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Credit Risk Reduction in the International Over-the-Counter Derivatives Market: Collateralizing the Net Exposure with Support Agreements

The use of master netting and credit support agreements between counterparties in the over-the-counter (OTC) derivatives market has become the most effective and widely used methods to reduce credit risk (the risk of loss resulting from a counterparty's inability to fulfill its obligations as they become due on maturing transactions). An OTC derivative transaction is a custom-tailored financial contract entered into between two parties whose value depends on the values of one or more underlying assets or indexes of asset values. The intent of the transaction is to transfer risks that arise from rate and price movements in the financial markets to which either counterparty may be exposed.¹ According to a market survey, credit support and netting arrangements cover approximately \$100 billion of the United States' \$172.6 billion total replacement value of derivatives outstanding.²

Netting agreements permit counterparties to offset gains or losses they may have on a number of separate OTC derivatives transactions between them.

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1. See U.S. GENERAL ACCOUNTING OFFICE, FINANCIAL DERIVATIVES ACTIONS NEEDED TO PROTECT THE FINANCIAL SYSTEM 24 (1994) [hereinafter GAO REPORT]. For a general explanation of what derivatives are and how they have further globalized the financial markets, see also Saul S. Cohen, *The Challenge of Derivatives*, 63 FORDHAM L. REV. 1993, 2000-3 (1995); Adam R. Waldman, *OTC Derivatives & Systemic Risk: Innovative Finance or the Dance into the Abyss?*, 43 AM. U. L. REV. 1023, 1026 (1994).

2. See Peter Thompson, *Are You Covered?: ISDA Mulls Legal Risk Survey for Multibillion Dollar Collateralized Biz*, DERIVATIVES WEEK, Jan. 8, 1995, at 1.

Under a credit support agreement, securities can be pledged as collateral against the net credit exposure resulting from the mark-to-market valuation of all outstanding transactions.³ As a result, a party with net credit exposure may reduce or eliminate his or her credit risk against a counterparty by receiving an interest in securities, the value of which is equal to its net credit exposure. This conclusion assumes netting is enforceable in the counterparties' jurisdictions and the counterparty, in receipt of securities, has complied with the applicable legal requirements to effect a transfer or to create a security interest in the securities, thereby guaranteeing a party's rights of enforcement in the event its counterparty defaults on its obligations.

However, such credit risk-reducing practices must be examined in light of the cross-border nature of most OTC derivatives transactions. For example, the laws of many jurisdictions may affect the settlement of a dispute arising from the transactions. It is common for counterparties headquartered in different countries to engage in multiple derivatives transactions booked through their branches. These branches may be located in the various financial centers in Europe, the United States, and Asia because the biggest users and dealers of derivatives are international banks.⁴ When entering into a cross-border transaction, the counterparties must assess the laws of each relevant jurisdiction regarding the recognition of netting, the legal requirements to transfer or create a valid security interest in the securities representing the credit support, and the insolvency law treatment of those practices and interests. Legal risk involving the risk of loss always exists due to either an unexpected application of a law or an unenforceable contract.⁵

To determine the counterparties' rights to the securities representing the credit support, most countries' courts, adhering to the conflicts of laws *lex situs* rule, will apply the law where the securities are deemed to be located at the time of the relevant transaction creating the interest in the securities. Moreover, determining where securities are located in this day of immobilization and dematerialization of securities, in which ownership and security interests are more frequently kept by electronic book entry rather than by physical possession, is not easy.⁶ In the event of counterparty default, the nondefaulting party's rights to the credit support may be determined by at least three sets of laws: the law governing the credit support agreement; the law of the jurisdiction in which the securities are deemed to be located by a court; and the law of the defaulting counterparty.

3. Mark-to-market valuation is a method of valuing OTC derivatives transactions at current market rates.

4. Banks are considered the main suppliers of OTC derivatives and account for just over half of all outstanding derivative contracts. See *A Brief History of Derivatives*, *ECONOMIST*, Feb. 10, 1996, at 9.

5. See BANK FOR INT'L SETTLEMENTS CROSS-BORDER SECURITIES SETTLEMENTS, 39 (1995) [hereinafter CROSS-BORDER SECURITIES SETTLEMENTS].

6. See generally, J. Benjamin, *Computerization and Negotiability, Part 1*, 9 J.I.B.F.L. 357 (1995).

This article will explain how netting and collateralization of OTC derivatives transactions can reduce credit risk. Part One explains netting and examines the use of standard documentation by the International Securities and Derivatives Association (ISDA) to create a multi-branch netting agreement. Part Two analyzes credit support agreements to show how they serve to reduce credit risk by the use of either the absolute transfer or security interest method. Part Two also explains recently issued standard documentation by ISDA, governed by English law, to show how the net credit exposure arising from a multibranch netting agreement is collateralized with the use of securities as credit support.

Part Three introduces the transfer method of collateralization and discusses the ISDA Transfer Credit Support Annex, governed by English law, to show how it works in conjunction with the ISDA Master Agreement. This part also presents the security interest method of collateralization and explains the corresponding ISDA Credit Support Deed governed by English law.

Part Four analyzes the dematerialization and immobilization of securities to determine which jurisdiction's laws govern the validity of rights to such securities under conflicts of laws analysis. Three sets of laws are presented that embody the trends toward reforming the law as it applies to the international securities market. Furthermore, this part explains the perfection requirements under Belgian and Luxembourg law because counterparties to a credit support agreement governed by English law are likely to keep their securities with international central securities depositories (ICSDs), such as Euroclear or Cedel Bank, due to their preeminence in the international securities settlement and clearance market, as well as their European location. Also, Part Four examines the counterparty's enforcement rights to the securities representing the credit support in the event its counterparty defaults on their agreements by declaring insolvency. Finally, this section analyzes English insolvency law through a case study providing an example of how insolvency laws may recognize close-out netting and subsequently treat a counterparty's rights to securities based on a credit support agreement.

I. Netting and Credit Risk Reduction

A. NETTING

Netting is the offsetting of two or more cash flows or two or more assets and liabilities. The legal concept of a set-off, the process by which mutual debts owed between two parties may be set off against one another and reduced to a single debt called the net amount, is similar to netting. But unlike a set-off, used mostly in the banker-customer context, netting can be agreed to contractually and does not require perfect mutuality.⁷ The amazing growth and concentration of the

7. See generally, Philip R. Wood, TITLE FINANCE, DERIVATIVES, SECURITIZATIONS, SET-OFF AND NETTING 151-649 (1995); Garrett R. Glass, *A Primer on Netting*, J. COM. LENDING 18 (1994), available in Lexis, News Library, ARCNEWS File; Rory Derham, *Set-Off and Netting of Foreign Exchange Contracts in the Liquidation of a Counterparty—Part II: Netting*, J. BUS. LAW 536 (1991).

OTC derivatives market increased the importance of netting not only for counterparty credit risk purposes but also for capital adequacy purposes.⁸

An example of netting shows its usefulness in the OTC derivatives market to reduce credit risk due to the frequency and size of the settlement payments exchanged between counterparties. Party A enters into a series of foreign exchange forward contracts with Party B.⁹ Upon maturity of two of these contracts, Party A owes Party B \$2 million on the first contract and Party B owes Party A \$4 million on the second contract. Netting allows the two parties to offset those payments so that Party B would owe Party A \$2 million. As a result, by reducing the mutual payments to one net sum owed from one party to the other, netting reduces the settlement risk that arises when parties must exchange payments.

B. CLOSE-OUT NETTING

Close-out netting is used only in the event of default by a counterparty. The counterparties will agree to use close-out netting in a master agreement to terminate and net all ongoing derivatives transactions across all value dates and across all currencies. In effect, close-out netting reduces credit risk when a counterparty defaults by automatically terminating all transactions, calculating a termination value for all transactions, and setting off those termination values to reach a single net sum that could be owed to either the nondefaulting or defaulting counterparty. ISDA has standardized documentation for counterparties engaging in multiple OTC derivatives transactions that contain close-out netting provisions.¹⁰

The advantages of the master agreement utilizing close-out netting include: clear evidence of counterparties' desire to close-out net; explicit instructions to determine a termination value for ongoing transactions; a method to determine

8. The Basle Accord of 1988 addressed the credit risk inherent in OTC derivatives positions by setting a capital requirement for those positions. The current replacement cost is calculated using mark-to-market valuations. An "add-on" amount is then added to reflect the potential future credit exposure over the remaining life of the contracts. Counterparty risk weights are then applied to the current plus potential credit exposure in order to determine the capital adequacy requirements. Since 1988, the Basle Committee has recognized close-out netting, called "bilateral netting," when certain conditions are met, including the acquisition of legal opinions from all relevant jurisdictions finding that netting provisions would be enforceable in the event of a legal challenge. As a result, banks with legally valid netting agreements in place may hold capital based on the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. *See generally*, BASLE CAPITAL ACCORD: THE TREATMENT OF THE CREDIT RISK ASSOCIATED WITH CERTAIN OFF-BALANCE-SHEET ITEMS (1994) BASLE COMMITTEE ON BANKING SUPERVISION [hereinafter BASLE CAPITAL ACCORD].

9. A foreign exchange forward contract is a basic OTC derivative transaction in which one counterparty agrees to buy, at a future date, from the other a certain amount of a foreign currency, the notional amount, at an agreed exchange rate that differs from the spot exchange rate for these currencies at a fixed date in the future. This date is later than the spot settlement date that is usually within two days of the contract date (T+2).

10. *See* INTERNATIONAL SECURITIES AND DERIVATIVES ASSOCIATION 1992 ISDA MASTER AGREEMENT § 6(e) (Multi-currency-Cross-border) to be discussed *infra* [hereinafter 1992 ISDA MASTER AGREEMENT].

currency conversion of all transactions values; and instructions to net the termination values of all transactions converted to the base currency for close-out netting purposes. In addition, now that the Basle Accord has been amended to recognize close-out netting,¹¹ the international banks that are the major players in the OTC derivatives market need only hold capital based on their net exposure to a counterparty if they have proven, to the satisfaction of the national bank supervisor, that the netting agreement is legally enforceable in all relevant jurisdictions. As a result, it has been proposed that banks with valid netting agreements in place will experience a reduction in their capital charge by between 25 and 40 percent on their OTC derivatives transactions.¹²

C. CLOSE-OUT NETTING AND INSOLVENCY RISK

The greatest disadvantage to close-out netting is insolvency risk, which is the risk that the liquidator of an insolvent counterparty will fail to recognize or enforce the close-out netting provisions agreed to in the master agreement. The cross-border nature of most OTC derivatives transactions and the multibranch nature of many of the counterparties increases the risk.¹³ Often, counterparties will elect the multibranch party option in their master agreement, which allows parties to book transactions through any of the branches listed in the agreement. However, each country where a branch is located will have a distinct policy toward the need for local proceedings to group branch assets incorporated into its insolvency laws, which may or may not recognize close-out netting. As a result of this legal disharmony in national insolvency laws, legal opinions and reports have been issued to indicate which countries' insolvency laws would not enforce the close-out netting provisions of a master agreement. Spain and Portugal are netting unfriendly jurisdictions for each have insolvency laws that would not enforce a close-out netting agreement in an insolvency proceeding.¹⁴

Two options may respond to the insolvency risk presented by the use of close-out netting by multibranch counterparties. First, two separate master agreements can be used, one for all the transactions booked through branches in netting friendly jurisdictions and a separate agreement for those transactions booked through the netting unfriendly jurisdictions. This option is preferable when including that branch in the master agreement would interfere with the validity of

11. See BASLE CAPITAL ACCORD, *supra* note 8.

12. See C.R.H. Paul, *Netting: A Means of Limiting Credit Exposure*, 3 J.I.B.F.L. 93 (1995).

13. See D. Cunningham & T. Werlen, *Cross-Border Insolvencies in Search of a Global Remedy*, I.F.L.R. Dec. 1996, at 52.

14. See D. CUNNINGHAM & C. ABRUZZO, INT'L BAR ASS'N, 5 MULTI-BRANCH NETTING—A SOLUTION TO THE PROBLEMS OF CROSS-BORDER BANK INSOLVENCIES 19 (Capital Markets Forum) (1995) [hereinafter CUNNINGHAM & ABRUZZO]. See also CLIFFORD CHANCE, NETTING—THE EFFECTIVENESS OF CLOSE-OUT NETTING IN INT'L TRANSACTIONS A MULTINAT'L SURVEY 18 (1995).

netting in the home jurisdiction of the other counterparty.¹⁵ If this is the case, the counterparty should refuse to include that branch in the master agreement, thereby making it impossible to book transactions governed by the master agreement.

The alternative option is to insert a severability clause in the multibranch master agreement. This clause would exclude from the close-out netting provisions those transactions booked through the branch in the netting unfriendly jurisdiction and treat the exposure from those transactions on a gross basis rather than a net basis. Under either option, a counterparty facing insolvency risk from its transactions with a counterparty's branch located in a netting unfriendly jurisdiction should allocate capital to those transactions on a gross rather than a net basis as a prudent measure.¹⁶

D. ISDA MASTER AGREEMENT

Because this article focuses on the cross-border nature of the OTC derivatives market and the conflicts of laws issues that arise when counterparties are from different jurisdictions, the 1992 ISDA Master Agreement for Multi-Currency Cross-Border Transactions (Agreement) will be examined in more detail. The Agreement covers such areas as interpretations of the agreements, obligations of the parties, netting agreements, representations, events of default and termination, early termination events, transfer rights, contractual currency, recognized offices for multibranch parties, and the governing law and jurisdiction of the Agreement.

In addition, the Agreement defines terms used and provides a Schedule in which the parties may alter the terms of the Agreement, broaden definitions, opt for automatic early termination (as opposed to early termination that would require the nondefaulting party to give notice of early termination), select a payment method on early termination, specify if a counterparty is a multibranch party, indicate if a credit support agreement has been made, as well as specify what will be the governing law (either New York or English law).

The netting and single agreement provisions significantly reduce credit and insolvency risks if the agreement is legally enforceable.¹⁷ Specifically, the Agreement provides for netting by novation if the counterparties elect in the

15. ISDA obtained legal opinions from six jurisdictions (England, France, Germany, Japan, Singapore, and Switzerland), affirming the fact that the inclusion of a branch in a netting unfriendly jurisdiction would not affect the enforceability of close-out netting (either for a home office or a local branch) even if an insolvency official in such a jurisdiction were to take possible actions. See CUNNINGHAM & ABRUZZO, *supra* note 14, at 32.

16. See E. Murray, *The Regulatory Requirements Now and What You Can Expect in the Future*, Euroforum Conference: Capitalizing on the Latest Techniques for Effective Netting (Dec. 11, 1995).

17. In fact, the Agreement requires the counterparties to represent that the obligations created by the Agreement are legally binding, all government consents have been obtained, and performance under the Agreement will not cause any violation or conflict with the local laws that govern each counterparty. See 1992 ISDA MASTER AGREEMENT, *supra* note 10, at § 3(a)(iii-v).

Schedule or specify in the confirmation of a transaction.¹⁸ More importantly, if an event of default occurs, all open transactions would be subject to close-out netting either upon notice by the nondefaulting party or automatically if the counterparties so elect in the Schedule to the Agreement.¹⁹ If the counterparties chose automatic early termination in the Schedule, when an event of default listed in the Agreement and modifiable by the Schedule occurs, all outstanding transactions automatically terminate and all outstanding obligations accelerate. These amounts are then aggregated, converted into a single common currency, and set off against one another to produce a single net amount payable by one counterparty to the other.

The single agreement provision provides that "all Transactions are entered into in reliance on the fact that this Master Agreement and all Confirmations form a single agreement between the parties (collectively referred to as this 'Agreement'), and the parties would not otherwise enter into any Transactions."²⁰ As a result, the single agreement provision reduces the risk of cherry-picking when the event of default is counterparty insolvency. A liquidator will find it more difficult to enforce only those transactions with a sum owed to the insolvent counterparty when the Agreement states all transactions are part of one agreement to which the netting provisions apply with the confirmations to each transaction reaffirming that fact. In effect, only one contract represented by the Agreement exists, from which the termination values of the outstanding transactions would be set off from one another.

In addition, the use of automatic early termination options in the Agreement further reduces the risk of cherry-picking because all the ongoing transactions are terminated along with the declaration of insolvency. Therefore, such transaction termination cannot be declared a preference. To avoid the legal risk of having the Agreement's netting and single contract provisions overridden by insolvency or other mandatory laws of a counterparty's jurisdiction, the counterparties may need to select the automatic early termination option. The above conclusions assume that netting is legally enforceable in the country in which the insolvency proceedings will take place.

II. Credit Support Agreements

Collateralized derivatives trading is growing in importance because the provision of credit support, in the form of securities, can lower credit risk as well as bolster credibility weakened due to problems with bad debts.²¹ In addition, due to

18. See *id.* at § 2(c). Netting by novation allows two counterparties to agree to net all payments due to each other on the same date and in the same currency, thereby reducing mutual payment obligations to one contractual payment obligation due to one counterparty.

19. *Id.* at § 6(a). See Schedule Part 1(e) for Election for Automatic Early Termination.

20. 1992 ISDA MASTER AGREEMENT, *supra* note 10, at § 1(c).

21. See *Secured Derivatives Appearing in Foreign Markets*, COMLINE DAILY NEWS TOKYO FINANCIAL WIRE, Jan. 5, 1995.

the concentrated nature of the OTC derivatives market, in which the counterparties trade continuously with one another, the credit line limits set for a single counterparty may be reached. Credit support agreements reduce credit risk exposure by granting one counterparty rights to the securities in the event of default, thereby providing an effective method to continue trading with such counterparties. In general, credit support agreements to OTC derivatives transactions involve the posting or receipt of securities in the form of government bonds, money market cash instruments, corporate Eurobonds, or more rarely, equities.²²

Credit support agreements provide for collateralization of the net credit exposure resulting from the OTC derivatives transactions, into which two counterparties enter under a master agreement. Like netting, collateralization of OTC derivatives transactions can reduce credit risk. However, in addition to relying on close-out netting in the event of default, credit support agreements protect the counterparties from losses by the use of a transfer of or a security interest in securities that form the credit support. Under the transfer arrangement, one counterparty will make an absolute transfer of securities to the counterparty with the net credit exposure based on the mark-to-market valuation of all ongoing OTC derivatives transactions. The transferee agrees to retransfer securities of equivalent value when it no longer has a net credit exposure to the other counterparty or when their mutual derivative transactions end. Alternatively, one counterparty can grant a security interest in securities to the counterparty with the net credit exposure.

III. Methods for Collateralizing OTC Derivatives Transactions

Four methods are used to collateralize net credit exposures in credit support agreements annexed to OTC derivatives master agreements: an English law set-off and transfer agreement; a fixed charge under English or other common or civil law; a Uniform Commercial Code (UCC) pledge under United States law; or a Japanese loan and pledge agreement. The credit support agreements, governed by English law, utilize the first two methods and shall be analyzed in more detail.²³ When deciding which collateralization method to use, a counterparty should analyze the treatment of the various methods under both the law governing the credit support agreement and the insolvency laws of one's counterparty.²⁴ In the event of counterparty default, these two sets of laws will affect the non-defaulting

22. See P. Smedresman and M. Kenny, *Solving the Puzzle of Cross-Border Securities Pledges*, IFLR, June 1996, at 15-19 [hereinafter, Smedresman and Kenny]. See also *ISDA Approaches Last Lap on Euro Credit Annex*, III DERIVATIVES WEEK, Oct. 17, 1994, at 6 [hereinafter, ISDA].

23. For more information regarding the UCC pledge and Japanese Pledge, see K. Tyson-Quah, *Cross-Border Securities Collateralization Made Easy*, 4 J.I.B.F.L. [1] (1996) [hereinafter Tyson-Quah]. See also Charles W. Mooney, Sr. & Atsushi Kinami, *Transfer, Pledge, Clearance and Settlement in the Japanese and United States Government Securities Markets*, 12 U. PA. J. INT'L BUS. L. 517 (1991).

24. Tyson-Quah, *supra* note 23, at 3.

counterparty's ability to enforce its rights to seize and liquidate the securities provided in the credit support agreement.

A. THE ISDA CREDIT SUPPORT ANNEX AND DEED

Initially, derivatives counterparties only used privately negotiated pledge agreements to provide collateral to cover their exposure to each other. These agreements set out the collateral posting obligations of each counterparty. Due to the expense and time needed to negotiate such agreements, ISDA's Credit Support Agreement (CSA), now developed in versions to accommodate the provision of credit support for the derivatives transactions controlled by the ISDA Master Agreement governed by New York, English, and Japanese law, is becoming more widely used. In general, counterparties can alter the amount of assets that collateralize their derivative transactions as their credit exposure to each other rises or falls. This fluctuation may be attributable to the constantly changing value of the derivatives transactions.

The CSA can be incorporated into the ISDA Master Agreement by including it as an annex to an existing agreement between the two counterparties identified by a specific date.²⁵ ISDA first developed the New York law version of the CSA in 1994 because of the ubiquitous use of U.S. government securities as collateral in derivative transactions.²⁶ This version of the CSA provides for dual margining on a mark-to-market basis where the collateral is held in the United States under New York law.²⁷

The CSA, governed by English law and introduced in November 1995, comes in two versions: the Credit Support Deed creating a security interest over the pledged assets (Security Interest CSD) and the Credit Support Annex which effects an absolute transfer of the assets (Transfer CSA). The difficulty in "the Euro Credit Annex," termed by *Derivatives Week*, is that English law versions of the CSA are anticipated to be used by counterparties that keep their securities with central securities depositories (CSDs) or ICSDs in many jurisdictions in Europe.

25. See INTERNATIONAL SECURITIES AND DERIVATIVES ASSOCIATION, *Preamble* to 1995 ISDA CREDIT SUPPORT ANNEX (Bilateral Form—Transfer) 1.

26. Due to the difficult situs and perfection requirements under the UCC Articles 8 and 9 that govern the creation, perfection, and transfer requirements of securities collateral, many OTC derivatives counterparties that chose the ISDA Master Agreement governed by New York law would only accept U.S. securities perfected under New York law. See Tyson-Quah, *supra* note 23, at 3; see also Charles M. Mooney, *Beyond Negotiability: A New Model for Transfer and Pledge of Interests in Securities Controlled by Intermediaries*, CARDOZO L. REV. 305, 307 (1990-1991).

27. New York has adopted the UCC Articles 8 and 9, which govern investment securities and secured transactions respectively. These Articles have been significantly amended to reflect the nonpossessory ownership trends of security investment and the use of foreign custodians who hold these securities in fungible form. As of the date of this article, New York has not adopted the amended versions, although legislation is pending. For an excellent analysis of the need to redefine the laws in this area to reflect modern business practice, as well as a discussion on the amended Articles 8 and 9, see R. Guynn, *Modernizing Securities Ownership, Transfer and Pledging Laws*, Capital Markets Forum Discussion Paper No. 6 (1996) [hereinafter Guynn].

Therefore, the CSA, governed by English law, must take into consideration the different legal requirements and rights under national laws creating security interests within Europe.²⁸

B. TRANSFER METHOD

Using documentation governed by English law, the transfer method of collateralizing the net credit exposures of counterparties to OTC derivatives transactions is the more effective method to guarantee enforcement rights over the securities than the security interest method. The transfer method is more effective because the transferee receives an absolute transfer of the securities. Additionally, it allows the transferee counterparty the right to rehypothecate the securities which promotes competition with U.S. institutions that have rehypothecation rights to securities used as collateral under UCC pledges. The right to rehypothecate pledged securities is valuable because the transferee can subsequently repledge those securities to meet other financial obligations. The transferor counterparty providing the securities as credit support will transfer title to the transferee subject to the transferee's obligation to retransfer securities of equivalent value upon termination of either the transferee's net credit exposure to the transferor or their mutual derivatives transactions.

An additional benefit of the absolute transfer method is the clarity in which most jurisdictions' laws set out the legal requirements for title transfer of securities. Due to clear legal requirements, the invalidation risk, that is, the risk that the transfer would be invalidated by a court due to failure to comply with legal requirements to effect a transfer, is reduced. ICSDs can record the transfer of title by crediting and debiting the counterparties' account through book-entry without the need for movement of the securities. Most jurisdictions with internationally traded securities recognize the validity of such a transfer.²⁹

In practical analysis, the absolute transfer method is a different legal form to grant security and is subject to recharacterization risk, the risk that a court will characterize the transfer as a pledge or charge that it is invalid due to the transferee's failure to comply with the appropriate legal requirements to create those interests. In the event of a counterparty's insolvency in a jurisdiction hostile to rehypothecation, for example, civil law countries, the transfer agreement could be subject to recharacterization as an invalid security interest due to lack of compliance with local laws. Such a result would leave the transferee counterparty an unsecured creditor with no enforcement rights to the securities.

A court is more likely to invalidate the transfer arrangement as an invalid security interest if the transferor has absolute rights to substitute securities without the transferee's right to consent to the substitution.³⁰ Only legal due diligence

28. See ISDA, *supra* note 22.

29. See Tyson-Quah, *supra* note 23, at 2.

30. See *infra* text accompanying note 37.

can assess the risks of recharacterization and resulting invalidation of the transfer agreement by examining the approach taken by the insolvency laws of one's counterparty toward the transfer method.

C. ISDA TRANSFER CSA GOVERNED BY ENGLISH LAW

Each counterparty may be subject to credit risk in the event of the other's default. Therefore, the ISDA Transfer CSA creates mutual transfer obligations in the form of Credit Support Obligations. These obligations are calculated by setting a threshold amount for each counterparty indicating the agreed exposure amount above which either party must provide credit support to cover the net credit exposure resulting from their OTC derivatives transactions.³¹ On set valuation dates, net credit exposure is calculated by determining the amount payable to either party if all ongoing derivatives transactions were terminated on that date according to the valuation method described in the ISDA Master Agreement.³²

As a result of that valuation, one counterparty may become entitled to receive transfer of eligible credit support because of its positive exposure to the other counterparty on the valuation date.³³ The transfer depends on a formula to determine a credit support amount for the transferor, calculated as the transferee's exposure minus the transferor's threshold amount.³⁴ The transferor must make a delivery amount of eligible credit support when the credit support amount is greater than the transferor's credit support balance, reflecting past eligible credit support transferred to the transferee and all distributions and interest received for that support.³⁵ In the event that the transferor's credit support balance exceeds the credit support amount, the transferor is entitled to demand a return amount from the transferee equivalent to the excess.³⁶

The ISDA Transfer CSA reflects its drafters' awareness that the use of the transfer method may increase the risk of recharacterization. Although the ISDA Transfer CSA grants the transferor of eligible credit support rights of substitution of original credit support for new credit support, a subsequent clause grants the transferee the right of consent to this right of substitution.³⁷ The transferor's right to substitute ensures flexibility to react to rapid changes in the securities market

31. See INTERNATIONAL SECURITIES AND DERIVATIVES ASSOCIATION, 1995 ISDA CREDIT SUPPORT ANNEX (Bilateral Form—Transfer) para. 11(b)(iii)(A) [hereinafter 1995 ISDA CREDIT SUPPORT ANNEX].

32. *Id.* at para. 10. See also ISDA 1992 ISDA MASTER AGREEMENT, *supra* note 10, at para. 6(e).

33. See 1995 ISDA CREDIT SUPPORT ANNEX, *supra* note 31, at para. 11(b)(ii). The parties may decide the types of collateral acceptable, such as cash, short-term, and long-term negotiable debt obligations issued by a particular government for each counterparty that is listed in the CSA. See para. 11, "Elections and Variables."

34. *Id.* at para. 10.

35. *Id.* at para. 2(a).

36. *Id.* at para. 2(b).

37. *Id.* at para. 3(c)(I-ii).

in which securities used as eligible credit support could be used more efficiently by the transferor in another transaction.

Therefore, it is to the advantage of both counterparties to have the right of substitution qualified by the transferee's right to consent so that the transferee has the required control over the securities to minimize the risk that the transfer could be recharacterized as an invalid security interest. This evidence of control will strengthen a counterparty's defense in proving the validity of the transfer arrangement if challenged.

As aforementioned, the main benefit of the transfer method exemplified in the ISDA Transfer CSA is the certainty of cross-border enforcement of the transfer of the securities. The counterparties may agree that delivery can be satisfied through the book-entry system by giving written instructions to the ICSD specified by the transferee. The transferee must also receive a copy of the instructions which will affect a legal transfer of the transferor's legal and beneficial title to the transferee. When securities must be delivered in physical form because they are certificated, or the counterparties so agree to that method of delivery, such delivery must be accompanied by the necessary documents to make a valid transfer of the transferor's legal and beneficial title to the transferee counterparty.³⁸

D. ENGLISH LAW FIXED CHARGE

An English law fixed charge is an encumbrance that gives the chargee the right to the proceeds of sale from the charged asset in the event the chargor fails to discharge its indebtedness.³⁹ Certain requirements of English law fixed charge expose the chargee to invalidation risk, the risk that a court would not recognize the charge as validly created. Also, the chargee may be exposed to recharacterization risk, the risk that a court would recharacterize the charge as a floating charge and invalidate it due to lack of compliance with the registration requirements for the floating charge.⁴⁰ Therefore, unlike the UCC pledge and the absolute transfer methods of collateralization, the chargee does not have any rights to reuse the securities for further economic benefit.

1. *ISDA Credit Support Deed (CSD)*

The ISDA CSD incorporates aspects of the English law fixed charge and common and civil law pledge to collateralize the net credit exposure resulting from two counterparties' OTC derivatives transactions governed by the ISDA Master Agreement. Like the ISDA Transfer CSA, the counterparties must each agree to a threshold amount which serves as the basis for calculating when either party will have to post eligible credit support. At each valuation date, all ongoing

38. *Id.* at para. 3.

39. See R. GOODE, *COMMERCIAL LAW* 636 (2nd ed. 1995) [hereinafter GOODE].

40. See generally Tyson-Quah, *supra* note 23, at 2.

OTC derivatives transactions are valued and a net replacement cost determined as if all transactions were terminated on that date according to the method agreed to in the ISDA Master Agreement. As a result of such a determination, one counterparty will have an exposure to the other.⁴¹

The counterparty with an exposure on the valuation date is entitled to demand a delivery amount from the chargor counterparty if the credit support amount (the chargee's exposure minus the chargor's threshold) exceeds the value of the chargor's posted credit support and that excess exceeds the chargor's minimum transfer amount.⁴² The delivery amount is equal to the amount the credit support amount exceeds the posted credit support. In the event that the chargor's posted credit support exceeds the credit support amount as well as the counterparty's minimum transfer amount, the chargor will have the right to demand a return amount from the chargee equal to that excess.⁴³

As mentioned earlier, the ISDA CSD is drafted to accommodate a security interest created under many European jurisdictions where the securities used as credit support may be kept while also conforming to English law requirements to create a fixed charge. Therefore, the secured party is not allowed to rehypothecate the posted securities it holds under the ISDA CSD⁴⁴ so as to avoid the risk of recharacterization and invalidation. The chargee must exercise reasonable care towards the securities and may use a custodian for whose actions it will be liable.⁴⁵

The provision of collateral is a bilateral obligation in the CSD; either counterparty could be the chargee seeking to enforce its rights to the securities if an event of default, listed in the ISDA Master Agreement, occurs or the other counterparty fails to meet its credit support obligations after notice of such failure has been given and two business days pass.⁴⁶ The chargee's rights of enforcement, after default, include the right to sell part or all of the securities that constitute the credit support, as well as "the right to collect, recover or compromise and to give good discharge for any moneys payable to the chargor."⁴⁷ As will be discussed below, a chargee must make a careful analysis of how the securities are issued and where they are held in custody to determine which country's laws regarding securities' ownership and pledging must be complied with to ensure one's rights of enforcement.

41. That counterparty would lose money if all the transactions were terminated early and had to be replaced. See INTERNATIONAL SECURITIES AND DERIVATIVES ASSOCIATION, 1995 ISDA CREDIT SUPPORT DEED (Bilateral Form—Security Interest), para. 12.

42. *Id.* at para. 3(a). The counterparties agree to a set "Minimum Transfer Amount" in the deed under paragraph 13, "Elections and Variables."

43. *Id.* at para. 3(b).

44. *Id.* at para. 6(d).

45. *Id.* at para. 6(b)(i-iii).

46. See 1995 ISDA CREDIT SUPPORT DEED, *supra* note 41, at para. 7(i-ii).

47. *Id.* at para. 8(a)(I)(A-B).

IV. Determining Rights to Immobilized and Dematerialized Securities

A. THE *LEX SITUS* RULE

The *lex situs* rule under conflicts of law analysis states that the law where something is located will govern both movables or immovables, regardless of whether any right in relation to it is to be deemed an interest in a movable or in an immovable.⁴⁸ However, when dealing with intangible things, such as registered securities that are not certificated or securities that are certificated but immobilized with a custodian, the movable/immovable distinction becomes irrelevant because they need not be moved to effect a transfer.⁴⁹ However, for purposes of conflicts of law analysis, the movable/immovable distinction is kept even for intangibles, placing intangibles in the movable category. Therefore, an intangible will be given an artificial situs or legal location so the laws of that situs will govern the rights to that intangible.

In relation to securities collateralizing OTC derivatives transactions, the *lex situs* rule determines the applicable law to govern the validity of a transfer and/or the grant of a security interest. However, determining securities' location is not easy when innovations in the international securities markets are moving towards dematerialization of securities. This dematerialization involves replacing the issuance of certificates representing the securities with a global receipt of the issue deposited with a custodian. Investors that purchase dematerialized securities receive interests in the issue in the form of book entry credits to the accounts of participants in the ICSD system used by the custodian of the global receipt. An investor will only receive a confirmation from that issuer's agent that the securities have been issued.⁵⁰ The ICSD participant could be the actual investor in the securities or a depository holding the interest for the investor.

An alternate method to dematerialization is immobilization, in which the certificated securities are deposited permanently with a custodian, making the investor's link to the issuer indirect and substituting the custodian as the holder of record. The investor's rights to the security will be against the custodian, not the issuer.⁵¹ The custodian will entrust the record keeping of investor interests and transfers of the securities with an ICSD. All transfers will be done by book entry to the accounts of ICSD participants. The participants may be the actual investors, depositories for the investors, or even the depositories for an investment bank, which acts as custodian for a smaller investment bank whose customer is the actual investor. Use of either the immobilized or dematerialized form of securities issuance gives the investor rights of co-ownership in a pool of fungible securities

48. See DICEY AND MORRIS ON CONFLICTS OF LAWS (L. Collins ed., 12th ed. 1993), Rule 113, at 915.

49. See R. Goode, *The Nature and Transfer of Rights in Dematerialized and Immobilized Securities*, (1996) 4 J.I.B.F.L. [172].

50. See *id.* at 168.

51. *Id.*

kept by the ICSD. That ICSD could keep the securities with its subcustodian in the jurisdiction of issue or with some other depository.⁵²

Immobilization or dematerialization improves the speed and cost efficiency of transferring or creating security interests in securities through book entry to records of accounts because of the lack of physical movement of the securities. These benefits are particularly evident when both counterparties to collateralized derivatives transactions keep their securities used as credit support with the same ICSD, such as Euroclear or Cedel.⁵³ The transfer or creation of a security interest in securities can be affected by electronic debits and credits to the counterparties' accounts or the creation of a specially segregated account.

B. REFORMING CONFLICTS OF LAW ANALYSIS REGARDING IMMOBILIZED SECURITIES

Application of the *lex situs* rule to securities held in ICSD accounts by book entry has been criticized by the legal community as not reflecting modern securities practice. Moreover, there has been a call to update the conflicts of laws rules.⁵⁴ Currently, three sets of laws exist, one model and the other two in force, that have altered their conflicts of law analysis for dematerialized and immobilized securities to reflect market practice. Even though these laws apply the *lex situs* rule in conflicts of laws analysis, the situs of the securities is the jurisdiction in which the book entries are made to investor accounts and this law will be applied to determine conflicting rights to the securities.

First, the Luxembourg Grand-Ducal Decree of February 17, 1971, provides the legal framework for book entry custody, clearing, and settlement of securities. Luxembourg conflicts of laws rules apply the *lex situs* rule; however, securities whose ownership and transfer are recorded by book entry by a Luxembourg depository will be sited in Luxembourg even if those securities are immobilized with a custodian outside of Luxembourg.⁵⁵ Therefore, in a dispute over book entry securities held by Cedel, a court applying *lex situs* would determine, considering the Grand-Ducal Decree treatment of securities kept by book entry, that such securities are located where the accounts are kept. Therefore, Luxembourg law would apply to determine the effectiveness or validity of a transfer or security interest in those securities.⁵⁶

The Royal Decree No. 62, which governs the transfer and pledging of securities held in book entry form through C.I.K. (the CSD in Belgium) and its affiliates (of

52. See J. Benjamin, *Computerization and Negotiability Part II*, (1995) 9 J.I.B.F.L. [357].

53. Euroclear and Cedel have established a bridge linking their securities holding systems that facilitates cross-system settlements when the counterparties use both ICSDs. See CROSS-BORDER SECURITIES SETTLEMENTS, *supra* note 5, at 26.

54. See Guynn, *supra* note 27.

55. See Grand-Ducal Decree, Feb. 17, 1971, art. 8(3).

56. See Guynn, *supra* note 27, at 45. See *infra* for a discussion of perfection under Luxembourg law.

which Euroclear is one), gives the investor title to the book entry representing the dematerialized or immobilized securities.⁵⁷ Under Belgian conflicts of laws rules, the *lex situs* of securities is applied to determine ownership and security interests of others in securities.⁵⁸ Therefore, since the investor's interest is not tied to any physical securities that may be deposited with a subcustodian outside of Belgium, the securities would be sited in Belgium and its law would apply because this location is where the book entries are made regarding the interests in the securities.

Lastly, Article 8 of the UCC, which is a model law that can be adopted by state legislatures within the United States to govern securities holding and transfer, has been amended although not yet adopted by all states, to provide that the law of the intermediary's (custodian of securities) jurisdiction will govern the rights of the investor in the securities and will determine if a third party may assert an interest in the security.⁵⁹ The investor and its intermediary may contractually agree as to where the intermediary's jurisdiction will be located. If there is no agreement, the jurisdiction will be the place where the intermediary has contractually agreed to keep accounts for those securities. If such a place is not indicated in their custodial agreement, then the jurisdiction stated on the investor's account statement as servicing its account will govern. If none of the above tests can be met to indicate the jurisdiction of the intermediary, then the default jurisdiction will be where the intermediary's headquarters are located.⁶⁰ The revised Article 8 gives the investor and the intermediary the option of choosing the jurisdiction. In the event the parties do not contractually agree on the intermediary's jurisdiction, the default jurisdiction will be the jurisdiction in which the intermediary's central activities are coordinated, which is most likely to be in its state of incorporation.

The confusion over the *lex situs* of dematerialized or immobilized securities creates uncertainty for counterparties in determining which country's transfer and security creation laws should be complied with to ensure enforcement rights over the securities. A counterparty who has a security interest in or receives a transfer of securities kept by a CSD or ICSD from a collateralized OTC derivatives arrangement must monitor the location of the securities. This party will incur significant legal costs determining and complying with the appropriate jurisdiction's laws to protect its rights to the securities. Currently, these added legal expenses and uncertainty can be avoided only by keeping immobilized or dematerialized securities with an ICSD in Belgium or Luxembourg, either of which has clear conflicts of laws rules for immobilized or dematerialized securities.

In the event of either counterparty's default, the other counterparty will want

57. See Royal Decree No. 62, Nov. 10, 1967, art. 10-13.

58. See M. van der Haegen, Transfer and Collateralization of Book-Entry Securities in Belgium (Oct. 13, 1994), IBA 25th Biennial Conference, at 13 (citing Rigaux, "Droit international prive," vol. II, 1979, 362, at No. 1109) [hereinafter van der Haegen].

59. See new U.C.C. § 8-110 for pledges, and new U.C.C. § 9-103(6) for transfers.

60. *Id.*

to exercise its enforcement rights over the securities. To do so, the counterparty must comply with the laws regarding securities ownership, transfer, and pledging in the jurisdiction in which the securities will be considered to be located. Until all countries modernize their conflicts of laws rules applicable to immobilized or dematerialized securities, counterparties to collateralized OTC derivatives transactions using documentation governed by English law should keep such securities, whose interests are represented by book entry only, with ICSDs in such jurisdictions as Belgium and Luxembourg which have updated their laws. As state legislatures in the United States adopt the revised version of Article 8, which redefines the rights of investors in securities held in book entry form and provides certainty that the law of the intermediary's jurisdiction will govern rights over the securities, those jurisdictions will also provide the certainty needed for counterparties to collateralized OTC derivatives transactions.

C. THE *LEX SITUS* RULE AND PERFECTION OF IMMOBILIZED OR DEMATERIALIZED SECURITIES

Following the internationally applied conflict of laws *lex situs* rule, a court adjudicating a dispute over rights to the securities would inquire into whether the counterparty asserting rights to the securities did in fact comply with the laws governing the creation and perfection of security interests or the transfer of the securities in the jurisdiction where the securities are deemed to be located.⁶¹ In the case of the Transfer CSA, determining which laws govern the transfer of the securities to avoid the risk of recharacterization is difficult when the ICSD holds the securities but may have deposited them with a subcustodian in another jurisdiction. As a result, a counterparty may feel compelled to comply with a number of jurisdictions' transfer laws to ensure that its rights to the securities are enforceable in case of default. The cost of the necessary legal due diligence could discourage the acceptance of certain securities, especially those in certificated form, making the securities market for collateralization of OTC derivatives transactions less efficient.

Since Euroclear and Cedel have a daily combined average turnover of \$111.8 billion as of 1994,⁶² these two ICSDs will likely be involved with most of the securities collateralization for the counterparties using the ISDA CSA or CSD governed by English law. As a result of the *lex situs* rule analysis above, the perfection rules of Belgium and Luxembourg need to be examined in greater detail to determine how counterparties to collateralized derivative transactions are ensuring the enforceability of their rights under the ISDA CSD.

61. See Smedresman and Kenny, *supra* note 22, at 15-17.

62. This figure includes internal settlements, bridge deliveries between them, and deliveries via local market links. See Cross-Border Securities Settlements, *supra* note 5, at 26.

1. *Perfection Under Belgian Law*

The Belgium Royal Decree No. 62 dated November 10, 1967, Facilitating the Circulation of Securities (as amended, April 7, 1995), is the relevant Belgian law governing ownership, perfection, and transfer by book entry through a system of accounts held with the Belgian C.I.K. or its affiliates. The system may be used with all bearer securities and non-Belgian registered securities that may be held in fungible form in the name of a nominee.⁶³ As discussed earlier, application of the *lex situs* rule in Belgium will site securities held in book entry form by the C.I.K. or its affiliate, such as Euroclear, in Belgium for purposes of determining rights to the securities.

An investor or secured creditor of securities held by Euroclear has a co-ownership right to a notional portion of the fungible securities pool represented by a credit to its account.⁶⁴ Therefore, even though most civil law systems require that a security interest over securities be a possessory pledge for it to be valid,⁶⁵ Article 5 of the Royal Decree creates an enforceable pledge by having the investor's interest in the securities credited to a pledged account held by a C.I.K. or its affiliate.⁶⁶ Upon notice to the pledgor, a secured creditor may liquidate the pledged securities held by Euroclear in a public or private sale in a Belgian or foreign regulated market without the need for permission from a Belgian court.⁶⁷

2. *Perfection Under Luxembourg Law*

Like the Belgian law described above, an investor keeping securities held by book entry with a Luxembourg depository, such as Cedel, has a co-ownership right in a fungible securities pool. No traceable right to a specific security exists. To create a pledge in securities held by book entry, the pledgor retains ownership, but must give up possession of the securities.⁶⁸ There are no formal registration or notification requirements to which the pledgee must comply.⁶⁹ Cedel Bank can create a valid security interest by either segregating the securities in the pledgor's account with an electronic marker indicating the pledgee's interest or by transferring the securities into the pledgee's account. However, the pledgee will have no rehypothecation rights. If the pledgor defaults on the credit support agreement, the pledgee will have the right to liquidate the securities held by a Luxembourg depository through either a public or private sale in Luxembourg or in a foreign regulated market, as long as the pledgee gives the pledgor formal written notice.⁷⁰

63. See van der Haegen, *supra* note 58, at 3.

64. See Belgian Royal Decree No. 62, Nov. 10, 1967 (as amended, 7 Apr. 1995), art. 10-13.

65. See P. WOOD, *COMPARATIVE LAW OF SECURITY AND GUARANTEES* 82 (1995).

66. See Belgian Royal Decree No. 62, Nov. 10, 1967 (as amended, 7 Apr. 1995), art. 5.

67. *Id.* See also Guynn, *supra* note 27, at 44.

68. See Law of June 1, 1929, on the pledge of securities and Grand Ducal Regulation of Feb. 17, 1971 (as amended by Grand Ducal Regulation of June 8, 1994, on the circulation of securities).

69. See Grand-Ducal Decree, Feb. 17, 1971, art. 8; Law of June 1, 1929, art. 3.

70. See Grand-Ducal Decree, June 8, 1994 (modifying the Grand-Ducal Decree of 1981, 1971, and the Law of 1929), art. 8-1.

Both Luxembourg and Belgium laws regarding pledging of securities in book entry form provide certainty of enforcement rights. Therefore, the ICSDs located in these countries will likely become the main custodians for securities used by counterparties to collateralize the net credit exposure resulting from their OTC derivatives transactions governed by English law.

D. ENFORCEMENT RIGHTS TO SECURITIES IN EVENT OF COUNTERPARTY DEFAULT DUE TO INSOLVENCY

Although the laws governing enforcement of a security interest must be taken into the risk calculus when a counterparty decides to enter into a credit support agreement, the treatment of secured creditors by the insolvency laws of one's counterparty is also of vital importance to the analysis. The credit risk reducing effectiveness of a credit support agreement can be measured only after discerning how effectively a counterparty can seize and liquidate the securities collateralizing the OTC derivatives transactions once a counterparty becomes insolvent. Although the law of the securities' location may allow a secured party to liquidate the pledged securities upon the pledgor's default, as the Luxembourg and Belgian laws allow, the insolvent counterparty's liquidator could still seek the proceeds of such a sale if the counterparty's insolvency laws invalidate the security interest or transfer. Alternatively, the liquidator could invoke a stay or freeze on the disposal of all the insolvent counterparty's assets during an investigation period, thereby delaying the counterparty's attempts to exercise its rights to the securities. The transfer method provides more certainty that a counterparty will be able to keep the securities in the event of default, unless the transfer occurred during a suspect period prior to the declaration of insolvency or the transfer is recharacterized as an invalid security interest.⁷¹

E. CASE STUDY: TREATMENT OF ENFORCEMENT RIGHTS BY ENGLISH INSOLVENCY LAW

The following example illustrates how the ISDA master and collateral support agreements work together to significantly reduce credit risk in the event of counterparty default due to insolvency. This example will also serve to illustrate why it is necessary to obtain legal opinions regarding the insolvency law's treatment of secured creditors in the country to which one's counterparty is headquartered in order to ensure one's enforcement rights to securities provided as credit support.⁷²

Suppose that an English counterparty and a German counterparty, both international banks, enter into a series of OTC derivatives transactions governed by the

71. See Tyson-Quah, *supra* note 23, at 4; see also Smedresman and Kenny, *supra* note 22, at 17.

72. The following analysis of English insolvency law is meant to highlight some of the potential concerns to a secured counterparty and should not be relied upon as a legal opinion.

ISDA Master Agreement with the multibranch party option indicated in the Schedule and the ISDA CSD governed by English law. After the most recent valuation date, the German counterparty had a net credit exposure to the English counterparty that exceeded its threshold amount agreed to in the CSD. Therefore, the German counterparty demanded and received the delivery amount in securities defined as eligible credit support. Since both counterparties kept the securities listed as eligible collateral support in the CSD with Cedel in Luxembourg, the English counterparty sent instructions to Cedel to credit the German counterparty's account with a security interest in a specified amount of securities equal to the credit support amount.

One week after receiving the security interest in the securities, the Bank of England shut down the English counterparty. Relying on its contractual rights in the Master Agreement as the net debtor based on the close-out netting calculations, the German counterparty notified the English counterparty that it planned to liquidate the securities held by Cedel, in which it had a security interest arising from the CSD in compliance with Luxembourg law as the *lex situs* of the securities. Subsequently, the German counterparty informed Cedel that it wished to liquidate the securities by private sale, due to its counterparty's default under the CSD.

The enforceability of close-out netting would not be at risk because English insolvency law incorporates mandatory set-off of mutual debts between the insolvent party and a creditor in Rule 4.90 of the Insolvency Act Rules 1986, which is what close-out netting accomplishes contractually.⁷³ Whether the German counterparty may enforce its rights to the securities and not be forced to return the proceeds will depend on the insolvency procedure taken by its English counterparty and the last valuation date. There are three potential procedures: administration, winding-up, and Bank of England-supervised workout.⁷⁴

The purpose of an administration is to facilitate rehabilitation, approve a voluntary arrangement, or improve the collection of assets for a winding-up.⁷⁵ Upon the filing of a petition for administration for the English counterparty, the German counterparty must receive administrator consent or court leave to enforce its rights to the securities because of the freeze on the exercise of such rights.⁷⁶ Since English insolvency law favors secured creditors,⁷⁷ courts tend to encourage the administrator to grant its consent for the secured party to exercise its rights to the insolvent English party's assets, as long as substantially greater losses would not be caused to others.⁷⁸

73. See generally J. Walter, *Close-Out Netting in English Law: Comfort at Last*, 4 J.I.B.F.L. 167 (1995).

74. See generally Goode, *supra* note 39, ch. 31.

75. See Insolvency Act of 1986, § 8(3). See also 1 GA PENN ET AL., *THE LAW RELATING TO DOMESTIC BANKING* ch. 28 (1987).

76. See Insolvency Act, *supra* note 75, at § 11(3)(c).

77. See P. WOOD, *PRINCIPLES OF INTERNATIONAL INSOLVENCY* 13 (1990). See also P. WOOD, *COMPARATIVE LAW OF SECURITY AND GUARANTEES* ch. 11 (1995).

78. See P. WOOD, *supra* note 77, at 154.

If a court were to analyze the validity of the German counterparty's rights, it would apply the *lex situs* conflict of laws rule and look to Luxembourg law to define the requirements for creating an enforceable security interest in book entry securities. The court would also find that the German counterparty had complied with the legal requirements under Luxembourg law to perfect its security interest. Although the German counterparty would likely receive permission to liquidate the pledged securities, a delay under the administration procedure would occur. Such a delay could result in the reduction of the securities' value due to fluctuations in the market. In the event of such a reduction, the German counterparty might have to pursue its rights to full compensation either through private negotiation, if the English counterparty is successfully rehabilitated through the administration, or through proving its claim in the insolvency proceedings.

Winding-up is the second procedure an insolvent English counterparty might choose or have chosen for it by a petition filed by the Bank of England.⁷⁹ A court will wind up an authorized bank if it is unable to pay its debts as defined by section 123 of the Insolvency Act 1986, or if it finds that it is "just and equitable" to do so.⁸⁰ Winding-up entails a court-supervised distribution of a bank's assets among the creditors. Secured creditors are preferential debts of the insolvent party and have priority over the general creditors.⁸¹ Although the liquidator must honor secured creditors' rights to the insolvent's specified assets, the liquidator may demand proof of the debt and security.⁸²

In addition, the CSD creating the security interest must not be deemed a vulnerable transaction by one of four measures. If deemed a vulnerable transaction, the security interest may be set aside. In particular, the latest valuation date, in which the net credit exposure was determined for the counterparties' ongoing transactions, could be viewed as the security-granting transaction. Therefore, the receipt of securities based on the most recent valuation date calculations of the net credit exposure must not be an undervalued transaction,⁸³ a preference,⁸⁴ an unregistered floating charge,⁸⁵ or a fraudulent transfer.⁸⁶ If these four characterizations are avoided, the German counterparty would be entitled to exercise its rights to the insolvent party's securities, assuming the above conflict of laws *lex situs* analysis would site the securities in Luxembourg and the perfection requirements had been followed. However, the delay in seizing the securities may result in the securities' devaluation.

79. See Banking Act of 1987, § 92(1)(a).

80. *Id.* at § 92(1)(a) & (b).

81. See Insolvency Act, *supra* note 75, at § 175.

82. See Insolvency Rules 1986, §§ 4.75(1)(g) & 6.98(1)(g).

83. See Insolvency Act, *supra* note 75, at § 339.

84. *Id.* at § 239.

85. See Companies Act of 1985, § 395 (requires registration for such a charge to receive priority in insolvency).

86. See Insolvency Act, *supra* note 75, at § 359.

The third procedure an insolvent English counterparty might take is based on the "too big to fail" attitude adopted by many bank supervisors. The Bank of England has strongly favored the "arrangement with creditors" option for banks in trouble, which would take the form of a workout with the bank's creditors to accomplish a bank's reorganization.⁸⁷ The Bank of England could exercise its right to file a petition for administration that would freeze all action vis-à-vis the English counterparty's assets. Under the Bank's guidelines, titled the London Approach, the German counterparty would be delayed in exercising its rights of enforcement over the securities with the risk of reduction in the securities' value mentioned above with the administration and winding-up procedures. It is difficult to predict how the terms of the bank-supervised workout would treat the German counterparty's rights to the securities because each workout would reflect the particular conditions of the troubled bank in question.

In summary, English insolvency law might delay a counterparty in enforcing its rights to security; however, under all three insolvency procedures, a counterparty's rights would be honored assuming the appropriate legal requirements to perfect its interests in the securities were followed. A potential result of such a delay is the risk of the securities' devaluation due to an adverse move in the market for those securities.

IV. Conclusions

Master and credit support agreements, incorporating the use of close-out netting and the collateralization of the net credit exposure, can be effective means to reduce credit risk for counterparties in OTC derivatives transactions. Standardized documentation has increased the use of these practices while decreasing the cost and time needed for counterparties to enter into transactions. Due to the increasing cross-border nature of OTC derivatives transactions, each counterparty must accomplish its legal due diligence by analyzing the laws regarding netting, insolvency, securities ownership, transfer, and pledging. These laws should be considered in the jurisdictions where one's counterparty is headquartered and has branches in addition to where the headquarters of the ICSDs to be used to hold the securities collateral are located. As long as the effectiveness of close-out netting in the Master Agreement and the enforcement rights to the securities collateralizing the net credit exposure in the credit support agreement are recognized by the counterparties' insolvency laws, the credit risk associated with entering into OTC derivatives transactions can be significantly reduced for each counterparties' risk management purposes.

87. See GOODE, *supra* note 39, at 848.