Regulators of several countries, including the United States Commodity Futures Trading Commission (CFTC), have introduced or proposed rules requiring clearing of over-the-counter (OTC) derivatives through central counterparties. Clearing requirements in turn affect margin requirements, which are one key mechanism used by parties to mitigate counterparty risk. Although clearing rules help shield collateral from the insolvency of the secured party, they also may substantially increase financial and operational costs for the users of cleared derivatives because of the higher margin delivery requirements applicable to such transactions.

**Background**

A derivative is a contract between two parties that transfers risks related to one or more underlying assets (such as equity securities, bonds, loans, or commodities), underlying market factors (such as interest rates or currency exchange rates) or underlying events (such as natural disasters or man-made disasters). It requires one or both parties to make agreed upon payments or deliveries of assets to the other party upon the occurrence of a specified event or on a specified date.\(^1\) Until recently, the regulatory regime and market practices for bilaterally negotiated OTC derivatives have been starkly different than for exchange-traded derivatives such as oil futures and other commodity futures.\(^2\) However, the financial crisis of 2008 has resulted in what many refer to as the

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\(^2\) Prior to the financial crisis, OTC transactions were largely conducted without regulatory supervision. See Matthew Philips, Traders Take Their Swaps Deals to Futures Exchanges, BLOOMBERG BUSINESSWEEK (Jan. 24, 2013), http://www.businessweek.com/articles/2013-01-24/traders-take-their-swaps-deals-to-futures-exchanges.
“futurization” of the OTC derivatives markets.³

The financial crisis that began in 2008 with the failures and near-failures of large financial institutions generated a great deal of scrutiny of OTC derivatives and their role in the demise of such companies.⁴ Although OTC derivatives were not the only cause of the financial crisis, there was international consensus that certain types of OTC derivatives contributed to the crisis⁵ and that more regulation and transparency was needed to diminish the risk they pose to the global financial system.⁶ This consensus manifested itself in an agreement by the leaders of the Group of 20 (G-20)⁷ in September 2009 that included a commitment by the participating countries to pass laws and regulations requiring (i) standardized OTC derivatives to be cleared through central counterparties by the end of 2012 and (ii) non-cleared OTC derivatives to be subject to higher capital requirements.⁸ Many regulators have since adopted or proposed central clearing rules in accordance with the G-20 commitments.⁹

Clearing Rules in the United States

In the United States, OTC derivatives clearing requirements were part of the Dodd–Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act).¹⁰ Title VII of the Dodd-Frank Act imposes comprehensive changes in the regulatory framework for derivatives and includes amendments to the Commodity Exchange Act (CEA)¹¹ and the Securities Exchange Act of 1934.¹² Under the Dodd-Frank Act, the Securities and Exchange Commission (SEC) has the authority to regulate certain OTC derivatives called “security-based swaps” and the CFTC has the authority to regulate all other swaps, except for mixed swaps, which are under the joint jurisdiction of the SEC and the

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³ See id.
⁷ The G-20 includes Argentina, Australia, Brazil, Canada, China, European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States. See What Is the G20, G20.ORG, http://www.g20.org/docs/about/about_G20.html (last visited Apr. 11, 2013).
⁹ Regulators in Japan, Singapore, Hong Kong, and the European Union have all taken steps to advance central clearing in their respective jurisdictions. See id. at 50–51.
CFTC.\textsuperscript{13} Although the SEC has not yet imposed any clearing mandates with respect to security-based swaps, the CFTC imposed its first clearing mandate on December 13, 2012.\textsuperscript{14}

The CEA, as amended by the Dodd-Frank Act, prohibits a counterparty from entering into a swap that the CFTC has required to be cleared unless that counterparty submits the swap for clearing to a derivatives clearing organization (DCO).\textsuperscript{15} The DCO can make a submission to the CFTC or the CFTC can directly initiate a review of a swap—or group, category, type, or class of swaps—and determine whether it should be required to be cleared.\textsuperscript{16}

On February 1, 2012, the CFTC requested DCOs that were already clearing OTC derivatives to submit all swaps that they were accepting for clearing as of that date.\textsuperscript{17} In its first swap clearing mandate, the CFTC required that four classes of interest rate swaps and two classes of credit default swaps (CDSs) be cleared by DCOs while meeting certain basic specifications:\textsuperscript{18} (1) fixed-to-floating swaps; (2) basis swaps; (3) forward rate agreements; (4) overnight index swaps; (5) North American untranche CDS indices; and (6) European untranche CDS indices.\textsuperscript{19} The clearing mandate became effective on February 11, 2013\textsuperscript{20} and requires swap counterparties to submit for clearing by a DCO any swap covered by the rules as soon as technologically practicable and no later than the end of the day of execution, unless one of the counterparties is an entity that is eligible for an exemption from the clearing requirements.\textsuperscript{21}

**Margin Requirements and Their Sources**

One of the key mechanisms used by parties to an OTC derivative transaction to reduce counterparty risk is the posting of margin. Typically, one or both of the parties will be required to deliver collateral to secure its payment obligations. If a party defaults by failing to make a payment or becoming subject to an insolvency proceeding, the other party has the right to terminate the OTC derivative and use the posted collateral to pay any termination payment owed by the defaulting party. A party may be required to deliver margin at the outset of the transaction (referred to as “initial margin”) and may also be required to deliver margin periodically as the potential termination payment of the parties changes over the life of the transaction (referred to as “variation margin”).

\textsuperscript{13} See Dodd-Frank Act §§ 722, 761–62.
\textsuperscript{15} 7 U.S.C. § 2(h)(1)(A).
\textsuperscript{16} See id. § 2(h)(2).
\textsuperscript{17} Clearing Requirement Determination Under Section 2(h) of the CEA, 77 Fed. Reg. at 74,287.
\textsuperscript{18} See id. at 74,336.
\textsuperscript{19} Id. at 74,331.
\textsuperscript{20} Id. at 74,284.
\textsuperscript{21} Id. at 74,335–36.
Margin requirements for a typical non-cleared OTC derivative are set forth in a bilateral agreement between the parties. OTC derivatives are typically documented under industry-standard master agreements, which are printed forms prepared by the International Swaps and Derivatives Association (ISDA).\textsuperscript{22} Margin requirements for such transactions are set forth in a credit support annex (CSA) to the agreement.\textsuperscript{23}

In contrast, margin requirements for a cleared OTC derivative spring from two sources. First, the DCO that clears the derivative will require both initial and variation margin based on the rules of the DCO and any government regulations applicable to the DCO. Second, since a counterparty to a cleared OTC derivative needs to gain access to a DCO through a Futures Commission Merchant (FCM), which is a member of the DCO, the counterparty will need to enter into a futures account client agreement with the FCM.\textsuperscript{24} Under this futures account client agreement, the FCM may require the counterparty to deliver margin in addition to the margin required by the DCO.

**Clearing Rules Help Protect Collateral**

Parties to a non-cleared OTC derivative can choose in the CSA how collateral delivered by a party must be held. For instance, the CSA may allow the pledgee of the collateral to use all the collateral posted to it in other transactions (that is, the right of “re-hypothecation”) and commingle such collateral with collateral posted by other parties. Although a counterparty typically prefers that the collateral it posts be held by a bank custodian and not re-hypothecated, dealers will insist on holding the collateral directly and having the right to re-hypothecate the collateral because this generates significant revenues for them. Such commingling and re-hypothecation of collateral were partially responsible for losses suffered by Lehman’s OTC swap counterparties on the collateral they had posted to Lehman.\textsuperscript{25} Following the Lehman insolvency, some buy-side clients negotiated prohibitions on re-hypothecation and required third-party custody for posted collateral to prevent commingling.\textsuperscript{26} The Dodd-Frank Act mandates that a dealer is

\textsuperscript{22} See DIETMAR FRANZEN, DESIGN OF MASTER AGREEMENTS FOR OTC DERIVATIVES 17–19 (2001).


\textsuperscript{24} See, e.g., AMERITRADE, FUTURES CLIENT AGREEMENT (2013), available at https://www.tdameritrade.com/retail-en_us/resources/pdf/TDA600.pdf. The counterparty will also need to enter into an addendum that modifies the futures account client agreement to address cleared OTC derivatives and an execution agreement that addresses the processing of cleared OTC derivatives, including the submission and acceptance of OTC derivatives into central clearing and consequences of failure of trade submissions. See ISDA Cleared Swap Documentation, ISDA, http://www.isda.org/publications/isda-clearedswap.aspx (last visited Apr. 11, 2013).


\textsuperscript{26} See Harriet Agnew, Rehypothecation Is Being Redefined, FINANCIAL NEWS (Sept. 13, 2010),
obligated to segregate initial margin if requested by its counterparty.\textsuperscript{27}

Under a cleared OTC derivative transaction, a counterparty’s collateral is better protected from the insolvency risk of the FCM or DCO because re-hypothecation of collateral is prohibited and the ability of the FCM or DCO to comingle the collateral is restricted.\textsuperscript{28} On February 7, 2012, the CFTC published a final rule adopting a new margin segregation model for cleared swaps that the CFTC termed the “legal segregation with operational commingling” model (LSOC Model).\textsuperscript{29} Under the LSOC Model, FCMs and DCOs must segregate, on their books and records, collateral posted by each cleared swap customer and treat such collateral as belonging solely to that customer.\textsuperscript{30} However, they are permitted, for operational purposes, to comingle the collateral deposited by all cleared swap customers in one account\textsuperscript{31} that is “separate from any account holding FCM or DCO property or holding property belonging to non-cleared swaps customers.”\textsuperscript{32}

\textbf{Costs Related to Margin Requirements for Cleared Swaps}

Although the LSOC Model imposed by the CFTC helps to safeguard collateral posted for cleared OTC derivatives from the counterparty risks of the FCM and DCO, the margin requirements may increase the financial and operational costs for such transactions compared to non-cleared OTC derivatives.

The CSA governing non-cleared OTC derivatives gives counterparties flexibility to negotiate the initial and variation margin to be posted by each party, the types of collateral that may be accepted, and any valuation haircuts to be applied to the collateral.\textsuperscript{33} The amount of collateral required, especially the initial margin, often depends on the type of counterparty. For example, an ERISA benefit plan will likely be required to post lower initial margin (if any) than a distressed asset hedge fund.\textsuperscript{34} In


\textsuperscript{30} Id.

\textsuperscript{31} The final rule defines commingling as holding “such items in the same account, or to combine such items in a transfer between accounts.” 17 C.F.R. § 22.1 (2012).


\textsuperscript{33} See INT’L SWAPS & DERIVATIVES ASS’N, ISDA MARGIN SURVEY 2012 14 (2012), available at

\textsuperscript{34} See INT’L SWAPS & DERIVATIVES ASS’N, ISDA MARGIN SURVEY 2012 14 (2012), available at
addition, a counterparty may not be required to post collateral at all until the dealer’s exposure to the counterparty exceeds a certain “Threshold Amount” specified in the CSA.\(^{35}\) Even if the exposure exceeds the Threshold Amount, the counterparty may not be required to post collateral unless the amount required to be delivered exceeds a “Minimum Transfer Amount” (to avoid nuisance transfers).\(^{36}\) Both the Threshold Amount and the Minimum Transfer Amount are negotiated between the dealer and the counterparty and will vary depending on the creditworthiness of the counterparty. Additionally, the parties can specify the frequency of collateral calls, the terms of the return of collateral and interest thereon, and valuation dispute resolution.\(^{37}\)

In contrast to a non-cleared OTC derivative, a counterparty has more stringent requirements and much less flexibility to negotiate the margin requirements for cleared OTC derivatives.

- CFTC rules prescribe minimum levels of initial margin that a DCO must collect from its FCM members.\(^{38}\) Therefore, the DCO collects margin from all FCMs\(^{39}\) and FCM members pass on the margin delivery requirements to their customers,\(^{40}\) regardless of their creditworthiness or trading relationships.\(^{41}\) Even a very creditworthy counterparty or a counterparty with a longstanding relationship with the FCM will need to post initial margin, thereby increasing the trading costs.\(^{42}\)
- DCOs will make daily, or even intraday, margin calls on the FCMs, which in turn could pass the same daily or intraday calls on to their customers.\(^{43}\) Unlike a


\(^{35}\) See INT’L SWAPS & DERIVATIVES ASS’N, ET AL., INDEPENDENT AMOUNTS, supra note 33, at 3–4.

\(^{36}\) See id. at 36 n.7.


\(^{39}\) Id.

\(^{40}\) Counterparties do not post this margin directly to the DCO. Instead, they post such collateral to their FCMs which, in turn, post the collateral to the DCOs. See Protection of Customer Funds: Frequently Asked Questions, FUTURES INDUS. ASS’N 2–4 (June 2012), http://www.futuresindustry.org/downloads/PCF-FAQs.PDF.

\(^{41}\) See The Bilateral World vs The Cleared World, supra note 34.

\(^{42}\) Id.

counterparty under a CSA for a non-cleared OTC derivative that may have as many as two business days to meet a margin calls, a counterparty to a cleared OTC derivative will need to have the operational capability and eligible assets available to deliver daily or intraday margin. Dealers expect that some counterparties will not be able to fund daily margin calls on cleared trades and will need their dealers to temporarily fund margin calls on their behalf.\textsuperscript{44} Although some dealers are willing to extend credit to their clients for this purpose, the additional cost of such credit will increase the overall costs of trading in cleared OTC derivatives and may drive some counterparties out of the market.\textsuperscript{45}

- Unlike dealers, which may be willing to accept many different types of securities as collateral in non-cleared OTC derivative transactions, many DCOs accept only cash and U.S. treasuries as collateral.\textsuperscript{46} Although financial institutions have begun to offer their clients “collateral transformation” services, whereby they engage in a repurchase transaction with a customer, accepting the customer’s securities in exchange for suitable collateral that the customer may post as cleared swaps margin, this type of service imposes an additional cost on counterparties.\textsuperscript{47} Sourcing eligible collateral will be a challenge to counterparties and will increase the financial cost of using cleared OTC derivatives.

- An FCM may collect additional margin beyond what is required to be posted to the DCO.\textsuperscript{48} This excess margin may be retained by the FCM or posted to the DCO. The combination of the margin required by the DCO and the margin required by the FCM may be substantially higher than the margin required by a dealer under an equivalent non-cleared OTC derivative. The more creditworthy counterparties will be the ones most affected by these increased margin requirements.

- Although a dealer under a CSA for a non-cleared OTC derivative may be required to post collateral to the counterparty, collateral posting for cleared swaps is a one-way obligation that is imposed only on the counterparty and neither a DCO nor an


\textsuperscript{45} Id.


FCM will post collateral to the counterparty. This means that if an FCM or DCO becomes insolvent, a counterparty will not have any collateral posted to cover the obligation of the FCM or DCO in respect of the cleared swap positions.

**Conclusion**

The unprecedented regulatory response to the perceived dangers of the OTC derivatives markets is transforming clearing requirements in these multi-trillion dollar markets. The impact of regulatory changes on collateralization requirements and, more generally, on how counterparties to OTC derivatives mitigate counterparty risk cannot be overstated. Although margin delivered by counterparties to cleared OTC derivatives may be better protected from the insolvency risk of the pledgee under the new regulatory regime, counterparties to cleared swaps will also be subject to more stringent collateral delivery requirements that will be more expensive and more difficult to implement operationally.

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49 The Basics on Futures & Options, KAN. CITY BD. OF TRADE, http://www.kebt.com/trading_basics.html (last visited Apr. 11, 2013). The existing regime of the commodity futures trading business was the basis for the CFTC’s scheme of regulating the clearing of OTC derivatives.