'Western'[216] jurisdictions, aleatory financial transactions such as derivatives today are

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Code rules on contemporary financial instruments such as swaps interact with older rules on gaming and betting.').

[212] 'Durch Spiel oder durch Wette wird eine Verbindlichkeit nicht begründet.'.

[213] J Roberts, 'Swaps, betting and the law' (2014) 29 Butterworths Journal of International Banking and Financial Law 563, 564.

[214] English and American common law doctrine took historically diverging paths in this respect. Early American jurisprudence was at pains to repudiate the validity of wagers. As discussed in: WR Anson, *Principles of the English Law of Contract and of Agency and its Relation to Contract* (n207) 228-229.

[215] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (3rd edn, Sweet & Maxwell 2019) para 18.016.

[216] Underlining the legal challenges posed by the truly global scale of the OTC derivatives market, in jurisdictions modelled on the body of Islamic law, the *Shariah*, absolute conformity of transactions with the basic tenets of Islamic law and jurisprudence is still of major practical importance in financial dealings. The threat of non-conformity has been referred to as 'Shariah Risk' as a specific form of legal risk: See, I Akkizidis and SK Khandelwal, *Financial Risk Management for Islamic Banking and Finance*

therefore widely legitimised, which some authors – again emphasising the manifold importance of the conceptualisation of risk – a least implicitly also put down to advances in financial economic theory.[217] Marieke de Goede even states that in light of the uncertainty element inherent in both gambling and financial trading with the common goal of achieving commercial profit, it was 'the concept of [financial] risk [which] provided the possibility of a demarcation line between gambling and finance'[218].

Under German Law, the scope of application of the safe harbour provision as it pertains to financial practice is as of 3 January 2018 limited by Sec. 99 – prior to this Sec. 37(e) – of the Securities Trading Act ('Wertpapierhandelsgesetz'; 'WpHG'). The provision provides an extensive exclusion of the objection contained in Sec. 762 BGB for obligations resulting from commercially concluded financial futures and forward transactions (Finanztermingeschäfte) such as derivative transactions (derivative Geschäfte) as defined in Sec. 2 para. 3 WpHG.[219]

Equally under English Law, of particular importance in financial practice,[220] specialist legislation has also created a specific regulatory regime applying to financial contracts. For example, Sec. 412 (gaming contracts) of the Financial Services and Markets Act 2000 ('FSMA') today explicitly makes legally enforceable any contract entered into by either party or each party by way of business.[221] Furthermore, contracts entered into on or after 1 September 2007, as will be the case with the overwhelming majority of non-settled derivative contracts in existence today, now theoretically would fall within the scope of the Gambling Act 2005. Crucially, Sec. 10 para. 2 of the Gambling Act 2005 excludes from its scope of application those activities potentially satisfying the meaning

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(Palgrave Macmillan 2008) 41; As such, besides the prohibition on *riba*, ie interest, the avoidance of *gharar*, ie 'risk' 'uncertainty' or 'hazard' is of continued relevance, *ibid* 2; In the increasingly commercially significant area of Islamic Finance generally, and OTC derivatives specifically, the unique challenges to legally enforceable contractual documentation is evidenced by the development of the so-called ISDA/IIFM Tahawwut Master Agreement for Shariah compliant derivatives. See, ISDA and IIFM, Explanatory Memorandum Relating to the ISDA/IIFM Tahawwut Master Agreement.

[217] See EP Caldentey and M Vernengo, 'Modern finance, methodology and the global crisis' (2010) 52 Real-World Economics Review 69, 76; J Biggins, '"Targeted Touchdown" and "Partial Liftoff"' (n106) 1304.

[218] M de Goede, 'Repoliticizing financial risk' (2004) 33 Economy and Society 197, 200.

[219] See, eg, the German legislative materials (BT-Drucks 14/8017 (18 January 2002) 96), relating to the genesis of Sec 37(e) WpHG, which state that this safe harbour provision was intended to 'continue the idea of creating a certain legal sphere in the area of forward transactions', which was already the basis for its predecessor provision [own translation].

[220] As also explored under § 1.D.III.2.a).

[221] As was also the case under its predecessor, namely, Sec 63 of the Financial Services Act 1986.

of 'betting' under the Gambling Act if entry into such transaction is a 'regulated activity within the meaning of Sec. 22 of the FSMA 2000'.[222]

The English courts, in particular, have been at pains to apply the legal certainty effect of the gambling safe harbours extensively and comprehensively. By way of an illustrative example, the wagering question surfaced in some English cases of a more recent vintage under a somewhat novel guise in the context of whether dealer banks had to disclose the Day 1 MTM of interest rate swap transactions entered into with an end-user.[223] In a nutshell, the abbreviated substantive argument put forward by the barrister on behalf of the end-user claimant in each of the cited cases can be framed in the following terms: Since the cash-settled interest rate swaps were contracts for differences, as they did not foresee actual physical delivery of an underlying asset, they fell under the definition of wagers at English common law.[224] Importantly, the statutory reform in form of the Financial Services Act 1986, the FSMA 2000 and the Gambling Act 2005 should have no bearing on the legal position of 'financial bets' in form of contracts for differences at common law, since nowhere in the statutes was there the requisite mention that the common law regime relating to wagering is to be in any way affected.[225] Consequently, regardless of their general enforceability, the common law regulatory scheme relating to wagers should continue to be applicable,[226] which included that parties had to possess equal ignorance/knowledge about the odds underlying their wager, either as a condition for the validity of the wager or as an implied term[227]. Where this was not the case, such lack of transparency of the wager at common law would mean that the dealer bank was consequently either liable to repay the total net payments received under the swap, because it was invalid, or liable for damages for breach of an implied term.[228] Applied to a swap agreement – as the argument went – such a lack of transparency was present in cases where, although mathematically possible for the dealer bank to calculate and

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[222] For a comprehensive overview relating to the legal status of derivatives in relation to gambling, wagering and gaming under UK Law see E Murray, 'Derivative Transactions' in S Paterson and R Zakrzewski (n209) para 11.8.

[223] *Nextia Properties Ltd v The Royal Bank of Scotland Plc & Anor* [2013] EWHC 3167 (QB); *Nextia Properties Ltd v The Royal Bank of Scotland Plc & Anor* [2014] EWCA Civ 740; *WW Property Investments Ltd v National Westminster Bank Plc* [2016] EWHC 378 (QB); *WW Property Investments Ltd v National Westminster Bank Plc* [2016] EWCA Civ 1142.

[224] [2016] EWCA Civ 1142 at [18].

[225] *Ibid*.

[226] Laying out this point: J Roberts, 'Swaps, betting and the law' (n212) 566 (who was the barrister making this argument in the cases cited).

[227] [2016] EWCA Civ 1142 at [18].

[228] *Ibid* at [19].

thus know the market value of a swap, the transaction did not transparently set out for the benefit of the end-user counterparty that at inception its net present value (synonymous with current market value) was not zero.[229] Failure to disclose that the transaction's expected cash flows are – in the end-user's contention – unfairly weighted in the dealer bank's favour in spite of superior knowledge to this effect thus amounted to unfairly skewing the odds or cheating, with the legal consequences set out above.[230]

As a brief excursion from the wagering question, however, although the concept of 'zero net-present value'[231] or 'mid-market pricing'[232] is central to financial transaction pricing, it is not identical to the quoted price itself.[233] As the swap dealer bank, as market maker, commonly does not charge a premium upfront for its service, it is general market practice to use the measure of net present value only as a *benchmark* against which the actual price either offered or bid is then calculated.[234] The price determined in this way factors in the various transaction costs incurred by the dealer bank even in the case of plain vanilla instruments. These include, i.a., the costs of (re-)hedging[235] risks incurred through the transaction, or in the case of highly customised transactions the costs of retaining those risks which cannot be re-hedged; compensation for credit risk exposure incurred in relation to the counterparty through the transaction; general administrative costs; in case of highly customised transactions, the costs of devising these, referred to as the costs of origination.[236] Lastly, the price quoted to a potential counterparty allows for a margin of profit.[237]

The arguments as to the wager issue as well as the disclosure obligation for initial negative market values of swap transactions were roundly rejected in court.[238] Vos LJ

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[229] [2014] EWCA Civ 40 at [63]-[66].

[230] [2016] EWCA Civ 1142 at [19].

[231] D Mengle, *The Value of a New Swap* (2010) 3 ISDA Research Notes 1.

[232] So described because it entails the aggregation of prices currently quoted in the market in expectation of the cash-flows generated by the transaction: *ibid* 2.

[233] According to David Mengle '[b]ecause mid-market pricing is such a central concept, confusion sometimes arises from literal application of the concept to actual pricing': *ibid*.

[234] *Ibid*.

[235] On the significance of re-hedging from the market maker perspective, see, Chapter 1 § 6.C.II; From the perspective of the wider market, see Chapter 1 § 7.D.IV.2.

[236] D Mengle, *The Value of a New Swap* (n231) 5-6.

[237] *Ibid* 2.

[238] With regard to the latter point: *Nextia Properties Ltd v The Royal Bank of Scotland Plc and National Westminster Bank Plc* [2013] EWHC 3167 (QB) at [76] ('NatWest is a commercial organisation offering a service. It would expect to cover its costs and make a profit. If the Day 1 MTM [market value] was zero it would not do either.'); Further, no disclosure obligation arose, since the contract could (no longer) be classed as a wager and there existed no incidence of a disclosure obligation in normal contractual arrangements: *Nextia Properties v Royal Bank of Scotland PLC & Anor* [2014] EWCA Civ 740 at [27].

left no doubt that the common law wagering regime was superseded by 'the legislation [encompassing the Gambling Act 2005 and the Financial Services and Markets Act 2000 replacing the Financial Services Act 1986][239] that provides a comprehensive statutory regime for regulating contracts for differences nowadays'[240].[241] Illustrative, for present purposes, is the strict finality with which the judgments have sought to put the matter to rest and implicitly signal to the wider derivative markets that OTC derivative transactions concluded under English law are not at risk of being re-characterised. Attempts to pursue the wagering argument set out above were characterised as 'pointless, expensive, and wasteful litigation to the detriment of the courts [*sic*] time and resources and needs of other litigants'[242]. Furthermore, as put by Briggs LJ in agreeing with Clarke LJ giving the judgment of the court in *WW Property Investments* and refusing permission to appeal on the wager issue: 'This court heard (and read) submissions on the wager issue of at least the length which would ordinarily have been permitted on the hearing of a full appeal, albeit only from one side. It is to be hoped that the reporting of this judgment dismissing those arguments as giving rise to no real prospect of success will finally lay to rest this ingenious but misguided heresy, so that no further time or money will be wasted on it.'[243]

3. *Evaluation*

Rather than perceiving state laws as 'shackles'[244] from which to seek liberation, state law must be seen as a valuable asset in facilitating and complementing the transnational ISDA regime in case of contractual incompleteness, and, arguably, is perceived by participants in the global OTC derivatives market as such.[245] However, there is – as a flip side – scope for interference with the normative integrity of the sectoral contractual regime through mandatory norms or doctrines of the respective state laws, which often by many centuries predate the creation of the financial instruments potentially coming within their regulatory orbit. It bears emphasis that some laws provide a more fertile,

[239] [2014] EWCA Civ 740 at [26].
[240] *Ibid* at [31].
[241] *Ibid* at [26].
[242] [2016] EWHC 378 (QB) at [28].
[243] [2016] EWCA Civ 1142 at [88].
[244] R Goode, 'Rule, Practice, and Pragmatism in Transnational Commercial Law' (2005) The International and Comparative Law Quarterly 539, 545.
[245] The specific use of the English courts in interpretation disputes regarding operative provisions of the ISDA MA is explored in more detail in Chapter 3.

i.e. 'OTC derivatives-friendly'[246], legal environment for OTC derivatives to operate, whereas others prove more constraining. As seen, by way of example, the comparably restrictive common law doctrine of frustration is more suited to upholding an executory and aleatory contract, such as a derivative, even in the face of market turmoil than the Civil law doctrine of *clausula rebus sic stantibus* and, in particular, its Portuguese interpretation.

Similarly, regardless of any normative evaluation of the effect of such safe harbours,[247] any residual legal uncertainty with regard to enforceability of OTC derivatives in the context of mandatory rules regarding wagering legislation has been removed through specialist legislation, in the example detailed above aided by its unequivocal and comprehensive application by the English courts. Comparable statutory safe harbours or *lex specialis* regulatory regimes displacing general law provisions on wagering and gambling have been created in further jurisdictions. However, seeking to escape contractual liability by invalidating out-of-the-money transactions *ex post* on the grounds that they constitute illegal gambling activities remains a prevalent strategy in litigation in some jurisdictions.[248] And, it bears emphasis that the unequivocal enforceability of OTC derivatives in the context of the wager issue, as followed by the English courts, is not mirrored in every jurisdiction, especially where in an emerging capital market jurisdiction a comparable comprehensive legislative safe harbour regime is not (yet) in place.[249]

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[246] J Biggins and C Scott, 'Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform' (n207) 326.

[247] A candid normative critique in this regard is contained in the following statement by Cooke J in the context of the range of transactions underlying his decision in *Deutsche Bank AG v Sebastian Holdings Inc (Rev 1)* [2013] EWHC 3463 (Comm) at [1587] ('Whether proper consideration was given to the public policy issues when the law was changed in this country is not for me to say but the harmful effects on people and on society have been detailed in previous centuries and bear re-examination. To the extent that any company or bank founds its business on transactions of this kind, it does so at its peril and those of its shareholders and stakeholders. To the extent that any economy depends upon such business, its foundations are built on sand.' at [1587]); In the same context, Lynn Stout, as a private law regulatory measure proposed re-introducing the common law rule against difference contracts, comprehensively disapplied by the Financial Services Act 1986 in the UK and the Commodities Futures Modernization Act of 2000 in the US, under which derivative contracts were legally unenforceable wagers unless it constituted a hedge for at least one of the parties in order to constrain socially costly derivative speculation: LA Stout, 'Regulate OTC Derivatives by Deregulating Them' (2009) 32 Regulation 30, 32.

[248] See, DM Forster, 'New Legal Weapons on the Derivative Battlefield' (n167).

[249] As addressed in, ISDA, *Policy Framework for Safe and Efficient Derivatives Activity in Emerging and Developing Markets* (n158) para 41.

III. Party Autonomy as a Sectoral Means of Navigating a Fragmented Global Legal Landscape

Insofar as domestic legal systems substantively diverge in terms of their respective suitability for OTC derivatives contracts, as illustrated above, so will to a greater or lesser degree the legal – and by extension economic – substance of an individual cross-border OTC derivative contract, depending on which legal system ultimately determines the validity and content of contractual obligations. Uncertainty of real-world economic outcomes is thus due to the fact that economic effects sought under a contract intentionally drafted with a view to the laws of state x, may not be obtained should the contract inadvertently fall within the scope of the laws of state y. In this regard, the power to predictably coordinate the interaction between transnational contract and specific governing law is of elementary importance in ensuring that its desired economic effects are achieved at the transnational level. In the OTC derivatives market this is compounded further by the need for synchronous operation of contracts against the background of transnational legal basis risk.[250]

1. Sources of Uncertainty and Modes of Resolution

When attempting classification by way of the sources for a potential resolution of the uncertainty of interaction of contract and law in an international transactions setting, two avenues theoretically suited to this end have emerged: Top-down/public legal ordering on the one hand and bottom-up/private ordering on the other.[251] When this classification is further differentiated by the ultimate goal of public and private ordering mechanisms, these respectively strategically aim for either normative *convergence* through harmonisation or even unification on the one hand, or *coordination of divergence* through the allocation of regulatory authority.[252] In this vein, the arsenal of public ordering strategies consists of either multilateral substantive unification and harmonisation of law across territorial boundaries, or recourse to private international law as a coordinative mechanism of substantive diversity.[253] The first strategy, an exhaustively harmonised or even unified state-supplied substantive law at the global

[250] See, Chapter 1 § 7.D.IV.2.c) on transnational legal basis risk.

[251] Drawing on the in-depth economic theory contributions of German economists Dieter Schmidtchen and Hans-Jörg Schmidt-Trenz on the matter: G Rühl, 'The Problem of International Transactions: Conflict of Laws Revisited' (2010) 6 Journal of International Private Law 59, 66.

[252] CA Whytock, 'Conflict of Laws, Global Governance, and Transnational Legal Order' (n7) 138.

[253] *Ibid*.

level in the mould of a general 'world law'[254] or more granular sectoral variants regulating a specific contract in question, however, for the present appears to remain an unrealistic[255] ideal. As such, substantive divergence along territorial lines and resulting legal uncertainty, rather than global normative convergence will remain the – somewhat untidy – *status quo* of the global legal landscape. Even at the supranational level of the European Union, generally a success story of legal harmonisation, the leap from private – i.e. non-legislative (soft law) codification projects, such as the Lando Commission's Principles of European Contract Law[256] – to a uniform, codified European Contract Law, as the pinnacle of the harmonisation project, does not look likely to become a reality any time soon.[257] At the very least, such uncertainty through diversity may impact sound contractual risk management and raise the costs of international contracting for parties attempting to navigate this territorially fragmented legal landscape.[258] At worst, cross-border commerce becomes impeded to the point of dysfunction by the unpredictability of outcomes – with unpredictability weighing particularly heavy where there exists an intrinsic economic nexus between individual contracts which becomes severed through diverging legal treatment.[259] This general type of legal uncertainty, immanent to and setting international transactions apart from their domestic counterparts, gives rise to what in new institutional economic scholarship has been termed and analysed as 'constitutional uncertainty'[260].

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[254] As, for example, envisaged by German jurist Ernst Zittelmann towards the turn of the 19th to the 20th century: E Zittelmann, *Möglichkeit eines Weltrechts: Vortrag, gehalten in der Vollversammlung der juristischen Gesellschaft zu Wien am 20 März 1888* (Manz'sche k.k. Hof-Verlags- und Universitätsbuchhandlung 1888); In more detail, with further references, KP Berger, 'The New Law Merchant and the Global Market Place: A 21st Century View of Transnational Commercial Law' in KP Berger (ed), *The Practice of Transnational Law* (Kluwer Law International 2001) 5.

[255] Giesela Rühl presents strong arguments that such an endeavour might even be undesirable, such as the disregard of local idiosyncrasy and the stifling of beneficial regulatory competition and legal evolution: G Rühl, 'The Problem of International Transactions: Conflict of Laws Revisited' (n251) 59, 81-84.

[256] Available at <www.trans-lex.org/400200/_/pecl/> accessed 7 September 2026.

[257] Indeed, the European Commission's ambitions in this regard, communicated in 2001, have after a number of intermediate steps been dropped for the time being. Tracing this trajectory in more detail: N Jansen and R Zimmerman, 'European Contract Laws: Foundations, Commentaries, Synthesis' in N Jansen and R Zimmerman (eds), *Commentaries on European Contract Laws* (Oxford University Press 2018) paras 9-23 (observing at the outset of their in-depth navigation of the topic that, as a result, the situation to date is such that one is 'faced with a complex and confusing picture of European contract *laws* rather than a European contract *law'*, *ibid* para 24 [emphases in the original].

[258] See, KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 23 ('For international business and trade, these uncertainties [in the determination of the applicable law] make contractual risk management more difficult, thereby raising transaction costs.').

[259] As in the transnational (re-)hedging chains discussed under Chapter 1 § 7.D.IV.

[260] H-J Schmidt-Trenz, *Institutionenökonomik: Theorie der Governance* (Franz Vahlen 2023) 143.

The second public ordering strategy, private international law, has proven to be more promising. The core element of its relative success is what has been described as the 'unifying principle of contemporary law'[261], the rise of the principle of private international law party autonomy. Other than its name might at face value suggest, private international law is not an internationally uniform body of conflicts rules, but choice of law rules predominantly form part of domestic legal systems.[262] As a result, its rules diverge across territorial boundaries, resulting in a broad variation as to the statutory instructions guiding the courts from jurisdiction to jurisdiction. In this regard, private international law mirrors the structural and functional deficiencies of fragmented domestic substantive private laws in relation to transnational commercial activity: As put by Christopher Whytock, this results in the paradox that 'conflict of laws contributes to transnational legal order, yet conflict of laws is itself transnationally disordered'[263]. The, in part, supranationally harmonised body of conflicts rules within the European Union is built upon a body of regulations, most importantly, for present purposes, the 'Rome I Regulation'[264], which proves a limited exception to the above general rule at the global level.[265]

Where, against this background, a court attempts to resolve the prevalent constitutional uncertainty as to the ultimately applicable law by mechanically applying its domestic conflict of law rules, this potentially poses problems for two main reasons. The first is essentially one of commercial utility. Namely, the proper law of the contract determined by virtue of a technical conflicts rule may, in fact, not be the law best suited to the commercial interests of the parties to that transaction.[266] Second, attempts at ameliorating the first problem through a host of innovative but competing doctrinal approaches to achieve more commercially desirable outcomes in specific cases necessarily broadens the range of potential outcomes in general, thus only exacerbating the initial uncertainty problem.[267] In addition, in the context of more complex

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[261] SC Symeonides, *Codifying Choice of Law Around the World: An International Comparative Analysis* (Oxford University Press 2014) 346.

[262] CA Whytock, 'Conflict of Laws, Global Governance, and Transnational Legal Order' (n7) 118-119.

[263] *Ibid* 119 [emphasis omitted].

[264] Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations [2008] OJ L 177/6 ('Rome I Regulation').

[265] CA Whytock, 'Conflict of Laws, Global Governance, and Transnational Legal Order' (n7) 124-126.

[266] KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 22-23.

[267] With regard to such attempts in US conflicts doctrine: *ibid* 22; A graphic overview of the current 'methodological camps' in the plural 'American', ie federal and state and principally judge-made conflicts law is provided in SC Symeonides, *The American Choice-of-Law Revolution: Past, Present and Future* (Martinus Nijhoff 2006) 63-65.

international financial transactions, such as OTC derivatives, which may exhibit manifold potential objective connections to a range of jurisdictions,[268] the outcome even of an established conflicts procedure may also not be ascertainable *ex ante* with any high degree of certainty.

Where a multitude of transnational contract chains as components of a larger contractual network transport a range of risks between counterparties the world over, as is the case in the OTC derivatives market, which is premised on predictable and, even more importantly, synchronised outcomes regarding its individual contractual components, unresolved constitutional uncertainty of this sort can pose a serious if not lethal impediment to market functioning.[269] Against this background, the uncertain outcome of the exercise of determining the law applicable to an international commercial transaction under respective domestic conflicts rules has been the pervasive and longstanding source of considerable commercial concern.[270]

In light of this, the recognition of party autonomy under the vast majority of private international law regimes, i.e. furnishing parties to an international contract with the autonomy to exercise a choice as to 'which system of private law applies to the legal relations between the parties'[271], has proven a largely effective mechanism towards overcoming both problems from within private international law. In a bygone legal age, the reach of a domestic legal regime deemed unsatisfactory could only be escaped by way of, quite literally, voting with one's feet, i.e. by resorting to 'physical exit' from that state's sovereign territory and the reach of its law.[272] In sharp contrast, modern choice of law doctrine in principle, and with limited exceptions, grants parties the legal mobility to simply contractually declare a preferred law as applicable to their contractual relationship.[273] As stated by Horatia Muir Watt and Luca G. Radicati di Brazolo, under such a conception 'party choice must be understood as a functional substitute for party mobility'[274] with its associated cost advantages. Recognising and enforcing party choice thus eliminates the constitutional uncertainty otherwise resulting

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[268] Potentially ranging, eg, from anything like the contractual currency to the place where the derivative's underlying is traded, see § 1.C.I.

[269] See, Chapter 1 § 7.D.IV.

[270] See, generally, KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 21-26 and the extensive literature cited.

[271] A Mills, *Party Autonomy in Private International Law* (Cambridge University Press 2018) 21.

[272] H Eidenmüller, 'The Transnational Law Market, Regulatory Competition, and Transnational Corporations' (2011) 18 Indiana Journal of Global Legal Studies 707, 710-711.

[273] Discussing the 'expanded opportunities for choice of law': *ibid*.

[274] H Muir Watt and LG Radicati di Brozolo, 'Party Autonomy and Mandatory Rules in a Global World' (2004) 6 International Law FORUM du droit international 90, 90-91.

from unpredictable application of conflict of law rules differing from state to state with potentially diverging results regarding an often context-specific and complex matrix of fact.[275]

Importantly, this party autonomy in private international law is conceptually distinct from party autonomy in domestic contract law, i.e. the scope of freedom of contract.[276] While the latter is a question under the applicable domestic law, the former is at the coordinative meta-level of determining which domestic law of many does in fact apply.[277] In other words, party autonomy in private international law constitutes 'a freedom to choose between different freedoms – the diverse degrees of contractual autonomy available in different national systems of private law'[278]. Although conceptually distinct, functionally both concepts thus fruitfully intersect in transnational commercial practice. This is because – at least functionally – private international law party autonomy greatly extends the scope of freedom of contract.[279]

For one, the principle of party autonomy implicitly recognises that the sophisticated commercial contract parties themselves should be ideally placed to determine which law best facilitates their at times highly specialised transactional requirements, thus addressing the suitability of law question.[280] Stated in the terms of economic theory, subject to the qualifications addressed below, free choice of law at the very least does not lead to lesser, and indeed promises more efficient outcomes relative to the otherwise applicable objective conflicts provision.[281]

What is more, when abstracting from the functional requirements of the concrete transaction, such choice can also be geared towards the functional requirements of the networked character of contracting within a particular specialised and transnationally

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[275] J Hill and M Ní Shúilleabháin, *Clarkson & Hill's Conflict of Laws* (Oxford University Press 2016) para 4.87; See, also, para I.2 of the *Commentary to The Hague Principles on Choice of Law in International Contracts* <www.hcch.net/en/instruments/conventions/full-text/?cid=135> accessed 7 September 2026

[276] A Mills, *Party Autonomy in Private International Law* (n271) 21.

[277] *Ibid*.

[278] *Ibid*.

[279] A Engert, 'Networks and Lemons in the Market for Contract Law' in H Eidenmüller (ed), *Regulatory Competition in Contract Law and Dispute Resolution* (CH Beck/Hart/Nomos 2013) 304, 307.

[280] See, eg, para I.3 of the *Commentary on The Hague Principles on Choice of Law in International Contracts* ('Party autonomy (…) recognises that parties to a contract may be in the best position to determine which set of legal principles is the most suitable for their transaction') <www.hcch.net/en/instruments/conventions/full-text/?cid=135> accessed 7 September 2026.

[281] G Rühl, 'Party Autonomy in the Private International Law of Contracts: Transatlantic Convergence and Economic Efficiency' in E Gottschalk and others (eds), *Conflict of Laws in a Globalized World* (Cambridge University Press 2007) 176-177.

operative industry. The private international law party autonomy benefit conceived in this way consists of granting members of the particular contractual network a legal 'coordination mechanism'[282] to ensure consistency in the legal treatment of individual bilateral – but at least economically interdependent – contracts within the wider network.[283] Fabrizio Cafaggi and Sandrine Clavel point out that network coordination in this way can take the form of either comprehensive choice of one law to apply to all contracts or, alternatively, 'choice of a common law applying only to interdependence-related questions'[284], with individual contracts residually remaining under their respective proper laws.[285] In the OTC derivatives market, where contract network coordination or governance is undertaken in a centralised fashion by ISDA, the former coordination option has been preferred to *dépeçage*, with the model choice of law provision contained in Sec. 13(a) ISDA MA in connection with Part 4(h) of the Schedule traditionally providing for English law or the laws of the state of New York.

The concept of private law party autonomy is, subject to few but significant limitations discussed below, widely recognised in litigation to the point of having become 'almost universally acknowledged'[286]. For example, at the level of harmonised European private international law[287], freedom of choice in law of contract is clearly embodied in the first sentence of the eponymous Art. 3(1) Rome I Regulation according to which '[a] contract shall be governed by the law chosen by the parties'. This is flanked by Recital 11 of the preamble to the Rome I Regulation, according to which '[t]he parties' freedom to choose the applicable law should be one of the cornerstones of the system of conflict-of-law rules in matters of contractual obligations.' The general principle embodied in this supranational rule is deemed to be of near universal character in that it 'reaffirms a rule currently embodied in the private international law of all the Member

[282] F Cafaggi and S Clavel, 'Interfirm Networks across Europe: a private international law perspective' in F Cafaggi (ed), *Contractual Networks, Inter-Firm Cooperation and Economic Growth* (Edward Elgar 2011) 208.
[283] *Ibid* 208-211.
[284] *Ibid* 208.
[285] *Ibid* 208 and 211-213.
[286] P Nygh, *Autonomy in International Contracts* (Oxford University Press 1999) 13; For further illustrative quotes attesting to its universal status, see SC Symeonides, 'Party Autonomy in International Contracts and the Multiple Ways of Slicing the Apple' (2014) 39 Brooklyn Journal of International Law 1123, 1123-1124 (fn 1-4).
[287] Itself guided by the overarching goal of predictability through legal certainty, cf, eg, Recitals 6 and 16 of the preamble to the Rome I Regulation.

States of the Community and of most other countries'[288]. Party autonomy has also become enshrined in influential international soft law instruments.[289] Against this backdrop of both the broad transnational recognition of party autonomy and its frequent practical exercise through the use of contractual choice of law clauses,[290] its – perhaps somewhat convenient – omission from economic accounts espousing the relative merits of autonomous private regulatory alternatives, such as the *lex mercatoria*, to state-supplied conflicts mechanisms, is somewhat surprising and amounts to a curtailment of the debate.[291] In the same vein, although they explicitly acknowledge the prevalence of choice of law clauses in the standardised contractual documentation of transnational instruments, such as the ISDA MA, other accounts see their significance usurped by highly technical and detailed contract drafting.[292]

However, private law party autonomy is not the panacea of transnational legal ordering since just as substantive freedom of contract in a domestic setting is not guaranteed absolutely, neither is party autonomy regarding choice of law.[293] Viewed from a transnational standpoint, the problem of mandatory domestic norms potentially interfering with freedom of contract and the normative integrity of a contractually constructed transnational sectoral order, which can to a degree be alleviated by an informed choice of a suitable governing domestic law, is – in a sense – kicked up a floor to the meta-level of public policy or mandatory rules of private international law constraining party autonomy.[294] Also at this level, the degree of incursion of domestic mandatory provisions into private law party autonomy, once again, varies between jurisdictions. At a general level, the private international law of some jurisdictions

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[288] See, writing in relation to Art 3(1) of its substantively similar predecessor, the 1980 Rome Convention, M Giuliano and P Lagarde, *Report on the Convention on the law applicable to contractual obligations*, OJ C 282, 31.10.1980.

[289] Notably, most recently, *The Hague Principles on Choice of Law in International Contracts*, affirming the principle of party autonomy with only limited exceptions. See, <www.hcch.net/en/instruments/conventions/full-text/?cid=135> accessed 7 September 2026.

[290] Often collectively exercised in a uniform fashion within specific transnationally operative industry sectors: J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (2018) 21 University of Pennsylvania Journal of Business Law 142, 183-185.

[291] J Basedow, 'Lex Mercatoria und Internationales Schuldvertragsrecht' in KP Berger and others (eds), *Zivil- und Wirtschaftsrecht in Europäischen und Globalen Kontext: Festschrift für Norbert Horn zum 70. Geburtstag* (De Gruyter Recht 2006) 241-242; G Cuniberti, 'Three Theories of Lex Mercatoria' (n112) 392-393.

[292] See, eg, KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 27 ('Even though they contain a choice of law clause, these contract documentations are, as much as possible, detached from the uncertainties of any applicable domestic law.').

[293] SC Symeonides, *Codifying Choice of Law Around the World: An International Comparative Analysis* (n261) 111.

[294] A Mills, *Party Autonomy in Private International Law* (n271) 21.

already restricts the menu of choice to one of the laws which are in some way objectively connected to the contract other than simply by subjective choice of law.[295] What is more, it is curtailed where its unconstrained guarantee is deemed to have a disadvantageous effect by those devising the conflicts regime; for example, on the structurally 'weak' contract counterparty.[296] Specifically, on both sides of the Atlantic, restrictions can be analysed in economic terms as preventing the occurrence of 'market failure'[297]; i.e. protecting against prospective exploitation of asymmetries of bargaining power or information, as well as excluding third party externalities of the *inter-partes* choice.[298] These restrictions thereby teleologically mirror the protective provisions under substantive contract law, especially in a B2C context.[299] However, restrictions are notably not limited to the B2C context under the rationale described above, but also apply vis-à-vis sophisticated commercial counterparties broadly transacting at eye level: Beyond systematically denying parties the option of choosing non-state law as an alternative to state law under near on all legal systems and private international law codifications,[300] which does in the OTC derivatives market, however, not constitute a relevant consideration to start with, the residual scope of party choice regarding state law is under conflict law rules frequently restricted further with regard to purely domestic situations in a conflict of laws sense.[301] Under Art. 3(3) Rome I Regulation,

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[295] As is, eg, the general rule under American conflicts law under para 187 Restatement (Second) on the Conflict of Laws (1971) with its conception of party autonomy followed by the majority of American courts: SC Symeonides, 'Party Autonomy in International Contracts and the Multiple Ways of Slicing the Apple' (n286) 1128.

[296] *Ibid*.

[297] G Rühl, 'Party Autonomy in the Private International Law of Contracts: Transatlantic Convergence and Economic Efficiency' (n281) 177-178.

[298] G Rühl, 'The Choice of Law Framework for Efficient Regulatory Competition in Contract Law' in H Eidenmüller (ed), *Regulatory Competition in Contract Law and Dispute Resolution* (CH Beck/Hart/Nomos 2013) 293-294; Analysing and observing a similarity of approaches under American and European law in this regard: G Rühl, 'Party Autonomy in the Private International Law of Contracts: Transatlantic Convergence and Economic Efficiency' (n281).

[299] SC Symeonides, 'Party Autonomy in International Contracts and the Multiple Ways of Slicing the Apple' (n286) 1128-1129.

[300] SC Symeonides, *Codifying Choice of Law Around the World: An International Comparative Analysis* (n261) 140-146 (possibly with the exception of the Mexico City Convention and Venezuelan private international law, *ibid* 142-144); In contrast, recourse to non-state norms is a feature in international arbitration: For example, Art 21 (Applicable Rules of Law) of the ICC Rules on Arbitration which provide for such choice; In terms of actual contractual practice, according to the *ICC Dispute Resolution 2020 Statistics*, however, only 2% of contracts arbitrated under ICC rules under the auspices of the International Court of Arbitration 'included a reference to rules or instruments other than national laws (…)', *ibid* 17.

[301] For example, in a recent manifestation, Art 1 of the Hague Principles on Choice of Law in International Contracts 2015, which are not applicable to purely domestic contracts, states: '(1) These

this is deemed to be the case '[w]here all other elements relevant to the situation at the time of the choice are located in a country other than the country whose law has been chosen'. In such case, 'the choice of the parties shall not prejudice the application of provision of the law of that other country which cannot be derogated from by agreement'. As such, under the approach underlying this provision, the mere choice of a foreign governing law is capable of internationalising a contract and thus paving the way for the application of private international law rules, while, however, that choice is subject to significant limitations.[302] As will be discussed in the *Banco Santander* case study under § 2, the judicial interpretation of this provision can have a profound impact on the effective functioning of the global OTC derivatives market, and, by extension, effective transnational legal ordering.

As has become clear from the above, two separate but each highly relevant concerns, both addressed through the instrument of private international law party autonomy, must be distinguished with regard to a functioning global OTC derivatives market. First, party autonomy enables counterparties to have the legal effect of their transactions measured against a private law of their strategic choosing. It is, therefore, the concept of private law party autonomy that metaphorically facilitates the strategic '"targeted touchdown"'[303] of disputes in what are perceived to be '"derivatives friendly" jurisdictions'[304], namely England and New York.[305] Second, and perhaps even more importantly from the perspective of effective transnational risk transfer, there is the functional requirement that party autonomy can be effectively exercised harmoniously throughout a transnational contractual ((re-)hedging) network, made up of a plethora of bilateral legally distinct – but economically interdependent – transactions. Both aspects, substantive 'quality' in the sense of derivatives-friendliness, as well as regard to transnational network integrity, will thus feature prominently in the case study under

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Principles apply to choice of law in international contracts where each party is acting in the exercise of its trade or profession. (…) (2) For the purposes of these Principles, a contract is international unless each party has its establishment in the same State and the relationship of the parties and all other relevant elements, regardless of the chosen law, are connected only with that State.'; Critically, from the standpoint of economic theory, since correction of market failure breaks down as a regulatory rationale, as far as sophisticated domestic counterparties contract with each other, which are each capable of attaining requisite information on the envisaged law: G Rühl, 'Party Autonomy in the Private International Law of Contracts: Transatlantic Convergence and Economic Efficiency' (n281) 182.

[302] A Mills, *Party Autonomy in Private International Law* (n271) 472.

[303] J Biggins, '"Targeted Touchdown" and "Partial Liftoff": Post-Crisis Dispute Resolution in the OTC Derivatives Markets and the Challenge for ISDA' (n106) 1318.

[304] *Ibid* 1327.

[305] *Ibid*.

§ 2. This case study will follow a brief discussion of the special feature and significance of what is effectively not individual counterparty but rather collective sectoral choice of law in the global OTC derivatives market via the ISDA MA boilerplate choice of law provision.

2. *From Party Autonomy to English Law as the Sectoral Law of the OTC Derivatives*

In an overarching sense, one effect of the extension of party choice to law has been to, in a purely economic sense, commodify law itself. Rather than just constituting a framework for the occurrence of economic activity,[306] law becomes a 'product' which, much like any other, can be subject to the laws of supply and demand in a transnational 'law market'.[307] In this way, the primary market for a particular service or commodity is – at least as an afterthought – structurally interwoven with the market for the suitable contract law. Crucially, this feature is perhaps most pronounced in the context of financial instruments such as derivatives, which are essentially legally engineered '"creatures" of law'[308] taking effect according to contractual stipulations measured against the applicable body of substantive law. As such, the 'law market' aspect here takes on not only secondary importance but becomes a primary consideration.[309] Classically – in the economic vernacular – the 'arbitrage'[310] opportunities created by the

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[306] H Eidenmüller, 'The Transnational Law Market, Regulatory Competition, and Transnational Corporations' (n272) 707.

[307] Seminally, on law as a product in relation to states' corporation laws in the US: R Romano, 'Law as a Product: Some Pieces of the Incorporation Puzzle' (1985) 1 Journal of Law, Economics, and Organization 225; Regarding the market for law products: EA O'Hara and LE Ribstein, *The Law Market* (n5); H Eidenmüller, 'The Transnational Law Market, Regulatory Competition, and Transnational Corporations' (n272).

[308] R McCormick and C Stears, *Legal Risk and Conduct Risk in the Financial Markets* (3rd edn, Oxford University Press 2018) para 1.01.

[309] Or, at least it ideally should, if the transaction's ultimate effect under the applicable law should not come as a costly surprise to either party in the pathological case of an insurmountable party dispute, necessitating resolution through litigation or arbitration. Giuditta Cordero-Moss observes a possible practical disconnect between the 'drafting lawyers' and 'litigation lawyers' involved in international commercial contracting in this regard. The formers' success is measured against how effectively they can remove stepping stones in commercial negotiations on the road to a final deal and after achieving the desired result 'will not have the possibility of verifying how the clauses work in practice'. The latter, in contrast, are focused on the disputed transaction's effect under the applicable sources of law in order to plot further litigation strategy: G Cordero-Moss, *International Commercial Contracts: Applicable Sources and Enforceability* (n142) 17; This concern should, however, be somewhat mollified in international financial contracting for the very reason that their function is premised on their legal analysis, with legal certainty a core objective of contract drafting.

[310] H Muir Watt and LG Radicati di Brozolo, 'Party Autonomy and Mandatory Rules in a Global World' (n274) 91 who emphasise the potentially negative flip side of party autonomy, namely increased scope

legal mobility afforded to market participants today make it possible to switch between legal systems by virtue of broad recognition of private international law party autonomy, meaning parties can choose the law most suitable to their individual commercial preferences, in turn exacting pressure on states to adapt rules accordingly in a quality and efficiency-enhancing spiral under the rubric of regulatory competition.[311] As analysed by Stephan Vogenauer, the axioms underlying the law market as generating regulatory competition conceptualisation does for a variety of reasons, however, not hold up wholesale in the specific context of the market for contract law and forum, both on the 'demand' and on the 'supply' side.[312] For present purposes, the following analysis will focus specifically on why English law, in particular, has become the dominant law for the transnational OTC derivatives industry in terms of a sectoral preference.

a) The Hegemony of English Law in International Commercial and Financial Contracting

Abstracting from the derivatives sector, English law has generally been described as the 'workhorse of international contracts'[313]. As can be seen in several major studies, this description largely bears out empirically in terms of the level of attractiveness of English law for both English and foreign parties.[314] Often its relative attractiveness is attributed to its focus on providing legal certainty in commercial dealings.[315] Indeed, a number of specific elements characterising the common law system as geared towards an overarching goal of legal certainty have been identified. These elements combine to form a general picture of inherent reluctance of the common law to insert itself into the

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for arbitrage both in terms of jurisdiction and law carrying an increased potential for acting *in fraudem legis* by circumventing national mandatory laws thus weakening their general standing.

[311] S Vogenauer, 'Regulatory Competition through Choice of Contract Law and Choice of Forum in Europe: Theory and Evidence' in H Eidenmüller (ed), *Regulatory Competition in Contract Law and Dispute Resolution* (CH Beck/Hart/Nomos 2013) 228-229.

[312] In detail, *ibid* 230 onwards.

[313] Original quote by Philip Wood, cited in K Clark, 'Economic Stability and the Creation of Stable Contract and Property Rights' in The Commercial Bar Association, *The Jamestown Lectures 2006-2007: The Rule of Law* (Hart Publishing 2008) 20.

[314] These studies share the common theme of the businesses and legal professionals questioned and contracts analysed attesting to a preference for English law: See, eg, Civil Justice Systems in Europe: Implications for Choice of Forum and Choice of Contract Law, A Business Survey, Final Results (2008) 14-15; Regarding choice of law specifically in international commercial arbitration: Queen Mary School of International Arbitration/White & Case LLP, *2010 International Arbitration Survey: Choices in International Arbitration* (2010) 11-14.

[315] See, eg, K Clark, 'Economic Stability and the Creation of Stable Contract and Property Rights' (n313) 21.

private regulatory order created and relied on by the parties, most prominently in form of the ISDA MA.[316] First and foremost, freedom of contract is and remains 'the core principle at the heart of the English law of contract'[317] and English courts give the parties a lot of leeway in drafting the content of their agreements.[318] The exercise of this freedom is further supported by the recognition of specificity of contract drafting as well as the technical construction of contracts by the courts, limiting the risk of a transaction being recharacterised.[319] When observed from the viewpoint of horizontal competition between state legal orders, this reluctance becomes a beneficial competitive feature of English law in terms of receptiveness to the normative integrity of an increasing number of transnational legal orders. Specifically, private standards formulated at the transnational level permeate and are validated with minimal interference at the level of the domestic legal order,[320] thus endowing them with the nimbus of formal legal enforceability craved by market participants, above all financial market participants[321]. The framing of this reluctance to insert itself into the functional design of a private regulatory order as a genuine competitive advantage is mirrored in a marketing formulation used by the *Law Society of England and Wales*[322] to emphasise the attractiveness of English law, stating that 'English law is renowned for its *commercial compatibility*'[323]. Indeed, English academics, as well as policymakers and judges as the 'supply side'[324] of law, appear to be acutely aware of the fact that any decision rendered in a specific case at the same time serves as an act of prospective transnational market regulation entailing significant financial incentives.[325] Specifically, these decisions constitute a significant factor in the international attractiveness of a

[316] G Cordero-Moss, 'Introduction' in G Cordero-Moss (ed), *Boilerplate Clauses, International Commercial Contracts and the Applicable Law* (Cambridge University Press 2011) 3, noting 'a low degree of interference by the courts' under English contract law.
[317] E Peel, 'The common law tradition: application of boilerplate clauses under English law' in G Cordero-Moss (ed), *Boilerplate Clauses, International Commercial Contracts and the Applicable Law* (Cambridge University Press 2011) 129.
[318] *Ibid*.
[319] K Clark, 'Economic Stability and the Creation of Stable Contract and Property Rights' (n312) 22.
[320] G Shaffer, 'Theorizing Transnational Legal Ordering' (2016) 12 Annual Review of Law and Social Science 231, 239.
[321] K Pistor, 'A Legal Theory of Finance' (2013) 41 Journal of Comparative Economics 315, 321.
[322] The professional association for solicitors in the jurisdiction of England & Wales.
[323] The Law Society, *England and Wales: A world jurisdiction of choice* (2019) 4 [emphasis added].
[324] H Eidenmüller, 'The Transnational Law Market, Regulatory Competition, and Transnational Corporations' (n272) 712.
[325] Generally, *ibid* 712-713.

jurisdiction to the global market,[326] which in turn determines whether considerable economic benefits can be reaped by domestic legal and financial services providers (or not).[327]

In a somewhat paradoxical sense, party autonomy in an increasingly interconnected world economy has thus given rise to a new kind of hegemony of national law through its firm entrenchment in international standard form contracts. However, this is not hegemony through parochial insistence of one nation to impose its laws on world trade or finance, but rather by the collective choice of an industry centrally exercised through an industry sector body.[328] Legal literature often subscribes to regulatory competition as the dominant explanatory model in attributing choice of a given law to particular intrinsic features, such as predictability or creditor-friendliness, deemed to best facilitate the needs of international business and finance, albeit in combination with 'soft' factors such as language and history.[329] In the specific case of the OTC derivatives market, a central part of the explanation of the embeddedness of English law would appear to lie in the ISDA contractual architecture's historical genesis[330] and the resulting path-dependency with the emergence of strong network effects in the sense of economic theory. Namely, the initial choice was exercised by the drafters of the ISDA MA[331], who early on adopted, i.a., English law into the ISDA documentary architecture where it has effectively remained locked-in since. As such, the success of English law in the market is, in large part, attributable to its initial inclusion in a model contract, i.e. its

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[326] See, eg, R Goode, *Commercial Law in the Next Millennium* (Sweet & Maxwell 1998) 3 ('It is a tribute to the good sense of the judges of old and their successors that, for the most part, they responded to the challenge [posed by novel commercial instruments] in a positive and constructive way, through a relaxed approach to commercial contracts and a recognition of the importance of upholding reasonable market practice. *It is in no small measure due to them that London can now fairly claim to be the world's leading financial centre.*') [insertion and emphasis added].

[327] See, eg, in the English context, writing extrajudicially, Lord Justice Briggs, 'How has English Law coped with the Lehman Collapse?' (n41) para 6.04 ('The result of the widespread choice of English law (and often jurisdiction) is of course jobs for English lawyers (and accountants), invisible exports and added GDP for the UK').

[328] Observing this phenomenon of a paradoxical new 'hegemony through autonomy' against the background of the 1972 US Supreme Court *The Bremen v Zapata Off-Shore Co* decision, J Bomhoff, 'Back to *The Bremen (*1972): Forum Selection and Worldmaking' in H Muir Watt and others (eds), *Global Private International Law: Adjudication without Frontiers* (Edward Elgar 2019) 24.

[329] See, eg, the overview of comparative factors governing choice of law provided in: PR Wood, *Conflict of Laws and International Finance* (2nd edn, Sweet & Maxwell 2019) paras 3.015-3.037. Although it should be noted, that the list – at least implicitly – also includes several factors constituting network effects, the status of the English language as *lingua franca* and the resulting wide accessibility of English language literature on international finance (*ibid* para 3.034) as an indirect network benefit being a prime example.

[330] Discussed under Chapter 1 § 7.

[331] See, Chapter 1 § 7.A.

institutionalised choice, with market participants subsequently passively endorsing that initial choice rather than positively choosing English law for its perceived merits themselves.[332] Put differently, the ISDA contractual standardisation project's natural culmination was to extend standardisation to choice of law itself, thus making English law the global common industry standard, where it has become ever deeper entrenched due to the beneficial network effects it creates for market participants. Building on economic theory, the primary such direct benefit has been identified as the 'synchronization value'[333] standardised choice of law offers all those users subscribing to it, i.e. synchronising their interactions in a predictable fashion,[334] aside from related indirect network effects such as, for example, a jurisdiction's level of expertise and competence and the quality of its legal services industry[335]. In fact, the pursuit of legal synchronisation value in this sense has a prominent historical antecedent, predating the emergence of the modern nation state and its distinct legal system. Christopher Druzin draws an instructive parallel to the emergence of the medieval Law Merchant as an early example of economic agents, in this case supra-regionally operative merchants, gradually assembling under a uniform body of mercantile rules in order to partake in such a synchronisation value, rather than having to inefficiently navigate an obscure panoply of local rules and customs of varying sources.[336] The transnationally operative economic agents of today instead navigate the range of diverse nation state legal systems that may potentially lay claim to regulate parts of their transactions. As such, in specialised sectors of the global economy, standardised exercise of private law party autonomy in the form of synchronised choice-of-law can today to a large degree be seen to perform as a functional equivalent to the submission under a substantive body of norms such as the ancient *lex mercatoria*. Much in the conceptual mould of the 'globalized localism'[337] described by Boaventura de Sousa Santos as one facet of globalisation, the borderless OTC derivatives market has thus become deeply embedded

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[332] G Cuniberti, 'The International Market for Contracts: The Most Attractive Contract Laws' (2014) 34 Northwestern Journal of International Law & Business 455, 486-487.

[333] SJ Liebowitz and SE Margolis, 'Network Effects and Externalities' in P Newman (ed), *The New Palgrave Dictionary of Economics and the Law* (Macmillan Reference Limited 1998) 671 (cited in: B Druzin, 'Buying Commercial Law: Choice of Law, Choice of Forum, and Network Externalities' (2009) 18 Tulane Journal of International and Comparative Law 1, 17).

[334] B Druzin, 'Buying Commercial Law: Choice of Law, Choice of Forum, and Network Externalities' (n333) 17-19 and 30.

[335] *Ibid* 30.

[336] *Ibid* 31-32.

[337] B de Sousa Santos, *Toward a New Legal Common Sense: Law, Globalization, And Emancipation* (2nd edn, Butterworths LexisNexis 2002) 179.

in the English domestic legal order and vice versa. In this sense, the OTC derivatives market illustrates that the question as to the role of 'the state' as an abstract concept has been superseded by a more nuanced perspective as to the role of specific states and their interplay with transnationally operative sectoral regimes.[338] In allusion to George Orwell's famous turn of phrase, in this environment all states are (formally) equal, but by virtue of strategic and collective exercise of party autonomy some states may be seen to be more equal than others. Rather than pursuing the primacy of private transnational normativity to the exclusion of state legal structures, contractually hardwiring choice of English (and to an extent New York) law into the ISDA contractual architecture has effectively elevated it to the – in a manner of speaking – at the same time statal and transnational *lex causae* of the OTC derivatives market.[339] In the words of Philip Wood, the laws so elected to govern international contracts attain the status of 'international public utilities – ideologies which no longer belong just to the jurisdictions which are their custodian'[340].

Such an observation as to the intertwining of private normative order and particular state law and institutions somewhat blurs the *pro forma* dichotomy of state law and non-legal transnational normativity of private origin in the abstract, which is also manifested at the meta-level of transnational legal coordination; i.e. the realm of private international law.[341] Here, the option of exercising private international law party autonomy in favour of contractual choice of non-state law in national court litigation is as yet systematically excluded under near on all legal systems and private international

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[338] On the broader phenomenon, R Michaels, 'Welche Globalisierung für das Recht? Welches Recht für die Globalisierung' (2005) 69 Rabels Zeitschrift für ausländisches und internationales Privatrecht 525, 532 and 544.

[339] C Avasilencei, 'Balancing Between Domestic and International Contracts in the Post-Crisis Global Markets' in H Muir Watt and others (eds), *Global Private International Law: Adjudication without Frontiers* (Edward Elgar 2019) 457 ('The effectiveness of the ISDA documentation travels globally under the umbrella of two legal orders, which furthermore grants ISDA normativity an epistemological immunity regarding the emancipation-from-the-state critique'); Joshua Karton, including the ISDA MA in his list of examples, identifes this phenomenon as one of the mechanisms driving the fragmentation of transnational contract law along distinct sectoral lines: J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (n290) 173 and 183-185 ('In some sectors, a particular national law is chosen so frequently that it has effectively become the global law of the industry'), *ibid* 183.

[340] PR Wood, *Conflict of Laws and International Finance* (n329) para 3.09.

[341] With private international law here being broadly understood as 'defin[ing] the competent court, applicable law, and status of foreign judgments in transnational settings': H Muir Watt, 'The Relevance of Private International Law to the Global Governance Debate' in H Muir Watt and DP Fernández Arroyo (eds), Private International Law and Global Governance (Oxford University Press 2014) 1.

law codifications.[342] In this way, private international law formally mirrors the *modus operandi* of state law generally, ultimately subjugating non-state normativity through a range of mechanisms.[343] Thus, the end-result of the coordinative exercise performed by private international law is to effectively (re-)nationalise any given transnational transaction by invariably steering it into the purview of and measuring it against a given body of substantive domestic law, whether by application of a conflicts rule or by respecting party choice. This wholesale embrace by private international law of statal legal institutions to ultimately regulate genuinely transnational activity[344] has been criticised on the grounds that the domestic substantive provisions thereby attained fail to suitably cater for the specific needs intrinsic to international transactions.[345] The criticism principally comprises an indictment of domestic substantive law on the grounds that it lacks the evolutionary capacity to keep pace with the rapid developments of international commerce and to provide practical solutions.[346]

However, where a transnational industry collectively engineers the touch-down of its normative regime in a given domestic legal system, such criticism may be alleviated by the fact that this touch-down exerts a transformative impact of transnationalisation on that statal legal system seized upon in this way where it proves responsive to the functional requirements of the transnational sector.[347] As observed by Joshua Karton, the dynamic interaction at the interstices of elected state law and contractual norms created from the bottom up in specialised transnational industry sectors 'is an

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[342] SC Symeonides, *Codifying Choice of Law Around the World: An International Comparative Analysis* (n261) 140-146.

[343] On the various strategies of recognition of non-state norms, which ultimately all amount to maintaining the legal monopoly of the state, R Michaels, 'The Re-State-ment of Non-State Law: The State, Choice of Law, and the Challenge from Global Legal Pluralism' (2005) 51 The Wayne Law Review 1209, 1227-1235.

[344] CA Whytock, 'Conflict of Laws, Global Governance, and Transnational Legal Order' (n7) 118; As observed by the author, within all the three dimensions of private international law, the allocation of authority to regulate transnational activity is consistently state-centric, ie: 'Which *nation's law* should apply? Which *nation's courts* should adjudicate disputes arising out of the activity? And if *one nation's courts* decide such a dispute, should *other nation's courts* recognize and enforce that decision?' *ibid* 120-121 [emphases added].

[345] Representative of this criticism is: KP Berger, *The Creeping Codification of the New Lex Mercatoria* (n55) 23 ('Whether traditional, mixed or progressive, the international nature of transnational commercial relationships always involves special interests of merchants and businessmen active in cross-border trade and does not necessarily lend itself to a regulation through domestic laws.').

[346] With specific examples, *ibid* 26-27.

[347] G Shaffer and T Halliday, 'With, Within, and Beyond the State: The Promise and Limits of Transnational Legal Ordering' (n92) 1000 ('States are not only actors in creating transnational legal norms, implementing them, and shaping local practice. They also are sites for transformation in which states' participation in transnational processes transforms them.').

underappreciated aspect of transnational contractual governance, less glamorous and more straightforward than the formal promulgation or informal evolution of transnational law rules'[348]. However, this underappreciated dynamic is at the very forefront of processes of legal transnationalisation engendered by the highly specialised sectors of the 21st century.

Tying in with this observation, albeit from the reverse perspective, Christopher Whytock conceptualises the often underappreciated implication of *domestic* courts in the regulation of *transnational* activity as 'transnational judicial governance'.[349] In his account, domestic courts' 'global governance function' is twofold, consisting of a jurisdictional side, namely the allocation of global governance authority on the one hand, as well as substantive, i.e. the determination of the rights and obligations of transnational actors, on the other.[350] A central feature of Whytock's account is the recognition of the necessity to broaden 'traditional litigant-oriented perspectives'[351] to capture the effects of such determinations also on transnational third parties influenced in their future behaviour, which he refers to as the 'transnational shadow of the law'[352].[353]

b) Jurisdictional Incubator for a Transnational Order: English Law as the Global Law of the OTC Derivatives Market

ISDA, as the private custodian of the OTC derivatives market, is acutely aware of the complex interplay and potential friction between state legal norms and the standardised nature of its derivatives documentation; i.e. that the ISDA MA is far from an 'autonomous contract'[354]. This is observable in the design of the ISDA MA itself and how it *de facto* limits the actual exercise of party autonomy by market participants by restricting choice of law to the specific legal orders contained within the model choice of law clauses in the quasi-legislative ISDA MA, which arguably is even more crucial than disincentivising market participants from amending the substantive contractual language of individual provisions. This is because in so doing, ISDA contractually

[348] J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (n290) 183.
[349] CA Whytock, 'Domestic Courts and Global Governance' (2009) 84 Tulane Law Review 67, 71.
[350] *Ibid* 72.
[351] *Ibid* 73.
[352] *Ibid* 72 and 118-119.
[353] *Ibid* 97.
[354] On the phenomenon of an international commercial contract being drafted without due regard payed to the interplay with an ultimately governing law and thus as if it existed autonomously: G Cordero-Moss, *International Commercial Contracts: Applicable Sources and Enforceability* (n142) 74-75.

channels legal questions arising in everyday commercial practice with regard to the standardised contractual infrastructure, and by extension the market's operation, exclusively into these jurisdictions. It is here that the fact the governing law provision is flanked by the default jurisdiction clause in Sec. 13(b) ISDA MA form, setting out jurisdiction in favour of the home courts of the respectively chosen law, becomes particularly relevant.[355] From a commercial perspective, this parallelism or 'package deal'[356] of choice of law and jurisdiction is above all a matter of common sense. This is because a court not applying the *lex fori* to a case, but foreign rules with which it is not familiar will for one result in a more time consuming process and generate additional costs.[357] In those jurisdictions, such as the United States and also England and Wales, where foreign law is a matter of fact to be pleaded and proved by expert evidence by the party basing its claim or defence on it,[358] these costs would have to be borne by the parties.[359] Similarly, as regards the economic end-result, jurisdictions following the alternative model of determining the applicable law *ex officio*, such as in continental Europe, externalise these costs to the parties as part of the court fees.[360] More importantly for present purposes, however, from a broader market perspective, the quality of substantive contract law in terms of its predictability depends in large part on a lively legal praxis of its interpretation and progressive clarification by a capable judiciary aided by competent subject-matter lawyers.[361] This, however, is premised on a steady stream of cases.[362] Where the productive nexus of substantive contract law and its domestic forum is broken, domestic courts are starved of this opportunity, thus also reducing the positive network effect of legal certainty of a *jurisprudence constante* from which other subscribers to that contract law could previously benefit.[363]

In this context, somewhat paradoxically, regime autonomy rather than party autonomy might be a factually more accurate description, with OTC derivative counterparties'

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[355] This choice of 'jurisdictional touchdown' will be discussed in Chapter 3.

[356] G Wagner, *Rechtsstandort Deutschland im Wettbewerb: Impulse für Justiz und Schiedsgerichtsbarkeit* (CH Beck 2017) 84 [own translation].

[357] G Rühl, 'Party Autonomy in the Private International Law of Contracts: Transatlantic Convergence and Economic (n281) 178.

[358] Regarding the English principle, L Collins and J Harris (eds), *Dicey, Morris and Collins on the Conflict of Laws* (16th edn Sweet & Maxwell 2022) paras 3.002-3.004, 3.013.

[359] G Rühl, 'Party Autonomy in the Private International Law of Contracts: Transatlantic Convergence and Economic Efficiency' (n281) 178.

[360] *Ibid* 178-179 with further references.

[361] G Wagner, *Rechtsstandort Deutschland im Wettbewerb: Impulse für Justiz und Schiedsgerichtsbarkeit* (n356) 84.

[362] *Ibid*.

[363] *Ibid*.

exercise of party autonomy reduced by default to selecting one of the two governing laws on offer on the restricted menu of choices in the ISDA MA.[364] The laws of the so selected jurisdictions, to employ a metaphor, in this way effectively serve as an 'incubator' for the further development of the transnational regulatory order in a complex interplay with the laws and courts of the selected state.[365] This has immediate economic advantages. For one, it reduces transaction costs, since the requisite costs of familiarisation with the effect of both dispositive and particularly mandatory rules on transactions, i.e. the 'learning investment', is limited to that law.[366] What is more, from the perspective of buttressing the standardised nature of the transnational ISDA regime, by, from the outset, limiting as far as possible the private regulatory order's points of contact with other state legal orders than those envisaged, ISDA also limits potential instances of interference in the transnational normative regime it has established, as codified in its contractual architecture.[367]

From the perspective of international market participants, the end result is a trade-off. Namely, market participants can expect to benefit from synchronisation value and a high degree of legal certainty by subscribing wholesale to the ISDA contractual architecture, regardless of perhaps diverging substantive preference, such as, e.g., for a more 'end-user friendly' law from the perspective of end-user market participants. It bears emphasis that, of course, counterparties are legally free to adopt any law of their choosing not anticipated in the ISDA MA. However, in doing so they forego the range of network benefits detailed above, including an established case law generated in the 'incubator', as well as of the supplementary ISDA Opinions and guidance in the form of special subject matter Memoranda and so forth. Mitigating the legal uncertainty incurred as a result, at the very least produces substantial additional costs in the form of legal advice. It is in this light that ISDA's note of caution that '[p]arties that wish to elect a governing law for the 2002 Agreement other than English law or the laws of the

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[364] C Avasilencei, 'Balancing Between Domestic and International Contracts in the Post-Crisis Global Markets' (n339) 458 ('(…) ISDA documentation is a financial innovation which, in order to be effective, relies on limiting the party autonomy with respect to choice of law').

[365] Both as regards interpretation and enforcement: See, eg, G Cordero-Moss, 'International Arbitration and Commercial Contract Interpretation: Contract Wording, Common Law, Civil Law and Transnational Law' in P Lindskoug and others (eds), *Essays in Honour of Michael Bogdan* (Juristförlaget 2013) 33 and 40-42.

[366] A Engert, 'Networks and Lemons in the Market for Contract Law' in H Eidenmüller (n279) 305.

[367] See, J Golden, 'Interpreting ISDA terms: when market practice is relevant, as of when is it relevant?' (n129) 304 noting that as 'the limited choice of law and choice of forum provisions that have been on offer can best be understood as stemming from [the] desire to ensure standardization'.

State of New York should carefully consider such an election with their legal advisers'[368] is to be understood.

A more recent development must be viewed in this context. While the ISDA menu of available choices of law, aside from English law, traditionally consisted also of New York law, the latter has not attained comparable transnational reach, but has rather been used predominantly in domestic transactional settings. In 2018, however, ISDA brought some movement into the established *status quo* by publishing French and Irish law versions of the 2002 ISDA MA to enrich the menu of available default choices, containing some technical adaptations to ensure operationality under the new governing law.[369] This occurred against the background of the UK's then imminent withdrawal from the EU, in order to provide counterparties the choice of an EU member state-law and in doing so the choice between a common and a civil law system option.[370] However, absent any initiative of top-down regulatory intervention,[371] it seems somewhat doubtful that the novel choices will, at least in the near future, come to rival the entrenched English law default by virtue of broad bottom-up adoption from market participants. What applies to EU market participants, applies all the more outside of the EU context, as divergence from the English law standard does not serve market participant interests, particularly as regards market making dealer banks. Principally, this is due to two reasons: First, any such development would in practice carry the risk of sacrificing transnational standardisation on the altar of true party autonomy. Namely, proliferation of different governing law options comes at the cost of legal fragmentation in the market, watering down network benefits associated with the English law standard.[372] Second, and potentially even more damaging, such legal fragmentation could potentially create a novel source of legal or documentation basis risk impeding

[368] ISDA, *User's Guide to the 2002 ISDA Master Agreement (2003 Edition*) 38; Near identical language can be found in the ISDA User's Guide to the 1992 ISDA Master Agreement.

[369] ISDA, News Release, *ISDA Publishes French and Irish Law Master Agreements*.

[370] *Ibid*.

[371] Noting the potential need for external pressure, eg, via an EU directive to the effect that EU member state market participants must migrate to the French Law ISDA MA: A Downe, 'The Choice of French Law for the new ISDA Master Agreement: Part 1' (2019) 34 Butterworths Journal of International Banking and Financial Law 658, 662; A Downe, 'The Choice of French Law for the new ISDA Master Agreement: Part 2' (2020) 35 Butterworths Journal of International Banking and Financial Law 262, 266.

[372] See, J Golden, 'Interpreting ISDA terms: when market practice is relevant, as of when is it relevant?' (n129) 304.

the smooth functioning of transnational (re-)hedging chains.[373]

§ 2 Case Study: Party Autonomy 'Transnationalised': What Scope for Mandatory Rules of Domestic Law upon Targeted Touchdown of the ISDA MA in English Law?

As discussed under § 1.D.III, by virtue of broad global recognition of private international law party autonomy, counterparties subscribing to ISDA's standardised choice of law provision are principally able to successfully opt out wholesale of an otherwise applicable national law. As already discussed, this pivotal feature is of particular relevance in a varied global jurisdictional landscape, where, by deliberate design, the ISDA MA contractual provisions interlock with only two state laws, one of which is English law. Namely, where mandatory provisions or doctrines of an otherwise applicable law are deemed unfavourable to or even defeating the purpose of the particular type of transaction entered into and the commercial goal thereby pursued, touch-down in the strategically elected legal order is paramount. It is here, at the boundaries of freedom of contract and of mandatory provisions, that the relative intrinsic differences between domestic laws matter.

What is more, from a transnational legal basis risk perspective, arguably even more important than the derivatives-friendliness of the law itself, is that choice-of-law is exercised in a synchronised fashion throughout the network of bilaterally linked (re-)hedging chains. As touched upon under § 1.D.III, for counterparties to actually profit from the legal certainty effect that comes from having elected a domestic law that broadly facilitates freedom of contract and by extension the transnational instrument under which they conduct their transactions, this requires that this choice is – as a crucial first step – validated at the meta-level of private international law and the mandatory provisions it encompasses. As insightfully stated by Fabrizio Cafaggi and Sandrine Clavel, writing with regard to transnational contractual networks, network coordination through (sectoral) exercise of private international law party autonomy may ultimately fail, since even '[i]f one single law is applied to all interdependent contracts, there is a risk that other laws with strong geographical links to these contracts might apply on a mandatory basis (notably lois de police or the law of the place of

[373] *Ibid* (fn 12); Also noting this danger, but more optimistic in his conclusion for the market standard potential of a French law governed ISDA MA, A Downe, 'The Choice of French Law for the new ISDA Master Agreement: Part 1' (n371) 662.

performance of the contract) and undermine the coordination objective pursued by the choice of a single law.'[374]

A number of more recent English court cases, centring not on *lois de police* but on the proper construction of Art. 3(3) of the Rome Convention[375] and specifically the meaning of 'elements relevant to the situation', prove illuminating in how crucial the first step of validation at the meta-level of private international law is with regard to the functioning of the ISDA MA as an 'industry-wide constitution'[376] for the cross-border OTC derivatives and the multitude of economically interlinked bilateral transactions it governs.

A. *Banco Santander Totta v Transport Companies*

The English Commercial Court decision, *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors*[377] subsequently upheld unanimously on appeal,[378] centred on the validity of obligations created under nine long-term interest rate swaps entered into between Banco Santander Totta ('BST') a Portuguese bank, and four Portuguese public sector transport companies[379] (the 'Transport Companies') between 6 June 2005 and 2 November 2007. BST, as claimant, *inter alia*, sought declarations that the Transport Companies' obligations under the swaps were legal, valid and binding and enforceable in accordance with their respective terms.[380] Conversely, the Transport Companies, i.a., sought declarations to the opposite effect.[381] Incidentally, the case was the first to be heard in the newly established Financial List.[382]

I. General Background

The commercial background to the dispute was as follows. The long-term (varying from 9 to just under 20 years)[383] interest rate swaps were, with one exception, entered into

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[374] F Cafaggi and S Clavel, 'Interfirm Networks across Europe: a private international law perspective' (n282) 213.

[375] Convention 80/943/EEC on the law applicable to contractual obligations [1980] OJ L 266/1 ('Rome Convention').

[376] A Gelpern and M Gulati, 'CDS Zombies' (n39) 357.

[377] [2016] EWHC 465 (Comm).

[378] See, § 2.III.1.

[379] Companhia de Carris de Ferro de Lisboa, SA; Sociedade Transportes Collectivos do Porto SA; Metroplitano de Lisboa EPE; and Metro do Porto SA.

[380] *Banco Santander* (n377) at [12].

[381] *Ibid* at [15].

[382] *Ibid* at [23]; On the Financial List, see Chapter 3 § 3.D.

[383] *Ibid* at [151(1)].

with a transport company at fixed rates, with the bank conversely as the floating rate payer.[384] The Transport Companies entered into the fixed-rate swap obligations as a means of interest rate management; i.e. to bring down their borrowing/financing costs on existing debt obligations.[385] However, these were not plain vanilla floating-fixed interest rate swaps. Rather, they were structured (*exotic*) swaps that included a formula to calculate the transactions' payment streams, figuratively referred to as 'snowball swaps'[386]. Very generally, the 'snowball' provision embedded in these contracts was that once the reference rates (at the time Euribor and Libor) moved outside contractually predefined upper and lower limits (barriers) the fixed-rate payment obligation was adapted in that it had a 'spread' added to it.[387] Notably, the effect of these adaptations was cumulative with the spread added to the fixed rate at each payment date (a 'memory feature') and – but for one transaction – subject to leverage, hence the 'snowball' element.[388]

By entering into the interest rate swaps, BST incurred significant market risk through exposure to changing interest rates. Rather than retain it on its books, however, it hedged this exposure on equal but opposite terms with another Portuguese bank, Banco Santander de Négocios Portugal SA ('BSNP'), which in turn re-hedged the exposure with a Spanish bank, Santander Spain, through back-to-back contracts, each documented on ISDA terms and subject to a choice of English law provision.[389] For the time periods that interest rates stayed within the contractually defined upper and lower barriers, the Transport Company counterparties stood to benefit from a very competitive low fixed interest rate. However, were the referenced interest rates to move beyond the barriers in either direction, the Transport Companies, through the snowball structure embedded in the swaps, stood to make payments calculated on the basis of a substantially increased interest rate. This was the trade-off inherent in the transaction over its considerable lifetime, or, as Blair J put it in his judgment referencing a statement by an economist of one of the Transport Companies, '[t]he *quid pro quo* for

[384] *Ibid* at [6]
[385] *Ibid* at [221(3), (10) and (11)].
[386] *Ibid* at [6].
[387] *Ibid*.
[388] *Ibid*.
[389] *Ibid* at [152]; For clarification, BST and BSNP were both subsidiaries of the Banco Santander group and subsequently merged, with all contracts between BSNP and Santander Spain novated to BST, *ibid* at [153].

the "very, very aggressive risk" [the Transport Companies] assumed was the benefit of a very low fixed rate of interest while the barriers held good'[390].

While, initially, reference rates did indeed remain within the limits of the barriers and the transactions proved economically beneficial to the Transport Companies in the first years, the onset of the GFC in 2007 radically altered the macroeconomic climate in which these transactions operated, with interest rates lowered to near zero and remaining there as of 2009.[391] By way of illustration, whereas in Autumn of 2008 the EURIBOR reference rate stood at around 5%,[392] it fell to around 0.5% in the course of only 6 months.[393] The impact of sustained low interest rates on the swaps transactions, strongly amplified through the contractual snowball structure, was such that the costs for the swaps increased 'very substantially'[394]. Thus, the Transport Companies ceased to make payments under the swaps in 2013.[395] On 1 October 2015, the swaps' cumulative mark-to-market value was from the Transport Companies' perspective negative in excess of EUR 1.3 billion with unpaid amounts exceeding EUR 270 million.[396]

All individual swap transactions entered into between BST and the Transport Companies were documented under ISDA MAs containing a choice of English law and jurisdiction.[397] In light of their refusal to meet their payment obligations, BST commenced proceedings against the Transport Companies in the High Court in May 2013, seeking declarations that their obligations under the swaps were legal, valid and binding, as well as seeking an order for payment of the sums due, or, alternatively, equivalent damages.[398]

Notwithstanding the ISDA MA governing law clause in favour of English law, in response, the Transport Companies sought to raise defences under mandatory Portuguese law.[399] Notably, in this case, these consisted of the very provisions and doctrines potentially conflicting with the operation of OTC derivative transaction discussed under § 1.D.II. Firstly, they sought to leverage the aleatory nature of

[390] *Ibid* at [622].
[391] *Ibid* at [8]
[392] *Ibid* at [580]
[393] *Ibid* at [582]; See for a detailed chronological summary, *ibid* at [578]-[586].
[394] *Ibid* at [8]
[395] *Ibid* at [9].
[396] *Ibid* at [8]-[9].
[397] *Ibid* at [3].
[398] *Ibid* at [12].
[399] *Ibid* at [14(2)].

derivatives in their favour and contended that the swaps were unlawful and thus void 'games of chance' pursuant to the Portuguese rules on gaming and betting and *ordre public*, or, alternatively speculations.[400] Secondly, the Transport Companies contended that an 'abnormal change of circumstances' had occurred in the guise of continuously near zero reference interest rates following the GFC regarding seven of the nine swaps, making these liable to be terminated.[401] In this respect, any chances of their Portuguese law defences ultimately being successful hinged on the (partial) applicability of Portuguese law to the swap agreements, each expressly governed by English law.[402]

II. The Proper Construction of Art. 3(3) Rome Convention

Crucially, for present purposes – in the face of a valid[403] agreement on the applicability of English law – the question of whether there was any residual scope for provisions of Portuguese law in turn hinged on the applicable choice-of-law rules and in the present case, as Blair J put it, on 'the correct application of the European rules contained in [the Rome Convention]'[404].

By way of a brief introductory excursion into the current English legal landscape on choice of law on contract, English common law rules in this area had in the course of the 20thcentury largely been superseded by EU law, first by the Rome Convention, subsequently succeeded and replaced by the Rome I Regulation.[405] The Rome Convention was enacted and given force of law in the UK by the Contracts (Applicable Law) Act 1990, which by statutory instrument came into force on 1 April 1991.[406] The – as an EU Regulation – directly applicable Rome I Regulation[407] entered into force on

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[400] *Ibid* at [14(2)(a)].

[401] *Ibid* at [14(2)(b)]; Namely, pursuant to Art. 437 of the Portuguese Civil Code, a manifestation of the civil law doctrine of *clausula rebus sic stantibus*: *ibid* at [459].

[402] Beyond the mandatory Portuguese law defence, the Transport Companies argued that they did not have requisite capacity to enter into the swaps, which were therefore void (*ibid* at [14(1)]) and that the swaps breached various provisions of the Portuguese Securities Code (*ibid* at [14(2)]. These issues of the case are, however, not determined by the *lex contractus*, with the former determined under the law of the jurisdiction of entity incorporation (*ibid* at [361], citing Haugesund Kommune v Depfa ACS Bank [2010] EWCA Civ 579 at [27]) and the latter arising in tort (*Banco Santander* (n377) at [362]). As the focus, for present purposes, is on the scope for standardisation by choice of a governing contract law, these issues will be disregarded in the following. Ultimately Blair J found for BST on both points.

[403] This was not in dispute between the parties: *Banco Santander* (n377) at [345].

[404] *Ibid*.

[405] L Collins and J Harris (eds), *Dicey, Morris and Collins on the Conflict of Laws* (n358) paras 32.001-32.003.

[406] The Contracts (Applicable Law) Act 1990 (Commencement No 1) Order 1991.

[407] (n264).

7 July 2008 for contracts entered into as from 17 December 2009.[408] These substantive provisions have not suddenly become obsolete with the UK's exit from the EU, but continue to operate under English law. After the UK's withdrawal from the EU under the terms set out in the Agreement on the Withdrawal of the United Kingdom of Great Britain and Northern Ireland form the European Union and the European Atomic Energy Community ('Withdrawal Agreement') on 31 January 2020, the Rome I Regulation (EU) was incorporated into English law in slightly modified form as 'retained EU law' via Sec. 3 of the European Union (Withdrawal) Act 2018 ('Withdrawal Act') and currently continues to operate as Rome I Regulation (Retained).[409]

In light of this, going back chronologically, the following picture in terms of temporal application emerges.[410] The Rome I Regulation (Retained) applies to all English law contracts concluded as from 1 January 2021.[411] The Rome I Regulation (EU) applies to contracts concluded as from its entry into force on 17 December 2009 to 31 December 2020.[412] Finally, the Rome Convention temporally applies to all contracts concluded in the time before 17 December 2009 but after its incorporation into UK law on 1 April 1991.

Against this introductory background, since all swap contracts considered by Blair J were concluded before the Rome I Regulation came into effect (and after 1 April 1991), they were subject to the continued effect of the predecessor Rome Convention.[413] The crucial question Blair J had to answer was whether the specific facts of the case, as contended by the Transport Companies, met the test contained in Art. 3(3) Rome Convention as 'a qualification'[414] of the principle of party autonomy enshrined in Art. 3(1) Rome Convention.

According to Art. 3(1) Rome Convention: 'A contract shall be governed by the law chosen by the parties. The choice must be expressed or demonstrated with reasonable

[408] Arts 24 and 25 Rome I Regulation; L Collins and J Harris (eds), *Dicey, Morris and Collins on the Conflict of Laws* (n358) para 32.011.
[409] See, in detail, *ibid* paras 1.068, 1.074, 32.013.
[410] Cf, *ibid* para 32.021.
[411] Arts 24 and 25 Rome I Regulation; L Collins and J Harris (eds), *Dicey, Morris and Collins on the Conflict of Laws* (n358) para 32.013.
[412] See, Arts 28 and 29 Rome I.
[413] *Banco Santander* (n377) at [349].
[414] *Ibid* at [351].

certainty by the terms of the contract or the circumstances of the case. By their choice the parties can select the law applicable to the whole or a part only of the contract.'[415]

However, the qualifying paragraph of Art. 3(3) Rome Convention provides:

'The fact that the parties have chosen a foreign law, whether or not accompanied by the choice of a foreign tribunal, shall not, *where all the other elements relevant to the situation at the time of the choice are connected with one country only*, prejudice the application of rules of the law at the country which cannot be derogated from by contract, hereinafter called "mandatory rules".'[416]

As such, affirming the applicability of Art. 3(3) Rome Convention would have had the legal consequence of curtailing the effectiveness of the counterparties' choice of English law in that it '[did] not prejudice the application of "mandatory rules" of Portuguese law'[417]. As a consequence, potentially, i.e, if the rules were indeed held to be 'mandatory', the domestic touchdown of the transactions in English law would – figuratively speaking – only have been partially successful, with a significant part of the landing ground made up of mandatory 'derivatives-hostile' doctrines of Portuguese law, as already touched upon in general terms in this chapter under § 1.D.II.

While Blair J's holdings were based on Art. 3(3) Rome Convention, the provision substantively corresponds with Art. 3(3) Rome I Regulation and is, therefore, of equal practical relevance to contracts concluded as of 17 December 2009.[418]

Staying with the touchdown metaphor, the crucial question was whether the transactions had, in fact, for the purposes of private international law, ever successfully achieved lift-off into the inter- or transnational realm in the first place, or were from the beginning merely domestic Portuguese transactions in the sense that as provided for under Art. 3(3) Rome Convention '*all the other elements [other than the choice of English law] relevant to the situation at the time of the choice are connected with one country [i.e., Portugal] only*'. Being able to demonstrate this was, in fact, the case was the first hurdle the Transport Parties had to cross in order to rely on their Portuguese

[415] Cited verbatim in *ibid* at [348].

[416] Also cited verbatim in *ibid* at [351] [emphasis added].

[417] *Ibid* at [346].

[418] Pursuant to Recital 15 of the Rome I Regulation no substantial change was intended as compared with Art 3(3) Rome Convention and changes in wording were due to the article's alignment with the parallel constraints on choice of law under Art 14 of Regulation (EC) No 864/2007 on the law applicable to non-contractual obligations ('Rome II Regulation'): G-P Calliess, 'Article 3 Rome I' in G-P Calliess and M Renner (eds), Rome Regulations: Commentary (3rd edn, Wolters Kluwer, Alphen aan den Rijn 2020) para 51; R Wagner, 'Der Grundsatz der Rechtswahl und das mangels Rechtswahl anwendbare Recht (Rom I-Verordnung)' (2008) 33 Praxis des internationalen Privat- und Verfahrensrechts 377, 380.

law defences.[419] Put simply, in the words of the presiding judge, '[t]he question is whether this is a purely domestic case'[420].

1. *The Provision's Language as a Result of its Legislative Genesis and its Purpose*

In order to understand the language of Art. 3(3) Rome Convention, it is necessary to understand that it was the result of a compromise struck within the Convention's draft working group between the positions of two expert factions from the then European Economic Community states.[421] Namely, while the continental European side pursued an approach under which choice, a merely subjective factor, *per se*, would be insufficient to ensure the application of the elected law without the 'correcting factor' of 'another foreign element', the UK experts pursued a more liberal and unconstrained version of party autonomy, arguing that such a correcting factor would prove too burdensome on parties' freedom to exercise their choice of law.[422] In the end, both sides settled on the provision in its stated form, meaning that while the parties' choice of law would indeed take effect, it would in a non-international, purely domestic 'situation', only do so within the constraints imposed by mandatory domestic rules of the objective proper law.[423] The legislative purpose of the provision is, against this background, understood as guarding against parties' ability to circumvent domestically mandatory rules, simply and exclusively by virtue of having elected a foreign law to govern their transaction.[424] In such a case, choice of the foreign law is traditionally understood to merely constitute a so-called reference by incorporation – and not a valid choice of law – meaning that the so elected law is incorporated into the contractual fabric of the transaction and only amounts to a further contractual term.[425] Which elements ought to be considered to characterise the 'situation' as purely domestic or international remained, however, open to question.

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[419] With the second being able to demonstrate that the defences relied upon were indeed mandatory under Portuguese law.

[420] *Banco Santander* (n377) at [373].

[421] M Giuliano and P Lagarde, *Report on the Convention on the law applicable to contractual obligations,* OJ C 282/19, 31.10.1980, Article 3, para 8.

[422] *Ibid*; See, also, F Maultzsch, 'Rechtswahl und ius cogens im Internationalen Schuldvertragsrecht' (2011) 75 Rabels Zeitschrift für ausländisches und internationales Privatrecht 60, 66-67.

[423] P Nygh, *Autonomy in International Contracts* (n286) 55; Noting the provision's relative 'leniency' from a comparative perspective: SC Symeonides, *Codifying Choice of Law Around the World: An International Comparative Analysis* (n261) 117.

[424] F Ragno, 'Article 3' in F Ferrari (ed), *Concise Commentary on the Rom I Regulation* (2nd edn, Cambridge University Press 2020) para 54

[425] *Ibid* with further references.

2. A Statist-Territorial versus a Transnational-Deterritorialised Reading

The Transport Companies' case was that, for the purposes of Art. 3(3) Rome Convention, all elements relevant to the situation at the time of the choice of English law were connected with Portugal, with the provision thus engaged, with BST taking the opposite position.[426]

Underlying their respective contention was the Transport Companies' reading of what constituted a purely domestic situation for the purposes of Art. 3(3) Rome Convention as encompassing only the objective connection with another territorial jurisdiction. In their trial submissions they framed the question faced by an English court in determining the applicability of Art. 3(3) Rome Convention in relation to the case in following terms: 'Is there any element linking the contractual dispute (…) *to the legal system of a country other than Portugal*, which the English Court would recognise as a connecting factor under its law of conflict (other than the choice of law and jurisdiction clauses)?'[427]. Thus, the Transport Companies' legal position crucially rested on '[t]he contention that the court should be looking for connecting factors to a particular legal system'[428]. Under their proposed test, where no such link existed, Art. 3(3) Rome Convention would be engaged and Portuguese mandatory rules would become applicable to the English law governed swaps. When applying such an exclusively statist-territorial reading of Art. 3(3) Rome Convention, the disputed swap transactions factually constituted the perhaps prototypical purely domestic contract: BST, a Portuguese bank, entered into the contracts with publicly-owned Portuguese counterparties; the place for performance of payment obligations was to be Portugal for both parties; the payment obligations were created in Portugal; finally, neither were the swaps conditional upon other contracts nor other contracts conditional upon the swaps or in any other way mutually affected.[429]

In contrast, BST submitted that 'elements of a "non-domestic" or "international" character which point[ed] outside Portugal should not be ruled out, *whether or not such elements point[ed] towards a particular country*'[430]. Under this interpretation of Art. 3(3) Rome Convention, identification of mere '"international factors", i.e. factors

[426] *Banco Santander* (n377) at [358].
[427] *Ibid* at [392] [emphasis added].
[428] *Ibid* at [393].
[429] As submitted by the Transport Companies: *ibid* at [408].
[430] *Ibid* at [389] [emphasis added].

with no connection to a particular legal system'[431], would suffice to disapply Art. 3(3) Rome Convention.[432]

In order to substantiate the existence of such an international factor, BST implicitly argumentatively deployed the transnational nature of the OTC derivatives market. Specifically, BST sought to bring to bear the OTC derivatives market's unique contractual configuration by pointing to the – objectively international – back-to-back hedging contracts it had entered into with counterparties located outside of Portugal.[433] In the eyes of the Transport Companies, these, however, merely constituted 'random, additional foreign elements'[434] and as such were entirely irrelevant to the question of the application or disapplication of Art. 3(3) Rome Convention, which encompassed 'contractual obligations in any situation involving a choice between the law of different countries [pursuant to Art. 1(1) Rome Convention]'[435].[436]

Against this background, the decisive question can be ostensibly framed as one of interpretation, by a national court, of a supranationally harmonised conflicts rule arising in the context of financial market transaction. The case extends beyond this, however. Namely, it is an illustrative test case for interlegality in an English court. In a subject area commonly seen as the epitome of globalisation, the case brought to light the tension, already much in the focus of socio-legal analyses, between the specific functional rationality of a specialised transnational sectoral regime, the OTC derivatives market, and the territorial rationality of the nation-state.[437] In the case at hand, the tension played out in what systems-theory grounded socio-legal scholarship has long identified as the centre or core of the legal system, a domestic court,[438] under the guise of a what may be termed the opposing poles of 'statist-territorial' versus

[431] *Ibid* at [390].
[432] *Ibid*.
[433] *Ibid* at [376].
[434] *Ibid* at [384].
[435] *Ibid*.
[436] *Ibid*.
[437] Seminally, from a socio-legal perspective building on Luhmannian systems theory: A Fischer-Lescano and G Teubner, 'Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law' (2004) 25 Michigan Journal of International Law 999-1046, who state at 1019 (albeit not in the specific context if interpretation of a norm of private international law) that 'choice of national law must be superseded by an orientation to transnational but sectoral regimes which lead to different principles of conflicts law'.
[438] N Luhmann, *Das Recht der Gesellschaft* (Suhrkamp 1995) 321.

'deterritorialised-transnational'[439] judicial interpretation of a provision of private international law.

3. Authority for a Statist-Territorial Reading: The High Court's Interpretation of Art. 3(3) Rome Convention in *Dexia Crediop SpA v Comune Di Prato*

As a key pillar in support of their argument, the Transport Companies relied on a Commercial Court decision handed down the year before, which exhibited broad similarities to their case and in which the proper interpretation of Art. 3(3) Rome Convention had also been a central feature.[440]

In *Dexia Crediop S.P.A. v Comune Di Prato*[441], Walker J was faced with a factual background very much similar to the *Banco Santander* case. In broad terms, Comune di Prato ('Prato'), an Italian local authority, had entered into six interest rate swaps with Dexia Crediop SpA ('Dexia'), an Italian bank, as part of a broader scheme of public debt restructuring.[442] The six individual swaps subsequently entered into by the counterparties, between 4 December 2002 and 29 June 2006,[443] were all documented under an ISDA MA, in the 1992 Multicurrency-Cross Border version, containing a choice of English law and jurisdiction.[444] Swaps subsequent to the first transaction were entered into as a means of unwinding previous positions with the end-result of there remaining one open swap position between the counterparties.[445] When that swap's mark-to-market value became increasingly negative from the perspective of Prato, it ceased making further payments under its payment obligations.[446] In light of this, Dexia commenced proceedings in the English High Court under the ISDA MA governing law and jurisdiction clause, pursuing a claim for payments due under the swap as well as declaratory relief to the effect, validity and enforceability of the swap.[447]

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[439] J Böhle, 'Die Abwahl zwingenden Rechts vor staatlichen Gerichten in Inlandsfällen' (2019) 27 Zeitschrift für Europäisches Privatrecht 72, 90 who in this very context voices his approval as regards an interpretative approach involving 'detachment from an understanding of internationality that is necessarily territorial, ie related to space' [own translation].

[440] *Banco Santander* (n377) at [364](8).

[441] [2015] EWHC 1746 (Comm).

[442] *Ibid* at [2].

[443] Thus, also falling into the temporal scope of application of the Rome Convention.

[444] *Dexia* (n441) at [5] and at [7]; The counterparties also made use of additional components of the ISDA contractual architecture, incorporating the 2000 ISDA Definitions as well as the 1998 ISDA FX and Currency Option Definitions, at [5].

[445] *Ibid* at [10].

[446] *Ibid* at [12].

[447] *Ibid* at [14].

Prato, i.a.,[448] relied on what Walker J termed 'the mandatory rules defence'[449] or '[f]inancial services & civil law defences'[450] under Italian law. As in the *Banco Santander* case, the availability of these defences hinged on the applicability of Art. 3(3) Rome Convention and the interpretation of 'all the other elements relevant to the situation at the time of the choice [being] connected with one country [in this case, Italy] only'[451].

Prato contended that such an exclusive connection to Italy existed, since both parties were incorporated in Italy, Italy was where the swaps were entered into and obligations had to be performed, and Italy was where counterparty communication took place.[452]

Dexia, in objecting to this interpretation, put forward two arguments which, it posited, pointed away from a purely domestic Italian situation. First, Dexia referred to the ISDA standard form that constituted the basis of the counterparties' contractual relationship, observing that it was 'drafted by international working groups for routine use in derivative transactions in the international capital markets'[453] and asserting that its inherent goal of promoting legal certainty and the 'significance and global nature of ISDA'[454] had been recognised as such by the English courts.[455] Second, Dexia pointed to the pervasive market practice, which it followed in the present case, under which it had entered into back to back hedging swaps in the international market with a counterparty based outside of Italy, and, in so doing, likewise had been relying on the ISDA 'industry standard'[456] documentation.[457]

Walker J, rejecting Dexia's arguments as 'misconceived'[458], resolved the opposing positions in favour of Prato. Regarding Dexia's international standard form argument, although acknowledging the ISDA MA's character as an international standard form and its intrinsic purpose of promoting legal certainty, he found that neither it nor the 'significance and global nature of ISDA'[459] constituted an 'element in the situation'

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[448] Including contesting the swaps' validity on the grounds of lack of capacity to enter into them, illegality, and misrepresentation by Dexia: *ibid* at [15].
[449] *Ibid* at [15(3)].
[450] *Ibid* [Heading of Section E].
[451] *Ibid* at [10].
[452] *Ibid* at [209].
[453] *Ibid* at [210(1)].
[454] *Ibid* at [210].
[455] *Ibid* at [210(1)].
[456] *Ibid* at [210(2)].
[457] *Ibid*.
[458] *Ibid* at [211].
[459] *Ibid*.

connected to a country other than Italy.[460] As for Dexia's back-to-back hedging arrangements with a counterparty outside of Italy, he did not deem these significant regarding the *inter-partes* relationship with Prato, since this was 'a matter for Dexia alone'[461]. What is more, Walker J noted that the possibility of assignment of the swap obligations to a non-Italian counterparty had not been envisaged.[462] Therefore, Dexia's conscious decision to involve a non-Italian counterparty through a cross-border hedging transaction, subsequent in time to the swaps with Prato, in order to offset the interest rate risk it had in this way taken on, was 'completely external to "the situation" at the time that choice of law was agreed'[463].[464]

Thus, under Walker J's interpretation, neither use of the international standard form, nor the commercial reality of the global OTC derivatives market, namely that the Prato-Dexia swap latched on to an international web of interrelated hedging contracts, were capable of transforming the domestic Italian situation into an international one. Art. 3(3) Rome Convention was as a consequence engaged and Prato was able to rely on its Italian law defences.[465] Indeed, that Prato in this way successfully crossed the preliminary private international law hurdle of Art. 3(3) Rome Convention ultimately determined the outcome of the case. Since Prato's other defences did not succeed, the Italian law defences proved decisive and the ultimate outcome rested on Art. 30.6[466] of the Testo Unico della Finanza ('TUF'), Italy's consolidated law on financial markets and investment services.[467] The provisions of the TUF were held to be a mandatory rule of Italian law for the purposes of the Rome Convention and thus applicable to the case.[468] Furthermore, the swaps were held to be a contravention of the provision, with the legal consequence of nullity under Art. 30.7 TUF.[469] Dexia's main claim thus failed.[470]

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[460] *Ibid*.
[461] *Ibid*.
[462] *Ibid*.
[463] *Ibid*.
[464] *Ibid*.
[465] *Ibid* at [212].
[466] Which, given that the swaps were executed by 'off-site offer' (English translation of the Italian statutory definition given *ibid* at [218]), gave Prato a statutory right to a '7 day cooling off period' after entering into the swaps and obliged Dexia to state its counterparty's right of withdrawal in its forms: *Ibid* at [43].
[467] *Ibid* at [44] and at [213].
[468] As also conceded by Dexia, *ibid* at [213].
[469] As Dexia's forms did not state Prato's right to withdrawal: *Ibid* at [44] and at [249].
[470] *Ibid* at [44] and at [251].

4. *Blair J's Transnational-Deterritorialised Reading of Art. 3(3) Rome Convention*

In formulating what he considered the appropriate legal test under Art. 3(3) Rome Convention, Blair J in the *Banco Santander* case neither accepted the Transport Companies' submissions, nor did he follow Walker J's interpretation in *Dexia*.

Noting that as there existed a valid choice of (English) law, the key issue centred solely on what was the correct interpretation of 'all elements relevant to the situation', rather than on objective connecting factors otherwise relevant in its absence.[471] Crucially, noting the provision's wording as deliberately general as a result of its legislative genesis as compromise, Blair J determined that in terms of applying the proper enquiry as to the relevant 'elements' under Art. 3(3) Rome Convention 'there [was] no reason to limit it to elements which would point to the applicable law being that of *another* country'[472].[473] Rather, Blair J stated that '[f]or the purposes of Art. 3(3) of the Rome Convention, in determining whether, choice of law aside, all the other elements relevant to the situation are connected with one country only, the enquiry is not limited to elements that are local to another country, but includes elements that point directly from a purely domestic to an international situation.'[474]

Mindful of the commercial reality of the global OTC derivatives market and, crucially for present purposes, at least implicitly recognising its immanent network logic, and thus '[r]espectfully disagreeing with the conclusion in *Dexia v Comune di Prato* in these regards'[475], Blair J first identified two general 'elements' in financial transactions that may potentially be relevant for the purposes of Art. 3(3) Rome Convention. First, this was the use of standard documentation of an international pedigree such as that provided by ISDA.[476] Second, he pointed to 'the fact that transactions are part of a back-to-back chain involving other countries'[477]. Primarily with regard to the latter point, Blair J relied on English expert commentary and case law on connected contracts cited by BST in support; namely on *Dicey, Morris & Collins on The Conflict of Laws*[478]

[471] *Banco Santander* (n377) at [394]-[396].
[472] *Ibid* at [396] [emphasis in the original].
[473] *Ibid*.
[474] *Ibid* at [404].
[475] *Ibid*.
[476] *Ibid*.
[477] *Ibid*.
[478] Collins, L (ed), *Dicey, Morris and Collins on the Conflict of Laws* (15th edn, Sweet & Maxwell 2012) para 32.087.

and *Caterpillar Financial Services v SNC Passion*[479]. In the *Caterpillar* decision, Cooke J had relied, i.a., on the Dicey, Morris and Collins commentary on 'string contracts' to disapply Art. 3(3) Rome Convention on the basis of an 'intimate connection' between a loan agreement and a shipbuilding contract in that case.[480] According to the relevant passage in *Dicey, Morris & Collins,* Art. 3(3) Rome Convention is not engaged 'where the transaction is apparently located in one country only, but where in fact there are other elements "relevant to the situation" (which is wider than relevant to the contract) which are located in another country: (…) such as *string contracts* or insurance arrangements'[481].

Importantly, Blair J explicitly recognised the interplay of both the potentially relevant international elements he had identified in OTC derivatives market practice; namely, the centrality of ISDA standard form documentation,[482] as the very means of facilitating the transnational back-to-back contracting through the legal certainty it provided in the market. As illustratively formulated by Blair J, the 'orderly contractual structure'[483] that the documentary standard provided was crucial to legal certainty since '[i]f it is left out of account as an element in determining the application of mandatory provisions of domestic law, the prospect arises of different legal rules applying to the swaps and to the back-to-back transactions, which themselves may be, and in this case were, hedged.'[484] Crucially, in this brief formulation Blair J summarised the functional prerequisite to effective OTC derivatives market functioning, recognition of its nature as a transnational contractual network and the consequent necessity of minimisation of (transnational) legal basis risk,[485] and – in contrast to the Commercial Court's *Dexia* decision – evidenced the court's responsiveness to both.

Blair J went on to consider eight and, for present purposes, to identify five central international 'elements of situation', which pointed away from a purely domestic situation in the case before him:[486]

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[479] [2004] EWHC 569 (Comm) (at [19] relying on the then – contentwise identical to para 32.087 of the 15th edn – para 32.069 of the 13th edn of Dicey, Morris and Collins).

[480] *Ibid* at [27].

[481] L Collins and others (eds), *Dicey, Morris and Collins on the Conflict of Laws* (n478) para 32.087.

[482] *Banco Santander* (n377) at [398] ('Documentation is of the essence of such transactions in the capital markets').

[483] *Ibid* at [400].

[484] *Ibid*.

[485] See, in detail, Chapter 1 § 7.D.IV.2.c); Discussed in the overarching evaluations of the cases under § 2.IV.

[486] *Banco Santander* (n377) at [409] and summarised at [411].

First, BST's unqualified right to assign its rights and obligations under any transaction to a (potentially) non-Portuguese bank as provided in the Schedule to the ISDA MA over the multi-year term of the executory transactions was 'an *actual*[487] element relevant at the material time [of contract conclusion and choice of law]'[488], which was not consistent with a purely domestic contract.[489]

Second, the counterparties' use of the Multicurrency-Cross Border Form of the 1992 ISDA MA was not an element relevant to the situation connected with Portugal.[490]

Third, the fact that BST had laid off its interest rate exposures incurred through the Transport Company swap transactions by entering into back-to-back hedging contracts on ISDA documentation, governed by English law, with BSNP, a Portuguese bank, which had, in turn, itself entered into back-to-back hedging contracts with Santander Spain, was an element relevant to the situation not connected with Portugal.[491] In this regard, Blair J, also proved sensitive to OTC derivatives market reality by not formalistically focusing on the *inter-partes* contractual relationship between BST and BSNP, by virtue of the latter's interposition in the larger back-to-back structure, but factoring in the actual economic substance of the transnational hedging chain and the fact that, ultimately, the exposure was transferred to Santander Spain, a Spanish bank.[492] In other words, BST was, at least in terms of economic outcome, hedging with a Spanish bank. As put by Blair J these kinds of arrangements were 'entirely routine'[493] with regard to OTC derivative transactions.

Fourth, Blair J, in addition, also considered the 'practical necessity'[494] of BST having to have had a relationship with a bank outside of Portugal, namely Santander Spain, for the purposes of relying on its pricing and risk calculation capabilities regarding the swaps as relevant.[495]

Fifth, what counted against a situation connected with Portugal only was that the swaps 'were concluded in an international market for OTC interest rate derivatives'[496], since three of the Transport Companies had entered into (other) swaps with international

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[487] The Transport Companies had contended that this right to assign was merely a *potential* element of the situation: *Ibid* at [409(1)].
[488] *Ibid* [emphasis in the original].
[489] *Ibid* at [409(1)(ii)].
[490] *Ibid* at [409(3)].
[491] *Ibid* at [409(5)].
[492] *Ibid* at [409(5)(iii)].
[493] *Ibid*.
[494] *Ibid* at [411].
[495] *Ibid* at [409(5)(i)] and at [409(5)(iv)].
[496] *Ibid* at [409(6)(i)].

banks on ISDA terms and the remaining one with Portuguese banks, with the majority, however, also on ISDA terms.[497] This, as put by Blair J, 'clearly demonstrate[d] that the BST swaps were anchored in a market that [was] necessarily international in its operation'[498].

In light of all of the above, Blair J held that the disputed swaps were not purely domestic contracts, since '[a]ny other conclusion (…) would undermine legal certainty'[499]. As a result, the question of whether the rules underlying the Transport Companies' '*rebus sic stantibus*' and 'game of chance' defences were 'mandatory' under Portuguese law did not arise with regard to the material outcome of the case.[500] Consequently, BST succeeded on the main issues and Blair J overall decided in favour of the bank,[501] declaring the Transport Companies' obligations under the English law governed swaps as legal, valid and binding, enforceable in accordance with their respective terms.[502]

B. Cementation of the Deterritorialised Reading in English Case Law

The Commercial Court's *Banco Santander* decision marked a stark contrast to the statist-territorial reading of Art. 3(3) Rome Convention in *Dexia*, factoring in the transnational commercial market reality of the OTC derivatives market. Rather than remaining an isolated outlier to this effect, however, the approach has since been approved and applied, and thus further cemented, in English jurisprudence.

I. The Court of Appeal's Decision in *Banco Santander*

The Transport Companies subsequently appealed the order of Blair J to the Court of Appeal in relation to seven swaps.[503] Their appeal centred on the proper meaning of Art. 3(3) Rome Convention, with the activation of their Portuguese law defence hinging

[497] *Ibid* at [409(6)(i)].
[498] *Ibid* at [409(6)(ii)].
[499] *Ibid* at [411].
[500] *Ibid* at [412] and at [414]; By way of background, the avenue of Art 7(1) Rome Convention and an examination of mandatory third-country rules with which the situation had a close connection, in this case Portugal and, consequently, potential mandatory rules of Portuguese law within the meaning of Art 7(1) Rome Convention was closed off to the court since the United Kingdom had made a reservation to this paragraph as permitted under Art. 22(1)(a) Rome Convention via Sec 2(2) Contracts (Applicable Law) Act 1990. See, L Collins and J Harris (eds), *Dicey, Morris and Collins on the Conflict of Laws* (n358) para 32.230.
[501] *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWCA Civ 1267 at [753].
[502] *Ibid* at [2].
[503] *Ibid* at [1]-[2].

on its engagement.[504] Under their submissions, the first and central ground for appeal for present purposes, was that Blair J had been wrong to hold that 'elements relevant to the situation' for the purposes of Art. 3(3) Rome Convention could be interpreted as including genuinely international factors that did not point to another country in the sense of a territorial jurisdiction.[505] As a second alternative ground for appeal, the Transport Companies contended that Blair J had been wrong to take into account the specific international elements he had identified in his application of Art. 3(3) Rome Convention.[506]

Sir Terence Etherton MR, delivering the judgment of the court, dismissed the appeal in its entirety.[507] The Court of Appeal agreed with the assertion that '"elements relevant to the situation" are not confined to factors connecting the contract to a particular country in a conflict of laws sense'[508] and the necessity of engaging in a narrow construction of Art. 3(3) Rome Convention as a limited exception to the principle of party autonomy.[509] The only question to be asked as part of the legal test for the purposes of Art. 3(3) Rome Convention was thus 'whether the situation is purely domestic'[510].

As for the actual elements taken into account by the judge at first instance in his evaluation, the Court of Appeal emphasised that the benchmark for interfering with the result of the 'evaluative exercise'[511] performed by the judge at first instance was a strict one, requiring that 'there was an error in principle or that it was plainly wrong'[512]. What is more, highlighting its authoritative future role in financial market dispute resolution, the scope for reaching such a determination was itself restricted further by the fact that the appeal was from the Financial List[513], an expert and specialist court.[514] Against this background, the Court of Appeal held that the Transport Companies' contention that the respective elements identified by Blair J were irrelevant, since they had not been known to them, held no water, as they 'underscored the international nature of the swaps market, of which objectively the [Transport Companies] were or should have been aware from the ISDA forms used, the assignment provisions in the Schedule of the

[504] *Ibid* at [24].
[505] *Ibid* at [25(1)].
[506] *Ibid* at [25(2)].
[507] *Ibid* at [76].
[508] *Ibid* at [43].
[509] *Ibid* at [46].
[510] *Ibid* at [57].
[511] *Ibid* at [67].
[512] *Ibid*.
[513] See, in more detail, Chapter 3 § 3.D.
[514] *Banco Santander* (n501) at [67].

Master Agreements, and the fact that hedging arrangements such as those used in the present case were entirely routine and foreseeable'[515]. Therefore, the Court of Appeal also dismissed the Transport Companies' second ground for appeal.[516]

It bears emphasis that the correct interpretation of Art. 3(3) Rome Convention as a gateway to the Transport Companies' law defences was not merely an academic issue in the litigation. Blair J had at first instance opined that the provision on which the change of circumstances defence rested, Art. 437 of the Portuguese Civil Code, was not mandatory[517]. On appeal from the Transport Companies, the Court of Appeal opined that Art. 437 of the Portuguese Civil Code was indeed mandatory for the purposes of Art. 3(3) Rome Convention and – had Art. 3(3) Rome Convention applied – would have been engaged in the light of the GFC's impact on interest rates[518]. Thus, under a statist-territorial interpretation and the application of Portuguese mandatory law, the case would have had the entirely opposite outcome.[519]

The Transport Companies' notices of appeal had included an application for the Court of Appeal to make reference to the European Court of Justice on the interpretation and scope of Art 3(3) Rome Convention.[520] However, although the case had centred on the question of the meaning of a European convention provision, as part of EU law, and was referable to the European Court of Justice[521], the Court of Appeal declined to make reference on the basis that this was neither necessary nor otherwise appropriate, since 'the proper interpretation of the words "all the other elements relevant to the situation … are connected with one country only" [was] clear'[522]. Finally, the Transport Companies ultimately did not appeal the decision to the UK Supreme Court, as BST and the Portuguese state reached a settlement, under which, i.a., the Transport Companies would abide by the Court of Appeal decision holding the litigated swaps valid and enforceable, with BST in return extending a long-term loan at a beneficial

[515] *Ibid* at [65].
[516] *Ibid* at [68].
[517] *Ibid* at [506].
[518] *Ibid* at [70]-[75]; Notable, however, is the note of caution sounded by Longmore LJ on the issue of non-derogability, *ibid* at [79]-[81].
[519] *Ibid* at [75].
[520] *Ibid* at [26].
[521] By virtue of the Court of Appeal acting as appeal court pursuant to Art 2(b) of the First Protocol ('Brussels Protocol') to the Rome Convention, at the time in force in the UK through the Contracts (Applicable Law) Act 1990 (Commencement No 2) Order 2004, SI 2004/3448 art 2(a).
[522] *Banco Santander* (n501) at [77].

interest rate to the Portuguese state, which according to the Portuguese finance ministry allowed for reducing the costs associated with the swaps by 36.8%.[523]

II. The Court of Appeal's Decision in *Dexia*

Soon after the *Banco Santander* litigation had come to its conclusion, Dexia's appeal[524] of the Commercial Court's judgment in favour of Comune di Prato came before the Court of Appeal.

Once again, the central ground of appeal rested on the proper construction of Art. 3(3) Rome Convention. Dexia contended that the judge was wrong to hold that Art. 3(3) Rome Convention was engaged in the case.[525] The Court of Appeal, its judgment delivered by Longmore LJ, decided that it was bound by its *Banco Santander* decision.[526] As such, it held that the judge at first instance had been wrong in disregarding the international elements submitted by Dexia, on the grounds they did not constitute elements relevant to the situation under its territorial reading.[527]

Since, based on this wrong assumption, no evaluation as to whether all elements relevant to the situation were in fact located in a country other than England for the purposes of Art. 3(3) Rome Convention had been performed at first instance, it now fell to the Court of Appeal to conduct the requisite evaluation.[528]

Although distinguishable from the *Banco Santander* case, since there existed no right to assign, nor was there a question of Dexia having to rely on an entity based in another country for the purposes of pricing or risk calculation,[529] the Court of Appeal identified two elements, considered central by Blair J in his *Banco Santander* decision, as also present in *Dexia*. Namely, these were the use of ISDA's international standard documentation, as well as Dexia's routine entry into back-to-back transactions with bank counterparties outside of Italy.[530]

The Court of Appeal elaborated on both elements in greater detail. Regarding the first element, the Court of Appeal gave weight to the following factors. As the ISDA MA is

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[523] As reported contemporaneously by Reuters, 'Portugal, Santander agree to end litigation over swaps' (London, 12 April 2017).

[524] Which had been heavily relied upon by the Transport Companies in *Banco Santander*.

[525] *Dexia Crediop SPA v Comune Di Prato* [2017] EWCA Civ 428 at [28(1)].

[526] *Ibid* at [128].

[527] *Ibid*.

[528] *Ibid* at [129].

[529] *Ibid* at [131]; *Banco Santander* (n377) at [409(1)(i)-(ii)] and [409(5)(i)-(ii)].

[530] *Dexia* (n525) at [131] noting that the additional element of the international nature of the swaps market observed in *Banco Santander* was 'somewhat less obvious' in the present case.

the standard form of master agreement of ISDA, there was deemed to be 'at once an international element rather than a domestic element associated with any particular country'[531]. The fact that the ISDA MA in its 'Multi-currency – Cross Border form' rather than the 'Local Currency – single Jurisdiction form' had been used was also deemed important.[532] Also considered important was the fact that the ISDA MA form, which the counterparties had signed was in English, although this was not their first language.[533]

With regard to the international back-to-back transactions, the Court of Appeal approved Blair J's approach in *Banco Santander* in determining that those underlying the *Dexia* case were equally routine, observing that 'the fact that they were made with banks outside of Italy shows just how international the swaps market actually is'[534].

Notably, in concluding its evaluation, the Court of Appeal held that '*each* of these two factors'[535], namely use of the ISDA MA and the entering into back-to-back hedges, was 'enough on its own to demonstrate an international and relevant element in the situation'[536]. This 'international dimension'[537] precluded any assertion that '"all elements (other than choice of law) relevant to the situation" [were] located in a country other than England as (in this case) Italy'[538].[539]

Significantly, the Court of Appeal devoted its own paragraph to the network and transnational legal basis risk dimension inherent in the global OTC derivatives market and the corresponding need for legal certainty, citing the concerns already identified by Blair J in his *Banco Santander*[540] decision by stating that '[i]f the mandatory local laws of a party are to be applied to any individual swap contract, there is a real risk that back-to-back security will quickly become illusory'[541].

In conclusion, again stressing its central concern with legal certainty, the Court of Appeal held that since '[i]t should be possible for parties to swap contracts to know where they are in relation to Article 3(3) of the Rome Convention without the detailed

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[531] *Ibid* at [132(1)].
[532] *Ibid* at [132(2)]; Cf Chapter 1 § 7.D.I on the different ISDA MA versions.
[533] *Ibid* at [132(3)].
[534] *Ibid* at [133].
[535] *Ibid* at [134] [emphasis added].
[536] *Ibid*.
[537] *Ibid*.
[538] *Ibid*.
[539] *Ibid*.
[540] *Banco Santander* (n377).
[541] *Dexia* (n525) at [135].

comparison of the facts of one case with the facts of another case'[542], the presence of a single international element should be enough to disapply Art. 3(3) Rome Convention and the recourse to mandatory domestic rules.[543]

The Court of Appeal made no reference to having contemplated a possible request for a preliminary ruling from the European Court of Justice on the proper interpretation of Art. 3(3) Rome Convention.

III. UK Supreme Court's Refusal of Permission to Appeal the *Dexia* Decision

On 18 December 2017, the Supreme Court drew a final line under the *Dexia* litigation by refusing to grant permission to appeal, on the basis that there existed 'no arguable point of law of general public importance' as the case had been the subject of judicial decision as well as reviewed on appeal.[544] What is more, as in the Court of Appeal decision in *Banco Santander*, the Supreme Court closed off the route to the European Court of Justice by declining to request a preliminary ruling.[545] Specifically, it did so on the grounds that 'the case involves the application of a clear set of words to specific facts and there is no reason to restrict "the elements relevant to the situation at the time of the choice" further'[546]. The avenue to the European Court of Justice is now, of course, closed off for good regarding the interpretation of the provision as retained EU law. After Brexit, and completion of the implementation period provided for in the Withdrawal Agreement under Sec. 6 of the European Union (Withdrawal) Act 2018, English courts are no longer bound by any principles laid down, or any decisions made by the European Court of Justice, nor can they any longer refer any matter to it.[547] Thus, it is to be expected that since the English courts' broad interpretative approach to Art. 3(3) Rome Convention and, by extension, now Rome I Regulation (Retained) will – looking towards the future – be insulated from potentially differing developments under EU law,[548] its deterritorialised reading will become ever more firmly entrenched

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[542] *Ibid* at [137].

[543] *Ibid*; This aspect is emphasised by J Böhle, 'Die Abwahl zwingenden Rechts vor staatlichen Gerichten in Inlandsfällen' (n439) 78.

[544] UK Supreme Court, *Permission to Appeal results – December 2017 and January 2018*, 3.

[545] *Ibid*; Although the question may at the time have been referred under Art 2(a) of the First Protocol ('Brussels Protocol') to the Rome Convention, in force in the UK through the Contracts (Applicable Law) Act 1990 (Commencement No 2) Order 2004, SI 2004/3448 art 2(a).

[546] UK Supreme Court, *Permission to Appeal results – December 2017 and January 2018*, 3.

[547] L Collins and J Harris (eds), *Dicey, Morris and Collins on the Conflict of Laws* (n358) para 1.076.

[548] With the potential consequence of an interpretive divergence between English and Continental European approaches towards choice of law as regards purely domestic transactions developing: J von Hein, 'Grenzen der Rechtswahl bei derivativen Geschäften zwischen inländischen Vertragsparteien

in English jurisprudence.

IV. Recent Italian Local Authority Swaps Decisions

The above prognosis appears to be borne out in two more recent cases. The deterritorialised interpretive matrix with regard to Art. 3(3) Rome Convention established by Blair J in *Banco Santander* and subsequently cited with approval by the Court of Appeal in both the *Banco Santander* and *Dexia* appeals was relied upon in two further English High Court Cases, decided within only a few weeks of each other, again centring on the validity and enforceability of swap transactions concluded with Italian local authorities.

1. *Dexia Crediop S.p.A. v Provincia di Pesaro e Urbino*

In the case of *Dexia Crediop S.p.A. v Provincia di Pesaro e Urbino*[549], the claimant, once more the Italian bank Dexia, sought declarations to the effect that two interest rate swap transactions entered into with the Defendant, the Italian municipal authority of Pesaro and Urbino ('Pesaro') in 2003 and 2005,[550] on the basis of a 1992 (Multicurrency – Cross Border) ISDA MA form, were valid, lawful and binding on the parties.[551] The election made by the parties in the ISDA MA and Schedule provided for the express choice of English law.[552] In the process of largely granting Dexia's application for summary judgment for declaratory relief, Eggers KC,[553] amongst other issues, once again had to decide whether Art. 3(3) Rome Convention was engaged.[554] Dexia, drawing on the established recent case law, contended that an 'international element' disapplying Art. 3(3) Rome Convention and thus rendering irrelevant any investigation into the question of mandatory rules of Italian law, was 'plainly' present.[555] As Dexia contended, an international element existed, i.a., first, in the guise of the documentation of the transactions under international standard documentation,

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(Art. 3 Abs. 3 Rom I-VO)' in S Grundmann, H Merkt, PO Mülbert (eds), *Festschrift für Klaus J Hopt zum 80. Geburtstag am 24. August 2020* (De Gruyter 2020) 1416; Recently, for example, the German Federal Court has in a different subject-matter context indeed evidenced a contrasting approach to interpreting Art 3(3) Rome I Regulation: BGH, judgment of 29 November 2023 – VIII ZR 7/23.

[549] [2022] EWHC 2410 (Comm).

[550] Thus, again within the temporal scope of application of the Rome Convention: *Ibid* at [64].

[551] *Ibid* at [15]-[16].

[552] *Ibid* at [68].

[553] Sitting as Deputy Judge of the High Court.

[554] *Dexia* (n549) at [69].

[555] *Ibid* at [76(3)]

the ISDA MA, in its multi-currency form.[556] Second, Dexia contended that an international element for the purposes of Art. 3(3) Rome Convention was present on the basis of Dexia having hedged its exposure incurred under the transactions with Pesaro through back-to-back swaps with market participants outside Italy, as 'was usual and reasonably foreseeable to Pesaro'[557].[558]

The judge, after having liberally cited verbatim the recent jurisprudence laying out the appropriate deterritorialised reading of Art. 3(3) Rome Convention,[559] held that 'given the nature of the Transaction Documents being based on the ISDA Master Agreement, there is no scope for allowing any mandatory rules of Italian law – should there be such laws – to displace, under Article 3(3), the express choice of English law (…)'[560]. With regard to Dexia's reliance on back-to-back hedging arrangements, the judge found he could not rely on this aspect as providing a sufficient international element, since he did not have these swap transactions before him.[561]

Against this background, the judge held that the swaps were governed by English law, giving broad effect to party autonomy in accordance with Art. 3(1) Rome Convention.[562] In so doing, notably, he applied and followed the test as laid down by the Court of Appeal in its *Dexia* decision, namely that the presence of a single 'international element',[563] here the use of ISDA MA form, was sufficient to disapply Art. 3(3) Rome Convention.

2. *Banca Intesa Sanpaolo S.p.A. and Dexia Crediop v Comune di Venezia*

In the case of *Banca Intesa Sanpaolo S.p.A. and Dexia Crediop v Comune di Venezia*[564] the claimants, two Italian banks (the 'Banks') sought declarations that certain interest rate transactions they had entered into with the Italian local authority of Venice ('Venice'), documented under a 1992 ISDA MA, were valid and binding, with Venice seeking declarations that they were not. As Foxton J remarked in his introduction, '[b]ehind that simple symmetry lurks a complex set of questions raising disputes of pure fact, and of Italian and English law, some of them with potentially profound

[556] *Ibid* at [76(3)(a)].
[557] *Ibid* at [76(3)(b)].
[558] *Ibid* at [76(3)(b)].
[559] *Ibid* at [77].
[560] *Ibid* at [78].
[561] *Ibid* at [79].
[562] *Ibid* at [80].
[563] See, *Dexia* (n525) at [134].
[564] [2022] EWHC 2586 (Comm).

implications for the sanctity of English law contracts'[565], including the contention by Venice that the transactions breached rules of Italian law which had the status of 'mandatory rules of law' for the purposes of Art. 3(3) Rome Convention and were void and/or unenforceable as a result[566]. In determining whether Art. 3(3) Rome Convention was engaged, Foxton J started off by quoting the Court of Appeal's *Dexia* decision in that 'the critical question therefore, is whether, apart from the ISDA law and jurisdiction clause "all the other elements relevant to the situation are connected with one country only"'[567]. Foxton J then laid out the deterritorialised interpretive matrix of international elements towards construing Art. 3(3) Rome Convention, as established by Blair J in *Banco Santander*[568] and the Court of Appeal's approving application to the facts of the case in *Dexia*, before '[a]pplying that guidance'[569] to the present case before him. In doing so, Foxton J relied on four elements present, which made it 'clear beyond argument'[570] that the transactions under consideration were not at the time of contracting connected only with Italy within the meaning of Art. 3(3) Rome Convention.[571] Approaching the genesis of the disputed transactions chronologically, and as regarded the force of the argument for internationality 'with the icing rather than the cake'[572], Foxton J considered relevant, firstly, the fact that various non-Italian banks were invited to tender for the swap transactions envisaged by Venice.[573] Secondly, the transactions themselves were documented 'on standard international documentation, in the form of the 'Multicurrency – Cross Border form' ISDA Master Agreement'[574] with the Euro, 'an international currency and one of the key currencies of the international swaps market'[575] as the underlying currency. Thirdly, '[i]t was objectively foreseeable, given their routine nature, that one or both of the [Claimant] Banks would enter into a back-to-back hedging contract with a bank outside Italy'[576], and Dexia had indeed hedged its resulting exposures under the transactions with Barclays Bank in London. Notably, Foxton J held that although Banca Opi (claimant bank Banca Intesa

[565] *Ibid* at [2].
[566] *Ibid* at [2(iii)] and at [331].
[567] *Ibid* at [338].
[568] *Banco Santander* (n377).
[569] *Banca Intesa Sanpaolo* (n564) at [2].
[570] *Ibid* at [341].
[571] *Ibid*.
[572] *Ibid* at [341(i)].
[573] *Ibid*.
[574] *Ibid* at [341(ii)].
[575] *Ibid*.
[576] *Ibid* at [341(iii)].

Sanpaolo's predecessor in title)[577] had also done so, but with an Italian Bank in the Intesa Sanpaolo Group, itself an international group, this did 'not affect the routine and objectively obviously foreseeable prospect of banks entering into back-to-back-swaps in the international swaps market in respect of contracts such as the Transactions'[578]. Lastly, which in the eyes of Foxton J made the case for internationality 'much stronger' than it had been regarding Comune di Prato, the transactions on the facts of the present case formed part of a larger transactional package, involving both the transfer of an existing interest rate swap in place between Venice and US bank Bear Stearns to the Banks, in order to effectively wind that transaction up, stating that 'not only, therefore, was an important aspect of the arrangements of which the Transactions formed part an international swap transaction (on the same ISDA form) between Venice and the Irish affiliate of a New York bank, but the Transactions were entered into as part of a package which included a three-way contract between Venice, the Banks and that US Bank'[579]. Against this overall background, Foxton J held that since Art. 3(3) Rome Convention was as a result not engaged, the reliance on mandatory Italian law already 'faile[d] at the first hurdle'[580].

C. Overarching Evaluation of the Decisions: A Cosmopolitan Choice of Law

The legal position settled on by the English courts as regards the (dis-)application of Art. 3(3) Rome Convention/Rome I Regulation as a restriction of private international law party autonomy is highly significant in two respects. First, it proves sensitive to the particular functional market logic of the global OTC derivatives sector. Namely, it reflects its nature as a transnational contractual network of bilateral, economically interdependent transactions, necessitating the mitigation of transnational legal basis risk, which – second – tying in with the larger point of evolving legal paradigms, proves to be a significant and highly illustrative stepping stone in the moulding of state legal institutions in the shadow of transnational normativity.[581]

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[577] *Ibid* at [18].
[578] *Ibid* at [341(iii)].
[579] *Ibid* at [341(iv)].
[580] *Ibid* at [342].
[581] On this transformative impact as component of the process of transnational legal ordering: G Shaffer and T Halliday, 'With, Within, and Beyond the State: The Promise and Limits of Transnational Legal Ordering' in (n92) 1000-1001.

I. The Rejection of a Statist-Territorial Reading of Art. 3(3) Rome Convention as Closing the Gateway for Transnational Legal Basis Risk

As the decisions demonstrate, the specific limits on private law party autonomy codified under Art. 3(3) Rome Convention/Rome I Regulation, although not prescribing a particularly high bar to internationalise a transaction and thus disapply the provision,[582] have the potential to become particularly problematic, when that threshold is not met in terms of connecting to another country against the background of the commercial reality of the global OTC derivatives market. This is because a statist-territorial reading of the provision proves wholly insensitive and unresponsive to the networked logic that underlies this transnational sector and its contracting practices, premised as they are on repeated as well as frequently cross-jurisdictional back-to-back hedging.[583]

Counterparties make use of their freedom of contract at the contractual level to document their OTC derivative transactions under transnationally standardised ISDA terms.[584] However, transnational contractual standardisation is only effective overall, if it does not shatter and fragment at the meta-level of private international law.[585] It bears remembering that it was, i.a., for this very reason, that the drafters of the ISDA documentary architecture limited choice of law to the two default choices, namely in order to reduce transnational legal basis risk.[586]

Under the Commercial Court's statist-territorial reading of Art. 3(3) Rome Convention in *Dexia*, however, whenever a dealer bank would enter into a swap transaction with a counterparty of the same jurisdiction, documented under the standard ISDA documentation, and providing for the equally standard choice of English law, a cloud of legal uncertainty would hang over the degree of effectiveness of that choice, whenever non-derogable mandatory laws of that jurisdiction come into play and impact upon the economic operation of that transaction.[587] Notably, the scope of impact under Art. 3(3) Rome Convention/Rome I Regulation, once determined to be applicable, is fairly broad in contrast to other restrictions of private international law party autonomy. This is

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[582] See, eg, the examples provided with regard to the successor provision under Art. 3(3) Rome I Regulation, including as relevant elements to the situation under Art 3(3) Rome I all those circumstances (if they lead to foreign country), which would constitute connecting factors in determining the objectively applicable law, including, eg, the principal place of business, place of conclusion of the contract or place of performance: F Ragno, 'Article 3' in F Ferrari (ed), *Concise Commentary on the Rom I Regulation* (n424) para 53.

[583] See, Chapter 1 § 7.D.IV.2.a).

[584] As discussed under Chapter 1 § 7.C.

[585] See, Chapter 1 § 1.III.1.

[586] Discussed under § 7.D.IV.2.c).

[587] Cf the doctrines discussed under § 1.D.II.

because it encompasses the full suite of mandatory domestic provisions, not merely the 'overriding mandatory provisions' as defined under Art. 9(1) Rome I Regulation, which, where these overriding mandatory provisions are those of a foreign country under Art. 9(3) Rome I Regulation, requires the rendering of the performance to cross the comparatively high bar of illegality.[588]

Again, it bears emphasis, that the full force of the detrimental effect of legal uncertainty does not crystallise at the level of the isolated bilateral purely domestic transaction, but within the larger market network of economically connected bilateral, often cross-border, hedging contracts with international dealer banks. These back-to-back transactions are entered into on the basis of the same standardised contractual structure, but importantly also the identical choice of law for the very purpose of legal predictability as regards the synchronous treatment of rights and obligations documented under the standardised ISDA MA provisions.[589] Where domestic mandatory law reorders the rights and obligations under the domestic link of the larger transnational contractual chain, a statist-territorial reading of Art. 3(3) Rome Convention/Rome I Regulation carries the very real threat of a crystallisation of transnational legal basis risk. Figuratively speaking, the orderly transnational flow of financial risk effected between the international dealer-bank market makers on the basis of the ISDA standard documentation is in this way disturbed *ex post*, and – worse still – unpredictably so. It is therefore noteworthy that this particular feature proved a, if not the, crucial consideration both in Blair J's *Banco Santander* and the Court of Appeal's decisions in disapplying Art. 3(3) Rome Convention.[590]

What is more, the responsiveness to the specific objective market reality of a transnational contractual network is reflected also in the fact that Blair J deemed the interposition of a domestic (Portuguese) bank in the first link of a larger international hedging chain irrelevant against the background of the economic substance underlying the contractual structure, with the hedged risk ultimately being transferred to a non-

[588] While conversely, and in contrast to Art 3(3) Rome Convention/Rome I Regulation, Art 9(3) Rome I Regulation offers the forum court discretion, whether or not to trigger it and is limited to mandatory provisions of the place of performance in that '[e]ffects *may* be given to the overriding mandatory provisions of the law of the country *where the obligation arising out of the contract have to be or have been performed* (…)') [emphases added]. On this point in more detail, with a comparison of these provisions: TC Hartley, 'Choice of law, choice of court and mandatory provisions' in B Hess, E Jayme and H-P Mansel (eds), *Europa als Rechts- und Lebensraum: Liber Amicorum für Christian Kohler zum 75. Geburtstag am 18. Juni 2018* (Verlag Ernst und Werner Gieseking 2018) 171-174.

[589] See, B Druzin, 'Buying Commercial Law: Choice of Law, Choice of Forum, and Network Externalities' (n334) 17-19 and 30.

[590] See, *Banco Santander* (n377) at [400] and *Dexia* (n525) at [135] respectively.

domestic (Spanish) bank.[591] This serves as an illustrative example of judicial rejection of a formalistic legal focus on an isolated domestic *inter-partes* bilateral contract, in favour of an explicit recognition of the networked logic underlying the wider inter- or transnational OTC derivatives market.[592] This stands in contrast to the – with limited recent exceptions[593] – common lack of legislative as well as scholarly recognition of the phenomenon of contractual networks, including in private international law, which frequently remains rooted in the frame of bilateral (international) contracting.[594]

In light of this, the presence of an international element, as identified by the English courts, under this interpretation suffices to disapply Art. 3(3) Rome Convention and its successor provisions – and, as Catalina Avasilencei puts it, the decisions are a reflection of the English courts' sensitivity to 'the intrinsic relationship between the global nature of the derivatives market (…) and the contractual architecture, as if it were an objective economic reality'[595]. For present purposes, noteworthy are especially the international elements of documentation of transactions under an ISDA cross-border MA, and the objective market reality of cross-border back-to-back contracting. Notably, under the English courts' view this objective economic reality is also deemed to be foreseeable for the counterparties operating in this market.[596]

II. Judicial Responsiveness to Transnational Legal Basis Risk as an Instance of Cosmopolitan Choice of Law

The emergent English jurisprudence can also be contextualised against the wider theme of this thesis, the transnationalisation of state law, when engaged as a key component of a larger transnational legal order. In rejecting the Commercial Court's *Dexia* decision and holding that in order to characterise a situation as international for the purposes of Art. 3(3) Rome Convention, there need be no connection of the situation to another country, subsequent English decisions have also adopted a genuinely transnational-deterritorialised reading of Art. 3(3) Rome Convention as a means of mitigating

[591] See, (n492).

[592] On the networked character of the global OTC derivatives market, cf Chapter 1 § 7.D.IV.2; Similarly, J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (Cambridge University Press 2020) 320 ('The essence of these decisions is that no such swap on these standardised terms should be considered in isolation, but rather as part of the markets in the main (…)').

[593] F Cafaggi and S Clavel, 'Interfirm Networks across Europe: a private international law perspective' (n282) 204-205.

[594] *Ibid* 203-205.

[595] C Avasilencei, 'Balancing Between Domestic and International Contracts in the Post-Crisis Global Markets' (n339) 461.

[596] See, *Banco Santander* (n501) at [65].

transnational legal basis risk.[597] Namely, under this approach, the presence of genuinely international elements *per se* is sufficient to justify the characterisation of a 'situation' for the purpose of Art. 3(3) Rome Convention as international.[598]

The interpretative approach taken by the English courts as regards Art. 3(3) Rome Convention has received mixed reviews within international legal scholarship and commentary. On the one hand, among other welcoming aspects,[599] it has either – importantly for present purposes – been welcomed for the necessary shift toward a 'functional', rather than merely territorial, understanding of internationality it encompasses,[600] or simply been accepted as the proper interpretative approach to Art. 3(3) Rome I Regulation in legal commentaries[601]. On the other hand, it has also faced criticism on various fronts and to varying degrees.[602] At their core lies a profound

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[597] Thus, although in the interpretation of a different provision than here envisaged, heeding growing calls to align judicial interpretation of existing rules of private international law with the social reality of transnational contractual networks: Notably, F Cafaggi and S Clavel, 'Interfirm Networks across Europe: a private international law perspective' (n282) 243-245.

[598] Most recently agreeing with the English jurisprudence explicitly in light of the transnationally networked character of individual OTC derivative contracts: T Kindt, *Transnationale Verträge im nationalen Recht: Theorie und Dogmatik transnationaler Ordnungsstrukturen am Beispiel von Musterverträgen im Finanzbereich* (Mohr Siebeck 2023) 223 ('For the legally predictable dovetailing of sector-specific contractual networks and contractual chains, as in the cases of Dexia v Prato and Banco Santander v Companhia de Carris de Ferro de Lisboa, the synchronisation of the individual contracts involved is of central importance, whereby the order in which the individual contracts are concluded – which is often random anyway – cannot be decisive') [own translation].

[599] See, eg, R Dias, 'Auslandsbezug des Sachverhalts nach Art. 3 Abs. 3 EVÜ/Rom I-VO und rebus sic stantibus-Klausel des portugiesischen Zivilrechts als nicht parteidisponible Bestimmung' (n196) 615 ('The judgment is carefully reasoned and represents a successful attempt to deal with the dubious rule/exception relationships between provisions of European private international law') [own translation]; M Stürner, '§ 32 Die Rom I-VO' in M Stürner (ed), *Europäisches Vertragsrecht: Institutionelle und methodische Grundlagen, materielles Recht, Kollisionsrecht* (De Gruyter 2021) para 22 ('With a view to the paramount importance of private autonomy (…) a generous interpretation of the notion of internationality seems appropriate') [own translation].

[600] J Böhle, 'Die Abwahl zwingenden Rechts vor staatlichen Gerichten in Inlandsfällen' (n439) 90-91.

[601] L Collins and J Harris (eds), *Dicey, Morris and Collins on the Conflict of Laws* (n358) para 32.228 (regarding Art 3(3) Rome Convention) and para 32.234 (regarding Art 3(3) Rome I Regulation); D McClean and V Ruiz Abou-Nigm (eds), *Morris: The Conflict of Laws* (10th edn, Sweet & Maxwell 2021) para 15-022; F Ragno, 'Article 3' in F Ferrari (ed), *Concise Commentary on the Rom I Regulation* (n424) para 53; PR Wood, *Conflict of Laws and International Finance* (n329) para 7.009 noting that through the interpretation adopted by the Court of Appeal, it has '(…) endorsed the view that art 3(3) is to approached as a limited exception to the principle of party autonomy to choose governing law.'.

[602] For present purposes, the following provides a cursory cross-section: TC Hartley, 'Choice of law, choice of court and mandatory provisions' (n588) 176 stating, with regard to Blair J's *Banco Santander* High Court decision, '[t]hat the result of this ruling, which was upheld by the Court of Appeal, is that Article 3(3) of the Rome Convention – now Article 3(3) of Rome I – will be inapplicable in England to a wide range of financial agreements, just the cases in which, it might be thought, they would be most needed. The justification advanced by Blair J was that this was necessary to ensure legal certainty. The banking community would whole-heartedly agree; their customers might be less sure.'; P Ostendorf,

doctrinal unease with the deterritorialised reading, in that it contravenes the core purpose of the provision in preventing the 'fraude à la loi'[603] by domestic counterparties in a purely domestic scenario,[604] by one-sidedly privileging private international law party autonomy to the detriment of this legislative purpose, thus ignoring the compromise between the two embodied in the provision[605]. As further put by Gilles Cuniberti, as a representative for the critical camp, this interpretative shift, apart from being unpersuasive under 'the traditional perspective'[606] of conflict of laws, is, as he contends, also not defensible from the point of view of seeing 'the extension of the notion of internationality as an acknowledgement of the transnational nature of the derivatives markets and related transactions'[607] since 'this innovative thesis stumbles (…) on an undeniable reality: international finance prefers the application of State laws'[608] with reference to the ISDA choice of law options.[609] This contention is

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'Anforderungen an einen genuinen Auslandsbezug bei einer Rechtswahl im Europäischen Kolllisionsrecht (zu Court of Appeal, 15.6.2017 – Dexia Crediop S.P.A. v Comune die Prato [2017] EWCA Civ 428' (2018) 6 IPRax 630-633 lamenting, ia, that the English courts' understanding of Art 3(3) Rome Convention 'leads to a far-reaching loss of function of the provision, with decisive consequences for the competence of nation states to act in the regulation of (financial) markets', *ibid* 63 [own translation]; G Cuniberti, 'Choice of Law in Domestic Contracts: Towards a right to Access for Foreign Financial Markets?' (n115) 464-471; H-P Mansel, 'Das auf *Swap*-Verträge auf Grundlage des ISDA Master Agreements anwendbare Recht – Rechtswahl und objektiv anwendbares Recht' in B Dauner-Lieb and others (eds), *Festschrift für Barbara Grundewald zum 70. Geburtstag* (Verlag Dr. Otto Schmidt 2021) 736-737 who states that, as far as use of the [Multicurrency – Cross-Border] ISDA MA alone were deemed to be sufficient to disapply Art 3(3) Rome I Regulation, its application 'would be left solely to the whims of the parties' which 'is diametrically at odds with the purpose of the provision', *ibid* 737 [own translation; insertion added]; K Thorn and M Thon, 'Der Auslandsbezug im IPR' in C Benicke and S Huber (eds), National, International, Transnational: Harmonischer Dreiklang im Recht: Festschrift für Herbert Kronke zum 70. Geburtstag am 24. Juli 2020 (Verlag Ernst und Werner Gieseking 2020) 569-583; J von Hein, 'Grenzen der Rechtswahl bei derivativen Geschäften zwischen inländischen Vertragsparteien (Art. 3 Abs. 3 Rom I-VO)'(n546) 1405-1418; J von Hein, 'Art. 3 Rom I-VO' in T Rauscher (ed), *Europäisches Zivilprozess- und Kollisionsrecht EuZPR/EuIPR Kommentar: Band III* (5th edn, Verlag Dr. Otto Schmidt 2023) 116 stating with regard to the English courts' willingness to let use of the [Multicurrency – Cross-Border] ISDA MA and hedging swaps with third country banks suffice for the disapplication of Art. 3(3) Rome Convention that '[t]his generous interpretation is obviously influenced by an interest in the attractiveness of London as a place of jurisdiction (…)' [own translation; insertion added].

[603] F Ragno, 'Article 3' in F Ferrari (ed), *Concise Commentary on the Rom I Regulation* (n424) para 54.

[604] H-P Mansel, 'Das auf *Swap*-Verträge auf Grundlage des ISDA Master Agreements anwendbare Recht – Rechtswahl und objektiv anwendbares Recht' in B Dauner-Lieb and others (n602) 737.

[605] K Thorn and M Thon, 'Der Auslandsbezug im IPR' (n602) 571.

[606] G Cuniberti, 'Choice of Law in Domestic Contracts: Towards a right to Access for Foreign Financial Markets?' (n115) 469.

[607] *Ibid* 469.

[608] *Ibid*.

[609] *Ibid*; The author against this background concludes that the true motivation underlying the approach taken by the English courts' ultimately is 'the promotion of the economic interests of the City of London as a financial centre, and that of English lawyers', *ibid*.

grounded in the observation that somewhat paradoxically, the transnationalisation of finance – often referred to and controversially discussed as financial globalisation – originates in a scalability that is achieved very much hand in hand with recourse to state law.[610] Such a view, however, in turn, may be seen to at least implicitly presuppose that a connection between a transnationally operative legal order and state law automatically serves to invalidate any claims to phenomena of legal transnationalisation and genuinely transnational legal ordering.[611] As has been pointed out, the fact that transnational legal ordering does not take place in *complete* autonomy to the degree of 'autarky'[612], but rather often strategically engages state institutions does not undermine the case for the existence of transnational legal orders, which are not reducible to nation-states alone.[613] Rather, at least with regard to the OTC derivatives market, this points to a more complex interrelationship between statal and private actors sitting within hybrid normative regimes, which transcends black-and-white theories of wholesale displacement of the state, on the one side of the spectrum, and state-centric negation of any form of genuinely bottom-up transnational legal ordering on the other.[614] It is perhaps this very dialectic, observed in the cases detailed above, namely an instance of interlegality, playing out in the interpretation of a 'traditional' conflict of laws norm in the courts of the global OTC derivatives market's 'incubator jurisdiction'[615] made against the background of ISDA's transnational contractual architecture which best captures the empirical reality of a financial law not without, but also not only exclusively within the state and a state-centric, territorial frame of reference – an emergent financial law beyond the state.

What is more, the phenomenon of sectorally streamlined choice of law, as in the case of the ISDA MA, for reasons of guaranteeing predictable (re-)hedging chains as a functional prerequisite of the wider market and in this way mitigating transnational

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[610] This, in fact, being one of the core theoretical insights at the heart from the legal theory of finance and legal institutionalism, as discussed under Chapter 1 § 5.B.IV.1.a); See, § 1.D.III.2 as regards sectoral exercise of private international law party autonomy.

[611] Observing this general argument in large parts of the scholarship on transnational law and legal ordering, J Horst, *Transnationale Rechtserzeugung: Elemente einer normativen Theorie der Lex Financiaria* (n45) 75-77.

[612] *Ibid* 76.

[613] TC Halliday and G Shaffer, 'Transnational Legal Orders' (n81) 13.

[614] As in the strict state law 'positivist' or legal 'centralist' tradition; Regarding the former and the condition of state law recognition as ultimate determinant of legal validity: C van Bar, 'Einheitsprivatrecht, Rechtsvergleichung und Internationales Privatrecht' (n43) 81 (Statal law always has the last word; (....) what it does not authorise has no prospect of [legal] validity') [own translation; insertion added].

[615] See, § 1.D.III.2.b).

legal basis risk, does not appear to conform to the notion of a 'fraude a la loi': Rather, if subscribing to the traditional view that, in this context, *individual transactions* were purely domestic, this would – at least where the cross-border ISDA standard form is used – doctrinally disguise from view the overarching nature of OTC derivatives market as an amalgamation of bilateral, but economically interlinked risk-transfer transactions, a *transnational contractual network*, within which the purely domestic pedigree of some transactions is merely accidental.

Against this background, the fact that a specialist transnational community deliberately chooses to strategically avail itself to a particular (state) legal order via a valid choice of law, transposes the question of ultimate recognition of specialist community norms into the domain of private international law. However, private international law has – with some notable exceptions, as seen below – long been conspicuous by its absence in much of the extensive scholarly debate on normative orders and law beyond the state. This observation is both at first glance understandable, yet at the same time strangely at odds with the methodological approach of the discipline. Private international law and theoretical concepts of transnational normativity or even law outside the state, such as the *lex mercatoria*, constitute 'radically different approaches to the same problem'[616] of international transactions facing a wildly fragmented jurisdictional global landscape. As such, scholarly defence of one's respective field may go some way to explaining the reticence of conflict scholars to engage with a competing solution.[617] What is more, as Horatia Muir Watt observes, its historical legacy and philosophical underpinnings on the face of it do not make private international law a natural fit for the reception of instances of transnational normativity.[618]

Nevertheless, conflict of laws is not as a matter of unassailable necessity confined to operating in the frame of its traditional nexus with state-based law and to the natural exclusion of all parallel normative phenomena in the transnational sphere. As formulated in a recent scholarly handbook in its introduction to Global Legal Pluralism

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[616] FK Juenger, 'The Lex Mercatoria and Private International Law' (2000) 60 Louisiana Law Review 1133, 1133.

[617] R Michaels, 'The True Lex Mercatoria: Law Beyond the State' (n85) 448-449 ('Scholars of conflicts of laws (…) abhorred the idea of a non-state law demanding recognition, not least because they feared for central tenets of their field').

[618] HM Watt, 'The Relevance of Private International Law to the Global Governance Debate' (n341) 1 ('When formulated, the philosophical underpinnings of private international law still tend to bear witness to Savigny's legacy of private legal scholarship within the Roman law and Catholic tradition, and as such are still linked to the quest for international harmony and predictability, with little regard for contemporary theoretical issues of emerging "global law" beyond the state, for new definitions of community and normativity, and for the urgent distributive issues which haunt the transnational arena.').

and Conflicts of Law, the reflective component inherent to choice in case of conflict, in fact, potentially makes it a highly suitable mechanism for reflecting instantiations of an elusive global law beyond the state in that: '[Conflicts of law] is explicitly designed as a device to force decision makers to be self-conscious about their jurispathic actions. Thus, instead of simply assuming that the law of one's own community always and inevitably should be applied to every dispute, conflicts of law asks decision makers to consider whether the norms of some other community might be applied to the legal question at hand. Arguably, the mere asking of such a question is a pluralist mechanism for accommodating hybridity'[619].

This recognition ties in with the 'global legal pluralism' detailed by Paul Schiff Berman. At the core of legal pluralism lies a shifting of the traditional coordinates of legal positivism, by postulating that legal regulation is not the sole and uncontested domain of the territorial nation-state, but that also various non-state normative communities are to varying degrees implicated in weaving the tapestry of legal order in their respective areas, with varying degrees of detachment from the state.[620] With a view to the global dimension of the concept, according to Berman, '[i]n a world of (…) extraterritorial effects, it is unrealistic to expect legal rules based on territory to be satisfactory, and it would not be surprising to see such rules evolve in the course of the increasingly deterritorialized twenty-first century'[621]. The approach taken in the analysed English Court decisions, in disavowing the solely territorial interpretation of Art. 3(3) Rome Convention followed by the Commercial Court in *Dexia*, gives an indication that this prognosis has already taken root within judicial interpretation undertaken by domestic courts. Namely, in that the *territorial* logic of the nation state, traditionally the cornerstone of private international law, has in terms of socio-legal theory been infused with the fundamental recognition that 'contemporary forms of transnational ordering, by way of contrast, rely on *functional* differentiation as their central organisational principle'[622].

In so doing, the English courts acknowledge that they themselves, in tandem with choice of English law, have been hardwired in to ISDA's transnational contractual

[619] PS Berman, 'Introduction' in PS Berman (ed), *The Oxford Handbook of Global Legal Pluralism* (Oxford University Press 2020) 627.

[620] PS Berman, 'From International Law to Law and Globalization' (n80) 507-511.

[621] PS Berman, *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (n81) 92.

[622] PF Kjaer, *Constitutionalism in the Global Realm: A Sociological Approach* (Routledge 2014) 2; Discussing this feature with regard to the English courts' Art. 3(3) Rome Convention jurisprudence, with further references: J Böhle, 'Die Abwahl zwingenden Rechts vor staatlichen Gerichten in Inlandsfällen' (n439) 90-91.

architecture with the consequence of performing a transnational regulatory role. As observed by Joanne Braithwaite, a complete explanation of the approach taken by the English courts must include that, economic considerations aside, 'English courts recognise that they are engaged in a direct, regulatory role in these global markets (…)'[623]. In this context, Joanne Braithwaite draws a highly illustrative analogy to the post-GFC focus on macroprudential regulatory policy, concerned with systemic stability through taking into account systemic effects and potential contagion in interconnected financial markets in contrast to the microprudential focus on the soundness of individual institutions, by framing the role performed by the English courts under the heading of 'Macro-jurisprudence'[624].[625] Macro-jurisprudence, in this analogy, takes into account the economic reality of systemic interconnectedness of the wider market through standardised forms and transnational back-to-back contracting, rather than merely focusing on the *inter-partes* dispute, i.e. the '"micro-level" of the litigation'[626].[627]

However, it bears emphasis, that rather than construing the ISDA contractual architecture as an independent normative system under the conceptual banner of an independent *lex mercatoria*, conflicting with national law and necessitating resolution of a 'conflict of laws between state law and transnational law'[628], recognition of the functional prerequisites of the sectoral normative system was achieved by the English courts within the existing frame of private international law, by way of pursuing a 'generous interpretation of the notion of internationality'[629]. In this way, although repositioned on the transnational map, the state retains a central role in supporting economic regimes which are themselves no longer easily captured by legal concepts premised on notions of nation-state territoriality.[630]

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[623] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n592) 67.

[624] *Ibid* 71.

[625] *Ibid* 67-75.

[626] *Ibid* 71.

[627] *Ibid* 71-72

[628] Insofar, H Collins, 'Flipping Wreck: Lex Mercatoria on the Shoals of Ius Cogens' in S Grundmann, F Möslein and K Riesenhuber (eds), *Contract Governance: Dimensions in Law and Interdisciplinary Research* (Oxford University Press 2015) 384.

[629] M Stürner, '§ 32 Die Rom I-VO' in M Stürner (ed), *Europäisches Vertragsrecht: Institutionelle und methodische Grundlagen, materielles Recht, Kollisionsrecht* (n599) para 22.

[630] G Handl, 'Extra-Territoriality and Transnational Legal Authority' in G Handl, J Zekoll and P Zumbansen (eds), *Beyond Territoriality: Transnational Legal Authority in an Age of Globalization* (n81) 6; PS Berman, *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (n81) 62 (affirming the nation state's continued relevance due to its ability to deploy coercive force); T C Halliday and G Shaffer, 'Transnational Legal Orders' (n81) 13 ('We contend that the nation-state remains central to lawmaking, law recognition, and law enforcement in the world today, and it is not simply bypassed by transnational legal ordering').

Recognition then resonates strongly with one central element in the 'cosmopolitan pluralist choice-of-law approach'[631] put forward by Paul Schiff Berman. Under this approach, a court is to inquire also into 'the variety of normative communities with possible ties to a particular dispute'[632]. Importantly, in continuation of the community focus of traditional legal pluralism literature, this includes shifting the focus to the role of transnational communities in the commercial reality of the creation of specialist normative frameworks for delimited areas of commerce and finance. As emphasised by Berman, the exercise comprises recognising those 'community affiliations that are not associated with nation-states, such as industry standards, norms of behaviour promulgated by nongovernmental organization, community custom, and rules associated with particular activities (…)'[633].

Lastly, circling back to a core critique levelled at the transnational-deterritorialised interpretation taken by the English courts, this is not to suggest that the process itself is not also driven by an element of regulatory competition grounded in economic considerations, i.e. 'the promotion of the economic interests of the City of London as a financial centre, and that of English lawyers'[634]. Rather, in an age of global legal pluralism and the commercial reality of transnationally operative specialist industry sectors, a relative competitive edge will be attained by those state legal orders which – subject to guarding against third party externalities – afford the broadest possible scope of recognition to party autonomy and to the diverse specific 'normative preferences'[635] of transnational normative communities at the various touch-down points of interaction with state law and institutions.[636] In this way, rather than stifling 'the astonishing variety on the ground'[637] through mechanical imposition of a rigid top-down

[631] See the eponymous Chapter 8 in PS Berman, *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (n81) 244-293.
[632] *Ibid* 262.
[633] *Ibid*; See also, R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (n9) 271-272.
[634] G Cuniberti, 'Choice of Law in Domestic Contracts: Towards a right to Access for Foreign Financial Markets?' (n115) 469; Similarly evoking the regulatory competition aspect, J von Hein, 'Art. 3 Rom I-VO' (n602) 116.
[635] D Wielsch, 'Global Law's Toolbox: Private Regulation by Standards' (n12) 1076.
[636] J Böhle, 'Die Abwahl zwingenden Rechts vor staatlichen Gerichten in Inlandsfällen' (n439) 78.
[637] PS Berman, *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (n81) 22.

framework,[638] state legal orders can recognise the functionally specialist legal regimes transcending mere territorial distinctions.[639]

Put differently, in general terms, pluralism in a conflicts setting therefore implies granting a degree of leeway to the normative integrity of the specialist transnational regime. It therefore involves 'not see[king] to 'fit' the foreign norm into its own scheme, but accept[ing] the other, however different (as long as the threshold of tolerance is not crossed) (…) and work[ing] to ensure communication rather than assimilation'[640].

§ 3 The ISDA Contractual Architecture in Transnational Financial Regulation

As touched upon in the introduction to this thesis, the ISDA contractual architecture, a private transnational regime, and the global OTC derivatives market it underpins, sit within a wider normative landscape, which – as distinctly opposed to other bottom-up transactional regimes lacking this additional normative dimension –[641] is, in significant respects, also shaped by a multitude of norms of financial market and prudential regulation.[642]

On the one hand, this begs the question of how to contextualise the ISDA contractual architecture in the wider context of this particular global 'regulatory "overlay"'[643], as well as analysing the particular interaction that occurs between it and transnational public regulation as a crucial additional facet intrinsic to a financial law beyond the state.

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[638] Lamenting the 'rigidity' of state laws with the contrasting continuous developmental flux of other societal sectors, such as the economy, is an aspect which is also emphasised by the proponents of the 'new lex mercatoria': F Galgano, 'The New Lex Mercatoria' (n8) 104.

[639] PS Berman, *Global Legal Pluralism: A Jurisprudence of Law Beyond Borders* (n81) 22.

[640] H Muir Watt, 'Jurisprudence without Confines: Private International Law as Global Legal Pluralism' (2016) 5 Cambridge Journal of International and Comparative Law 388, 400.

[641] Such as, eg, the *lex mercatoria* (*generalis*) of international trade or distinct sectoral varieties, in the sense of a *lex mercatoria specialis*, such as, eg, the *lex maritima* of the international maritime trade.

[642] While most OTC derivatives market participants have, at the entity level, always been subject to regulation, as far as specific market regulation is concerned, this applies, in particular in light of the shift to a new 'Age of Regulation' ushered in by post-GFC reforms: NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (2017) 11 Virginia Law & Business Review 309, 313-322; See, also, R Pickel, 'Adapt or die: institutional survival in the post-crisis world' (2018) 13 Capital Markets Law Journal 168, 170-172 observing an industry transformation from a 'relationship-dominant existence' to a 'regulation-dominant world', *ibid* 171-172.

[643] Y Diamant and others 'Post-Crisis Regulatory Responses' in M Haentjens (ed), *Financial Collateral: Law and Practice* (Oxford University Press 2020) para 9.01 (specifically with regard to the interaction of private law and public regulation in the context of financial collateral transactions).

A. ISDA Normativity and Regulatory 'Soft Law' in the 'Global Administrative Law' Frame

Unsurprisingly, the processes of financial globalisation have also had a transformative impact on the financial regulatory sphere and those tasked with keeping pace with developments and effectively implementing regulatory goals in an environment where the regulated activity easily transcends individual regulatory jurisdictions which remain premised on territorial organisation.[644]

I. The Phenomenon of International Financial 'Soft Law'

When adopting the top-down perspective of international financial market and prudential banking regulation, this process of transformation is observable in the proliferation of a multitude of international organisations operating via a specific mode of rule-generation in the form of international financial standards.[645] Namely, in the realm of international finance, the relative sparsity of formal multilateral treaty law, in comparison with other areas of international economic law such as trade law,[646] is compensated by a multiplicity of specialist, but informal, international organisations, in the sense that they are not created by a conventional instrument of international law, which are intended to coordinate regulatory policy at the international level.[647] A paradigmatic manifestation of such informality is the Basel Committee on Banking Supervision ('BCBS'), set up by the central bank governors of the Group of Ten countries and the recommendations emanating from it.[648] In very broad terms, top-down regulatory rule-making in international finance is structured in such a way that overarching policy goals, set by global 'Agenda Setters' such as the Group of Twenty ('G20') and the Financial Stability Board ('FSB'), cascade down to different sectoral and specialist 'Standard Setters', where these policy goals are cast into global standards, which, in turn, are ultimately adopted and implemented at the domestic level of

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[644] As put by Charles Goodhart, this 'basic contrast' has become something of a 'truism': C Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997* (Cambridge University Press 2011) 542-545.

[645] M Giovanoli, 'A New Architecture for the Global Financial Market: Legal Aspects of International Financial Standard Setting' in M Giovanoli (ed), *International Monetary Law: Issues for the New Millennium* (Oxford University Press 2000) para 1.13.

[646] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (n135) 119; In detail with an explanatory account: C Brummer, 'Why Soft Law Dominates International Finance – And not Trade' (2010) 13 Journal of International Economic Law 623-643.

[647] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (n135) 65.

[648] C Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997* (n644) 542-545 noting that '[t]he legal status of the BCBS is easy to discuss; it had none', *ibid* 542.

respective jurisdictions.[649] Procedurally, at an abstract level, after the inception of such an organisation, the regulatory consensus on minimum standards at the political level is translated into global regulatory standards in a largely technocratic process, shaped by subject-matter experts, which are then promulgated by the different international fora acting as international (financial) standard setters.[650] As is the case with bottom-up private norms underpinning transnational contracting in the OTC derivatives market, standardisation is thus also a key feature of top-down public regulation.

The core guiding rationale for achieving a degree of regulatory convergence through top-down harmonisation in this way, is to place basic constraints on international regulatory competition, since without them and the 'level playing field'[651] they help create, unilateral moves towards stricter regulation effectively become impossible in light of the fear of domestic institutions losing out to their international rivals.[652] What is more, competition unchecked by any kind of minimum standard may potentially lead to a regulatory 'race to the bottom' of jurisdictions seeking to outbid each other in a downward spiral of ever lower standards, as well as, in the specific financial market context, potentially creating negative externalities through systemic risk contagion for the financial system as a whole.[653]

The resulting substantive body of various principles, guidelines, rules and best practices informally promulgated to counter this effect reflects the technocratic genesis and technical nature of these norms sometimes referred to as 'expert made law'[654], as well

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[649] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (n135) 69-70; This particular dynamic is evident in the following Case Study No. 2, under § 3.C., and the genesis of the FSB's Key Attributes, introduced by the FSB, and subsequently endorsed by the G20.

[650] D Arner and MW Taylor, 'The Global Financial Crisis and the Financial Stability Board: Hardening the Soft Law of International Financial Regulation?' (June 2009) AIIFL Working Paper No 6 (Asian Institute of International Financial Law, University of Hong Kong) 5.

[651] C Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997* (n644) 1.

[652] *Ibid* 1-2.

[653] This is aspect is paradigmatically stated in, US Department of the Treasury, 'Financial Regulatory Reform: A New Foundation' (2009) 80 ('As we have witnessed during the crisis, financial stress can spread easily and quickly across national boundaries. Yet, regulation is still set largely in a national context. Without consistent supervision and regulation, financial institutions will tend to move their activities to jurisdictions with looser standards, creating a race to the bottom and intensifying systemic risk for the entire global system.').

[654] See, eg, J Köndgen, 'Privatisierung des Rechts: Private Governance zwischen Deregulierung und Rekonstitutionalisierung' (n42) 481-500 who under the broad heading subsumes both *Expertenrecht* (expert made law) of private, ie, non-governmental origin, such as technical standards (eg, the standards promulgated by the International Organization for Standardization) or accounting rules, as well as those of semi-governmental ('halbstaatlich') origin, such as, most prominently for present purposes, the Basel Accords. Regarding the latter, Köndgen notes the legitimacy concerns which arise from the fact that, eg,

as, commonly, reflecting the voluntary and legally non-binding nature, summarised under the collective label of 'soft law'[655]. The designation as 'soft' thus points to a gradation in normative quality, meaning that the collective body of soft law is not (hard) law in a traditional positivist sense.[656] This is because compliance under this view is not effected *de jure* by an ultimate threat of hard sanction, but rather incentivised; for example, by different 'forms of moral suasion'[657]. By way of example, such a *de facto* 'carrot and stick' approach to enforcement, which can also extend beyond the participating members of the standard-setting body, may include, for example, economic incentivisation via a positive impact on sovereign credit ratings in case of domestic compliance with a soft-law standard.[658] The degree of specificity of this soft law varies greatly, as does as a result the degree of harmonisation it achieves.[659]

Upon observing a proliferation of regimes marking the often-invoked conceptual shift from national *government* towards various modes of global *governance*, contextualising and classifying both the emergent 'transnational networks' at work and the soft law they generate, has been the subject of much scholarly attention.[660] While soft law exists both at the domestic and at the international level, the common nomenclature notwithstanding, the two functionally are different creatures. This is because, while soft law domestically is integrated into and complements the established institutions of the

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the mathematical finance formulae for the calculation of capital reserves *de facto* necessitate their unreserved adoption, essentially rendering parliamentary consent at most ceremonial in nature, *ibid* 494 [own translation].

[655] In detail, M Giovanoli, 'A New Architecture for the Global Financial Market: Legal Aspects of International Financial Standard Setting' (n645) paras 1.45-1.63.

[656] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (n135) 3; Chris Brummer seeks to provide a more nuanced view by transcending the established hard law/soft law dichotomy and working from coerciveness as being a defining component of legality, towards developing a 'compliance-based theory of international financial law', under which soft law is in some constellations more coercive than would be permitted under the conventional public international law theory: *ibid* ('Chapter 3').

[657] D Arner and MW Taylor, 'The Global Financial Crisis and the Financial Stability Board: Hardening the Soft Law of International Financial Regulation?' (n650) 2.

[658] *Ibid*.

[659] Since, the broader the standard, the greater the flexibility and discretionary scope for its respective implementation.

[660] See, seminally, in the context of global governance and international relations scholarship, A-M Slaughter, *A New World Order* (Princeton University Press 2004). In Anne-Marie Slaughter's account, states retain a crucial role albeit in disaggregated, networked form. At the global level, multiple policy and regulatory networks emerge which have their origins in the 'globalization paradox' arising from the fact that '[w]e need more government on a global and a regional scale, but we don't want the centralization of decision-making power and coercive authority so far from the people actually to be governed', *ibid* 8.

state,[661] at the international level, it constitutes a 'stand-alone'[662] normative source. In this way, it acts as a functional substitute for the lack of overarching formal global institutions.

II. ISDA and International Regulatory 'Soft Law' under the Global Administrative Law Lens

Recognising that many types of rule-making processes in the transnational sphere mirror administrative procedure, rather than legislative modes of lawmaking or adjudication,[663] and focusing on the manifold effects of these comparatively novel forms of normativity have on classical conceptions of public international law, has given rise to the 'global administrative law' ('GAL') approach.[664] This entails recognising that in many cases norms emanating from the 'global administrative bod[ies]'[665], addressed under GAL, fall outside the scope of recognised formal sources of international law under Art. 38 of the Statute of the International Court of Justice, thereby posing novel questions as to their normative pedigree[666] but also of legitimacy.[667] Although its exact content, boundaries and status remain contested,[668] the general point of departure for GAL is that it commences from the observation 'that much of global governance can be understood as regulation and administration'[669].

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[661] M Giovanoli, 'A New Architecture for the Global Financial Market: Legal Aspects of International Financial Standard Setting' (n645) para 1.49.

[662] *Ibid* para 1.50, noting that '(…) generally speaking, international standards, in particular those relating to financial stability on the global market, exist independently of any international framework of binding law rules', *ibid*.

[663] B Kingsbury, N Krisch and RB Stewart, 'The Emergence of Global Administrative Law' (2005) 68 Law and Contemporary Problems 15, 17; Also observing pervasive 'administrative modes of rule-making' in international financial law: C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (n136) 6.

[664] See: B Kingsbury, N Krisch and RB Stewart, 'The Emergence of Global Administrative Law' (n663) 15-62; N Krisch and B Kingsbury, 'Introduction: Global Governance and Global Administrative Law in the International Legal Order' (2006) 17 The European Journal of International Law 1-13, as well as the accompanying case studies.

[665] Defined as 'a public entity other than a state': B Kingsbury, 'The Concept of 'Law' in Global Administrative Law' (2009) 20 The European Journal of International Law 23, 36.

[666] As stated by Krisch and Kingsbury: '[I]t is unsatisfactory to have no better analysis of them than "non-law"': N Krisch and B Kingsbury, 'Introduction: Global Governance and Global Administrative Law in the International Legal Order' (n664) 12.

[667] *Ibid* 11-12; B Kingsbury, 'The Concept of 'Law' in Global Administrative Law' (n665) 26.

[668] For a concise overview, see, S Cassesse, 'Global administrative law: The state of the art' (2015) 13 International Journal of Constitutional Law 465-468.

[669] N Krisch and B Kingsbury, 'Introduction: Global Governance and Global Administrative Law in the International Legal Order' (n664) 1; See also, B Kingsbury, 'The Concept of 'Law' in Global Administrative Law' (n665) 24-25.

Importantly, GAL seeks to encompass a broad plurality of actors, as well as a breakdown of traditional clear distinctions such as between national and international in that '(in) the practice of global governance, transnational networks of rule-generators, interpreters and appliers cause such strict barriers to break down. This global administrative space is increasingly occupied by transnational private regulators, hybrid bodies (…) national public regulators (…) informal inter-state bodies with no treaty basis (…) and formal interstate institutions (…) affecting third parties through administrative type actions'[670]. Thus, private ordering or regulation in its various manifestations also forms an integral part of GAL – including both the substantive and procedural levels of non-state norms generated by standardisation processes as well as non-state dispute resolution including arbitration –[671] in the specific context of legitimacy and accountability concerns arising from the public impact they have. Indeed, the accountability of ISDA has more recently been subjected to a GAL analysis in this vein.[672] For present purposes, what makes GAL a valuable analytical frame is that, in terms of the issues it seeks to offer a novel conceptual approach towards framing, as succinctly put by Karl-Heinz Ladeur:

'*[T]hey concern complex problems which are completely beyond the reach of a nation-state and which do not find a solution based upon patterns formulated at that level. The peak of this development is reached in financial market regulation, where we are confronted with a type of rapidly self-transcending, overlapping, disruptive market that processes risk information and demands risk management to a hitherto unknown extent. New global problems that do not just change the level of abstraction or the territorial dimension are at stake here, but undermine the territoriality of the legal order in a much more complex and demanding way than in the past of the nation-state.*'[673]

As will be seen in the following, the bottom-up norm generation of the kind found in ISDA's contractual architecture, in what, depending on disciplinary nuance, has

[670] *Ibid* 25.
[671] *Ibid* 52-55.
[672] With an ultimately favourable evaluation, M Borowicz, 'Private Power and International Law: The International Swaps and Derivatives Association' (2015) 8 European Journal of Legal Studies 47-66; Critical of this conclusion, with further references, J Horst, *Transnationale Rechtserzeugung: Elemente einer normativen Theorie der Lex Financiaria* (n45) 141 (fn 392).
[673] KH Ladeur, 'Global Administrative Law: A Transnational Perspective' in P Zumbansen (ed), *The Oxford Handbook of Transnational Law* (Oxford University Press 2021) 176.

generally been referred to as 'private governance'[674], 'private ordering'[675], 'private regulation'[676] or even 'private *law*making'[677], intersects with and is inseparably interwoven with top-down administrative modes of norm-generation at the transnational level, in the mutual pursuit of transnationally effective risk mitigation. Private actors, subscribing to ISDA's contractual architecture, are in their everyday dealings, at least not chiefly, preoccupied with systemic risk mitigation, which is the primary rationale for and at the forefront of deliberations within the international policy fora described above.[678] Rather, finance practitioners and lawyers in 'grappl[ing] with the day to day technicalities of their trade'[679], and, owing to their perspective being limited to their own business operations, primarily focus and contractually prescribe for the risks that attend their transactions at the micro-level. These are principally market, credit and legal risk.[680] In this vein, Chris Brummer notes that although ISDA constitutes a specialist standard setter, its sector-specific standard terms and principles 'are not sanctioned by any government-run international standard setter'[681] and it is therefore 'not commonly recognized as a "regulatory" body in the same sense as the other standard setters'[682]. Nevertheless, since risk categories do not exist in isolation, but rather are structurally interwoven, and since contract and market concepts collapse into each other in the case of OTC derivatives,[683] it follows that this also extends to risk management at the micro- and macro-levels. The interrelationship of credit risk at the transactional, and systemic risk at the wider market level, has, as a paradigmatic example of this observation, long been recognised as the primary rationale for the privileged status of close-out netting as a contractual mechanism of *inter-partes* credit risk mitigation.[684] What is more, this entanglement of private transactional and public regulatory concerns in the global OTC derivatives market finds an expression in ISDA's mission explicitly encompassing transactional as well as wider market functioning

[674] Especially in economic scholarship: See, eg, EP Stringham, *Private Governance: Creating Order in Economic and Social Life* (Oxford University Press 2015).
[675] SL Schwarcz, 'Private Ordering' (2002) 97 Northwestern University Law Review 319.
[676] D Wielsch, 'Global Law's Toolbox: Private Regulation by Standards' (n12).
[677] DV Snyder, 'Private Lawmaking' (2003) 64 Ohio State Law Journal 371[emphasis added].
[678] In detail: A Kern, R Dhumale and J Eatwell, *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press 2006).
[679] JK Levit, 'A Bottom-Up Approach to International Lawmaking: The Tale of Three Trade Finance Instruments' (n11) 126.
[680] As described in Chapter 1 § 3.C.
[681] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (n135) 92.
[682] *Ibid* 92.
[683] See Chapter 1 § 6.D
[684] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 362.

goals,[685] and is perhaps most evident in its public mission statement reading: 'ISDA fosters safe and efficient derivatives markets to facilitate effective risk management for all users of derivative products'[686].[687]

B. Case Study No. 1: Amending ISDA's 'Flawed Asset Approach'

The years following on from the GFC have seen a marked increase in the dynamic of an entanglement of private transactional and public regulatory concerns and action described above. The interplay of regulatory concerns with market development is, however, far from a novel phenomenon to the OTC derivatives market. For example, some of the first contractual standardisation initiatives, such as the development and issuing of standard terms for certain London inter-bank swaps, the BBAIRS Terms,[688] early on in the development of the swaps market in 1985 by the British Bankers' Association, in fact occurred at the express urging of the Bank of England.[689]

What has, however, become ever more visible in recent years is the ever closer intertwining of public and private modes of regulation in the OTC derivatives market via a transposition of regulatory policy into contractual obligations, in turn concerning ever more technical transactional aspects. This can be illustratively seen with regard to the ISDA MA's two core contractual credit risk mitigation strategies; namely, the 'flawed asset approach' embedded under Sec. 2(a)(iii) ISDA MA, as well as the scope of operation of close-out netting, both of which have become a focal point in the interplay with broader financial regulatory policy objectives. The first example, detailed in the following, concerns the technical area of derivative contract termination, specifically how ISDA amended the ISDA MA's flawed asset approach, i.e. the operation of the condition precedent contained in Sec. 2(a)(iii) ISDA MA,[690] in the face of domestic regulatory concerns, while the second example, discussed under § 3.C, highlights ISDA's involvement in the implementation of regulatory policy at the transnational level.

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[685] ISDA, article II ('Purposes') ISDA By-Laws.

[686] See, eg, the frontpage of the ISDA website, <www.isda.org> accessed 7 September 2026.

[687] Observing this dual transaction and market regulatory function embodied in the ISDA MA: MK Borowicz, 'Contracts as Regulation: The ISDA Master Agreement' (2021) 16 Capital Markets Law Journal 72, 74.

[688] See, Chapter 1 § 7.B.

[689] D Cunningham, 'Swaps: Codes, Problems and Regulation' (1986) 5 International Financial Law Review 26, 27.

[690] Discussed further in Chapter 3 § 2.

I. Content and Purpose of the 'Flawed Asset Approach' in Sec. 2(a)(iii) ISDA MA

What is the 'flawed asset approach'? The general payment obligation under Sec. 2(a)(i) ISDA MA states that '[e]ach party will make each payment or delivery specified in each Confirmation to be made by it, subject to the other provisions of this Agreement'. Sec. 2(a)(ii) ISDA MA in turn, in simplified terms, states that performance will be made on the due date subject to the counterparties' specifications in each Confirmation. Crucially, dovetailing with the provision under Sec. 2(a)(i) ISDA MA, is a condition precedent contained in Sec. 2(a)(iii)(1) ISDA MA, which subjects the payment or delivery obligations under Sec. 2(a)(i) ISDA MA to the condition precedent that, i.a., no 'Event of Default' or 'Potential Event of Default' with respect to the other party has occurred or is continuing. Namely the Sec. 2(a)(iii)(1) ISDA MA states *verbatim*:

'Each obligation of each party under Section 2(a)(i) is subject to (1) the condition precedent that no Event of Default or Potential Event of Default with respect to the other party has occurred and is continuing (…)'[691].

The condition precedent in Sec. 2(a)(iii)(1) ISDA MA – in conjunction with the Early Termination Date designation mechanism and the close-out methodology – has substantially formed part of each of the ever evolving ISDA standard forms published since 1985.[692] The primary underlying commercial purpose of the condition precedent is credit protection, namely to protect a non-defaulting counterparty, by way of creating a credit exposure limit, since it may cease any further payments or deliveries to the defaulting counterparty, while, conversely, the defaulting counterparty's obligations remain unaffected.[693] What is more, should the financial position of the defaulting counterparty deteriorate further, upon insolvency, the flawed asset provision also

[691] On Events of Default as part of the ISDA MA close-out netting mechanism, see, § 3.C.III.1.a).

[692] E Murray, 'Derivative Transactions' (n209) para 11.11.3.1; ISDA, *Amicus Brief, First Written Submission – Lomas v JB Firth Rixson and Others* (29 July 2011) para 15.

[693] E Murray, 'Derivative Transactions' (n209) para 11.11.3; NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 362; From English Jurisprudence: *Lomas & Ors v JFB Firth Rixson Inc & Ors* [2012] EWCA Civ 419 at [92]; *Pioneer Freight Futures Company Ltd v TMT Asia Ltd* [2011] EWHC 778 (Comm) at [69]-[70]; Also emphasising this commercial purpose, citing both prior cases, *Grant & Ors v FR Acquisitions Corporation (Europe) Ltd & Anor (Re Lehman Brothers International (Europe))* [2022] EWHC 2532 (Ch) at [63]-[64] and at [170]; From the perspective of ISDA itself: ISDA, *Amicus Brief, First Written Submission – Lomas v JB Firth Rixson and Others* (29 July 2011) para 41 ('[I]ts purpose is to protect a Non-defaulting Party from the additional credit risk of continuing to perform its own obligations while the counterparty is in default or on the brink of default.') [emphases omitted].

prevents any 'cherry picking'[694] by a liquidator or administrator, since if it attempts to enforce individual in-the-money transactions beneficial to the estate, the non-defaulting counterparty may refuse performance on the grounds that – since the condition precedent has not been met – performance has not yet become due.[695] From the perspective of the defaulting counterparty its in-the-money transactions subject to the provision are thus 'flawed', since its counterparty's performance obligations are subject to the condition precedent described above and its otherwise existing right to demand performance adversely modified as a consequence.[696] In practical terms, the provision offers a non-defaulting counterparty a 'breathing space'[697], giving it the opportunity to evaluate its position following an Event of Default, with a view to potentially constructively working towards the Event of Default being remedied, rather than leaving it with the only option of mitigating counterparty credit exposure by bringing the trading relationship to an end through closing out all outstanding transactions documented under the respective ISDA MA.[698]

II. The 'Flawed Asset Approach' in Action

The 'flawed asset approach' as it is embedded in the ISDA MA form, on a literal reading, thus provides the Non-defaulting Party with two potential courses of action following an Event of Default of its counterparty: First, it may choose to trigger the close-out netting mechanism and terminate and close-out all outstanding transactions pursuant to Sec. 6(a) ISDA MA.[699] Second, – since Sec. 6(a) ISDA MA does not contain any obligation for it to do so – it may choose not to exercise its right to terminate, but rather simply rely on Sec. 2(a)(iii) ISDA MA in order to withhold payment or delivery, as the case may be, during the ongoing Event of Default.[700] Crucially, since Sec. 2(a)(iii) ISDA MA contains no express time limit, this latter option understandably appeared attractive to a Non-defaulting Party in those cases where it was out-of-the-money on the aggregate net basis of its transactions, and its

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[694] See, § 3.C.III.1.a) on insolvency 'cherry picking' as part of the ISDA MA close-out netting mechanism.
[695] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 361; S Firth, *Firth on Derivatives Law and Practice* (n34) para 5.033.
[696] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 362.
[697] S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.012.
[698] *Ibid*.
[699] E Murray, 'Derivative Transactions' (n209) para 11.12.2.; NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 362-363;
[700] *Ibid* 363.

counterparty's default was expected to continue for the foreseeable future – if not indefinitely – such as paradigmatically in the case of a Bankruptcy Event of Default under Sec. 5(a)(vii) ISDA MA.[701] This is because, in such a case, designation of an Early Termination Date as the first step of the close-out netting mechanism, would only have served to crystallise its payment obligations to its defaulting in-the-money counterparty under Sec. 6(e) ('Payments on Early Termination') ISDA MA.[702] Alternatively, rather than trigger early termination, the currently out-of-the-money (non-defaulting) counterparty could, as described above, by virtue of the 'flawed asset' stipulation, simply bide its time, and, by the mere letter of the contract, choose to trigger close-out at a more opportune later moment in time, such as when underlying market conditions had changed in its favour – with transactions under the ISDA MA having potentially gone from out-of-the-money to in-the-money on a net basis.[703] This is because the respective underlying, such as a currency, interest rate or commodity, which determines the economic value of the respective payment or delivery obligation, during the intervening time was open to fluctuation, depending on the prevailing market conditions.[704] Thus, where a particular Event of Default, such as insolvency, was to continue indefinitely, upon a literal reading, an out-of-the-money (Non-defaulting Party) could hold out on its performance obligation to the in-the-money (Defaulting Party) indefinitely.

1. Regulatory Concerns as to Indefinite Suspension of Obligations

Viewed through the regulatory lens, however, Sec. 2(a)(iii) ISDA MA, under the interpretation set out above, effectively meant that the stipulation could, if not technically, at least in terms of its ultimate economic effect, operate as a 'walk-away' clause from the perspective of the Non-defaulting Party.[705] 'Walk-away' clauses are

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[701] *Ibid*.

[702] E Murray, 'Derivative Transactions' (n209) para 11.11.3.1; Conversly, of course, were an insolvent entity's derivatives counterparty was in-the-money on an aggregate net basis, the logical choice was to terminate and close-out transactions under an ISDA MA. This was because in this way individual out-of-the money transactions could be netted against the in-the-money transactions, thereby at least preventing cherry picking, and eventually leaving the counterparty with whatever insolvency dividend an administrator would be able to realise from the insolvent estate.

[703] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 363; As noted by NM Feder, himself an experienced legal practitioner in the area of derivatives law, counterparties have been known to sometimes seek to contractually counteract such a strategy by bilaterally adding a 'use-it-or-lose-it' provision, whereby the right to declare an Early Termination Date is deemed to be waived if not exercised within a specified time frame, *ibid* 365.

[704] See, ISDA, See, ISDA, *Amicus Brief, First Written Submission – Lomas v JB Firth Rixson and Others* (29 July 2011) para 3.

[705] S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.014/1.

contractual provisions, which substantively permit a non-defaulting counterparty to make only limited payment, or no payments at all, to the defaulter or its estate, even if on an aggregate net basis it would owe payment to its defaulting counterparty, meaning it would effectively be enabled to simply walk away from its payment obligations.[706] In such a case, an in-the-money defaulting counterparty could, depending on how much it was actually owed, face significant credit exposure to its counterparty.

Against this background, even after close-out netting agreements had as a matter of regulatory policy been generally recognised as credit risk reducing for capital adequacy purposes under subsequent amendments to the original 1988 Basel Capital Accord, those containing a walk-away clause have historically never been recognised as such.[707] This position remains unchanged under the current prudential regulatory regimes. By way of one example, under current EU regulatory rules, pursuant to Art. 296(2)(d) CRR, close-out netting provisions containing a walk-away clause do not qualify as risk-reducing for regulatory purposes in the calculation of capital reserves.

Therefore, potentially at least, functionally having something akin to a walk-away clause embedded in the ISDA MA standard form, might call into question the recognition of contractual netting regimes under all contractual arrangements documented under ISDA MAs and entered into by prudentially regulated financial counterparties, with the seriously detrimental effect that any capital held against positions would have to be calculated on a gross rather than net basis.[708] This would, at best, result in costly additional amounts of regulatory capital having to be held against OTC derivatives positions,[709] or, in the worst case scenario, making transactions economically unviable.

Regulatory concerns regarding Sec. 2(a)(iii) ISDA MA were, in fact, not new. Indeed, they had already existed for some time, going back to the 2003 Supreme Court of New South Wales decision in *Enron Australia v TXU Electricity*[710]. In this decision, Austin J in the context of a 1992 ISDA MA confirmed that after Enron went into voluntary administration and was placed into a liquidation proceeding, each of these events respectively constituting a separate Event of Default under Sec. 5(a)(vii) ISDA MA,

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[706] BCBS, *Basle Capital Accord: The Treatment of the Credit Risk Associated with Certain Off-Balance-Sheet Items, Annex 1: Amendment to the 1988 Capital Accord for bilateral netting* (July 1994) 2.

[707] *Ibid*.

[708] S Firth, 'The English Law Treatment of Lehman's Derivative Positions' in D Faber and N Vermunt (eds), *Bank Failure: Lessons from Lehman Brothers* (Oxford University Press 2017) paras 10.17 and 10.25.

[709] *Ibid*.

[710] [2003] NSWSC 1169.

TXU Electricity had the contractual right – as Non-Defaulting Party – under Sec. 2(a)(iii) ISDA MA to not make a payment under Sec. 2(a)(i) ISDA MA for as long as an Event of Default continued, and concluded it could not be compelled to terminate its out-of-the-money swap transactions.[711] The decision quickly elicited regulatory attention internationally. By way of only one example, the US Financial Markets Lawyers Group and the UK Financial Markets Law Committee formed a working group to review the decision and its impact.[712] However, in spite of all the attention, no concrete regulatory action followed at the time. Indeed, the general assumption had historically been that, in practice, the Non-defaulting Party would 'in virtually all cases'[713] eventually trigger termination and close-out as regarded outstanding transactions.[714] However, this assumption had, at least implicitly, in turn rested on a second assumption, namely, that it would generally be a non-financial end-user counterparty which would default on its obligations, not a financial dealer bank institution.[715] In such a scenario, the first assumption of course made sense, since a financial institution would be naturally reticent to risk even the whiff of an impression of a walk-away strategy being pursued, due to the detrimental regulatory capital implications which could follow.

The old regulatory concerns, however, were revitalised and once again came to the fore, when in the throes of the GFC, it was large financial institutions which did, in fact, themselves become subject to Events of Default under their ISDA MAs. In these circumstances, some out-of-the-money non-financial counterparties strategically relied on the ISDA MA's 'flawed asset' provision, electing to go down the avenue of indefinite suspension of payment, by refusing to terminate and close-out outstanding transactions, to the financial detriment of their failed financial counterparty, most prominently vis-à-vis various Lehman Group entities, such as Lehman Brothers International (Europe) ('LBIE') in Europe and Lehman Brothers Special Financing Inc.

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[711] *Ibid* at [44].

[712] Foreign Exchange Committee, *2004 Annual Report: Legal Initiatives* 4.

[713] HM Treasury, *Establishing resolution arrangements for investment banks* (December 2009) para 7.9.

[714] *Ibid*.

[715] This assertion would appear to be supported by ISDA, *Written Submission on Behalf of the International Swaps and Derivatives Association in the Matter of Lehman Brothers International (Europe)* para 88 ('Financial counterparties in particular may wish to close-out in order to obtain certainty as to their exposure, often for regulatory reasons.').

('LBSF') in the United States.[716] In those cases, where the defaulting counterparty had already entered into administration, indefinite strategic reliance on Sec. 2(a)(iii) ISDA MA evidently clashed with core public policy objectives through its potential to detrimentally impact the value of the insolvent estate, and, thus, indirectly the position of unsecured creditors, by affecting the level of return ultimately available to them.[717] Aside from the Defaulting Party potentially incurring additional losses through termination effected by its counterparty at a later date, due to intervening market movements relative to the early realisation of net positions through early termination, it was recognised from a regulatory perspective that the longer the uncertain state of limbo regarding both 'if' and 'when' a non-defaulting counterparty would exercise its termination right persisted, the more difficult and costly it was for an administrator to effectively quantify and monitor the exposures associated with continuously outstanding transactions and to engage in effective hedging strategies.[718]

2. Approaching the Problem: The Quest for a 'Market Solution'

Against the backdrop of these identified concerns, the UK government weighed up the different modes of intervention available to it for mitigating the uncertainty of potentially indefinitely suspended performance obligations and the resulting potential harm to unsecured creditors of the non-defaulting entity. These ranged from direct regulatory or legislative intervention by curtailing the time frame for early termination and mandating automatic termination of outstanding positions within a certain period, to less invasive approaches, such as encouraging the market to provide for a suitable solution.[719]

Ultimately, and centrally to the current topic of the mutual entanglement of public and private modes of regulation as regards the ISDA MA, the UK government, as a first step, opted to communicate its hope that 'a market solution'[720] could be found, while stating its intent to further monitor developments and to implement legislative measures should this approach fail.[721] This preference for a market-minded approach was

[716] Pursuing this strategy resulted highly significant litigation on both sides of the Atlantic, namely the *Metavante* and *Lomas* litigations in New York and England respectively. The *Lomas* Litigation is analysed in detail as a further case study in Chapter 3 § 2.
[717] HM Treasury, *Establishing resolution arrangements for investment banks* (December 2009) para 7.11.
[718] *Ibid* paras 7.10-7.11.
[719] *Ibid* para 7.12; This is discussed in greater detail in connection with the interpretative approach taken by the English courts regarding Sec 2(a)(iii) ISDA MA in Chapter 3 § 2.
[720] *Ibid* para 7.13.
[721] *Ibid* paras 7.13-7.14.

grounded in the goal to find a solution which balanced the solvent non-defaulting counterparty's effective risk-management needs in retaining adequate flexibility in deciding whether to terminate outstanding transactions – interlinked with the wider policy concern of mitigating systemic risk impacts of close-out – with the (administrators' of the) defaulting entity's need for certainty regarding the question of whether and in which time frame termination of outstanding OTC derivatives positions could be expected to occur.[722] To strike this balance, the UK government considered the market participants themselves, as organised under the centralised organisational umbrella of ISDA, best placed, stating that it would 'encourage ISDA to consult with its members to develop an appropriate solution'[723].

Against this backdrop, and under the looming spectre of direct legislative intervention, ISDA, after a failed first attempt at arriving at an amendment to Sec. 2(a)(iii) ISDA MA upon a consultation with its members in 2011,[724] did in 2014 eventually come up with a market solution in the form of an amendment template for optional adoption by market participants.[725]

Substantively, this market solution, suitable for both the 1992 and 2002 ISDA MA forms, introduced the concept of a 'Condition End Date' into the ISDA MA, requiring the Non-defaulting Party to either perform or designate an Early Termination Date.[726] While the failed first amendment had stipulated a time limit of 90 days for the purposes of Sec. 2(a)(iii) ISDA MA, the 2014 amendment allows for negotiation of the time limit underlying the Condition End Date, with ISDA suggesting 90 days.[727] Significantly, for present purposes, the UK regulator, the Financial Services Authority and its successor, the Financial Conduct Authority ('FCA'), also inserted themselves into the substantive technicalities of the market-driven process by engaging in a dialogue with ISDA,[728] and

[722] *Ibid* para 7.14.
[723] *Ibid* para 7.13.
[724] C Gurney, 'Calling Time on Section 2(a)(iii) of the ISDA Master Agreement: ISDA Publishes an Amendment' (2014) Butterworths Journal of International Banking and Financial Law 520, 521.
[725] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 362; C Gurney, 'Calling Time on Section 2(a)(iii) of the ISDA Master Agreement: ISDA Publishes an Amendment' (n722) 521.
[726] In detail on the substantive content of the amendment: C Gurney, 'Calling Time on Section 2(a)(iii) of the ISDA Master Agreement: ISDA Publishes an Amendment' (n724) 521.
[727] *Ibid*.
[728] E Murray, 'Derivative Transactions' (n209) para 11.11.3.4.

communicating to the market that this should in fact constitute the maximum permissible time period.[729]

As the above example demonstrates, the interaction and increasing coalescence of public and private modes of regulation occurs through integration of abstract financial regulatory policy objectives via insertion of specific regulatory provisions into the ISDA MA, which is broadly adopted throughout the market as the result of a kind of dialectical process which engages the relevant stakeholders, including market participants, the legislator, regulatory agencies – and also the courts[730].[731]

C. Case Study No. 2: ISDA's Enlistment in the Implementation of Cross-Border Bank Resolution

While the first introductory case study above into the dynamics of interaction of public regulatory concerns with a private contractual instrument, namely the ISDA MA, focused on a specific instance of such interaction at the domestic level, the following case study points to the crucial role that ISDA and the ISDA MA – as a transnational contractual instrument – play in a transnational regulatory dimension.

I. Relative Functional Advantages of Bottom-Up to Top-Down Regulation

Financial market as well as banking law and regulation are the central domain of public top-down state regulation. Standardised multilateral contracting in the OTC derivatives market, as a bottom-up regulatory strategy, however, has some significant comparative advantages to top-down public regulation. For one, as it emanates directly from the regulated community, it exhibits a high responsiveness to the specific needs or 'sector specific rationality of interaction'[732]. What is more, this proximity to both the regulated and to the substantive object of regulation also means that the bottom-up contractual regulatory regime tends to be more reactive in terms of speed and effectiveness than its

[729] C Gurney, 'Calling Time on Section 2(a)(iii) of the ISDA Master Agreement: ISDA Publishes an Amendment' (n724) 521; S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.014/1.

[730] As already mentioned above, the role played by Sec 2(a)(iii) ISDA MA in post-GFC litigation before the English courts, beyond its significance in a regulatory context, is analysed in Chapter 3 § 2.

[731] See, also, regarding the US post-GFC regulatory context: MK Borowicz, 'Contracts as Regulation: The ISDA Master Agreement ' (n687) 74 noting, by way of example, the integration of Dodd-Frank Act ('DF') mandated information obligations into the ISDA contractual regime via market participants' adherence to ISDA's DF Protocols; C Jordan, *International Capital Markets: Law and Institutions* (Oxford University Press 2014) para 11.09.

[732] As put by D Wielsch, 'Global Law's Toolbox: Private Regulation by Standards' (n12) 1080; Similarly, D Wielsch, 'Relational Justice' (2013) 76 Law & Contemporary Problems 191, 208.

more sluggish top-down counterpart.[733] Lastly, and crucially for present purposes, in the light of the territorially defined jurisdiction of national financial regulation,[734] (industry standard form) contracts can trace cross-border market practice in ways which, regardless of some extraterritorial effects, territorially anchored law and regulation cannot.[735] In the wake of the GFC, this territorially limited enforcement radius proved particularly problematic as regarded measures implemented by a domestic resolution authority, faced by the failure of a bank with subsidiaries as well as assets and liabilities located in or respectively governed by the law of other jurisdictions.[736]

Against this specific background, as will be illustrated in the following, it is a continuously evolving feature that bottom-up and top-down strands of regulation in the international financial markets do not exist to the exclusion of the other, but – more so than ever after the GFC – interact in 'complex and multi-faceted ways'[737].

II. The Significance of Cross-Border Bank Resolution

Banking activity has in the decades following on from the demise of the Bretton Woods system[738], through a multitude of intersecting trends, become increasingly transnational, i.e. evolved in terms of commercial as well as in terms of organisational complexity and geography, facilitated by today's modern 'megabanks'[739]. One of the main exponents of this has been that of major financial institutions, such as the Lehman Brothers group, as cause célèbre of the GFC, operating via corporate structures which were 'highly

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[733] C Bradley, 'Private International Law-Making for the Financial Markets' (2005) 29 Fordham International Law Journal 127, 164.

[734] I MacNeil, 'Enforcement and Sanctioning' in N Moloney, E Ferran and J Payne (eds), *The Oxford Handbook of Financial Regulation* (Oxford University Press 2015) 301-302; M Haenjens, B Wessels and S Guo, 'Conclusions' in M Haentjens and B Wessels (eds), Research Handbook on Cross-Border Bank Resolution (Edward Elgar 2019) 398 ('As another consequence of the GFC, it became apparent how deeply international several banks had begun to operate, whilst their supervision and their applicable legal rules (…) remained fundamentally national').

[735] C Bradley, 'Private International Law-Making for the Financial Markets' (n733) 163-164; D Wielsch, 'Relational Justice' (n732) 208 ('(…) private standards can easily cross borders and become transnational because they only require freedom of contract to be promulgated'); J Biggins and C Scott, 'Resolving the gaps: embedding ISDA in states' responses to systemic risk' in N Dorn (ed), *Controlling Capital: Public and Private Regulation of Financial Markets* (Routledge 2016) 157-158.

[736] R Leckow and E Emre, 'Cross-Border Resolution: Progress and Challenges in Cross-Border Enforcement' in *Law & Financial Stability* (International Monetary Fund 2020) 70, 72.

[737] C Bradley, 'Private International Law-Making for the Financial Markets' (n733) 159.

[738] See, Chapter 1 § 6.B.I.1.

[739] C Kobrak, 'From Multinational to Transnational Banking' in Y Cassis, RS Grossman and CR Schenk (eds), *The Oxford Handbook of Banking and Financial History* (Oxford University Press 2016) 164.

fragmented and labyrinthic'[740], consisting of branches, subsidiaries and other entities in a range of different jurisdictions.[741] By way of one particularly illustrative example, the Lehman Brothers group, as the poster child of the global financial crisis, consisted of no less than 2,985 legal entities, which operated in some 50 countries.[742] What is more, it is commonplace for these internationally operative banks to have assets, i.e. contractual rights and liabilities, governed by foreign laws in their balance sheets.[743] As a result, the challenges arising from such a fundamentally transformed regulatory subject-matter have evolved accordingly, and regulators must seek to contend with the inherent tension between the commercial reality of transnational banking on the one hand, and the territorially constrained reach of financial regulation on the other.[744]

Against the backdrop of the GFC, the extent of this challenge had become manifest with regard to the failure of the kind of structurally elaborate transnational megabanks described above, which contrasted with the absence or incompleteness of dedicated regulatory frameworks containing tools suited to effect orderly bank resolution; i.e. so-called Special Resolution Regimes ('SRRs').[745] In light of this, dovetailing with the international regulatory consensus regarding the implementation of OTC derivatives market reform, under the immediate impression of the Chapter 11 bankruptcy proceedings against LBHI, with its implications for its 2,985 group entities,[746] was the recognition that there existed a pressing need to extend the regulatory focus to the

[740] E Avgouleas, *Governance of Global Financial Markets: The Law, The Economics, The Politics* (Cambridge University Press 2012) 253.

[741] C Kobrak, 'From Multinational to Transnational Banking' in Y Cassis, RS Grossman and CR Schenk (eds), *The Oxford Handbook of Banking and Financial History* (n739) 175-180.

[742] BCBS, *Report and Recommendations of the Cross-Border Bank Resolution Group* (2010) para 49.

[743] FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' in M Haentjens and B Wessels (eds), *Research Handbook on Cross-Border Bank Resolution* (Edward Elgar 2019) 203, 224.

[744] As put in the context of banking regulation by C Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997* (n644) 2.

[745] M Čihák and E Nier, The Need for Special Resolution Regimes for Financial Institutions: The Case of the European Union, IMF Working Paper (September 2009) 4.

[746] J-H Binder, 'Resolution: Concepts, Requirements, and Tools' in J-J Binder and D Singh (eds), *Bank Resolution: The European Regime* (Oxford University Press 2016) para 2.08; As Irit Mevorach points out, the specific problem with the Lehman brothers failure was paradigmatic of the limitations of jurisdictionally fragmented approaches to the failure of a transnational entity, in that insolvency proceedings were opened around the world against individual Lehman entities, but with no globally harmonised regime or global standard to coordinate proceedings in place, the attempt at coordinating via a multilateral cross-border protocol was ultimately not subscribed to by all Lehman subsidiaries: I Mevorach, 'Beyond the Search for Certainty: Addressing the Cross-Border Resolution Gap' (2015) 10 Brooklyn Journal of Financial & Commercial Law 183, 191; E Avgouleas, *Governance of Global Financial Markets: The Law, The Economics, The Politics* (n740) 254.

development of SRRs for failing banks as a central policy objective.[747] In this context, it is necessary to briefly distinguish two distinct aspects underlying the trajectory of regulatory reform, the first concerning function, the second concerning scope. First, the GFC had shown that national corporate insolvency regimes were ill-suited to adequately address the particularities of the failure of a financial institution[748], primed as these court-based proceedings are towards maximising the estate's value in order to satisfy creditors, which does, however, not encompass specific macroeconomic objectives such as financial stability or, in other words, systemic risk concerns.[749] Second, merely national approaches to resolution were doomed to fail in attaining the ultimate goal of effective resolution regarding institutions which were constructed and operated as complex cross-border group structures.[750] As already touched upon above, in terms of the constrained territorial reach of national regimes, Lehman provided a good example of the type of complex cross-border group structure creating significant obstacles to a swift and comprehensive resolution.[751]

Against this background, already in 2008, the G20 had set out an 'Action Plan to Implement Principles of Reform' ('Action Plan') appealing to national and regional authorities to subject their resolution regimes and bankruptcy laws to review, in order 'to ensure that they permit an orderly wind-down of large complex cross-border financial institutions'[752]. The initiative was rooted in a concern to resolve the 'too-big-to-fail' problem experienced first-hand during the GFC with regard to systemically important financial institutions ('SIFIs'), of the likes of Lehman and American International Group ('AIG'), and the corresponding unenviable binary choice facing national governments at the time, of either bailing out (as in the case of AIG)[753] or

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[747] See, eg, G20, *Leaders' Statement: The Pittsburgh Summit* (24-25 September 2009) 9 ('We should develop resolution tools and frameworks for the effective resolution of financial groups to help mitigate the disruption of financial institution failures').

[748] On the particular systemic implications regarding the failure of financial institutions, M Čihák and E Nier, *The Need for Special Resolution Regimes for Financial Institutions: The Case of the European Union* (n745) 6.

[749] In detail, *ibid*.

[750] E Avgouleas, *Governance of Global Financial Markets: The Law, The Economics, The Politics* (n740) 255.

[751] *Ibid* 254, summing up the root problem in the instance of Lehman as being that 'while claims had to be exercised against individual Lehman Brother entities based in different jurisdictions, each having separate legal personality due to the doctrine of incorporation, the group was managed as an integrated entity and borrowed money through the holding company in the same manner'.

[752] G20, *Declaration: Summit on Financial Markets and the World Economy* (15 November 2008) 2.

[753] M Čihák and E Nier, *The Need for Special Resolution Regimes for Financial Institutions: The Case of the European Union* (n745) 4-5.

resigning distressed SIFIs to their fate (as in the case of Lehman)[754], thus creating a source of *moral hazard*[755] at the expense of the taxpayer in the first case, or risking significant damage to the wider financial system in the latter case.[756] This binary choice is evident in the definition of a SIFI, as provided by the FSB:

'SIFIs are institutions of such size, market importance and interconnectedness that their distress or failure would cause significant dislocation in the financial system and adverse economic consequences. The "too-big-to-fail" (TBTF) problem arises when the threatened failure of a SIFI leaves public authorities with no option but to bail it out using public funds to avoid financial instability and economic damage.'[757]

Taking into account the genuinely transnational scope of the task ahead, a G20 Working Group substantiating the measures set out in the Action Plan called on two international standard setting bodies, the Financial Stability Forum ('FSF')[758] and the BCBS, to bring some uniformity to the global regulatory approach regarding cross-border resolution, which would otherwise fragment along the lines of regulatory jurisdiction.[759]
Conforming to the model dynamic of financial soft law generation briefly set out under § 3.A.I, international regulatory consensus eventually yielded some substantive fruit in the formulation of 'a new international standard for resolution regimes'[760] in the form of the FSB's 'Key Attributes of Effective Resolution Regimes for Financial Institutions'[761] ('Key Attributes'). The Key Attributes, drawing on the groundwork laid down by a range of different regulatory bodies and international standard setters, encapsulated and

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[754] *Ibid* 4.
[755] Since market participants cognisant of their systemic importance may be incentivised towards increased future risk-taking driven by the expectation that any materialisation of downside risk will be ultimately cushioned by guaranteed recapitalization with public funds. M Haentjens, T Keijser and G Morton, 'Financial Collateral: From Private to Regulatory Law Reform', in T Keijser (ed), *Transnational Securities Law* (2nd edn, Oxford University Press 2022) para 2.72 (fn 137).
[756] Y Diamant and others 'Close-Out Netting and Safe Harbours' in M Haentjens (ed.), *Financial Collateral: Law and Practice* (Oxford University Press 2020) para 8.44.
[757] FSB, *Progress and Next Steps Towards Ending "Too-Big-To-Fail" (TBTF): Report of the Financial Stability Board to the G20* (2 September 2013) 2.
[758] The FSB's predecessor.
[759] G20 Working Group on Reinforcing International Cooperation and Promoting Integrity in Financial Markets (WG2), *Final Report* (27 March 2009) 5 ('[W]e call on the FSF and the BCBS to explore the feasibility of common standards and principles as guidance for acceptable practices for cross-border resolution schemes thereby helping reduce the negative effects of uncoordinated national responses (...)').
[760] G20, *Communiqué G20 Leaders Summit Cannes* (3-4 November 2011) Sec 13; FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (15 October 2014) 1.
[761] FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (n758).

combined certain features which the FSB identified as the core elements necessary for an effective resolution regime 'in all jurisdictions'[762]. As such, they are a collection of non-binding best practices, intended as a blueprint for domestic jurisdictions the world over to design their resolution laws against.[763] Tying in with this is recognition of the fact that the effective coordinated resolution of transnationally operative entities requires substantive convergence of domestic resolution regimes transnationally, which was to be achieved by legislative incorporation of the tools and powers set out in the best practice blueprint.[764] Notably, rather than a court-based procedure, such as corporate insolvency, bank resolution was explicitly to be effected through a designated administrative authority; i.e. a 'resolution authority'.[765] The Key Attributes were officially endorsed at the Cannes G20 Summit in 2011.[766] While retaining the initial twelve Key Attributes, the Key Attributes were republished in 2014 to provide further sector-specific guidance on their implementation.[767]

The central objective of a resolution regime, envisaged by the FSB, was to 'allow authorities to resolve financial institutions in an orderly manner without taxpayer exposure to loss from solvency support, while maintaining continuity of their vital economic functions'[768]. Detailing the instrumentarium of resolution tools crafted for resolution authorities to achieve this goal is beyond the scope of this thesis. Of relevance for present purposes, as will be detailed below, were those 'general resolution powers'[769] premised on contractual operation. This included the so-called 'bail-in'[770] (as opposed to 'bail-out') mechanism, whereby the failing bank's debt is converted into equity, as well as the sale of viable business to third party financial institutions, or establishing a temporary bridge institution to carry on the failing bank's critical functions[771]. Crucially, for the purposes of this chapter, and as will be detailed below, it

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[762] *Ibid* 1.

[763] I Mevorach, *The Future of Cross-Border Insolvency: Overcoming Biases and Closing Gaps* (Oxford University Press 2018) 239.

[764] FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (n760) 4.

[765] *Ibid* 5.

[766] G20, *Communiqué G20 Leaders Summit Cannes* (n758); FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (n760) 1.

[767] FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (n760) 1.

[768] *Ibid*.

[769] *Ibid* Key Attribute 3.2.

[770] *Ibid* Key Attribute 3.2(ix).

[771] Their content and functioning is beyond the scope of this thesis and not relevant for present purposes. In more detail, see the overview of resolution powers provided by the FSB, *ibid* Key Attribute 3.2 ('General resolution powers').

also included a temporary regulatory resolution stay on early termination rights,[772] as embedded in pervasive financial market master agreements, such as the ISDA MA.

III. Bank Resolution versus Close-Out Netting: A Collision Course between Regimes of Public and Private Transnational Regulation

The implementation of the new transnational regulatory policy objective of effective transnational bank resolution – born out of financial stability and systemic risk concerns – was, however, on a collision course with an established component of transnational private regulation in the OTC derivatives market. Namely, orderly resolution of SIFIs promised to be incompatible with the unconstrained operation of the contractual risk mitigation technique of close-out netting, embedded in the OTC derivatives market via the ISDA MA, which will be detailed in the following.

1. Close-out Netting as an Instrument of Private Transnational Risk Regulation

It has become commonplace to emphasise the importance the 'legal technique'[773] of close-out netting holds for the functioning of the financial markets generally, and the OTC derivatives market specifically.[774] In terms of legal terminology, netting, with its origins in commercial practice, constitutes a relatively new conceptual addition.[775] Even in the qualified form of 'close-out' netting, the term presents itself as a somewhat broad 'catch-all'[776] concept, potentially causing some uncertainty as to its proper doctrinal classification and treatment under various legal systems.[777] Today, however, close-out netting is near universally recognised and facilitated in statutory insolvency regimes across the world.[778] As will be shown in the following, this has not simply happened by some accident of history, but is due to the strategic efforts of ISDA. Before that,

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[772] *Ibid* Key Attribute 3.2(x).

[773] M Peeters, 'On Close-Out Netting' (n20) para 3.01.

[774] See, eg, M Peeters, *ibid* para 3.01; M Bridge and J Braithwaite, 'Private Law and Financial Crises' (n151) 389; SK Henderson, *Henderson on Derivatives* (2nd edn, Lexis Nexis, 2010) para 11.1.

[775] I Annets and E Murray, 'Set-Off, Netting, and Alternatives to Security' in D Prentice and A Reisberg (eds), *Corporate Finance Law in the UK and EU* (Oxford University Press 2011) para 10.01; UNIDROIT, *Principles on Close-Out Netting* (2013) para 2.

[776] M Peeters, 'On Close-Out Netting' (n20) para 3.08.

[777] *Ibid* para 3.02 and 3.04; UNIDROIT, *Principles on Close-Out Netting* (2013) para 2; This uncertainty was particularly pronounced where the concept, born out of Anglo-American contract practice, came into contact with non-common law legal orders: With respect to contractual *netting* generally, already, KP Berger, *Der Aufrechnungsvertrag* (JCB Mohr 1996) noting the discrepancy between the broad functional definition of netting in international commercial practice, vis-à-vis its more granular treatment under (German) legal doctrine.

[778] For an overview, see, ISDA, *Status Of Netting Legislation*.

however, it is necessary to set out the contractual mechanics and economic purpose of the close-out netting mechanism.

a) The Operation and Purpose of Close-Out Netting under the ISDA MA

At the outset, it is necessary to briefly distinguish between two distinct netting techniques, each contained in the ISDA MA. Namely, this includes 'close-out' netting on the one hand, and 'payment' or 'settlement' netting under Sec. 2(c) ISDA MA, on the other hand.[779] As provided under Sec. 2(c) ISDA MA, in broad terms, where on a given date the amount under a party's payment obligation exceeds its counterparty's payment obligation in the same currency, and with respect to the same transaction, both countervailing obligations are discharged, and replaced with an obligation to pay only the exceeding difference. Turning first to their commonalities, both contractual techniques are intended to reduce multiple reciprocal cash-flows to a single net payable or receivable, and are thus not mutually exclusive but rather complement each other, while, however, differing in their operation and the particular transactional risk category they are intended to mitigate.[780]

The main purpose of settlement netting – aside from administrative cost advantages, added liquidity and reduction of the scope for operational error associated with the need for fewer payment instructions – is the reduction of settlement risk or the illustratively named 'daylight exposure'.[781] This is the specific risk that in a global market, spanning not only multiple jurisdictions, but also multiple time zones, one party already executes a payment in settling a payment obligation due on a mutual settlement date, for example in the context of a fixed-floating interest rate swap, before its counterparty's work day has begun, thus exposing it to the risk that this counterparty might default on its respective mutual obligation later in time.[782] The often cited famous example of this is the failure of West German private bank 'Bankhaus Herstatt' in 1974.[783] As such,

[779] I Annets and E Murray, 'Set-Off, Netting, and Alternatives to Security' (n775) 278.
[780] S Firth, *Firth on Derivatives Law and Practice* (n34) para 5.024.
[781] I Annets and E Murray, 'Set-Off, Netting, and Alternatives to Security' (n775) 278; S Firth, *Firth on Derivatives Law and Practice* (n34) para 5.024.
[782] NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 309, 366; S Firth, *Firth on Derivatives Law and Practice* (n34) para 5.024 noting that the time lag can also be due to systems limitations.
[783] The Herstatt case can be seen as an early example of the crystallisation cross-border settlement risk, as Herstatt's banking licence was revoked before the Bank's foreign exchange positions in New York had been settled. The German liquidator subsequently refused to make the payment: C Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997* (n644) 4.

settlement risk management via payment netting constitutes an everyday occurrence as part of daily transaction clearing and settlement.[784]

In contrast, the main purpose of close-out netting is not to reduce settlement risk, but rather to reduce mutual credit exposure under open executory contracts, such as derivatives, which envisage performance of mutual obligations over an amount of time in the light of a counterparty's (looming) insolvency before the value date.[785] As such, in contrast to payment netting, the occurrence of close-out netting is very much out of the ordinary, in that it comes into play only upon occurrence of a contractually agreed trigger event,[786] which often constitutes an indicator of an increase in the probability of the crystallisation of credit risk. As regards its purpose in reducing counterparty credit exposure, close-out netting functionally complements the posting of collateral, with the relative functional benefit of – as a purely contractual technique – not binding highly liquid assets in the process.[787]

The operation of close-out netting generally entails three stages.[788] In concise terms, it invariably follows the chronological triad of 'cancel, calculate, set-off'[789].[790] Namely, it consists of early termination of a single or multiple financial transactions between two parties, which are encompassed within the scope of the close-out netting provision, upon occurrence of certain contractually predetermined contingencies, i.e. the actual close-out component (Step 1).[791] This is followed by the valuation of the transactions encompassed by close-out in terms of a single currency (Step 2),[792] thus laying the foundation for the final component, namely determining the final net obligation due as termination amount to one of the parties'; i.e. the actual netting component (Step 3)[793]. These elementary steps are universally present in all contractual close-out netting

[784] M Peeters, 'On Close-Out Netting' (n20) para 3.07.
[785] *Ibid* para 3.36; PR Wood, *Set-off and netting, derivatives, clearing systems* (n215) para 2.031;
[786] M Peeters, 'On Close-Out Netting' (n20) para 3.07.
[787] I Annets and E Murray, 'Set-Off, Netting, and Alternatives to Security' (n775) 281.
[788] *Ibid* 269; M Peeters, 'On Close-Out Netting' (n20) para 3.10.
[789] PR Wood, *Set-off and netting, derivatives, clearing systems* (n215) para 2.003; Albeit, set-off is here not to be understood in its technical legal sense.
[790] Beyond the pure contractual mechanics, it also extends to the collateral taker's right to sell off any collateral posted to secure credit exposure incurred via the transactions: EJ Janger, 'Symposium Introduction: Treatment of Financial Contracts in Bankruptcy and Bank Resolution' (2015) 10 Brooklyn Journal of Corporate & Financial Commercial Law 1, 3-4; In detail on the interplay between close-out netting and collateralisation, Y Diamant and others 'Close-Out Netting and Safe Harbours' (n756).
[791] In the case of the ISDA MA, so-called Termination Events and Events of Default, as described below.
[792] M Peeters, 'On Close-Out Netting' (n20) para 3.10.
[793] *Ibid* para 3.10.

provisions, as, for example, defined in transnational soft law under Principle 2 of the UNIDROIT Principles on the Operation of Close-Out Netting Provisions:

'"*Close-out netting provision means a contractual provision on the basis of which, upon the occurrence of an event predefined in the provision in relation to a party to the contract, the obligations owed by the parties to each other that are covered by the provision, whether or not they are at that time due and payable, are automatically or at the election of one of the parties reduced to or replaced by a single net obligation, whether by way of novation, termination or otherwise, representing the aggregate value of the combined obligations, which is thereupon due and payable by one party to the other.*"'

Nevertheless, beyond these general commonalities, the concrete contractual configuration of these steps depends on the specificities of the market segment in which close-out netting is to operate.[794] As regards the specific manifestation close-out netting takes under the provisions of the ISDA MA, in terms of Step 1, it stipulates the predetermined contingencies constituting a right to early termination under the headings of *Events of Default* (Sec. 5(a) ISDA MA) and *Termination Events* (Sec. 5(b) ISDA MA). Events of Default, their nomenclature notwithstanding, do generally not constitute a breach of contract, but anticipate circumstances, which on their occurrence are deemed to bring about a risk of non-performance so great that the basis on which the transactions documented under the ISDA MA has broken down,[795] thus warranting the close-out of all outstanding transactions[796]. Termination Events, while upon their occurrence also potentially resulting ultimately in transaction close-out, differ, in that while Events of Default can be broadly said to be located within a counterparty's sphere of a responsibility, in the latter case no counterparty is at fault for the materialisation of the stipulated event.[797] As a result, the legal consequences of a Termination Event are somewhat less severe in that only those transactions actually affected by the Termination Event are subject to close-out and, at that, only upon counterparty notification.[798]

[794] *Ibid* para 3.23.
[795] S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.045.
[796] *Ibid* para 11.044; Simon Firth in light of this function qualifies them as 'probably the most important provisions in the ISDA Master Agreement', *ibid*.
[797] *Ibid* para 11.086
[798] *Ibid*.

As regards Step 2, since many OTC derivatives are to varying degrees customised, bespoke transactions, with no observable active trading market to rely on for the purposes of valuation, close-out valuation is effected using one of the calculation methodologies stipulated in the ISDA MA.[799] Broadly speaking, these methodologies serve to calculate the costs that the terminating (non-defaulting) counterparty would incur, or, inversely, the financial gains it would experience, if it were to replace the terminated transactions with economically equivalent replacement transactions with third parties.[800] The final Step 3 in the ISDA MA context, against this background, entails tallying up the positive and negative replacement values of all transactions within the scope of the close-out netting provision, arriving at a single overall net figure owing from one (out-of-the-money) to the other (in-the-money) party on an aggregate basis, constituting the termination amount.[801] In this way, where close-out netting clauses are legally enforceable, counterparties can reduce their mutual credit exposure from a 'gross' to the conceptually name-giving 'net' amount.

By way of a stylised example, two counterparties have as part of their trading relationship entered into two interest rate swaps: 'Swap 1' and 'Swap 2'. If 'Swap 1' is in-the-money for counterparty A by a value of '2' and 'Swap 2' is in-the-money for Counterparty B by a value of '3', each party is exposed to the other up to the value of their respective in-the-money swap, resulting in a gross exposure of '5'. However, where close-out netting is enforceable, mutual credit exposures can be netted against each other, meaning that outstanding obligations covered by the respective netting provision cease to be treated individually and their aggregate value is computed so as to result in a single net payment obligation, owed by the out-of the-money party to the in-the-money party.[802] As a result, net exposure in the example described above, would amount to '1', with Counterparty A owing Counterparty B payment of that amount. Of course, it bears emphasis that the true practical utility of netting in all its forms reveals itself most clearly when abstracting from a few individual transactions to the

[799] In detail, R Grove, 'Valuation in the context of derivatives litigation' (2011) 6 Capital Markets Law Journal 149.
[800] M Peeters, 'On Close-Out Netting' (n20) para 3.20.
[801] *Ibid* para 3.21.
[802] UNIDROIT, *Principles on Close-Out Netting* (2013) 2.

multiplicity of transactions contained in large derivative portfolios, for example those of international dealer banks, and the huge cumulative amounts involved.[803]

While gross credit exposure might not be a problem in a hypothetical world of at all times solvent counterparties, its pitfalls are thrown into sharp relief upon a counterparty's insolvency. It is here that the economic value of distilling the multitude of open transactions between counterparties into a single net payable or receivable under close-out netting comes into its own.[804] Taking the above example, were Counterparty A to become insolvent, without enforceability of a close-out netting provision encompassing the counterparties' transactions ('Swap 1' and 'Swap 2'), Counterparty B's credit exposure to Counterparty A would crystallise in the full amount of its in-the-money 'Swap 2', namely '3'. Crucially, upon insolvency of an OTC derivatives market participant, under the general insolvency laws of a given jurisdiction, an insolvency office holder may be entitled to choose to abandon those transactions which are – from the insolvent entity's perspective – out-of-the-money, and thus unprofitable to the insolvent estate, while at the same time increasing the insolvency mass by requiring the insolvent entity's counterparty to perform its obligations under any in-the-money transactions.[805] This particular scenario has figuratively become known as 'Cherry Picking'[806]. In such a case, again staying with the above example, counterparty B would face crystallisation of the full gross credit exposure of the trading relationship to the amount of '5'.

Against the above background, it bears emphasis that the close-out netting mechanism is also embedded in and supported by various other provisions beyond those regulating the actual close-out procedure in a narrow sense. Principally, this is the essential 'Single Agreement Concept' embodied in Sec. 1(c) ISDA MA, according to which '[a]ll Transactions are entered into in reliance on the fact that this Master Agreement and all Confirmations form a single agreement between the parties (…) and the parties would

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[803] D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (Oxford University Press 2022) paras 1.30-1.31, who observes that '[in] derivatives, the basic unit of analysis is often the portfolio rather than the trade', *ibid* para 1.30.

[804] M Bridge and J Braithwaite, 'Private Law and Financial Crises' (n151) 390 ('Though netting facilitates dealings under the MA in many circumstances, it becomes of vital importance on insolvency.').

[805] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n215) para 2.033.

[806] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation) (n36) para 17.30; PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n215) para 2.033; J Benjamin, *Financial Law* (Oxford University Press 2007) para 1.26; D Cunningham, 'Swaps: Codes, Problems and Regulation' (n689) 32.

not otherwise enter into any Transactions'.[807] In this way, standard form master agreements, such as the ISDA MA form, contractually link together all executory transactions in a single agreement, with the goal of erecting a contractual barrier to insolvency cherry picking.[808] This is because, where the barrier is legally effective, the insolvency official ends up only with the limited choice of whether or not to pick the single cherry of the entire agreement.[809] When viewed through the functional lens of the overarching purpose of derivative transactions as risk transfer instruments, the single agreement concept is in effect an embodiment of the fact that at a portfolio basis, any new individual transaction recorded under an ISDA MA in place between the counterparties should not be viewed in isolation, but is concluded with a view to altering the respective overall risk transfer effected via the existing portfolio, to the extent the new trade alters existing cash-flows.[810]

b) Enforceability of Close-Out Netting under Domestic Insolvency Laws

Enforceability of close-out netting provisions can prove problematic, insofar as the contractual mechanism substantively comes into conflict with mandatory provisions of insolvency law which limit freedom of contract in insolvency and are the specific expression of overarching principles – historically rooted in many jurisdictions – most notably, for example, the core principle of *par conditio creditorum*, the equal treatment of creditors of equal rank.[811]

Such a collision of the private contractual mechanism with mandatory provisions of domestic insolvency law can, for different reasons, occur at each of the three constituent

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[807] S Firth, *Firth on Derivatives Law and Practice* (n34) para 5.027; As is also evidenced in the preamble to the ISDA MA form, eg, in the 2002 version: '[The counterparties] have entered and/or anticipate entering into one or more transactions (…) that are or will be governed by this 2002 Master Agreement, which includes the schedule (…) and the documents and other confirming evidence (…) exchanged between the parties or otherwise effective for the purpose of confirming or evidencing those Transactions. This 2002 ISDA Master Agreement and the Schedule are together referred to as this "Master Agreement"'.

[808] J Benjamin, *Financial Law* (n805) para 12.14 (fn 36); NM Feder, 'Market in the Remaking: Over-the-Counter Derivatives in a New Age' (n642) 361.

[809] M Peeters, 'On Close-Out Netting' (n20) para 3.32; Ensuring that there is an actual economic inter-relationship between the individual transactions documented under a master agreement, and thus lend some substantive legal weight to the contractual stipulation of a single agreement, has been at the centre of concerns with how to design the ISDA MA from the early days of the swaps market. For example, creating 'a unified approach to default' including the netting of two-way settlement amounts was deemed relevant in establishing such a connection: D Cunningham, 'Swaps: Codes, Problems and Regulation' (n689) 32; Emphasising this point, and providing an overview of current positions on this question: M Peeters, 'On Close-Out Netting' (n20) paras 3.32-3.35.

[810] D Murphy, *Derivatives Regulation: Rules and Reasoning from Lehman to Covid* (n803) para 1.41.

[811] M Peeters, 'On Close-Out Netting' (n20) para 3.28.

steps of the close-out netting process.[812] First, the enforceability of the close-out component, i.e. early termination, may prove questionable with a view to the existence of some type of insolvency 'stay' on enforcing obligations against the insolvent counterparty, as well as a general prohibition of '*ipso facto* clauses' enshrined in many domestic legal systems.[813] In general terms, an '*ipso facto* clause' is a contractual provision entitling one party to (early) termination of an outstanding contract solely based on the occurrence of an insolvency event.[814] Second, as regards valuation, domestic insolvency laws may foresee mandatory valuation methodologies regarding the debtor's liabilities, which differ from those stipulated in the relevant contractual close-out netting provision.[815] Illustrating how this is far from a mere theoretical matter, this conflict came to the fore as recently as 2016 in a decision of Germany's highest civil matter court.[816] Lastly, conflicts may also arise at the actual 'netting' stage, when under the applicable insolvency regime, the competent insolvency office holder can – regardless of an overarching master close-out netting provision – repudiate individual executory contracts, while assuming others beneficial to the insolvent estate, thus allowing for insolvency cherry picking by not recognising the single agreement concept.[817]

2. *ISDA Enlisting National Legislatures: The Genesis of Harmonised Netting Legislation as State Recognition of Financial Lex Mercatoria*

As observed by Ian Annetts and Edward Murray, in noting the relative novelty of the concept of netting, historically speaking, it 'was not a term widely used in statutes, referred to by judges in cases or discussed by legal academics in their commentaries. It now appears in a number of European Directives and the domestic legislation implementing those Directives in a number of European countries as well as in

[812] *Ibid* para 3.28.
[813] *Ibid* para 3.28; FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' (n743) 204.
[814] Translated into English as 'the fact itself' clauses. So called since 'in substance (…) the very fact of insolvency is enough' to terminate outstanding transactions: PR Wood, *Principles of International Insolvency* (3rd edn, Sweet & Maxwell 2019) para 21.004; M Peeters, 'On Close-Out Netting' (n20) para 3.28; FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' (n743) 204.
[815] M Peeters, 'On Close-Out Netting' (n20) para 3.28.
[816] See, § 3.C.III.2.e).
[817] M Peeters, 'On Close-Out Netting' in T Keijser (ed), *Transnational Securities Law* (n20) para 3.28; Which is 'usually (…) fatal to close-out netting': PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n215) para 2.033.

domestic UK legislation that is not of European origin'[818]. While not quite a contractual *deus ex machina*, in that it did build upon pre-existing legal concepts, these were innovatively assembled and adapted to financial market practice under the rubric of close-out netting to a distinct contractual technique,[819] which came to be included in standard OTC derivatives documentation beginning in the mid-1980s and has, with the rise of the OTC derivatives market, become pervasive in financial market transactions generally.[820] Against this background, close-out netting has in itself been described as forming an integral part of the corpus of 'the *lex mercatoria* of the financial markets in general'[821]. This aspect has recently, at least implicitly, been recognised in two English decisions, with regard to the operation of the express terms of the ISDA MA's specific contractual termination regime under the common law, with its respective termination rights and remedies. In *Deutsche Bank AG v Sebastian Holdings Inc (Rev 1)*[822] Cooke J, with approving reference to a passage from derivatives law literature on the operation of the 1992 ISDA MA, illustratively stated that '[i]t is generally recognised that the provisions in the ISDA agreements on close out are intended to represent a complete code on termination of such Master Agreements'[823]. As such, rights of termination under common law were deemed to be implicitly excluded insofar as they counteracted the specific contractual termination and close-out regime in the ISDA MA.[824] In *Marme Inversiones 2007 SL v NatWest Markets Plc & Ors*[825], with reference to the ISDA MA's termination provisions as 'a comprehensive code for termination, namely the Event of Default regime'[826], Picken J indicated that a counterparty's right to complain under general law that there had been a repudiatory breach was not ousted by the existence of a specific contractual termination regime under the ISDA MA.[827] However, said counterparty's right under the general law was constrained in that it had to raise such a complaint in accordance with the specific ISDA MA procedure for termination,

[818] I Annets and E Murray, 'Set-Off, Netting, and Alternatives to Security' (n775) 269-270.
[819] M Peeters, 'On Close-Out Netting' in T Keijser (n20) paras 3.03
[820] *Ibid* paras 3.03-3.04; E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation) (n36) para 17.31; A number of other master agreements in use for cross-border financial transactions, such as securities financing transactions, have also incorporated a close-out netting clause. See, eg, Sec 10 of the Global Master Repurchase Agreement ('GMRA') for securities sale and repurchase agreements.
[821] M Peeters, 'On Close-Out Netting' (n20) para 3.02.
[822] [2013] EWHC 3463 (Comm).
[823] *Ibid* at [1553].
[824] *Ibid* at [1553]-[1557].
[825] [2019] EWHC 366 (Comm).
[826] *Ibid* at [506].
[827] *Ibid* at [509].

including the contractually agreed legal consequences under its specific provisions; i.e. the ISDA MA's standard notice and grace periods.[828]

a) Starting Point: Diverse Global Landscape of Insolvency Laws

It bears repeating that, at its core, close-out netting is from a legal viewpoint nothing but a purely contractual mechanism.[829] As such, necessitated by the multi-jurisdictional scope of the OTC derivatives market, it requires universal recognition, in order to reliably perform its risk-reduction function on a transnational market-wide basis – or, at the very least, its effectiveness is premised upon recognition in a harmonised fashion in the major derivatives jurisdictions.

From a comparative perspective, the jurisdictional pre-conditions regarding the recognition and enforceability of close-out netting, however, varied considerably in the early days of the fledgling, yet quickly internationalising swaps market, with local insolvency laws perhaps the prime exponent of closely guarded territorial sovereignty.[830] On the one hand, some jurisdictions' insolvency regimes already provided a fertile ground for close-out netting provisions to take hold, such as the generally creditor friendly jurisdictions of England and English-based jurisdictions through the pre-existing combination of the recognition of insolvency set-off, as well as the upholding of insolvency termination clauses and contract set-off against interveners.[831] Against this background, specific netting legislation subsequently introduced in these jurisdictions was largely only declaratory in character.[832] In contrast, more debtor-friendly jurisdictions, hostile to insolvency set-off for example, to varying degrees required statutory amendment of existing insolvency regimes to ensure close-out netting enforceability, including most Napoleonic jurisdictions as well as the major derivatives jurisdiction of the United States.[833]

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[828] *Ibid*.

[829] P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (2016) 36 Oxford Journal of Legal Studies 855, 857.

[830] DP Cunningham and TJ Werlen, 'Risk Reduction through Multibranch Netting', in RJ Schwartz and CW Smith, Jr (eds), *Derivatives Handbook: Risk Management and Control* (John Wiley & Sons 1997) 213 ('Insolvency remains a major domain of territorial sovereignty.').

[831] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n215) para 8.001; PR Wood, *Principles of International Insolvency* (n814) para 20.001; See also, S Firth, *Firth on Derivatives Law and Practice* (n34) para 5.001 ('(…) in contrast to certain other jurisdictions (…) their enforceability in England in respect of uncleared transactions that are not part of a financial collateral arrangement is based on an application of general legal principles').

[832] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n215) 8.004.

[833] *Ibid* 8.002; PR Wood, *Principles of International Insolvency* (n814) para 20.001; As noted by Philip Paech, this goes some way to explaining the intensity with which the debate on the utility of insolvency

b) ISDA's Role in Aligning the Global Legal Landscape

It was against the backdrop of this varied legal landscape, overcast by a large cloud of legal uncertainty, that ISDA, beginning towards the end of the 1980s, commenced its ongoing practice of commissioning opinions from select local law firms on the enforceability of close-out netting provisions, then under the 1987 ISDA MA for the US, England, Germany and France, at the time the jurisdictions where the major market participants were located and soon extending the scope of the exercise to further jurisdictions.[834] What is more, opinions addressing legal certainty concerns regarding the enforceability of close-out netting have not been isolated merely to the transactional level ever since the mechanism was first hardwired as risk-reducing into the global soft law standard on banking supervision, the Basel Capital Accord of 1988, as revised in 1994.[835] From this significant turning point onwards, close-out netting also took on a significant regulatory dimension at the institutional level. This is because the recognition of close-out netting provisions as credit risk-reducing for the purposes of determining the level of regulatory capital a supervised institution is required to hold, relative to its derivatives positions, hinges on its legal enforceability, with banks shouldering the primary burden of demonstrating to their supervisors 'the legal enforceability of netting arrangements in all relevant jurisdictions'[836].

In light of some caveats and qualifications on enforceability contained in these early opinions, ISDA commenced an ambitious law reform project, actively lobbying national legislatures at a global level to amend existing legislation as a means of removing any residual legal uncertainties and thus ensuring the smooth operation of close-out netting in those jurisdictions.[837] In other words, ISDA sought to shape the potential statal touchdown points of its transnational private regulatory regime in its image; i.e. in the

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safe harbours is fought out in the US context, since here, safe harbour privileges constitute a foreign body within and at odds with the general insolvency regime – a polarity not replicated in other more creditor-friendly jurisdictions: P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n829) 861 and 867.

[834] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation) (n36) para 17.35.

[835] See, BCBS, *Basle Capital Accord: The Treatment of the Credit Risk Associated with Certain Off-Balance-Sheet Items* (July 1994); A historical treatment of the genesis of the prudential regulatory recognition of close-out netting is provided in C Goodhart, *The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997* (n644) 358-361.

[836] BCBS, *Basle Capital Accord: The Treatment of the Credit Risk Associated with Certain Off-Balance-Sheet Items* (July 1994) 2.

[837] E Murray, 'Use of Close-Out Netting and Financial Collateral in Relation to Derivatives (Including ISDA Documentation) (n36) para 17.36.

context of close-out netting provisions, the domestic insolvency provisions and principles of domestic insolvency laws. As a cornerstone of these efforts, ISDA in 1996 published a model netting act to serve as a blueprint for substantive law reform, subsequently updated and re-published in 2002, 2006 and most recently in 2018 to reflect intervening market developments, flanked by a Guide aimed at 'provid[ing] practical advice and guidance to governmental officials and other policy makers in countries that are currently considering implementing netting legislation'[838]. The 2018 ISDA Model Netting Act, by way of example, continues in the mould of its predecessors in addressing the enforceability of bilateral close-out netting arrangements and of related financial collateral arrangements, as well as expressly stating gaming- and wagering law exemptions for derivative transactions.[839] New additions necessitated by intervening market developments, specific to the 2018 model law, include provisions addressing the post-crisis mandatory initial and variation margin requirements as well as Shari'a compliant transactions, and, of particular importance for present purposes and the topic of this chapter, 'the widespread adoption of bank and other financial institution resolution regimes'[840].[841]

Significantly, the original model netting act was – regardless of cultural, political, economic or legal idiosyncrasies – drafted for universal jurisdictional adoption.[842] Where local legal idiosyncrasies stand in the way of literal transcription, ISDA advocated and advocates for transposition into local law, at least in the spirit of the principles laid down in the accompanying Guide.[843] Legal anthropologist Annelise Riles

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[838] ISDA, *2018 ISDA Model Netting Act and Guide* i.

[839] Sec 3(a) ISDA Model Netting Act: *ibid* 38.

[840] *Ibid* i.

[841] *Ibid*.

[842] A Riles, *Collateral Knowledge: Legal Reasoning in the Global Financial Markets* (The University of Chicago Press 2011) 200-201.

[843] This understanding is evidenced, eg, in the following passage from the most recent Guide to the 2018 ISDA Model Netting Act, stating that '[i]n preparing this Guide, [ISDA] have had regard to the experience of civil law as well as common law jurisdictions. [ISDA] intend the general principles discussed in this Guide to be of assistance to national authorities in jurisdictions representing all legal traditions. [ISDA] recognize that in many countries it will not be necessarily feasible, as a matter of theory or practice, to implement the 2018 MNA [Model Netting Act] *verbatim* in the form in which [ISDA] have published it (...). In preparing the 2018 MNA [ISDA] have sought to avoid using legal concepts that would be specific to a given legal culture (…). The 2018 MNA is generic in the sense that its provisions are self-contained and generally do not rely on jurisdiction specific concepts. [ISDA] are aware that actual netting legislation sharing the same purpose as the 2018 MNA will often need to be in a form which substantially differs from the generic form set out in the 2018 MNA. This may be for a variety of reasons, ranging from technical (for example, taking into account existing local legal concepts or doctrines) to legal cultural (for example, the detailed style of drafting adopted in the 2018 MNA may be considered inappropriate in jurisdictions of the civil law tradition). [ISDA] demonstrate in this Guide

makes this core mechanism of 'legal transplantation'[844] of the privately crafted netting technique into national legislation via a privately drafted model law explicit when succinctly stating that '[i]n the model law (…) we have the apotheosis of the private global law reform project – a global law, posted at a private Web site, and downloadable directly to national bureaucracies'[845].

Not least because of its framing as an essential component for the attractiveness of a financial jurisdiction in an environment of international regulatory competition, the model netting acts' substantive provisions were transposed into a multitude of national bodies of legislation, with ISDA representatives closely accompanying the legislative process to its fruition.[846]

c) Statutory 'Safe Harbours' as an Insolvency Privilege for a Transnational Market

At the technical legal level, recognition and facilitation of close-out netting vis-à-vis an insolvent counterparty,[847] has taken the form of so-called statutory 'safe harbours'[848] or 'carve-out statutes'[849]. Both metaphors indicate the respective statute's essential function of shielding or immunising qualifying contracts, such as OTC derivatives, encompassing close-out netting provisions, from the operation of the regime of general insolvency law and thus privileging OTC derivatives positions relative to any other positions held by creditors of a distressed counterparty.[850] As already detailed above, this is because its effective operation in insolvency is the principal point of contention as well as the concern of market participants; *inter alia* for calculating credit exposure

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how the 2018 MNA may, nonetheless, be used even in civil law jurisdictions as a starting point for the preparation of appropriate legislation. We also make certain methodological suggestions to facilitate the effective translation of the provisions of the 2018 MNA into a body of provisions that takes into account these various local requirements while achieving effectively the purposes of the 2018 MNA': ISDA, *2018 ISDA Model Netting Act and Guide* ii.

[844] A Riles, *Collateral Knowledge: Legal Reasoning in the Global Financial Markets* (n842) 185.

[845] *Ibid* 201.

[846] Cf, eg, case studies available in academic literature on the Irish and Japanese experiences respectively: J Biggins and C Scott, 'Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform' (n207) 329-331 (emphasising the factor of regulatory competition); A Riles, *Collateral Knowledge: Legal Reasoning in the Global Financial Markets* (n842) 199.

[847] Where close-out netting clauses are applied against a solvent party upon triggering the respective mutually agreed close-out provision, freedom of contract should provide the requisite basis for enforceability: M Peeters, 'On Close-Out Netting' (n20) para 3.26.

[848] As they are referred to in the parlance of US bankruptcy law: P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n829) 857.

[849] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n215) 8.002.

[850] I Annets and E Murray, 'Set-Off, Netting, and Alternatives to Security' (n775) para 10.01.

and regulatory capital reserves.[851] In terms of competing legal principles, this is due to the fact that, here, freedom of contract – the core principle at the heart of the ISDA contractual architecture – clashes with and is, at least under the major legal orders, curtailed by the operation of mandatory general insolvency principles.[852] This general conflict bears out illustratively in the specific context of contractual close-out netting.[853] As already touched upon above, the general insolvency rules in a number of jurisdictions, *mutatis mutandis*, restrict the individual steps of the close-out netting mechanism; for example, by invalidating contractual provisions entitling a party to terminate an executory contract based solely on the insolvency or some related event indicating a deterioration in the financial condition of its counterparty as so-called '*ipso facto* clauses'.[854] In general terms, the rationale underlying such an insolvency policy is informed by the objective to preserve the insolvent party; in other words a 'rescue philosophy'[855]. Such statutory nullification of contractual termination, however, at the same time spells out the wholesale statutory negation of close-out netting of executory contracts, since early termination constitutes the essential first step in the close-out netting mechanism.[856]

Specific statutory carve-outs exempt close-out netting from such restrictions.[857] Again framing the issue in terms of jurisdictional touch-down of the transnational close-out netting standard in a particular national insolvency jurisdiction, the ultimate goal of safe harbour legislation is to *ex ante* minimise the extent of interpretative leeway or 'interpretive interference'[858] from the perspective of the private transnational regime, which a national insolvency court may exert regarding the operation of the close-out

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[851] See, eg, ISDA, *2018 ISDA Model Netting Act and Guide* 6.

[852] See, generally, eg, KP Berger, 'Lösungsklauseln für den Insolvenzfall' in Arbeitskreis für Insolvenzwesen Köln e. V. (ed), *Kölner Schrift zur Insolvenzordnung* (3rd edn, ZAP Verlag 2009) 329 classing this 'conflict between the creative freedom of party autonomy, as a paradigm of contract law (…), and the mandatory claim to validity of insolvency law' as 'a basic problem of modern insolvency law that is becoming increasingly virulent in modern business practice' [own translation].

[853] *Ibid* 329.

[854] PR Wood, *Principles of International Insolvency* (n814) paras 21.025 and 21.028-21.032 with a status overview.

[855] *Ibid* paras 21.026.

[856] *Ibid* paras 20.006 and 21.027.

[857] Aside from easing the access to collateral upon insolvency of a counterparty and restricting the protection against avoidance of legal acts prior to insolvency, which will, however, be disregarded for present purposes. In detail, P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n829) 864-865 and 866-867.

[858] J Black and D Rouch, 'The development of the global markets as rule-makers: engagement and legitimacy' (2008) 2 Law and Financial Markets Review 218, 225.

netting standard, thus ensuring the transnational consistency of its operation.[859] As put by John Biggins and Colin Scott, the '[s]horing up the ISDA regulatory regime'[860] in this particular instance takes the form of supplementing boilerplate contracts with 'boilerplate legislative provisions'[861], which are drafted to minimise any friction in the operation of the former.

ISDA itself identifies the core potential sources of interference with transnational market functioning to be mitigated by carve-out legislation as domestic insolvency laws (the 'primary obstacle'[862]), any other specific mandatory provisions of debtor protection more generally, gaming or wagering laws, as well as 'less frequently'[863] other domestic law principles, such as mandatory form requirements.[864] In addressing the latter, ISDA explicitly evokes the 'international nature of the financial markets'[865] in suggesting law makers actively question the suitability of domestic provisions vis-à-vis international financial transactions.[866]

As a testament to the effectiveness of its efforts, today, according to the continuously updated list on the ISDA website, 76 jurisdictions have adopted netting legislation with such legislation currently under consideration in 13 further jurisdictions.[867] Flanking and facilitating its recognition at the level of domestic legislation is the overarching recognition of close-out netting as 'best practice(…)'[868] to be emulated domestically in a range of transnational soft law instruments. Soft law instruments promoting broad recognition, prominently include, i.a., the post-GFC 2013 UNIDROIT Principles on the Operation of Close-Out Netting Provisions[869].

In addition, as already briefly touched upon above, a crucial soft law milestone on the way to close-out netting becoming a transnational standard was its successful integration into the global architecture of prudential regulation. As stated above, this occurred via its recognition as credit risk-reducing at the microprudential level of

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[859] A Riles, *Collateral Knowledge: Legal Reasoning in the Global Financial Markets* (n842) 187.
[860] J Biggins and C Scott, 'Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform' (n207) 327.
[861] *Ibid* 328.
[862] ISDA, *2018 ISDA Model Netting Act and Guide*, para 2.6(a).
[863] *Ibid*.
[864] *Ibid* para 2.6(d) and (fn 33).
[865] *Ibid* para 2.6(d).
[866] *Ibid* (fn 33).
[867] ISDA, *Status of Netting Legislation*.
[868] As recognised in his critical account of the ISDA lobbying effort by RJ Mokal, 'Liquidity, Systemic Risk, and the Bankruptcy Treamtent of Financial Contracts' (2015) 10 Brooklyn Journal of Corporate, Financial & Commercial Law 15, 17.
[869] UNIDROIT, *Principles on Close-Out Netting* (2013).

regulated banks' regulatory capital calculation.[870] Namely, whereas the original 1988 Basel Accord, on account of legal uncertainty as to its enforceability in insolvency, owing to the relative novelty of the technique, did not yet do so, the 1994 and 1995 amendments to the Basel Accords recognised close-out netting as credit risk-reducing for regulatory capital purposes – subject to certain qualifying conditions; such as, i.a., the provision of legal opinions demonstrating enforceability.[871] This, in turn, has had the effect of making those jurisdictions adopting the approach more attractive to dealer banks due to reduced capital costs of transactions, thus incentivising other jurisdictions to adopt and maintain it under the pressures of regulatory competition.[872] Soft law recognition has since filtered down into hard law internationally, including, for example, at the level of supranational EU law in the form of Arts. 295, 296 CRR.

The current picture is thus one of a highly successful bottom-up attempt at achieving substantive harmonisation at the transnational level, bringing about a high degree of legal certainty for internationally active market participants. In other words, within the few decades following its inception, this highly technical element of financial *lex mercatoria* has prevailed upon its contact with mandatory state law.[873] Thus, rather than mandatory law shaping the permissible extent of a transnational contractual technique, the transnational technique has effectively moulded state laws to fit its purposes.

d) Systemic Risk Reduction as the Traditional Policy Rationale for Insolvency Safe Harbours

The primary policy rationale put forward in support of broad statutory recognition of the operation of close-out netting has – at least traditionally – been that the credit risk mitigating function at the micro-level of individual transactions translates to a systemic-risk reducing function at the macro-level of the financial markets.[874] In other words, microprudential risk reduction equates to macroprudential (systemic) risk reduction.[875]

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[870] Y Diamant and others 'Close-Out Netting and Safe Harbours' (n756) para 8.05.

[871] M Peeters, 'On Close-Out Netting' in T Keijser (n20) para 3.37.

[872] This dynamic is evident in the reaction of the German authorities and legislature to a German Federal Court decision potentially impeding the operation of close-out netting, as briefly detailed under § 3.C.III.2.e).

[873] M Peeters, 'On Close-Out Netting' (n20) para 3.31 (making this description of the status quo as part of the normative question of why it should).

[874] *Ibid* para 3.44; WJ Bergman and others, 'Netting, Financial Contracts, and Banks: The Economic Implications' in Federal Reserve Bank of Chicago (WP 2004-02) para 4.2.1; P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n829) 873 ('[T]he limitation (or near-elimination) of individual counterparty credit risk is expected to have a beneficial effect on systemic stability.').

[875] Y Diamant and others 'Close-Out Netting and Safe Harbours' (n756) para 8.05.

Underlying this approach is a conceptualisation of systemic risk as 'a simple aggregation of the risk of individual institutions'[876]. At the microprudential level, credit risk reduction is evident in current BIS statistics, where the global OTC derivative gross market value of USD 17.1 trillion is significantly reduced to a gross credit exposure, as an indicative measure of counterparty credit risk, of USD 2.8 trillion; i.e. by approximately 83.6%, when taking into account enforceable netting provisions.[877] A current account of the traditional systemic risk rationale underlying safe-harbour legislation is provided by Philip R. Wood, in that at its core lies avoiding the threat of 'a 'domino-effect' triggered by the failure of one financial institution prompting subsequent failures of other contractually interlinked financial institutions, ultimately creating costs for the wider financial system and creating the need for tax payer funded bailouts.[878] This particular understanding also lies at the heart of international soft law instruments, propagating domestic close-out netting recognition, such as the UNIDROIT Principles mentioned above.[879] In broad strokes, the general systemic argument employed in favour of safe harbours in the OTC derivatives context is that the otherwise applicable insolvency stays would in unpredictable ways impact the effectiveness of the insolvent entity's counterparties' hedging positions. Namely, counterparties would for the uncertain duration of insolvency proceedings and an applicable stay remain effectively trapped in long-term positions, subject to market risk and, thus, with continuously changing values impacting the solvent counterparty's risk management, with potential resulting liquidity and solvency problems – not just for that counterparty – but also with knock-on effects on the solvent counterparty's respective contract counterparties.[880] Where close-out netting is effective, according to this view, counterparties can, in contrast, quickly close-out and re-establish hedging positions in the market.[881] Under this view, since the OTC derivatives market structure is characterised by a high degree of contractual interconnectedness between market

[876] RJ Mokal, 'Liquidity, Systemic Risk, and the Bankruptcy Treamtent of Financial Contracts' (n868) 21 (who is highly critical of this approach and the harnessing of bankruptcy law in systemic risk mitigation in general).
[877] See, on these measurement metrics, Introduction (n11).
[878] PR Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (n215) para 8.001.
[879] UNIDROIT, *Principles on Close-Out Netting* (2013) 3 ('(…) the operation of close-out netting provisions reduces the risk that the inability of one market participant to meet its obligations creates or increases financial difficulties for counterparties which could lead to a chain of failures of market participants (contagion effect or systemic risk)').
[880] M Peeters, 'On Close-Out Netting' (n20) para 3.44; See, also, FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' in M Haentjens and B Wessels (n743) 208.
[881] M Peeters, 'On Close-Out Netting' (n20) para 3.43.

participants, principally the market making dealer banks sitting at the core of the characteristic 'hub and spoke'[882] networked market structure through extensive hedging and re-hedging chains, these systemic risk concerns are particularly pronounced.[883] A related argument to this scenario of contractual or 'asset connectedness'[884], is that without enforceable close-out netting, counterparties of a distressed, but not (yet) formally insolvent entity, may simply choose to close out transactions at an earlier stage (should termination in insolvency not be legally enforceable), thus creating a 'run' on the distressed debtor with the potential of ultimately tipping it over the edge into insolvency with systemic implications, where the insolvent debtor is itself systemically important (i.e., conforming to the microprudential view on systemic risk)[885] or affected by common risk-factors with other institutions (i.e., conforming to the macroprudential view on systemic risk)[886].[887]

However, since the widespread insolvency privilege for particular financial contracts, through disapplying established mechanisms of general insolvency law – as its flip side – entails significant potential negative externalities in the shifting of risk to the insolvent entity's other (non-privileged) creditors,[888] the strength and persuasiveness of the privilege's justifications have been questioned and subject to critical academic analysis. Scholarly criticism has focused on the systemic risk mitigation rationale as the policy foundation for the widespread adoption of safe harbour provisions.[889] By way of a very brief overview of some of the criticisms, for one, as regards commercial end-users, Stephen J. Lubben notes that where the bankruptcy of a single commercial client can threaten the viability of a bank, this has first and foremost to do with a failure in risk management at that institution, rather than any systemic risk created by its

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[882] With regard specifically to the Euro area interest rate market segment, S Dalla Fontana and others, *The Anatomy of the Euro Area Interest Swap Market* (European Central Bank Working Paper Series, No 2242, February 2019) 2.

[883] M Peeters, 'On Close-Out Netting' in T Keijser (ed), *Transnational Securities Law* (n20) para 3.44.

[884] See, H Scott, *Connectedness and Contagion: Protecting the Financial System from Panics* (The MIT Press 2016) Part I with an overview of the distinct 'three Cs of systemic risk', *ibid* 1, including asset connectedness.

[885] VV Acharya and TS Öncü, 'A Proposal for the Resolution of Systemically Important Assets and Liabilities: The Case of the Repo Market' (2013) 9 International Journal of Central Banking 291, 292.

[886] *Ibid*.

[887] M Peeters, 'On Close-Out Netting' (n20) para 3.45.

[888] P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n827) 857.

[889] For a literature overview, see M Peeters, 'On Close-Out Netting' (n20) para 3.46 (fn 75) in combination with para 3.45 (fn 75) in the 1st edn of the volume, published 2014, with contributions goings as far back to before the GFC as 2003; P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n829) 857 (fn 16);

commercial counterparty's bankruptcy.[890] What is more, where it succeeds in mitigating credit risk, close-out netting can potentially itself serve as a transmitter of systemic risk via resulting moral hazard and collateral or liquidity shortages.[891] As regards the former, the broad strokes argument is that financial institutions by virtue of enforceable close-out netting can effectively afford a laxer attitude to counterparty credit risk monitoring and will ultimately, on aggregate, engage in riskier business choices to the detriment of the non-financial counterparties who do not fall within the scope of the insolvency privilege and ultimately bear the economic consequences upon insolvency of the relevant entity as well as society as a whole.[892] Due to the highly standardised nature of the contractual backbone of the OTC derivatives market, specifically the termination provisions of the ISDA MA, when the termination right of a counterparty is triggered, this affects the identically worded clauses in the trading relationships with other counterparties across the market simultaneously, thus leading to a scenario of mass liquidation and value destruction with potentially systemic implications.[893] What is more, specifically with a view to transaction collateralisation, in the shadow of the Lehman Brothers insolvency, the argument has been made that close-out netting may actually lead to collateral fire sales and a downward price spiral in an insolvency scenario, in the sense that collateral takers will seek to sell assets – even at discounted prices – thus compressing prices in the respective asset class constituting the collateral, with the result of creating further losses for all those holding the assets, including but crucially not limited to the collateral holder and taker.[894]

While an all-encompassing discussion of the criticisms and their respective merits of the wholesale adoption of the close-out netting privilege is beyond the scope of this thesis and taking a decisive position on this matter not its focus,[895] taking note of the criticisms raised serves the purpose of drawing attention to the fact its unqualified utility in systemic risk reduction is at least not as uncontested as the unqualified success of the global recognition project would imply. Namely, what stands out, for present purposes, is how deeply engrained close-out netting has become in the global legal

[890] SJ Lubben, 'Transaction Simplicity' (2012) 112 Columbia Law Review Sidebar 194, 195.
[891] P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n829) 873.
[892] In detail, *ibid* 873-876.
[893] In more detail and mapping out specific scenarios, *ibid* 876-879.
[894] Y Diamant and others 'Close-Out Netting and Safe Harbours' (n756) para 8.07.
[895] Marcel Peeters notes with regard to the current debate that, aside from the current scarcity of formal economic analysis of the various arguments in play, 'it is difficult to see that or how this debate will evolve (much) further and whether it will have more than the very limited impact on close-out netting regimes it may have had so far': M Peeters, 'On Close-Out Netting' (n20) para 3.52.

landscape, at the levels of soft law instruments, insolvency law, as well as regulation, thus effectively, in practical terms, shielding the status quo of broad recognition of this financial *lex mercatoria* from academic criticism and cementing its status as transnational standard.[896] In other words, since close-out netting has become embedded within separate, yet interwoven strands of the overall transnational legal infrastructure, in which OTC derivative transactions are concluded, including, e.g., those at the level of prudential regulation, making selective attempts at amending the scope of recognition by disentangling these strands at the level of isolated jurisdictions appears exceedingly difficult.

e) Testament to the Enduring Strength of the Transnational Contractual Standard: The Aftermath to German Federal Court's 'Netting Decision' of 9 June 2016

As noted above, the financial market *lex mercatoria* of close-out netting through its near on universal recognition in the last few decades successfully embedded itself into the fabric of a multitude of bodies of substantive norms, ranging from soft law instruments, prudential regulatory provisions and domestic laws. Empirically testifying to the depths with which the comparatively novel transnational contractual technique, as embodied under the standardised provisions of the ISDA MA, has in the course of only a few decades not only become embedded, but deeply entrenched in the fabric of both supranational provisions and domestic laws – and the interaction between the two – is the aftermath to an instance of judicial interpretation from Germany's highest civil matter court, which countered the established market view on the enforceability of close-out netting.

At the core of the decision were Sec. 104(2) and (3) of the German Insolvency Code ('Insolvenzordnung'; 'InsO'), as they then were, which created a statutory regime that integrated the operation of close-out netting into the German insolvency regime.[897] The

[896] As, eg, conceded by the FSB, in light of post-GFC academic criticism of the exemption from the automatic insolvency stay under some insolvency safe harbours regarding repo transactions as potentially systemic risk increasing, with policy proposals aimed at curtailing the exemption, 'these policy proposals, while theoretically viable in addressing some financial stability issues, can involve substantial practical difficulties, particularly the need for fundamental changes in bankruptcy law, and therefore should not be prioritised for further work at this stage.': FSB, *Strengthening Oversight and Regulation of Shadow Banking: Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos* (29 August 2013) 19, See, also, M Peeters, 'On Close-Out Netting' (n20) para 3.67.

[897] The provision has deep historical legislative roots reaching as far back as 19th century Prussia: See, J Fried, 'InsO § 104', in R Stürner, H Eidenmüller and H Schoppmeyer (eds), *Münchener Kommentar zur Insolvenzordnung, Vol 2* (5th edn, CH Beck 2025) para 5; Its historic predecessor was originally enacted in order to curtail the insolvency official's cherry picking right regarding open or executory transactions

German insolvency regime, however, in line with its historical legislative roots,[898] follows a unique approach in terms of regulatory technique relative to other jurisdictions in that rather than simply statutorily recognising and validating the legal effect of *contractual* close-out netting provision,[899] it lays down a *statutory* close-out netting procedure, moulded upon its historic predecessor and operating *ipso iure*.[900] Under Sec. 119 InsO, any agreements which *ex ante* exclude or restrict the application, i.a., of these statutory netting provisions, are not legally effective. Nevertheless, while not undisputed, the established general consensus in German legal scholarship at the time was that under the statutory regime as it then existed, contractual close-out netting clauses, as found in various financial master agreements, were legally enforceable.[901]

However, in 2016 a judicial interpretive shock *par excellence*, emanating from Germany's highest civil matter court, brought to the fore the simmering tension between, on the one side, a domestic substantive insolvency provision, itself the product of historical path dependency with its predecessor initially tailored towards comparatively straightforward transaction types,[902] and, on the other, a comparatively novel transnational contractual technique, necessitated by market practice and the rise of sophisticated financial transactions such as OTC derivatives. In its decision of 9 June 2016 the German Federal Court ('Bundesgerichtshof'; 'BGH') held that a close-out netting provision modelled on the standard form provision contained in the 'Deutscher

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subject to a (volatile) market value. This was to enable the solvent party to enter into replacement transactions and not face the risk of either having to perform on two transactions, where the official eventually did assume the original transaction, or, otherwise bear the risk of negatively changed market prices upon its counterparty's insolvency where the original transaction was ultimately rejected. The legislative solution originally adopted was to prescribe *ipso iure* termination of eligible open transactions and followed by calculation of a current market value in order to compensate the financially disadvantaged counterparty, ie the counterparty suffering a loss as a result of non-performance, in the amount of the negative difference between contract price and market price: *ibid* para 1.

[898] Observing a 'path dependence' of German law in this respect: M Lehmann, L Flöther and and E Gurlit, 'Die Wirksamkeit von Close-out-netting-Klauseln in Finanzderivaten nach § 104 InsO n.F.' (2017) 71 Zeitschrift für Wirtschafts- und Bankrecht 597, 600.

[899] As is the typical case from an international comparative perspective; A range of examples is provided in *ibid* 600 (fn 42).

[900] *Ibid* 599; KP Berger, 'Lösungsklauseln für den Insolvenzfall' (n852) 342; This German particularity appears all the more striking when viewed in the context of EU regulation, since as noted by M Lehmann, L Flöther and E Gurlit, 'Die Wirksamkeit von Close-out-netting-Klauseln in Finanzderivaten nach § 104 InsO n.F.' (n898) 600, Art 7(1) EU financial collateral directive of 2002 explicitly provides for the primacy of contractual netting in obliging member states to 'ensure that a close-out netting provision can take effect in accordance with its terms'.

[901] See, with some individual references, *ibid*.

[902] Such as basic forward transactions ('Warenfixgeschäfte') for the delivery of goods such as grain, wool and methylated spirits, as envisaged in its 1855 Prussian predecessor norm: See, J Fried, 'InsO § 104' (n897) para 4.

Rahmenvertrag für Finanztermingeschäfte' ('DRV'), the German law master agreement for financial derivatives transactions, was partially unenforceable.[903] Crucially, for present purposes, the court held that the close-out amount in respect of stock option transactions, documented under a DRV between two German companies (the claimants) and a trading company incorporated under the laws of England and Wales (the respondent), could – upon the defendant's entry into administration – not be calculated by reference to the calculation method under the close-out netting provision contained in the DRV. Rather, the court held that, insofar as it violated mandatory statutory rules, it had to be calculated according to the statutory netting provisions of German insolvency law.[904] Of interest for present purposes, rather than the particular intricacies and judicial reasoning in the case at issue, is the speed and force of the concerted reaction to the judicial invalidation of the second step of the contractual close-out mechanism.[905] This is because the decision triggered an immediate and in many respects unique administrative and legislative backlash and flurry of activity in German legal history.[906]

On the very same day – even before the grounds for the decision had been published – the German Ministry of Justice and the German Ministry of Finance felt compelled to issue a joint statement.[907] The statement, strongly echoing regulatory competition concerns, made clear that if, after careful examination, it should emerge that the judicial

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[903] BGH, judgment of 9 June 2016 – IX ZR 314/14.

[904] In broad strokes, in its application of Sec 119 InsO, determining that the provision already temporally applied in the time window, in which, upon an insolvency application, the opening of insolvency proceedings could be seriously expected (*ibid* at [56]), the court further held that the transaction was invalid insofar as the contractual calculation method itself – as set out under the DRV – deviated from Sec 104(2) and (3) InsO (in the at the time applicable version), *ibid* at [56]. The court held that it did so in various respects: Specifically, whereas the German Insolvency Code provided merely for an abstract calculation of the close-out amount as the difference between contract and (derivative) market price regardless of any replacement values, the DRV under No 8(2) stipulated calculation of damages incurred by either party on the basis of actual concrete replacement transactions, *ibid* at [71]; What is more whereas No 8(2)(1) DRV provided for a cap on the close-out amount at the level of the damages incurred by the other party, the German Insolvency Code made no such provision, *ibid* at [60]; Lastly, Sec 104(3) InsO (as it then was) stipulated as relevant date for the calculation of the close-out amount a date after the opening of insolvency proceedings. In detail on the deviation of the contractual provisions from the German Insolvency Code (in the at the time applicable version): *ibid* at [54]-[84].

[905] See, § 3.C.III.1.a) on the three-tiered operation of close-out netting.

[906] As German commentators observed, 'the entire incident is in terms of how it unfolded and its drama unique in the history of the Federal Republic of Germany' [own translation]: M Lehmann, L Flöther and E Gurlit, 'Die Wirksamkeit von Close-out-netting-Klauseln in Finanzderivaten nach § 104 InsO n.F.' (n898) 597.

[907] Gemeinsame Stellungnahme des Bundeministeriums der Finanzen und des Bundesministeriums für Justiz und Verbraucherschutz, *BGH-Urteil zur Wirksamkeit des Rahmenvertrags für Finanztermingeschäfte* (9 June 2016) [own translation in the following].

ruling had an impact beyond the individual case on the acceptance of the German law master agreement in the market and by supervisory authorities, the German government would immediately initiate legislative measures in order to refine or clarify the relevant provisions of insolvency law, to ensure that prevalent framework agreements would continue to be recognised in the market and by supervisory authorities.[908] This was to ensure that the Federal Republic of Germany – like all EU member states – continues to be one of the jurisdictions in which derivative transactions can be effectively documented under the usual framework agreements.[909]

This joint ministerial statement was, also on the same day, followed up by the Federal Financial Supervisory Authority ('BaFin') publishing a temporary administrative decree with effect from 10 June 2016 to 31 December 2016, with the purpose of restoring legal certainty regarding the operation of close-out netting arrangements under German insolvency law, on the basis of the at the time in force Sec. 4(a) WpHG – a provision which was concerned with powers to safeguard the financial system.[910] Crucially, the decree mandated that counterparties were to settle contractual netting agreements, as stipulated under Art. 295 CRR, as agreed.[911] Notably, the reasons given in support of the decree were prefaced with a recognition of the pervasiveness of close-out netting clauses alike or similar to the kind at issue in standard form master agreements, including the ISDA MA.[912]

Following these unprecedented measures of state-led legal uncertainty management, with a view to minimising the risk of German law governed transactions no longer being recognised for prudential regulatory purposes, the German legislator then sprang into action with the domestic insolvency provisions at the heart of the decision being amended at remarkable pace, entering into force in their revamped form on 29 December 2016,[913] two days before BaFin's temporary administrative decree was

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[908] *Ibid*; The joint ministerial statement itself is, unfortunately, no longer available online. The cited passage is, however, referenced in an opinion paper submitted in the course of the subsequent parliamentary proceedings: Deutscher Bundestag, Ausschuss für Recht und Verbraucherschutz, Wortprotokoll der 119. Sitzung, *Gesetzentwurf der Bundesregierung: Entwurf eines Dritten Gesetzes zur Änderung der Insolvenzordnung* (9 November 2016) 76.

[909] Gemeinsame Stellungnahme des Bundeministeriums der Finanzen und des Bundesministeriums für Justiz und Verbraucherschutz (n907).

[910] BaFin, *Allgemeinverfügung zu Nettingvereinbarungen im Anwendungsbereich des deutschen Insolvenzrechts* (9 June 2016).

[911] *Ibid*.

[912] *Ibid*.

[913] As per Art 5(1) of Gesetz zur Änderung der Insolvenzordnung und zur Änderung des Gesetzes, betreffend die Einführung der Zivilprozessordnung vom 22. Dezember 2016.

due to expire. This particular anecdote illustrates how the multilevel entrenchment of the recognition of close-out netting, including its qualified recognition for regulatory capital calculation purposes at the supranational EU level, effectively – at least economically – barred Germany from individually breaking away from the established regulatory consensus.

3. Close-Out Netting Provisions in a Bank Resolution Scenario

Aside from the traditional policy rationale of systemic risk reduction, the case has been made for recognising the – less frequently evoked and under the traditional view often overlooked – liquidity providing function of close-out netting as its principal utility in the existing policy debate.[914]

This policy rationale re-orientation, again not here taking a position on its relative merits, is already instructive by its very existence, in light of the advent of bank resolution regimes. This is because these have somewhat weakened the systemic risk argument in favour of legislative recognition of close-out netting under general insolvency law, even under the traditional microprudential view underlying the safe harbours, since resolution regimes, by intervening directly at the level of the failing bank, can provide more targeted and effective tools for countering the systemic threat of consecutive failure of interconnected systemically relevant financial institutions.[915]

Effective cross-border bank resolution and close-out netting, as it had become recognised and embedded in domestic general insolvency regimes, were, however, operationally set up for collision over the first step of the close-out netting mechanism; i.e. close-out in the form of early transaction termination.[916] As detailed above, statutory insolvency 'safe harbours' in most jurisdictions invariably privilege OTC derivative

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[914] More recently, P Paech, 'The Value of Financial Market Insolvency Safe Harbours' (n829) 867-872: Aside from the reduced monitoring costs of counterparty credit risk due to the insolvency privilege of close-out netting, *Paech* identifies the (i) increased flexibility international market participants enjoy across legal categories and asset types through recourse to the various master agreements' contractual risk mitigation techniques as protected under the safe harbours; as well as (ii) reduced need for collateral cover and consequent market-wide asset allocation due to the fact that only a resulting net risk exposure must be collateralised, which can be efficiently adjusted constantly under the provisions of the relevant master agreement in response to market movements; (iii) the global harmonisation of legal regimes to lend enforceability to the key provisions of the ISDA MA through *mutatis mutandis* substantively similar safe harbour rules opening up the possibility of sourcing and using collateral globally; (iv) the freeing up of additional liquidity by regulatory recognition of net credit risk exposures due to enforceable close-out netting under the safe harbours, enabling higher transaction volumes, but also increased unrelated risk-taking activity such as increased ordinary lending benefiting the wider economy.

[915] *Ibid* 879-882.

[916] EJ Janger, 'Symposium Introduction: Treatment of Financial Contracts in Bankruptcy and Bank Resolution' (n790) 1 ('Where financial contracts are involved, the two regimes follow radically different approaches').

transactions by recognising non-defaulting counterparties' right to close-out transactions under the financial master agreement close-out mechanism in an insolvency scenario. This, however, clashes with the central rationale of bank resolution. Since financial contracts typically form the core of a distressed bank's assets, the comprehensive and unconstrained exercise of early termination rights under close-out netting arrangements has the potential to substantially undermine the effectiveness of any resolution efforts with potential systemic consequences.[917] As stated by the FSB, '[i]n the case of a SIFI, the termination of large volumes of financial contracts upon entry into resolution could result in a disorderly rush for the exits that creates further market instability and frustrates the implementation of resolution measures aimed at achieving continuity'[918].[919] Thus, in a nutshell, since many of a failing financial institution's counterparties will be other financial institutions that have documented contracts under ISDA MA's containing close-out netting provisions, unconstrained operation of close-out netting promised to prematurely slam shut the window of opportunity within which the range of bank resolution measures could otherwise take effect in substantially reducing the amount of assets available for such resolution measures.[920] By way of prominent example, within the first week of LBHI filing for bankruptcy on 15 September 2008, its subsidiaries' counterparties *en masse* exercised (early) termination rights under ISDA MA's documenting tens of thousands of outstanding derivatives transactions, amounting to value destruction of the insolvent estate estimated in the tens of billions of dollars range.[921]

The collision course between close-out netting and banking resolution promised to be all the more damaging to the policy goal of market stability and effective bank resolution resulting in entity continuity, due to the fact that the overwhelming majority of major OTC derivatives dealer banks, boasting significant derivatives portfolios, themselves constitute global systemically important banks ('G-SIBs'). For example, most recently in 2024, the FSB, in consultation with the BCBS as well as national

[917] FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' (n743) 219.

[918] FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (n761) 51.

[919] Similarly FSB, *Principles for Cross-border Effectiveness of Resolution Actions* (3 November 2015) 7 ('Such close-out action upon entry into resolution could disrupt the provision of critical functions, lead to the firm in resolution having an unbalanced book and undermine the objective of a resolution action that seeks to maintain the continuity of critical functions').

[920] FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' (n743) 219-220.

[921] AR Valukas, *Lehman Brothers Holdings Inc. Chapter 11 Proceedings Examiner's Report (Vol 5)* 2060.

regulatory authorities, identified as many as twenty-nine G-SIBs,[922] which consisted, i.a., of fourteen of the sixteen largest OTC derivative dealer banks (the G16)[923].

Therefore, unconstrained operation of close-out netting was identified early on in the reform process as untenable as part of orderly resolution proceedings, particularly where the exercise of termination rights by counterparties of distressed SIFIs was based solely on the basis of entry into resolution, or a regulatory authority's exercise of resolution powers.[924] Against this background, while promoting the principle of enforceability of close-out netting in a crisis or resolution scenario,[925] the FSB set out that the resolution powers which resolution authorities should have at their disposal should, i.a., include the power to '[t]emporarily stay the exercise of early termination rights that may otherwise be triggered upon entry of a firm into resolution or in connection with the use of resolution powers (…)'[926].[927] This temporary stay was to be subject to certain material and temporal conditions, aimed at guaranteeing a degree of SIFI counterparty creditor protection, while at the same time empowering the resolution authority to perform its mandate of 'preserv[ing] a failed SIFI as a going concern'[928].[929]

With regard to the general status of close-out netting under domestic laws, this in the specific context of a bank resolution scenario, amounted to a targeted departure from the insolvency privilege, effectively 're-rout[ing]'[930] privileged transactions to the respective general insolvency regime.[931]

However, where a SIFI operates across a multitude of national financial systems, and resolution thereby necessarily takes on a transnational dimension, divergent legislative implementation of resolution regimes raises the spectre of legal uncertainty on the

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[922] FSB, *2024 List of Global Systemically Important Banks* (26 November 2024) 3.

[923] With the mere exception of Nomura and the Royal Bank of Scotland: cf, on the G16, Chapter 1 § 6.C.II.

[924] Ie, where the SIFI otherwise continues to perform its principal payment or delivery obligations: FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (n760) 51.

[925] *Ibid* Key Attribute 4.1.

[926] *Ibid* Key Attribute 3.2(x).

[927] *Ibid* Key Attribute 3.2.

[928] D Geen and others, 'A Step Closer to Ending Too-Big-To-Fail: The ISDA 2014 Resolution Stay Protocol and Contractual Recognition of Cross-border Resolution' (2015) 35 The Journal on the Law of Investment & Risk Management Products 1, 5.

[929] FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (n760) 10 and 51; FSB, *Principles for Cross-border Effectiveness of Resolution Actions* (n918) 7 ('(…) close-out of financial contracts in significant volumes (…) upon entry into resolution could disrupt the provision of critical functions, lead to the firm in resolution having an unbalanced book and undermine the objective of a resolution action that seeks to maintain the continuity of critical functions.').

[930] FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' (n743) 218.

[931] *Ibid* 218-219.

effectiveness of cross-border resolution. Crucially, the question arose of how to ensure that resolution measures, such as a temporary stay mandated against an entity in one jurisdiction, would have the requisite cross-border effect. Namely, as identified by the FSB, '[t]he need to give cross-border effect to resolution actions may arise with respect to a firm undergoing resolution in its home jurisdiction that operates a branch or controls a subsidiary in a foreign jurisdiction; or a firm that holds assets, liabilities or contracts located or booked in, or subject to the law of, another jurisdiction in which the firm is not established.'[932] For present purposes, the key challenge was thus to ensure that the temporary stay regarding early termination rights, identified as a key resolution power, could be enforced against the entity in resolution's counterparties on a transnational basis; i.e. beyond supranationally harmonised jurisdictions such as within the EU by virtue of Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 ('BRRD'), regardless of the respective law governing the contractual provisions.[933] In the global OTC derivatives market context, this provided a potential problem in a setting where individual contracts subject to close-out netting provisions contained in an ISDA MA were to be subject to a different law than the law under which the early termination stay was imposed, since through the exercise of private international law party autonomy these contracts could potentially be placed beyond the reach of the jurisdiction prescribing resolution.[934] This is because even where a domestic statutory resolution regime is drafted to have extraterritorial effect, in the absence of any treaty or binding instrument of public international law, its enforceability, for example that of a temporary stay, in other jurisdictions is not assured.[935] Against this background, effective transnational operation of a resolution stay in relation to close-out netting provisions pervasive in OTC derivatives documentation was premised on two conditions which required transnational, or, in other words, universal implementation.[936] First, and impacting on the first step of the

[932] FSB, *Principles for Cross-border Effectiveness of Resolution Actions* (n919) 5.
[933] Bank of England, *Contractual stays in financial contracts governed by third-country law* (CP19/15, May 2015) paras 1.8-1.9.
[934] D Geen and others, 'A Step Closer to Ending Too-Big-To-Fail: The ISDA 2014 Resolution Stay Protocol and Contractual Recognition of Cross-border Resolution' (n928) 5; FSB, *Principles for Cross-border Effectiveness of Resolution Actions* (n919) 7; Bank of England, *Contractual stays in financial contracts governed by third-country law* (n933) paras 1.8-1.9.
[935] D Geen and others, 'A Step Closer to Ending Too-Big-To-Fail: The ISDA 2014 Resolution Stay Protocol and Contractual Recognition of Cross-border Resolution' (n928) 5.
[936] Emphasising the essential functional need for resolution tools to have universal effect across jurisdictions, M Lehmann, 'Conflict-of-laws issues' in M Haentjens and B Wessels (eds), *Research Handbook on Cross-Border Bank Resolution* (Edward Elgar 2019) 288.

close-out netting operation, it necessitated universal disapplication of entry into resolution as a termination event.[937] Second, it required universal recognition of the power of resolution authorities to temporarily stay, i.e. suspend counterparties' close-out netting rights, in each case irrespective of the *lex contractus* governing the transaction.[938]

The FSB identified two viable technical approaches towards ensuring that, for present purposes most importantly, the temporary stay could be effectively implemented beyond the entity in resolution's home jurisdiction, namely 'statutory approaches'[939] on the one side, or 'contractual recognition'[940] on the other. Under statutory approaches, the cloud of legal uncertainty over the effectiveness of cross-border resolution procedures could be dispelled by ensuring mutual recognition of foreign resolution proceedings under local law across jurisdictions ('Recognition'), or, through producing the effect of a foreign resolution proceeding via the instrumentarium available under the domestic resolution regime ('Supportive Measures').[941] However, both approaches were prone to the typical pitfalls of regulatory competition, since one jurisdiction breaking out of the multilateral consensus could potentially single-handedly undermine the collective resolution effort regarding a multi-jurisdictionally operative SIFI.[942] At the very least, statutory implementation promised to be a time-consuming process. As a means of at least offering a bridge solution until such a time that 'comprehensive statutory regimes for giving cross-border effect to resolution action'[943] were internationally adopted, as well as to permanently support such regimes once established, the FSB thus proposed the path of 'contractual recognition approaches'[944]. Such a contractual recognition approach was to be pursued, i.a., regarding 'the cross-border enforeceability of (…) temporary restrictions or stays on the exercise of early termination rights (including those resulting from cross-defaults) under financial contracts that are governed by the laws of a jurisdiction other than that of the contracting financial institution that is subject to the resolution regime'[945].

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[937] FJ Garcimartín Alférez and S Sánchez Fernández, 'Resolution and Contracts' (n743) 224.
[938] *Ibid*.
[939] FSB, *Principles for Cross-border Effectiveness of Resolution Actions* (n919) 5-6.
[940] *Ibid* 6-7.
[941] *Ibid* 5-6.
[942] D Geen and others, 'A Step Closer to Ending Too-Big-To-Fail: The ISDA 2014 Resolution Stay Protocol and Contractual Recognition of Cross-border Resolution' (n928) 6.
[943] FSB, *Principles for Cross-border Effectiveness of Resolution Actions* (n919) 6-7.
[944] *Ibid* 6.
[945] *Ibid* 7.

IV. Averting Collision: Enlisting ISDA's Regime of Transnational Private Regulation for Public Regulatory Goals

As already observed by the FSB, the success of any contractual approach was centrally premised on being widely adopted in the (transnational) market.[946] Against this background, a group of major financial regulators,[947] took the step of approaching ISDA in 2013 through a letter in which they set out a potential contractual solution to the problem of enforceability of temporary stays, seeking to strategically enlist ISDA's central position in the market and the pervasiveness of the ISDA MA in global OTC derivative contracting. Specifically, the letter referred to ISDA's 'opportunity to play a pivotal role in providing greater certainty to the treatment of early termination rights and other remedies with respect to derivative contracts in a cross-border resolution scenario'[948], stating that '[a]s resolution regimes are developed and implemented in an increasing number of jurisdictions, ISDA is in a unique position to link these regimes by providing consistent and enforceable contractual provisions related to termination and other remedies with respect to derivatives transactions'[949].

ISDA responded to being approached in this way, by forming a working group of buy-side and sell-side institution representatives which together developed the ISDA 2014 Resolution Stay Protocol.[950] The protocol addressed central concerns regarding the effectiveness of cross-border resolution in connection with close-out netting. Namely, broadly speaking, under the ISDA 2014 Resolution Stay Protocol, adhering counterparties would contractually opt in to the qualifying[951] resolution regime and its provisions on temporary restrictions or stays applicable to the counterparty, or 'related entities', in resolution.[952] This meant that, where both counterparties had adhered to the protocol, the counterparty to an entity in resolution could contractually exercise its default rights under the ISDA MA only to the extent permitted by its counterparty's

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[946] *Ibid* 6.

[947] Comprising the Bank of England, the German BaFin, the US Federal Deposit Insurance Corporation and the Swiss Financial Market Supervisory Authority.

[948] Bank of England and others, *Joint Letter to ISDA*.

[949] *Ibid*.

[950] ISDA, *Resolution Stay Protocol – Background*.

[951] The ISDA 2014 Resolution Say Protocol initially encompassed the French, German, Japanese, Swiss, UK and US special resolution regimes with additional jurisdictions added subject to certain conditions set out in the Protocol: ISDA, *ISDA 2014 Resolution Say Protocol* (Attachment to the ISDA 2014 Resolution Stay Protocol, Sec 1).

[952] *Ibid*; D Geen and others, 'A Step Closer to Ending Too-Big-To-Fail: The ISDA 2014 Resolution Stay Protocol and Contractual Recognition of Cross-border Resolution' (n928) 7.

resolution regime, principally with regard to early termination rights, as well as cross-default rights of affiliates under the ISDA MA.[953] As a result, regardless of which law governed the rights and obligations of the derivatives transactions, the ISDA MA – as modified by the protocol – ensured that a SIFI's counterparties would face coordinated equal treatment under the provisions of the resolution regime of the SIFI's home jurisdiction.[954] On 11 October 2014, ISDA announced that 18 major global banks had initially agreed to sign up to the ISDA 2014 Resolution Stay Protocol,[955] which was subsequently adhered to by a total number of 189[956] parties.[957] The goal of transnational industry-wide adoption of the protocol was flanked domestically by various specific regulatory initiatives, seeking to prop up the contractual approach, such as the Bank of England proposal to implement a regulatory prohibition on market participants subject to UK prudential regulatory oversight 'from creating new obligations or materially amending an existing obligation (…) unless the counterparty has agreed in writing to be subject to similar restrictions on early termination and close-out to those that would apply as a result of the firm's entry into resolution (…) if the financial contract were governed by the laws of the United Kingdom.'[958]

While the contractual solution facilitated by ISDA is necessarily limited in scope, in that it can only cater for a particular set of tools from the resolution toolkit, namely those with a contractual component; i.e. bail-in and, most importantly for present purposes, the contractually facilitated stay of early termination rights,[959] it provides valuable functional support for cross-border resolution in this delimited area.

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[953] As described in detail in *ibid*.

[954] *Ibid* 8.

[955] ISDA Press Release, *Major Banks Agree to Sign ISDA Resolution Stay Protocol*.

[956] ISDA, *ISDA 2014 Resolution Stay Protocol, List of Adhering Parties*.

[957] As Edward Janger points out, the contractual resolution stay implemented via the ISDA Protocol mechanism is also instrumental in facilitating what is referred to as the 'single point of entry' resolution approach, as it pertains to transnational financial firms operating through a holding company structure, with subsidiaries incorporated in third country jurisdictions. As he sets out, under this approach, in a resolution scenario, subsidiaries would be recapitalised via the parent company, which would then, if need be, file for bankruptcy, allowing for the recapitalised subsidiaries to continue operating. This approach is envisaged to take effect in a speedy, 48 hour, resolution process, premised on and consistent with an effective short contractual stay on early termination, as made possible through the ISDA Protocol: EJ Janger, 'Symposium Introduction: Treatment of Financial Contracts in Bankruptcy and Bank Resolution' (n790) 10-11.

[958] Bank of England, *Contractual stays in financial contracts governed by third-country law* (n933) para 1.1 (cited in: J Biggins and C Scott, 'Resolving the gaps: embedding ISDA in states' responses to systemic risk' (n735) 165).

[959] I Mevorach, *The Future of Cross-Border Insolvency: Overcoming Biases and Closing Gaps* (n763) 247.

The scope of ISDA's contribution in crafting and facilitating the contractual approach at the global level has since gradually evolved and expanded, thus further embedding ISDA into the transnational regulatory structure of post-GFC cross-border bank resolution.[960] By way of a brief summary, the ISDA 2015 Universal Resolution Stay Protocol replaced the original ISDA 2014 Resolution Stay Protocol for those counterparties adhering to it, with the new version essentially identical to its predecessor, but extending its scope to cover additional transaction types.[961] The ISDA 2016 Resolution Stay Jurisdictional Modular Protocol, in turn, while also intended to serve the overarching policy goal of ensuring the orderly resolution of systemically important institutions,[962] is more targeted in this regard than its predecessor stay protocols. This is because its predecessors predated the successive implementation of specific domestic regulations in various jurisdictions which require the contractual recognition of special resolution stays applicable to a regulated entity's counterparties. The ISDA 2016 Resolution Stay Jurisdictional Modular Protocol, in contrast to its predecessors, therefore seeks to facilitate specific compliance with these novel regulations – at the heart of which lies the regulatory obligation to consent to applicable stays on termination rights, as embodied in the applicable special resolution regimes – regardless of which law substantively governs the OTC derivative contracts.[963] As such, if the competent resolution authority exercises its resolution powers in a jurisdiction covered by the ISDA 2016 Resolution Stay Jurisdictional Modular Protocol in respect of an adhering party, the range of contractual rights under the ISDA MA – including first and foremost termination and suspension of performance – can be exercised only to the extent permissible if the ISDA MA were in fact governed by the law of that

[960] And in doing so, somewhat ironically, is now a key factor in reigning in the unconstrained operation of close-out netting it had been instrumental in facilitating in the first place. As observed in this regard by Rizwaan J Mokal, '[e]ven ISDA, the powerful financial market lobbying group that has played a critical and troubling role in legislative entrenchment of the immunities around the world, has now performed something of a volte-face and acknowledges that cross-border recognition of moratoria on close-out netting reduces systemic risk': R J Mokal, 'Liquidity, Systemic Risk, and the Bankruptcy Treatment of Financial Contracts' (n868) 72.

[961] ISDA, *Resolution Stay Jurisdictional Modular Protocol – General FAQs (updated February 2022)*.

[962] *Ibid*.

[963] *Ibid* ('(…) the ISDA Jurisdictional Modular Protocol is aimed at enabling financial institutions to trade under terms that comply with the laws, regulations or other binding guidance (Stay Regulations) requiring them to amend certain agreements to ensure stays on or overrides of certain termination rights under statutory regimes that were for the most part developed in response to the financial crisis of 2008, called "special resolution regimes" (SRRs), will be effective with respect to all of their counterparties on a global basis, notwithstanding the governing law of the agreements.')

respective jurisdiction.[964] The ISDA 2016 Resolution Stay Jurisdictional Modular Protocol's name stems from the particular regulatory technique underlying it. Namely, it derives from the fact that it is a combination of boilerplate terms, as well as bespoke jurisdictional modules, which were designed with regard to the particular regulatory stay requirements in specific jurisdictions.[965] More recently, in addition to the BRRD II Omnibus Jurisdiction Module, which is designed to facilitate market participants' compliance with the contractual recognition requirement of resolution stay powers introduced at EU-level in 2019 under Art. 71(a) BRRD,[966] as implemented at the domestic level by the EU member states, jurisdictional modules were, e.g., more recently also finalised for Canada and Hong Kong and also Singapore upon working together with ISDA,[967] after having imposed a regulatory temporary stay contractual recognition requirement[968].

V. Evaluation: Transnational Regulatory Hybridisation in Action

The above case study topically sits very comfortably within the broader theme of this thesis, as its roots also lie in the same simple overarching observation: In contrast to the global nature of the OTC derivatives market, there largely exist no statal legal institutions of equivalent global reach in a territorially organised, multijurisdictional world. Similarly to there being no global legislator providing a facilitative substantive body of transnational law to govern OTC derivative transactions at the level of the global market,[969] or a world financial court to settle disputes and provide globally binding determinations or definitive contractual meaning,[970] in the transnational regulatory space, there (as yet) exists no binding overarching global bank resolution framework or a global resolution authority to address the commercial reality of interconnected global systemically significant financial institutions.[971] This, in turn,

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[964] S Firth, *Firth on Derivatives Law and Practice* (n34) para 11.123/2.

[965] ISDA, *Resolution Stay Jurisdictional Modular Protocol – General FAQs*.

[966] ISDA, *Resolution Stay Jurisdictional Modular Protocol: BBRD II Omnibus Jurisdictional Module*.

[967] FSB, *2022 Resolution Report: "Completing the agenda and sustaining progress"* (8 December 2022) 11; ISDA, *Singapore Jurisdictional Module to the ISDA Resolution Stay Jurisdictional Modular Protocol – Overview*.

[968] Monetary Authority of Singapore, *Response to Feedback Received on Proposed Regulations to Enhance Resolution Regime for Financial Institutions in Singapore* (29 October 2021) paras 1.2 and 1.4.

[969] With ISDA's contractual architecture and strategic sectoral choice of law stepping in to fill the transnational gap.

[970] See, Chapter 3.

[971] M Haenjens, B Wessels and S Guo, 'Conclusions' (n734) 398 ('(…) at the global level, the integration of financial markets has not led to integrated international financial regulation').

creates considerable legal uncertainty, which potentially endangers the realisation of the goal of orderly cross-border bank resolution.[972] In light of this deficit, what is needed in this context, as in the other examples given, is an effective functional proxy, capable of adequately reflecting the transnational nature of the particular challenge and providing a genuinely global solution to a global problem. The above case study illustrates how this global solution, in the specific area of temporary stays on contractual early termination rights – as embedded in market standard documentation – entailed a novel form of the 'complex and multi-faceted' interaction between contract and public regulation, already described by Caroline Bradley,[973] in aiding the implementation of international regulatory objectives. What is more, the case study illuminates two distinct developmental steps of this private-public interaction, with the strategic impetus shifting between the two. The first step entailed ISDA enlisting domestic legislatures in ensuring successive statal recognition of the novel financial market *lex mercatoria* of close-out netting under domestic insolvency laws, with transnational normativity thus moulding state mandatory laws in its shadow.[974] In contrast, the second step entailed a strategic reversal, in that now state financial regulators sought to enlist ISDA and its contractual architecture as a transnational anchor point or 'interface' in service of the facilitation of orderly cross-border bank resolution.[975] As regards the second step, an existing and globally pervasive framework of sectoral private regulation, in no small part the product of the successful first step through the boost in market liquidity recognition of close-out netting brought with it,[976] offered significant efficiencies for public regulation. Namely, it could latch on to and strategically make use of pre-

[972] *Ibid* 400 ('(…) the absence of an effective global or regional regime for the resolution of cross-border operating banks jeopardizes effectiveness of any resolution measure taken by authorities or ordered by courts in the context of a bank insolvency').

[973] C Bradley, 'Private International Law-Making for the Financial Markets' (n733) 158-159.

[974] What in this instance occurs in the context of domestic insolvency law, has been observed by Joshua Karton as a central feature of transnational law regarding contract law, namely that '(…) in a reverse of the traditional conception, formal contract law is being remade in the shadow of private contracts': J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (n290) 145 (in allusion to R H Mnookin and L Kornhauser, 'Bargaining in the Shadow of the Law: The Case of Divorce' (1979) 88 Yale Law Journal 950-997) *ibid*, fn 8.

[975] P Knaack, 'A Web without a Center: Fragmentation in the OTC Derivatives Trade Reporting System' in E Helleiner, S Pagliari and I Spagna (eds), *Governing the World's Biggest Market: The Politics of Derivatives Regulation After the 2008 Crisis* (Oxford University Press 2018) 237 noting with regard to the ISDA MA and the Protocol Mechanism that 'ISDA's power is relational in that it is the exclusive link between the public legal system of nation-states and the private system of cross-border derivatives contracts' and that '(…) [ISDA] harnesses the power of brokerage by acting as the interface between the transnational space of private law and the public rules of national authorities.', *ibid* 251.

[976] M Peeters, 'On Close-Out Netting' (n20) para 3.38.

existing market structures, built upon the sector-specific standardised contractual infrastructure created by ISDA, allowing for the dissemination of regulatory policy along existing cross-border contractual relationships.[977] What is more, in the process of latching on to an existing transnational contractual infrastructure, regulators could make use of the industry-specific ISDA Protocol mechanism, ensuring that transnational dissemination of the temporary stay recognition via the original ISDA 2014 Resolution Stay Protocol – as well as by the ever growing number of successor protocols, developed by ISDA in consultation with international financial regulators – could be rapidly implemented in a harmonised fashion on a multilateral basis.[978]

The kind of public-private regulatory entanglement in the transnational sphere, observable in the case study, through strategic regulatory leveraging of the existing transnational boilerplate, also ties into a broader phenomenon, which elsewhere has been described as 'the phenomenon of regulatory hybridization within the larger framework of the emerging field of transnational law'[979]. Its emergence is said to be followed by a dual conceptual breakdown of 'the separation between national and international domains of world society'[980] as well as of 'public and private spheres of society'[981].[982] The notion of the ISDA MA standard form as a unique type of 'regulatory contract'[983], as proposed by Konrad Borowicz, under which it serves a dual purpose in that it caters both for private concerns of transactional efficiency, as well as wider market regulatory concerns, neatly encapsulates this breakdown of such distinctions. Under Borowicz's conceptualisation, the cumulative defining characteristics of the ISDA MA as a regulatory contract, as a consequence of its standardised nature, are its breadth of use and the consequent user constraints in deviating from it, thus effectively

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[977] D Wielsch, 'Global Law's Toolbox: Private Regulation by Standards' (n12) 1088 ('Through standardization [the ISDA MA] makes visible (and publicly observable) a huge network of bilateral contracts that, due to the aggregate effect, bring about high systemic risk. State legal ordering is then able to piggyback on this private standardization and, in fact, presupposes it in its own regulatory efforts'.); In a similar vein: A Gelpern, 'The Importance of Being Standard' (January 2017) European Central Bank Legal Conference 2016 (6-7 October 2016) 23, 41 noting that ISDA 'has become an indispensable intermediary between market participants, governments and international regulatory fora, projecting quasi-satutory power across its market'.

[978] See, on the general operation of the ISDA Protocol Mechanism, Chapter 1 § 7.C.VI.1.

[979] PF Kjaer, 'Introduction' in P Jurčys, PF Kjaer and R Yatsunami (eds), *Regulatory Hybridization in the Transnational Sphere* (Martinus Nijhoff 2013) 1.

[980] *Ibid*.

[981] *Ibid*.

[982] *Ibid*.

[983] MK Borowicz, 'Contracts as Regulation: The ISDA Master Agreement' (n687) 72.

making its provisions mandatory[984], in addition to the fact that it, crucially, addresses both *transactional* problems – such as transaction costs – as well as *market* problems – in the form of negative externalities including systemic risk and market integrity concerns.[985] The core function of the ISDA MA in the mitigation of transnational legal basis risk, as discussed in detail in Chapter 1 § 7.D.IV.2.c), may perhaps be seen as paradigmatic of this, in that it bridges both transactional and market concerns, since the OTC derivatives market as a prototypical interlinked 'aggregation (…) of transactions'[986] can only function by virtue of standardisation of individual contracts providing the legal basis for risk transfer along the constituent contractual links of larger (often transnational) hedging chains.

Similarly, John Biggins and Colin Scott, in their analysis of the ISDA 2014 Resolution Stay Protocol, come to the conclusion that it acts 'as a pragmatic solution to a problem, where the outcome is neither wholly private nor public, but rather a species of 'private soft law', a particular form of public–private complementarity in governance, which we are likely to see more of in the future.'[987]

Such a revisiting of established distinctions goes hand in hand with a shift in perspective, namely by decentring the territorial nation state as the primary anchor of transnational legal governance in favour of a focus on the hybrid arrangements, freely combining elements of statal and non-statal sources.[988] At the same time, although the contractual approach facilitated by ISDA has the effect of functionally mimicking an extraterritorial effect of domestic special resolution regimes – thereby compensating for the deficiencies inherent to territorially constrained regulation – it is operationally premised on the existence of the statutory special resolution regimes, with which it can prescribe compliance, as well as supportive regulatory initiatives at the domestic

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[984] *Ibid* 82.

[985] *Ibid* 74 and 84-87 with specific regard to systemic risk considerations and the ISDA Resolution Stay Protocol, noting that in its light, the role now played by the ISDA MA in OTC derivatives market regulation is 'par excellence, a regulatory one', *ibid* 87.

[986] *Ibid* 74.

[987] J Biggins and C Scott, 'Resolving the gaps: embedding ISDA in states' responses to systemic risk' (n735) 169 (internal citation omitted).

[988] P Zumbansen, 'Law and Legal Pluralism: Hybridity in Transnational Governance' in P Jurčys, P F Kjaer and R Yatsunami (eds), *Regulatory Hybridization in the Transnational Sphere* (Martinus Nijhoff 2013) 50; Or, as, put by Karl-Heinz Ladeur in the context of the phenomenon of global administrative law, '[i]n this transnational dimension, the territorial state, its organizational structures and legal rules providing legitimacy are reconsidered and the role of the state, if only in a heterarchical and not in the central position of the sovereign of decision-making, is brought back in.': K-H Ladeur, 'Global Administrative Law: A Transnational Perspective' (n673) 74.

level[989]. As such, the case study reinforces the central premise of this thesis that, also in the transnational regulatory context, the OTC derivatives market is an illustrative example of global law not without, but rather beyond the state.[990]

[989] J Biggins and C Scott, 'Resolving the gaps: embedding ISDA in states' responses to systemic risk' (n735) 164-165.

[990] As emphasised in this very context by J Biggins and C Scott, *ibid* 165.

Chapter 3: ISDA's Global Law by Contract in Dispute Resolution

At the core of the ISDA MA lie rules prescribing certain techniques concerning transaction operation in 'bad times'[1], that is to say when the performance of a counterparty's performance obligations is in jeopardy. Crucial among these credit risk mitigating rules are those pertaining to the exact operation of the close-out netting mechanism.[2] These contractual techniques in effect constitute 'sophisticated self-help remedies'[3], which were, from the very beginnings of the derivative industry's standardisation efforts, intended to as widely as possible preventively shield, or, in the words of Jeffrey Golden, '"hermetically seal" the trading universe'[4] and its highly technical contractual standards from potential generalist court litigation under the applicable general law.[5] In particular, this desire pertained to the technical issues of derivative contract operation and interpretation of core terms in line with prevailing market practice. However, the hermetic seal of self-help remedies described above is porous as a matter of design. This is because the ISDA transnational private regulatory regime – beyond the highly specific example of the so-called Credit Determination Committees[6] limited as they are to one specific asset class as well as in terms of the range of justiciable questions – lacks an intrinsic quasi-judicial 'enforcement capacity'[7] to internally deal with the residual cases, where these aforementioned self-help mechanisms require supplementation or are challenged by a counterparty. Therefore, in the light of the inherent contractual incompleteness of these mechanisms,[8] disputes unresolvable *inter partes* have been traditionally externalised to state fora of formal dispute resolution; namely, the English courts or the courts of the State of New York

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[1] D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (2019) 36 Yale Journal on Regulation 495, 534.

[2] See, Chapter 2 § 3.C.III.1.a).

[3] JP Braithwaite, 'Standard Form Contracts as Transnational Law: Evidence from the Derivatives Markets' (2012) 75 The Modern Law Review 779, 786.

[4] J Golden, 'ISDA and ADR: A Brief History of a Long Relationship' in A Calissendorff and P Schöldström (eds), *Stockholm Arbitration Yearbook 2020* (Wolters Kluwer 2020) 19.

[5] *Ibid* 16, 18 ('(…) it was the drafters' ambition that the scope of the issues to be court determined, rather than party or leading dealer determined, would be narrow.'); J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (Cambridge University Press 2020) 50.

[6] See, D Wielsch, 'Contract Interpretation Regimes' (2018) 81 The Modern Law Review 958, 979-982 in more detail.

[7] C Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (2nd ed, Cambridge University Press 2015) 92.

[8] See, generally, Chapter 2 § 1.C.II; In detail, most recently: D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (n1) 534-539.

and the US District Court located in the Borough of Manhattan in New York City, in a standardised manner, via the default jurisdiction clause in Sec. 13(b) ISDA MA form.[9]

§ 1 'Juridical Touchdown' of the ISDA Normative Regime

Procedurally flanking the substantive touchdown of the ISDA transnational private regulatory regime in a pre-chosen state law, is its touchdown in similarly pre-selected state fora of dispute resolution, depending on the elected law. In this regard, the ISDA transnational private regulatory regime again follows in the conceptual mould of the 'juridical touchdown' of international transactions described by Robert Wai.[10]

A. Ideal: A World Financial Court for Creating a Settled Body of '(Macro-) Jurisprudence'

In stark contrast to the globalised and interconnected nature of financial markets in general, and the OTC derivatives market in particular, state norm provision as well as adjudication for these transactions still breaks along the lines of national sovereign territoriality and is therefore in the gift of the multitude of the world's jurisdictions.[11] Just as there is no global (statist) legislative body to mirror the transnational nature of the OTC derivatives market and provide the requisite specialist norms,[12] there exists no single adjudicative body in the mould of an international financial court to authoritatively and bindingly decide any disputes arising from the overarching specialist and in geographical scope transnational norms embedded in the ISDA MA. While ISDA has at the substantive level of norm-generation filled the existing vacuum by providing an authoritative standardised contractual architecture effectively governing

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[9] Providing a recent detailed analysis of the range of formal, such as collateral provision and the designation of valuation agents, and informal means, such as reputational sanction and the expectation of future dealings, preceding formal contract enforcement in the courts: *ibid* 542-554.

[10] R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (2002) 40 Columbia Journal of Transnational Law 209, 265 ('Although transnational business and financial actors have become much more mobile (…) most businesses must still, to some degree, "put down roots." National courts are still one of the locations at which international transactions and the international economy must "touch down" to achieve certain benefits.').

[11] Critical of this *status quo* and arguing for nation states to pool sovereignty in favour of one or several World Financial Organisation(s) to function, ia, as the generator of binding international financial regulatory rules as well for the resolution of resulting conflicts in the face of financial markets and their inherent risks which effortlessly transcend nation state boundaries: RM Lastra, 'Do We Need a World Financial Organization' (2014) 17 Journal of International Economic Law 787-805.

[12] In the sense of effectively a 'world parliament': JB Golden, 'Do We Need a World Court for the Financial Markets' in D Vriesendorp, FA Nelissen and M Wladimiroff (eds), *The Hague Legal Capital? Liber in Honorem W. J. Deetman* (Hague Academic Press 2008) 255, 260, 263.

the market, no single specialist adjudicative counterpart in the mould of a 'world financial court'[13] exists at the procedural level. Nevertheless, the need to authoritatively resolve residual uncertainties emanating from the contract, e.g. on specialist matters of contract interpretation, exists and will, indeed, persist. Against this background, the clearcut solution of a centralised world financial court, naturally positioned to generate the kind of 'macro-jurisprudence'[14] which takes into account the market reality of an inherent network logic, as well as the individual dispute at hand, currently remains a figment of scholarly imagination. In its absence, there currently exists a considerably more complex transnational landscape of real-world dispute resolution in the OTC derivatives market, potentially with the addition of international arbitration, as discussed under § 3, with potential pitfalls for the effectiveness of the standardised contractual architecture that undergirds the market.

B. Reality: Transnational Norms in Selected State Courts

Although not traditionally conceptualised in this way, a domestic court engaging in the exercise of contractual interpretation of a transnational standard form, beyond merely resolving a concrete fact-specific dispute between two litigants, can also perform a genuinely regulatory and prospective function for the transnational market.[15] Where a court is tasked via a jurisdiction clause to resolve a dispute and where doing so hinges on the interpretation of a seemingly obscure technical clause of a boilerplate derivative contract, made up of 'what might be called 'code'-words, expressions and usages'[16], it is at the same time activated as a decentralised node in a system of global governance.[17] In the OTC derivatives market this consists of fleshing out the market's standardised contractual reference points for third parties having incorporated the particular ISDA clause into their contractual relationship. As succinctly stated by one commentator,

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[13] Propagating the functional need for such an institution: *ibid* 255, 256; See, also, JB Golden, 'The Future of Financial Regulation: The Role of the Courts' in IG MacNeil and J O'Brien (eds), *The Future of Financial Regulation* (Hart Publishing 2010) 91-92.

[14] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 71.

[15] Specifically regarding the interpretation of the ISDA MA: J Braithwaite, 'Law after Lehmans', LSE Law, Society and Economy Working Papers (11/2014) 16-17; See, also, the more general account provided by E Benvenisti and GW Downs, 'National courts and transnational private regulation' in F Cafaggi (ed), *Enforcement of Transnational Regulation: Ensuring Compliance in a Global World* (Edward Elgar 2012) 131-146.

[16] As put in the context of judicial interpretation of complex financial transactions by J Ross, 'The case for P.R.I.M.E. Finance: P.R.I.M.E. Finance cases' (2012) 7 Capital Markets Law Journal 221, 256.

[17] A detailed account of the global governance role of domestic courts is provided by CA Whytock, 'Domestic Courts and Global Governance' (2009) 84 Tulane Law Review 67.

'leading courts in the major financial centres make global commercial law'[18]. The wide range of benefits standardisation of contractual documentation affords parties under normal circumstances can potentially turn into a significant weakness when the meaning of a standardised contract clause is disputed among counterparties. This is because standardised contract wording, abstracting from the individual contract concluded *inter partes*, carries the potential for significant third-party effects. Namely, even a single, isolated decision rendered in relation to a two-party dispute resting on the interpretation of a standardised contract term – although not necessarily binding in the sense of legal precedent – can ripple through the wider market by simultaneously impacting all other open contracts operating on the identical contract term and choice of law.[19] In such a case, the economic effects of any judgment on market participants outside the case, in terms of scale, by far outweigh those for the litigants themselves.[20] This potential ripple effect may also be felt across different jurisdictions.[21] In the same vein, the 'healing costs' of market coordination to amend a standard clause and its related provisions to more clearly reflect the established market meaning can be quite considerable. Already in the abstract it becomes clear, therefore, that the universal effect a domestic court decision can have on all those governed by the particular ISDA MA standard is therefore functionally much closer to the effect of – albeit sectorally confined – statutory rather than contract interpretation.[22] In contrast to any domestic statute, however, the distinctive feature of interpreting such a transnationally adopted

[18] A Mugasha, 'Global Financial Transactions and Jurisdictional Fragmentation: Inconsistent Decisions by Leading Trans-Atlantic Courts' (2011) 29 Penn State International Law Review 553, 554.

[19] J Golden and P Werner, 'The Modern Role of Arbitration in Banking and Finance' in J Golden and C Lamm (eds), *International Financial Disputes* (Oxford University Press 2015) para 1.29, referring to this as 'corollary risk'; See, also, SJ Choi and GM Gulati, 'Contract as Statute' (2006) 104 Michigan Law Review 1129, 1132 pointing to the potential problem of 'third party effects' when boilerplate contract language is interpreted by a court and at 1139 noting that '(…) a single court attempting to interpret the meaning of a commercial boilerplate term used in a single contract can generate long-lasting and disruptive consequences for the rest of the market using the same boilerplate term.'.

[20] JB Golden, 'Do We Need a World Court for the Financial Markets' (n12) 257.

[21] As, eg, in the US *Metavante* decision, discussed briefly under § 1.A.I.1, where the Bankruptcy Court for the Southern District of New York held that Sec 2(a)(iii) ISDA MA was unenforceable under the US Bankruptcy Code. As observed by Agahsa Mugasha, although specifically centred on the application of US insolvency law, at least theoretically '[t]he decision potentially has impact beyond the United States because it may influence the views of other courts when they interpret the ISDA Master Agreement section 2(a)(iii)': A Mugasha, 'Global Financial Transactions and Jurisdictional Fragmentation: Inconsistent Decisions by Leading Trans-Atlantic Courts' (n18) 575.

[22] Writing in relation to a comparable, albeit domestic, phenomenon in the US insurance sector, which is also dominated by boilerplate language: ME Boardman, 'Contra Proferentem: The Allure of Ambiguous Boilerplate' in O Ben-Shahar (ed), *Boilerplate: The Foundation of Market Contracts* (Cambridge University Press 2007) 179 and 184.

contract is that its effects are instantaneously felt by all market participants contracting under its terms, as it radiates beyond the territorial confines of that jurisdiction. This emphasises the need for those seized upon by a transnational industry to decide on norms of a highly technical nature and of a transnational pedigree with quasi-statutory effect for a cross-border market to be, firstly, aware of this aspect, and secondly, have requisite competence to make determinations on at times fiendishly technical contractual mechanisms.[23]

Joanne Braithwaite sees some of the bespoke argumentative patterns relied upon by the English courts in cases relating to standard forms in historically established industries, such as shipping, sitting alongside other industries of strategic value, such as insurance and more recently in time construction, as paving the way for the bespoke contractual interpretation developed in relation to OTC derivative standard form terms.[24] The overarching recurring themes in this context are the recognition of any decision simultaneously also being addressed to the wider market as well as individual litigants; the goal of providing consistent interpretations so as to create legal certainty, if need be at the appellate level; as well as – linking back to the concern for legal certainty – a tendency of English courts seeking to be the definitive interpreters of standard terms governed by English law in asserting jurisdiction over such cases.[25]

C. The Significance of Interpretation Disputes

An interpretation dispute may in the OTC derivatives market occur due to a – perhaps significantly – out-of-the-money party pursuing its own short-term commercial interests and seeking a lifeline by choosing to assert a commercially beneficial meaning of a clause through litigation, where it believes there is leeway to do so; for example on the basis of a broad contractual standard or textual ambiguity regardless of a settled market understanding.[26] What is more, it may also do so in opportunistic disregard, ignorance

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[23] This need for specialisation is clearly reflected in the recent trend of subject-matter specialisation visible both as regards adjudication (in form of the Financial List set up as a specialist court within the English High Court) as well as specialist arbitration institutions (most notably P.R.I.M.E Finance). A discussion of both against the background of the at times highly complex subject matter underlying any disputes referred to these specialist institutions is provided by: S Malik, 'The Empire Strikes Back: Derivatives disputes, the financial list, test case scheme and arbitration' (2021) 16 Capital Markets Law Journal 251-266; See, also, § 3 D.

[24] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 62-64, 105.

[25] In detail, *ibid* 105-107.

[26] *Ibid* 54 ('(…) derivatives litigation arises where 'out of the money' parties challenge the interpretation, validity or application of contractual provisions which constitute the self-help remedies.'); See, eg: *Deiulemar Shipping SpA v Transfield ER Futures Limited* [2012] EWHC 928, centring, ia, on the

or simple disinterest in the long-term impact of any decision which negates the industry's established understanding of a term as regards the interests of other industry stakeholders as well as the smooth long-term functioning of the market as a whole.[27] Litigants in a concrete dispute may also just be badly placed to ascertain, let alone argue an established market practice; for example, in part due to ill-equipped counsel or the unwillingness or inability to invest the necessary resources to provide the court with the requisite background information.[28] Other counterparties out-of the money on their transactions may, once they become aware of a decision running counter to the established market understanding, also refuse to comply with their contractual payment obligations. At the very least, they may refer to such a decision as a means of wielding argumentative leverage in opportunistically renegotiating more favourable terms in its shadow, regardless of a particular market understanding of the term's functioning having initially been priced into the counterparties' transaction[29].[30]

When viewing the standardised contractual architecture and the legal predictability it brings as a shared sectoral resource,[31] collective utility can in this way be defeated by the opportunistic self-interest of individual market participants to the detriment of all.[32]

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meaning of and proper test for 'insolvent' under the 'Bankruptcy' Event of Default in Sec 5(a)(vii)(2) of the ISDA MA. Here, in light of the existence of a clearly established market view regarding the interpretative issues nevertheless raised, which was ultimately upheld by the court, one expert practitioner illustratively commented that 'this case holds no surprises, merely confirming that which practitioners should already know or be able to easily guess.': M Beaton, *Bankruptcy Under the ISDA Master Agreement* (1 August 2012).

[27] JB Golden, 'Do We Need a World Court for the Financial Markets' (n12) 257-258; See, also, SJ Choi and GM Gulati, 'Contract as Statute' (n19) 1151 (fn 81).

[28] B Golden, 'Do We Need a World Court for the Financial Markets' (n12) 257-258.

[29] See, SJ Choi and GM Gulati, 'Contract as Statute' (n19) 1130 who explicitly acknowledge the legal exercise of uniform interpretation of boilerplate contract language as a precondition for the pricing and trading of financial instruments. In addition, they recognise that the market can respond to court errors in constructing standard terms by repricing the contracts. However, they point out that parties relied *ex ante* on the meaning originally ascribed to the term contained in their transactions, with the decision thereby potentially reducing all transactions' values. Lastly, the decision may create further costs based on the need of trying to price in the additional uncertainty resulting from the question as to what extent a national decision will in fact be accepted in a global market, *ibid* 1157.

[30] Joanne Braithwaite, for example, points out that even after (very unusually) conflicting answers to a question of the proper construction of sec 2(a)(iii) of the ISDA MA 1992 were provided in several English first instance cases, these are still raised, although the substantive issue has been definitively resolved by the Court of Appeal: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 82.

[31] See, in outlining the arguments of proponents of textualist contract interpretation characterising 'a set of terms with clear, unambiguous meanings that is already understood by the vast majority of commercial parties' as 'a valuable collective good': RJ Gilson and CF Sabel and RE Scott, 'Text and Context: Contract Interpretation as Contract Design' (2014) 100 Cornell Law Review 23, 40-41 as well as 'contracting infrastructure (…) provided jointly by a trade association' as an 'industry-specific public good', *ibid* 44.

This aspect of wider industry concern is very illustratively voiced in a recent Amicus Brief submitted in a Chapter 11 case by ISDA, jointly with the Securities Industry and Financial Markets Association ('SIFMA'), to the U.S. Bankruptcy Court of the Southern District of Texas, Houston Division, in connection with the proper construction of 'Market Quotation' as one of the standard valuation methodologies in close-out under the 1992 ISDA MA in relation to four standard fixed-floating interest-rate swaps, each governed by the 1992 ISDA MA.[33] In this case, in very broad strokes, the insolvent, and thus defaulting[34] end-user counterparty, sought to assert that the quotations obtained by its dealer counterparties for replacement transactions were defective, since these were based on fully-collateralised transactions, whereas its obligations under the swaps did not at all times need to be fully collateralised.[35] However, in contrast, the plain language of the definition of 'Market Quotation' under Sec. 14 1992 ISDA MA makes it clear that the calculation (factoring in collateral) is made as regards an economically equivalent replacement transaction between the non-defaulting party and the reference market-maker, without in any way contemplating the terminated transactions between the defaulting insolvent counterparty and its non-defaulting counterparty.[36] As emphatically stated by the *amici curiae*:

'*If the Amended Objections to the Proofs of Claim raised issues only of concern to the parties of these particular swap agreements (the Debtor and the Dealers), ISDA and SIFMA would not bother to submit this brief. But, unfortunately, this is not the case. The arguments made by [the Debtor], if accepted, could undermine the stability of the market for interest rate swaps and indeed for all derivative transactions governed by the 1992 ISDA Master Agreement. That is for several reasons. First, as discussed, this multi-trillion-dollar market with billions of dollars in swaps and other derivative transactions executed daily depends on the parties' confidence that the contractual*

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[32] In loose analogy to G Hardin, 'The Tragedy of the Commons' (1968) 162 Science 1243-1248; In the same vein, J Golden, 'Interpreting ISDA terms: when market practice is relevant, as of when is it relevant?' (2014) 9 Capital Markets Law Journal 299, 303.

[33] ISDA/SIFMA, *Amicus Brief, In re: Brazoz Electric Power Cooperative, Inc., Debtor, With Respect To Debtor's Amended Objections To Claims Of Swap Counterparties* (October 11, 2022).

[34] The debtor's Chapter 11 bankruptcy filing constituted an Event of Default under Sec 5(a)(vii) ISDA MA.

[35] ISDA/SIFMA, *Amicus Brief, In re: Brazoz Electric Power Cooperative, Inc., Debtor, With Respect To Debtor's Amended Objections To Claims Of Swap Counterparties* (n33) para 23.

[36] The definition under sec. 14 ISDA MA is included in full, as part of a comprehensive reproduction of the 1992 ISDA MA as Exhibit A of the Amicus Brief, *ibid*; See, also, with emphases on the salient passages made by the *amici curiae*, *ibid* para 24.

terms are clear and understood by all. Companies in all lines of business (…) regularly enter into such transactions to hedge their risks or for other business reasons. To do so effectively and efficiently, they need to be able to contract with certainty regarding their rights and obligations. The position advanced by [the Debtor] (…) would upset the market's settled expectations. (…) In short, [the Debtor's] argument, if accepted, would not only render ineffective the plain language of the 1992 ISDA Master Agreement. It would also threaten the stability and certainty of critical financial markets that depend, for their existence, on such stability and certainty.'[37]

Historically, recourse to third party dispute resolution mechanisms was in the financial market, and the OTC derivatives sector especially, seen as an *ultima ratio* to be accessed sparingly and only after the breakdown of self-help private ordering solutions.[38] This is illustrated by the empirical findings underlying the analysis of Joanne Braithwaite, who analysing the decisions handed down by the English courts centring on ISDA documentation, found that from 1993 to the end of 2008 only between one and four decisions were rendered per year and there were even three years without any decision being handed down at all.[39] These figures are all the more telling when considering the structural embeddedness of English courts in the contractual architecture of the global OTC derivatives market.[40] However, the incentive to disregard and test an established market understanding in litigation, as well as the willingness to litigate against a counterparty more generally, will be strongest in times of market turmoil. For example, Joanne Braithwaite describes the spike of such litigation in the wake of the GFC with, i.a., defaulting parties challenging the exercise of contractually

[37] ISDA/SIFMA, *Amicus Brief, In re: Brazoz Electric Power Cooperative, Inc., Debtor, With Respect To Debtor's Amended Objections To Claims Of Swap Counterparties* (n33) paras 35-36, 40.

[38] Traditionally, sophisticated financial market counterparties – none more so than financial institutions – exhibited a natural proclivity towards privately settling any disputes that did arise out of their commercial dealings out of court. In part, this tendency to eschew formal litigation may very well be attributed to the traditional discretion associated with the sector and the consequent interest to avoid any publicity associated with formal court proceedings. However, the wave of litigation that followed the GFC may have ushered in a more durable trend of readiness to resort towards third party dispute resolution, which increasingly includes arbitration. See, especially on the latter aspect: KP Berger, 'The aftermath of the financial crisis: why arbitration makes sense for banks and financial institutions' (2009) 3 Law and Financial Markets Review 54-63.

[39] J Braithwaite, 'OTC derivatives, the courts and regulatory reform' (2012) 7 Capital Markets Law Journal 364.

[40] J Braithwaite, 'Thirty years of ultra vires: Local authorities, national courts and the global derivatives markets' (2018) 71 Current Legal Problems 369, 402.

stipulated valuation discretion upon close-out under the ISDA MA.[41] Here, the dynamic described above becomes particularly clear. Although highly technical, these provisions also include vague standards, including good faith and commercial reasonableness.[42] A paradigmatic example is part of the definition of 'Close-out Amount' in Sec. 14 of the 2002 ISDA MA stating that:

'Any Close-out Amount will be determined by the Determining Party (or its agent), which will *act in good faith* and *use commercially reasonable procedures* in order to *produce a commercially reasonable result*. (…) Each Close-out Amount will be determined as of the Early Termination Date or, if that would not be *commercially reasonable*, as of the date or dates following the Early Termination Date as would be *commercially reasonable*'[43].

As noted by Joanne Braithwaite, since 'Early Termination' and the determination of any 'Close-out Amount' are at the heart of the ISDA MA's core risk mitigating contractual 'self-help remedies'[44], which are premised on providing rapid and efficient solutions for market participants, it appears 'paradoxical'[45] that these highly technical provisions include vague standards opening up the scope for time-consuming litigation on fact and law with an uncertain outcome.[46] However, and in striking contrast, as Jeffrey Golden, special drafting counsel in the drafting process of the antecedent to today's ISDA MAs, the ISDA Code,[47] notes in the context of close-out quotations:

'*[The] commercial objective for certainty was (...) a fundamental rationale for the considerable discretion that the ISDA Master allows a non-defaulting party and the reference market makers when called upon to quote in a close-out situation. It was fully appreciated by the relevant ISDA documentation working groups that, by this point in time, an ISDA Master might be the umbrella for tens of thousands of trades. Setting specific times or prices was not the game. Neither was searching for correct or perfect (or even 'best') answers. If it turned out that, with the benefit of hindsight or more*

[41] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 54.
[42] *Ibid* 253.
[43] Sec 14, 2002 ISDA MA [emphases added].
[44] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 253.
[45] *Ibid*.
[46] *Ibid*.
[47] See, on the evolution of the ISDA documentation, Chapter 1 § 7.

accurate information, a different (or more 'just') result might have been reached, that was unfortunate – but irrelevant'[48].

What initially appears as a contradiction, thus becomes explicable when factoring in the far more homogeneous composition of market participants in the early years of ISDA and during the drafting of the original documentation. Especially the larger market makers were, through repeated dealing, more constrained by relational ties accompanying their trading relationships and far less likely inclined to litigate the determinations resulting from the exercise of contractual discretion, thus enabling fast and certain answers to be found. However, with the diversification of market participants over the past decades, in particular on the end-user side,[49] this certainty rationale no longer holds absolutely, with end-users far more likely to challenge these determinations in court, ever more so in times of market turmoil.

The OTC derivatives market is particularly susceptible to market turmoil in this regard, as a significant and at the time of entry into the transactions unforeseeable shift in the respective financial underlying has the potential, particularly where transactions are leveraged, to severely alter counterparties' positions up to the point of severe financial distress for the now significantly out-of-the-money party[50]. In such a case, any relational ties and the resulting informal constraints on behaviour flowing from these, such as the expectation of future dealings with that counterparty or the litigant's reputation within the wider market, are significantly loosened and the distressed counterparty's self-interest prevails.[51] It is, therefore, not surprising that the majority of interpretative disputes regarding the ISDA MA centre upon the various provisions contractually regulating the consequences of a counterparty defaulting on its performance obligations; i.e. first and foremost, the provisions regarding early termination and close-out of transactions.[52] In such a situation, any initial readiness to address frictions in the commercial relationship in the spirit of cooperation gives way to

[48] See, J Golden, 'ISDA and ADR: A Brief History of a Long Relationship' (n4) 19 (fn 23).

[49] The diversification of market participants and its interplay with both regulation and litigation before the English courts is one of the central topical strands of OTC derivatives market evolution identified and analysed by Joanne Braithwaite: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 21-25; See also, § 3.

[50] As was, for example, the case with regard to the Portuguese transport companies discussed in the *Banco Santander* case study in Chapter 2 § 2.

[51] Ie, when and 'where its own survival is at stake': D Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' (n1) 501 and 540.

[52] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 78.

a markedly more adversarial mode of problem solving, characterised by the shift from informal dealing towards formal litigation and an insistence on formal contractual rights according to an interpretation suitable to serve the desired commercial outcome. Lisa Bernstein in this regard illustratively distinguishes between what she terms 'relationship preserving norms' and the 'endgame norms' contained in the written contract.[53] The marked surge in litigation following on from the GFC, centring, i.a., on the proper interpretation of contractual damages provisions after decades of relatively few reported litigated derivatives disputes, serves to practically illustrate this aspect.[54]

Beyond individual market participants, however, the incentive to test or disregard an established market understanding is perhaps most pronounced when the market participant is no longer the actual strategic decisionmaker, as would be the case with the onset of insolvency of a counterparty and the initiation of a corporate insolvency procedure. This is because, where the insolvent entity either has no commercial future (i.e. in liquidation), or an ailing institution's future can solely be secured by damaging reputation in this way (i.e. in administration), any ties with the respective counterparty or damaging publicity associated with a publicly litigated dispute, no longer acts as an effective disincentive to pursuing short-term commercial interests. Rather, in case of liquidation, the liquidator will be compelled to attempt to maximise the value of the insolvent estate available to the insolvent counterparty's creditors, regardless of or at least overriding any long-term market concerns. As observed by Joanne Braithwaite, litigation concerning derivatives contracts in insolvency may also be due to genuine legal uncertainty with the operation of the respective clauses meeting the test of now applicable mandatory rules of insolvency law for the first time, in transnational cases raising complex questions of conflicts of law at the same time.[55]

In fulfilling its duty, one strategy open to the liquidator is to attempt to disclaim any unprofitable contracts.[56] Beyond this, where there is scope to do so, the liquidator may opt to assert a commercially beneficial contractual interpretation of obligations in litigation or arbitration. This applies similarly in administration. Summing up, times of

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[53] L Bernstein, 'Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms' (1996) 144 University of Pennsylvania Law Review 1765, 1796-1798.

[54] J Golden, 'ISDA and ADR: A Brief History of a Long Relationship' (n4) 12; J Braithwaite, 'OTC derivatives, the courts and regulatory reform' (n39) 367-368; JP Braithwaite, 'Standard Form Contracts as Transnational Law: Evidence from the Derivatives Markets' (n3) 791 (Table 1), *ibid* ('[…] in the two and a half years from the beginning of 2009 there have been more of each type of court decision involving the ISDA documentation than there were in the sixteen years prior to that.').

[55] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 53.

[56] Such 'Cherry Picking' is described under Chapter 2 § 3.C.III.1.a).

crisis, with many market participants forced to run relationship endgames, will, therefore, commonly coincide with a marked increase in the willingness to formally litigate and, by extension, with a marked increase of interpretation disputes.

§ 2 OTC Derivatives Litigation

The touchdown of disputes centring on the interpretation of operative provisions of ISDA's private 'industry-wide constitution'[57] in state sponsored fora of dispute resolution, i.e. domestic courts, provides an illustrative example of the characteristic interpretative exercise that unfolds in a field of creative tension between the universal meaning ascribed to standard terms in the global financial markets and established domestic rules of interpretation – and the interplay between the two.[58]

A. Case Study: Flawed Asset Litigation – Proper Construction of Sec. 2(a)(iii)(1) ISDA MA

Following the guiding theme of this thesis of focusing on the process of transnationalisation by way of observable instances of interlegality,[59] the following case study is highly illustrative.

I. The High Court Decision in *Lomas v JFB Firth Rixson Inc*

A prime example of conflicting approaches to contractual interpretation, each guided by economic considerations in the context of an Event of Default[60] under an ISDA MA due to a counterparty entering administration, came before Briggs J in the Chancery Division of the High Court against the background of the insolvency and administration of Lehman Brothers International Europe (LBIE). It had its roots in the need for interpretive guidance regarding the proper operation of the ISDA MA and resulted from the application of LBIE's joint administrators for directions on the construction of five open interest rate swap agreements.[61]

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[57] A Gelpern and M Gulati, 'CDS Zombies' (2012) European Business Organization Law Review 347, 357.

[58] Capitalised terms in the following (and, in particular, in cited passages), where not otherwise indicated, are defined terms from the ISDA MA forms.

[59] See, Chapter 2 § 1.B.III.

[60] See, Chapter 2 § 3.C.III.1.a).

[61] *Lomas (Together the Joint Administrators of Lehman Brothers International (Europe)) v JFB Firth Rixson Inc & Ors* [2010] EWHC 3372 (Ch) (21 December 2010) at [1]. The administrators made use of a specific provision under UK insolvency statue, namely para 63 of Schedule B1 Insolvency Act 1986, which allows for a company administrator's application to the court for directions in connection with its

At its heart[62] lay the effect and extent of operation of the 'flawed asset approach' as discussed in the case study in Chapter 2 § 3.B, at that time already a focal point of concern from the perspective of the UK's financial regulatory agency,[63] and, specifically, the correct interpretation of the condition precedent under Sec. 2(a)(iii)(1) ISDA MA.[64]

As he sets out at the very beginning of the judgment, Briggs J was acutely aware of the transnational dimension and potential knock-on-effects of any interpretive decision in relation to the standard form ISDA MA. This is evidenced in his stating that ISDA was permitted to intervene in the proceedings 'out of an understandable concern that any decision on [LBIE's joint administrators'] application about the interpretation of the Master Agreement may have potentially wide-ranging implications for the derivatives markets generally, in which the Master Agreement is an extremely widely used standard form. ISDA claims (and is not challenged) that the Master Agreement serves as the contractual foundation for more than 90% of over-the-counter derivatives transactions globally'[65].[66] The decision sits alongside a number of High Court cases centring on the proper construction of Sec. 2(a)(iii) ISDA MA in the context its overall contractual 'machinery'[67] in the wake of the GFC market turmoil, and three first instance English High Court cases in particular, that resulted in substantively conflicting judgments[68]

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functions, in order to ask Briggs J to answer a range of questions, which would ultimately determine the legal position of the parties to the case.

[62] While the case also dealt with other issues, including questions of insolvency law, namely whether the provision contravened the common law 'anti deprivation principle', or constituted a 'penalty from forfeiture', the following will, for present purposes, focus on the central issue of contractual construction.

[63] See, Chapter 2 § 3.B.II.2 on the 'market solution' ultimately found with regard to these concerns in dialogue with the FCA in 2014.

[64] As put by one of the leading commentators on derivatives law, 'Section 2(a)(iii) [as formulated in the ISDA MA standard forms] is unfortunately rather unclear (…) about how the condition precedent operates': S Firth, *Firth on Derivatives Law and Practice* (Sweet & Maxwell 2022) para 11.012/1 [insertion added]; The provision's wording is cited under Chapter 2 § 3.B.I.

[65] *Lomas* (n61) at [5] [insertion added].

[66] ISDA ultimately did so by serving evidence, a position paper and through making oral and written submissions at trial: ISDA, *Amicus Brief, First Written Submission – Lomas v JB Firth Rixson and Others* (29 July 2011) para 3.

[67] As illustratively put by Gloster J in *Pioneer Freight Futures Company Ltd v TMT Asia Ltd* [2011] EWHC 778 (Comm) at [91] and at [107].

[68] In addition to the decision detailed in the following, this included *Lehman Brothers Special Financing Inc v Carlton Communications Ltd* [2011] EWHC 718 (Ch), both decided by Briggs J, as well as *Britannia Bulk Plc v Pioneer Navigation Ltd & Anor* [2011] EWHC 692 and *Pioneer Freight Futures Company Ltd v Cosco Bulk Carrier Company Ltd* [2011] EWHC 1692 which were both decided by Flaux J; The diverging approaches are discussed in more detail by J Braithwaite: *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 79-85 (The author points out how these judgments are

which, in turn, caused a degree of legal uncertainty in the wider derivatives markets. This uncertainty was ultimately only resolved by the Court of Appeal decision on the four conjoined appeals in *Lomas & Ors v JFB Firth Rixson Inc & Ors*[69], which is – specifically in respect to the *Lomas* appeal – discussed in the following.

The *Lomas* litigation is particularly illustrative in terms of an interpretation dispute, since three varying perspectives as to the proper construction of Sec. 2(a)(iii) ISDA MA are offered, each informed by different intrinsic motivations and considerations. Namely, it brings to bear, firstly, the contention of LBIE's administrators, intent on recovering outstanding amounts owing to LBIE; secondly, that of LBIE's (non-ISDA member) swap counterparties, intent on delaying payment for as long as possible (and optimally indefinitely); and, thirdly, that of ISDA, as the custodian of the OTC derivatives market's wider interests and originator of the contractual documentation under consideration.

1. General Background and Core Differences from the United States Legal Landscape

The background to the decision, by way of a high level overview, was as follows: LBIE, the main European broker-dealer subsidiary of its ultimate parent company Lehman Brothers Holdings Inc. ('LBHI'),[70] was placed in administration on the morning of 15 September 2008, shortly after LBHI had filed for bankruptcy protection under Chapter 11 of the US Bankruptcy Code early on the same day.[71] LBIE had, up to the point of it entering into administration, been heavily involved in the OTC derivatives market.[72] When LBIE was placed into administration, it was the floating rate payer under five open fixed-floating interest rate swaps in total, each documented under an ISDA MA in place with its four end-user counterparties acting as respondents in the case.[73] Three of the swaps were documented under the 1992 ISDA MA form, the

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in fact 'a rare example, in the context of the ISDA MA, of inconsistent decision-making across the English Hight Court cases', *ibid* 81).

[69] [2012] EWCA Civ 419.

[70] PricewaterhouseCoopers, *Lehman Brothers International (Europe) In Administration: Joint Administrators' progress report for the period 15 September 2008 to 14 March 2009)* (14 April 2009) 8-9.

[71] *Lomas* (n61) at [28]-[30].

[72] On the day of its administration LBIE 'was party to some 2000 derivative transactions which incorporated the [ISDA] Master Agreement': *ibid* at [29] (insertion added).

[73] The four counterparties from which the joint administrators wanted to collect outstanding payment were (1) JFB Firth Rixson Inc; (2) FR Acquisitions Corporation (Europe) Limited); (3) BEIG Midco Ltd;

remaining two under the 2002 ISDA MA form.[74] Notably, none of its end-user counterparties, each commercial manufacturing and/or trading companies, which had each entered the transactions to hedge existing interest rate exposure, were members of ISDA.[75] All transactions, as evidenced by their respective Confirmations, had an agreed maturity date after 15 September 2008, the date the administrators were appointed.[76] LBIE was at the moment in time of its entry into administration 'in the money'[77] on two and 'out of the money' on the remaining three swaps,[78] which on the respondents' side acted as hedging transactions against interest rate risk arising from various floating rate borrowings[79]. Subsequently, on their respective maturity dates[80], and for the foreseeable future as at the time of litigation, LBIE would – but for its entering into administration – have been significantly in the money on all five swaps because of a substantial fall in the referenced floating interest rates.[81] However, the previous sentence is phrased only in the subjunctive, since under Sec. 5(a)(vii) ISDA MA, LBIE's entry into administration constituted one of the nine stipulated categories of Bankruptcy Event of Default.[82] This meant that under the regulatory mechanism underlying the ISDA MA, LBIE's non-defaulting counterparties could now make use of the 'flawed asset' provision under Sec. 2(a)(iii) ISDA MA, as discussed in detail in Chapter 2 § 3.B, and – since in none of the transactions had the counterparties elected Automatic[83] Early Termination under Part 1(c) of their Schedule to the ISDA MA – they could either close-out all outstanding transactions, or, alternatively, simply bide their time and withhold payment. As the swaps had become increasingly out of the money for LBIE's counterparties, triggering the close-out mechanism would have meant an Early Termination Amount owing to LBIE would have to have been paid by the Non-

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and (4) KP Germany Zweite GmbH. Of these, KP Germany Zweite GmbH was counterparty to two transactions.

[74] *Lomas* (n61) at [8].

[75] *Ibid* at [50].

[76] *Lomas* (n69) at [11].

[77] Ie, as on the contractually determined payment dates the fixed rate payable by its counterparties exceeded the floating rate payable by LBIE, LBIE was therefore said to be 'in the money' for the *net* difference payable to it pursuant to the payment netting provision under Sec 2(c) ISDA MA (and vice versa regarding LBIE's 'out of the money' transactions): *Lomas* (n61) at [3].

[78] *Ibid* at [1] and at [3].

[79] *Ibid* at [48].

[80] *Lomas* (n69) at [11].

[81] *Lomas* (n61) at [3].

[82] *Ibid* at [1].

[83] *Ibid* at [50].See, Chapter 2 § 3.C.III.1.a) in more detail on the operation of Early Termination.

defaulting counterparties.[84] Against this background, LBIE's counterparties (understandably) chose not to exercise their contractual right to designate an Early Termination Date to terminate the outstanding transactions, most likely expecting LBIE's bankruptcy default to continue on indefinitely.[85] Rather, they each relied on the unsatisfied condition precedent under Sec. 2(a)(iii)(1) ISDA MA in order to not make the payments otherwise due under the terms of the respective swap Confirmations.[86] LBIE's joint administrators, by contrast, in pursuing their objective of realising LBIE's assets, naturally took issue with this approach, as they sought to assert a restrictive construction of Sec. 2(a)(iii) ISDA MA, which would ultimately open up a path to recover any value of the five in-the-money swaps for LBIE's creditors.[87]

As a clarifying side note, a mirror contract interpretation dispute – by virtue of the ISDA MA's second default choice of forum clause – in the other major derivatives jurisdiction of New York did not arise in the context of the insolvency of Lehman Brothers, as Sec. 2(a)(iii) ISDA MA was, regardless of any questions as to New York contract law, already unenforceable under the proper construction of mandatory provisions of the US Bankruptcy Code, as was decisively stated in the 2009 *Metavante* decision.[88] In broad terms, the court ruled that Metavante, an out-of-the-money swap counterparty to Lehman Brothers Special Financing Inc. (LBSF) under an interest rate transaction documented under a 1992 ISDA MA, could, upon LBSF's default as a result of its own and its credit support provider's Chapter 11 filing, not rely on Sec. 2(a)(iii) ISDA MA to refuse to make outstanding payments under open transactions. The court determined that the clause amounted to an *ipso facto* clause*,* which was as a general rule under Sec. 365(e)(1)(A) of the US Bankruptcy Code unenforceable against a Chapter 11

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[84] As provided under Sec 6(e)(i) ISDA MA.

[85] This thesis finds some support, eg, in the statement by Briggs J at the time, that 'there is no realistic prospect that LBIE will ever cease to be in default': *Lomas* (n61) at [71].

[86] *Ibid* at [2].

[87] E Murray, '*Lomas v Firth Rixson*: 'As you were'' (2013) 8 Capital Markets Law Journal 395, 399; The potential detrimental economic effect of Sec 2(a)(iii) ISDA MA on the estate was amplified by the fact that, aside form out-of-the-money counterparties holding out on their payments, inversely, the in-the-money counterparties would elect to close-out their transactions, thus crystallising the losses: S Firth, 'The English Law Treatment of Lehman's Derivatives Positions' in D Faber and N Vermunt (eds), *Bank Failure: Lessons from Lehman Brothers* (Oxford University Press 2017) para 10.19; In the end, the vast majority of LBIE's counterparties, including those out-of-the-money, did, however, choose to designate an Early Termination Daten and close-out their outstanding transactions, *ibid* para 10.24; *Lomas* (n61) at [29].

[88] Bankruptcy Court of the Southern District of New York, In re Lehman Brothers Holdings Inc (Case No 08-13555 (JMP)) (15 September 2009). In the case, Judge Peck issued a bench ruling. Pinpoints in the following thus pertain to the court transcript containing the Metavante ruling ('*Metavante Transcript*').

debtor and violated the automatic stay under Sec. 362 of the US Bankruptcy Code.[89] Crucially, the court ruled that Metavante could not rely on the US Bankruptcy Code's safe harbour provisions, carving out certain privileges from the general insolvency regime for derivatives counterparties, since, as the legislative history of the provision and its purpose of mitigating systemic risk demonstrated, the rights (including termination and close out) contained therein were intended to protect a derivative counterparty only during a brief time window.[90] The court held that the fact Metavante had not attempted to exercise any of these rights, but rather decided to 'ride the market for the period of one year, while taking no action whatsoever'[91] was 'simply unacceptable and contrary to the spirit of the Bankruptcy Code'[92] and consequently the 'window to act promptly under the safe harbor provisions ha[d] passed'[93]. The court ruled that as a result Metavante had waived its right to exercise its rights under the safe harbour provisions.[94]

This differing reception of Sec. 2(a)(iii) ISDA MA is in fact one of the very rare examples where a core operative provision of the ISDA MA did not operate in synchronicity upon touching down in either of the two contractually predefined legal orders, with the transnational contractual standard rather fragmenting along jurisdictional lines.[95] This outlier goes to show how instances of global legal pluralism and resulting interlegality are highly context-specific. In this case, mandatory state norms closed the state legal order off *ex ante* to any responsiveness towards transnational specialist normativity, ultimately trumping the transnational provision.

While it has been argued that, normatively, state mandatory rules should, in fact, not be granted automatic priority in contestation with norms emanating from the ISDA normative system,[96] this, as the *Metavante* case shows, does not, aside from raising significant questions of democratic legitimacy, appear a realistic prospect any time soon. Taking this and the interests of the markets from which these transnational norms emanate into consideration, which keenly rely on their ultimate (predictable)

[89] *Metavante Transcript* at [112]-[113].
[90] *Ibid* at [111].
[91] *Ibid* at [110].
[92] *Ibid*.
[93] *Ibid* at [111].
[94] *Ibid* at [112].
[95] A Mugasha, 'Global Financial Transactions and Jurisdictional Fragmentation: Inconsistent Decisions by Leading Trans-Atlantic Courts' (n18) 555.
[96] H Collins, 'Flipping Wreck: Lex Mercatoria on the Shoals of Ius Cogens' in S Grundmann, F Möslein and K Riesenhuber (eds), *Contract Governance: Dimensions in Law and Interdisciplinary Research* (Oxford University Press 2015) 405.

enforceability, and when conceptualising the ISDA regime through the theoretical lens of global legal pluralism, it appears more promising to focus on arenas in which transnationalisation occurs as the kind of dialectical interplay between transnational and statal norms it describes: such as, in the realm of contractual interpretation by the courts.

While rather technical in its detail, this chapter will touch upon the key aspects of the various diverging interpretive contentions put forward, as they offer an illustrative insight into the wide interpretive leeway offered by such a crucial operative provision, as well as, importantly for present purposes, a realistic insight into the process of transnationalisation unfolding in a highly technical area of contractual interpretation.

2. *The Parties Contentions Regarding the Proper Construction of Sec. 2(a)(iii) ISDA MA*

The central issue of the case before Briggs J, accounting for 42 of the decision's 124 paragraphs, and treated in the decision under the heading of 'Construction'[97], was the proper meaning and effect of Sec. 2(a)(iii) ISDA MA as a component of the wider regulatory environment of the ISDA MA. Since neither in Sec. 2(a)(iii) ISDA MA, nor for that matter anywhere else in the ISDA MA, was there an express obligation to close-out at any stage, the non-defaulting party could by relying on the strict wording of the ISDA MA theoretically withhold performance indefinitely. Thus, as put at the time by Briggs J, 'the difficulties in the present case arise from the fact that the express terms of Sec. 2(a)(iii) of the Master Agreement leave significant matters unsaid about the condition precedent to any payment obligation (…)'[98].

Incidentally, one possible reason why such a constellation may not have been foreseen by the drafters of the ISDA MA, and thus not received any express contractual treatment, is that quite simply the drafters had realistically anticipated only the failure of the commercial rather than its financial counterparty, i.e., a bank. This distinction is relevant as, ordinarily, a financial, in contrast to a commercial counterparty, would be incentivised to close-out its positions rather than rely on Sec. 2(a)(iii) ISDA MA for any prolonged amount of time in order to remove any uncertainty as to the exact exposure value of its counterparty exposure principally for regulatory reasons.[99]

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[97] *Lomas* (n61) at [52]-[93].

[98] *Ibid* at [58].

[99] See, Chapter 2 (n715); See, also, ISDA, *Written Submission on Behalf of the International Swaps and Derivatives Association in the Matter of Lehman Brothers International (Europe)* para 88 (noting that 'ISDA believes this helps to explain why out of LBIE's 2,000 or so Master Agreement counterparties, it

Of relevance for present purposes, the parties asked Briggs J to consider and instruct upon the following central issues in relation to the proper construction of Sec. 2(a)(iii)(1) ISDA MA.[100] Firstly, as contended by LBIE's joint administrators – naturally intent on limiting the scope of the condition precedent to advance their cause – whether as a matter of construction or by way of an implied term, Sec. 2(a)(iii)(1) ISDA MA operated only for 'a reasonable period' and, if this were to be the case, what legal consequences followed from this.[101] Or, as alternatively contended by LBIE's joint administrators, whether as a matter of construction or by way of an implied term, the condition precedent operated only until the expiry date of that transaction.[102]

Secondly, Briggs J was asked to consider what the exact legal effect of the condition precedent under Sec. 2(a)(iii)(1) ISDA MA not being met was regarding the Non-defaulting Party's performance obligation.[103] Namely, simplifying somewhat, as variously advanced by LBIE's out-of-the-money counterparties – intent on a construction releasing them from their payment obligation – whether, if an Event of Default or Potential Event of Default existed at a payment date scheduled for the Non-defaulting Party, either no payment obligation ever arose on the part of the Non-defaulting Party with respect to the amount otherwise due on the payment date (i.e. the respondents' 'Once and for All'[104] interpretation).[105] Alternatively, the counterparty respondents asked Briggs J to consider, whether the initial suspension[106] of payment obligations due to the Event of Default or Potential Event of Default continued until the

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appears that only the Respondents and one other LBIE counterparty, as already noted, indicated an intention to rely on Section 2(a)(iii) rather than close out').

[100] *Lomas* (n61) at [52].

[101] *Ibid*.

[102] *Ibid*.

[103] *Ibid*.

[104] As phrased by Briggs J in the relevant sub-heading, *ibid* at [66]-[79] ('Once and for All v Suspension'); By way of background, the 'Once and for All' interpretation could not advance with respect to the transactions documented under a 2002 ISDA MA, since that standard form contains explicit provisions assuming that payment, which because of Sec 2(a)(iii) ISDA MA is not payable on the prescribed payment date, will become payable at a later date, thus depriving of any basis a construction to the effect that such a payment obligation is extinguished at a point in time before the Event of Default or Potential Event of Default is no longer continuing: *ibid* at [27] with regard to Sec 9(h)(i)(3) ('Interest on Deferred Payments') of the 2002 ISDA MA.

[105] This was the contention of two respondents, Firth Rixson and KPGZ respectively: *ibid* at [66].

[106] As has been noted, 'suspension' as a legal term does, strictly speaking, not properly describe the technical legal effect of Sec 2(a)(iii) ISDA MA, since as long as the condition precedent is not met, no payment obligation actually capable of being suspended ever arises in the first place. However, since, as additionally observed by Edward Murray, regardless of terminology, the legal operation of the provision was in each case accurately understood, this thesis will follow the approach of the receiving literature of keeping with this terminology for ease of cross-reference: E Murray, 'Lomas v Firth Rixson: 'As you were'' (n87) 401 (fn 29).

Event of Default or Potential Event of Default was cured, or, if this was not the case, until expiry of the term of the respective transaction, after which the payment obligations were, however, extinguished (i.e. the respondents' 'Limited Suspension' interpretation). Lastly, as was contended by ISDA as intervenor in the proceedings, Briggs J was asked to determine whether performance obligations under Sec. 2(a)(i) ISDA MA – which have not come into effect due to the condition precedent in Sec. 2(a)(iii)(1) ISDA MA not being met (on account of an Event of Default or Potential Event of Default at the scheduled date of performance) – were suspended and arose only, when the said Event of Default or Potential Event of Default was no longer continuing, regardless of whether the transaction had at that time already expired, meaning that suspended contingent obligations could (theoretically) survive indefinitely; i.e. regardless of whether the natural term of a transaction had expired.[107] One principal argument advanced for such an 'indefinite survival of contingent obligations'[108] was the internal regulatory structure of the ISDA MA, namely that the Non-defaulting Party had the option of simply electing for Early Termination if it wished to unburden itself of the prospect of a potentially indefinite contingent obligation (i.e. ISDA's 'Indefinite Suspension' interpretation').[109]

3. Justice Briggs' Construction of Sec. 2(a)(iii) ISDA MA

Notably, at the outset of the interpretative exercise, Briggs J found it necessary to 'begin with some preliminary observations about the correct approach to construction'[110] of the ISDA MA, in which he focused at some length on the prominent status of the transnational standard form contract.

a) Preliminary Judicial Observations on Interpreting the ISDA MA

Briggs J first emphasised the breadth of the ISDA MA's use by stating that it 'is one of the most widely used forms of agreement in the financial world. It is probably the most important standard market agreement used in the financial world.'[111] He then went on to point out the close nexus between the ISDA's standardised contractual architecture and the English legal system by emphasising that 'English law is one of the two systems of law most commonly chosen for the interpretation of the Master Agreement,

[107] *Lomas* (n61) at [66].
[108] *Ibid* at [77].
[109] *Ibid*.
[110] *Ibid* at [53].
[111] *Ibid*.

the other being New York Law'[112]. From these observations he derived that it was 'axiomatic that it should, as far as possible, be interpreted in a way that serves the objectives of clarity, certainty and predictability, so that the very large number of parties using it should know where they stand'[113], thereby explicitly factoring in and pointing to the market-wide effects of contractual construction.

b) Conclusion as to Proper Legal Effect of Sec. 2(a)(iii) ISDA MA

Firstly, Briggs J ultimately rejected any basis for the implication of terms into the ISDA MA.[114] Specifically, he stated that LBIE's joint administrators' contention of the condition precedent in Sec. 2(a)(iii)(1) ISDA MA being subject to the implied term that it should fall away after a reasonable time, thus rendering any payment obligations fully enforceable, was in light of the unambiguous language of the provision 'quite simply, contrary to the express terms of the Master Agreement'[115].[116] Similarly, he rejected as 'even more obviously at variance with the plain language of the Master Agreement'[117] any implied term to the effect that the condition precedent was to fall away at the end of the transactions.[118]

Secondly, with regard to the question of the proper construction as to the legal effect of Sec. 2(a)(iii)(1) ISDA MA, although leaning towards the 'Once and For All' approach on the basis of the language of Sec. 2(a)(iii) of the 1992 ISDA MA,[119] Briggs J 'on a fairly narrow balance'[120] rejected such a construction, citing, i.a., its 'pointlessly draconian outcome'[121] as it would lead to the disproportionate result of destroying payment obligations even 'in the event of a minor and momentary default'[122], as well as due to the 'counterintuitive'[123] result of payment obligations being extinguished, rather than suspended by operation of Sec. 2(a)(iii) ISDA MA, as the same obligations would,

[112] *Ibid*.
[113] *Ibid*.
[114] *Ibid* at [53]-[91].
[115] *Ibid* at [88].
[116] *Ibid*.
[117] *Ibid* at [89].
[118] *Ibid*.
[119] *Ibid* at [72].
[120] *Ibid* at [73].
[121] *Ibid*.
[122] *Ibid*.
[123] *Ibid* at [74].

however, still be deemed existing for the purposes of close-out calculation upon Early Termination[124].

Instead he opted for a suspension interpretation of the provision in holding that under the ISDA MAs, where a Defaulting Party was subject to an Event of Default, or Potential Event of Default, at the scheduled performance date of an obligation under Sec. 2(a)(i) ISDA MA, then Sec. 2(a)(iii) ISDA MA suspended the coming into effect of that obligation, which then only arose upon the Event of Default, or Potential Event of Default being cured and the condition precedent being thus satisfied.[125] However, rather than on the side of ISDA's Indefinite Suspension interpretation, he came down on the side of the Limited Suspension interpretation alternative put forward by the respondents, as he saw the existence of indefinite contingent liabilities as irreconcilable with the ISDA MA regime.[126] Under this interpretation, the suspension of the Non-defaulting Party's performance obligations under a transaction was limited merely until the expiry of the term of that transaction, upon which, if the Event of Default or Potential Event of Default had not been cured, the performance obligations terminated at the end of the transaction's natural term by 'effluxion of time'[127], meaning on the last payment date referred to under Sec. 2(a)(i) ISDA MA[128].[129]

With regard to the interpretation put forward by ISDA, Briggs J stated that it seemed to him 'to be wholly inconsistent with any reasonable understanding of the Master Agreement that payment obligations arising under a Transaction could give rise to indefinite contingent liabilities, because of the possibility that an Event of Default may be cured long after the expiry of a Transaction by effluxion of time'[130]. In addition, in reaching his decision, Briggs J relied upon the wording of Sec. 9(c) ('Survival of Obligations'), advanced in this way by the respondents, which states that '[w]ithout prejudice to Sections 2(a)(iii) and (…), the obligations of the parties under this Agreement will survive the termination of any Transaction'. From this wording Briggs J inferred that while 'certainly a roundabout way of making express provision against

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[124] *Ibid*.

[125] *Ibid* at [75]-[79].

[126] The proponents oft the limited suspension interpretation had sought to 'point to the unlikelihood that commercial persons would contemplate, let alone specifically agree, to leave potentially large contingent obligations hanging over themselves indefinitely': *ibid* at [76].

[127] *Ibid* at [78]-[79].

[128] *Ibid* at [79].

[129] *Ibid* at [89] ('(...) a payment obligation suspended by Section 2(a)(iii) does not survive termination [by effluxion of time]') [insertion added].

[130] *Ibid* at [78].

payment obligations springing to life after the expiry of a Transaction by effluxion of time, it [was] the only relevant indication one way or another anywhere in the Master Agreement which [bore] on this issue'[131]. In interpreting the provision as supporting the extinction of payment obligations upon transaction maturity, Briggs J rejected ISDA's submission that Sec. 9(c) ISDA MA was merely concerned with preserving the effect of the overarching provisions of the ISDA MA, including the referenced Sec. 2(a)(iii) ISDA MA, upon termination of a particular transaction in relation to other outstanding individual transactions.[132]

4. Contemporaneous Reactions

While welcoming the decision in general, some of the contemporaneous reactions to the judgment's crucial holding, that suspended payment obligations were extinguished upon transaction termination by an 'effluxion of time' are indicative of the concern felt in the wider markets. As later markedly phrased by ISDA in reaction in the context of the Court of Appeal decision, Briggs J's finding that as a matter of construction payment obligations suspended under Sec. 2(a)(iii) ISDA MA were extinguished on the scheduled final payment date under the transaction was a 'surprising finding at odds with the market's expectation and with the wording of the ISDA Master Agreement'[133]. As noted by Edward Murray, then partner at law firm Allen & Overy as well as member of the Financial Markets Law Committee and chairman of ISDA's Financial Law Reform Committee, and incidentally himself at the time of writing now a High Court judge, the 'termination by effluxion of time' idea developed in the decision, although not reaching the point of raising doubts as to the basic enforceability of close-out netting, compounded by Flaux J's subsequent *obiter dictum* in *Pioneer Freight Futures Company Ltd v Cosco Bulk Carrier Company Ltd*[134], created some uncertainty as to the effective scope of operation of the crucial credit-risk mitigation strategy of close-out

[131] *Ibid*.
[132] *Ibid* at [77] and [79].
[133] ISDA, News Release, *ISDA Welcomes the English Court of Appeal's Decision to Uphold ISDA Master Agreement in LBIE Judgment* (3 April 2012).
[134] [2011] EWHC 1692 (Comm); Very broadly, in this first instance decision, as it pertained specifically to the interplay of Sec 2(a)(iii) ISDA MA and close-out netting, Flaux J considered that the value of a transaction (here, forward freight agreements incorporating by reference the 1992 ISDA MA), which had already terminated by virtue of what Briggs J had termed 'effluxion of time' (as frequently referenced in the judgment), or as Flaux J termed it 'at the end of its natural term' (at [67]), or its 'natural termination date' (at [34]), prior to the Early Termination Date, would not be contained within the scope of close-out calculation under Sec. 6 ISDA MA.

netting under Sec. 6(e) ISDA MA.[135] Namely, the legal uncertainty related to whether the decisions had the cumulative effect of shattering the 'orthodox market understanding of the ISDA MA'[136] up until that point, which had been that the value of suspended obligations of a Non-defaulting Party relying on Sec. 2(a)(iii) ISDA as well as amounts due, but unperformed upon expiry of a transaction, were both subsumed under the term of Unpaid Amounts within the meaning of Sec. 14 ISDA MA, and as such included in the close-out calculation.[137] This emphasised the 'great interest to the market'[138] of the outcome of the appeal to the first instance decisions.[139]

What is more, Briggs J's interpretation of Sec. 2(a)(iii) ISDA MA as operating in such a way that suspended payment obligations were extinguished upon a transaction coming to the end of its contractual term, also brings into focus the characteristic overarching interactions between the multiple dispersed institutions drawing on the ISDA MA as the central source of the rules of the game for transnational derivatives transacting. Namely, this judicial pronouncement on the proper meaning of one of its core provisions by a domestic court also had significant potential regulatory implications. This was because, at least functionally, it brought the provision within the scope of the regulatory definition of a 'walkaway clause' with the potentially 'disastrous consequences'[140] for financial entities with English Law governed Master Agreements subject to regulatory capital requirements.[141]

Considering this uncertainty, ISDA, in consultation with its members, started the process of drafting an amendment to Sec. 2(a)(iii) ISDA MA which would clarify the market view as to the operation of the clause and through its wording rule out any judicial interpretation to the effect of extinction of suspended obligations.[142]

II. The Court of Appeal Decision in *Lomas v JFB Firth Rixson*

In 2012, upon an appeal brought by LBIE's joint administrators, the Court of Appeal was tasked with revisiting some of the interpretative questions raised in connection with Sec. 2(a)(iii) ISDA MA in *Lomas & Ors v JFB Firth Rixson Inc & Ors*[143]. The decision

[135] E Murray, 'Lomas v Firth Rixson: a curate's egg?' (2012) 7 Capital Markets Law Journal 5, 13, 16.
[136] *Ibid*.
[137] *Ibid*.
[138] *Ibid* 16.
[139] *Ibid*.
[140] E Murray, 'Lomas v Firth Rixson: 'As you were'' (n87) 425.
[141] *Ibid*; See, as regards the regulatory context, the case study in Chapter 2 § 3.B.
[142] E Murray, 'Lomas v Firth Rixson: a curate's egg?' (n135) 16-17.
[143] *Lomas* (n69).

dealt with four appeals in total, including *Lomas v JFB Firth Rixson Inc & Ors*[144]. These were listed for hearing together because of their shared features, namely that each raised questions of contractual construction upon an Event of Default in relation to interest rate swaps and forward freight agreements documented on the basis of either a 1992 or 2002 ISDA MA.[145] The *Lomas* appeal, to which the following will, for present purposes, be largely confined, was limited to questions of contractual construction, including the issue of implied terms regarding Sec. 2(a)(iii) ISDA MA. As at first instance, ISDA was again granted leave to intervene,[146] and in its written submission set out its position that, aside from agreeing with Briggs J on the matter of implied terms[147], Briggs J was correct to hold that in connection with the 1992 ISDA MA the legal effect of Sec. 2(a)(iii) ISDA MA was to suspend the coming into effect of a performance obligation where the Defaulting Party was subject to an Event of Default or Potential Event of Default, which would then arise upon the cure of said Event of Default or Potential Event of Default.[148] However, crucially, ISDA contended that Briggs J was wrong to hold that a performance obligation under Sec. 2(a)(i) ISDA MA and suspended by Sec. 2(a)(iii) ISDA MA was extinguished 'at the end of what he had referred to as the "term of the Transaction"'[149].[150]

1. The Court of Appeal's Holding

Abstracting strongly for present purposes, the Court of Appeal, in its decision delivered by Longmore LJ, comprehensively affirmed the constructive approach to Sec. 2(a)(iii) ISDA MA advanced by ISDA. In doing so, it upheld Briggs J's holding that rather than preventing the Non-defaulting Party's performance obligations ever coming into existence, the legal effect of the Sec. 2(a)(iii) ISDA MA was to suspend these

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[144] *Lomas* (n61).

[145] *Lomas* (n69) at [7]; Beyond these four appealed first instance cases, the decision in addition touches upon related questions concerning the operation of the ISDA MA raised in other first instance decisions and in this way comprehensively states the English case law on these issues. A comprehensive overview and discussion of the reconciliation of English first instance decisions is provided in E Murray, '*Lomas v Firth Rixson*: 'As you were!'' (n87) 395.

[146] *Lomas* (n69) at [19] ('ISDA conceived that they themselves had a legitimate interest in the true construction of their standard terms of Agreement and applied for (and were granted) leave to intervene both at first instance and in this court.').

[147] ISDA, *Amicus Brief, First Written Submission – Lomas v JB Firth Rixson and Others* (29 July 2011) para 7(1).

[148] *Ibid* para 5.

[149] *Ibid*.

[150] *Ibid*.

obligations.[151] The Court of Appeal also rejected any implication of terms to the effect of creating additional grounds for reviving the suspended payment obligation and thus limiting the scope of the provision[152], while, however, reversing Briggs J's holding that suspended performance obligations, where the Event of Default or Potential Event of Default is not cured during the lifetime of a transaction, were extinguished at the end of its contractual term in favour of ISDA's indefinite suspension interpretation.

In rejecting the 'Once-and-for-All approach' regarding the 1992 ISDA MA, the Court of Appeal agreed with Briggs J in that an interpretation resulting in the rejection of an extinction of payment obligations in favour of suspension, relying, i.a., upon the fact that this result would be 'altogether too drastic a remedy in favour of the Non-defaulting Party'[153]. In addition, the Court of Appeal referred to the internal regulatory structure of the ISDA MA, agreeing with Briggs J that 'it would be somewhat counterintuitive'[154] that Sec. 2(a)(iii) ISDA MA should operate in such a way as to extinguish rather than suspend payment obligations, when at the same time in the context of the calculations of loss in close-out upon Early Termination or Automatic Early termination, it was required to assume the condition precedent in Sec. 2(a)(iii) ISDA MA had been satisfied.[155]

Notable, for present purposes, was the Court of Appeal's definitive rejection of any of the implied terms advanced by LBIE's joint administrators to limit the scope of Sec. 2(a)(iii) ISDA, i.a., because such an implication was deemed either contrary to the express wording of the provision,[156] or for the overarching reason that '[t]here is just no reason to make the implication since the contract works perfectly well without it'[157].[158]

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[151] *Lomas* (n69) at [21]-[28]; In doing so the Court of Appeal relied on Gloster J's interpretation in *Pioneer Freight Futures Co Ltd v TMT Asia Ltd*, a decision which rested on conceptually distinguishing between the general 'debt obligation' underlying a transaction and the specific 'payment obligation' arising from it on a scheduled payment date, with only the latter being addressed by Sec 2(a)(iii) ISDA MA, meaning that the existence of the underlying debt consequently was not affected by an Event of Default (*ibid* at [28]).

[152] *Lomas* (n69) at [21]-[28]

[153] *Ibid* at [31].

[154] *Ibid* at [32].

[155] *Ibid*.

[156] As with regard to the implication of a reasonable time limit regarding the operation of the condition precedent in Section 2(a)(iii) ISDA MA and its explicit wording to the effect that it exists while the Event of Default or Potential Event of Default 'is continuing', *ibid* at [39].

[157] *Ibid* at [44].

[158] The Court of Appeal in its decision very briefly lays out the accepted tests for implying a term into a contract in the context of the implied terms advanced by LBIE's joint administrators, stating that 'the court will only imply terms if it is necessary to do so or if it would be obvious to any disinterested third party that the contract must have the meaning which the implied terms would give it': *ibid* at [45].

Regarding the implication of a reasonable time limit on the operation of Sec. 2(a)(iii) ISDA MA, the Court of Appeal again drew upon the overarching internal regulatory mechanism of the ISDA MA, noting that had counterparties wished to achieve the result of Early Termination upon a certain time limit, they could have simply opted for the mechanism of Automatic Early Termination as provided under the ISDA MA.[159] What is more, the Court of Appeal drew upon the general purpose of Sec. 6 (Early Termination) ISDA MA to refute any reason to imply such a term. The Court of Appeal pointed out that 'the whole point of Section 6'[160] was to give to the Non-defaulting Party the option to choose to close-out 'all outstanding Transactions'.[161] Since the right was not unqualified in the sense that the Non-defaulting Party could not choose only individual transactions to terminate, the Court of Appeal found that it 'will not necessarily be entirely beneficial to the Non-defaulting Party but he has to take that on the chin as the price of the exercise of that option'[162].[163] As any kind of implied time-limit would thus require the Non-defaulting Party to terminate not just the transaction to which the Event of Default pertained, there was 'just no reason why the Non-defaulting Party should be required to opt in this way'[164].[165]

With regard to one of LBIE's joint administrators' further submissions as to the specific operation of an implied term, the Court of Appeal was similarly reluctant to intervene in the explicit contractual wording of the ISDA MA, stating that to do so 'would be to re-write the contract for the parties which it is no business of the court to do.'[166]

A final noteworthy point in the present context is a particular strand of the Court of Appeal's reasoning in rejecting Briggs J's holding that payment obligations suspended by operation of Sec. 2(a)(iii) ISDA MA were extinguished on transaction maturity. In agreeing with ISDA's submission of the indefinite contingent obligation interpretation and reversing Briggs J's holding in this regard, the Court of Appeal rejected Briggs J's construction of Sec. 9(c) ISDA MA. Whereas Briggs J had, at first instance, not been referred to the genesis and historic evolution of the ISDA MA standard form,[167] the Court of Appeal, in contrast, was, and in its interpretative exercise included the wording

[159] *Ibid* at [41].
[160] *Ibid*.
[161] *Ibid*.
[162] *Ibid*.
[163] *Ibid*.
[164] *Ibid*.
[165] *Ibid*.
[166] *Ibid* at [45].
[167] *Ibid* at [53].

of the 1987 form as compared to its successor versions.[168] As noted by the Court of Appeal, the 1987 ('Interest Rate and Currency Exchange Agreement') form already materially contained clauses 2(a)(iii) ISDA MA and 9(c) ISDA MA, yet with a slightly different wording to the subsequent 1992 and 2002 versions.[169] Specifically, Sec. 2(a)(iii) ISDA MA did, in the 1987 version, not yet contain the condition precedent that no Early Termination had occurred or been designated, which was inserted via Sec. 2(a)(iii)(2) ISDA MA[170] into subsequent versions, and, crucially, Sec. 9(c) ISDA MA in the 1987 version made no reference to Sec. 2(a)(iii) ISDA MA at all.[171] From this, the Court of Appeal inferred that the conclusion that payment obligations suspended upon an Event of Default were to be extinguished upon maturity, as made by Briggs J on the basis of the wording of Sec. 9(c) ISDA MA was 'impossible'[172] regarding the 1987 standard form.[173]

The central question for the Court of Appeal thus was whether the subsequent amendment of Sec. 9(c) ISDA MA (i.e. its general reference to Sec. 2(a)(iii) ISDA MA) from the 1992 standard form onwards – and without any express reference to such an effect – in fact introduced as a new concept into the ISDA MA that suspended payment obligations would be extinguished upon transaction maturity.[174] On this matter, the Court of Appeal determined that it could not conclude 'as a matter of construction, so fundamental an alteration has been achieved by the new wording'[175]. As put by the Court of Appeal, while it was easy to see why upon insertion of the new condition precedent into Sec. 2(a)(iii) of the 1992 ISDA MA version, Sec. 9(c) ISDA MA should have for the first time added the reference to Sec. 2(a)(iii) ISDA MA:

'[I]t cannot, in our judgment, have been the *intention of the framers of the 1992 Agreement* to introduce the concept of extinction of the payment obligation by the use of such "non-ideal" and "inelegant" wording. If that had been their intention, they

[168] *Ibid* at [51]-[53].
[169] *Ibid* at [51].
[170] Ie, 'the condition precedent that no Early Termination Date in respect of the relevant Transaction has occurred or been effectively designated'.
[171] *Lomas* (n69) at [51].
[172] *Ibid* at [52].
[173] *Ibid*.
[174] *Ibid* at [53].
[175] *Ibid*.

would have made that intention much more explicit than by hiding it in a clause headed "miscellaneous" and phrasing it in such an obscure manner'[176].

Against the historical background of the standard form before it, and the intention of its 'framers' derived from it, the Court of Appeal understood the reference in Sec. 9(c) ISDA MA to Sec. 2(a)(iii) ISDA MA to be a reference exclusively to Sec. 2(a)(iii)(2) ISDA MA; i.e. not to Sec. 2(a)(iii)(1) ISDA MA.[177]

Turning to another of the reasons Briggs J relied upon in coming down in favour of the counterparty respondents', i.e. the Non-defaulting Parties', Limited Suspension (until extinction) interpretation, the Court of Appeal noted that this ultimately amounted merely to saying that indefinite contingent obligations were inconvenient and stated that, while this was undoubtedly so, this did not provide sufficient reasons to justify the implication that suspended obligations should be regarded as extinguished upon transaction maturity.[178] In doing so, the Court of Appeal recognised that these arguments amounted to an implication of terms just as much as in the case of LBIE's joint administrators, since the text of the ISDA MA remained silent in both cases, and went on to set out at some length the law on implied terms it had so far only touched upon in dealing with LBIE's joint administrators' arguments.[179] Measuring the arguments relied upon by Briggs J against the relevant test for the implication of terms stated by Lord Hoffmann in *Attorney General of Belize v Belize Telecom*[180], as 'the

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[176] *Ibid* [emphasis added]; The adjectives cited are from Briggs J's first instance decision, where he conceded that the effluxion of time concept was not clearly embodied in the language of the ISDA MA, see *Lomas* (n61) at [79] and at [89].

[177] *Lomas* (n69) at [53].

[178] *Ibid* [56].

[179] *Ibid*.

[180] [2009] UKPC 10. The relevant passages cited by the Court of Appeal are at [17] ('The question of implication arises when the instrument does not expressly provide for what is to happen when some event occurs. The most usual inference in such a case is that nothing is to happen. If the parties had intended something to happen, the instrument would have said so. Otherwise, the express provisions of the instrument are to continue to operate undisturbed. If the event has caused loss to one or other of the parties, the loss lies where it falls.'); at [18] ('In some cases, however, the reasonable addressee would understand the instrument to mean something else. He would consider that the only meaning consistent with the other provisions of the instrument, read against the relevant background, is that something is to happen. The event in question is to affect the rights of the parties. The instrument may not have expressly said so, but this is what it must mean. In such a case, it is said that the court implies a term as to what will happen if the event in question occurs. But the implication of the term is not an addition to the instrument. It only spells out what the instrument means.'); and at [21] ('It follows that in every case in which it is said that some provision ought to be implied in an instrument, the question for the court is whether such a provision would spell out in express words what the instrument, read against the relevant background, would reasonably be understood to mean.').

latest authoritative pronouncement about implied terms'[181], the Court of Appeal ultimately determined that the arguments did not pass the test.[182] Condensing the test to the core question of whether the contracts under consideration 'meant' that a suspended payment obligation was extinguished upon transaction maturity, as had been held by Briggs J, the Court of Appeal provided a clear answer. Since neither a transaction-specific Confirmation nor the overarching ISDA MA stated so expressly, and the Court of Appeal did not consider the contracts 'must' have this meaning and held that in the absence of a clear provision by the parties on the question 'the loss (such as it is) must lie where it falls'[183].

As a result, the Court of Appeal decision vindicated wholesale the constructive approach towards the flawed asset approach and Sec. 2(a)(iii)(1) ISDA MA advanced by ISDA – namely, the Indefinite Suspension interpretation.

2. Reception of the Court of Appeal Decision

The outcome of the appeal and the renewed certainty it brought as to the operation of the ISDA MA in a close-out scenario was favourably received by market representatives and practitioners. Unsurprisingly, the decision was warmly welcomed by ISDA. Illustrative is the reaction of the then ISDA General Counsel, David Geen, who stated:

'*We are delighted, but not surprised, that the Court of Appeal has really understood the meaning and purpose of the key provisions of the ISDA Master Agreement and has unambiguously affirmed the positions that ISDA has consistently held. This judgment provides clarity and certainty to the derivatives market and vindicates ISDA's decision to participate in the appeals.*'[184]

What is more, somewhat telling is its choice of words in the respective ISDA News Release characterising the Court of Appeal's decision as a 'decision to uphold'[185] the ISDA MA, emphasising how the first instance decision had run counter to how it operated under an established market understanding. Considering the immediate effect

[181] *Lomas* (n69) at [56].
[182] *Ibid* at [56]-[57].
[183] *Ibid* at [57].
[184] ISDA, News Release, *ISDA Welcomes the English Court of Appeal's Decision to Uphold ISDA Master Agreement in LBIE Judgment* (3 April 2012).
[185] *Ibid*.

of the decision in clarifying the somewhat muddied waters of legal uncertainty created by the first instance decisions, ISDA consultations with its membership with a view to publishing its own clarifying amendment to Sec. 2(a)(iii) ISDA MA were dropped.[186]

In addition, as stated by Edward Murray, '[i]t (…) restored, more or less intact, to its status quo ante the common understanding of market practitioners as to how the ISDA Master Agreement works following an Event of Default.'[187] The same commentator underlines the decision's importance in respect of what he refers to as a restoration of the 'orthodox market view'[188] to the established legal position under English case law, thereby comprehensively resolving the uncertainty emanating from conflicting first instance decisions, terming it 'one of the most important judgments ever given by an English court on the ISDA Master Agreement'[189].

However, the legal effect of Sec. 2(a)(iii) ISDA MA under the prevailing market view, now bolstered by the Court of Appeal's concurring decision, caused considerable concern amongst the third interested group in the outcome of the Appeal, beyond the litigants and the wider markets, which had subscribed to ISDA's standard terms. Namely, this was the group of financial regulators, uneasy with the resulting uncertainty faced by the respective defaulting party regarding if and when it would ever be able to crystallise the value of its in-the-money transactions.[190] This unease was ultimately resolved through the 'market solution' discussed in the case study detailed in Chapter 2 § 3.B.

III. *Grant v FR Acquisitions*

Most recently, the lengthy saga of litigation surrounding the proper construction and effect of the 'flawed asset approach' under Sec. 2(a)(iii) ISDA MA was rounded off by

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[186] An amendment of Sec 2(a)(iii), which included an express time limit regarding the suspension duration was later published by ISDA. It is worth noting, however, that this occurred not as a reaction to legal uncertainty arising out of litigation, but due to regulatory concerns in connection with effective bank resolution. See, in detail, the case study in Chapter 2 § 3.C.

[187] E Murray, '*Lomas v Firth Rixson*: 'As you were!'' (n87) 395; Similarly, S Firth, 'The English Law Treatment of Lehman's Derivatives Positions' (n87) para 10.03 ('(…) the judgments that have been given are of considerable importance to the derivatives market as they have helped clarify the meaning of standard documentation that remains in widespread use.'); See also, one of the most prominent commentators on derivatives law characterising that the Court's ultimate conclusion on the legal effect of the condition precedent as 'undoubtedly correct': S Firth, *Firth on Derivatives Law and Practice* (n64) para 11.012/1.

[188] E Murray, '*Lomas v Firth Rixson*: 'As you were!'' (n87) 395.

[189] *Ibid* 396.

[190] C Gurney, 'Calling Time on Section 2(a)(iii) of the ISDA Master Agreement: ISDA Publishes an Amendment' (2014) Butterworths Journal of International Banking and Financial Law 520, 520-521.

the High Court decision in *Grant & Ors v FR Acquisitions Corporation (Europe) Ltd & Anor (Re Lehman Brothers International (Europe)*)[191]. As with the cases discussed above, what – beyond the technicalities of the ISDA MA's operation – stands out for the purposes of this discussion is the particular approach to interpreting its provisions adopted by the English courts.

1. Background

Notably, the question of the legal effect of Sec. 2(a)(iii) ISDA MA – with regard to LBIE – had at first instance, back in 2010, been considered to be more an academic than practical legal question.[192] However, the construction and effect of the ISDA MA's Events of Default provisions and their interplay with Sec. 2(a)(iii)(1) ISDA MA, including, i.a., the proper interpretation of when an Event of Default with respect to the other party was, in fact, 'continuing', which is itself neither defined nor addressed in the ISDA MA, became a matter of great practical importance before Hildyard J in the High Court more than a decade later.[193]

After it became apparent that, contrary to most expectations,[194] LBIE, rather than being dissolved at the end of administration, would, in fact, be going to be saved and exit administration as a solvent company,[195] LBIE's joint administrators once again applied for directions to the court. This time the application was for directions as to whether upon LBIE's exit out of administration, any Events of Default which were as yet 'continuing' for the purposes of Sec. 2(a)(iii) ISDA MA had been or were capable of being cured, thus disapplying the condition precedent and making its counterparties, the respondents, liable to make outstanding payments under so far suspended payment obligations. It bears emphasis that the *Grant* litigation was only conceivable because the Court of Appeal in its *Lomas* decision had rejected the 'limited suspension until

[191] [2022] EWHC 2532 (Ch).

[192] *Lomas* (n61) at [71] ('The question whether Section 2(a)(iii) has a once and for all or suspensory effect is of minimal practical relevance in the present context, since there is no realistic prospect that LBIE will ever cease to be in default.').

[193] The decision also touches upon interpretive questions regarding the proper construction of the Bankruptcy Event of Default under the ISDA MA. These are, however, beyond the scope of analysis for present purposes.

[194] In all likelihood including that of its out-of-the money counterparties: See, *Grant* (n191) at [6]; See, also, The Right Honourable Lord Justice Briggs, 'How has English Law coped with the Lehman Collapse?' in D Faber and N Vermunt (eds), *Bank Failure: Lessons from Lehman Brothers* (Oxford University Press 2017) para 6.42.

[195] *Grant* (n191) at [6]-[7] ('The Administrators have paid in full (or fully reserved for) all provable debts (including subordinated debts), statutory interest entitlements and non-provable liabilities. Substantial assets remain available in the estate.').

extinction interpretation' of Sec. 2(a)(iii) ISDA MA, thus, in retrospect, highlighting the very real practical importance and legal implications of the decision.[196]

The two respondents, collectively referred to in the following as 'Firth Rixson'[197], both parties in the *Lomas* litigation, as detailed above, belonged to the small minority of counterparties that had chosen not to terminate and close-out their transactions with LBIE in the immediate aftermath of LBIE's entry into administration, but to hold out on any payments to LBIE relying on the suspensory effect of Sec. 2(a)(iii)(1) ISDA MA – at the time of the decision for over the course of well over a decade.[198] It was common ground between the parties that on the two interest rate swap agreements with LBIE in question, one governed by a 1992 ISDA MA, the other by a 2002 ISDA MA,[199] the respondents were out-of-the-money to the amount of more than GBP 8 million and more than USD 53 million respectively[200].

The central question, however, was when an Event of Default such as under Sec. 5(a)(vii) ISDA MA (Bankruptcy) in the form of, i.a., the administration order made with respect to LBIE in 2008,[201] was or was not 'continuing' for the purposes of the suspensory condition precedent under Sec. 2(a)(iii)(1) ISDA MA.[202]

2. *Preliminary Judicial Observations on Interpreting the ISDA MA*

Central, for the purposes of this chapter, are the illustrative preliminary judicial observations on interpreting provisions of the ISDA MA.

Under the heading 'The ISDA Master Agreements'[203] Hildyard J prefaced his substantive decision by detailing in-depth the 1992 and 2002 ISDA MAs'

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[196] In contrast also to the first instance judge's appraisal writing extrajudicially in 2017: The Right Honourable Lord Justice Briggs, 'How has English Law coped with the Lehman Collapse?' in D Faber and N Vermunt (eds), *Bank Failure: Lessons from Lehman Brothers* (Oxford University Press 2017) para 6.42 ('(…) the differences in analysis of section 2(a)(iii), however fundamental conceptually, have made little practical difference to the small number of parties involved (despite the enormous sums at stake). This is because, regardless whether the payment obligation is extinguished, suspended permanently, or suspended only until extinction at the end of the agreement, the inability of the Lehman (and other insolvent) parties ever to remedy their defaults means that they will never get their dollars or dimes. What never? No never.').

[197] (1) FR Acquisitions Corporation (Europe) Ltd and (2) JFB Firth Rison Inc., both part of the Firth Rixson group of companies, *Grant* (n191) at [2].

[198] *Ibid* at [4].

[199] *Ibid* at [2].

[200] *Ibid* at [3].

[201] *Ibid* at [5] and [20].

[202] *Ibid* at [9]-[10].

[203] *Ibid* at [51] onwards.

background,[204] the overall contractual architecture in which they sit,[205] as well as – most importantly – the appropriate resulting judicial interpretive approach towards them[206].

Hildyard J set out his remarks by citing Briggs J's assertion in *Lomas v JFB Firth Rixson Inc.*, as to the global importance and breadth of use of the ISDA MA,[207] adding a BIS statistic reflecting the total notional amount of OTC derivatives globally.[208] Noting the publication of an ISDA User's Guide for each form of the ISDA MA and their respective interpretive admissibility and value,[209] as well as the ISDA MA's design feature as an abstract template for a multitude of specific transaction environments in terms of counterparties and transaction types,[210] Hildyard J, crucially, inferred that '[t]his affects the Court's approach to interpretation'[211].

Restating the general principles of contractual interpretation, citing as a recent authority on the matter the Supreme Court decision in *Wood v Capita Insurance Services Ltd*[212], Hildyard J noted the need for a different approach in the context of a standard form agreement such as the ISDA MA with its unique versatility of personal and transactional use. As observed by the judge, this entailed an interpretative process, which must 'ascribe even more than usual deference to the words used, and take as the context not the specific position as between the parties, but its anticipated use by such a variety of intended users in such a variety of circumstances'[213].

In the light of these special circumstances, Hildyard J drew on the customised interpretative template he had already laid down in *Lomas & Ors (Joint Administrators of Lehman Brothers International (Europe)) v Burlington Loan Management Ltd &*

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[204] *Ibid* at [51]-[56].
[205] *Ibid* at [59]-[60].
[206] *Ibid* at [57]-[58].
[207] *Lomas* (n61) at [5]
[208] *Grant* (n191) at [51].
[209] *Ibid* at [55] with reference to *Lomas & Ors (Joint Administrators of Lehman Brothers International (Europe)) v Burlington Loan Management Ltd & Ors* [2016] EWHC 2417 (Ch) at [28].
[210] *Grant* (n191) at [56] with reference to *Lehman Brothers Finance SA v Sal. Oppenheim Jr. & CIE. KGAA* [2014] EWHC 2627 (Comm) at [25(iii)] '(…) the ISDA Master Agreement is intended to be normative, and to apply in many different situations and with as much straightforward application as possible'.
[211] *Grant* (n191) at [57].
[212] [2017] UKSC 24 at [10]-[13] with Justice Hildyard citing the court's task in conducting the interpretative exercise as 'ascertaining the objective meaning of the language which the parties have chosen to express in their agreement', *ibid* at [10], involving 'an iterative process by which each suggested interpretation is checked against the provisions of the contract and its commercial consequences are investigated', *ibid* at [12].
[213] *Grant* (n191) at [57].

Ors[214], which is constituted of established principles from case law on the interpretation of agreements of such a nature and which, for its significance, is cited verbatim in the following:

'*"In the context of the ISDA Master Agreements, and having regard to their intended and actual use as standard agreements by parties with such different characteristics in a multiplicity of transactions in a plethora of circumstances, the following principles are also relevant:*

(1) It is "axiomatic" that the ISDA Master Agreements should, "as far as possible be interpreted in a way that achieves the objectives of clarity, certainty and predictability, so that the very large number of parties using it know where they stand": Lomas (Together the Joint Administrators of Lehman Brothers International (Europe)) v JFB Firth Rixson Inc & Ors [2010] EWHC 3372 (Ch) at [53], per Briggs J.

(2) Although the relevant background, so far as common to transactions of such a varied nature and reasonably expected to be common knowledge amongst those using the ISDA Master Agreements, is to be taken into account, a standard form is not context-specific and evidence of the particular factual background or matrix has a much more limited, if any, part to play. see AIB Group (UK) Plc v. Martin and Another [2001] UKHL 63.

(3) More than ever, the focus is ultimately on the words used, which should be taken to have been selected after considerable thought and with the benefit of the input and continuing review of users of the standard forms and of knowledge of the market: see Lehman Brothers International (Europe) v Lehman Brothers Finance SA [2013] EWCA Civ 188 [53], [88].

(4) The drafting of the ISDA Master Agreements is aimed at ensuring, among other things, that they are sufficiently flexible to operate among a range of users in an infinitely variable combination of different circumstances: Anthracite Rated Investments (Jersey) Ltd v Lehman Brothers Finance SA [2011] EWHC 1822 (Ch) [115], per Briggs J: particular care is necessary not to adopt a restrictive or narrow construction which might make the form inflexible and inappropriate for parties who might commonly be expected to use it.

(5) That drafting is also aimed, to adopt what was said in an expert report submitted in a recent case (Lehman Bros Holdings Inc v Intel Corpn SDNY (unreported) 16

[214] [2016] EWHC 2417 (Ch) at [48].

September 2015, "the Intel case") in the United States Bankruptcy Court for the Southern District of New York by one of the principal draftsmen of the 1992 ISDA Master Agreement (Professor Jeffrey Bruce Golden), at "mitigating the risk of fact-specific disputes and the attendant risk of protracted litigation" by providing for the parties to have considerable latitude in the exercise of contractual rights subject to "general terms of reasonableness and good faith"."[215]

a) Party Contentions as to the Proper Construction of 'Continuing'

Broadly, LBIE's joint administrators contended that if and when their appointments terminated, no Event of Default in this respect would be continuing, resulting in Firth Rixon's payment obligations to LBIE under the out-of-the-money swaps becoming due and payable.[216] The joint administrators, in support of this contention, submitted that the general legal analysis to determine what the term meant was principally the same factual enquiry for any Event of Default,[217] in that 'the word "*continuing*" connote[d] an ongoing process or subsisting state of affairs. Thus, in order to decide whether an Event of Default [was] continuing, it [was] necessary to identify the process or state of affairs which constitute[d] the Event of Default, and to decide whether that process or state of affairs remain[ed] in existence'[218]. Beyond this factual analysis, which in the interest of safeguarding the requirements of 'reasonably predictable, objective and certain'[219] interpretation of the ISDA MA was to be guided 'by reading the plain language of the clause'[220],[221] no further inquiry was deemed necessary. This extended especially to there being no need for any legal analysis in order to ascertain whether the particular event in question had any sort of continuing legal effect,[222] since such an exercise would result in the ISDA MA becoming unworkable, as it 'would become open-ended, wide-ranging and uncertain, which would be contrary to the principles in accordance with which the ISDA Master Agreement should be construed'[223].[224]

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[215] *Grant* (n191) at [58] [The English case citations forming part of the running text of the decision have for ease of reference been adapted to neutral citation pinpoints].
[216] *Ibid* at [9].
[217] *Ibid* at [77(3)].
[218] *Ibid* at [77(1)].
[219] *Ibid* at [77(2)].
[220] *Ibid*.
[221] *Ibid* at [77(2)].
[222] *Ibid* at [77(4)].
[223] *Ibid* at [77(5)].
[224] *Ibid.*

In contrast, again in broad strokes, Firth Rixson contended that the Bankruptcy Event of Default could not be cured by virtue of mere formal termination of the appointment of LBIE's administrators, arguing that aside from certain intervening events having given rise to a number of 'freestanding Events of Default'[225] in addition to the original Event of Default in the form of LBIE's entry into administration,[226] the consequences or (legal) *effects* of certain Events of Default, including, i.a., that of LBIE's entry into administration,[227] were ongoing and these therefore incapable of cure.[228] In support of this contention, the respondents also sought to leverage the argument of a need for legal certainty and predictability regarding the ISDA MA – albeit running counter to the administrators – arguing principally that 'users in a huge range of different transactions and circumstances need[ed] to be able to know where they [stood] by reading the words of the provision without regard to particular commercial considerations or any specific factual matrix'[229], adding that, 'the objective of the draftsmen, which should be realized, was to use language applicable and having the same meaning across that range, without regard to factors which will inevitably differ from case to case'[230]. In light of this, they argued for 'rigorously textual'[231] approach to construction in order to ensure 'clarity and predictability across the range'[232] (of ISDA MAs in use), removed from any court-identified considerations as to the contractual purpose, such as whether a counterparty was in fact still exposed to counterparty credit risk as a result of the events triggering the Event of Default.[233] Rather than being subject to a general fact-specific test, 'the question of whether an Event of Default is "*continuing*" should be answered by reference to the particular Event of Default in question and the terms in which the ISDA draftsman has chosen to frame it'[234]. Nevertheless, it bears emphasis that the clear-cut force the textual argument might otherwise have had is in the specific case somewhat blunted by the fact that the ISDA MA does not contain any express definition or even

[225] *Ibid* at [11(1)].
[226] Which are beyond the present scope, as is in particular the aspect of the subsequent conversion of the administration into a distributing administration with resulting permanent alterations to the rights of creditors.
[227] *Grant* (n191) at [11(2)].
[228] *Ibid* at [10]-[11], [78].
[229] *Ibid* at [84(1)].
[230] *Ibid*.
[231] *Ibid* at [84(2)].
[232] *Ibid*.
[233] *Ibid* at [84(2)]. As illustratively put by a barrister acting for the respondents in light of the generally accepted purpose of Sec 2(a)(iii) ISDA MA as a protection against additional credit risk, 'it doesn't necessarily follow that if there isn't a credit risk in a particular case, the provision doesn't operate', *ibid*.
[234] *Ibid* at [85].

expressly address the term 'continuing',[235] which explains why Firth Rixson so heavily relied on the aspect of lingering legal effects of an Event of Default as constituting a 'continuing' Event of Default.

b) The Holding as to the Proper Construction of 'Continuing'

Ultimately, Hildyard J substantively came down on the side of the joint administrators' submissions as to the meaning of 'continuing', who had advanced a practical and factually based rather than an 'unduly technical'[236] interpretation of the term.[237]

As held by Hildyard J, 'the test to be adopted is whether the identified event or state of affairs which constituted the Event of Default is continuing, rather than whether creditors' rights have been significantly and permanently altered or continue to be affected by the administration'[238]. Applying this factual test to the issue of LIBE's exit from administration, Hildyard J held that 'the focus is on the state of coming to be and continuing to be in administration; (…) and that state of affairs will no longer be *"continuing"* when the administration terminates, whether or not the administration at some earlier point became a distributing administration'[239].

As a result,[240] upon LBIE's administration formally coming to an end, no Event of Default is 'continuing' under Sec. 2(a)(iii) ISDA MA, and the outstanding amounts contractually owing to LBIE thus become due more than a decade after LBIE's entering into administration in the midst of the throes of the GFC.[241] Notably, in the present context, towards the very end of the decision Hildyard J characterised the interpretive approach he had taken in reaching this result, stating that although the result arose from a 'process of contextual interpretation of the words of the ISDA Master Agreements which [he] sought to set out, that result, accord[ed], in [his] view, with the overall purpose of the relevant provisions'[242]. In this regard he drew on the credit risk reducing purpose of the flawed asset approach under Sec. 2(a)(iii) ISDA MA, which he contrasted with the fact that after 'their (unusual) choice'[243] not to terminate outstanding transactions under the ISDA MA, Firth Rixson, as debtors to LBIE, were, in fact, not

[235] *Ibid*.
[236] *Ibid* at [55].
[237] *Ibid* at [116]-[120], [168].
[238] *Ibid* at [119].
[239] *Ibid* at [120].
[240] While permission to appeal on the substantive issues was granted, the decision has not been appealed.
[241] *Ibid* at [169].
[242] *Ibid* at [170].
[243] *Ibid*.

subject to any credit risk increase through any of the Events of Default or alleged Events of Default on the part of LBIE.[244]

B. Overarching Evaluation of the Decisions

In surveying the pluralist landscape of co-existing normative orders, it has been observed that '[i]n many instances, it is only the proliferation of international courts and tribunals that brings about the very legal pluralism to which it owes its own existence. In this way, the different legal orders may operate self-referentially.'[245]

However, since the ISDA contractual architecture is a special case in the sense that, although the functional distillation of norms were developed by a specialist financial industry sector, rather than shield the autonomy of these privately-crafted functional provisions by channeling them to specialist dispute resolution bodies, the ISDA contractual regime actively seeks institutional touchdown in bodies of state law and fora of dispute resolution.[246] As such, legal pluralism and instances of interlegality,[247] observable in the global OTC derivatives market take a different shape. Namely, the English Courts, in being called upon to perform the superficially straightforward exercise of contractual interpretation, are, owing to the origin and nature of the transnational norms embedded in the ISDA MA, at the same time substantively allocating rights and obligations in a transnational market and thus activated as nodes in a wider system of global governance.[248]

It is this dual nature of the judicial interpretative exercise that is encapsulated in the observation by Ralf Michaels as to the treatment of transnational private norms from the view of the state in that '[i]t does not ignore non-state law, but it treats it in a special way: it "re-states" these norms by translating or even transposing them into the semantics of its own system.'[249] While highly technical in their respective substantive detail regarding the proper interpretation of core operational provisions of the ISDA MA, some crucial overarching themes regarding this translation or transposition can be

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[244] *Ibid*.

[245] L Viellechner, 'Responsive legal pluralism: The emergence of transnational conflicts law' in K Blome, A Fischer-Lescano, H Franzki and others (eds), *Contested Regime Collisions: Norm Fragmentation in World Society* (Cambridge University Press 2016) 116 [internal citation omitted].

[246] See, Chapter 2 § 1.C.

[247] See, Chapter 2 § 1.B.III.1.

[248] CA Whytock, 'Domestic Courts and Global Governance' (n17) 91.

[249] R Michaels, 'The True Lex Mercatoria: Law Beyond the State' (2007) 14 Indiana Journal of Global Legal Studies 447, 461.

distilled from the cases laid out above in the way the English courts approached the task of completing the ISDA MA through their interpretative exercise.

I. The ISDA MA as a Transnational Sectoral (Quasi-)Statute

As already laid out in Chapter 1, the ISDA MA technically is a boilerplate or standard form contract and, indeed, the realisation that the proper constructive approach to be taken by a court when interpreting provisions embedded in a standard form contract differs from the typical bilateral contracting setting is not a novel one.[250] However, as already discussed, since by virtue of the default choice in ISDA MA, choice of English law is effectively hardwired into the ISDA contractual architecture and thus elevated to something functionally akin to the *lex causae* of the global OTC derivatives market, any interpretation rendered in this context transcends the setting of purely domestic boilerplate interpretation. In this vein, the decisions set out above, however, exhibit a number of features that are indicative of a 'transnationalised' reading of the ISDA MA and the construction of its provisions, effectively in the realm of contractual interpretation mirroring the interpretative approach taken by the English courts in the context of interpreting Art. 3(3) Rome Convention/Rome I Regulation. As analysed by Joanne Braithwaite in her recent in-depth analysis of the English courts' approach to contractual interpretation as regards the ISDA MA, there is an overarching method or system behind this 'bespoke approach'[251] to interpretation, which has developed to become 'well-established and routinely and consistently applied'[252].[253] Notably, what is apparent is that the English courts are acutely sensitive of the commercial reality that

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[250] Instructively: *AIB Group (UK) Plc v Martin and Anor* [2001] UKHL 63 at [7] ('A standard form is designed for use in a wide variety of different circumstances. It is not context-specific. Its value would be much diminished if it could not be relied upon as having the same meaning on all occasions. Accordingly, the relevance of the factual background of a particular case to its interpretation is necessarily limited. The danger, of course, is that a standard form may be employed in circumstances for which it was not designed. Unless the context in a particular case shows that this has happened, however, the interpretation of the form ought not to be affected by the factual background.'); R Calnan, *Principles of Contractual Interpretation* (2nd edn, Oxford University Press 2017) paras 5.51-5.55.

[251] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 77; As Professor Braithwaite points out, this bespoke approach specific to ISDA MA interpretation sits as the most recent example within an established tradition of the general approach to contractual interpretation being flexibly adapted by the English courts, where they are called upon to interpret 'globally significant standard form commercial contracts', *ibid* 107, including, eg, standard form shipping contracts, *ibid* 62-67 and 105-107.

[252] *Ibid* 77.

[253] For a detailed account of the development and background to this bespoke interpretative approach and how it sits within the general 'modern' approach of the English courts in interpreting commercial contracts, cf, *ibid* 97-119.

the ISDA MA constitutes the operational nucleus of the global OTC derivatives market, as evidenced by Briggs J's preliminary observations on interpreting its provisions.[254] The bespoke approach is perhaps nowhere more clearly evident than in the bespoke interpretative matrix with which Hildyard J prefaced the *Grant* decision, drawing upon and weaving together principles established in various strands of case law dealing with the interpretation of the ISDA MA, which variously reflect the nature of the ISDA MA as a globally used standard agreement for use as a universal template by a multiplicity of parties for a multiplicity of transactions.[255]

The mode of interpretation developed by the English courts vis-à-vis provisions of the ISDA MA thus in important aspects reflects the constructive approach normatively advanced by Professors Choi and Gulati in the U.S. context, namely that these types of contracts functionally 'are better viewed akin to statutes'[256], and, as such, courts should adopt a mode of interpretation more akin to statutory interpretation[257]. This functional equivalency of standard form contract and statute, albeit in a domestic German setting, was observed early on – and with some unease – by legal scholar Hans Großmann-Doerth, who noted that 'the boilerplate condition [has] the same status as the state legal norm: not formulated by the parties to the individual contract, on the contrary, usually independent of them, and quite often irrevocable from their perspective, boilerplate conditions, like state law, are a power which externally determines the contractual relationship'[258]. Under Professors Choi and Gulati's view, the goal of approximating statutory interpretation is best pursued not through a purely textualist approach, but rather a specific form of contextual analysis.[259] In practice, this, they contend, entails shifting the interpretative focus away from the context surrounding the disputing parties to the intent of the original drafters of the respective terms as an analogue to courts' search for the legislative intent in statutory interpretation, which in turn includes making use of a provision's overall history and defining its context within the greater

[254] See, *Lomas* (n61) at [53].

[255] See, (n215); Similarly, J Golden, 'Interpreting ISDA terms: when market practice is relevant, as of when is it relevant?' (n32) 301 noting that the goal its drafters was 'to provide an accepted universal language in a polyglot marketplace'; Regarding the phenomenon of the extensive judicial cross-referencing in English judgments dealing with the ISDA MA, see the comprehensive analysis in J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 109.

[256] SJ Choi and GM Gulati, 'Contract as Statute' (n19) 1130.

[257] *Ibid* 1131.

[258] H Großmann-Doerth, *Selbstgeschaffenes Recht der Wirtschaft und staatliches Recht* (Fr Wagner'sche Universitätsbuchhandlung 1933) 5 [own translation in the main text from the German original].

[259] SJ Choi and GM Gulati, 'Contract as Statute' (n19) 1131.

commercial environment in which it operates.[260] Reinforcing their 'contract as statute' approach is their realisation of the abstract-general nature of third party effects of any deference to a specific party context on the wider sectoral user base subscribing to the same standardised contractual language.[261] This puts into sharp relief that the legal effects of sectorally dominant and unamendedly used standard-form contracts, such as the ISDA MA, transcend the traditional conception of mere bilateral normativity of contract: In this way, 'meaning gets detached from the concrete relation'[262] and the legal effect of standardised contract language voluntarily adopted by counterparties gravitates from a mere *inter-partes* to a sectoral *erga-omnes* regulatory effect. The sector-specific boilerplate contract can thus be seen to operate as a functional equivalent to an – albeit special-matter – domestic statute in the transnational sphere.[263] In the cases considered, there are clear indications that the English courts have developed an interpretative approach in this particular mould.[264]

At a general level, the realisation of the quasi-statutory abstract-general nature of the provisions of the ISDA MA and the focus on the wider market context rather than individual counterparties' bilateral contracting environment is reflected in the fourth leg of the bespoke interpretative matrix with which Hildyard J prefaced the *Grant* decision, which emphasises that the '[t]he drafting of the ISDA Master Agreements is aimed at ensuring, among other things, that they are sufficiently flexible to operate among a range of users in an infinitely variable combination of different circumstances'[265]. As Joanne Braithwaite puts it, borrowing from regulatory parlance, the bespoke contextualism in the English courts' ISDA MA interpretation thus focuses on 'a "macro" rather than a "micro" level'[266]. This also corresponds to the overall scheme of ISDA's contractual architecture, since counterparties wishing to modify the standard

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[260] *Ibid* 1131-1132.

[261] *Ibid* 1132.

[262] D Wielsch, 'Contract Interpretation Regimes' (n6) 970.

[263] D Wielsch, 'Global Law's Tooblox: How Standards Form Contracts' in H Eidenmüller (ed), Regulatory Competion in Contract Law and Dispute Resolution (CH Beck/Hart/Nomos 2013) 73 ('(…) "multifirm contract standardization" is effected by trade associations or other centralized standard-setting organizations through collective agreement on a standard contract (…) – these standards appear as powerful tools of legal regulation at the global level: the form contracts similar to public regulation. *In a way they substitute for statutes in the transnational sphere*.') [emphasis added]; Similarly, D Wielsch, 'Contract Interpretation Regimes' (n6) 973-974 ('[S]ubstitute statutes, most notably in the transnational sphere').

[264] As analysed in-depth in J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5).

[265] *Grant* (n191) at [58].

[266] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 116.

provisions of the ISDA MA and the meaning ascribed by the market to them have means of doing so; for example, with regard to a particular transaction, they may provide for any deviations from the overarching standard provisions in the particular Confirmation.[267]

What is more, there are also specific elements within the English court's approach to interpreting the ISDA MA, which move it closer to modes of statutory interpretation. Since contracts and statutes are, as an interpretative starting point, both legal texts, intended to produce specific legal effects, there is a broad degree of material overlap between the principles of contractual and statutory interpretation in English law.[268] At the same time, there are, of course, significant differences. One of the most clear-cut differences is that the purpose of contractual interpretation is to (objectively) establish the intention of the contracting parties, while the purpose of statutory interpretation is to (objectively) establish the meaning the legislature ascribed to a particular statutory provision.[269] In light of this, it is particularly illuminating to see how the Court of Appeal in its *Lomas* decision abstracts from the disputing parties' contractual environment and refers to the genesis and historic evolution of the ISDA MA standard form and 'the intention of the framers of the 1992 Agreement'[270], echoing the language of statutory drafting. Similarly, teleological references as to the abstract functional purposes of the operative provisions of the ISDA MA, such as in the High Court's *Grant* decision, may be seen as moving the interpretative mode pursued more into the realm of statutory interpretation.[271] As far as the second leg of the bespoke interpretative matrix with which Hildyard J prefaced the Grant decision stresses the relegated role of litigant-specific contextualism and the third leg, correspondingly, emphasises the importance of textualism in light of the ISDA MA provisions' pedigree as the deliberate product of a long evolutive learning process, the reviewed cases show

[267] This is reflected in ISDA's written submission as to the proper construction of Sec. 2(a)(iii) ISDA MA in the Lomas appeal, ISDA, *First Written Submission – Lomas v JB Firth Rixson and Others* (29 July 2011) para 6 ('ISDA's position on these two issues is, in short, that absent any provision to the contrary in a particular Confirmation, the effect of the Master Agreement is that (…)'); On the general function of the ISDA Confirmation, see, Chapter 1 § 7.C.III.

[268] R Calnan, *Principles of Statutory Interpretation* (Oxford University Press 2023) paras Ep 36-44.

[269] As contrasted in *ibid* para Ep 41.

[270] *Lomas* (n69) at [53].

[271] Namely, with Hildyard J stating that with the accepted abstract purpose of Sec 2(a)(iii) ISDA MA being a contractual barrier to additional counterparty credit risk being taken on by the Non-defaulting Party, this purpose was not engaged in any way and the protection afforded by the provision not necessary since in the present case LBIE's counterparties' were debtors to LBIE, thus not subject to any credit risk: *Grant* (n191) at [170].

how the English courts do in fact blend textualism with the kind of bespoke contextualism envisaged by Choi and Gulati. First, what stands out is the explicit unwillingness to imply terms into the ISDA MA, thus preserving the integrity of the standard form. What is more, as far as bespoke contextualism is concerned, the decisions look not so much towards the factual matrix surrounding the counterparties' dealings, but towards the market context in which the transactions were concluded. Significantly, ISDA was permitted to join the proceedings as intervenor in both instances of the Lomas litigation and thus allowed to communicate the market view as to the proper construction of the effect of Sec. 2(a)(iii)(1) ISDA MA.[272]

What is more, the fact that the English courts have, sitting alongside the generalist rules of contractual interpretation, developed such a bespoke interpretative approach when dealing with the ISDA MA as the contractual nucleus of the global OTC derivatives market, ties in with the account of normative 'sectoral fragmentation' as the key feature of transnational contract law provided by Joshua Karton.[273] As he observes, domestic contract law, such as the rules of contractual interpretation in the cases detailed above, fragment along sectoral, i.e., particular specialised industry lines when approaching highly specific industry norms, such as those of the global derivative industry.[274] This observation goes to the very heart of the conceptualisation of the ISDA regime through a lens of transnational law. With the importance of territoriality waning in the commercial reality of transnationally operative industry sectors, the sectoral boundaries demarcated by each sector's respective functional prerequisites are, upon their touchdown in consciously elected state laws and fora, a driving force in moulding the (statal) legal host order to reflect their specific needs. As a result, just as the functional

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[272] As Joanne Braithwaite observes, this is, however, in contrast to ISDA's frequent *amicus curiae* interventions in US courts, not a regular occurrence in English ISDA MA cases, where sources of (macro-)contextual information rather include market expert testimony, practitioner texts (particularly Simon Firth's monograph (now, highlighting its prominence, called) *Firth on Derivatives Law and Practice,* as well as above all ISDA materials, such as the ISDA User's Guides: J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 112-116.

[273] J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (2018) 21 University of Pennsylvania Journal of Business Law 142-199; For a socio-legal account on fragmentation drawing upon Luhmanian systems theory, emphasising the differentiation of transnational law along functional lines, see, A Fischer-Lescano and G Teubner, 'Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law' (2004) 25 Michigan Journal of International Law 999-1046.

[274] J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (n273) 163 ('Sectoral fragmentation occurs whenever rulemaking entities (whether private or public, national or international, formal or informal, regulatory or legislative or adjudicative) adopt legal rules that yield different outcomes on analogous transactions in different industry sectors. I label such rules "industry-particularist," [*sic*] while "generalist" rules apply to one or more categories of transactions across all areas of commerce.').

needs of a transnational industry sector have given rise to a set of key industry rules, as embodied in the core operative provisions of the ISDA MA,[275] these 'structures of private governance are now recapitulated in formal contract law'[276]. This is far from an autonomous global financial law without a state. Rather, it is a highly illustrative example of interlegality occurring within the process of adjudicative interpretation of transnational norms, where against the background of the OTC derivatives market's 'global law by contract', the courts are sensitive to the functional needs of this transnational industry sector re-configuring the formal law of a nation state.

II. Judicial Focus on Certainty and Predictability

The English courts appear to have taken to their role of preferred port of call for disputes regarding the transnational instrument that is the ISDA MA. Namely, by accepting the resulting responsibility of 'steward[ing]'[277] the English law governed transnational instrument through the choppy waters of legal uncertainty, when and where it arises, by seeking to provide guidance and certainty to a transnational market that has chosen to touch down in English law and English courts.[278] Beyond the cases detailed above, this understanding is clearly condensed in the considerations of Gloster J in *Pioneer Freight Futures Company Ltd v TMT Asia Ltd*[279], one of the other 2011 cases involving the construction of Sec. 2(a)(iii) ISDA MA, before the question was ultimately resolved by the Court of Appeal's *Lomas* judgment in the following year. In this case, Gloster J considered whether it was appropriate to exercise her

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[275] On this aspect of the commercial reality of private normative regimes constituted according to functional prerequisites or a functional 'rationality': A Fischer-Lescano and G Teubner, 'Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law' (n273) 1013 ('Standard contracts within the *lex mercatoria* reflecting the economic rationality of global markets'); As illustratively phrased by Dan Wielsch, this entails a 'double change of perspective on lawmaking – from statist to societal and from territorial to functional (…)': D Wielsch, 'Global Law's Tooblox: How Standards Form Contracts' (n263) 73.

[276] J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (n273) 145.

[277] See, The Right Honourable Lord Justice Briggs, 'How has English Law coped with the Lehman Collapse?' in D Faber and N Vermunt (eds), *Bank Failure: Lessons from Lehman Brothers* (n196) para 6.42 (cited in J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 92).

[278] In this regard, the interpretative approach also sits squarely within the general commercially-minded tradition of the English courts. See, generally, K Clark, 'Economic Stability and the Creation of Stable Contract and Property Rights' in The Commercial Bar Association, *The Jamestown Lectures 2006-2007: The Rule of Law* (Hart Publishing 2008) 21 ('(…) the development of English case law over more than a hundred years has taken place against a background of consistent judicial awareness of a policy objective that, as far as possible, commercial bargains should be enforceable in accordance with their terms and that a successful marketplace does not welcome legal (or for that matter regulatory) "surprises." [sic]').

[279] [2011] EWHC 1888 (Comm).

discretion to render a judgment even though the parties had at that point in time already reached a settlement.[280] Due to the dispute already having been settled, she observed that '[i]n effect the Court is being asked to give an advisory opinion, in order to assist [the Claimant] and the market (…) in relation to the construction and application of important provisions of [the 1992 ISDA MA]'[281]. In the end, she did find it necessary to provide this assistance in form of the decision rendered.

It is notable that in the specific case of the English Sec. 2(a)(iii) ISDA MA litigations, even though lending the assisting hand of legal certainty to the wider markets is the overarching aim of the English courts, as noted by Joanne Braithwaite in her analysis, the conflicting judgments at first instance are a rare example of the English courts initially failing in this endeavour and themselves contributing to legal uncertainty.[282] However, conversely, the fact that this initial uncertainty was ultimately quickly resolved through a decisive, clarifying Court of Appeal decision is again characteristic of the English courts approach to addressing market concerns in cases of uncertainty or inconsistency emanating from a pervasive standard form such as the ISDA MA.[283] It is in the context of providing certainty to the counterparties which have availed themselves to the ISDA MA to govern their trading relationship that the English courts general reluctance to imply terms,[284] is also evident throughout the above decisions in the *Lomas* litigation. The decisions decisively reject any variant of implied terms put forward by the litigants thereby letting any losses fall where they lie upon the operation of the ISDA MA provision.[285] The cumulative result is that what is observable is that the English courts strive to pursue a two-pronged approach to providing certainty to market participants regarding the ISDA MA. As phrased by Joanne Braithwaite, this includes, firstly, certainty as to the operation of the contracts themselves, and, secondly, certainty about the courts' interpretative approach towards the ISDA MA, which she illustratively terms 'certainty about certainty'[286].

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[280] *Ibid* at [5].

[281] *Ibid* at [26].

[282] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 81.

[283] *Ibid* 81, 106.

[284] R Calnan, *Principles of Contractual Interpretation* (n250) paras 8.16-8.18.

[285] This also reflects the observation made in the Court of Appeal's decision in *Lehman Brothers International (Europe) v Lehman Brothers Finance SA*, which forms the third leg of Hildyard J's interpretative matrix, that '[m]ore than ever, the focus is ultimately on the words used, which should be taken to have been selected after considerable thought and with the benefit of the input and continuing review of users of the standard forms and of knowledge of the market'.

[286] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 66.

III. Transatlantic Judicial Cross-Fertilisation

Crucially, as touched upon above, the ISDA MA does not operate as a domestic, but rather a transnational statutory functional equivalent. Against this background, it is particularly illuminating how the courts in the leading OTC derivatives jurisdictions, England and New York, although not formally connected in any comprehensive system of precedent, cross-reference each other in their respective decisions regarding the proper interpretation of operative provisions of the ISDA MA. This applies particularly in respect of the overarching goal of providing certainty to the wider markets.[287] By way of example, the statement by Judge Chapman in *Lehman Brothers Holdings Inc et al v Intel Corp* that 'to the extent they have adopted the ISDA standard forms, it is reasonable to infer that the parties have no quarrel with ISDA's intention that "transactions that use ISDA standard form documents and definitions . . . are enforced so as to promote legal certainty and hence, market stability."'[288] concludes Hildyard J's ISDA MA interpretative matrix. Conversely, Judge Chapman had explicitly referenced the English High Court's *Lomas* decision by citing that it was 'axiomatic that [ISDA standard forms] should, as far as possible, be interpreted in a way that serves the objectives of clarity, certainty and predictability'[289]. As observed by Joanne Braithwaite, this example suggests a process which goes beyond mere cross-referencing to reach a point of 'convergence between the two major jurisdictions'[290] in their respective interpretative approaches to the ISDA MA.[291] For present purposes, this process of horizontal 'judicial cross-fertilization'[292] in domestic approaches to contractual interpretation in the face of a transnational instrument, which transcends jurisdictional boundaries, serves as a genuinely transnationalised approach to reading

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[287] *Ibid* 111-112.

[288] US Bankruptcy Court for the Southern District of New York, *In re Lehman Brothers Holdings Inc et al v Intel Corp* (Case No. 08-13555 (SCC)) (16 September 2015) at p22 (cited in *Grant* (n191) at [84(5)]). The internal citation is of an ISDA *Amicus Curiae* brief, which through the English courts' approving reference to the US decision has interestingly filtered through into English jurisprudence; Notable in this is statement is also the express reference to ISDA's intention, not the intention of individual counterparties.

[289] *Ibid*.

[290] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 112 (referencing the approving quotation and discussion of Judge Chapman's interpretative approach in the US decision in yet another English High Court case, *Lehman Brothers Finance AG v Klaus Tschira Stiftung GmbH & Anor* [2019] EWHC 379 (Ch) at [163] and [166]).

[291] *Ibid*.

[292] As phrased in the context of her analysis of cross-jurisdictional interaction between national (mainly constitutional) courts by A-M Slaughter, 'Judicial Globalization' (2000) 40 Virgina Journal of International Law 1103, 1112.

the ISDA MA's provisions. It constitutes, in effect, a genuinely transnational jurisprudence for a specialist transnational industry sector.

IV. The Implicit Regulatory Dimensions of Judicial Interpretation

Lastly, what further becomes evident from the reviewed cases is the distinct governance or regulatory dimension to English courts' interpretation of operative provisions of the ISDA MA.[293] Firstly, by focusing on the abstract operative context of the ISDA MA rather than particular litigating parties, thus pursuing the quasi-statutory approach discussed above, the English courts make clear that they are aware of the externalities, i.e. potential third-party effects, any interpretation of the ISDA MA's operative provisions has in the wider OTC derivatives market due to its inherent contractual standardisation. As are they aware of the subsequent ripple effect of any surprising interpretation that would simultaneously impact all other open contracts operating on the identical contract term and choice of law, i.e. the 'corollary risk'[294] or sector-wide 'infection'[295] aspect identified by some authors. It is this specific market-wide dimension that is encapsulated in the concept of 'macro-jurisprudence' put forward by Joanne Braithwaite.[296]

Lastly, the judicial construction of ISDA terms can also take on a regulatory dimension in a more technical sense. Namely, beyond the litigating parties and other market participants ubiquitously subscribing to the ISDA's standard form contractual architecture, financial regulatory agencies constitute a third group interested in and reactive to any judicial pronouncement on the operation of ISDA MA provisions that potentially impacts upon aspects of regulatory policy and mandates. Put simply, where a civil court of the jurisdiction elected in a globally used standard form contract determines that such a transnational provision works under the elected law in a certain way, it is that specific judicially ascertained function that must additionally pass muster in view of the multitude of provisions of financial regulation.[297] In the cases reviewed,

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[293] CA Whytock, 'Domestic Courts and Global Governance' (n17) 91; J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 67-75.

[294] See, eg, J Golden and P Werner, 'The Modern Role of Arbitration in Banking and Finance' (n19) para 1.2.

[295] See, in this regard, *ibid* para 1.29, noting that 'a judicial mistake made when interpreting a standard term can 'infect' trillions of dollars'.

[296] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 71.

[297] Inversly, courts can in heavily regulated areas such as the financial markets also in certain cases productively draw upon the relevant regulatory regime as background in their task of contractual interpretation: See, eg, M Fell, 'How Regulation Impacts the Interpretation of Contracts' (2017) 12

this is evident in the concern from a financial regulatory perspective that the construction of Sec. 2(a)(iii) ISDA MA by Briggs J, might potentially – in the case of counterparty insolvency – at least functionally operate as a 'walkaway clause' for a Non-defaulting Party under the ISDA MA, with potentially significant consequences for the wider markets in terms of uncertainty regarding the netting privilege enjoyed by financial entities and any requisite regulatory capital.[298] As described under the case studies in Chapter 2 § 3, financial regulators can in turn react by latching upon the ISDA MA and ISDA's central coordinative capabilities as a transnational anchoring point.[299] For present purposes, this particular dialectical dynamic between the courts and not two, but potentially three interested groups impacted by any interpretation ((i) the litigating parties, (ii) the wider market, but also, importantly, (iii) financial regulators) sets the OTC derivatives market apart from other sectors reliant on a globally used standard form; e.g. the shipping or construction sectors. Since parties operating in the financial markets, more so after the GFC, do so in a landscape formed in significant part by various layers of financial regulation, the OTC derivatives market is different to other instances of transnational private regulation, where this particular source of norms is lacking. This, in turn, brings to light the additional layer of normative complexity characteristic of the OTC derivatives market, and the central role of the ISDA MA as a transnational instrument serving as a central interface for coordination between all the audiences active in the OTC derivatives microcosm.

§ 3 Brief Outlook: Arbitration of Cross-Border OTC Derivatives Disputes

While, as illustrated in the preceding sections, litigation before sectorally selected state courts has since the fledgling beginnings of the market become cemented as the *status quo* of dispute resolution in the OTC derivatives sector, the following will briefly trace a comparatively novel development – the growing interest in recourse to international arbitration by market participants. The majority of publications in this area, in large part by dispute resolution scholars and practitioners, are focused on the relative functional merits of international arbitration to domestic court litigation, most recently with an emphasis towards the effects of Brexit on the standing of English courts with regards to

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Butterworths Journal of International Banking and Financial Law 335-338; Specifically regarding the ISDA MA, arguing for a mode of regulatory contractual interpretation, meaning pertinent regulatory provisions are to the plain meaning arrived after textual interpretation in case of conflict, MK Borowicz, 'Contracts as Regulation: The ISDA Master Agreement' (2021) 16 Capital Markets Law Journal 72, 88-89.

[298] See, § 2.A.I.4.

[299] See, in particular, Chapter 2 § 3.C.

the advantages at the enforcement stage relating to any English court judgment.[300] However, this will not be the sole focus in the following. Rather, in keeping with the theme of this thesis, a cursory glimpse will be given and a note of caution offered as regards the wholesale suitability of international arbitration as a strand in the tapestry of transnational OTC derivatives law beyond the state. Somewhat paradoxically, this stands in contrast to the large parts of transnational law and *lex mercatoria* scholarship, which, regardless of their respective methodological approach, are often united in emphasising the crucial role played by international arbitration in the development of transnational law.[301] Put differently, and foreshadowing the following conclusion, the *inter-partes* and the market governance perspectives, or linking back to previous discussion within this thesis, individual party autonomy and collectively exercised (sectoral) party autonomy are not aligned in the case of (certain) OTC derivatives disputes.

A. Starting Point: Historic Absence of Arbitration in International Finance

One constant runs through much of the literature on arbitration in the field of finance and OTC derivatives, specifically leading up to the GFC. This is the theme of a deep-seated scepticism on the part of financial professionals towards arbitration and a resulting reticence to provide for arbitration clauses in financial contractual relationships.[302]

Such reticence is notable in terms of how it stands in sharp contrast with other transnationally operative industry sectors. While international commercial arbitration is the favoured resolution mechanism regarding disputes from international commercial contracts, arbitration has so far failed to replicate its success in the international financial markets.[303] Thus, traditionally there exists a clear divide between generally

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[300] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 339-344.

[301] See, eg, G Teubner, '"Global Bukowina": Legal Pluralism in World Society' in G Teubner (ed), *Global Law Without a State* (Dartmouth Publishing 1997) 32.

[302] See, amongst many others, WW Park, 'When the Borrower and the Banker are at Odds: The Interaction of Judge and Arbitrator in Trans-Border Finance' (1990-91) 65 Tulane Law Review 1323, 1323-1324; MC Boeglin, 'The Use of Arbitration in the Field of Banking and Finance: Current Status and Preliminary Conclusions' (1998) 15 Journal of International Arbitration 19, 27; K Nairn, 'Arbitration: The Latest Fashion or a Classic Choice' (2002) 17 Butterworths Journal of International Banking and Financial Law 431, 431.

[303] This striking contrast bears out empirically: Queen Mary School of International Arbitration/PWC, *2013 International Arbitration Survey: Corporate Choices in International Arbitration: Industry Perspectives* (2013) 7; J Freeman, 'The Use of Arbitration in the Financial Services Industry' (2015) 16 Business Law International 77, 77-78.

arbitration-friendly commerce and arbitration-averse finance.[304] In addition to the schism between commerce and finance, there similarly exists a historic divide specifically as regards disputes stemming from derivatives transactions between exchange and OTC trading. Here, the former has been more accepting of arbitration, providing the opportunity for private arbitration according to exchange rules in keeping with their nature as self-regulatory organisations.[305]

Where the traditional rejection of arbitration for financial disputes is backed up with long-standing substantive arguments, as will be seen in what follows, their persuasive force, however, seems rather limited in the face of a rapidly changing market reality. Nevertheless, the use of arbitration in OTC derivatives disputes comes with some caveats against the background of ISDA's mission of safeguarding the normative integrity of the harmonised contractual backbone of the wider markets.

Notably, in addition to the oft-cited traditional 'scepticism' towards arbitration in finance, its absence may in fact also be attributed to a widely held 'indifference'[306]. Specifically, this is in the sense that the absence of arbitration may be the result of historic path-dependency rather than a well-formed attitude after conscious deliberation as to the comparative virtues of either mode of dispute resolution. Regardless of the relative merits of arbitration and litigation as methods of dispute resolution, the ISDA standard documentation has in and of itself played a significant part in the relative absence of arbitration in sectoral dispute resolution by creating a historic path dependence towards litigation in OTC derivatives disputes.[307] One author has observed a 'herd mentality' inherent in the wider banking sector which is evidenced in a reluctance to change the general *status quo* including the established choice of forum clauses.[308] In the OTC derivatives market this observation bears out empirically. Here, from the 1987 ISDA Interest Rate and Currency Exchange Agreement onwards, ISDA

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[304] See, KP Berger, 'The aftermath of the financial crisis: why arbitration makes sense for banks and financial institutions' (n38); P Durand-Barthez, 'The Governing Law Clause: Legal and Economic Consequences of the Choice of Law in International Contracts' (2012) 2012 International Business Law Journal 505, 514.

[305] See, eg, M Kantor, 'OTC Derivatives and Arbitration: Should Counterparties Embrace the Alternative?' (2000) 117 Banking Law Journal 408, 408.

[306] See insofar, eg, P Costa e Silva and D G Henriques, 'Arbitration in Swaps: The Portuguese Experience'(2017) 33 Arbitration International 583, 585.

[307] M Kantor, 'OTC Derivatives and Arbitration: Should Counterparties Embrace the Alternative?' (n305) 410-411; I Hanefeld, 'Arbitration in Banking and Finance' (2013) 9 NYU Journal of Law & Business 917, 920.

[308] WW Park, 'When the Borrower and the Banker are at Odds: The Interaction of Judge and Arbitrator in Trans-Border Finance' (n302) 1325 ('If it ain't broke, don't fix it.'); *Idem*, 'Arbitration in Banking and Finance' (1998) 17 Annual Review of Banking Law 213, 216.

documentation has traditionally provided for the default choice of court jurisdiction.[309] Since individual market participants' incentives to deviate from the ISDA documentary benchmark are limited due to the inherent trade-off of foregoing the network benefits associated with the standard,[310] the default opt-in for litigation has become entrenched in the wider market structure as the choice of dispute resolution mechanism.[311]

B. Key Structural Drivers of the Re-Evaluation of Arbitration

Some of the commonplace functional arguments in favour of international arbitration proceedings for inter- or transnational disputes have more recently gained increasing traction amongst market participants owing to certain structural changes in the wider OTC derivatives market. The following changes may add to an understanding as to why a re-evaluation of arbitration is taking place.

I. Diversification of Participants and Stakeholders in the OTC Derivatives Market

The uniformity of the contractual architecture underlying the OTC derivatives market today stands in increasing contrast to the diversity of market participants subscribing to it. This diversity includes the institutional nature of market participants, their place of incorporation as well as related factors of language and cultural background.

In terms of institutional diversity, structural market change has over the course of the last years significantly increased the appeal of the OTC derivatives market to non-bank participants. This change consists to an important degree in the electronification of trading practices which has greatly facilitated automation.[312] This, in turn, has increased diversity as it has made the markets more attractive for non-bank end-users pursuing high-frequency or algorithmic trading practices, such as, for example, hedge funds and principal trading firms.[313] Similarly, reduced transaction costs and easier market access through automation have made derivatives more attractive for investment funds and other asset managers seeking to create synthetic positions or hedge interest rate

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[309] M Kantor, 'OTC Derivatives and Arbitration: Should Counterparties Embrace the Alternative?' (n305) 410-411.

[310] See, Chapter 1 § 7.D.IV.2.

[311] See, along these lines: ICC, *ICC Commission Report: Financial Institutions and International Arbitration* (2016) para 71 ('(…) it appears that a major reason why arbitration is less commonly used in the European [derivatives] context is that it is not yet viewed as a "default" dispute resolution option (…)').

[312] P Woolridge, 'FX and OTC derivatives markets through the lens of the Triennial Survey', BIS Quarterly Review (December 2019) 15, 17.

[313] *Ibid*.

exposures with their increased demand driving market growth.[314] What is more, with commodity trading being a field traditionally more inclined to make use of arbitration and commodity traders over the years becoming increasingly involved in the derivatives markets, these market participants showed a natural interest in the development of model arbitration clauses for derivative transaction disputes.[315]

II. Further Internationalisation through Emerging Markets and Market End-Users

While the use of OTC financial derivatives remains geographically concentrated in developed economies, the OTC derivatives market in emerging market economies has been catching on and has grown more rapidly.[316] In this process, OTC derivatives have facilitated incoming international capital flows through the possibilities they offer in managing the component risks associated with cross-border investment, including exposure to macroeconomic variables such as foreign exchange and interest rate risk.[317] On the other hand, corporations from emerging market jurisdictions of course also participate as counterparties in the OTC derivatives market seeking, for example, to hedge exposure to price risk in their commercial dealings.[318] As such, while arbitration clauses were traditionally already inserted into derivative transactions involving emerging market counterparties where chances of enforcement was deemed questionable,[319] this trend has only increased in recent years with the ongoing internationalisation of finance and the enforcement advantages offered by the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards[320] ('New York Convention').[321] The key functional advantage offered by the New York

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[314] T Ehlers and B Hardy, 'The Evolution of OTC interest rate derivatives markets', BIS Quarterly Review (December 2019) 69, 78-79.

[315] P Leonard and H O'Donnell, 'Arbitration in Derivatives Contracts' (2022) 39 Journal of International Arbitration 61, 63 (fn 7).

[316] D Mihaljek and F Packer, 'Derivatives in Emerging Markets', BIS Quarterly Review (December 2010) 43, 44-45.

[317] D Lien and M Zhang, 'A Survey of Emerging Derivatives Markets' (2008) 44 Emerging Markets Finance & Trade 39, 42 and 49-50 also noting the associated potential negative flip sides of derivatives use including accelerating capital outflow in times of financial crisis.

[318] TV Somanathan and V Anantha Nageswaran, *The Economics of Derivatives* (Cambridge University Press 2015) 134-135.

[319] P Leonard and H O'Donnell, 'Arbitration in Derivatives Contracts' (n315) 61, 63; ICC, *ICC Commission Report* (n311) para 69.

[320] United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York, 10 June 1958); At the time of writing, more than 170 states have become party to the New York Convention. A current overview of signatories is provided under: <www.newyorkconvention.org/list+of+contracting+states> accessed 7 September 2026.

[321] I Hanefeld, 'Arbitration in Banking and Finance' (n307) 924-925.

Convention, compounded by the number of state signatories, is that in the exceptional case where an award is not followed by a party voluntarily, enforcement is premised on foreign arbitral awards being presumed valid and can only be refused on a very limited number of grounds.[322] These enforcement advantages are even more pronounced where a counterparty has assets in multiple jurisdictions, since enforcement of the arbitral award may be sought concurrently in all relevant signatory jurisdictions.[323]

C. Indicators of the Growing Awareness and Significance of Arbitration for OTC Derivatives Disputes

Due in large part to the standardised nature of the market's contractual architecture, the mode of dispute resolution in the OTC derivatives market has strong systemic implications and should thus be understood as an important component of the regulatory infrastructure.[324] Nevertheless, an in-depth examination of its functional role as a gateway for the implementation of post GFC financial regulation objectives with regard to non-centrally cleared OTC derivatives and, in the context of this discussion, the potential role for alternative dispute resolution in risk mitigation especially, has from the regulatory side not taken place.[325] Rather, the main impetus for a renewed focus on the appropriate dispute resolution procedures regarding OTC derivatives disputes has occurred bottom-up from within the market. Over the course of the years following on

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[322] In detail, S Jagusch, 'The Modern Role of Arbitration in Banking and Finance' in J Golden and C Lamm (eds), *International Financial Disputes* (Oxford University Press 2015) paras 15.56-15.129.

[323] S Trevis, *Arbitration Trending in the Derivatives Context: Perspectives*, Kluwer Arbitration Blog (7 March 2020).

[324] Jeffrey Golden has been particularly vociferous in raising this aspect: J Golden, 'Judges and Systemic Risk in the Financial Markets' (2013) 18 Fordham Journal of Corporate & Financial Law 327-337; JB Golden, 'The Future of Financial Regulation: The Role of the Courts' in IG MacNeil and J O'Brien (eds), *The Future of Financial Regulation* (Hart Publishing 2010) 86.

[325] Although dispute resolution has been identified as a matter of regulatory concern: See, eg, within the EU regulatory framework and fleshing out EMIR requirements on risk mitigation techniques for non-cleared OTC derivative contracts, recital 31 of Commission Delegated Regulation (EU) No 149/2013 ('Dispute resolution aims at mitigating risks stemming from contracts that are not centrally cleared. When entering into OTC derivative transactions with one another, counterparties should have an agreed framework resolving any related dispute that may arise. The framework should refer to resolution mechanisms such as *third party arbitration* or market polling mechansism. The framework intends to avoid unresolved disputes escalating and exposing counterparties to additional risks. (…)' [emphasis added]; See, also, IOSCO*, Risk Mitigation Standards for Non-Centrally Cleared OTC Derivatives* (28 January 2015) highlighting the relevance of dispute resolution by including it as a risk mitigation standard (Standard 7) and noting arbitration as a potential avenue for dispute resolution (fn 7).

from the GFC, ISDA in close consultation with its membership has subjected the common 'legacy view'[326] regarding arbitration to an in-depth review and re-evaluation.

I. The 2013 and 2018 ISDA Arbitration Guides

A significant first step towards the arbitration of derivatives disputes was taken in the evolving field of Islamic Finance. In 2010, ISDA together with the International Islamic Financial Market ('IIFM') drafted the Tahawwut Master Agreement for use in Shari'a-compliant derivatives transactions, which was modelled on the ISDA 2002 MA form.[327] Besides constituting the first such standard form contract for cross-border Shari'a-compliant derivatives, the ISDA/IIFM Tahawwut Master Agreement contained a further premiere for OTC derivatives documentation in that its Sec. 13(c) included the possible election of arbitration as a method of dispute resolution under the rules of the ICC.[328]

In 2013, after a consultation process including its members,[329] ISDA issued the 2013 ISDA Arbitration Guide regarding recourse to arbitration for derivatives disputes documented under the ISDA MA forms. Intended as a general overview and guidance on arbitral procedure, it contained model arbitration clauses for use with the 1992 and 2002 ISDA MA forms.[330] As one of the '[k]ey reasons for considering using arbitration'[331] the 2013 ISDA Arbitration Guide, mirroring the arguments generally made in support of arbitration, i.a., identified the potential 'enforcement risk'[332] of English or New York judgments not being enforceable in emerging market jurisdictions against the background of the comparative ease of enforceability of arbitral awards

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[326] Jeffrey Golden and Peter Werner term as 'legacy views' the arguments traditionally levelled by financial institutions at arbitration as a dispute resolution mechanism not suitable to resolving financial disputes: J Golden and P Werner, 'The Modern Role of Arbitration in Banking and Finance' (n19) para 1.22.

[327] See, ISDA, Press Release, *IIFM and ISDA Launch Tahawwut (Hedging) Master Agreement* (March 1, 2010).

[328] ISDA/IIFM, *ISDA/IIFM Tahawwut Master Agreement*.

[329] The formal process, following preceding informal discussions, such as by way of example a roundtable discussion involving representatives of ISDA, the German Arbitration Institute (DIS) as well as banks, law firms and universities (see, A Sheppard, *Arbitration of International Financial Disputes* (Kluwer Arbitration Blog, 19 March 2009), was initially kicked off with the 19 January 2011 memorandum to ISDA members entitled 'The use of arbitration under an ISDA Master Agreement' intended to gauge membership interest in resorting to arbitration and how to facilitate any further action. Following a second memorandum dated 10 November 2011, ISDA coordinated meetings with members and market stakeholders in international financial centres. The collective input from memoranda responses and meetings is reflected in its final 2013 Arbitration Guide: ISDA, *2013 ISDA Arbitration Guide, Version 1.0* (9 September 2013) i.

[330] *Ibid*.

[331] *Ibid* 3.

[332] *Ibid* para 2.3.

under the New York Convention.[333] In 2018, ISDA published an updated second edition of its arbitration guide, the 2018 ISDA Arbitration Guide, reflecting the feedback from further consultations with its members since the first edition.[334] The 2018 ISDA Arbitration Guide brought with it a proliferation of the arbitral institutions under the rules of which disputes could be referenced in its model clauses to twelve.[335]

II. The 2016 ICC Commission Report on Financial Institutions and Arbitration

In 2016, the ICC's Commission on Arbitration published a report compiled on the basis of a detailed survey of the views and experiences of arbitration from representatives of major financial institutions. As such, the report opened an informative window into the world of financial market practice and confirmed the general finance sector's ambivalent attitude and specifically the 'mixed views on the merits of arbitration for derivatives disputes'[336]. While finding that arbitration was indeed chosen regarding some transactions, the report observed that there was nonetheless 'an overall lack of awareness of the potential benefits of international commercial arbitration (…) in banking and financial matters'[337].

However, the report also observed 'the changing landscape of financial disputes'[338], highlighting industry-specific developments, including in particular ISDA's arbitration initiative.[339] While acknowledging the unamenability of the financial sector's wide range of idiosyncratic transactions to a '"one size fit all" approach',[340] the report identified key considerations in favour of finance arbitration. These also encompassed the multitude of disputes from OTC derivative transactions, including, i.a., disputes regarding 'various rights and obligations imposed by the ISDA Master Agreements'[341]. Here, arbitration was viewed favourably regarding transactions with counterparties from

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[333] *Ibid* para 2.2 ('Succeeding on the merits of a dispute may prove to be a pyrrhic victory if it is not possible to enforce the resulting judgment.').
[334] ISDA, *2018 ISDA Arbitration Guide, Version 2.0* (14 December 2018); The 2018 ISDA Arbitration Guide, Version 2.0, has since been superseded by an updated Version 2.1, published on 31 May 2022, which reflects intervening legislative changes in some jurisdictions. These are, however, not relevant for present purposes.
[335] ISDA, *2018 ISDA Arbitration Guide, Version 2.0* (14 December 2018).
[336] ICC, *ICC Commission Report* (n312) para 71.
[337] *Ibid* para 3.
[338] *Ibid* Sec III.
[339] *Ibid* para 30.
[340] *Ibid* para 33.
[341] *Ibid* para 67.

emerging markets due to enforcement concerns in those jurisdictions.[342] Further, the report identified arbitration as potentially beneficial due to the opportunity to select arbitrators against the background of the specialist financial expertise desired by market participants from decision-makers in the face of derivative transaction complexity.[343] Additionally, the report cited procedural speed of arbitration, confidentiality and easier enforceability of awards as potential arguments to opt for arbitration over litigation.[344]

III. The P.R.I.M.E. Finance Initiative

A further indicator of a changing perception of arbitration in OTC derivatives dispute resolution is the initiative of a number of arbitral institutions to secure a market share of the OTC derivatives disputes business.[345] Most prominent in this context, and specifically tailored towards financial disputes, is the Panel of Recognised International Market Experts in Finance ('P.R.I.M.E. Finance') initiative.[346] P.R.I.M.E. Finance was born out of the GFC and the recognition of a market need for a tribunal functioning both as an educational resource as well as a dispute resolution forum dedicated to complex financial transactions and was launched against this backdrop in January 2012.[347] Notable in this regard is the cooperation of P.R.I.M.E. Finance with the Permanent Court of Arbitration ('PCA') as regards the administering of arbitrations and mediations under its rules since 2015.[348] P.R.I.M.E. Finance has publicly communicated its self-proclaimed mission of 'promoting certainty and reducing risk in the global financial markets'[349]. Insofar as an arbitration pertains to industry standards, e.g., as regards documentation, market practices or valuations, P.R.I.M.E. Finance, at least functionally, takes on the role of a world financial court, with a view to mitigating transnational legal uncertainty by furnishing the markets with an authoritative body of law, in particular as regards the operation of the core industry standards.[350]

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[342] *Ibid* para 69.
[343] *Ibid* para 70.
[344] *Ibid*.
[345] See, eg, the institutions referenced in the 2018 ISDA Arbitration Guide.
[346] See, the PRIME Finance website at <https://primefinancedisputes.org>.
[347] PRIME Finance, *Our Story*, <https://primefinancedisputes.org/page/general-information-and-history> accessed 7 September 2026.
[348] *Ibid*.
[349] PRIME Finance, *Mission*, <https://primefinancedisputes.org/page/mission> accessed 7 September 2026.
[350] Emphasising the central function plugging the black hole of legal uncertainty for global financial markets: GJ Meijer and CML Perera-De Wit, 'Fostering Stability and Confidence in the Financial

This latter point is removed from considerations of relative functional advantages of arbitration in an *inter-partes* dispute and touches upon the transnational market governance role prospectively to be played by P.R.I.M.E. Finance. Illustrative in this regard is Art. 39 para. 9 of the current 2022 P.R.I.M.E. Finance Arbitration Rules, according to which '[a]n award may be made public with the consent of all parties (…)'. Furthermore, under Art. 39 para. 10 of the 2022 P.R.I.M.E. Finance Arbitration Rules '[u]nless any party objects within 30 days of receipt of an award or other decision of the arbitral tribunal or the PCA, the PCA shall provide P.R.I.M.E. Finance with an anonymised copy of such decision that P.R.I.M.E. Finance may make public.' The latter provision especially encapsulates the tension between the benefit of confidentiality associated with arbitration, from an arbitrating party's perspective, and the wider market governance perspective of creating a predictable body of jurisprudence to guide market participants. Thus, the mechanism of publicising anonymised awards performs a balancing act between these two considerations, retaining a degree of confidentiality whilst opening up the procedural capacity of developing the settled body of jurisprudence regarding the interpretation of standardised provisions and thus crucial questions of market functioning.[351]

D. Suitability of Arbitration as an Element in ISDA Market Governance

Notably, ISDA prefaced its first arbitration guide with the notice that '[i]n preparing model arbitration clauses and making such choices, ISDA has been led by the responses it receives from members, rather than by any preference of ISDA itself'[352]. Some of the functional advantages put forward in favour of arbitration from an *inter-partes* perspective can prove to be a double-edged sword when viewed in the context of the wider market interest. For this tension to be defused, certain qualifications must be made regarding the suitability of international arbitration as a mode of dispute resolution in the global OTC derivatives industry. Namely, the overarching qualification

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Markets – A Global Affair P.R.I.M.E. Finance' in N Lavranos and others (eds), *Hague Yearbook of International Law 2012* (Martinus Nijhoff 2013) 238.

[351] On the predecessor provisions, A Cohen Smutny and P Polašek, 'Arbitral Institutions' in J Golden and C Lamm (eds), *International Financial Disputes* (Oxford Univertsity Press 2015) para 2.12; See, also, I Han, 'Rethinking the Use of Arbitration Clauses by Financial Institutions' (2017) 34 Journal of International Arbitration 207, 235 ('an innovative and highly desirable approach to balancing the need for consistency in arbitral decision-making whilst also protecting parties' confidentiality').

[352] ISDA, ISDA, *2013 ISDA Arbitration Guide, Version 1.0* (9 September 2013) i.

must be that there exists no neat one-size fits all answer in favour of state litigation or international arbitration.

As such, any *inter-partes* functional advantages deemed to result from opting for international arbitration proceedings must be weighed up against the risks of legal fragmentation of the OTC derivatives market through the wholly unconstrained reign of party autonomy in choosing suitable arbitral institutions. This is the risk of multiple and, by virtue of the arbitral process, final but potentially conflicting awards on operative provisions of a transnational instrument, which is, however, geared by operational necessity towards standardised operation across jurisdictions. Against this background, two final considerations are in order as regards the two perhaps most significant arguments leveraged in favour of international arbitration in OTC derivatives disputes, the perceived superior subject matter expertise of expert arbitrators, chosen by the disputing parties, and the enforcement benefits by virtue of the universal success of the New York Convention.

Starting with the expertise aspect, the force of the argument concerning relative advantages of arbitration in this regard have, at least where English courts are chosen in a dispute, been somewhat attenuated by what may be seen as an early manifestation of the internationally growing trend of institutionalised judicial specialisation, namely the genesis of the so-called Financial List. The Financial List was set up by statutory instrument in 2015.[353] As per the newly inserted practice directions to the Civil Procedure Rules, the Financial List is constituted as a single specialist list, with claims in the Financial List to be commenced in the Commercial Court or the Chancery Division in London.[354] As set out in relation to the Financial List's jurisdiction under Sec. 63A.1(2) Civil Procedure Rules:

'*"Financial List claim" means any claim which —*

(a) principally relates to loans, project finance, banking transactions, derivatives and complex financial products, financial benchmark, capital or currency controls, bank guarantees, bonds, debt securities, private equity deals, hedge fund disputes, sovereign debt, or clearing and settlement, and is for more than £50 million or equivalent;

(b) requires particular expertise in the financial markets; or

(c) raises issues of general importance to the financial markets.'

[353] SI 2015 No 1569 (L 20) (The Civil Procedure (Amendment No. 4) Rules 2015).

[354] Sec 63A.2(1) Civil Procedure Rules.

Under Sec. 63A.1(3) Civil Procedure Rules, financial markets for these purposes expressly include the derivatives markets.

The core purpose of the Financial List is to ensure 'that cases which would benefit from being heard by judges with particular expertise in the financial markets or which raise issues of general importance to the financial markets are dealt with by judges with suitable expertise and experience'[355]. Emphasising how the Financial List initiative is not a stillborn idealistic project is the *Banco Santander* litigation, discussed under Chapter 2 § 2, as its first test, and the deference shown to the subject matter expertise at first instance shown by the Court of Appeal[356].[357]

Regarding the enforcement argument, as ISDA identified in its 2013 Arbitration Guide, '[t]he starting point for assessing enforcement risk is to consider whether there is any arrangement for reciprocal enforcement between (a) the country of the chosen court or of the seat of arbitration and (b) the likely place of enforcement.'[358] In relation to the first element, ISDA noted the relative ease of enforcement of commercial judgments under the Brussels Regulation (Recast)[359], extended to Norway, Switzerland and Iceland by virtue of the Lugano Convention[360], but observing a patchiness beyond this jurisdictional scope,[361] and contrasting this state of affairs in the following paragraph with the number of signatories to the New York Convention[362]. Arguably, with the Brussels Regulation (Recast) no longer applicable to the UK after its exit from the European Union, and thus far no equivalent reciprocal arrangement agreed, the patchiness of mutual enforcement mechanisms throughout the rest of the world has been compounded by a gaping hole in one of the world's two leading derivatives

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[355] Judiciary UK, *Guide to the Financial List* (1 October 2015).

[356] *Banco Santander Totta SA v Companhia de Carris de Ferro de Lisboa SA & Ors* [2016] EWCA Civ 1267 at [67].

[357] A more detailed analysis of the Financial List, and the novel test case mechanism, is provided by J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 358-362.

[358] ISDA, *2013 ISDA Arbitration Guide, Version 1.0* (9 September 2013) para 2.5.

[359] Regulation (EU) No 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters [2012] OJ L 351/1 ('Brussels Regulation (Recast)').

[360] Convention on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters [2009] OJ L 147/35 ('Lugano Convention') [the successor to the original 1988 Lugano Convention].

[361] ISDA, *2013 ISDA Arbitration Guide, Version 1.0* (9 September 2013) para 2.6.

[362] *Ibid* para 2.7.

jurisdictions, with the arguments made for the relative enforcement advantages of arbitration only gaining in traction as a result.[363]

Nevertheless, tying in with the second element highlighted by ISDA, i.e. the likely place of enforcement, these effects in the context of judgments concerning OTC derivatives market disputes may not be felt as keenly as anticipated, particularly in the context of inter-bank disputes. This is primarily due to the, at least for the foreseeable future, undiminished status of the City of London as an international financial services hub, with market making dealer banks maintaining London operations with corresponding assets against which to enforce an English court judement. Against the background of this correlation of forum and location of assets, any future drawbacks in the enforceability of English judgments in the EU generally should not prove as detrimental as in other industry sectors, or, in the more acerbic words of Adrian Briggs, 'the fact that a claimant may not be able to enforce a judgment in Slovakia or Slovenia, Bulgaria or Romania, is not something which will cause a large number of people to lose sleep'[364]. Nevertheless, as regards enforcement in relation to OTC derivatives market participants from certain emerging market jurisdictions where assets against which enforcement is sought are located in the developing world, the enforcement argument of course continues to hold sway.[365]

E. Conclusion

With a view to market-driven developments over the last several years, it appears that the perceived anti-arbitration stance of finance as observed and fossilised in some older publications on the subject is no longer a completely accurate reflection of current market preferences. Some authors even go as far as attesting to a 'sea-change in thinking towards dispute resolution within the finance and banking sectors'[366]. Nevertheless, some caution must be sounded in relation to the potential of international arbitration in OTC derivatives disputes from a market governance perspective. Some of the early optimism as regards the industry's reappraisal of arbitration appears to have been tied to the presumption that an institutional initiative, such as P.R.I.M.E. Finance, would be accepted by the majority of market participants, thus potentially ultimately

[363] J Braithwaite, *The Financial Courts: Adjudicating Disputes in Derivatives Markets* (n5) 343-344.

[364] A Briggs, 'Brexit and Private International Law: An English Perspective' (2019) 55 Rivista di diritto internazionale private e processuale 261, 274.

[365] S Jagusch, 'Enforcement' in J Golden and C Lamm (eds), *International Financial Disputes* (Oxford University Press 2015) para 15.02.

[366] J Golden and P Werner, 'The Modern Role of Arbitration in Banking and Finance' (n19) para 1.34.

serving as *the* international tribunal and functional equivalent for a so far elusive 'world court for finance'[367]. However, in light of the very limited success in this regard,[368] and ongoing competition between arbitral institutions the world over, with even the most recent 2018 ISDA Arbitration Guide not providing for a sectoral filter on the free individual use of party autonomy in favour of a single institution, this appears to be a significant flaw in the governance potential of international arbitration for the OTC markets, at least with regard to the interpretation of its core operative provisions.

However, as aptly put by Sabur Malik, '[m]uch like marriage, arbitration and litigation need not be in conflict, but only if the relationship is calibrated correctly with each respecting the other's domain.'[369] In this sense, as proposed under the taxonomy put forward by Malik,[370] i.a., cases involving novel points of law, and, as is argued here, cases touching upon the operation of core ISDA MA standard provisions against the background of potential transnational legal basis risk, should remain the preserve of the courts hardwired into the ISDA MA since the early days of the market. This should provide for predictable binding precedent continuing to develop in the transnational market's incubator[371] jurisdiction going forward. Beyond this, the functional arguments leveraged in favour of arbitration apply in an unqualified manner,[372] and there is reason to be optimistic of the complementary role international arbitration can play in catering to the needs of market participants.

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[367] JB Golden, 'Do We Need a World Court for the Financial Markets' (n12) 255.

[368] At least so far, no anonymised awards have been published on the P.R.I.M.E. Finance website. What is more, while anecdotal evidence suggests some financial institutions have indeed included the model arbitration clause into ISDA MAs, so this may change sometime in the future, there appears to be no wholesale directional change in this regard.

[369] S Malik, 'The Empire Strikes Back: Derivatives disputes, the financial list, test case scheme and arbitration' (n23), 266.

[370] *Ibid* 264-265.

[371] See, on this particular term, Chapter 2 § 1.D.III.2.b).

[372] S Malik, 'The Empire Strikes Back: Derivatives disputes, the financial list, test case scheme and arbitration' (n23) 265.

Concluding Remarks

OTC derivatives and the global OTC derivatives market provide an integral economic function, primarily by transforming uncertainty into quantifiable risk at the product level, thereby enabling the efficient distribution of an array of correspondingly priced market risks to those parties best placed to bear them at the market level. The result of this, at least conceptually, is the constant flow of a vast panoply of streams of financial risks between an equally vast array of entities the world over. It bears reminding, however, that at their core, derivative 'products' are '"creatures" of law'[1], constructed as they are in the form of legal contracts. This feature enables market participants to rely on the universal legal principle of the sanctity of contract or *pacta sunt servanda* in taming even the more radical, non-quantifiable, manifestations of uncertainty, which not only for the purposes of neoclassical financial economic theory, but also in the minds of many market practitioners appeared to have been successfully vanquished, only to very painfully come to the fore in the GFC.

Nevertheless, such realisation in itself is not an answer, but only the stepping stone for further inquiry, as it transposes the unique challenges such categories of non-quantifiable uncertainty pose into the legal realm and, more generally, throws a spotlight on the integral role law and the legal system play in this financial market segment. Conversely, it shifts attention to the crucial analytical categories of legal uncertainty and legal risk, and, taking account of the transboundary nature of the streams of risk that make up the OTC derivatives market, to legal risk of a transnational nature. It is in this context that Jeffrey Golden, amongst others, has explicitly pointed to the macroeconomic dimension legal risk can take; for example, by warning that potentially 'the courts can also be a source of systemic risk'[2] in the financial markets.

The theme of transnational legal risk – and of its management and mitigation – has been at the heart of the different strands of this thesis. To make use of derivatives products and their functions, counterparties can by virtue of the concerted efforts of ISDA, the global OTC derivatives market's trade organisation, today avail themselves of a tried and tested standardised contractual architecture that minimises transnational legal

[1] R McCormick and C Stears, *Legal Risk and Conduct Risk in the Financial Markets* (3rd edn, Oxford University Press 2018) para 1.01.

[2] J Golden, 'Judges and Systemic Risk in the Financial Markets' (2013) 18 Fordham Journal of Corporate and Financial Law 327, 329.

(basis) risk.[3] In this context, as illustrated in Chapter 1 § 7.D.IV.2, the synchronous operation of derivative transactions in larger and often transnational back-to-back hedging chains, which reveal themselves when viewing the cross-border streams of financial risk through the legal lens, is paramount. Against this background, the significance of upholding the contractual standard regardless of considerations of domestic jurisdiction cannot be overstated. As a result, the pervasiveness of the ISDA contractual documentation, with the ISDA MA as its operational nucleus, and the normative force of the operational provisions embedded within it appear to break the frame of mere contractual normativity, even functionally acting as a kind of transnational sector specific quasi-statute. Rather than seek to distance or shield itself from state law and institutions, however, the ISDA regime seeks to strategically 'touch down'[4], where it of its own cannot offer the best functional solutions to its user base, for example through contractual choice of law and forum.[5] Other instances of interaction or 'interlegality'[6] are not initiated by ISDA or the users of its contractual architecture, but by state legal actors, such as in the case of bank resolution reform.[7]

As this thesis has attempted to show throughout regarding the distinct legal areas of the market it has touched upon, what is revealed is the presence of a transformative force that emanates from private transnational normativity and engages state legal institutions, which, when seized upon in this way, in turn adapt and react in such diverse legal areas as private international law[8], bank resolution, or contractual interpretation. As put by Ralf Michaels in his innovative, systems-theory inspired contribution on the current state of legal analysis of global phenomena stretching established legal concepts to breaking point:

'"*Law without a state" may have been a necessary concept to overcome the idea that all law is state law. However, as the mere negation of that idea, it lacks constructive potential; its implications collapse into either the negation or the replication of law*

[3] On the genesis and evolution of the ISDA contractual architecture, see Chapter 1§ 7.A; On the concept of transnational legal basis risk, see Chapter 1 § 7.D.IV.2.c).

[4] See, generally, R Wai, 'Transnational Liftoff and Juridical Touchdown: The Regulatory Function of Private International Law in an Era of Globalization' (2002) 40 Columbia Journal of Transnational Law 209.

[5] Such as in the case of contractual interpretation disputes: See, Chapter 3 § 2.

[6] B de Sousa Santos, 'Law: A Map of Misreading. Toward a Postmodern Conception of Law' (1987) 14 Journal of Law and Society 279, 298.

[7] See, Chapter 2 § 3.C.

[8] See, Chapter 2 § 2.

within the state. We should leave this behind and devote our attention to the law that transcends these boundaries and presents a more credible candidate for globalization and a functionally differentiated global legal system: law beyond the state.'[9]

In light of this conceptual call to arms, it is argued here that the ISDA regime and the wider normative landscape within which it sits and operates, conforms most closely to this very conception of a global law not without, but beyond the state. The various case studies contained within this thesis offer instructive practical examples of an account of such observable transnational law beyond the state 'in action' rather than as merely described 'in the books',[10] and the manifold interactional dynamics between a transnational sectoral normative regime and state institutions. By way of one example, as a result of the ISDA transnational regime strategically latching onto nation state institutions, national regulators were in turn able to latch on to ISDA's transnational contractual architecture, strategically deploying it in the pursuit of a macroeconomic policy goal of international financial stability through effective transnational bank resolution.[11] Such implicit recognition of ISDA's transnational sectoral law offers a unique glimpse at the chances on offer for nation-states to implement effective transnational action. Conversely, this aspect also reinforces the importance of state legal responsivity to, and as far as possible recognition of, the particular functional requirements of such transnational sectoral regimes, an example of which is the upholding of the transnational contractual standards in the particular case of the ISDA contractual regime.[12] This encompasses their recognition and reinforcement at other legal intersections, for example upon juridical touchdown in the courts, both as regards the preliminary interpretation of norms of private international law as well as the judicial approach to the interpretation of the contracts themselves.[13]

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[9] R Michaels, 'The True Lex Mercatoria: Law Beyond the State' (2007) 14 Indiana Journal of Global Legal Studies 447, 468.

[10] In loose analogy to the often-cited dichotomy coined by Roscoe Pound already at the beginning of the last century, as he observed a chasm between legal doctrine and practical application of the law: R Pound, 'Law in Books and Law in Action' (1910) 44 American Law Review 12.

[11] See, (n7).

[12] Most recently stressing the need, ia, for a responsive state legal doctrine to phenomena of transnational legal normativity, including ISDA's boilerplate contractual architecture: T Kindt, *Transnationale Verträge im nationalen Recht: Theorie und Dogmatik transnationaler Ordnungsstrukturen am Beispiel von Musterverträgen im Finanzbereich* (Mohr Siebeck 2023) 180-183.

[13] As regards the ISDA contractual regime, examples of implicit recognition in the courts of England and Wales exist both in the context of the interpretation of a norm of private international law as well as

This reversal of the traditional domestic hierarchical relationship between law and contract in the transnational constellation has been elsewhere observed by Joshua Karton, who, regarding contract law, aptly observes that in this way 'formal contract law is being made in the shadow of private contracts'[14]. As a consequence, legal hierarchy, which is relatively neatly organised within territorial boundaries fragments along functional lines at the transnational level and gives way to heterarchy and pluralism requiring coordination.[15]

Actors, from nation states to private entities, should be actively aware of this particular dynamic in order to adequately react to and effectively navigate the transnationalised reality of this evolving legal landscape. It stands to reason that regulatory arbitrage is still prevalent post-GFC in the sense that market participants will prefer legal systems better adapted to and more inclusive of processes of transnationalisation. It is hoped that this thesis has in a small way contributed to shedding some light on one particularly striking vista in this larger landscape – the global OTC derivatives market.

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contractual construction of a substantive provision of the ISDA MA. See, insofar, the case studies in Chapters 2 and 3.

[14] J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (2018) 21 University of Pennsylvania Journal of Business Law 142, 144; See, also, G Shaffer, 'Theorizing Transnational Legal Ordering' (2016) 12 Annual Review of Law and Social Science 231, 239 ('(…) public law can be viewed in the shadow of transnational private regulation').

[15] J Karton, 'Sectoral Fragmentation in Transnational Contract Law' (n14) 167-168.

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