

MARKET IN THE REMAKING: OVER-THE-COUNTER DERIVATIVES IN A NEW AGE

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ABSTRACT

In the aftermath of the financial crisis of 2007–08, governments in leading jurisdictions deluged the traditionally free-wheeling over-the-counter derivatives market with legislation and regulation. Political leaders, lawmakers, and regulators not only imposed oversight but also sought to rework the way OTC derivatives trade. They cited reduction in the risk of financial system collapse as justification. This Article reviews key aspects of the new rules, fundamental workings of the OTC derivatives market, and significant issues that OTC derivatives documentation specialists must face. It also shows how the new rules might sometimes fail to advance the intended systemic safety. Regardless, whatever transformation the new rules force the OTC derivatives market to undergo, they layer complexity over already complex documentation norms and increase documentation density. The new rules thus amplify documentation risk, which market participants must manage. Familiarity with the new rules, the traditional documents, and the now additionally needed documents is essential to controlling the intricacy that, more than ever, characterizes the legal structures of OTC derivatives transactions.

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INTRODUCTION

THE financial crisis of 2007–08 remains fresh in the minds of financial market observers, not least because of the great legal and regulatory efforts it let fly. Officials in leading jurisdictions singled out over-the-counter (“OTC”) derivatives transactions to have been not a primary cause, but a particularly aggravating factor, of the crisis. To them, OTC derivatives, which are off-exchange agreements for the allocation of financial exposure, enabled concentrations of financial obligations and transmission of financial

contagion, and opaquely at that. This they considered untenable going forward, as matters of systemic risk and market integrity.

Political leaders of the major economies commanded action. At a Group of Twenty summit in 2009, world leaders mandated a regulatory overhaul of the OTC derivatives market, spelling out that: “All 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.”¹ These mandates have driven legislators and regulators, led by those in the United States and Europe, to promulgate myriad new rules aimed at reining in the presumed contribution of OTC derivatives to the risk of financial system collapse.²

Whether or not the new rules will achieve their goals, or even are justified,³ they undoubtedly are complicated.⁴ Further, the increased oversight of derivatives trading is layered on top of another apparent complication: the complexity of industry-standard documentation in the OTC derivatives market. OTC derivatives are, at base, contracts—almost always produced from stock forms made bespoke only by schedules, transaction

¹ G20 Leaders Statement: The Pittsburgh Summit, ¶ A13 (Sept. 24–25, 2009) [hereinafter 2009 Pittsburgh Summit Statement], <http://www.g8.utoronto.ca/g20/2009/2009communique0925.html>. In OTC derivatives parlance, trading parties are referred to as counterparties. This Article uses the terms “party” and “counterparty” interchangeably but, in the main, uses the term “party” to refer to a contract participant and “counterparty” to refer to a trade participant.

² This Article refers to the new laws and regulations collectively as “new rules.”

³ See, e.g., *Too Big Not to Fail*, THE ECONOMIST (Feb. 18, 2012), <http://www.economist.com/node/21547784> (“[I]here is an ever-more-apparent risk that the harm done by the massive cost and complexity of its regulations, and the effects of its internal inconsistencies, will outweigh what good may yet come from it.”); John Walsh, Acting Comptroller of the Currency, Remarks at the American Securitization Forum Annual Conference 8 (Jan. 24, 2012), <http://www.occ.gov/news-issuances/speeches/2012/pub-speech-2012-11.pdf> (“I’m not trying to suggest that this isn’t a big market or that it doesn’t involve sizeable risks, but the risk ascribed to derivatives is often many orders of magnitude greater than the reality.”).

⁴ They are also voluminous. The reform statute in the U.S., namely the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub L. No. 111-203, 124 Stat. 1376 (2010) (codified as amended in various sections of 7, 12, 15 U.S.C.) [hereinafter Dodd-Frank Act], comprises 601 principal sections and goes on for 848 pages. As of July 15, 2013, rules for derivatives generated by the Dodd-Frank Act ran close to 5,000 pages. DAVIS POLK, *Dodd-Frank: Three Years Later*, in DODD-FRANK PROGRESS REPORT 1, 4 (July 2013), http://www.davispolk.com/files/uploads/FIG/071813_Dodd.Frank.Progress.Report.pdf.

confirmations, and other add-ons—so this documentation is necessarily a building block of the market. Ironically, industry pioneers who had exerted initial efforts to instill documentation efficiency in the OTC derivatives market had set out to simplify things, but markets evolved, market participants innovated, and the need for many formats and layers of documents expanded. Today, OTC derivatives documentation, as organized as it may be, has achieved such a breadth of material and requires such a state of involvedness that dealers are constrained to maintain whole staffs of derivatives documentation specialists. These specialists manage documentation risk—the possibility that a contract will not express the parties’ intent completely, sufficiently, or in a manner that is enforceable. The new rules require, literally or practically, additional documentation, thus amplifying that risk and the importance of documentation expertise.

This Article seeks to provide a précis of the new rules, in particular those that impact operatively on OTC derivatives trading and implicate the documentation structure of OTC derivatives contracts, and emphasizes core issues that negotiators of this documentation commonly face. This Article does not purport to act as a comprehensive guide to the new rules, to derivatives documentation, or to any particular document. Instead, it summarizes key legal concepts and regulatory issues that derivatives specialists should bear in mind today when establishing and maintaining OTC derivatives trading relationships. More broadly, this Article underscores the special knowledge that these relationships require even or, to be more precise, especially in a time of hyper-regulation.

I. AN AGE OF REGULATION

Prior to the recent regulatory enterprise, OTC derivatives, as products, were largely unregulated, although many purveyors and consumers of OTC derivatives were themselves regulated.⁵ The new rules change that; they focus on the products as well as on the entities that employ them. In the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (“Dodd-Frank Act”), via its Title VII, overhauled the regulatory framework for derivatives by investing the Commodity Futures Trading

⁵ In the U.S., the Commodities Futures Modernization Act of 2000 had excluded most OTC derivatives trades between sophisticated parties from regulation as futures under the Commodity Exchange Act or as securities under U.S. securities law. 7 U.S.C. § 1 (2012) [hereinafter CFMA].

Commission (“CFTC”) with regulatory authority over “swaps” and also over “swap dealers,” and “major swap participants”; the Securities and Exchange Commission (“SEC”) with regulatory authority over “security-based swaps” and also over “security-based swaps dealers,” and “major security-based swap participants”; and both Commissions jointly with regulatory authority over “mixed swaps.”⁶ Title VII also empowers banking regulators, known as the Prudential Regulators, to establish capital and margin requirements for banking entities acting as such dealers or participants, but not to regulate derivatives transactions more generally.⁷ Behind the statutory phraseology and grants of authority lies a theme of prophylaxis. Swaps, whether based on commodities or securities or even on other types of reference items, are presumed to be potential stealthy accelerants of financial crises and so the trade in them should be regulated and made transparent. Similarly, dealers and major participants in swaps or security-based swaps are understood to be systematically important and so they should be subject to prudential oversight and forced to maintain firm risk reduction practices.⁸

The scope of the new authorities plainly hangs on the conception of swap, that vital word that shoots through much of Title VII, and that conception is wide. The Commodity Exchange Act, as modified by the Dodd-Frank Act (“CEA”), defines swap extensively, capturing not just swaps in the transactional sense of exchanges of cash flows, but also various forwards and options.⁹ The Securities Exchange Act of 1934, also as

⁶ Dodd-Frank Act’s Title VII, also known as the Wall Street Transparency and Accountability Act of 2010, Pub. L. 111-203, 124 Stat. 1641 (2010), devotes itself to derivatives and is the wellspring of the regulations that suffused the U.S. derivatives market in recent years. Title VII repealed most of the exemptions from regulation that the CFMA, *supra* note 5, conferred upon OTC derivatives. *See also* Repeal of the Exempt Commercial Market and Exempt Board of Trade Exemptions, 80 Fed. Reg. 59,575 (Oct. 2, 2015) (final rule rescinding prior CFTC regulations establishing exempt derivatives-trading platforms due to the Dodd-Frank Act’s elimination of these platforms from the CEA). This Article, when addressing the Dodd-Frank Act, refers to its Title VII.

⁷ The Prudential Regulators comprise the Board of Governors of the Federal Reserve System, Office of the Comptroller of the Currency, Federal Deposit Insurance Corporation, Farm Credit Administration, and Federal Housing Finance Agency. 7 U.S.C. § 1a(39) (2012).

⁸ The CFTC and the SEC have expounded on the definitions of the various swap entities, to clarify which entities are indeed subject to registration and regulatory requirements. 17 C.F.R. § 240.3a67-1 (2015) (regarding “Security-Based Swap Participants”); 17 C.F.R. pt. 23 (2012) (regarding “Swap Dealers” and “Major Swap Participants”).

⁹ The CEA defines a swap as:
any agreement, contract, or transaction— (i) that is a put, call, cap, floor, collar, or similar option of any kind that is for the purchase or sale, or based on the value, of 1 or more

modified by the Dodd-Frank Act (“Exchange Act”), defines “security-based swap,” and both the CEA and Exchange Act define “mixed swap,” by referring to “swap” under the CEA.¹⁰ Effectively, these Title VII instruments

interest or other rates, currencies, commodities, securities, instruments of indebtedness, indices, quantitative measures, or other financial or economic interests or property of any kind; (ii) that provides for any purchase, sale, payment, or delivery (other than a dividend on an equity security) that is dependent on the occurrence, nonoccurrence, or the extent of the occurrence of an event or contingency associated with a potential financial, economic, or commercial consequence; (iii) that provides on an executory basis for the exchange, on a fixed or contingent basis, of 1 or more payments based on the value or level of 1 or more interest or other rates, currencies, commodities, securities, instruments of indebtedness, indices, quantitative measures, or other financial or economic interests or property of any kind, or any interest therein or based on the value thereof, and that transfers, as between the parties to the transaction, in whole or in part, the financial risk associated with a future change in any such value or level without also conveying a current or future direct or indirect ownership interest in an asset (including any enterprise or investment pool) or liability that incorporates the financial risk so transferred, including any agreement, contract, or transaction commonly known as— (I) an interest rate swap; (II) a rate floor; (III) a rate cap; (IV) a rate collar; (V) a cross-currency rate swap; (VI) a basis swap; (VII) a currency swap; (VIII) a foreign exchange swap; (IX) a total return swap; (X) an equity index swap; (XI) an equity swap; (XII) a debt index swap; (XIII) a debt swap; (XIV) a credit spread; (XV) a credit default swap; (XVI) a credit swap; (XVII) a weather swap; (XVIII) an energy swap; (XIX) a metal swap; (XX) an agricultural swap; (XXI) an emissions swap; and (XXII) a commodity swap; (iv) that is an agreement, contract, or transaction that is, or in the future becomes, commonly known to the trade as a swap; (v) including any security-based swap agreement which meets the definition of “swap agreement” as defined in section 206A of the Gramm-Leach-Bliley Act (15 U.S.C. 78c note) of which a material term is based on the price, yield, value, or volatility of any security or any group or index of securities, or any interest therein; or (vi) that is any combination or permutation of, or option on, any agreement, contract, or transaction described in any of clauses (i) through (v).

Id. § 1a(47)(A). The statute creates a number of exceptions, one of which is commodity forward transactions intended to be settled by delivery of the underlying and various security-based transactions. *Id.* § 1a(47)(B). This particular exception comports with the typical market understanding of what constitutes a derivative transaction. *See infra* text accompanying note 41. The CFTC and the SEC have expounded on what types of transactions are or are not included in the various swap categories. *See* 17 C.F.R. §§ 240.3a68–71 (2015).

¹⁰ Generally, under the Exchange Act, a security-based swap is any agreement, contract, or transaction which otherwise is a swap under the CEA (which excludes security-based transactions), that is based on— (I) an index that is a narrow-based security index, including any interest therein or on the value thereof; (II) a single security or loan, including any interest therein or on the value thereof; or (III) the occurrence, nonoccurrence, or extent of the occurrence of an event relating to a single issuer of a security or the issuers of securities in a narrow-based security index, provided that such event directly affects the financial statements, financial condition, or financial obligations of the issuer.

make up nearly all, if not all, of what financial market participants commonly call financial derivatives, or just derivatives.

Beyond establishing regulatory authorities, the Dodd-Frank Act reordered derivatives trading practices in a number of fundamental ways. Generally: (i) unless exempted, a derivatives trade must be cleared through a central clearing counterparty (“CCP”) that, in the case of a swap, is a registered (or registration-exempt) derivatives clearing organization (“DCO”) or, in the case of a security-based swap, is a registered (or registration-exempt) clearing agency;¹¹ (ii) a derivatives trade which is subject to the central clearing requirement must also trade on an exchange or on a derivatives execution facility—a swap execution facility (“SEF”) or a security-based swap execution facility (“SBSEF”)—if the derivatives product is available for trade at any such venue;¹² (iii) a derivatives trade which is not centrally cleared (also known as uncleared, although bilaterally cleared) is subject to margin, and with regard to derivatives dealers, major derivatives market participants and banks, capital requirements;¹³ (iv) a derivatives trade, centrally cleared or not, must be reported to a registered swaps or security-based swaps data repository;¹⁴ and (v) derivatives dealers and major derivatives market participants must register with, and thus subject themselves to oversight by, the relevant Commission.¹⁵ In Europe, similar constraints apply, but without

15 U.S.C. § 78c(a)(68)(A) (2012). Mixed swaps are a narrow group of derivatives that embody both swap and security-based swap characteristics. 7 U.S.C. § 1a(47)(D); 15 U.S.C. § 78c(a)(68)(D).

¹¹ 7 U.S.C. § 2(h)(1)(A) (2012); 15 U.S.C. § 78c-3(a)(1). For DCO registration requirements, see 7 U.S.C. § 7a-1 (2012), and for clearing agency registration requirements, see 15 U.S.C. § 78q-1(b).

¹² 7 U.S.C. § 2(h)(8); 15 U.S.C. § 78c-3(h).

¹³ 7 U.S.C. § 6(s)(e) (2012); 15 U.S.C. § 78o-10(e).

¹⁴ 7 U.S.C. § 2(a)(13)(G); 15 U.S.C. § 78m(m)(1)(G); *see also* 7 U.S.C. § 6r (if swap not accepted for clearing by any DCO and no swap data repository will accept the swap, report the swap to CFTC); 15 U.S.C. § 78m-1 (if security-based swap not accepted for clearing by any clearing agency or DCO and no security-based swap data repository will accept the security-based swap, report the security-based swap to SEC).

¹⁵ 7 U.S.C. § 6s(a); 15 U.S.C. § 78o-10(e). Regarding banks, Section 6s(e)(1)(A) of the CEA directs a registered swap dealer or major swap participants for which there is a Prudential Regulator to meet the margin and capital requirements set by the Prudential Regulator. Section 78o-10(e)(1) of the Exchange Act generally parallels Section 6s(e)(1) of the CEA, except that Section 78o-10(e)(1)(A) refers to a registered security-based swap dealer and a major security-based swap participant for which “there is not a prudential regulator.” The Prudential Regulators consider the word “not” to have been mistakenly included and to have no meaning. Margin and Capital Requirements for Covered Swap Entities, 80 Fed. Reg. 74,840, 74,841 (Nov. 30, 2015).

the regulatory split between instruments.¹⁶ Of the Dodd-Frank Act's constraining precepts, this Article will focus on the more operative ones of central clearing and centralized trading. In addition, because the CFTC has generally made greater progress in Dodd-Frank Act-required rulemaking than the SEC, this Article will focus on the CFTC's area of jurisdiction.

The OTC derivatives market, as traditionally perceived, is not a discrete trading venue, but an amalgamation of many bilaterally negotiated trades and is known for its trading flexibility and capacity for product customization. The new rules take aim at this market; they are designed to drive transactions away from the bilateral environment and to central clearing and, consequently in many cases, to centralized trading. In this regard, it bears noting that the CEA permits the CFTC to prescribe rules to prevent abusive evasions of the mandatory clearing requirement and that the CFTC has issued rules prohibiting reckless or knowing evasion of the central clearing requirement or abuse of an exception to that requirement.¹⁷ Other constraints might also contribute to the cause of trade redirection: in 2009, the G20 dictated "higher capital requirements," and in 2011, it added "standards on margining"¹⁸ for

¹⁶ The European reform legislation comprises the Regulation on OTC Derivatives, Central Counterparties and Trade Repositories, Council Regulation (a/k/a European Market Infrastructure Regulation) 648/2012, 2012 O.J. (L 201) (EU) [hereinafter EMIR] and the Markets in Financial Instruments Directive, Council Directive 2014/65, 2014 O.J. (L 173) (EU) [hereinafter MiFID II]. MiFID II comprises a revamp of the 2007 MiFID I and the Regulation on Markets in Financial Instruments, Council Regulation 600/2014, 2014 O.J. (L 173), 84 (EU) [hereinafter MiFIR]. EMIR requires financial counterparties and non-financial counterparties with non-hedge positions in OTC derivative contracts above certain thresholds to clear certain types of OTC derivatives through CCPs. EMIR, *supra*, art. 4. MiFIR includes a procedure for the European Securities and Markets Authority ("ESMA") to designate derivatives which must clear centrally under EMIR and which are sufficiently liquid to trade exclusively on a regulated market, a multilateral or organized trading facility, or an equivalent non-EU trading venue. MiFIR, *supra*, art. 32. Financial counterparties and non-financial counterparties trading above clearing thresholds are required to trade such derivatives on these organized venues. *Id.* art. 28. Under EMIR, all counterparties and CCPs must ensure that derivatives transaction details are reported to a registered trade repository (or if not in place, ESMA). EMIR, *supra*, art. 2(1).

¹⁷ 7 U.S.C. § 2(h)(7)(F) (2012); 17 C.F.R. § 50.10 (2013). Also, under the CFTC's general anti-evasion rule, any transaction willfully structured to evade Title VII of the Dodd-Frank Act will nonetheless be considered a swap for purposes of Title VII and the CFTC rules thereunder. 17 C.F.R. § 1.3(xxx)(6) (2016).

¹⁸ G20 Summit, Cannes Summit Final Declaration: Building Our Common Future: Renewed Collective Action for the Benefit of All, ¶ 24 (Nov. 3–4, 2011) [hereinafter Cannes Summit Declaration], www.g20civil.com/documents/Cannes_Declaration_4_November_2011.pdf.

uncleared derivatives; lawmakers and regulators obligingly followed suit.¹⁹ These additional dictates are meant to promote central clearing, which observers often consider to be a systemic benefit.²⁰ Conventional research contends that the new rules impose comparatively high incremental costs on banks when trading in uncleared derivatives, as opposed to derivatives cleared directly with CCPs.²¹ It is not certain, however, that the rules have that same effect on bank customers, for whom central clearing of OTC derivatives trades can only be done indirectly.²² More intriguingly, some researchers find that, in many realistic scenarios, the capital and collateral costs imposed on “full bilateral trading” (that is, with bilateral clearing) when banks transact

¹⁹ See 17 C.F.R. pt. 23, subpt. E (2016) [hereinafter CFTC Margin Rule] (covering registered swap dealers and major swap participants not supervised by a Prudential Regulator); Margin and Capital Requirements for Covered Swap Entities (Regulation KK), 12 C.F.R. pt. 237, subpt. A (2015) [hereinafter PR Margin Rule]. The SEC has proposed, but has not yet adopted, margin requirements for uncleared security-based swaps. See Capital, Margin, and Segregation Requirements for Security-Based Swap Dealers and Major Security-Based Swap Participants and Capital Requirements for Broker-Dealers, 77 Fed. Reg. 70,213 (proposed Nov. 23, 2012). Under EMIR, *supra* note 16, European Regulators have promulgated similar requirements. See Final Draft Regulatory Technical Standards on Risk-Mitigation Techniques for OTC Derivative Contracts Not Cleared by a CCP under Article 11(15) of Regulation (EU) No. 648/2012 (2016) [hereinafter Final Draft RTS],

<http://www.esa.europa.eu/documents/10180/1398349/RTS+on+Risk+Mitigation+Techniques+for+OTC+contracts+%28JRC-2016+18%29.pdf>; see also Section XII.B, *infra* (discussing margin requirements for uncleared swaps).

²⁰ BANK FOR INT'L SETTLEMENTS & INT'L ORG. OF SEC. COMM'NS, MARGIN REQUIREMENTS FOR NON-CENTRALLY CLEARED DERIVATIVES 3 (2015) [hereinafter BIS, MARGIN REQUIREMENTS], <http://www.bis.org/bcbs/publ/d317.pdf>.

²¹ BANK FOR INT'L SETTLEMENTS, REGULATORY REFORM OF OVER-THE-COUNTER DERIVATIVES: AN ASSESSMENT OF INCENTIVES TO CLEAR CENTRALLY 1–2 (2014) [hereinafter BIS, ASSESSMENT OF INCENTIVES], <http://www.bis.org/publ/othp21.pdf> (member banks incentivized by costs to clear centrally); cf. John Hull, *OTC Derivatives and Central Clearing: Can All Transaction Be Cleared?*, 14 FIN. STABILITY REV. 71, 72 (2010) (increased charges on capital will discourage artificial avoidance of central clearing requirements). By one estimate, “the incremental costs [margin requirements, additional capital charges, and reporting and other compliance costs] arising from the reforms for non-cleared OTC derivatives are more than ten times as much as the estimate for cleared transactions.” DELOITTE, OTC DERIVATIVES: THE NEW COST OF TRADING 9 (2014), <http://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-fs-otc-derivatives-april-14.pdf>.

²² BIS, ASSESSMENT OF INCENTIVES, *supra* note 21, at 2. For discussion of direct and indirect clearing, see *infra* Section III.

should actually be lower than those associated with central clearing.²³ Be all this as it may, the apparent upshot of the new rules has been that many transactions—in particular interest rate derivatives transactions—have migrated from the bilateral environment to central clearing venues²⁴ and that more migration looms.

Loads of bilaterally traded derivatives transactions, however, endure for now and should do so for the near future, if not far longer. This is because not all derivatives will be standardized and an authentic need for product customization by market participants seeking precise risk management persists. It is true that a standardized product might (or might not) roughly meet a firm's risk management needs, but it is also true that for many market participants, most notably hedgers, precision and particularity are key.²⁵ Indeed, hedge accounting rules, which allow a firm to match a derivatives instrument with an item on the balance sheet and recognize changes in value from both items in the same reporting period, can be employed only when the changes in value of the derivatives instrument closely offset changes in

²³ Samim Ghamami & Paul Glasserman, *Does OTC Derivatives Reform Incentivize Central Clearing?* 4 (Office of Fin. Research, Working Paper, July 26, 2016) (capital and collateral requirements may not incentivize central clearing).

²⁴ See generally BANK FOR INT'L SETTLEMENTS, STATISTICAL RELEASE: OTC DERIVATIVES STATISTICS AT END-JUNE 2016, at 4 (2016) [hereinafter BIS, STATISTICAL RELEASE: MID-YEAR 2016], https://www.bis.org/publ/otc_hy1611.pdf (as of the end of June 2016: (i) of dealers' outstanding OTC derivatives contracts, 75% of interest rate derivatives were opposite CCPs, and (ii) of dealer-reported \$544 trillion in notional amounts outstanding under OTC derivatives contracts, 62% were centrally cleared); BANK FOR INT'L SETTLEMENTS, STATISTICAL RELEASE: OTC DERIVATIVES STATISTICS AT END-DECEMBER 2015 (2016) [hereinafter BIS, STATISTICAL RELEASE: END-DECEMBER 2015], http://www.bis.org/publ/otc_hy1605.pdf (global OTC derivatives market declined broadly in second half of 2015, and central clearing made inroads in credit default swap market); INT'L SWAPS & DERIVATIVES ASS'N, MARKET ANALYSIS: INTEREST RATE DERIVATIVES (2015) (proportion of interest rate derivatives market which is centrally cleared increased significantly over previous two years). In July 2016, the CFTC claimed, without substantiation, that 75% of the swap market was centrally cleared, as opposed to only 15% in 2007. Press Release, U.S. Commodity Futures Trading Comm'n, CFTC Staff Issues Guidance to Clearinghouses on Recovery Plans and Wind-Down Plans (July 21, 2016), <http://www.cftc.gov/PressRoom/PressReleases/pr7409-16>.

²⁵ See Richard Heckinger, Ivana Ruffini & Kirstin Well, *Over-the-Counter (OTC) Derivatives*, in UNDERSTANDING DERIVATIVES: MARKETS AND INFRASTRUCTURE 27, 29 (Fed. Reserve Bank Chi. ed., 2014) (primary reason to use OTC, instead of exchange-traded, derivatives is to create "perfect hedge"); cf. INT'L SWAPS & DERIVATIVES ASS'N, SIZE AND USES OF THE NON-CLEARED DERIVATIVES MARKET 17 (2014) (significant part of interest rate derivatives market is used for risk management and remains non-clearable).

value of the hedged item.²⁶ A bespoke product, such as an OTC interest rate swap specifically tailored to an interest rate risk, will qualify more easily for hedge accounting treatment than will a fully standardized product, such as an exchange-traded interest rate swap future that only approximately reverses the effects of that risk.²⁷

Moreover, whether by statute, regulation, or formal interpretation, many derivatives transactions enjoy freedom from the central clearing obligation. For instance, the CEA generally excludes a forward contract on a non-financial commodity from the definition of swap.²⁸ Additionally, the CEA provides for, and the CFTC has implemented, a so-called end-user exception, which permits eligible non-financial end-user entities and certain of their, including financial, affiliates to use uncleared swaps to hedge risks associated with commercial activities.²⁹ Further, the CEA allows the Treasury Secretary

²⁶ FIN. ACCOUNTING STANDARDS BD., ACCOUNTING STANDARDS UPDATE NO. 2013-10: DERIVATIVES AND HEDGING (TOPIC 815) (July 2013). Under normal accounting rules, derivatives are carried on the balance sheet at fair value, with changes in their fair values reflected in the income statement, while underlying exposures are recognized as assets or liabilities, which are carried on the balance sheet at cost (or amortized cost) or as unrecognized forecasted transactions. The disparity in treatment can lead to temporary earnings volatility in financial statements, since changes in the fair value of a derivatives instrument will have no concurrent offset. Hedge accounting treatment, if elected, eliminates the disparity by allowing, to the extent of the hedge, (i) recognition of losses and gains in a hedged item and offset of changes in the value of the hedged item, with converse changes in the value of the hedging instrument (“fair value hedge”), or (ii) deferral of changes in the value of the derivative instrument in equity (as other comprehensive income) until the underlying exposure affects the income statement (“cash flow hedge,” or when involving a foreign currency investment in a subsidiary or certain foreign operations, “net investment hedge”).

²⁷ A swap future is an exchange-traded futures contract that, at maturity, will convert into an off-exchange centrally cleared swap with terms preset by the exchange.

²⁸ 7 U.S.C. § 1a(47)(B)(ii) (2012). The CFTC considers the concept of non-financial commodity to apply to a forward contract on a commodity that can be physically delivered and is an “agricultural commodity” or an “exempt commodity” under the CEA as well as to an intangible that can be physically delivered and consumed, such as an emission allowance. Further Definition of “Swap,” “Security-Based Swap,” and “Security-Based Swap Agreement”; Mixed Swaps; Security-Based Swap Agreement Recordkeeping, 77 Fed. Reg. 48,208, 48,232–33 (Aug. 13, 2012) [hereinafter Final Product Definition Rule].

²⁹ An entity may invoke an end-user exception with regard to a swap if it is not a “financial entity,” is using swaps to hedge or mitigate commercial risk, and notifies the relevant Commission as to how the counterparty meets its financial obligations of entering into a non-cleared swap transaction. 7 U.S.C. § 2(h)(7)(A), (j) (2012). The CFTC’s rulemakings influence the extent of that exception. *See* End-User Exception to the Clearing Requirement for Swaps, 77 Fed. Reg. 42,560, 42,590–91 (July 19, 2012) (to be codified at

to determine whether either or both foreign exchange (“FX”) forwards and FX swaps should be regulated as swaps under the statutory definition of swap.³⁰ On the back of that authority, the Treasury Department has determined that both are exempt from the definition.³¹ Moreover, the CFTC has excluded certain insurance contracts from the category of swap.³² The CFTC also has clarified that certain qualifying forward contracts which contain commodity options are excluded nonfinancial commodity forward contracts, i.e., are not swaps,³³ and that certain non-financial forward contracts which embed certain types of optionality can be included in the forward exclusion (these are particularly pertinent to energy derivatives contracts).³⁴ Additionally, the CFTC has exempted certain commodity “trade options” from the application of many of the Dodd-Frank Act regulations.³⁵

Desuetude, then, is not yet slouching towards the OTC derivatives market. The recent market reforms have certainly reordered the market, but they have not done so wholesale, and transaction centralization will grow, but presumably not to the point of obliterating bilateral trade.³⁶ End-user needs,

17 C.F.R. pt. 39) (exempting small banks from financial entity status and defining hedging for purpose of the exception).

³⁰ 7 U.S.C. § 1a(47)(E).

³¹ Determination of Foreign Exchange Swaps and Foreign Exchange Forwards Under the Commodity Exchange Act, 77 Fed. Reg. 69,694, 69,694, 69,705 (Nov. 20, 2012). FX forwards and swaps are predominantly short-term instruments which trade electronically, making them liquid and transparent. The Treasury’s determination exempts FX swaps and FX forwards from Title VII’s execution, clearing, and margin requirements, but not its reporting requirements, business conduct standards, and anti-evasion rules. All other currency based swap transactions, including FX options, currency (or cross-currency) swaps, and non-deliverable forwards are fully subject to swap regulation. *See* 17 C.F.R. § 240.3a69-2(c)(5) (2012).

³² 17 C.F.R. § 240.3a69-1(a) (2012).

³³ Final Product Definition Rule, *supra* note 28, at 48,237.

³⁴ *Id.* at 48,238.

³⁵ 17 C.F.R. § 32.3 (2016).

³⁶ BIS, STATISTICAL RELEASE: MID-YEAR 2016, *supra* note 24, at 4 (as of the end of June 2016: (i) of dealers’ outstanding OTC derivatives contracts, 75% of interest rate derivatives were opposite CCPs, 37% of credit derivatives were opposite CCPs, and less than 2% of foreign exchange and equity derivatives were opposite CCPs; and (ii) of dealer-reported \$544 trillion in notional amounts outstanding under OTC derivatives contracts, 62% were centrally cleared); *see also* Robert Neil McCauley & Philip Wooldridge, *Exchanges Struggle to Attract Derivatives Trading from OTC Markets*, BIS Q. REV., Sept. 2016, at 33, 33–34 (since 2009, exchange trading of foreign exchange and interest rate derivatives has not trended, whereas OTC—which the authors consider to include SEF—trading of these transactions has expanded); *OTC Derivatives – What Is the Long Game?*, DERIVSOURCE (Jan. 7, 2016), <http://derivsource.com/articles/otc-derivatives-what-long-game> (market has not yet embraced swap futures, despite various exchanges making them available,

exemptions and exclusions from regulatory oversight, and even hedge accounting will undergird a persistent relevancy for bilaterally traded derivatives and potentially keep the market for them large,³⁷ even if diminished from its former massive size.³⁸ The result of the persistence is that OTC derivatives market documentation remains relevant and thus so does its apparent complexity. Complexity, however, is sometimes another word for unfamiliarity.

II. TRADING OTC DERIVATIVES

Defining a derivative is a notorious exercise in imprecise generalization or abstruse exactitude.³⁹ Nevertheless, at the risk of oversimplifying or overconfounding things, a derivative, however it trades or clears, is a bilateral contract of exchange *which*, definitely or contingently, obligates at least one

especially in the United States); Philip Stafford, *US Swap Market Resists Futures Model*, FIN. TIMES (Mar. 16, 2015), https://www.ft.com/content/53c971ce-cbb9-11e4-beca-00144feab7de?ftcamp=published_links/rss/ft-trading-room_clearing-settlement/feed//product (based on ISDA weekly statistics, sometimes as much as half the U.S. interest rate derivatives market trades away from SEFs).

³⁷ See BIS, MARGIN REQUIREMENTS, *supra* note 20, at 3 (citations omitted) (substantial fraction of derivatives are not standardized, cannot be centrally cleared, and total hundreds of trillions of dollars in notional amounts); see also INT'L MONETARY FUND, GLOBAL FINANCIAL STABILITY REPORT ch. 3 (2010), <https://www.imf.org/external/pubs/ft/gfstr/2010/01/pdf/chap3.pdf> (assuming one-quarter of interest rate swaps, one-third of credit default swaps, and two-thirds of other OTC derivatives will not be centrally cleared due to insufficient standardization and liquidity).

³⁸ See BIS, STATISTICAL RELEASE: END-DECEMBER 2015, *supra* note 24 (demonstrating broad decline in global OTC derivatives market activity in second, as compared to first, half of 2015 and concluding that central clearing is increasingly important).

³⁹ Conspicuously, within only a couple of days following the start of reporting under EMIR, ESMA asked the European Commission to clarify the definition of derivative or derivative contract under EMIR, noting that “there is no single, commonly adopted definition of derivative or derivative contract in the European Union.” Letter from Steven Maijor, Chair, European Sec. & Mkt. Auth., to Michel Barnier, Comm’r for Internal Mkt. & Servs., European Comm’n, on Classification of Financial Instruments as Derivatives (Feb. 14, 2014), https://www.esma.europa.eu/search/site/derivative?date_from=2014-02-01&date_to=2014-02-28. EMIR itself defines derivatives by type, rather than by nature, of transaction. EMIR, *supra*, note 16, art. 2(5) (referring to points (4) to (10) of Section C of Annex I to Directive 2004/39/EC (MiFID), as implemented by Articles 38 and 39 of Regulation (EC) No. 1287/2006). The Dodd Frank Act leaves little to chance, defining “swap” both by nature and by type of transaction. See definition of “swap” under the CEA, *supra* note 9.

counterparty to make one or more future deliveries or payments and *under which* the profitability of each counterparty's position derives from the value of a referenced asset or index or the occurrence or non-occurrence of an identified event. To parse even this description somewhat, in which direction and to what extent the price of the referenced asset (often called the underlying) or value of the referenced index (often called the underlying rate) will change or whether the referenced event (in credit derivatives, a credit event) will occur is something normally beyond the control of the counterparties and amounts to financial risk.⁴⁰ By providing for profit to one counterparty and loss to the other based on the direction and extent of change in the price or value of the referenced item or on the occurrence or failure to occur of the identified event, a derivatives contract reorders the normal impact of that change or that occurrence on each counterparty during the term of the contract and, in this way, functions as a vehicle for the transfer of financial risk. Thus, a derivatives contract is primarily a financial agreement; it is, for lack of a better term given the typical illegality of unlicensed gaming (at least for non-business purposes), a side wager designed to exchange financial risk, not to raise capital or to establish commercial transaction terms.⁴¹ While the two types of financial risk that derivatives most commonly address are market risk, which is exposure to a change in market price or rate, and credit risk, which is exposure to the default of another due to insolvency, derivatives can also be used to transfer other types of financially meaningful risk, such as weather or inflation risk.

At root, derivatives consist of three basic types of financial transaction: option, forward (which trades OTC only, as distinguished from the closely related "future," which trades on exchanges only), and swap (which itself often is essentially a series of forwards).⁴² An option on an underlying is the right to buy or sell the underlying in the future; a forward on an underlying is the obligation to buy or sell the underlying in the future; and a swap is an exchange of cash flows determined by reference to different bases, such as different rates. From the basic types of derivatives, financial institutions can

⁴⁰ That said, the market has witnessed self-referenced credit derivatives, under which a single counterparty acts as both reference entity and protection seller—i.e., sells protection on its own credit risk.

⁴¹ See SIMON JAMES, *THE LAW OF DERIVATIVES* 3 (1999) (also noting that a commodity forward contract which the counterparties thereto intend to settle physically would generally not qualify as a derivative).

⁴² To round things out, a swaption is an option to enter into a specified leg of a swap.

and do build a wide array of trading strategies and financial products, some quite complex, to address the needs and wants of derivatives consumers.⁴³

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. These dealers comprise leading international banking organizations and provide bid and offer quotes, generally willing to go long or short a given derivatives contract. A gamut of derivatives end-users, from companies to hedge funds to governments and more, make up the buy-side of the market.⁴⁴ Broadly, end-users consume derivatives to hedge financial risks to which they become exposed as a natural outgrowth of their activities—i.e., to reduce their holistic risk—or to speculate in financial risks—i.e., to increase their holistic risk. Additionally, trading entity end-users, such as hedge funds, will use derivatives for arbitrage—that is, to exploit pricing anomalies, as when two different markets price the same asset differently or when the market price of an underlying differs from its implied price under a derivatives contract.

A dealer usually strives to balance the exposures from its derivatives transactions—ideally to net them to zero—and to focus its money-making on bid-offer spreads. To manage these exposures, a dealer will break down each transaction into constituent risks and offset long and short positions in each of these risks across its whole portfolio. This will likely leave the dealer with a net exposure per constituent risk, as the dealer is unlikely to achieve zero net exposures by trading only with its customers. The dealer will usually seek to cover its net exposures by trading with other dealers.

Trading between dealers is substantial and leads to significant inter-dealer credit exposure. To manage credit exposure in the bilaterally cleared derivatives market—inter-dealer as well as between dealer and non-dealer—dealers historically maintained a general but not universal practice of requiring their counterparties with net out-of-the-money positions reflecting potential liability to post collateral and to keep posting collateral if and as these

⁴³ See generally Norman M. Feder, *Deconstructing Over-the-Counter Derivatives*, 2002 COLUM. BUS. L. REV. 677 (2002) (describing types of OTC derivatives and their risk management functions).

⁴⁴ See FIN. STABILITY BD., IMPLEMENTING OTC DERIVATIVES MARKET REFORMS 9 (2010), <http://www.fsb.org/2010/10/fsb-report-on-implementing-otc-derivatives-market-reforms/> (describing OTC derivatives market buy-side as “a diverse set of market participants, such as banks, hedge funds, pension funds and other institutional investors as well as corporate end-users and government entities”).

positions would degrade.⁴⁵ Market observers commonly feared, however, that these voluntary collateral arrangements, if in place, would prove imperfect products of risk assessment or negotiation. The arrangements might not cover the whole of the harm caused by actualization of the credit risk. In the event of the collapse of a counterparty, the collateral collected might not suffice to cover all the resultant losses, especially if many positions of the failed counterparty would have to be liquidated quickly and concurrently. To the observers, these uncovered losses could force a dealer to fail, which could then trigger a daisy chain of dealer failures and, in this way, crash the entire financial system.⁴⁶ Thus, observers commonly perceived dealers (though eventually not only dealers)⁴⁷ as significant contributors to systemic risk.

As for a derivatives trade, it takes place between two counterparties and involves a number of basic operational processes. *Trading* or *execution* is the process by which the trade is executed; if the trade is not fully standardized, it is executed after negotiation of terms. *Clearing* is the process by which the payment and delivery obligations of the counterparties under the terms of the trade, including any applicable netting of payments, are computed and otherwise prepared for performance and by which security is made available to collateralize secure exposures arising from the trade. *Central clearing* is the

⁴⁵ Even before the 2007–08 financial crisis, collateral coverage featured in OTC derivatives trading. INT'L SWAPS & DERIVATIVES ASS'N, COUNTERPARTY CREDIT EXPOSURE AMONG MAJOR DERIVATIVES DEALERS 1 (2007) [hereinafter CREDIT EXPOSURE SURVEY], <http://isda.org/statistics/pdf/ISDA-Concentration-Survey2007.pdf> (in 2006, the five largest inter-dealer exposures for top ten dealers before taking account of collateral averaged 10% of net derivatives exposure and were reduced by collateral to 2% of net exposure; the largest non-dealer exposures for top ten dealers averaged 11% of net exposure before collateral and 6% after collateral). *But see id.* at 6 (government sponsored entities and other official institutions and insurance companies did not routinely post collateral with dealers).

⁴⁶ Famously, Warren Buffet, Chairman of Berkshire Hathaway Inc., once described derivatives as “time bombs, both for the parties that deal in them and the economic system” and “financial weapons of mass destruction.” BERKSHIRE HATHAWAY, BERKSHIRE HATHAWAY 2002 ANNUAL REPORT 13, 15 (2002), <http://www.berkshirehathaway.com/letters/2002pdf.pdf>. These comments notwithstanding, between 2004 and 2008 Berkshire Hathaway sold long-dated OTC put options on four stock indexes and wrote credit default swaps, with billions of dollars of exposure. BERKSHIRE HATHAWAY, BERKSHIRE HATHAWAY 2008 ANNUAL REPORT 19–20 (2008), <http://www.berkshirehathaway.com/letters/2008ltr.pdf>.

⁴⁷ *See, e.g.,* Reint Gropp, *How Important Are Hedge Funds in a Crisis?*, FED. RES. BANK S.F. ECON. LETTER, Apr. 14, 2014, at 1 (hedge funds play greater role in transmitting shocks to financial market and thus may increase systemic risk more than previously thought).

process by which the two initial counterparties to a trade interpose a CCP between them, whereupon the CCP manages all clearing functions. *Settlement* is the performance of delivery or payment obligations under the terms of the trade. A derivatives contract will settle either in cash—by payment of an amount equaling the economic loss of one counterparty (and the commensurate gain of the other counterparty) under the contract—or physically, by delivery of the underlying against cash.⁴⁸

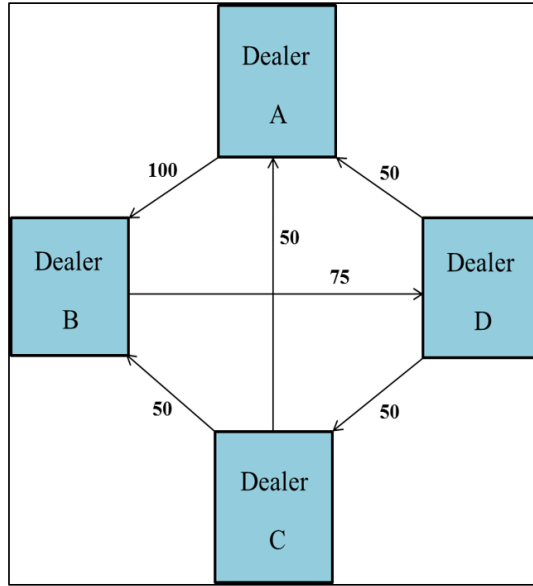
III. CENTRAL CLEARING

Central clearing of derivatives has its complexities, but at its most basic involves post-trade insertion of a very creditworthy settlement-purposed third party between two counterparties once they have traded. To deconstruct that, when two trading counterparties finalize their transaction terms and a CCP agrees to accept their transaction into its settlement clearing system, a novation or similar legal process replaces the one transaction between the two initial counterparties (the alpha swap) with two separate transactions (the beta and gamma swaps): one between the buyer and the CCP, and one between the seller and the CCP.⁴⁹ In terms of market risk, the CCP has two perfectly offsetting positions—a “matched book.” In terms of credit risk, each initial counterparty is exposed to the CCP, as opposed to the other initial counterparty, and the CCP is exposed to each of the initial counterparties. The following Figure 1 presents bilateral dealer clearing, and the following Figure 2 presents CCP member clearing of the same transactions after novation of the dealers’ transactions.

⁴⁸ Clearing and settlement apply to both cash-settled transactions and physically-settled transactions. For simplicity, this Article refers to clearing and settlement of cash settled transactions only.

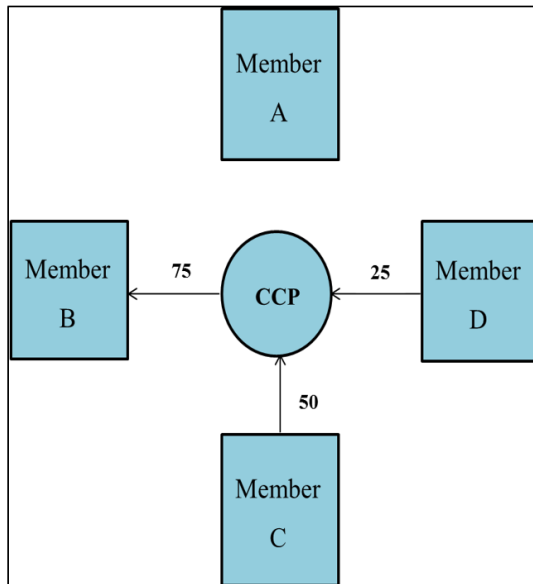
⁴⁹ See generally Robert S. Steigerwald, *Central Counterparty Clearing*, in UNDERSTANDING DERIVATIVES: MARKETS AND INFRASTRUCTURE (Fed. Reserve Bank Chi. ed., 2013) (describing core legal concepts and risk implications of the central clearing of derivatives).

Figure 1: Bilateral Dealer Clearing



Trades are netted bilaterally

Figure 2: Member Clearing after Novation



Trades are netted multilaterally

A CCP manages its credit exposures rigorously, collecting both initial margin from each side at a transaction outset (it does not post its own initial margin) and variation margin as a transaction unfolds. A counterparty posts initial margin to protect the margin recipient from prospective exposure, in particular the deterioration of a position while it is closed-out; it posts variation margin to protect the margin recipient from unfavorable valuation changes, measured on a mark-to-market (valuation based on real time market pricing) basis, that have already taken place. Should a counterparty to the CCP fail to meet a payment obligation, the CCP will liquidate the counterparty's position and cover any shortfall from the collected initial margin.

Typically, derivatives dealers are members of CCPs and, as such, are held to high standards of credit standing and operational capability. Members access the CCPs directly, engaging in what is called "member clearing." End-users, however, are usually not members and so must access the CCPs indirectly. They do so as clients of clearing members, via "client clearing" arrangements with the members, or even as customers of and via "indirect clearing" arrangements with, clients (which may even be affiliates) of clearing members. CCPs impose stiff rules on their members; these rules naturally inject some rigidity into the documentation of the OTC derivatives relationships between CCP members and their clearing clients (and these clients with their clearing customers). As, in effect, conduits of CCPs, members strive to avoid unfavorable (to themselves) mismatches between the documentation of the member-client relationship and the documentation of the CCP-member relationship. In fact, in their documentation with clients, members may push for more protections for themselves than the CCPs require of them, particularly when it comes to margin.

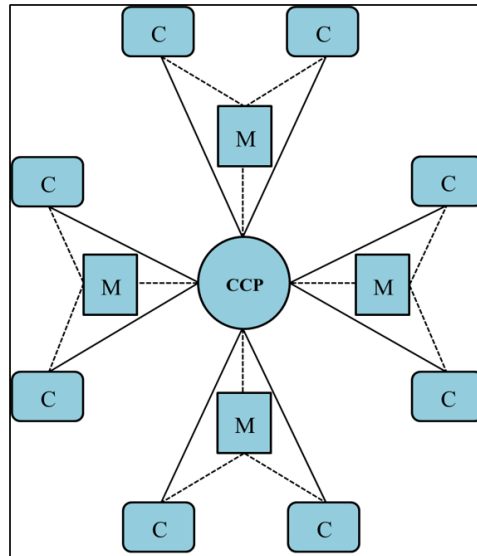
The nature of the relationship between a client and a given CCP varies among CCPs and jurisdictions, but broadly conforms to one of two models. In the United States, the agency-based clearing model prevails.⁵⁰ Under this model, the clearing member acts as agent and (paradoxically for an agent, it must be said) guarantor of the client, so that the client is considered to trade directly with the CCP. In addition, the client transfers required margin to the member, which transfers the same to the CCP. In Europe and England,

⁵⁰ This could change. See, e.g., Hoe Parson, *ICE Warms to Expanding US Clearing Model*, THE TRADE (Oct. 21, 2016, 8:11 AM), <http://www.thetradenews.com/Trading-Venues/ICE-warms-to-expanding-US-clearing-model> (Intercontinental Clearing Exchange considering direct clearing in the United States).

however, the principal-to-principal clearing model prevails. Pursuant to this model, a client trades with a clearing member on a principal-to-principal basis and the clearing member trades back-to-back with the CCP on a principal-to-principal basis.⁵¹ Under this latter model, the client transfers required margin to the clearing member's account at the CCP. Generally, the agency model exposes the client directly to the CCP and the principal-to-principal model exposes the client directly to the clearing member and the clearing member directly to the CCP. The following Figures 3 and 4 elaborate on the structures of these two models (with solid lines indicating inter-principal trading relations and dotted lines indicating other relations relating to that trading).

⁵¹ See Stan Renas, Noah Melnick & Chris Davis, *A Fork in the Road*, INT'L FIN. L. REV., Mar. 2012, at 36, 36–37.

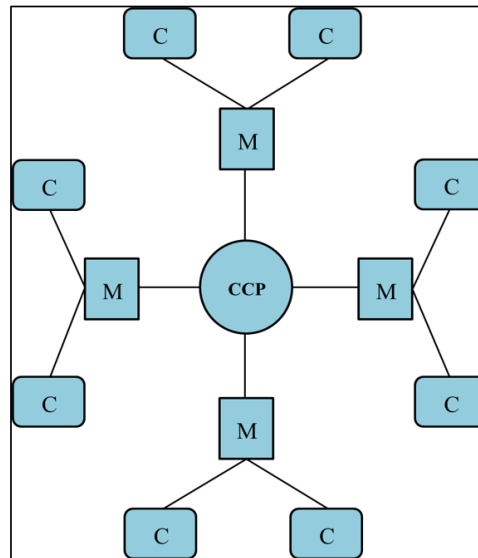
Figure 3: Agency Clearing Relationships



Member acts as agent, guarantees client to CCP, and facilitates margin transfers

M=Member, C=Client

Figure 4: Principal-to-Principal Clearing Relationships



Member trades with client and back-to-back with CCP

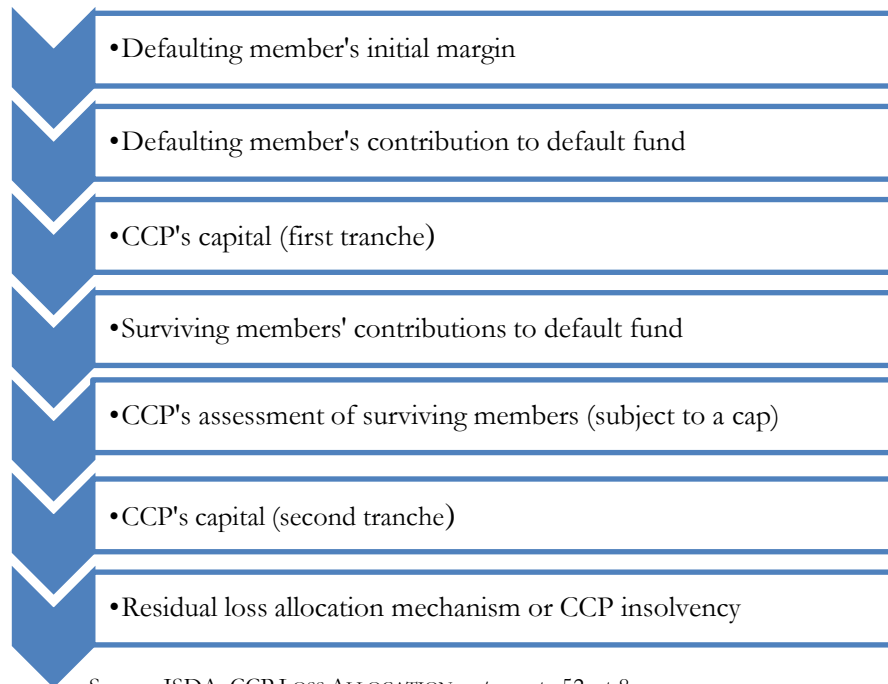
M=Member, C=Client

With regard to the credit health of a CCP, should a clearing member default, the CCP might transfer the defaulter's positions to another member (commonly via an auction) to restore the CCP's matched book or it might just close-out the defaulter's positions. In any event, the CCP will require resources to cover its potential losses until its exposures resulting from the default are eliminated and its matched book is restored. These resources are tranching as a "default waterfall" and are available in an order of priority. First, the CCP will draw on the initial margin posted by the defaulter (variation margin is normally passed through to counterparties). Should that prove inadequate—perhaps the defaulter's positions were not liquid or the number of its positions were so great that their liquidation depressed prices—a CCP will draw upon a tranche of its own capital, otherwise known as "skin-in-the-game," as well as a "default fund" (or "guaranty fund"), which is a reserve account pre-funded with CCP member contributions. The priorities between the two sources of funds will depend on the CCP's rules, but regardless of how risk of loss is allocated between them, the CCP will first utilize the full extent of a defaulting member's contribution to the default fund. Should the skin-in-the-game and the default fund not suffice, the CCP can usually draw upon contribution commitments of its members. After that, if there is no mechanism to allocate losses further or if there is but it is already exhausted, the CCP would have to draw on whatever of its own capital it has left.⁵² The foregoing is not the only way to structure a default waterfall, but the idea of successive layers of resources is common to all default waterfall structures.⁵³ The following Figure 5 depicts a sample waterfall structure of CCP resources.

⁵² See INT'L SWAPS & DERIVATIVES ASS'N, CCP LOSS ALLOCATION AT THE END OF THE WATERFALL 4 (Aug. 2013) [hereinafter ISDA, CCP LOSS ALLOCATION] (promoting variation margin gains haircutting as part of default waterfalls).

⁵³ See Louise Carter & Megan Garne, *Skin in the Game – Central Counterparty Risk Controls and Incentives*, RES. BANK AUSTL. BULL., June 2015, at 79, 80–86.

Figure 5: Sample Waterfall of CCP Resources in Event of Clearing Member Default



Source: ISDA, CCP LOSS ALLOCATION, *supra* note 52, at 8.

For some years leading up to the 2009 G20 summit, a number of derivatives clearinghouses provided central clearing services to major dealers for straightforward OTC derivatives transactions.⁵⁴ The dealers, when availing themselves of these services, did so by choice. Rules forcing central clearing of bilaterally traded derivatives, however, are a phenomenon of the post-crisis era.

Central clearing, as compared to bilateral clearing, purportedly reduces the systemic risk observed in the 2007–08 financial crisis mainly by two credit risk management techniques: multilateral netting and clearinghouse member

⁵⁴ See Christopher L. Culp, *OTC-Cleared Derivatives: Benefits, Costs, and Implications of the "Dodd-Frank Wall Street Reform and Consumer Protection Act,"* 20-2 J. APPLIED FIN. 103, 115–17 (2010) (beginning in late 1990s, central clearing services provided for a variety of OTC derivatives asset classes); Nicholas Vaus, *Central Clearing and OTC Derivatives Statistics*, BIS Q. REV., June 2011, at 26 (showing central clearing of interest rate swaps from as early as 2006).

support. With regard to multilateral netting, a CCP, as counterparty to many market participants, can net multilaterally and thus arguably reduce credit risk (as well as operational risk, which is the risk of failures in a firm's own systems, processes, or personnel impinging on the firm's ability to perform).⁵⁵ Contrast this with a bilaterally cleared environment, in which credit risk builds up within each dealer and a dealer nets only per counterparty. With regard to member support, the so-called mutualization of risk spreads the risk of loss, after exhaustion of margin, among a number of presumably strong guarantors.

The systemic benefit that market reformers perceive central clearing to provide, however, is not clear-cut. CCPs tend to focus on a limited range of asset classes and facilitate multilateral netting in connection with only a single class or just a few classes of transaction, as opposed to bilateral netting between pairs of dealers across many different classes of transaction. This tendency might actually increase credit risk in the system because focused CCP netting does away with the advantages of cross-product bilateral netting.⁵⁶ In fact, central clearing of standardized products could also increase the risks on bilateral clearing of bespoke products, by limiting the opportunity for bilateral netting between products.⁵⁷

Moreover, central clearing of derivatives diverts, but does not eliminate, credit risk. This means that while CCPs operate to absorb the credit risk of otherwise bilaterally trading counterparties and thus somehow dampen systemic risk, the systemic or risk-spreading nature of CCPs itself poses risk. For one thing, mandated central clearing concentrates considerable credit and liquidity risks in the CCPs themselves, possibly more so than in dealers.⁵⁸

⁵⁵ Stephen G. Cecchetti, Jacob Gyntelberg & Marc Hollanders, *Central Counterparties for Over-the-Counter Derivatives*, BIS Q. REV., Sept. 2009, at 45, 49.

⁵⁶ Darrell Duffie & Haoxiang Zhu, *Does a Central Clearing Counterparty Reduce Counterparty Risk?*, 1 REV. ASSET PRICING STUD. 74, 75–76 (2011) (central clearing of one derivative product may reduce netting efficiency and, when a number of derivative products are cleared, clearing by one CCP is more efficient than clearing by different CCPs); *see also* Rodney Garratt & Peter Zimmerman, *Does Central Clearing Reduce Counterparty Risk in Realistic Financial Networks?*, in FED. RES. BANK N.Y. STAFF REPORT No. 717 (Mar. 2015) (in large, scale-free networks, central clearing by one CCP will worsen expected netting efficiency).

⁵⁷ *See* Randall S. Kroszner, *Central Counterparty Clearing: History, Innovation, and Regulation*, 30 ECON. PERSP. 37, 39 (2006) (citing dealer concerns).

⁵⁸ *See, e.g.*, INT'L ORG. OF SEC. COMM'NS, SECURITIES MARKETS RISK OUTLOOK: 2014–15, at 84–90 (2014) (identifying which risks in central clearing act as potential sources of systemic risk); Dietrich Domanski, Leonardo Gambacorta & Cristina Picillo, *Central Clearing: Trends and Current Issues*, BIS Q. REV., Dec. 2015, at 59, 60, 73 (central clearing has

Certainly, the business model of a CCP differs fundamentally from that of a dealer, but the failure of a significant CCP, however less likely than the failure of a dealer, could endanger the financial system even more than the failure of a dealer. For another thing, risk mutualization should work well when the credit events affecting a CCP are isolated member failures, but when a system-wide crisis causes a failure, a capital contribution call on already-stressed members could push these members into insolvency.

In truth, there is much positive experience with central clearing of even OTC derivatives—it has existed for many years—but the command to use it is expanding its role to unprecedented size and prominence. Should a CCP grow hugely, by dominating the market for a highly traded product or by acting significantly across a number of vital products, concentration of risk would increase.⁵⁹ Considering that a CCP can deeply interconnect with market participants and guarantors, one cannot blithely dismiss the worry that a default by a sizable CCP or even an assessment of members by a CCP would destabilize the entire financial market.

IV. CENTRALIZED TRADING

All derivatives contracts, even if centrally cleared, are bilateral; any of them involves two counterparties (one of which will be a CCP, if the contract is centrally cleared). Not all derivatives contracts, however, will trade in a bilateral marketplace. The CEA generally requires that trade of a swap transaction subject to a general central clearing requirement take place on either a designated contract market (“DCM”), which essentially is an exchange registered as a contract market, or a SEF.⁶⁰ No one may operate a facility that offers a trading system or platform in which more than one market participant has the ability to trade swaps with more than one other market participant, unless the facility is registered as a DCM or SEF.⁶¹ The Exchange Act provides similarly for security-based swaps to be traded on exchanges or SBSEFs.⁶² The aim of the centralized trade execution requirement is to enhance pre-trade price transparency.

begun to reduce risks presented by uncleared markets, but may give rise to other forms of systemic risk due to concentration).

⁵⁹ See Ghamami & Glasserman, *supra* note 23, at 5.

⁶⁰ 7 U.S.C. § 2(h)(8)(A) (2012).

⁶¹ 17 C.F.R. § 37.3(a)(1) (2015).

⁶² 15 U.S.C. §§ 78c-3(h), 78c-4(a)(1) (2012).

Notably, the generally applicable requirement for centralized trading does not apply if no DCM or SEF has made the swap “available to trade” or if the transaction qualifies for the end-user exception to the clearing requirement.⁶³ A DCM or SEF can submit to the CFTC a determination that a swap is available to trade either for CFTC approval or self-certification.⁶⁴ Any swap that is made available to trade (“MAT”) by either process must trade on a DCM or SEF—not necessarily the one that made the submission—and may no longer trade bilaterally. Tellingly, a DCM or SEF which submits a determination must consider, as appropriate, the following market factors with regard to the subject swap: (i) whether there are ready and willing buyers and sellers; (ii) frequency or size of transactions; (iii) trading volume; (iv) number and types of market participants; (v) the bid/ask spread; or (vi) the usual number of resting firm or indicative bids and offers.⁶⁵ This indicates that even a basically structured derivative might not achieve sufficient interest, liquidity, or activity to be tradable in a centralized fashion. Further, the MAT requirement means that fewer swaps are subject to the CEA’s centralized trade execution requirement than are subject to the CEA’s mandatory central clearing requirement.

DCMs are familiar to market participants—commodities exchanges, not to mention securities exchanges, have long hosted futures and options trading. SEFs (like their securities world counterpart, SBSEFs), however, constitute a new form of trading venue, one invented by the Dodd-Frank Act.⁶⁶ A SEF is:

a trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or system, through any means of interstate commerce, including any trading facility, that—(A) facilitates the

⁶³ 7 U.S.C. § 2(h)(8)(B).

⁶⁴ 17 C.F.R. § 37.10(a)(1) (2013). On a self-certification submission, the DCM or SEF determination self-certifies and becomes effective after a prescribed review period, unless the CFTC objects or issues a stay.

⁶⁵ 17 C.F.R. § 37.10(b). The regulation does not prescribe a specific number of the factors to consider.

⁶⁶ 7 U.S.C. § 7b-3 (2012); *see also* 15 U.S.C. § 78c-4 (regarding SBSEFs). The CFTC granted its first permanent SEF registrations to eighteen organizations in January 2016.

execution of swaps between persons; and (B) is not a designated contract market.⁶⁷

While this might seem a lot like a DCM—both SEFs and DCMs facilitate “many-to-many” trading and real-time view of quoted prices—a SEF, unlike a public exchange, hosts trading by eligible participants only and limits its services to the execution of swap transactions. Also, the mandatory principles governing SEFs are arguably more flexible than the rules governing DCMs.⁶⁸ Notably, an entity can obtain designation as both a DCM and a SEF.⁶⁹

Exchange-traded futures generally trade in an “order-driven” market, where orders are submitted to a central limit order book and a trade is executed only when a buy and sell order in the book match.⁷⁰ As for trading swaps on a SEF, the CFTC imposes on a SEF a minimum trading functionality requirement and imposes on swaps that are subject to the centralized trade execution requirement a minimum execution methods requirement.

With regard to minimum trading functionality, a SEF must offer at least an “Order Book” for all swaps available for trade on the SEF.⁷¹ The CFTC defines an Order Book as (i) a trading facility, electronic or otherwise, or (ii) a trading system or platform in which multiple participants can enter and accept bids and offers and all participants can view the bids and offers and transact on such bids and offers.⁷² It follows from this that an Order Book is more a conceptual way and less a specific technique to match participant bids and offers.⁷³ For example, the CFTC does not instruct SEFs on how to match bids and offers.

⁶⁷ 7 U.S.C. § 1a(50) (2012).

⁶⁸ RENA D. MILLER, CONG. RESEARCH SERV., R44351, DERIVATIVES: INTRODUCTION AND LEGISLATION IN THE 114TH CONGRESS 9 (2016). A SEF must comply with fifteen core principles. 7 U.S.C. § 7b-3(f). A DCM must comply with twenty-three core principles. *Id.* § 7(d).

⁶⁹ 17 C.F.R. § 37.8 (2013).

⁷⁰ By contrast, traditional OTC derivatives trade in a “quote-driven” market, where a dealer quotes a price and a counterparty agrees or negotiates. *See* Nick Smyth & Anne Wetherilt, *Trading Models and Liquidity Provision in OTC Derivatives Markets*, 51 BANK ENG. Q. BULL. 331, 333–34 (2011).

⁷¹ 17 C.F.R. § 37.3(a)(2) (2015).

⁷² *Id.* § 37.3(a)(3).

⁷³ Voice brokerage SEFs usually consider their voice-based execution methods to be like the trading floor of a traditional exchange and thus a non-electronic “trading facility” under the definition of Order Book.

With regard to minimum trade execution methods, the CFTC coins swaps that are subject to the centralized trade execution requirement “Required Transactions.” Required Transactions, unless in “block trades,” must be executed on a DCM or SEF and, if executed on a SEF, must be executed by use of (i) an Order Book, or (ii) a request for quote (“RFQ”) system “operated in conjunction with an Order Book.”⁷⁴ In providing an Order Book or RFQ execution method for Required Transactions, a SEF can use “any means of interstate commerce,” which includes telephone, so long as the SEF meets the minimum trade execution method requirements.⁷⁵

Under an RFQ trade system, a market participant can request a price quote from at least three independent market participants and the SEF must communicate the responses of those RFQ recipients who responded to the requester. The SEF is not obligated to publish RFQ responses. In keeping with the requirement that an RFQ system operate in conjunction with an Order Book, a SEF must, at the time the requester receives the first response, inform the requester of any firm bid or offer for the requested swap resting on the SEF’s Order Books and must provide the requester with the ability to execute against such firm resting bids or offers along with any RFQ responsive orders.⁷⁶ There is no requirement that the RFQ requester choose a proposal under one particular execution method or even pick the most attractive proposal. While RFQ-based trading does not promote as much sell-side competition and pre-trade price transparency as exchange-based or even Order Book-based trading, it does promote more pricing contests and discovery than standard OTC trading.

As for block trades, the rules excuse them from the SEF Order Book or RFQ execution method requirement that otherwise apply to Required Transactions because pre-trade transparency in connection with large trades might allow traders to distort market pricing.⁷⁷ A block trade is a publicly

⁷⁴ 17 C.F.R. § 37.9 (2013).

⁷⁵ *Id.* § 37.9(a)(2)(ii).

⁷⁶ *Id.*

⁷⁷ Section 2(a)(13) of the CEA authorizes the CFTC to make swap transactions and pricing data available to the public, but also requires the CFTC to determine what constitutes a “large notion swap transaction (block trade)” for purposes of applying time delays on its public reporting and protect the identities of swap market participants and maintain the anonymity of transactions and positions of swap counterparties. 7 U.S.C. § 2(a)(13)(B), (E) (2015). The CFTC has adopted block trade rules to mitigate the concern that real-time reporting of very large trades would reduce market liquidity by opening the door to predatory traders, who would anticipate a liquidity provider’s need to hedge and exact a premium for the required hedge positions. Under these rules, block trades enjoy time

reportable swap transaction that (i) involves a swap listed on a registered SEF or DCM; (ii) occurs away from the SEF's or DCM's trading system or platform and is executed pursuant to the SEF's or DCM market's rules and procedures; (iii) has a notional or principal amount at or above the appropriate minimum block size applicable to such swap; and (iv) is reported subject to the rules and procedures of the SEF or DCM.⁷⁸ Block trades nowadays frequently trade on SEFs via a one-to-one RFQ execution method.

In contrast to Required Transactions, "Permitted Transactions" are transactions which are not subject to the centralized trade execution requirement. A SEF may offer any method of execution, even if not one of the minimum execution methods applicable for Required Transactions, for any Permitted Transaction.⁷⁹ That said, a SEF must register with the CFTC even if it accommodates trade in Permitted Transactions only, so long as it provides many-to-many trading in swaps. The listing by a SEF of a swap that is a Permitted Transaction does not, by itself, amount to a determination of MAT and does not force the OTC market into centralized trading for that swap.

Revealingly, no less than a CFTC commissioner has criticized (sharply) the CFTC's trade execution requirements for disregarding the letter and spirit of the Dodd-Frank Act. To him, the requirements misguidedly impose a centralized order-driven market model, which characterizes the futures market, on the OTC market, which almost by definition requires flexible execution methods.⁸⁰ The commissioner concludes that the swaps trading regulation framework, including the MAT process, the distinction between Required Transactions and Permitted Transactions, and the block-trade concept, rives the global OTC derivatives market into U.S. and non-U.S. market participants. This, the commissioner argues, fragments trading liquidity, with knock-on and deleterious effects on pricing and volatility, and ultimately increases systemic risk.⁸¹ The CFTC has noted that a SEF could

delays in public reporting and exemption from the trade execution requirement. 17 C.F.R. § 43.5 (2015). Block trades are executed pursuant to the rules of a SEF, but not through the SEF's Order Book or RFQ method.

⁷⁸ 17 C.F.R. § 43.2 (2013).

⁷⁹ 17 C.F.R. § 37.9(c).

⁸⁰ J. CHRISTOPHER GIANCARLO, PRO-REFORM RECONSIDERATION OF THE CFTC SWAPS TRADING RULES: RETURN TO DODD-FRANK 21–47 (Jan. 2015), <http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/sefwhitepaper012915.pdf>. The commissioner generally considers central clearing and reporting to centralized data repositories virtuous. *Id.* at 70.

⁸¹ *Id.* at 48–50.

petition the CFTC to amend the execution method regulation to include additional execution methods,⁸² but the commissioner considers this more an admission of failure to rule-make intelligently than a contribution to flexibility.⁸³ Considering that, less than seven years after passage of the Dodd-Frank Act, the U.S. President has issued an executive order to promote reconsideration of the recent financial reforms enacted by Congress and implemented by regulators,⁸⁴ it should not surprise market participants to see regulators revise, if not roll back, the CFTC's trade execution requirements.

Given the current clearing mandate and trading and execution rules, however, the traditional paradigm of dividing derivatives transactions merely into OTC derivatives and exchange-traded derivatives no longer sits easily. Nowadays, derivatives are arguably better categorized by discrete concepts of trading and clearing and can be divided into a few general types: (i) bilaterally cleared and bilaterally traded contracts—these can be non-standard or exempted from the central clearing requirement and are best considered classic OTC transactions; (ii) centrally cleared and bilaterally traded contracts—these are standardized but exempted from the centralized trading requirement and are sometimes called “cleared OTC” transactions;⁸⁵ (iii) centrally cleared contracts traded on venues for centralized trade (DCMs or SEFs)—when traded on a SEF these are sometimes called OTC transactions,⁸⁶ but might be more precisely described as SEF-listed transactions; and (iv) bilaterally cleared contracts that trade on a SEF—these are not centrally cleared, as they are exempted, and are not voluntarily submitted to a CCP. Since any many-to-many platform that offers trading in a swap, even swaps not subject to the clearing and the trade execution requirements, must register as a SEF, these contracts trade on a SEF (indeed, many liquid, short-term FX swaps, such as non-deliverable FX forwards, trade on SEFs). The following Table 1 summarizes the various types of derivatives that can trade in the market, based on clearing and trading characteristics.

⁸² Core Principles and Other Requirements for Swap Execution Facilities, 78 Fed. Reg. 33,476, 33,501 (June 4, 2013).

⁸³ GIANCARLO, *supra* note 80, at 24.

⁸⁴ Exec. Order No. 13,772, 82 Fed. Reg. 9965 (Feb. 3, 2017).

⁸⁵ See, e.g., INT'L SWAPS & DERIVATIVES ASS'N, OTC COMMODITY DERIVATIVES TRADE PROCESSING LIFECYCLE EVENTS 4 (2012) (discussing listed trades and “cleared OTC trades”).

⁸⁶ See McCauley & Wooldridge, *supra* note 36, at 33–34 (referring to OTC trades as including derivatives traded on SEFs).

Table 1: Swap Permutations Based on Trading and Clearing Traits

| Clearing Trading | Bilateral Clearing | Central Clearing |
|----------------------------|---|--|
| Bilateral Trading | Classic OTC | Cleared OTC |
| Centralized Trading | Exempted, not voluntarily cleared centrally, SEF-traded | Exchange-listed: DCM-traded SEF-listed: SEF-traded, using Order Book or RFQ |

Today's rules emphasize, and consequently increase the availability of, central clearing and centralized trading. This, in turn, has enlarged the opportunity of counterparties to dealers to unbundle core financial services inherent in OTC derivatives trading. In the past, a counterparty trading an OTC derivatives product with a dealer was locked into a relationship with the dealer for the full gamut of the trade. Now, in contrast, the counterparty can potentially pursue separate relationships for, and pricing of, clearing and trading.⁸⁷

V. DOCUMENT STANDARDIZATION

In the early years of the modern OTC derivatives market, trades were documented on, or close to, a per-transaction basis. This *ad hoc* documentation approach proved a significant obstacle to efficient trading and to development of the OTC derivatives market. To overcome this obstacle and to provide a common language via which market participants could

⁸⁷ See 7 U.S.C. § 2(h)(7)(E) (2012) (with respect to a cleared or uncleared swap executed by a swap dealer or major swap participant with a counterparty that is not a swap dealer, major swap participant, security-based swap dealer, or major security-based swap participant, counterparty has sole right to select clearing organization at which to clear such swap); 15 U.S.C. § 78c-3(g)(5) (2012) (with respect to cleared to uncleared security-based swap executed by a security-based swap dealer or major security-based swap participant with a counterparty that is not a swap dealer, major swap participant, security-based swap dealer, or major security-based swap participant, counterparty has sole right to select clearing agency at which to clear such swap).

negotiate and document OTC derivatives transactions, an association of swap dealers in the United States formed in 1985 the International Swap Dealers Association, which eventually was renamed the International Swaps and Derivatives Association (“ISDA”) and which conceived a master agreement approach for the market.

Under ISDA's master agreement approach, a standard form master agreement provides terms that apply generally to all relevant trades between a pair of signatory parties. The form contemplates certain elections, which parties negotiate and set out in a schedule. The parties can also use the schedule to add to, or even modify, the standard master agreement terms and to import by reference other publications released by ISDA. When parties trade, they can use yet other ISDA-prepared forms and documents to support their trades. ISDA's goal is not to interfere with the opportunity for trading parties to customize an OTC derivatives contract, but to significantly reduce the provisions that these parties need to specifically negotiate and draft. To state what is almost obvious, ISDA itself is not a party to a master agreement; it is, among other roles, a purveyor of forms.

When first published in 1987, ISDA's master agreement form lit a new way for the OTC derivatives industry. Critically, and without sacrificing customization across-the-board, the document represented a consensus by dealers, the sell-side of the market, on what contractual terms should govern OTC derivatives trades.⁸⁸ Moreover, these terms included methods and mechanisms to manage credit risk, a crucial and chronic concern of the OTC derivatives market. Today, ISDA's standardized master agreement, which ISDA has revamped a couple of times since 1987, and its related publications constitute the dominant manner by which market participants document OTC derivatives transactions.⁸⁹ Indeed, ISDA's documentation is so ubiquitous worldwide that ISDA arguably acts as a global finance lawmaker.⁹⁰

⁸⁸ ISDA's first steps toward standardization took place with its publication in 1985 of the “Code of Standard Wording, Assumption and Provisions for Swaps,” which ISDA revised in 1986. The Code was structured as a compendium of standard terms and provisions for U.S. dollar swaps. To this, ISDA added the “1987 Interest Rate and Currency Exchange Definitions,” covering currency and interest rate swaps in fifteen different currencies, which itself served as a companion to the “1987 Currency Interest Rate and Currency Exchange Agreement” form.

⁸⁹ See SIMON FIRTH, DERIVATIVES LAW AND PRACTICE ¶ 11-1 (2002) (“The ISDA Master Agreement is the most important of the standard form agreements used in the derivatives market and one of the most important in the financial markets generally.”).

⁹⁰ See generally Maciej Borowicz, *Private Power and International Law: The International Swaps and Derivatives Association*, 8 EUR. J. LEGAL STUD. 46 (2015) (ISDA promotes procedural,

ISDA's efforts to standardize documentation of OTC derivative trades are ongoing and their scope regularly expands to accommodate market needs, all with the aim to make negotiation and documentation of OTC derivatives transactions efficient and reliable. The architecture of ISDA documentation is modular, meaning that ISDA publishes various standardized documents and parties who are in an ISDA Master Agreement-governed relationship and interested in the subject matter of these documents are free to adopt them on a per-document basis.⁹¹

OTC derivatives, however cleared, are by nature bilaterally executed contracts designed to reflect a meeting of the minds of two specific counterparties. It could be said that standardizing OTC derivatives documentation begets a paradox: the more the OTC market relies upon a form or a standard set of terms, the less apparent room there is to negotiate bilaterally. In fact, for many years before the latest legal and regulatory reforms, a number of relatively straightforward OTC derivatives trades—such as plain vanilla interest rate swaps—required little more than negotiation of a few economic terms. In the end, however, OTC must be said to embody the potential for (if not actual) customization of a financial product, and the ability to customize, within a standardized framework, is what characterizes ISDA documentation.⁹²

VI. ISDA DOCUMENTATION ARCHITECTURE

A. Master Agreement Form

The core document in ISDA's array of documents is a "Master Agreement," which ISDA publishes as a pre-printed form. First published in

global, and administrative law-like standards and enjoys legislative, regulatory, and judicial recognition of market conventions it develops.).

⁹¹ Sometimes, two counterparties trade with each other without a negotiated ISDA Master Agreement in place. They often will do this by incorporating within their trade documentation an un-negotiated ISDA Master Agreement form (i.e., without a schedule or add-ons) and stipulating that, once a negotiated ISDA Master Agreement between them is executed, the negotiated agreement will govern their outstanding derivatives transactions.

⁹² *But see* McCauley & Wooldridge, *supra* note 36 (considering SEF-traded derivatives as OTC). If SEF-trading is considered OTC, then OTC can be any transaction that is off-exchange.

1987,⁹³ the ISDA Master Agreement form⁹⁴ was revised and republished in 1992⁹⁵ and further revised and republished with a 2002 title date.⁹⁶ (The 1992 and the 2002 agreements, when interchangeable, are hereinafter referred to as the “ISDA Master Agreement.”)⁹⁷ The 1992 agreement form comes in two formats, one intended for multicurrency and cross-border transactions and the other intended for transactions in a single currency and involving counterparties in the same jurisdiction. Not surprisingly, the cross-border, multi-currency format has generally been considered the more versatile one; thus, between the two formats, it is the one that is far more common in the market today.

The 2002 agreement form comes in only a single format, without any express dedication to, or prescribed limitation by, currency or jurisdiction. The changes to the 1992 agreement expressed in the 2002 agreement form affect neither the traditional architecture of ISDA’s documentation nor the

⁹³ In 1987, ISDA published the 1987 Interest Rate and Currency Exchange Agreement, which was designed for currency swaps and interest rate swaps in fifteen different currencies (including the U.S. dollar), and the 1987 Interest Rate Swap Agreement form, which was designed for U.S. dollar interest rate swaps only. The few significant differences between the two forms related to the multi-currency nature of the 1987 Interest Rate and Currency Exchange Agreement. The two forms together are commonly referred to as the “1987 ISDA Master Agreement.” The 1987 ISDA Master Agreement form, when published, addressed only swaps. Even after an Addendum to Schedule in 1989 and again in 1990, in each case to broaden transaction types, the 1987 Master Agreement was capable of comfortably accommodating only interest rate and currency derivatives.

⁹⁴ Unless otherwise defined, this Article refers to the master agreement form published by ISDA as a “Master Agreement form” and to a master agreement executed by parties as a “Master Agreement.” Except in a few instances necessary for clarity, this Article refers to all other ISDA-published documents without the noun “form.”

⁹⁵ INT’L SWAPS & DERIVATIVES ASS’N, 1992 ISDA MASTER AGREEMENT (1992) [hereinafter 1992 ISDA MASTER AGREEMENT], <http://assets.isda.org/media/e0f39375/3ac98971-pdf/>.

⁹⁶ INT’L SWAPS & DERIVATIVES ASS’N, 2002 ISDA MASTER AGREEMENT (2003) [hereinafter 2002 ISDA MASTER AGREEMENT], <http://assets.isda.org/media/e0f39375/d851831a-pdf/>. Although the document was published on January 8, 2003, it was entitled with the year 2002. Both the 2002 ISDA MASTER AGREEMENT and the 1992 ISDA MASTER AGREEMENT, *supra* note 95, when containing identical provisions, are hereinafter referred to as “ISDA MASTER AGREEMENT.”

⁹⁷ ISDA, together with the International Islamic Financial Market, also published in 2010 the ISDA/IIFM Tahawwut Master Agreement (“TMA”) form for cross-border transactions in *Shariah*-compliant derivatives. The TMA form is based on the 2002 ISDA Master Agreement form and was produced with a view to documenting commodity *Murabaha*-based Islamic profit-rate and currency swaps. A discussion of the TMA is beyond the scope of this Article.

fundamentals of the ISDA documentation program; rather, they reflect changes in market practice since 1992 and address apparent market needs that were either unknown or not sufficiently appreciated in 1992.

The ISDA Master Agreement form is a basis for a bilaterally negotiated contract between parties seeking to trade OTC derivatives, and parties remain free to use either the 2002 Master Agreement form or the 1992 Master Agreement form. In fact, agreements based on the 1992 form and agreements based on the 2002 form are commonly encountered in the marketplace today,⁹⁸ with the agreements based on the 1992 form enjoying legacy status. This is especially understandable when considering that the 2002 form maintains the basic structure of the 1992 form and that parties to an agreement based on the 1992 form may well have already made a number, even many, of the changes expressed in the 2002 form in their specific ISDA Master Agreement documentation.⁹⁹ (Not surprisingly, parties are often reluctant to renegotiate agreements that are already in place.) Parties entering into a fresh ISDA relationship today, however, are likely to adopt the 2002 form.¹⁰⁰ For this reason, when addressing ISDA Master Agreement issues, this Article focuses on the 2002 ISDA Master Agreement form.

The ISDA Master Agreement typically stands at the center of an ISDA relationship between a given pair of OTC derivative transaction counterparties. It is an agreement by the parties that all transactions between them made subject to the agreement will be governed by the common set of contractual terms. Regardless of version, 1992 or 2002, the ISDA Master Agreement form provides crucial legal and administrative terms that apply to all subject transactions and is the heart of ISDA's documentation architecture.

⁹⁸ The 1987 ISDA Master Agreement form is practically gone from the market.

⁹⁹ ISDA described five key changes to the 1992 Master Agreement form that were incorporated into the 2002 Master Agreement form. Press Release, Int'l Swaps & Derivatives Ass'n, Key Changes in the 2002 Master Agreement (Jan. 8, 2013), <http://www.isda.org/press/pdf/2002masterkeychanges.pdf>. With a more granular perspective, a number of other meaningful changes could have been listed.

¹⁰⁰ *But see* GuyLaine Charles, *The ISDA Master Agreement – Part II: Negotiation Provisions*, PRAC. COMPLIANCE & RISK MGMT. FOR THE SEC. INDUS., May–June 2012, at 33 (“[E]ven before the negotiations begin, the threshold issue to be agreed on by the parties will be the form of ISDA Master Agreement into which they will enter”). Dealers generally prefer the 2002 ISDA Master Agreement form, but some buy-side market participants favor the 1992 ISDA Master Agreement form. The significant ones among them can sometimes persuade dealers to employ the 1992 form. *See generally infra* Section VI.A (2002 ISDA Master Agreement form considered more creditor-friendly than 1992 ISDA Master Agreement form).

B. Schedule

Although an ISDA Master Agreement is based on a pre-printed form, a significant number of its provisions are actually negotiated. For party-specific (but usually not product- or transaction-specific) tailoring of the ISDA Master Agreement form, the parties employ a schedule (“Schedule”), which too is a pre-printed form published by ISDA. Parties to an ISDA Master Agreement add or make changes to the standard ISDA Master Agreement form and make elections anticipated in that form via input to the Schedule, rather than by direct re-write of the fixed ISDA Master Agreement form. Not surprisingly, the ISDA Master Agreement form provides that the provisions of the Schedule prevail over any inconsistent provisions in the ISDA Master Agreement.¹⁰¹ The Schedule is not a stand-alone document; it is bilaterally negotiated and is married to the pre-printed ISDA Master Agreement form; the two documents together, when signed, constitute an ISDA Master Agreement.

C. Collateral Agreement

Parties to an ISDA Master Agreement typically enter into a collateral agreement to document a security provision between them. ISDA has published various forms of collateral agreements to cover mark-to-market exposure, each of which is designed for bilateral security posting. In the past, the collateral agreement forms were sometimes modified by parties for unilateral security posting, but the regulatory introduction of two-way margining requirements will generally override this practice.¹⁰²

1. Credit Support Annex

Historically, the main collateral agreement forms published by ISDA have been the (i) 1994 Credit Support Annex (Security Interest – New York Law), which is drafted as an annex to the Schedule so as to form part of the Master Agreement and, when employed, creates a security interest in posted collateral under New York law; (ii) the 1995 Credit Support Annex (Transfer – English Law), which is also drafted as a Schedule annex, but requires transfer of the collateral ownership under English law; and (iii) the 1995 Credit Support

¹⁰¹ ISDA MASTER AGREEMENT, *supra* note 96, § 1(b).

¹⁰² For discussion of one-way and two-way margining requirements, see *infra* Section XII.B.

Deed (Security Interest – English Law), which is drafted as a stand-alone document and, when employed, creates a security interest in posted collateral under English law.¹⁰³ For many parties, however, the new rules will force an update of these forms.¹⁰⁴

The collateral agreements are used to manage counterparty credit risk by requiring collateral provision to secure the performance of the counterparty. A Credit Support Annex (“CSA”) details, among other things, the calculation of the exposure of a counterparty, the provision of collateral to cover the exposure, and the return of collateral when the collateralized exposure reduces. A CSA also specifies the types of collateral permitted (e.g., cash and government bonds), haircuts (percentage discounts applied to the mark-to-market values of collateral by type), and thresholds (levels of unsecured credit risk permitted before demands for collateral can be made).

Under the 1995 English law CSA, the collateral provider delivers assets to its counterparty as collateral by outright transfer of title in the assets.¹⁰⁵ The recipient counterparty thus becomes the legal owner of these assets. If a recipient counterparty's exposure to the collateral provider shrinks, it must return to the collateral provider an appropriate amount of equivalent (but not necessarily identical) assets. Under the 1994 New York law CSA, in contrast, the collateral recipient obtains a first ranking security interest in the collateral it collects. Either CSA is designed to maintain the collateral recipient as a secured creditor, to protect it against the insolvency of the collateral provider.

In 2013, ISDA published a 2013 Standard Credit Support Annex (“2013 SCSA”) for collateral provision, one for outright transfer of cash or securities under English law and one for creation of a security interest under New York law.¹⁰⁶ The 2013 SCSA was intended as an alternative to the earlier published CSAs and was designed to eliminate a problematic “collateral switch option”

¹⁰³ ISDA also published a 1995 Credit Support Annex (Security Interest – Japanese Law), for situations where at least one party or the collateral is located in Japan and is governed by Japanese law, and a 2014 Korean Law Credit Support Annex (Bilateral form – Loan and Pledge), which sets out two methods of collateral provision under Korean law, loan and pledge. Since the Japanese law CSA and the Korean law CSA are limited to particular jurisdictional circumstances, this Article does not address them further.

¹⁰⁴ See *infra* Section XII.B.

¹⁰⁵ The English law CSA refers to the assets provided to reduce credit risk not as collateral, but as “Credit Support.” For convenience, this Article refers to these assets too as collateral.

¹⁰⁶ See INT'L SWAPS & DERIVATIVES ASS'N, 2013 STANDARD CREDIT SUPPORT ANNEX (TRANSFER – ENGLISH LAW) (2013); INT'L SWAPS & DERIVATIVES ASS'N, 2013 STANDARD CREDIT ANNEX (SECURITY INTEREST – NEW YORK LAW) (2013).

implicit in them. The earlier-published CSAs permit posting many types of collateral and even allow a collateral provider to replace one form of provided collateral with another. This leads collateral providers to provide eligible collateral that is cheapest for them to deliver. This, in turn, could lead to a mismatch between the collateral currency and the derivative funding currency and consequently, to disputes over exposure estimations and collateral calculations.

To solve the problem, the 2013 SCSA required grouping risk exposures and offsetting collateral into same currencies from among seventeen leading currencies, known as “silos.” Currency silos were to be managed separately so that a derivative exposure in a G17 currency would trigger a variation margin delivery in the same currency.¹⁰⁷ After the currency silos were assessed and the necessary collateral posting per silo determined, the collateral flows were to be netted to a single settlement amount in a single settlement currency, the “Transport Currency,” selected by the net provider of collateral from among the G7 currencies.¹⁰⁸

The innovation notwithstanding, ISDA quickly had to rework the 2013 SCSA because, as it turned out, actual and proposed bank regulations at the time interfered with recognition of the risk reduction function of collateral, if it was not posted in the same currency as the derivative transaction.¹⁰⁹ This rendered the 2013 SCSA potentially too capital intensive for dealers. Accordingly, in 2014, ISDA published a revamped Standard Credit Support Annex (“2014 SCSA”). It also came in two formats, one for outright transfer

¹⁰⁷ The G17 currencies were (i) US Dollar; (ii) Euro; (iii) Pound Sterling; (iv) Japanese Yen; (v) Canadian Dollar; (vi) Australian Dollar; (vii) Swiss Franc; (viii) Czech Koruna; (ix) Danish Krone; (x) Hong Kong Dollar; (xi) Hungarian Forint; (xii) Norwegian Krone; (xiii) New Zealand Dollar; (xiv) Polish Zloty; (xv) Swedish Kroner; (xvi) Singapore Dollar; and (xvii) South African Rand.

¹⁰⁸ The G7 currencies are (i) U.S. Dollar; (ii) Euro; (iii) Pound Sterling; (iv) Japanese Yen; and (v) Canadian Dollar. The G7 comprises the United States, France, Germany, Italy, the United Kingdom, Japan, and Canada, but France, Germany and Italy share the Euro as a common currency, which results in only five G7 currencies.

¹⁰⁹ Under the Third Basel Accord (or Basel III), the third iteration of the international voluntary regulatory framework for banks, cash collateral can reduce a derivatives contract's exposure only if the collateral currency is the same as the derivatives contract currency. See BASEL COMM. ON BANKING SUPERVISION, BASEL III LEVERAGE RATIO FRAMEWORK AND DISCLOSURE REQUIREMENTS ¶ 25 (Jan. 2014). Separately, initial margin proposals for international application included a requirement for counterparties to apply an 8% margin haircut when the currency of the non-cleared derivatives did not match the currency of the collateral. BASEL COMM. ON BANKING SUPERVISION & THE BD. OF THE INT'L ORG. OF SEC. COMM'NS, MARGIN REQUIREMENTS FOR UNCLEARED DERIVATIVES, Annex A p. 25 (Sept. 2013), <http://www.bis.org/publ/bcbs261.pdf>.

of collateral under English law and one for creation of a security interest under New York law. Under the 2014 SCSA, the currency silos are maintained but are managed separately so that a derivative exposure in a G17 currency triggers a variation margin delivery in the exact same currency. Thus, with the 2014 SCSA, ISDA abandoned the Transport Currency settlement mechanism and favored instead a mechanism whereby counterparties could deliver or accept collateral in seventeen different currencies. This reformulation solved much of the regulatory capital expense issue generated by the 2013 SCSA, but resurrected prospective cross-currency settlement risk.¹¹⁰

2. 2016 Credit Support Documentation for Margin

In 2011, the G20 called for the Basel Committee on Banking Supervision (“BCBS”), which is part of the Bank for International Settlements, and the International Organization for Securities Commission (“IOSCO”) to develop margin requirement standards for uncleared OTC derivatives.¹¹¹ In 2013, BCBS and IOSCO jointly published a final framework, which established global standards for margin requirements for uncleared derivatives.¹¹² Generally, the framework promotes initial and variation margining for uncleared derivatives transactions, the implementation of which will transform the bilaterally cleared derivatives market—historically, a patchwork of negotiated margin arrangements. Regulators in important financial jurisdictions, including the United States and Europe, have since promulgated rules that localize the BCBS/IOSCO margin requirement, with staggered compliance dates (IM regulations are phased in before VM regulations for phase one entities).¹¹³

In 2016, ISDA published a slew of credit support documentation forms for initial and variation margin exchanges to help market participants comply with the new margin requirements for uncleared derivatives transactions. These documents include the ISDA 2016 Phase One Credit Support Annex for Initial Margin (New York Law); the ISDA 2016 Phase One Initial Margin Credit Support Deed (English Law); the ISDA 2016 Credit Support Annex

¹¹⁰ See Matt Cameron, *ISDA Forced to Rework Year-Old Standard CSA*, RISK.NET (Jan. 30, 2014), <http://www.risk.net/risk-magazine/news/2325850/isda-forced-to-rework-year-old-standard-csa>.

¹¹¹ Cannes Summit Declaration, note 18, ¶ 24.

¹¹² See BIS, MARGIN REQUIREMENTS, *supra* note 20.

¹¹³ See, e.g., CFTC Margin Rule, *supra* note 19; Final Draft RTS, *supra* note 19.

for Variation Margin (New York Law); and the ISDA 2016 Credit Support Annex for Variation Margin (English Law).¹¹⁴ A fundamental way in which the new CSAs differ from the legacy CSAs is the bifurcation of documents by function; there is now a CSA for initial margin (“IM CSAs”) and a CSA for variation margin (“VM CSAs”). For transactions subject to the uncleared derivatives transactions margin requirements, counterparties could find themselves using multiple CSAs. Depending on their needs, the regulations to which they are subject, and when they become subject to these regulations, counterparties could find themselves using a legacy CSA for transactions not subject to the margin rules (e.g., swaps executed before the relevant compliance date or after such date but with nonfinancial commercial end-users), a 2016 IM CSA for transactions subject to the new IM requirements, and a 2016 VM CSA for transactions subject to the new VM requirements. None of these documents, however, disturb the centrality of the ISDA Master Agreement to the bilateral OTC derivatives trading relationship. ISDA's new CSAs establish margin arrangements to meet new regulatory requirements applicable to uncleared swaps. They are updated versions of the legacy 1994 and 1995 CSAs. Given ISDA's prominence in OTC derivatives documentation and the dominance of the 1994 and 1995 CSA in OTC derivatives collateral documentation, there is every reason to expect that these new CSAs will become market-standard for OTC derivatives trades subject to the regulatory margin requirements.

D. Confirmations

The ISDA Master Agreement itself is not an economic transaction, nor is it even a commitment to enter into such a transaction. Rather, it establishes omnibus rules for all the transactions between the signatory parties subject to

¹¹⁴ Other documents include (i) the ISDA Regulatory Margin Self-Disclosure Letter (designed to assist market participants with the exchange of the necessary information to determine if and when their trading relationship will become subject to regulatory margin requirements for non-cleared derivatives); (ii) the 2016 Phase One Credit Support Annex for Initial Margin (Japanese Law) and Trust Scheme Addendum; (iii) the ISDA 2016 Credit Support Annex for Variation Margin (Japanese Law); (iv) Recommended Amendment Provisions for the ISDA New York Law 2016 Phase One Credit Support Annex for Initial Margin with respect to Japanese Securities; and (v) Recommended Amendment Provisions for New York Law and English Law Credit Support Annexes for Variation Margin with respect to a Japanese Party. *ISDA Bookstore: ISDA Credit Support Documentation, INT'L SWAPS & DERIVATIVES ASS'N*, <http://www.isda.org/publications/isdacredit-users.aspx>.

it. The economic terms of each trade subject to an ISDA Master Agreement are negotiated separately from the terms of the Master Agreement and usually by different personnel than those who negotiated the ISDA Master Agreement. Traditionally, counterparties negotiated OTC derivatives transaction terms and, if so inclined, shopped among dealers for best prices by telephone. Once terms were agreed upon, the counterparties considered their trade effective and the counterparties would then confirm their trade terms in writing, often simply by fax.

Telephonic trading continues for a number of involved transactions, but many straightforward derivatives moved to electronic trading even before the recent reforms. The primary way dealers conduct electronic trading is by conveying bid/ask quotes, regarding which negotiation of basic variables, including price, can take place on electronic bulletin boards. Email and instant message trading also occurs. The bulletin boards can take the form of a single-dealer platform, whereby one dealer displays quotes (which can prove indicative only) and terms for various basic products or where a customer can ask the dealer for a quote on a more customized product. One customer does not see the prices at which another customer trades and this type of platform allows for only bilateral trading. Alternatively, the bulletin boards can take the form of a multi-dealer platform, on which multiple dealers display quotes allowing a customer to compare prices or on which a customer can request and upon receipt compare, quotes from multiple dealers.¹¹⁵

The ISDA Master Agreement form states that it includes not only the Schedule but also the documents and other evidence exchanged between the counterparties confirming transactions that are or will be governed by it (“Confirmations”).¹¹⁶ This formulation accommodates a Confirmation that only evinces a binding trade which has already taken place—important for jurisdictions in which a writing is not required to create an enforceable derivatives trade—or that is, in fact, the instrument which binds the counterparties to a trade—relevant at least for jurisdictions in which a writing is required. Thus, the terms of the ISDA Master Agreement form, individualized by and for the counterparties via the Schedule, govern transactions documented in the Confirmations. To promote a liquid market by making product transaction documentation more efficient, ISDA

¹¹⁵ Smyth & Wetherilt, *supra* note 70, at 334–36.

¹¹⁶ ISDA MASTER AGREEMENT, *supra* note 96, pmbl.

publishes various Confirmation forms for a wide range of product types in various derivative asset classes.¹¹⁷

The ISDA Master Agreement form provides that the terms of a Confirmation prevail over any inconsistent provisions in the ISDA Master Agreement.¹¹⁸ This makes sense given the transaction-specific nature of a Confirmation. Counterparties, however, are typically wary of adopting overly broad terms via a Confirmation, for fear that the Confirmation will inadvertently override standard terms of the ISDA Master Agreement.

Confirmations center on the economic terms of the trades, such as price, notional amount, underlying, and settlement dates. That said, various non-economic terms can also be included in Confirmations, so Confirmation negotiations can sometimes revolve on terms that do not go to the heart of the trade. For example, parties negotiating a credit spread option can get hung up on what data points should be used to measure credit spread.

Delays in exchange of Confirmations are not considered benign today. Prior to the 2007–08 financial crisis, they were surprisingly well-tolerated—dealers could find themselves carrying on their books many live trades that had not yet been documented. Since then, regulators have highlighted Confirmation exchange lag as a contributing factor to systemic risk.¹¹⁹ This is because, in the event of counterparty collapse, and particularly in jurisdictions that require a written contract for a derivatives trade, the lag can undercut the enforceability of close-out netting, a vital feature of OTC derivatives

¹¹⁷ ISDA lists, without limitation, the following OTC derivative product types (sometimes called asset classes): interest rate, credit, equity, FX, energy, commodity, developing, and structured products. *Asset Classes*, INT'L SWAPS & DERIVATIVES ASS'N, <http://www2.isda.org/asset-classes>.

¹¹⁸ ISDA MASTER AGREEMENT, *supra* note 96, § 1(b).

¹¹⁹ COMM. ON PAYMENT & SETTLEMENT SYS. & EURO-CURRENCY STANDING COMM. OF THE CENT. BANKS OF THE GRP. OF TEN COUNTRIES, BANK FOR INT'L SETTLEMENTS, OTC DERIVATIVES: SETTLEMENT PROCEDURES AND COUNTERPARTY RISK MANAGEMENT 28–30 (1998), www.bis.org/cpmi/publ/d27.pdf; cf. Das Satyajit, *Regulation and the Derivatives Markets*, FIN. TIMES (June 7, 2010), <http://www.ft.com/content/833a0994-6e32-11df-ab79-00144feabdc0> (“In 2006, Alan Greenspan expressed shock and horror at the state of settlements in the credit derivative market. He expressed surprise that banks trading CDS seemed to document trades on scraps of paper. The ex-Chairman, perhaps unfamiliar with the reality of financial markets, had difficulty reconciling a technologically advanced business with this appalling operational environment.”). It bears noting that overly speedy Confirmation exchanges can themselves create accuracy risk—not all terms that Confirmations require are necessarily known at trade time. For example, an investment manager may execute a block trade, but needs time (including for compliance verifications) to allocate it among client positions.

documentation.¹²⁰ The lag can also delay detection by counterparties of inconsistent views of transaction terms, increasing the potential for disputes and decreasing the reliability of perceived positions.

In recent years, regulatory pressure has forced parties to reduce backlogs in Confirmation exchanges. Today, after various phase-ins, the leading regulators require uncleared OTC derivatives transactions involving financial institutions and other significant market participants to be confirmed, depending on the nature of the counterparty and the transaction, on the first business day following the date of trade (colloquially known as T+1) or the second such day (T+2).¹²¹ This is not as simple to achieve as it may seem and, for many, required major reworking of trade processing flows.¹²²

1. Long-form and Short-form Confirmations

Traditionally, ISDA published two forms of Confirmation: long-form and short-form. A long-form Confirmation contains all the terms needed to document the economic terms of a transaction. A short-form Confirmation does not contain all such terms and, instead, incorporates terms contained in one or more other ISDA documents, such as ISDA-published definitions.¹²³

The reason for the two types of Confirmation has much to do with how OTC derivative products evolve in the market. When a market in a new type of transaction develops, ISDA publishes a long-form Confirmation to document it. If and when a market for this type of transaction matures—that is, when a market consensus on terms of the transaction type emerges—

¹²⁰ For discussion of close-out netting, see *infra* Section VII.D.

¹²¹ 17 C.F.R. § 23.501(a) (2012); Commission Delegated Regulation 149/2013 of Dec. 19, 2012, Supplementing Reg. (EU) No 648/2012 of the European Parliament and of the Council with Regard to Regulatory Technical Standards on Indirect Clearing Arrangements, the Clearing Obligation, the Public Register, Access to a Trading Venue, Non-Financial Counterparties, and Risk Mitigation Techniques for OTC Derivatives Contracts Not Cleared by a CCP, 2012 O.J. (L 52) 11 (EU). This is a big change from the pre-2007–08 financial crisis era, when the industry strove for Confirmations for complex transactions to be issued as late as T+10 and executed by as late as T+30. See News Release, Int'l Swaps & Derivatives Ass'n, Industry Groups Urge Continued Focus on Credit Derivative Efforts; Confirmation Backlog Reduction Exceeds Target (July 19, 2006), <http://www.isda.org/press/press071906.html>.

¹²² See Krishnan Ranganathan, *Timely Confirmations in OTC Derivatives: A Herculean Task?*, TABB F. (Sept. 8, 2014), <http://tabbforum.com/opinions/timely-confirmations-in-otc-derivatives-a-herculean-task> (explaining why compliance with confirmation mandates is onerous).

¹²³ For discussion of ISDA-published definitions, see *infra* Section VI.E.

ISDA will publish a set of definitions, together with one or more short-form Confirmations. The short-form Confirmation is usually found in the rear of the booklet in which the set of relevant definitions is published.

2. Master Confirmation Agreements

To standardize and simplify negotiation of Confirmations further and to promote, in some instances, electronic Confirmations, ISDA and others have developed form Master Confirmation Agreements (“MCAs”) for certain high-volume products (e.g., equity swaps and options and credit default swaps) in several jurisdictions (e.g., United States, Europe, and Japan). By employing an MCA, which is a bilaterally negotiated and executed agreement, parties streamline transaction documentation. MCA parties confirm a transaction by exchanging a simple supplement to the MCA. Most of the terms of the transaction, which absent the MCA would have been included in a Confirmation document, are contained in a negotiated annex to the MCA.

An ISDA MCA will contain a set of “General Provisions,” or common terms applicable to all transactions documented under the MCA. Counterparties interested in trading a product with an available MCA form can employ that form, which incorporates a relevant set of Definitions and can customize it with a “General Terms Confirmation” exhibit, forms of which ISDA also has published. After the parties have agreed upon an MCA, as modified by a General Terms Confirmation, for a particular product, all the parties need to do when ready to trade that product is to confirm the economic terms with a “Transaction Supplement.” Thus, the Confirmation of each transaction under an MCA incorporates the terms of MCA, including the General Terms Confirmation and the economic details of the trade set out in the Transaction Supplement.

Practically, negotiating MCAs can (but need not) be fraught, as the structures of the trades into which parties intend to enter may not conform precisely to the structures anticipated by the form. Nonetheless, MCAs, once in place, do speed up the process of confirming trades, as they can reduce Confirmations to just a few confirmable fields (around twenty, but the numbers vary by product). The pace of development of MCAs has increased in the last few years, but some buy-side market participants are wary of dealers revising ISDA-prepared MCAs or of dealer-prepared MCAs. Also, as MCAs are often drafted to address certain regional issues and developments, a multinational market participant might find that it needs to enter into multiple MCAs for a given product.

3. *Electronic Confirmations*

For certain OTC derivative asset classes, such as interest rate swaps and credit derivatives, the industry has moved significantly to electronic Confirmations; certain other asset classes, such as equity derivatives, have also begun to move to electronic Confirmations.¹²⁴ Electronic Confirmations, in contrast to paper Confirmations, quicken Confirmation execution and leave an easily discoverable documentation trail, but their widespread adoption requires appropriate platforms, which are not necessarily common in buy-side communities, as well as templates which are not necessarily available.¹²⁵ On a technical level, the process of electronically matching Confirmations involves each of the two trading counterparties entering its view of the trade into an electronic matching platform by spreadsheet upload, electronic messaging, or use of the platform's user interface. A platform typically includes a number of trade detail fields that need to be completed by the counterparties, and the number of fields depends on the type of derivatives product. If both counterparties' inputs match completely, the system will show a confirmed trade, but if the inputs do not, the system will alert the counterparties and the trade will be confirmed only after the parties fix the error and match. Thus, electronic processing delivers on a classic dealer goal of “straight-through processing”—the capture of transaction details upon transaction formation, without the need to re-enter data.

E. Definitions

The ISDA Master Agreement form, while covering an impressive amount of ground, is a relatively succinct document. It also is not product-specific. This means that market participants frequently require other documentation to transact in a specific product, especially if wishing to focus their

¹²⁴ One data researcher reports that the weighted average of electronically confirmed trades, as a percentage of total trade volume, in the third quarter of 2015 was approximately 99% for credit derivatives, 92% for interest rate derivatives, and 40% for equity derivatives. MARKIT, METRIC TREND REPORT: Q3 2015, at 6, 12 (2015).

¹²⁵ See Nick Fry, *OTC Trade Documentation: A Revolution Awaits*, DERIVSOURCE (May 23, 2013), <http://derivsource.com/articles/otc-trade-documentation-revolution-awaits> (OTC derivatives transactions will reduce in number, but there will always be a non-cleared portion of the OTC market, which makes regulations relating to timely confirmation critical).

Confirmations on economic terms. In response to this need, ISDA has published important terms for market participants in various documents.

ISDA has developed a series of booklets for various popular products that contain product-specific definitions, which are meant to reflect market convention and terminology (“Definitions”).¹²⁶ Generally, Definitions are intended for explicit incorporation in Confirmations, though occasionally some are incorporated in the Schedule. ISDA periodically updates its definitional booklets to reflect market events and new conventions in the underlying products, many of which increase in sophistication over time. Definitional booklets cover products such as interest rate, currency, commodity, credit, equity, and bond derivatives and their variants. Notably, parties are free to revise Definitions; they usually do this in the Confirmation or MCA incorporating the Definitions, but sometimes in the Schedule.

1. 2006 ISDA Definitions

Among the sets of Definitions published by ISDA, the 2006 ISDA Definitions (“2006 Definitions”), an update of ISDA’s 2000 ISDA Definitions, bear particular note. These Definitions provide the basic framework for documentation of interest rate and currency derivatives transactions and are intended for use in Confirmations of such transactions. This inescapably makes the 2006 Definitions noteworthy; whether measured by notional amount outstanding or by market value, the largest global OTC derivatives market by asset class is the one for interest rate derivatives, and the next largest is the one for foreign exchange derivatives.¹²⁷

While the purpose of the 2006 Definitions is to provide a documentation framework for interest rate and currency derivatives transactions, parties

¹²⁶ Referring to the most recent version of published Definitions and omitting appendices and supplements, ISDA has published the (i) 2011 ISDA Equity Derivatives Definitions; (ii) 2008 ISDA Inflation Derivatives Definitions; (iii) 2007 ISDA Property Index Derivatives Definitions and Forms of Confirmation; (iv) 2006 ISDA Definitions; (v) 2005 ISDA Commodity Definitions; (vi) 1998 FX and Currency Option Definitions; (vii) 1997 ISDA Bullion Definitions; (viii) 1997 ISDA Short Form Bullion Definitions; and (ix) 1987 ISDA Government Bond Definitions.

¹²⁷ BIS, STATISTICAL RELEASE: END-DECEMBER 2015, *supra* note 24, at 3; BANK FOR INT’L SETTLEMENTS, SEMIANNUAL OTC DERIVATIVES STATISTICS (last updated Sept. 18, 2016) [hereinafter BIS, SEMIANNUAL STATISTICS], <http://www.bis.org/statistics/derstats.htm>; BANK FOR INT’L SETTLEMENTS, TRIENNIAL CENTRAL BANK SURVEY OF FOREIGN EXCHANGE AND DERIVATIVES MARKET ACTIVITY IN 2013 (last updated Sept. 13, 2015) [hereinafter BIS, TRIENNIAL SURVEY], <http://www.bis.org/publ/rpfx13.htm>.

entering into other types of derivatives transactions might also adopt the 2006 Definitions in their Confirmations (or Schedule) even for these transactions.¹²⁸ For example, parties documenting a commodity or an equity swap, where the counterparty under one leg of the swap is subject to floating or fixed rate payment obligations, might incorporate the 2006 Definitions to the Confirmation. This will allow them to more easily document the rate-based payments.¹²⁹

2. 2011 Equity Derivatives Definitions

Another noteworthy set of Definitions published by ISDA is the 2011 ISDA Equity Derivatives Definitions (“2011 Equity Derivatives Definitions”).¹³⁰ These are meant to replace the 2002 ISDA Equity Derivatives Definitions, which do not lend themselves to standardization and electronic trade confirmation because they leave many legal terms open to party elections. This new set of Definitions is important in the market because whether by notional amount outstanding or by market value, the global OTC equity derivatives market is significant—it is the third largest OTC derivatives market (the largest being the interest rate derivatives market and the second largest being the foreign exchange derivatives market).¹³¹ The OTC equity derivatives market is also quite varied with a range of frequently-traded products, such as swaps, forward options, and barrier options. Additionally, in the past, OTC equity derivatives transactions referred only to basic equity underlyings or rates, such as single stocks or stock market indices, but today a transaction can address such underlyings as depository receipts, dividends, and variance (a form of volatility).

The 2011 Equity Derivatives Definitions, which ISDA has published in machine readable format (Financial products Markup Language (or FpML)) to facilitate electronic confirmations and trade reporting, exhibit a multi-level architecture of Confirmation. They comprise four key elements: “Main Book,” “Appendix,” “Transaction Matrix,” and “Transaction Supplement.”

¹²⁸ ISDA acknowledges use of the 2006 Definitions for multiple product types. INT'L SWAPS & DERIVATIVES ASS'N, INTRODUCTION TO THE 2006 ISDA DEFINITIONS, at vi (2006), <http://www.isda.org/publications/intro/2006isdadefs-INTRO.pdf>.

¹²⁹ *See id.*

¹³⁰ INT'L SWAPS & DERIVATIVES ASS'N, 2011 ISDA EQUITY DERIVATIVES DEFINITIONS (2011).

¹³¹ *See* BIS, STATISTICAL RELEASE: END-DECEMBER 2015, *supra* note 24; BIS, SEMIANNUAL STATISTICS, *supra* note 127; BIS, TRIENNIAL SURVEY, *supra* note 127.

The Main Book sets out core definitions and a menu of standard operative provisions, which will not change materially over time. The Appendix to the Main Book comprises definitions and operative provisions and contains several elections and fallbacks for different equity derivative products. ISDA will update the Appendix over time to accommodate market needs as products evolve or emerge. The Transaction Matrix enables combinations of various elements of the Main Book and the Appendix to establish the operative terms of a particular type of transaction. Finally, the Transaction Supplement, or “T-Supp,” is a short-form confirmation and contains only the economic terms of a given trade (e.g., underlying and settlement dates and amounts). Thus, an equity derivatives transaction documented under the 2011 Equity Derivatives Definitions will be structured to combine transaction-specific terms built on a base of uniform product and uniform product-type definitions and provisions.¹³²

The 2011 Equity Derivatives Definitions are highly structured and represent a significant remake of ISDA's traditional methodology for documenting equity derivatives trades. Indeed, they point to a new future in equity derivatives transaction processing and documentation; the matrix format obviates the need for equity derivatives MCAs, which are lengthy and not necessarily suitable for electronic processing. The extent and rate of uptake of these Definitions, however, will determine whether and how quickly that future arrives.

3. 2014 Credit Derivatives Definitions

Finally, another set of Definitions worth mentioning, given the lingering effects of the 2007–08 financial crisis, is the 2014 ISDA Credit Derivatives Definitions (“2014 Credit Derivatives Definitions”).¹³³ These Definitions address the highly influential credit derivatives market and introduce terms that were developed in response to a host of credit derivative issues in Europe revealed in recent years. Credit derivatives are designed to allocate credit exposure to obligors—corporate or sovereign—and the credit derivatives market is important at least because of its role in quantifying credit

¹³² Gil Koenigsberg & Nick Fry, *Electronic Matching: The Challenges Facing the OTC Equity Derivative Market*, DERIVSOURCE (May 15, 2009), <http://derivsource.com/articles/electronic-matching-challenges-facing-otc-equity-derivative-market>.

¹³³ INT'L SWAPS & DERIVATIVES ASS'N, 2014 ISDA CREDIT DERIVATIVES DEFINITIONS (2014).

risk and in bank management of risk capital.¹³⁴ The 2014 Credit Derivatives Definitions replaced the 2003 ISDA Credit Derivatives Definitions (“2003 Credit Derivatives Definitions”), which various credit events that took place in the 2007–08 crisis and its aftermath made seem wan.¹³⁵

F. Protocols

ISDA publishes “Protocols” to allow for easy amendment of a number of contracts with a number of different counterparties for matters of general concern. For example, if a dealer would want to amend all of its standard

¹³⁴ See Timothy F. Geithner, President & Chief Exec. Officer, Fed. Reserve Bank of N.Y., Remarks at the New York University Stern School of Business Third Credit Risk Conference: Implications of Growth in Credit Derivatives for Financial Stability (May 16, 2006), <https://www.newyorkfed.org/newsevents/speeches/2006/gei060516.html>.

¹³⁵ For instance, the 2014 Credit Derivatives Definitions introduce “Government Intervention” with respect to non-U.S. financial reference entities as a “Credit Event.” This Credit Event became obviously necessary in 2013, when the Dutch government nationalized SNS Bank and expropriated the bank’s subordinated debt (a “bail-in”). The Credit Event of “Restructuring” under the 2003 Credit Derivatives Definitions did not explicitly cover this action, something that led to significant market uncertainty. Under the 2014 Credit Derivatives Definitions, a government action or pronouncement that results in binding changes to certain obligations of a reference entity, such as expropriation, now triggers the Credit Event of Governmental Intervention. The 2014 Credit Derivatives Definitions also isolate senior debt from subordinated debt so that a governmental intervention or restructuring Credit Event that affects only subordinated debt will not trigger credit default swaps referring to senior debt. Similarly, the 2014 Credit Derivatives Definitions address expropriation of all outstanding debt (or subordinated debt) or a restructuring by way of debt exchange when the new bonds do not satisfy deliverability criteria. This became obviously necessary when, in 2012, Greece enacted a law forcing on holders of Greek law-governed sovereign-issued bonds a next-day debt exchange. An ISDA “Credit Derivative Determination Committee” (which makes determinations of credit events in accordance with a 2009 ISDA Credit Derivatives Determinations Committees and Auction Settlement Supplement to the 2003 ISDA Credit Derivatives Definitions (the “Supplement”)) declared a Credit Event to have occurred, but the consequent bond-pricing auction (held pursuant to the Supplement to determine a settlement price with regard to a credit derivatives transaction following a Credit Event) could not reference the pre-exchange bonds since they had disappeared from the market. The auction succeeded by referring to long-dated exchange-traded bonds that had traded close to the prices of the pre-exchange bonds, but the situation exposed a flaw in ISDA’s documentation. The 2014 Credit Derivatives Definitions now include “Asset Package Delivery” provisions, which generally provide that should a governmental intervention or restructuring credit event take place, a deliverable obligation can be an obligation that would have been deliverable if the auction had been held before the event or, in the case of a sovereign issuer, benchmark reference obligation of the sovereign identified by ISDA.

agreements in a certain manner, it normally would need to negotiate with each of its counterparties bilaterally. This could easily become an expensive and time-consuming undertaking. A Protocol allows parties to amend all of their contracts multilaterally and thus offers significant savings of costs and time.

A Protocol works by having an ISDA Master Agreement party adhere to it with delivery of an “Adherence Letter” to ISDA. When the party does this, it effectively agrees to amend all of its covered contracts in a particular way with all its similarly-adhering acting counterparties. The Protocol provides that any of these contracts is amended only if the counterparty to such contract adheres to the Protocol. When ISDA receives Adherence Letters from market participants, it posts them, together with a list of parties adhering to a given Protocol. This allows adhering parties to identify the counterparties with which it has amended its contracts and the extent of the amendments.

With annexes, a Protocol can include a range of amendments. In its Adherence Letter, each party can choose which amendments it wishes to implement for its contracts by specifying which Protocol annexes it wishes to apply to its contracts. The Protocol provides that the relevant contract is amended only by those amendments that both parties have agreed to implement.

G. Annexes

ISDA and certain commodity industry associations have published form annexes to the ISDA Master Agreement for parties seeking to trade in physical commodities, including power, gas, oil, refined petroleum products, coal, and emissions. These annexes are intended to reflect prevailing market terms for these industries. As a result of these physical underlying annexes, counterparties which have adopted them perceive themselves as able to net payments across physical and financial transactions.

H. Bridges

ISDA also has published forms of cross-agreement bridge agreements (“Bridges”), which provide for cross-agreement default, netting, and margining with various industry-standard master agreements (i.e., not an ISDA Master Agreement). For example, the 2001 ISDA Cross-Agreement Bridge is designed to allow parties to an ISDA Master Agreement, under certain circumstances, to terminate transactions they have documented under

an industry-standard agreement (not ISDA's) and to include the close-out amounts of these transactions in the close-out calculations under the ISDA Master Agreement.¹³⁶

I. Amendments

From time to time, ISDA publishes form amendments to the ISDA Master Agreement forms. Parties are free to incorporate these amendments into their ISDA Master Agreement. Of course, parties are free to amend their ISDA Master Agreement via the Schedule as they see fit, but many market participants will prefer the vetting and consideration of ISDA to bilateral drafting when an ISDA amendment is available. Notably, to address the impact of the U.S. Foreign Account Tax Compliance Act ("FATCA")¹³⁷ on OTC derivatives transactions, ISDA conflated the concepts of protocol and amendment and published a protocol to enable parties to amend the tax provisions of their ISDA Master Agreements, so that the payee counterparty would be responsible for FATCA withholding tax.¹³⁸

VII. STRUCTURAL STRATEGIES

A major consideration of any counterparty when trading uncleared OTC derivatives is the other counterparty's credit risk. (Obviously, the risk of default by a counterparty's own self is also a significant consideration.) In a derivatives contract, where both counterparties can have future payment or delivery obligations, depending on the underlying's performance, either counterparty has the potential to be a debtor or creditor. In many swaps, for example, counterparties have reciprocal obligations to pay or deliver, often on the same settlement dates. A counterparty, which is a contingent creditor, is necessarily wary that insolvency laws will excuse all or some of the other counterparty's obligations. The less creditworthy one counterparty, the more worried about this risk the other counterparty.

To limit credit risk, ISDA has structured the ISDA Master Agreement form to reduce a solvent counterparty's exposure to an insolvent counterparty

¹³⁶ INT'L SWAPS & DERIVATIVES ASS'N, 2001 ISDA CROSS-AGREEMENT BRIDGE (2016).

¹³⁷ 26 U.S.C. §§ 1471–1474 (2012). *IRS Circular 230 Disclosure*: The author hereof does not provide tax advice and any discussion of U.S. tax matters herein cannot be used for the purpose of avoiding penalties or for promoting, marketing, or recommending to another any transaction or matter addressed herein.

¹³⁸ INT'L SWAPS & DERIVATIVES ASS'N, 2012 ISDA FATCA PROTOCOL (2012).

and to curb the reach of the insolvent counterparty's liquidator. It does this with a number of documentation strategies, as follows:

A. Single Agreement

The ISDA Master Agreement form states that all transactions between the parties are entered into in reliance on the fact that the Master Agreement (which includes the Schedule) and all Confirmations (which can incorporate Definitions) between the parties form a single agreement between the parties.¹³⁹ This “single agreement” approach is intended to protect a counterparty from the bankruptcy trustee of the other counterparty “cherry-picking” among transactions.

Under the bankruptcy laws of many jurisdictions, a bankruptcy trustee generally can assume executory contracts that are favorable to the bankrupt counterparty (e.g., a swap in which the bankrupt counterparty is in-the-money) and abrogate executory contracts that are onerous to the bankrupt counterparty (e.g., a swap in which the bankrupt counterparty is out-of-the-money).¹⁴⁰ Assumption of a favorable contract, which requires continued performance under the contract, presumably preserves cash for the bankruptcy estate, whereas abrogation of an unfavorable contract leaves the creditor counterparty with a claim for damages against the bankruptcy estate. The claim will be for losses suffered by the creditor counterparty, presumably the mark-to-market value of the abrogated contract. To the extent the creditor counterparty does not enjoy reliable credit support (e.g., perfected collateral) to cover the losses, it will be an unsecured creditor of the bankrupt counterparty.

The ability of a trustee to pick and choose (i.e., to cherry pick) among transactions is a dread of OTC derivatives counterparties, which need to rely on the value of their transactions. The single agreement structure of the ISDA Master Agreement is designed to prevent the bankruptcy trustee from selecting piecemeal the trades it will honor and force the trustee to make only a single election: accept or reject all the outstanding transactions governed by a given ISDA Master Agreement. Whether this works depends on the enforceability of the single agreement provision under the law applicable to the failed counterparty.

¹³⁹ ISDA MASTER AGREEMENT, *supra* note 96, § 1(c).

¹⁴⁰ *See, e.g.*, 11 U.S.C. § 365(a) (2012); *see also* U.K. Insolvency Act 1986 c. 45, § 178.

B. Flawed Asset

A distinguishing feature of the ISDA Master Agreement form is its so-called flawed asset approach, which qualifies in a significant manner a counterparty's obligations to make transaction payments or deliveries otherwise required.¹⁴¹ Section 2(a)(iii) of the ISDA Master Agreement form provides, in pertinent part, that any obligation of either counterparty to make a payment or delivery under a Confirmation is subject to a proviso that “no Event of Default or Potential Event of Default with respect to the other [counter]party has occurred and is continuing” This means that, as a matter of contract, a counterparty's obligations are conditioned on the absence of an outstanding “Event of Default,” or event which, with the lapse of time or provision of notice, would become an Event of Default (“Potential Event of Default”), in either case with respect to the other counterparty.¹⁴² Notably, with regard to Potential Event of Default, Section 2(a)(iii) does not establish a materiality threshold and so could refer to even a relatively trivial default that the non-defaulting counterparty might normally ignore.¹⁴³

To put the meaning of Section 2(a)(iii) another way, if on a scheduled settlement date an Event of Default with respect to the other counterparty has occurred and is continuing, the non-defaulting counterparty's payment or delivery obligation does not arise. The defaulting counterparty gets no leeway; its payment or delivery obligations, to any extent, are expected to continue. Section 2(a)(iii) protects a non-defaulting counterparty from adding to its exposure the defaulting counterparty and also acts as a further stratagem to preempt cherry picking. For a bankrupt defaulting counterparty, a profitable derivatives trade is “flawed” by the conditionality of the further performance by the non-defaulting counterparty; this could discourage an insolvency trustee of the defaulting counterparty from assuming the profitable trades, while disowning the losing ones.

On the face of things, in the case of an outstanding Event of Default, the non-defaulting counterparty can either (i) terminate with respect to all transactions, as it is contractually entitled to do upon an Event of Default

¹⁴¹ Some consider the ISDA Master Agreement's close-out netting mechanism, *see infra* Section VII.D, also to be a “flawed asset” approach. Section 2(a)(iii), however, plays no role in close-out netting; the two strategies for addressing credit risk are separate and distinct.

¹⁴² For discussion of Events of Default, *see infra* Section VIII.A.

¹⁴³ To simplify, Potential Events of Default are not discussed further, save at *infra* note 151.

with respect to the defaulting counterparty;¹⁴⁴ or (ii) withhold payments otherwise due and payable to the defaulting counterparty until the Event of Default is resolved. This latter possibility can be particularly attractive to the non-defaulting counterparty when the Event of Default is unlikely to be remedied within a short period of time, such as with insolvency. This is especially true regarding insolvency at a time of financial crisis, when the defaulting counterparty is even less likely to recover, if at all. An out-of-the-money, non-defaulting counterparty should be happy to refrain from legitimately meeting its obligations unless and until the market turns, at which point it could terminate with respect to all outstanding transactions and act the creditor.

Notably, the central clearing mandate will impact on Section 2(a)(iii). A CCP that accepts ISDA Master Agreements for client clearing purposes imposes rules on its members.¹⁴⁵ These rules will generally operate to limit a client's ability to unilaterally terminate cleared transaction with the clearing member or avoid making scheduled settlement payments, regardless of the contractual terms between the client and the member. The outcome is that a CCP, when accepting an ISDA Master Agreement as a basis for client clearing, will operate to limit the reliability of Section 2(a)(iii) for cleared transactions. Thus, for example, the ISDA/FIA Client Cleared OTC Derivatives Addendum form, jointly published by ISDA and the Futures Industry Association (“FIA”) to enable central clearing of OTC derivatives between a dealer and its client documented under an already existing trading agreement (such as an ISDA Master Agreement) and which works by overriding the contravening terms of the already existing Agreement, disables client protections of the type found under Section 2(a)(iii) of the ISDA Master Agreement.¹⁴⁶

¹⁴⁴ For discussion of right to terminate upon occurrence of an Event of Default, see *infra* Section VIII.A. Section 2(a)(iii) would have no function if the Event of Default caused an automatic early termination of all outstanding transactions. For discussion of such automatic early termination, see *infra* Section VIII.D.

¹⁴⁵ See *supra* Section III.

¹⁴⁶ INT'L SWAPS & DERIVATIVES ASS'N & FUTURES INDUS. ASS'N, ISDA/FIA CLIENT CLEARED OTC DERIVATIVES ADDENDUM (EU PRINCIPAL-TO-PRINCIPAL ARRANGEMENTS) § 8(b) (2016). For further discussion of this agreement, see *infra* Section XII.A.

1. Flawed Asset Complications

The contractual language of ISDA's flawed asset concept is not without complication. For one, the negative impact of suspension¹⁴⁷ on the defaulting counterparty (and its creditors) can be ruinous; withholding payments to the defaulting counterparty could dry up its liquidity, cause a cascade of defaults with other trading partners, and even lead to its collapse. Inexplicably, Section 2(a)(iii) allows suspension even if the defaulting counterparty has no payment or delivery obligations to make to the non-defaulting counterparty (e.g., when the defaulting counterparty holds an unexpired, fully paid-up, in-the-money option).

For another, what effect a court applying bankruptcy law in connection with a failed counterparty will give to this power of suspension is unknown in many jurisdictions; for how long can the non-defaulting counterparty rely on Section 2(a)(iii) to withhold payment? Can the defaulting counterparty's payment obligation net against the non-defaulting counterparty's payment obligation? Are obligations of the non-defaulting counterparty that are not performed on the date performance is otherwise due extinguished or merely postponed under Section 2(a)(iii)? Courts of leading jurisdictions that have considered the operation of Section 2(a)(iii) have provided inconsistent resolutions.¹⁴⁸

¹⁴⁷ Technically, under Section 2(a)(iii) of the ISDA Master Agreement form, the obligations do not exist due to failure of the condition precedent; therefore, they cannot be suspended. Nonetheless, it is common to refer to the phenomenon as suspension because contingent obligations do arise and will crystallize into obligations if and when the condition precedent is met. INT'L SWAPS & DERIVATIVES ASS'N, GUIDANCE NOTE ON THE FORM OF AMENDMENT TO ISDA MASTER AGREEMENT FOR USE IN RELATION TO SECTION 2(a)(iii), at 3 n.4 (2014), http://www.isda.org/publications/pdf/Guidance_Note_amendment_agreement.pdf.

¹⁴⁸ The U.S. Bankruptcy Court in New York ruled, in connection with an ISDA Master Agreement between Lehman Brothers Special Financing, Inc. and Metavante Corporation, that in the context of a bankruptcy, Metavante could not rely on Section 2(a)(iii) to withhold performance for about a year. *In re Lehman Bros. Holdings*, No. 08-13555 (JMP), 2009 WL 6057286, at *1 (Bankr. S.D.N.Y. Sept. 17, 2009). In the U.K., by contrast, the Court of Appeals decided that, under Section 2(a)(iii), the non-defaulting counterparty can suspend payments to the defaulting party so long as an Event of Default is continuing, potentially for an indefinite time. *Lomas v. JFB Firth Rixson Inc.* [2012] EWCA (Civ) 419 (Eng.); *see also* *Enron Austral. v. TXU Elec.* [2003] 48 ACSR 266 (Austl.) (reconfirmed on appeal) (out-of-the-money, non-defaulting counterparty could, pursuant to Section 2(a)(iii), choose not to designate an early termination date and suspend its payment obligation).

To prevent uncertainty, parties sometimes negotiate a curb on the right of a non-defaulting counterparty to rely on Section 2(a)(iii) to not make payment or delivery by: (i) limiting suspension under Section 2(a)(iii) to a specified number of days, (ii) rendering Section 2(a)(iii) inapplicable when the defaulting counterparty has satisfied all of its settlement obligations, or (iii) permitting novation of a relevant transaction to a creditworthy counterparty, without the need for consent. Related to this, parties sometimes also add a so-called use-it-or-lose-it (or fish-or-cut-bait) provision, whereby the right to declare an Early Termination Date as a result of an Event of Default or “Termination Event” is deemed waived if not exercised within a specified number of days.¹⁴⁹ Parties add this constraint to address the concern that a non-defaulting counterparty or non-affected counterparty, as the case may be, would otherwise terminate at its convenience, even in the far future, despite the counterparties’ continued performance over a significant period of time after the event has occurred and been ignored.¹⁵⁰

2. Section 2 Amendment

In 2014, ISDA published an optional form agreement to amend the ISDA Master Agreement in connection with Section 2(a)(iii) so that, when an Event of Default has occurred, the operation of that provision is subject to a time limit. The amendment form operates by permitting the defaulting counterparty to designate, by notice, a “Condition End Date,” after which the condition precedent of no continuing Event of Default lapses.¹⁵¹ This means that, by no later than the first “Local Business Day” after the Condition End Date, the non-defaulting counterparty must either make its scheduled payments or deliveries, plus accrued contractual interest and, if relevant, compensation for late delivery to the defaulting counterparty or have declared an Early Termination Date. If an Early Termination Date will be declared, the suspended obligations will be treated as “Unpaid Amounts” and taken

¹⁴⁹ For discussion of Termination Events, see *infra* Section VIII.B.

¹⁵⁰ Charles, *supra* note 100, at 41. For discussion of termination rights in the case of an Event of Default or Termination Event, see *infra* Section VIII.C.

¹⁵¹ In the case of a Potential Event of Default, the counterparty that may default can waive the requirements for notice and for any lapse of time to turn the Potential Event of Default into an Event of Default. This would enable the counterparty to give notice of a Condition End Date. Also, when a counterparty triggers one Event of Default, it may trigger additional Events of Default at a later date. Under the Section 2 Amendment, a subsequent Event of Default voids the designation notice given in connection with the earlier Event of Default.

into account when calculating an early termination Amount under Section 6(e).¹⁵²

The parties are free to agree on the number of days that must transpire for the Condition End Date to occur. Parties that are unlikely to default will seek to extend the time period as much as possible within the bounds of enforceability. ISDA has suggested a period of ninety days following the notice, and the Financial Conduct Authority in the United Kingdom has reportedly opined that a period longer than ninety days is too long.¹⁵³ Regardless, it is possible that in some jurisdictions, a court might deny a non-defaulting counterparty's attempt to suspend payment or delivery for some period of time or at all in an insolvency proceeding of the defaulting counterparty, even under the Section 2 Amendment.

C. Payment Netting

Under the ISDA Master Agreement form, counterparties net payments due to each other under one transaction, provided that the payments are due on the same date and are to be made in the same currency.¹⁵⁴ This structural requirement is often called “payment netting.” The ISDA Master Agreement also provides that the parties can affirmatively choose to net payments across more than one transaction (from the same pair of respective “Offices”), if the payments are due on the same date and are to be made in the same currency. For this, the parties would have to elect for “Multiple Transaction Payment Netting” in the Schedule or any Confirmation.¹⁵⁵

Payment netting is intended to reduce settlement risk—the risk that on a mutual settlement date, one counterparty makes payment while the other party defaults. Settlement risk can most easily arise when counterparties are located in different time zones. For example, a counterparty in Tokyo can meet its settlement obligations on a given settlement date applicable to both counterparties before the work day for its counterparty and the banks in New York has even begun, thus producing for the Japanese counterparty “daylight exposure.” Payment netting also has a salutary operational impact on solvent counterparties, as it reduces the number of payments that need to be made and converts two-way obligations to a one-way obligation. In this respect, it

¹⁵² For discussion of Early Termination Amount, see *infra* Section IX.A.

¹⁵³ INT'L SWAPS & DERIVATIVES ASS'N, GUIDANCE NOTE ON THE FORM OF AMENDMENT TO ISDA MASTER AGREEMENT FOR USE IN RELATION TO SECTION 2(a)(iii), at 4 (2014).

¹⁵⁴ ISDA MASTER AGREEMENT, *supra* note 96, § 2(c).

¹⁵⁵ *Id.*

is rather like set-off, which requires mutual and matured debts. Payment netting, however, does relatively little to mitigate cherry-picking, as it creates a net exposure of only present obligations to pay, not of present obligations to deliver or of future obligations. To net future obligations, the ISDA Master Agreement form structures for something called close-out netting.

D. Close-Out Netting

Upon an Event of Default attributable to one counterparty (“Defaulting Party”), the other counterparty (“Non-defaulting Party”) will have the right to terminate all the outstanding transactions (or all the outstanding transactions may be automatically terminated, if the parties elected in the Schedule for Automatic Early Termination to apply with regard to the Defaulting Party), value them, and net amounts owed by the Defaulting Party from any amounts owed to the Defaulting Party.¹⁵⁶ This is a highlight of the ISDA Master Agreement and is often called “close-out netting,” “termination netting,” or simply “netting.” Close-out netting is designed to reduce credit risk. It provides that only the one counterparty of the two trading partners that owes the greater gross amount under the early terminated transaction will owe a single and final settlement payment and only to the extent that the gross amount it owes exceeds the gross amount it is due.¹⁵⁷ Of course, close-out netting would have no impact if either counterparty was free of any payment or delivery obligations under any of the outstanding transactions between the two—one counterparty could hold only fully paid-up positions or be in-the-money (or, conversely, be out-of-the-money) in all the transactions—as there would be nothing to net.

Close-out netting comprises three basic steps in the following conceptual order: (i) early termination of outstanding transactions; (ii) valuation of the terminated transactions; and (iii) an offset of the resultant values, together with other amounts due but unpaid between the counterparties. The steps are designed to lead to a single net amount owed by one counterparty to the other and thus to defeat cherry-picking. As a matter of contract law, the enforceability of ISDA's close-out netting mechanism is presumably not

¹⁵⁶ For discussion of Events of Default, see *infra* Section VIII.A.

¹⁵⁷ To put close-out netting more straightforwardly, “[c]ounterparties to derivative contracts effectively get a super-senior claim to each other’s assets.” *Over the Counter, Out of Sight*, THE ECONOMIST (Nov. 12, 2009) (quoting Craig Pirrong), <http://www.economist.com/node/14843667>.

controversial due to principles of freedom of contract. As a matter of insolvency law, however, enforceability can be an issue. This is a sensitive concern; for the non-defaulting counterparty reasonably to view its credit exposures on a net basis, a counterparty must be able to rely on the enforceability of close-out netting when the defaulting counterparty is insolvent, even when the bankruptcy law applicable to the defaulting counterparty disregards the chosen governing law. Often, specific legislation quiets market concerns about the enforceability of close-out netting.¹⁵⁸

Many market participants, when considering internal mandate limits on counterparty credit exposure, embrace the single agreement approach as a way to view transactions with a single counterparty on a net basis. As for credit support, assuming the enforceability of close-out netting, it allows counterparty pairs to collateralize their transactions based on their portfolio of transactions (i.e., on a net basis), rather than by discrete transaction (i.e., on a gross basis). Moreover, if an acceptable netting agreement is in effect, regulators in many jurisdictions allow banks and other financial institutions to net exposures for purposes of capital adequacy requirements and typically see enforceable close-out netting as a way to mitigate systemic risk.

E. Set-Off

Frequently, a market participant will use different agreements for OTC derivatives and for other types of financial transaction with the same counterparty, such as one master agreement for OTC derivatives and another for repos.¹⁵⁹ This gives rise to the risk of having to make a payment under the ISDA Master Agreement when the counterparty has failed, while owing an amount under another agreement. Sometimes this segregation is fine, as when the counterparties intend to separate exposure under one agreement from other trading between the counterparties, but more commonly it is not. Since close-out netting affects only the transactions under the agreement

¹⁵⁸ A number of countries have enacted legislation to safeguard unambiguously the enforceability of close-out netting in OTC derivatives transactions. Israel is one example. *See* Financial Assets Agreements Law, 5766-2006, SH No. 286 p. 68 (Isr.), http://www.isa.gov.il/Download/IsaFile_959.pdf. Often, netting legislation is based on a model netting statute prepared by ISDA.

¹⁵⁹ Repos, short for repurchase agreements, are money market products pursuant to which a dealer sells securities—typically government obligations—to investors for a short term, often overnight, with a commitment to buy the securities back upon expiration of the term.

which provides for it, parties characteristically manage the risk with a set-off clause.

The 2002 ISDA Master Agreement form provides for a right of set-off where an early termination settlement amount thereunder is owed, but only in limited circumstances. Under the form, a Non-defaulting Party or, in the case of certain specified Termination Events involving a single “Affected Party,” a “Non-affected Party” may set off the early termination settlement amount it owes under the agreement against other amounts owed to it (whether matured or contingent) under other agreements with the same counterparty.¹⁶⁰ Distinct from set-off rights under traditional loan documents, this right of set-off is available to either qualifying counterparty.

Set-off by itself, however, can prove problematic when the obligations owed to the counterparty seeking to reduce the early termination settlement amount that it owes under the ISDA Master Agreement have not yet matured; applicable law might not allow set-off of unripe claims. To solve this, a cross-default clause, which permits a counterparty to treat the other’s default under one agreement as a default under another agreement, is commonly included in each agreement.¹⁶¹ A cross-default clause matures obligations and, when included in all relevant agreements, allows for simultaneous close-outs.

Often, market participants seek to expand the set-off right to include amounts owed under agreements with affiliates. Under a “triangular set-off” clause of this sort, an owing counterparty is said to be entitled to offset amounts it would otherwise have to pay the owed counterparty against amounts owed by the owed counterparty to the owing counterparty or the owing counterparty’s affiliates. Importantly, in some jurisdictions, this type of cross-affiliate set-off can be unenforceable in bankruptcy proceedings, for failure of mutuality.¹⁶²

¹⁶⁰ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 6(f). For discussion of Termination Events, Affected Parties, and Non-Affected Parties, see *infra* Section VIII.B. The 1992 ISDA Master Agreement form does not expressly include a set-off provision, but parties frequently include it in their Schedules to these forms. Parties sometimes expand set-off rights to Termination Events beyond the Termination Events to which the form set-off language applies (which are Credit Event Upon Merger and a Termination Event in respect of which all transactions are “Affected Transactions”).

¹⁶¹ For discussion of Cross-Default under the ISDA Master Agreement, see *infra* Section X.B.

¹⁶² See, e.g., *Sass v. Barclays Bank (In re Am. Home Mortg. Holdings, Inc.)*, 501 B.R. 44 (Bankr. D. Del. 2013) (holding triangular set-off unenforceable after commencement of bankruptcy for failure of mutuality).

VIII. EARLY TERMINATION

Close-out netting is a core feature of the ISDA Master Agreement form and requires as an essential first step the closing out of transactions. To close out a transaction is to terminate its rights and obligations prematurely. Normally, a counterparty cannot end an OTC derivatives transaction before its intended term has expired, absent consent of the other counterparty; the whole idea of a plain vanilla interest rate swap, for example, is that it runs its full course of a series of settlement dates.¹⁶³ As with a traditional financing, however, certain events that interfere with counterparties' settlement expectations do allow early termination. These events are, to use the traditional language adopted by the ISDA Master Agreement, Events of Default and Termination Events.

The ISDA Master Agreement form provides, under certain circumstances and sometimes depending on an election in the Schedule, for either automatic or discretionary designation of an "Early Termination Date" following the occurrence of an Event of Default or for discretionary designation of an "Early Termination Date" following the occurrence of a Termination Event. This early termination does not dissolve the ISDA Master Agreement or even a transaction thereunder; rather, it replaces the counterparties' delivery or payment obligations due after the Early Termination Date applicable to implicated transactions with an obligation to pay a close-out amount.¹⁶⁴ Additionally, the ISDA Master Agreement form provides that designation of an Early Termination Date due to an Event of Default will apply to all outstanding transactions, but if the designation is due to a Termination Event, it will not necessarily apply to all such transactions.

The ISDA Master Agreement form distinguishes between (i) Events of Default, which generally are considered to engender an element of fault, and (ii) Termination Events, which generally are considered not to involve culpability. Section 6(a) of the form addresses the right of the Non-defaulting Party to terminate transactions in the case of an Event of Default; Section 6(b) of the form addresses the right to terminate Transactions in the case of a Termination Event.

¹⁶³ Unless transacted at off-market terms, an interest rate swap is priced so that, at its outset, the present value of the expected floating rate leg payments equals the present value of the scheduled fixed rate leg payments. Thus, each counterparty is willing to exchange cash flows.

¹⁶⁴ See ANTHONY C. GOOCH & LINDA B. KLEIN, *DOCUMENTATION FOR DERIVATIVES* 857 (4th ed. 2003 & Supp. 2004).

A. Events of Default

Settlement obligations in a derivatives transaction are commonly reciprocal, so each counterparty will have both the potential benefit and the potential burden associated with future changes in underlying value or measure.¹⁶⁵ This means that extremely stringent definitions of events of default would not necessarily suit a derivatives relationship. In addition, once a typical transaction is live, fluctuating rates or prices in the market will benefit one party at the expense of the other, possibly providing a party with an interest in terminating a transaction early.

Given the foregoing, it is not surprising that the ISDA Master Agreement form allows for grace periods following payment defaults,¹⁶⁶ notice requirements for and opportunities to cure defaults arising from failure to perform ancillary obligations,¹⁶⁷ and materiality tests for defaults relating to misrepresentations.¹⁶⁸ Additionally, if “Cross-Default” applies to a party pursuant to election in the Schedule, *de minimis* payment or delivery delays or failures are often excluded as Cross-Default triggers.¹⁶⁹ That said, the 1992 ISDA Master Agreement form does provide more generously for grace periods than the 2002 ISDA Master Agreement form. Accordingly, as between the two agreements, some buy-side market participants consider the former to be more debtor-friendly and the latter more creditor-friendly. This shift is best explained by the global financial crises of the late 1990s—namely, the Asian currency crisis¹⁷⁰ and the Russian bank crisis,¹⁷¹ which underscored

¹⁶⁵ In some derivatives transactions, such as with an unexpired, fully paid-up option, only one counterparty will have a potential future obligation.

¹⁶⁶ ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(i).

¹⁶⁷ *See id.* § 5(a)(ii).

¹⁶⁸ *See id.* § 5(a)(iv).

¹⁶⁹ *See id.* § 5(a)(vi). For discussion of Cross-Default, see *infra* Section X.B.

¹⁷⁰ During the Asian currency crisis of 1997–98, the currencies of Thailand, Indonesia, and South Korea and, to a lesser extent, other emerging market countries collapsed. The currency shocks raised fears of worldwide economic disorder and instigated bailouts by the international community, led by the International Monetary Fund, to the tune of approximately \$120 billion all told. DICK K. NANTO, CONG. RESEARCH SERV., RL97-1021, THE 1997–98 ASIAN FINANCIAL CRISIS (1998); *see also* Tom Shorrocks, *IMF and US Response to the Asian Financial Crisis*, FOREIGN POL’Y IN FOCUS, Apr. 1998, <https://www.globalpolicy.org/component/content/article/209/42877.html>.

¹⁷¹ On August 17, 1998, Russia devalued the ruble, defaulted on its domestic debt, stopped payments on ruble-denominated debt, and declared a moratorium on commercial banks making external debt payments, including under OTC forwards. *See* Abigail J. Chiodo & Michael T. Owyang, *A Case Study of a Currency Crisis: The Russian Default of 1998*, 84 FED.

credit risk and seemingly influenced the drafters of the 2002 ISDA Master Agreement form.

The ISDA Master Agreement form describes eight different Events of Default:

- “Failure to Pay or Deliver,” which refers to failure by a counterparty to make a settlement payment or delivery when due under the ISDA Master Agreement;¹⁷²

- “Breach of Agreement,” which refers to failure by a counterparty to comply with any other obligation under the ISDA Master Agreement.¹⁷³ The 2002 (but not the 1992) ISDA Master Agreement includes “Repudiation” of any part of the Master Agreement or a Confirmation or transaction evinced by it;¹⁷⁴

- “Credit Support Default,” which refers to failure by a counterparty (or its credit support provider (e.g., a parent guarantor)) or the lapse of any provided credit support without consent;¹⁷⁵

- “Misrepresentation,” which refers to the making by a counterparty (or its credit support provider) of a false representation;¹⁷⁶

- “Default under Specified Transaction,” which refers to default under or repudiation of derivatives transactions (and, under the 2002 ISDA Master Agreement form, certain other financial trades)¹⁷⁷ not covered by the ISDA Master Agreement between the same counterparties, by a counterparty (or its credit support provider or any entity—usually affiliates of the counterparty which are not credit support providers) identified as “Specified Entity” in the Schedule);¹⁷⁸

- “Cross-Default,” which refers to defaults under debt obligations of a counterparty (or its credit support provider or Specified Entity);¹⁷⁹

- “Bankruptcy” which refers to insolvency events or proceedings of a counterparty (or its credit support provider or Specified Entity);¹⁸⁰ and

RES. BANK ST. LOUIS REV. 7, 7 (2012),
<https://research.stlouisfed.org/publications/review/02/11/ChiodoOwyang.pdf>.

¹⁷² ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(i).

¹⁷³ *Id.* § 5(a)(ii).

¹⁷⁴ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(ii)(2).

¹⁷⁵ ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(iii).

¹⁷⁶ *Id.* § 5(a)(iv).

¹⁷⁷ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 14.

¹⁷⁸ ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(v).

¹⁷⁹ *Id.* § 5(a)(vi).

¹⁸⁰ *Id.* § 5(a)(vii).

o “Merger Without Assumption,” which refers to merger of a counterparty (or its credit support provider) with another firm or a reorganization where the surviving firm does not assume the prior obligations under the ISDA Master Agreement.¹⁸¹

Notably, under the 2002 ISDA Master Agreement form, a failure to pay or deliver under a transaction only becomes an Event of Default if the failure is not cured within one Local Business Day (or one Local Delivery Day in the case of delivery failure) after notice of the failure has been given by the non-defaulting party; under the 1992 ISDA Master Agreement, the cure period is three Business Days (or three Local Delivery Days).¹⁸² Similarly, where a “Specified Transaction”¹⁸³ is not subject to a cure period under terms applicable to that Specified Transaction, the ISDA Master Agreement form grants a cure period before a default under such Specified Transaction can be said to have occurred. Under the 2002 ISDA Master Agreement form, that period is one Local Business Day, whereas it is three Local Business Days under the 1992 ISDA Master Agreement form.¹⁸⁴ Apparently, the industry considered three Local Business Days too long a period of inaction in times of market stress and, with the 2002 version of the Master Agreement form, ISDA increased stringency in the Event of Default definition.

Furthermore, involuntary insolvency filings and enforcement actions are subject to a fifteen-day cure period under the 2002 ISDA Master Agreement form (as opposed to a thirty-day cure period under the 1992 ISDA Master Agreement form).¹⁸⁵ In many jurisdictions, it is not likely that a bankruptcy filing would be dismissed or stayed within fifteen days.¹⁸⁶ Apparently, however, the drafters of the 2002 form considered fifteen days sufficient time for the parties to at least communicate with each other or otherwise gain

¹⁸¹ *Id.* § 5(a)(viii).

¹⁸² 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(i); 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 5(a)(i).

¹⁸³ For further discussion of Specified Transaction, see *infra* Section X.A.X.A. The 2002 ISDA Master Agreement adds stock lending and repo transactions, which are not classic derivatives, to the definition of Specified Transaction. 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 14.

¹⁸⁴ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(v)(2); 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 5(a)(v)(2).

¹⁸⁵ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(vii); 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 5(a)(vii).

¹⁸⁶ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(vii)(7); 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 5(a)(vii)(7).

some clarity to determine whether the filing or proceeding was frivolous or whether serious credit problems were afoot.

B. Termination Events

The 1992 ISDA Master Agreement form describes five, and the 2002 ISDA Master Agreement describes six, different Termination Events:

- “Illegality,” which refers to situations of supervening illegality that render a counterparty's (or its credit support provider's) performance illegal;¹⁸⁷

- “Force Majeure Event,” which is a Termination Event under only the 2002 ISDA Master Agreement and which refers to a supervening force majeure or act of state that renders performance by a counterparty (its credit support provider) impossible or impractical;¹⁸⁸

- “Tax Event,” which refers to an action by a tax authority or a change in tax law that makes it substantially likely that a counterparty will have to pay an unanticipated tax, save for certain types of taxes on interest which presumably are considered insignificant;¹⁸⁹

- “Tax Event Upon Merger,” which refers to a merger or reorganization of a counterparty (that does not qualify as a Merger Without Assumption, which itself is an Event of Default) and which results in the withholding of tax obligation;¹⁹⁰

- “Credit Event Upon Merger,” which refers to merger of a counterparty (or its credit support provider or Specified Entity), which does not qualify as a Merger Without Assumption (which itself is an Event of Default) and the surviving firm therefrom is materially less creditworthy than the original counterparty;¹⁹¹ and

- “Additional Termination Event” (“ATE”), which refers to any other termination event that parties might, but need not, add.¹⁹²

¹⁸⁷ ISDA MASTER AGREEMENT, *supra* note 96, § 5(b)(i).

¹⁸⁸ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(b)(ii).

¹⁸⁹ *Id.* §§ 5(b)(iii), 14; 1992 ISDA MASTER AGREEMENT, *supra* note 95, §§ 5(b)(i), 14.

¹⁹⁰ 2002 ISDA MASTER AGREEMENT, *supra* note 96, §§ 5(b)(iv), 14; 1992 ISDA MASTER AGREEMENT, *supra* note 95, §§ 5(b)(iii), 14.

¹⁹¹ 2002 ISDA MASTER AGREEMENT, *supra* note 96, §§ 5(b)(v), 14; 1992 ISDA MASTER AGREEMENT, *supra* note 95, §§ 5(b)(iv), 14.

¹⁹² 2002 ISDA MASTER AGREEMENT, *supra* note 96, §§ 5(b)(vi), 14; 1992 ISDA MASTER AGREEMENT, *supra* note 95, §§ 5(b)(v), 14. For discussion of ATEs, see *infra* Section XI.B.

The ISDA Master Agreement form specifies which outstanding transaction is considered an “Affected Transaction” and which counterparty is considered an Affected Party (with the other counterparty being the Non-affected Party if there is only one Affected Party) upon the occurrence of a given Termination Event.¹⁹³ Generally, however, under a given Termination Event, an outstanding transaction subject to the consequences of the event is considered an Affected Transaction, and a counterparty that suffers the consequences of the event is considered an Affected Party.¹⁹⁴ Under the ISDA Master Agreement, the following are Affected Transactions: (i) with respect to a Termination Event which is an Illegality, Force Majeure Event (only under the 2002 ISDA Master Agreement form), Tax Event, or Tax Event Upon Merger, all Transactions affected by the occurrence of that Termination Event (in the 2002 ISDA Master Agreement, subject to some exceptions involving credit support), and (ii) with respect to any other Termination Event, all Transactions.¹⁹⁵ A Termination Event triggers a right of termination only with respect to Affected Transactions.¹⁹⁶

Regarding ATEs, parties can add them via the Schedule or in a Confirmation.¹⁹⁷ The range of ATEs on which parties may agree is great. While ATEs included by parties in their ISDA relationship normally relate to credit events, they need not necessarily do so.¹⁹⁸ Commonly, however, they do and when the typical ATE occurs, all transactions will be Affected Transactions and the Non-affected Party will be able to terminate them all.¹⁹⁹

C. Termination Rights

Under an ISDA Master form, termination rights depend on the nature of the triggering event. Generally, upon occurrence of an Event of Default, the Non-defaulting Party may designate an Early Termination Date in respect of all, but not less than all, outstanding transactions.²⁰⁰ The occurrence of such

¹⁹³ ISDA MASTER AGREEMENT, *supra* note 96, §§ 5(b), 14.

¹⁹⁴ Parties might countermand this base case for a given ATE, which is by definition a Termination Event, depending on the nature of the ATE, but presumably not if the ATE relates to creditworthiness.

¹⁹⁵ ISDA MASTER AGREEMENT, *supra* note 96, § 14.

¹⁹⁶ *Id.* § 6(b)(iv).

¹⁹⁷ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(b)(vi); 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 5(b)(v).

¹⁹⁸ For further discussion of ATEs, see *infra* Section XI.B.

¹⁹⁹ ISDA MASTER AGREEMENT, *supra* note 96, § 6(b)(iv).

²⁰⁰ *Id.* § 6(a). For discussion of automatic early termination, see *infra* Section VIII.D.

an Early Termination Date will lead to effective termination of all such transactions. Not even the Non-defaulting Party can select which transactions will effectively terminate and which will continue; to allow that would not only be unfair but would run contrary to the anti-cherry-picking spirit which pervades the ISDA Master Agreement form. Notably, designation of an Early Termination Date in the case of an Event of Default is not an exclusive remedy for the Non-defaulting Party. The ISDA Master Agreement form explicitly permits other legal remedies,²⁰¹ which means that the Non-defaulting Party could maintain the transactions and claim damages.

Upon occurrence of a Termination Event, the termination rights depend on the circumstances. The type of event determines which counterparty may designate an Early Termination Date, in respect of what transactions, and whether conditions apply. In the case of (i) a Tax Event that cannot be cured, an Affected Party can terminate in respect of all Affected Transactions; (ii) a Tax Event Upon Merger that cannot be cured, the Burdened Party (the counterparty that will bear the economic brunt of the additional tax, taking into account the gross-up obligation for indemnifiable taxes under the ISDA Master Agreement form)²⁰² can terminate in respect of all Affected Transactions;²⁰³ (iii) an ATE where there are two Affected Parties, any Affected Party can terminate in respect of all Affected Transactions; (iv) an ATE where there is only one Affected Party, the Non-affected Party can terminate in respect of all Affected Transactions; and (v) a Credit Event Upon Merger, the Non-affected Party can designate an Early Termination Date in respect of all Affected Transactions.²⁰⁴

²⁰¹ *Id.* § 9(d).

²⁰² *Id.* § 2(d)(i).

²⁰³ In case of a Tax Event where there is only one Affected Party or a Tax Event Upon Merger where the Burdened Party is the Affected Party, the Affected Party must use reasonable efforts to transfer, within twenty-one days of giving notice of the Termination Event, which such Affected Party must do promptly upon becoming aware of the event, such Affected Party's rights and obligations under the Affected Transactions to one of its Schedule-designated branch offices or of its affiliates, if the transfer will cease the Termination Event. *Id.* § 6(b)(ii). The 1992 ISDA Master Agreement (Cross-Border Multicurrency) form, but not the 1992 ISDA Master Agreement (Local Currency Single Jurisdiction) form or the 2002 ISDA Master Agreement form, further applies this requirement in the case of Illegality where there is only one Affected Party. *See* 1992 ISDA MASTER AGREEMENT (Cross-Border Multicurrency), *supra* note 95, § 6(b)(ii). This obligation to transfer is an exception to the general prohibition on transfer of interests or obligations under an ISDA Master Agreement, absent consent. *See* ISDA MASTER AGREEMENT, *supra* note 96, § 7.

²⁰⁴ ISDA MASTER AGREEMENT, *supra* note 96, § 6(b)(iv).

If the Termination Event is an Illegality or Force Majeure Event, however, termination rights under the 2002 ISDA Master Agreement form are more involved. In the event of Illegality or Force Majeure Event, either counterparty has a right of termination, but only once the applicable “Waiting Period” has expired.²⁰⁵ A counterparty may designate an Early Termination Date for less than all of the Affected Transactions, but if a counterparty does so, the other counterparty may then designate the same date as an Early Termination Date for some or all of the remaining Affected Transactions.²⁰⁶

This notwithstanding, the 2002 ISDA Master Agreement form creates an exception to the right of either counterparty to declare an Early Termination Date with respect to some or all of the transactions affected by an Illegality or Force Majeure Event. If the event relates to performance, but not receipt of performance, by a counterparty (or its Credit Support Provider) of payment or delivery obligations (or to compliance with another material term of a Credit Support Document), the counterparty whose performance (or whose Credit Support Provider's performance) has become unlawful, impossible, or impracticable can only designate an Early Termination Date in reaction to a prior designation by the counterparty of an Early Termination Date with regard to fewer than all of the Affected Transactions.²⁰⁷ This exception is designed to prevent a counterparty from designating an Early Termination Date with respect to a transaction when performance under the transaction is permitted but performance under a related Credit Support Document is not.

D. Automatic Early Termination

The ISDA Master Agreement form allows the parties to modify somewhat the standard right of the Non-defaulting Party to designate an Early Termination Date in respect of all outstanding transactions upon the occurrence and continuation of an Event of Default by selecting, in the Schedule, for “Automatic Early Termination” to apply to one or both parties.²⁰⁸ If a Defaulting Party is subject to Automatic Early Termination and the Event of Default it has experienced is a certain defined insolvency event (effectively, dissolution, composition, winding-up resolution, appointment of an administrator or similar representative, or an analogous

²⁰⁵ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 6(b)(iv)(2).

²⁰⁶ *Id.* § 6(b)(iv)(2)(A).

²⁰⁷ *Id.* § 6(b)(iv)(2)(B).

²⁰⁸ ISDA MASTER AGREEMENT, *supra* note 96, § 6(a) (Schedule, pt. 1(c)).

event), an Early Termination Date in respect of all outstanding transactions will occur automatically and immediately. This will in turn trigger the close-out provisions of the ISDA Master Agreement form.

Specification in the Schedule that Automatic Early Termination will apply to a given party usually stems from a concern that, once the Defaulting Party has been drawn into insolvency proceedings, insolvency rules in the jurisdiction of the insolvency will prohibit termination by notice of the solvent counterparty or will mandate insolvency set-off precepts and possibly overrule the contractual close-out netting arrangement under the ISDA Master Agreement. The result of insolvency set-off might not coincide completely with the outcome intended under close-out netting.

Automatic Early Termination, however, can adversely affect the Non-defaulting Party. This is because, at the time of automatic termination, the Non-defaulting Party may be unaware that an Event of Default has occurred and so will not take any action to replace its suddenly terminated position. If the Non-defaulting Party replaces the closed-out transactions upon eventually becoming aware of the termination and consequent exposure—even if that takes place only a day or two later—the Non-defaulting Party might not be able to recover all of its losses if cost of the replacement transaction has increased in the interim. Applicable law may require that the Non-defaulting Party's losses be measured as of the time of a termination.²⁰⁹ The following Table 2 summarizes termination rights under the 2002 ISDA Master Agreement form.

²⁰⁹ See GOOCH & KLEIN, *supra* note 164, at 850. The parties might select Automatic Early Termination and, to address the concern of the pertinent Event of Default's late discovery, add language to indemnify for market movement between the date of automatic termination and the date on which the Non-defaulting Party becomes aware of the triggering Event of Default. This tactic, however, would have to be measured for enforceability.

**Table 2: Early Termination under 2002 ISDA Master Agreement Form;
What, Who, Which**

| What Event | Who Can Designate Early Termination Date | With Respect to Which Transactions |
|----------------------------|--|--|
| <i>Event of Default</i> | | |
| ○ Bankruptcy | Non-defaulting Party <i>or</i> Automatic Early Termination ^a | All transactions |
| ○ Any other | Non-defaulting Party | All transactions |
| <i>Termination Event</i> | | |
| ○ Tax Event | Any Affected Party | All Affected Transactions |
| ○ Tax Event Upon Merger | Burdened Party | All Affected Transactions |
| ○ Credit Event Upon Merger | Non-affected Party | All Affected Transactions (all transactions) |
| ○ ATE | Non-affected Party, if only one Affected Party Any Affected Party, if two Affected Parties | All Affected Transactions (all transactions) |
| ○ Illegality | Either counterparty, but Affected Party (if event affects its performance) only after prior designation by other of Early Termination Date in respect of less than all Affected Transactions | All or some Affected Transactions |
| ○ Force Majeure | Either counterparty, but Affected Party (if event affects its performance) only after prior designation by other of Early Termination Date in respect of less than all Affected Transactions | All or some Affected Transactions |

^a Automatic Early Termination, if specified in Schedule, applies only in event of Bankruptcy under Section 5(a)(vii)(1), (3), (4), (5) or (6) or, to the extent analogous, (8) of form.

IX. VALUING TERMINATED TRANSACTIONS

Close-out netting requires, as another essential step, valuation of closed-out transactions. In normally functioning markets, this should not prove difficult, even if the OTC derivatives market does not trade like an exchange where prices are available for anyone to look up. In times of market stress, however, easy OTC derivatives price discovery can elude market participants.

Upon the occurrence of an Early Termination Date, market values must be placed on the terminated transactions so that they can be settled early and rationally. The 2002 ISDA Master Agreement form uses the term “Early Termination Amount” for the amount, if any, that a counterparty would be required to pay or receive, depending largely on the overall moneyness (extent in- or out-of-the-money) of that counterparty under terminated transactions, in connection with the designation or occurrence of an Early Termination Date²¹⁰ as a result of an Event of Default²¹¹ or a Termination Event.²¹² It also employs a single payment measure, embodied in the definition of the term “Close-out Amount,”²¹³ for the calculation of the Early Termination Amount by the counterparty entitled to determine the Close-out Amount (“Determining Party”).²¹⁴ Close-out Amount replaced “Market Quotation” and “Loss,” the two standard payment measures used to determine close-out values under the 1992 ISDA Master Agreement form.²¹⁵

²¹⁰ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 6(e).

²¹¹ *Id.* § 6(e)(i).

²¹² *Id.* § 6(e)(ii).

²¹³ *Id.* § 14.

²¹⁴ *Id.* For example, the Non-defaulting Party will be the Determining Party when the Early Termination Date results from an Event of Default. *Id.* § 6(e)(ii)(1). The Determining Party, which appears only in the 2002 ISDA Master Agreement form, functions differently from a Calculation Agent, the duties of which are usually described in the relevant ISDA-published definitions.

²¹⁵ Under the 1992 ISDA Master Agreement form, parties elect between Market Quotation and Loss measures for calculating settlement payments in case of early termination. If Market Quotation is elected, but cannot be determined, or the counterparty making the determination reasonably believes the measure would fail to produce a commercially reasonable result, Loss applies. 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 14. Market Quotation depends on a quotation from a leading dealer chosen by the Non-defaulting Party in the relevant market for an amount that would be paid by or to the Non-defaulting Party for a replacement transaction. If more than three Market Quotations are provided, the average of the remaining quotations after the highest and lowest are disregarded is used. Loss reflects the Non-defaulting Party’s total loss, including loss of bargain and costs, but not legal fees and out-of-pocket expenses (which are paid separately by a Defaulting Party). *Id.* § 11.

A. Early Termination Amount

Essentially, the Early Termination Amount is the net settlement amount due to the net in-the-money counterparty under the closed-out transactions, should an Early Termination Date have been designated. Depending on what event led to the Early Termination Date, this net amount comprises, among other possible elements, the termination currency equivalent of a Close-out Amount or Close-out Amounts (owed or owing) for the terminated transactions.²¹⁶ Importantly, in the case of early termination due to an Event of Default, the net settlement amount will be payable by the counterparty which is out-of-the-money on a net basis, even if it is the Non-defaulting Party. This is what is known under the 1992 ISDA Master Agreement form as “Second Method,” and the 2002 ISDA Master Agreement form contemplates no other payment method.²¹⁷

Close-out Amount means, with regard to each terminated transaction (or group of terminated transactions), the losses the Determining Party would incur, or the gains it would enjoy, in replacing or providing for the Determining Party the economic equivalent of (i) the material terms of the terminated transaction (or group of terminated transactions), including expected payments and deliveries, and (ii) the option rights of the counterparties with respect to the terminated transaction (or group of terminated transactions).²¹⁸ Whereas Market Quotation under the 1992 ISDA Master Agreement form refers to “the economic equivalent of any payment or delivery,” Close-out Amount under the 2002 ISDA Master Agreement form refers to “the economic equivalent of the material terms of the

²¹⁶ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 6(e)(i)–(iv).

²¹⁷ The 1992 ISDA Master Agreement form contemplates that, for calculating settlement payments, the parties will choose in the Schedule between “First Method,” which in case of Event of Default, denies the Defaulting Party the right to collect a net settlement amount otherwise due to it, and Second Method. 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 6(e). First Method, known generically as a “walkaway” or “limited two-way payment” provision, is rarely employed. At first, it was thought by some to be appropriate, in line with a common law principle that a party breaching a contract is not compensated for the breach. Eventually, however, it came to be seen as unfair because it could provide the Non-defaulting Party with a bonanza. Perhaps more instrumental in the demise of First Method was a 1994 amendment to the Basel Capital Accord of 1988, stating that a close-out netting arrangement that includes a walk-away provision should not be recognized for credit risk reduction purposes. *See* BASEL COMM. ON BANKING SUPERVISION, THE TREATMENT OF THE CREDIT RISK ASSOCIATED WITH CERTAIN OFF-BALANCE-SHEET ITEMS, Annex 1 (1994), <http://www.bis.org/publ/bcbs12a.pdf>.

²¹⁸ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 14.

terminated transactions.²¹⁹ Thus, Close-out Amount embodies the concept that a termination payment should reflect all loss and gain due to early termination and that the value of a transaction upon early settlement does not necessarily reduce solely to contemplated payments and deliveries.

B. Close-out Amount

Under the 2002 ISDA Master Agreement form, each counterparty must prepare and deliver a statement of its Early Termination Amount calculations once an Early Termination Date occurs.²²⁰ It is the Determining Party, however, which the form charges with determining the often foremost component of the Early Termination Amount, the Close-out Amount.²²¹ The form allows the Determining Party to choose a reasonable method of determination, in light of conditions in the relevant market at the time, and to use reasonable substitutes for market-based quotations, if using such quotations is impossible, impracticable, or unreasonable at the time.²²² This approach reflects a concern, based on market crisis experiences in 1998 and 1999, that the Market Quotation and Loss formulations of the 1992 ISDA Master Agreement form are not flexible enough for all types of transactions or for periods when markets are unsettled.²²³

The 2002 ISDA Master Agreement form's extensive definition of Close-out Amount subjects the Determining Party to an overarching precept that it must act in good faith and use commercially reasonable procedures to produce a commercially reasonable result when determining the Close-out Amount.²²⁴ It also allows the Determining Party to base its determination on the features of individual transactions. Accordingly, the Determining Party can make a determination per terminated transaction or for an entire portfolio of terminated transactions (which makes sense when a portfolio is made up of different classes of transactions, such as equity swaps and credit default swaps).

The definition of Close-out Amount describes various types of non-exclusive information a Determining Party may consider when calculating a

²¹⁹ *Id.*; 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 14.

²²⁰ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 14.

²²¹ *Id.*

²²² *Id.*

²²³ *See* INT'L SWAPS & DERIVATIVES ASS'N, USER'S GUIDE TO THE ISDA 2002 MASTER AGREEMENT 24 (2003) [hereinafter 2002 MASTER AGREEMENT USER'S GUIDE].

²²⁴ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 14.

Close-out Amount, namely (i) quotations, firm or indicative, from third parties that can take into account the creditworthiness of the Determining Party, (ii) relevant market data (e.g., yields, yield curves, volatilities, spreads, and correlations) from third parties, and (iii) information from internal sources of the type described in the foregoing two sub-clauses, provided that the information is of the same type used by the Determining Party in the regular course of its business for the valuation of similar transactions. The Determining Party will consider these quotations or relevant market data from third parties, unless it reasonably believes in good faith that such quotations or relevant market data are not readily available or would produce a result that would not satisfy the standards and procedures otherwise applicable to Close-out Amount determinations. Thus, if the market is unsettled enough so that quotations or relevant market data would either yield a commercially unreasonable outcome or be unavailable, the Determining Party need not obtain, or for that matter try to obtain, the information from third parties.

The definition also spells out an agreement that the following are commercially reasonable: (1) applying relevant market data pricing or valuation models which the Determining Party uses with unrelated third parties in the regular course of its business for similar transactions, and (2) using different valuation methods for different terminated transactions, based on type, complexity, size, and number of terminated transactions (or group of terminated transactions).

X. NEGOTIATING EVENTS OF DEFAULT

The more creditworthy party—historically assumed to be the dealer, but following the widespread failures of banks in the years of and following the 2007–08 financial crisis and considering the growth of assets under management by non-bank financial institutions, less so than in the past—will often seek to broaden the scope of Events of Default and to shorten cure periods under the ISDA Master Agreement form. It will also want to maximize its ability to terminate promptly the trades under the agreement upon an early display of counterparty distress. In contrast, the less creditworthy party will seek to limit the Events of Default and maintain the lengthier cure periods. This natural tension will feature in discussions on ISDA Master Agreement form clauses addressing cross-default.²²⁵

²²⁵ See *infra* Section X.B.

A. Default Under Specified Transaction

Section 5(a)(v) of the ISDA Master Agreement form, entitled “Default under Specified Transaction,” is sometimes described as a limited cross-default, or a derivatives cross-default, provision. Under this section, defaults under, or repudiations of, Specified Transactions by a counterparty (or its credit support provider or Specified Entity) become Events of Default under such ISDA Master Agreement form, subject to any applicable cure periods.²²⁶ Specified Transaction is defined to include many, if not all, types of derivatives transactions²²⁷ (and under the 2002 ISDA Master Agreement form, certain other financial trades).²²⁸ As the 2002 ISDA Master Agreement form made explicit,²²⁹ Specified Transaction also refers to transactions not covered by the ISDA Master Agreement. Failure to perform under a derivatives transaction is generally considered a meaningful credit event. The 2002 ISDA Master Agreement form, however, expands on the definition of the 1992 ISDA Master Agreement form to also include more current derivatives transactions and even some non-derivative financial transactions.²³⁰ Additionally, the definition of Specified Transaction in the 2002 ISDA Master Agreement form includes any current or future transaction similar to the specifically enumerated transactions.²³¹

When considering the expansive meaning of Specified Transaction under the 2002 ISDA Master Agreement form, it is worth noting that some of the transactions included within the enlarged definition of Specified Transaction are often documented under a master agreement (or other document of standardized terms) that allows early termination of only some, as opposed to all, of the transactions between the parties upon the occurrence of certain defaults. The 2002 ISDA Master Agreement form clarifies that a failure to make due delivery under a Specified Transaction will trigger an Event of Default under the ISDA Master Agreement only if all transactions outstanding under the documentation applicable to that Specified Transaction are liquidated, accelerated, or terminated.²³² Presumably, this addresses

²²⁶ ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(v); *see also supra* text accompanying note 184 (describing cure period for Default under Specified Transaction).

²²⁷ ISDA MASTER AGREEMENT, *supra* note 96, § 14.

²²⁸ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 14.

²²⁹ *Id.*

²³⁰ *Id.*

²³¹ *Id.*

²³² *Id.* § 5(a)(vi)(3).

concerns of failure to deliver due to administrative error, settlement system glitches, or even unavailability of the underlying in the market. That said, the ISDA Master Agreement form contains no threshold amount for Default under Specified Transaction, making this Termination Event a sensitive one.

While the 2002 ISDA Master Agreement form already includes a relatively broad definition of Specified Transaction, some dealers seek to expand that definition even further with a hedge fund counterparty. This allows the dealers to capture defaults under prime brokerage agreements of the counterparty within the dealer group, as hedge funds almost always are party to at least one prime brokerage agreement. Such an expansion might make sense if the hedge fund uses leverage in its portfolio trades, but hedge funds are generally wary of this request; they are concerned that merely a technical default under the fund's prime brokerage agreement could lead to termination under the 2002 ISDA Master Agreement form.

B. Cross-Default

The ISDA Master Agreement form provides that, if Cross-Default has been specified in the Schedule as applying to a given party, an Event of Default will occur if that party (or its Credit Support Provider or Specified Entity) defaults on a third party obligation with respect to a “Specified Indebtedness” and the default or the obligation exceeds a specified “Threshold Amount” (in the Schedule).²³³ Essentially, Specified Indebtedness is borrowed money, whether present or future, contingent or otherwise, as principal or surety or otherwise. This captures traditional credit arrangements such as loans and letters of credit.

Parties electing for Cross-Default to apply to one or both of them will, nonetheless, commonly negotiate the scope of its application. What is at stake when negotiating a cross-default is whether a counterparty's (and its guarantor's and possibly its affiliate's) relations with credit providers will have a direct bearing on that counterparty's derivatives trades. Negotiation of the Cross-Default provision often focuses on the following, among other possible, points:

²³³ ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(vi).

1. Cross-Acceleration

Corporate and other buy-side parties often seek to eliminate or delay the effect of the application of the Cross-Default provisions. On the assumption that Cross-Default will be specified in the Schedule to apply to them, such parties usually seek to require that, to trigger an Event of Default, not only should the default under the Specified Indebtedness have occurred but the creditor under the Specified Indebtedness also should have accelerated payment of the obligation. This is commonly known as “cross acceleration.” Its rationale is that a Specified Indebtedness may be capable of acceleration, but not actually accelerated, because the default is merely technical. When the other party is not of high credit quality, dealers tend to resist such a narrowing of the application of Cross-Default.

2. Specified Indebtedness

Dealers sometimes seek to expand the definition of Specified Indebtedness to include Specified Transactions (and to expand the definition of Specified Transactions to include transactions with third parties). This is a sensible request when the counterparty has little in the way of “borrowed money” (for example, loans). For example, hedge funds do not typically issue debt or borrow money through classic credit arrangements.

3. Threshold Amount

The 2002 ISDA Master Agreement form enables the parties to identify a Threshold Amount of Specified Indebtedness required for an Event of Default under that provision. This helps avoid triggering cross-default by *de minimis* debt payment delays or failures.²³⁴ It is natural for a party to an ISDA Master Agreement to seek a sizeable Threshold Amount for itself, to prevent an Event of Default from being triggered by a default on a relatively insignificant loan obligation or payment. By contrast, it will want the other party’s Threshold Amount to be as low as possible, to increase opportunities to declare an Event of Default. Threshold Amounts are usually set at (i) a percentage of a party’s shareholders’ equity (for companies), or members’ capital (for limited liability companies), or net asset value (for hedge funds), and (ii) a fixed dollar amount that makes sense for a party based on its

²³⁴ 2002 ISDA MASTER AGREEMENT, *supra* note 96, § 5(a)(vi).

borrowed money. Sometimes the lesser of the foregoing clauses (i) and (ii) sets the Threshold Amount.

XI. CREDIT RISK BELLWETHERS

Counterparties to uncleared derivatives transactions like to stay far away from the need to test the ISDA Master Agreement's structural strategies for limiting credit risk. For this reason, the ISDA Master Agreement provides the parties with the opportunity to install various mechanisms that can assist a counterparty in assessing whether its counterparty is moving toward an insolvency-based default. Advance notice of a prospective default of this kind could allow a counterparty to reduce its exposure by—depending on the circumstances—novating existing trades, limiting the size of or refraining from new trades, obtaining credit protection, or even terminating transactions early. The standard mechanisms for obtaining bellwether counterparty credit signals are (i) receipt of financial information and (ii) incorporation of ATEs.

A. Financial Information

Assessing the risk of a counterparty's default requires study of the financial information delivered from or otherwise made available regarding a counterparty. If the counterparty is a company, one measure of its financial health is shareholders' equity. If the counterparty is an investment fund, the parallel measure is net asset value. Should these measures show a notable rate of decline over a specific period of time, the information recipient would presumably implement risk-mitigation tactics.

To track a counterparty's overall financial health, a dealer usually requires counterparty financial information in the form of financial statements. Typically, under the Schedule, counterparties which are companies or other conventionally organized business entities are obligated to deliver annual and quarterly financial statements. Investment fund counterparties, such as hedge funds, are obligated to deliver annual and monthly financial statements. For investment funds, it is common to ask for monthly financial statements that set forth the fund's Net Asset Value ("NAV"), which is generally calculated as total assets minus total liabilities. NAV statements can also show redemptions from or subscriptions to the fund in the relevant month.

Publicly-traded counterparties typically require that the delivery timing of their financial statements under the ISDA Master Agreement be similar to (or more lenient than) the reporting timing mandated by their regulator. Private

entities delivering financial information will seek to ensure that they can meet the agreed delivery timing obligations and have a system in place for timely delivery. For example, hedge funds usually obtain their monthly statements from administrators; therefore, when committing to deliver the information to a dealer, a hedge fund will need to be sensitive to the time needed after the end of each month for an administrator to prepare and deliver the statements.

B. Additional Termination Events

The ISDA Master Agreement form allows the parties to designate one or more ATEs, which are Termination Events.²³⁵ When an ATE that is a counterparty credit event occurs, the solvent counterparty presumably will be the sole Non-affected Party and will have the right to terminate all open transactions under the ISDA Master Agreement between the counterparties. These ATEs provide the Non-affected Party with an opportunity to exit its trades with the Affected Party before the Affected Party's problems cause the Affected Party to default under the ISDA Master Agreement due to insolvency. Often, ATEs are specifically tailored to the type of entities involved.

Parties commonly describe the ATEs upon which they agree in the Schedule, and these ATEs will typically apply to all transactions under the ISDA Master Agreement. This, however, need not always be the case. The parties can add an ATE in a Confirmation, and the ATE can be associated with a specific derivatives transaction. This makes sense, for example, when a transaction under the ISDA Master Agreement acts as a hedge for a payment obligation, for example, under a bond or loan agreement. In such an event, a presumably sensible ATE would be the prepayment or redemption of the debt (but identifying the Affected Parties and Affected Transactions in such a way as to allow the hedging counterparty to terminate with respect to the hedge transaction).

The following describe two, among many, possible ATEs:

²³⁵ *Id.* § 5(b)(vi); 1992 ISDA MASTER AGREEMENT, *supra* note 95, § 5(b)(v). The ISDA Master Agreement form does not explicitly provide for additional Events of Default, but parties could add them—with the consequences arising therefrom, as opposed to those arising from ATEs—via the Schedule or a Confirmation. ISDA has drafted a form annex to the Schedule for additional Events of Default in connection with natural gas transactions. INT'L SWAPS & DERIVATIVES ASS'N, FORM OF A PART [6] TO THE SCHEDULE TO THE ISDA 2002 MASTER AGREEMENT FOR NBP TRANSACTIONS AND NBP OPTIONS (2003), <http://www.gas.isda.org/publications/pdf/isdagasannex02.pdf>.

1. Credit-Rating Downgrade

When a counterparty is a rated entity or is guaranteed by a rated entity, a credit rating downgrade ATE is often requested. A lowered credit rating indicates a presumptive decline in creditworthiness. Therefore, a rating below a certain level might require the unwinding of a transaction with counterparties not permitted to transact with parties rated below that level. The rated entity often resists, arguing that rating methodology is flawed and that a credit rating is not a reliable indicator of creditworthiness. A common argument is that while the usefulness of a credit-rating downgrade ATE depends on the accuracy of the ratings published by the rating agencies, its accuracy has been called into question by the financial crisis of 2007–08.

There are many ways to draft this ATE. A paradigmatic example stipulates that if the rated entity experiences a credit-rating downgrade (e.g., below investment grade or a drop of a certain number of rating levels), the other party will have the right to terminate all the outstanding transactions between them under the ISDA Master Agreement. Where the counterparty is a subsidiary of a rated entity, the counterparty can be made subject to a rating downgrade attributable to its owners. Often, an end-user seeks a limitation on a credit downgrade ATE, so that the downgrade can trigger an Early Termination Event only if the downgrade constitutes a material, adverse change in its creditworthiness. This, however, introduces a certain amount of subjectivity.

2. Net Asset Value Trigger

To protect itself from a hedge fund counterparty that suffers a significant loss of assets, a dealer will usually seek to include an ATE based on the fund's NAV Statements (commonly known as an NAV trigger). The most common example is triggered by a specified decline in the fund's NAV in a given period, such as a 1-month, 3-month or 12-month period. Another common NAV trigger is the "NAV floor," which allows the Non-affected Party to terminate with respect to all transactions under the ISDA Master Agreement when the fund-counterparty's NAV falls below a pre-set amount.

Commonly, hedge funds will ask that the monthly and quarterly NAV triggers be based on performance only, thus excluding subscriptions and redemptions. Dealers, however, tend to consider significant redemptions by fund investors as indicative of an impending counterparty crisis.

XII. DOCUMENTING CENTRAL CLEARING AND MARGINING

Unsurprisingly, rules for oversight of complex financial instruments are themselves complex and require documentary solutions. The central clearing mandate—a driving feature of the recent reforms—and the new margin requirements for uncleared trades demonstrate all too well how complex regulatory demands lead to extra documentation needs. This extra documentation too can be complex.

A. Central Clearing Documentation

Dedicated documentation for clearing derivatives transactions by CCPs is now essential for many market participants. Setting aside agreements needed for clearing of exchange-traded futures contracts,²³⁶ documentation that is now needed for cleared off-exchange derivatives transactions comprises at least execution agreements between dealers and their customers and addenda to extant clearing member-client agreements. An execution agreement (sometimes called a “give-up agreement”—a name borrowed from futures transactions) is a document currently required as a practical matter, not by regulation, and focuses on transactions not yet accepted for central clearing. The agreement addresses the process by which counterparties submit a transaction to a CCP for clearing and what happens, and who pays what “breakage,” if a CCP rejects the transaction.²³⁷ A clearing addendum, in contrast to an execution agreement, focuses on transactions already accepted for central clearing. The addendum addresses the way positions can be transferred and transactions closed out, if required. Parties can continue to

²³⁶ These involve (i) a bilateral futures clearing agreement between a customer and a clearing member, pursuant to which the member agrees to clear futures contracts traded by the customer trading through its executing broker, and (ii) a trilateral “give-up” agreement between the customer, the clearing member, and the customer’s executing broker, pursuant to which the broker agrees to “give up” the customer’s trades to the member and to allocate commissions. Lauren Teigland-Hunt, *When Worlds Collide: An Overview of New Industry Documentation for Cleared Swaps*, 32 FUTURES & DERIVATIVES L. REP., Nov. 2012, at 1, 4.

²³⁷ The industry demand for execution agreements may fade as the market evolves. Memorandum from the Futures Indus. Ass’n & Int’l Swaps & Derivatives Ass’n re FIA-ISDA Cleared Derivatives Execution Agreement 2 (Sept. 19, 2012), <http://www.isda.org/publications/pdf/FIA%20Cleared%20Derivatives%20Execution%20Agreement%20V1%201%20Memo%20091912.pdf> (“FIA and ISDA fully expect that as straight through processing and anonymous trading become a reality, the need for breakage agreements will lessen over time.”).

use their existing ISDA Master Agreements for uncleared trades, subject to any need to enter into new or revised collateral provision documentation.

In the United States, a clearing member will be a registered futures commission merchant (“FCM”).²³⁸ An FCM usually depends on its own standard futures clearing agreement to govern its provision of clearing services, which it will modify to accommodate off-exchange derivatives. Accordingly, for U.S. market participants, ISDA and FIA have jointly published the FIA-ISDA Cleared Derivatives Execution Agreement, a template contract meant for use by market participants when negotiating execution-related arrangements for OTC derivatives trades that the parties intend to clear through an FCM.²³⁹ The agreement is effective only for execution phases of covered trades; once a CCP interposes itself between the counterparties in a given trade, the agreement will have no further impact on that trade.

ISDA and FIA have also jointly published for the U.S. market the FIA-ISDA Cleared Derivatives Addendum. This is a template add-on for a futures clearing contract between an FCM and its client and is designed to facilitate central clearing of “swaps, forwards, options or similar transactions,” whether entered into OTC or executed or traded “on or subject to the rules or protocols of any multilateral or other trading facility, system or platform.”²⁴⁰ The Addendum works by overriding the futures agreement to the extent of cleared off-exchange derivatives transactions. Since futures agreements are not standardized in the market, the Addendum itself is sometimes modified by the parties.²⁴¹

For European market participants, ISDA and FIA have co-published the ISDA/FIA Cleared Derivatives Execution Agreement (EU principal-to-principal arrangements). This is a template execution agreement for OTC derivatives transactions that the parties intend to have cleared by CCPs

²³⁸ 7 U.S.C. § 6d(f) (2012). Generally, an FCM solicits or accepts orders for the purchase or sale of, among other things, commodities for future delivery, security futures products, swaps, and commodity options, and accepts payment from, or instead extends credit, to margin, guarantee, or secure any transactions therefrom. 7 U.S.C. § 1(a)(28) (2012); 17 C.F.R. § 1.3(p) (2015). In the futures market, an FCM is often referred to as a futures broker; outside of the United States, a clearing broker.

²³⁹ Generally, a futures commission merchant solicits or accepts orders for the purchase or sale of any commodity for future delivery on an exchange and accepts payment from, or extends credit to, those whose orders are accepted. 7 U.S.C. § 1(a)(28); 17 C.F.R. § 1.3(p).

²⁴⁰ FUTURES INDUS. ASS’N & INT’L SWAPS & DERIVATIVES ASS’N, FIA-ISDA CLEARED DERIVATIVES ADDENDUM § 1(a) (2012).

²⁴¹ Teigland-Hunt, *supra* note 236, at 6.

outside of the United States. The agreement, which is stated to be governed by English law, is intended for use when clearing will be done under the principal-to-principal clearing model.²⁴² The same institutions have also jointly published for the European market the ISDA/FIA Client Cleared OTC Derivatives Addendum. This document is a template add-on for a clearing member and its client to use when documenting their arrangement for clearing any qualifying “over-the-counter swap, forward, option or similar transaction.”²⁴³ The addendum is designed to supplement an existing clearing agreement between a clearing member and its client agreement, and when clearing is done on the principal-to-principal model, as in Europe.

ISDA has launched and will launch Protocols to accommodate arising regulatory documentation requirements. For instance, in connection with the non-financial end-user exception to the central clearing requirement (and thus to the trade execution requirement) in the United States,²⁴⁴ the CFTC imposes an end-user documentation requirement. If trading under the exception, a swap dealer or a major swap participant must “obtain documentation sufficient to provide a reasonable basis on which to believe that its counterparty meets the statutory conditions required for an exception from a mandatory clearing requirement”²⁴⁵ To facilitate U.S. market participant compliance needs with regard to this regulation, ISDA launched its March 2013 D-F Protocol (also known as “DF Protocol 2.0”).²⁴⁶ The Protocol allows parties in a CFTC-regulated trading relationship to supplement their trading documentation with notices, representations, and covenants. The Protocol includes a requirement of each party to deliver a “Protocol Questionnaire.”²⁴⁷ By adhering to the Protocol and delivering the questionnaire with the appropriate representations, an end-user can elect to rely upon the end-user exception, thus allowing its counterparty swap dealers

²⁴² For discussion of clearing models, see *supra* text accompanying notes 50–51.

²⁴³ FUTURES INDUS. ASS’N & INT’L SWAPS & DERIVATIVES ASS’N, ISDA/FIA CLEARED DERIVATIVES EXECUTION AGREEMENT, pmb1. & § 20 (2016).

²⁴⁴ See *supra* text accompanying note 29.

²⁴⁵ 17 C.F.R. § 23.505(a) (2013).

²⁴⁶ INT’L SWAPS & DERIVATIVES ASS’N, MARCH 2013 DF PROTOCOL AGREEMENT (Mar. 2013), <http://assets.isda.org/media/38756a02/7ecb18ba-pdf/>.

²⁴⁷ The D-F Protocol 2.0 comprises four documents: (i) an adherence letter; (ii) a protocol agreement; (iii) a Protocol Questionnaire; and (iv) a supplement, which contains the substantive provisions and consists of four schedules, two mandatory (one for definitions and one for representations, including in connection with the end-user exemption, and also containing general terms) and two optional (one for valuations and one for portfolio reconciliation).

and major swap participants also adhering to the Protocol to meet their documentation requirement.

B. Margin Documentation

A transformative feature of the G20 policy drive and the consequent legal and regulatory reform is the imposition of margin requirements even with regard to uncleared OTC derivatives trades.²⁴⁸ In the past, OTC derivatives dealers commonly declined to post initial margin (“Independent Amount” in CSA jargon) and, in connection with liquid transactions, were often reluctant to require it from their creditworthy customers. Even the extent of variation margin, which was commonly posted by counterparties before—and even more so after—the 2007–08 financial crisis, was a somewhat negotiated affair, especially when transactions were short-dated.²⁴⁹ New rules, however, institute a mandatory margin regime in most OTC derivatives trading circumstances.

The CFTC has adopted margin requirements for swap dealers and major swap participants registered with the CFTC and not supervised by a Prudential Regulator in connection with nearly all uncleared swaps (“CFTC Margin Rule”).²⁵⁰ Separately, the Prudential Regulators imposed mostly the same requirements—with some differences—on swap dealers, major swap participants, security-based swap dealers, and major security-based swap participants subject to the authority of a Prudential Regulator with regard to

²⁴⁸ See CFTC Margin Rule, *supra* note 19; PR Margin Rule, *supra* note 19; Final Draft RTS, *supra* note 19; see also Scott O’Malia, *A Derivatives Revolution*, ISDA Q., Oct. 2016, at 6, 6 (launch of required exchange of initial and variation margin for uncleared derivatives transactions is “most extensive transformation of derivatives markets in decades”).

²⁴⁹ See CREDIT EXPOSURE SURVEY, *supra* note 45, at 6 (government sponsored entities and other official institutions and insurance companies did not routinely post collateral with dealers).

²⁵⁰ CFTC Margin Rule, *supra* note 19. As part of its final rulemaking with regard to uncleared swap margin requirements, the CFTC adopted an interim final rule to implement statutory exemptions, enacted after passage of the Dodd-Frank Act, from these margin requirements for non-financial entities (commercial end-users using swaps to hedge commercial risk), small financial institutions, captive finance companies, certain cooperative entities, and treasury affiliates acting as agents of clearing-exempt entities. See Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants, 81 Fed. Reg. 636, 677 (Jan. 6, 2016) (to be codified at 17 C.F.R. pts. 23 & 140) [hereinafter CFTC Margin Requirement Exclusions].

uncleared swaps and uncleared security-based swaps (“PR Margin Rule”).²⁵¹ (The CFTC Margin Rule and the PR Margin Rule, collectively, are hereinafter the “Margin Rules.”) Setting aside phase-in, threshold amount, and cross-border matters, the Margin Rules require a “Covered Swap Entity” (or “CSE”), when trading in nearly any derivatives product that is not centrally cleared, to collect and post initial margin (“two-way margining”) if its counterparty is a “swap entity” (a registered swap dealer, major swap participant, security-based swap dealer, or major security-based swap participant) or a “financial end-user” (expansively defined to include financial counterparties other than swap entities, but to exclude commercial firms) with “material swaps exposure” (average daily aggregate notional amount of more than \$8 billion, as measured in accordance with the Margin Rules).²⁵² Additionally, a Covered Swap Entity must post or collect initial margin on each business day to accommodate portfolio composition changes and other factors affecting initial margin amounts. The margin rules also require Covered Swap Entities to post or collect variation margin at least once per business day when its counterparty is a swap entity or a financial end-user, whether with or without “material swaps exposure.” Special margin requirements apply to Covered Swap Entity transactions with affiliates. In Europe, similar, but not identical, margin rules apply.²⁵³ The following Table

²⁵¹ PR Margin Rule, *supra* note 19. The Prudential Regulators adopted a final rule to exclude from uncleared swap margin requirements those swaps that are subject to the CFTC Margin Requirement Exclusions, *supra* note 250. Margin and Capital Requirements for Covered Swap Entities, 81 Fed. Reg. 50,605, 50,607–09 (Aug. 2, 2016) (to be codified at 12 C.F.R. pts. 45, 237, 349, 624 & 1221).

²⁵² 17 C.F.R. § 23.151 (2016); 12 C.F.R. § 237.2 (2016). The following are not financial end-users: sovereign entities, multilateral development banks, the Bank of International Settlements, certain captive finance companies, agent affiliates, and, under the CFTC Margin Rule, eligible treasury affiliates exempted from margin requirements by CFTC rule. 17 C.F.R. § 23.151; 12 C.F.R. § 237.2. The Prudential Regulators have stated in an interim final rule publication that they intend to match any exclusions from the definition of financial end-user implemented by the CFTC. Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants, 80 Fed. Reg. 74,840, 74,856 (Nov. 30, 2015) (to be codified at 12 C.F.R. pts. 45, 237, 349, 624 & 1221).

²⁵³ The European Union margin rules arise from a delegated regulation adopted by the European Commission and published in the Official Journal of the European Union on October 4, 2016. Commission Delegated Regulation (EU) 2016/2251 of 4 October 2016, Supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC Derivatives, Central Counterparties and Trade Repositories with Regard to Regulatory Technical Standards for Risk-Mitigation Techniques for OTC Derivative Contracts Not Cleared by a Central Counterparty, 2016 O.J. (L 340) 9 (EU).

3 summarizes the basic margin requirements that the CFTC Margin Rules and PR Margin Rules apply to a Covered Swap Entity based on counterparty type.

Table 3: Margin Requirements Applicable to a Covered Swap Entity under the CFTC and Prudential Regulators Margin Rules

| Counterparty Margin | Swap Entity | Financial End-User with Material Swaps Exposure | Financial End-User without Material Swaps Exposure | Affiliate | Other |
|-----------------------------|----------------|--|---|--|--------------------------------|
| Initial Margin | Two- way | Two-way | Not compulsory ^a | CFTC CSE: one-way (post), if affiliate is PR CSE ^b PR CSE: one- way (collect) ^c | Not compulsory ^a |
| Variation Margin | Two- way | Two-way | Two-way | Two-way ^d | Not compulsory ^a |

^a PR CSE must collect IM or VM that it considers appropriate for the credit risk posed by the counterparty and the risks posed by the transaction. 12 C.F.R. §§ 237.3(d), 237.4(d) (2016). If transaction specifically exempted, not even this purported requirement applies. *Id.*

^b Release from IM collection requirement under CFTC Margin Rule is subject to conditions. 17 C.F.R. § 23.159(a) (2016).

^c If affiliate is a PR CSE, IM requirement is effectively two-way.

^d CFTC Margin Rule requires exchange of VM only with swap entity or financial end-user affiliates. 17 C.F.R. § 23.159.

Under the Margin Rules generally, a Covered Swap Entity posting or collecting initial margin for a covered transaction must require that one or more custodians not affiliated with the Covered Swap Entity or its counterparty hold the mandatory part of that initial margin.²⁵⁴ In addition, the PR Margin Rule compels a Covered Swap Entity posting initial margin that exceeds the mandatory initial margin to require that one or more such custodians also hold the excess initial margin.²⁵⁵ This requirement

²⁵⁴ 17 C.F.R. § 23.157(a)–(b) (2016); 12 C.F.R. § 237.7(a)–(b) (2016).

²⁵⁵ 12 C.F.R. § 237.7(b).

notwithstanding, when a CFTC Covered Swap Entity collects mandatory initial margin from its affiliate or when a PR Covered Swap Entity collects initial margin in cash from an affiliate in accordance with the PR Final Margin, the Covered Swap Entity itself or its affiliate can act as custodian for such margin.²⁵⁶ No custodian requirements apply to variation margin.

The margin rules address many aspects of collateral transfer practices, such as what constitutes eligible collateral for initial margin and for variation margin,²⁵⁷ but they also impose specific documentation requirements. A Covered Swap Entity is required to execute trading documentation with any of its swap entity or financial end-user counterparties that provides for, among other things, the right to collect and post initial margin in accordance with the margin rules, valuation of swaps for margin amount, determinations, and resolution of valuation disputes.²⁵⁸ In addition, a Covered Swap Entity must enter into an agreement with each custodian holding collateral that the Margin Rules require be segregated.²⁵⁹ The custodial agreement must prohibit the custodian from re-hypothecating, re-pledging, reusing, or otherwise transferring the initial margin it holds and must be enforceable under the laws of all relevant jurisdictions, even in the case of bankruptcy or insolvency.²⁶⁰ (Temporary re-hypothecation of cash collateral to convert to permitted non-cash assets is allowed.)²⁶¹ Tri-party collateral custody agreements, heretofore but no longer uncommon for OTC derivatives trading relationships, will likely address more than is required by the margin rules; parties to the agreements will seek to resolve such critical issues as risk of loss due to the custodian's negligence, custodian credit risk, or whether the custodian will segregate a collateral taker's assets from those of the custodian or other collateral takers.

ISDA began to address the need for compliant credit support documentation with its 2016 VM CSAs and its 2016 IM CSAs.²⁶² Further, ISDA published an elaborate ISDA 2016 Variation Margin Protocol to help market participants comply with variation margin rules for uncleared swaps.

²⁵⁶ 17 C.F.R. § 23.159(c)(3) (2016); 12 C.F.R. § 237.11(d) (2016).

²⁵⁷ 17 C.F.R. § 23.156 (2016); 12 C.F.R. § 237.6 (2016).

²⁵⁸ 17 C.F.R. § 23.158 (2016); 12 C.F.R. § 237.10 (2016). For the CFTC's general swap trading relationship documentation requirement, see 17 C.F.R. § 23.504 (2012).

²⁵⁹ 17 C.F.R. § 23.157(c); 12 C.F.R. § 237.7(c).

²⁶⁰ 17 C.F.R. § 23.157(c); 12 C.F.R. § 237.10(c).

²⁶¹ 17 C.F.R. § 23.157(c)(1); 12 C.F.R. § 237.10(c)(1).

²⁶² For discussion of the various ISDA CSAs, including the 2016 IM and VM CSAs, see *supra* Section VI.C.

This Protocol provides for an exchange of questionnaires, which enables counterparties to identify relevant regulatory regimes and to revise their collateral arrangements to comply with the applicable regulations. Additionally, the Protocol provides that a pair of adhering parties will so revise by agreeing to one of three “methods”: (i) *Amend Method*: amend an existing CSA per the terms of the Protocol in accordance with the questionnaires (for both new and legacy transactions); (ii) *Replicate-and-Amend Method*: create a replica of the existing CSA, but the replica is amended per the terms of the Protocol, based on the questionnaires (for new transactions only); and (iii) *New CSA Method*: add a new CSA per the terms of the Protocol, based on the questionnaires (for new transactions only). If the parties treat new and legacy transactions separately, they will net separately for each group. Alternatively, parties can enter into a new 2002 ISDA Master Agreement with Protocol-deemed terms and a new and compliant CSA, as under the New CSA Method. Clearly, documentation features strongly under the new collateral rules.

CONCLUSION

The concept driving the legal and regulatory upwelling of recent years is that oversight and a prescribed system of trading will ease management of, if not preempt, future financial crises. Whether that concept is sound or, if it is, whether implementation of the new rules will succeed or even prove economical, is unknown. The new rules, however, go beyond plain vanilla legal reforms and regulatory drives; they represent a remaking of nearly a whole system of trade and, with that, an assertion of government control over a once freewheeling and opaque market. Implicitly, the new rules also represent a governmental attempt to diminish the power of the derivatives dealers, something that has long characterized the OTC market.

Regardless, market participants must now order their relationships not just by bilateral interests, but also by governmental dictates. These dictates, in the name of systemic risk reduction, add complexity, something which itself arguably contributes to financial crises,²⁶³ and raise the specter of unintended

²⁶³ See Lee Bucheit, *Did We Make Things Too Complicated?*, 27 INT’L FIN. L. REV. 24, 26 (2008) (“Excessive complexity in the design, description and documentation of financial transactions contributes to debt crises in several ways.”).

consequences. Already, some complain intelligently of fragmented liquidity²⁶⁴ and too-big-to-fail CCPs.²⁶⁵ Moreover, inconsistent CCP regulations across national jurisdictions could lead to relatively lax jurisdictions attracting significant, and risky, amounts of clearing business. In any event, the age of regulation has arrived for derivatives and it impacts even at the documentation level of things.

The surge of rulemaking significantly bears on transaction methods, but the utility of the classic OTC derivatives market persists. Precisely tailored derivatives serve a tenaciously useful function, and the OTC market possesses past-proven skills at product customization and innovation that genuinely benefit end-users. Tacitly, exemptions from and exceptions to mandatory central clearing recognize the significance of these attributes.

Documenting an OTC derivatives trading relationship today is much more convenient than it was before ISDA made order out of disorder and began publishing industry-standard documents. That said, market practices and products, as well as the resultant standard documentation, have evolved to lofty levels of sophistication. Unquestionably, ISDA's document standardization has contributed greatly to the growth and dynamism of the OTC derivatives market but, as it turns out, this great contribution has led to a rarefaction of knowledge regarding OTC derivatives documentation. The post-crisis oversight and market reordering only increase the erudition needed for expert legal know-how in this market.

More than ever, intricacy characterizes documentation and legal structuring in the OTC derivatives market. This creates risk for market participants; transaction documents may not perfectly express or ensure consummation of party intentions and complicated rules can lead to compliance failures. Undoubtedly, parties can manage this risk, but to do so they require, as a first step, familiarity.

²⁶⁴ See, e.g., INT'L SWAPS & DERIVATIVES ASS'N, ISDA RESEARCH NOTE: CROSS-BORDER FRAGMENTATION OF GLOBAL INTEREST RATE DERIVATIVES: SECOND HALF 2015 UPDATE (2016); GIANCARLO, *supra* note 80, at 24; Richard Squire, *Clearinghouses as Liquidity Partitioning*, 99 CORNELL L. REV. 857, 899–902 (2014).

²⁶⁵ See e.g., Sean J. Griffith, *Governing Systemic Risk: Towards a Governance Structure for Derivatives Clearinghouses*, 61 EMORY L.J. 1153, 1157–58 (2012); see also Francesco Guarascio, *EU Finance Chief Wants System to Wind Down Troubled Clearing Houses*, REUTERS (July 6, 2016), <http://www.reuters.com/article/us-eu-markets-dombrovskis-idUSKCN0ZM110>. But see Timothy Massad, Chairman, Commodity Futures Trading Comm'n, Remarks at the Economic Club of New York (Dec. 6, 2016), <http://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-52>.