

Derivatives - Switzerland

Mitigating counterparty credit risk in the OTC derivatives market

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September 21 2011

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Introduction

Counterparty or credit risk exists whenever a market participant has entered into a transaction with a counterparty where the latter has an obligation to make payments or deliveries at some point in the future. Except for some regulated entities such as banks, securities dealers, investment funds or other collective investment schemes and pension funds, which are required by law to monitor and limit their counterparty exposure generally or at least for certain types of transactions, market participants are in general free to assume unlimited counterparty risk at their discretion, whether under over-the-counter (OTC) derivative transactions or otherwise. Thus, unless market participants are subject to specific laws or regulations or are bound by contractual arrangements, they are free to choose whether, how and to what extent they wish to limit or mitigate their counterparty risks.

However, as a result of the recent credit crisis, most sophisticated parties which are aware of the extent that their trading volume is sufficient to warrant the respective costs – mainly legal expenses associated with the negotiation and maintenance of the necessary documentation, operational and technology costs, custody fees and financing costs associated with transferring, receiving and monitoring collateral – as a first step opt to enter into master agreements with their counterparties in order to reduce their exposure to a net amount. In a second step, in order to reduce the risk that such net amount is lost due to an unexpected insolvency of the counterparty, market participants can obtain credit support in the form of a financial guarantee provided by a financially robust affiliate or – usually more reliable – sufficient collateral posted by the counterparty itself.

Risk reduction by entering into master agreements with all relevant counterparties

A first measure to reduce counterparty risk is to consolidate the exposure under the various transactions entered into with a particular counterparty through the use of a close-out netting mechanism. This can be achieved by entering into a master agreement with each counterparty, providing for appropriate netting arrangements such as the International Swaps and Derivatives Association (ISDA) master agreement, the Swiss master agreement for OTC Derivatives or similar international (eg, the European master agreement (EMA) sponsored by the European Banking Federation (EBF)) or national master agreements. As a result of such netting provisions, if certain events occur which are highly likely to undermine the counterparties' financial health and thus their ability to fulfil their obligations, these agreements provide for the consolidation and conversion of multiple obligations between two parties into a single net obligation.

Structure of contractual framework

Each of the master agreements referred to above consists of a pre-printed body with standard provisions and one or more schedules or annexes. While the body of the master agreement is neither party specific nor transaction specific, and therefore the parties are not supposed to change it, they can make certain elections and, if needed,

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amendments or alterations to any of the provisions contained in the body of the schedule(s). The pre-printed body of the master agreement, together with any amendments and further terms, elections and arrangements provided for in the schedule pertaining to the master agreement, provide the (abstract) legal framework governing the relationship between the parties (eg, payment mechanics, a basic set of representations, warranties and covenants, events of default and other events or circumstances that give one or both parties the right to terminate all or certain transactions, applicable procedures to terminate transactions and to calculate, convert and offset termination values). They also specify certain credit aspects, but refer to no concrete transactions or economic terms for specific trades.

The commercial and any transaction-specific contractual terms for each transaction must be set forth in a confirmation which refers to, and forms part of, the respective master agreement. While the parties need to prepare and exchange a confirmation relating to each transaction that they enter into setting forth the agreed commercial terms of that specific trade, confirmations are generally quite short as they will normally incorporate, and make use of, certain standard definitions either provided for – as in the Swiss master agreement – in the body or annexes of the master agreement or – as in the ISDA framework – in one or more of the definition booklets published by ISDA, which each relate to a specific type of derivatives transaction and contain both definitions and mechanical provisions that alleviate the need for the parties to reproduce such standard terms in each confirmation.

An important aspect of most master agreements is that the master agreement and all the confirmations relating to transactions entered into thereunder together form a single agreement which allows the consolidation of the amounts owed under all such transactions in one net amount owed by one party.

1992 and 2002 ISDA master agreements

In an international context, OTC derivative transactions are most frequently documented pursuant to a form of master agreement provided by ISDA – either a 1992 ISDA master agreement or a 2002 ISDA master agreement. The 2002 ISDA master agreement was developed from the 1992 ISDA master agreement in the aftermath of the crises that affected the global financial markets in the late 1990s (among them the Russian bank crisis and the Asian currency crisis), and is considered to be more creditor friendly, as opposed to the 1992 version which was considered to be too debtor friendly in view of various grace periods which were considerably shortened in the 2002 version. Apart from a large number of smaller changes, the 2002 version introduced an additional termination event for *force majeure* and changed the process used in case of an early termination of the amount due as a consequence of such termination are calculated through the so called 'close-out amount' method. Since its introduction, the 2002 agreement has become the standard master agreement most commonly used by most market participants (in particular in an international context), although the 1992 ISDA agreement continues to be widely used, but usually with amendments that effectively import some of the new provisions of the 2002 agreement.

The pre-printed form of the ISDA master agreement contains the body of the agreement with general provisions relating to payment mechanics, general representations and covenants, definitions of events of default and termination events, as well as procedures to terminate transactions and to determine and calculate the aggregate net termination value of all transactions. In the schedule, the parties can modify and amend the provisions of the standard master agreement and, among other things, address tax issues, list the documents that each party must deliver as conditions precedent and provide administrative details. Thus, the schedule adapts the standard master agreement to the specific requirements of the parties and therefore must be negotiated between the parties, but nevertheless remains an integral part of the master agreement.

Netting mechanics under ISDA master agreements upon a default event

The ISDA master agreement provides for various events of default – in particular, failure to pay or deliver, breach of agreement, credit support default, misrepresentation, default under specified transaction, cross default, bankruptcy and merger without assumption – as well as so-called termination events – in particular, illegality, tax event, tax event upon merger, credit event upon merger and, in the 2002 agreement, *force majeure*.

Each default event and each termination event is defined in detail in the body of the master agreement and – as explained above – such definition can be amended, substituted by another event or even struck out by the parties. The occurrence of a default event or termination event in respect of a party to a master agreement, in either case, gives one or both parties the right to terminate all transactions that are concluded under the relevant ISDA master agreement and therefore form part thereof (except in the case of certain termination events, when only transactions affected by the respective event may be terminated). Where more than one transaction is terminated at the same time, the ISDA master agreement provides for the 'close-out netting' mechanism to apply. The effect of close-out netting is to consolidate all obligations of the parties by

substituting the multiple payment and/or delivery obligations under the several transactions between the parties by a single net payment obligation of one party for all transactions that are being terminated.

There are several ways to calculate the individual payments for each transaction that become due as a result of the early termination of all such transactions. Such amount should reflect how much it would cost for a party to enter into a replacement transaction with an independent third party having economical terms identical to the terminated transaction. Under the 1992 ISDA agreement, parties could (and still can) select from between two standard methods to determine such amount: loss and market quotation. The loss method allows a party considerable flexibility when determining its losses and costs (or gains) incurred as a result of the termination or the replacement of related hedging positions. It can do so based on internal models and/or, at its election, quotations of dealers in the relevant markets, to the extent that it acts reasonably and in good faith. The market quotation method, however, provides a more stringent framework which requires the determining party to seek quotations from three or more leading dealers in the relevant market in order to obtain a quote for the amount that would be payable upon entering into replacement transactions economically equivalent to the terminated transactions, and then to determine the arithmetic average of such quotes (disregarding the highest and the lowest quote).

The close-out amount method introduced in the 2002 ISDA agreement combines elements from both of the aforementioned approaches and requires, in essence, a reasonable determination of the losses or gains that would be realised upon entering into replacement transactions that are economically equivalent to the transactions entered into by the parties and now terminated. The determining party must act in good faith and use commercially reasonable procedures to produce a commercially reasonable result. In doing so, the determining party may consider any relevant information including relevant market data from dealers, end users, information vendors and other sources, as well as information from internal models and third-party quotations, without an absolute requirement to obtain a certain number of quotations and to determine their arithmetic average. However, the determining party must consider any third-party market quotations and relevant market data, unless it reasonably believes in good faith that such quotations or data either are unavailable within the required time period or would lead to commercially unreasonable results.

In general, the close-out amount method aims to provide the determining party with more flexibility in making its determinations while preserving a sufficient degree of objectivity and transparency by providing more detailed guidance regarding the procedures and standards to be adhered to in calculating early termination amounts. The market instabilities and partial market disruptions following the Lehman insolvencies have confirmed the difficulty to obtain market quotations as required under the market quotation approach of the 1992 ISDA agreement during periods of market turmoil.

Even if the determining party were able to obtain the required number of quotations in the market, in many cases those quotations would diverge significantly, making it difficult to determine whether the market quotation method produced the required commercially reasonable result.

As a result, most major dealers in OTC derivatives entered into bilateral or multilateral contractual arrangements with each other to amend any 1992 ISDA agreements existing among them to incorporate the close-out amount method of the 2002 agreement. Further, in February 2009 ISDA in cooperation with market participants, published the ISDA close-out amount protocol in order to allow parties of existing 1992 agreements to amend the terms of those agreements on a multilateral basis, and to facilitate the adoption of the close-out amount method without the need for bilateral amendments of existing 1992 ISDA agreements.

Early termination and automatic early termination

Under an ISDA master agreement, transactions under the master agreement are subject to early termination when a default event occurs and the non-defaulting party serves a default notice on the defaulting party. However, in various jurisdictions it is considered to be necessary to effect the close-out before the applicable bankruptcy regime, which would otherwise not recognise the close-out and the netting effect that the parties want to achieve. In order to mitigate the risk that, under the bankruptcy regimes of these jurisdictions, a default notice to the defaulting party by the non-defaulting party could be considered to be too late to be effective, the agreement also provides for the option of automatic early termination, which usually applies only to default events related to a bankruptcy or similar procedures. The effect of an automatic early termination is that all transactions under the agreement are deemed terminated as of a date immediately before any bankruptcy proceedings were instituted against the defaulting party.

Conversely, parties choosing to apply automatic early termination are faced with the risk that transactions may be automatically terminated without the non-defaulting party's

knowledge, which can leave the latter with unhedged positions or trades that it would otherwise have unwound or replaced simultaneously with the termination. By the time such non-defaulting party becomes aware of the automatic early termination, markets may have already moved adversely against it. Many parties have therefore shown a preference not to elect automatic early termination in order to preserve control over whether and when their transactions will be terminated based on the market prices at such time and considering whether, as a result of the termination, it would owe an immediate settlement payment to the defaulting party.

Based on the contractual arrangements described above, and as an effect of the termination of all outstanding transactions between the parties in case of a default event or termination event, the close-out netting mechanism also avoids 'cherry-picking' by the defaulting party or its bankruptcy trustee – that is, the attempt to uphold those transactions that are favourable to the defaulting party while annulling those that are unfavourable. In jurisdictions in which close-out netting is enforceable, a party's exposure is therefore effectively limited to any net amount that would be payable to it by its counterparty on the termination of all transactions. At the same time, close-out netting also benefits the non-defaulting party in the converse situation, because its obligation to pay gross amounts in respect of any (from its perspective) out-of-the-money transactions is replaced with a single obligation to pay the net amount, and the latter is automatically diminished by all amounts the non-defaulting party can claim under (from its perspective) in-the-money transactions. As a result, under most applicable accounting rules and capital requirement regulations, the availability of close-out netting allows parties to an ISDA or other recognised master agreement to account for all transactions entered thereunder on a net basis.

Swiss master agreement for OTC derivatives

Similar to the ISDA master agreements described previously, the Swiss master agreement consists of a pre-printed body with standard provisions, annexes to the latter and confirmations relating to specific transactions.

In the case of the Swiss master agreement, the body of the agreement is neither party specific nor transaction specific, and therefore not intended to be changed by the parties. If the parties intend to amend the body, they must modify and supplement the standard provisions in an addendum to the master agreement. Certain elections (designation of the calculation agent and threshold amounts for purposes of electing and defining a cross-default) can be made in the last clause of the body. The Swiss master agreement provides explicitly that the body of the agreement and all confirmations relating to transactions entered into by the parties thereunder together form a single agreement. The Swiss master agreement contains three annexes providing for special provisions for the different types of OTC derivatives. In comparison to an ISDA master agreement, the length, language and structure of the Swiss master agreement – in particular, of its body – is less complex and thus easier to comprehend for both lawyers and non-lawyers who are in charge of documenting OTC derivative transactions.

Compared to the standard schedule pertaining to an ISDA master agreements, there are far fewer elections provided for as standard elections, since the Swiss master agreement either does not provide for such election as a standard election, (eg, the election of specified entities (ie, the possibility to tie-in other entities whose defaults would trigger a default event under the master agreement)) or specified transactions (allowing to limit a cross default to certain types of transactions), or does not provide for a standard opting-out of certain standard provisions contained in the agreement (eg, credit event upon merger, which is contained as a standard default event in Section 5(3)(f) of the Swiss master agreement and thus can only be disapplied in an addendum to the Swiss master agreement). Further, the Swiss master agreement provides Swiss francs as a default termination currency, since the agreement is primarily intended for transactions between national parties.

The Swiss master agreement provides for similar standard events of defaults as provided for in an ISDA master agreement (failure to pay or deliver; breach of agreement; default under specified transaction cross-default; bankruptcy; and credit event upon merger). The detailed definition of these events of default vary in certain aspects – for example, the Swiss master agreement provides in its standard form that any "failure by a party to perform any obligation under any other agreement entered into between the parties" constitutes a default event, "if such failure is not remedied on or before the twentieth Banking Day after written notice of such failure is given to the defaulting party" and the default event relating to a restructuring of the counterparty encompasses any "legal or economic restructuring of a party which results in a material deterioration in its creditworthiness". If one of these default events occurs, the non-defaulting party may terminate the master agreement - and thus all transactions entered thereunder - by written notice. In such cases the defaulting party must compensate the other party for any costs and direct loss – calculated on the basis of replacement transactions – resulting from its default.

Like the ISDA master agreement, the Swiss master agreement provides for the concept

of close-out netting in order to consolidate all obligations of the parties by substituting the multiple payment and/or delivery obligations under the several transactions between the parties by a single net payment obligation of one party to the other for all outstanding transactions that are being terminated. In order to ensure the effect of close-out netting and to prevent any possibility of cherry-picking by a bankruptcy trustee, the Swiss master agreement provides for automatic early termination if:

- a party is declared bankrupt;
- a party is granted a payment moratorium;
- reorganisation measures are approved; or
- any other insolvency-related event with similar effect occurs in respect of a party.

In such cases the transactions entered into under the agreement are deemed to be terminated immediately prior to the occurrence of such event.

Collateralisation of net exposure

As discussed previously, a first step towards addressing the credit risk arising from derivatives transactions with a specific counterparty is to enter into a master agreement providing for an enforceable close-out netting mechanism which allows the reduction of exposure under each of the outstanding transactions to a net exposure – that is, a net amount that one party owes to the other party. Such net exposure can further be reduced by obtaining credit support in the amount of such exposure – that is, through financial guarantees by an affiliate, a shareholder or the main financial lender of the contracting entity, or by collateralising the exposure. Each of these methods has its advantages and disadvantages.

Collateralisation usually constitutes an adequate way of risk mitigation if the volume of activity is sufficiently high to warrant the operational and procedural burden and costs related to a reliable collateral process. For derivative parties which use derivative instruments only infrequently (eg, corporations outside the financial industry), relying on other methods of mitigating the remaining credit risk might be more cost efficient. As the Lehman collapse brutally demonstrated, however, relying on the financial health of a parent company or on the credit rating issued by a rating agency might turn out to be a risky approach and, despite its expense, collateralisation might prove to be the safer approach to avoid significant losses in case of the counterparty's unexpected bankruptcy. However, this is provided that such counterparty itself has easy access at reasonable costs to the type of assets (typically, cash of a G7 currency or high-quality government bonds) required for collateralising bilateral OTC derivatives, and is not hindered from pledging assets under the terms of facility agreements with negative pledge clauses that contain no carve-out for the collateralisation of OTC derivatives.

Therefore, collateralisation has become the most widely used method with which to mitigate counterparty credit risk in the OTC derivatives market and market participants have increased their reliance on collateralisation in the recent past. As demonstrated by the recently published ISDA Margin Survey 2010 Preliminary Results, on average, 78% of all open derivatives transactions were subject to collateral arrangements. The percentage, however, varies depending on the type of derivative transaction, mostly in function of the riskiness of the derivative type: while the percentage of collateralised credit derivatives (97%) or fixed income derivatives (84%) is substantially higher, the percentage is significantly lower for foreign exchange (FX), metals and commodities transactions, since markets such as FX are spot or very short-dated and therefore carry a lower risk which is not practical or economic to mitigate by way of collateralisation.

Agreements typically used to document collateralisation

The type of agreement used to document the provision of collateral depends primarily on the type of master agreement in place between the parties, and secondarily on their preference for granting the collateral taker the right to make use of the collateral during the period of collateralisation. If the parties have documented their derivative transactions under an ISDA master agreement, collateral is commonly provided pursuant to the 1994 ISDA Credit Support Annex under New York law, the 1995 ISDA Credit Support Annex under English law or the 1995 ISDA Credit Support Deed. If the parties have entered into a different (national) master agreement, they would typically use the appropriate jurisdiction-specific collateral agreement – for example, the French 1998 AFB Collateral Annex, the *Besicherungsanhang* pertaining to the German *Rahmenvertrag* or the Swiss Credit Support Appendix in its current version dated March 26 2009, pertaining to the Swiss master agreement for OTC derivatives. In addition, depending on the particular circumstances, the parties might also use bespoke margin agreements or master margining agreements referring, for instance, to commodity-specific arrangements. Unless amended, most standard credit support documents provide for collateral to be posted on a bilateral basis such that either party may be required to provide or entitled to receive collateral depending on the net exposure under the relevant master agreement on a mark-to-market basis.

Both the 1994 ISDA Credit Support Annex under New York law and the 1995 ISDA Credit

Support Deed create a security interest over the collateral, while the 1995 ISDA Credit Support Annex under English law provides for an outright transfer of ownership by the collateral provider to the collateral taker – that is, the former retains no proprietary interest in the collateral itself and full legal and beneficial ownership in the collateral passes to the collateral taker, subject to an obligation on the collateral taker to return equivalent property to the collateral provider. Alternatively, the collateral taker may designate a custodian to whom collateral is to be transferred. As a result, under the 1995 ISDA Credit Support Annex under English law, the collateral taker has no restrictions regarding the sale or re-use of the collateral until it has to return the collateral to the collateral provider. Also, the 1994 ISDA Credit Support Annex under New York law permits the collateral taker to sell, rehypothecate or otherwise use or dispose of any posted collateral, unless these rights have been restricted by the parties in the Credit Support Annex, while the 1995 ISDA Credit Support Annex under English law allows no such re-use of collateral.

Further, under the 1995 ISDA Credit Support Annex under English law, in case of an early termination as a result of a default event, an amount equal to the value (as defined in the annex) of the posted collateral at that time will be included in the close-out netting calculations of the ISDA master agreement and thus the collateral taker's obligation to return equivalent property to the collateral provider is replaced by the net-amount resulting in the close-out netting.

The Swiss Credit Support Appendix provides – in a similar manner to the 1995 ISDA Credit Support Annex under English law – for the full right of title to pass to the other party when transferring collateral to the collateral taker, and the latter's right to dispose freely of such collateral, subject to an obligation to deliver back the same quantity, type and quality of collateral. Also, the mechanism to be applied in case of an early termination is similar to that provided in the 1995 ISDA Credit Support Annex under English law; neither of the parties is obliged any longer to deliver or return collateral, and the obligations to deliver or return collateral are replaced by a single monetary obligation to pay a liquidation value, which is calculated by the non-defaulting party in analogy to the provisions provided for in the Swiss master agreement.

The so-calculated liquidation value under the Swiss Credit Support Appendix is then offset against the liquidation value under the master agreement; any resulting net liquidation value shall be paid by the relevant party to the other.

Remaining risks despite collateralisation

While collateralisation is a highly useful means of significantly reducing counterparty risk, it cannot fully eliminate any remaining credit risks relating to the counterparty. In particular, certain risks will remain, mainly due to:

- delays in reacting to market changes and implementing the appropriate counter measures (eg, fluctuations in the value of collateral in the form of securities or an increase in exposure, both occurring between the last settled margin call and the counterparty's default or the time of the close-out);
- voluntarily accepted imprecision of the collateralisation schemes put in place caused by unsecured thresholds or excess collateral requirements; or
- disparities in negotiation leverage and thus built-in over-collateralisation, in particular where one party is obliged to accept, and provide collateral based on an independent amount, as defined in the Credit Support Annex (ie, an amount that must be deposited with the counterparty as a prerequisite for trading with such counterparty, irrespective of any actual exposure of such counterparty).

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An earlier version of this article first appeared in the [Euromoney Derivatives & Risk Management Handbook 2010-11](#).

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