Independent Amounts

Abstract

Collateralization has become a key method of mitigating counterparty credit risk in the derivative markets, both bilateral, privately-negotiated derivatives and exchange-traded, standardized derivatives. In several situations it is common for one party to provide collateral to its counterparty or the exchange clearing house in an amount that exceeds the credit exposure between the two parties at a given point in time. This may occur intentionally, for example through the delivery of Initial Margin or Independent Amount. It may also occur unintentionally, for example during the time interval between the exposure between the parties reducing and the relevant amount of excess collateral being recalled. Regardless of underlying cause, any situation in which one party has delivered collateral in excess of its obligation to the other party may represent additional risk in the event that the other party becomes insolvent. This is, of course, the corollary of the scenario more often considered in collateralization, when the collateral delivered is less than the exposure. But in either case, over-collateralization or under-collateralization, one party is at risk.

This paper is a two-part examination of the risks associated with over-collateralization associated with Independent Amounts ("IA") under ISDA Credit Support Annexes ("CSAs"), and the potential remedies that may be developed by the derivatives market to protect participants.

Although the focus of this paper is the use of IA under CSAs, it will be obvious to readers that many of the same issues and potential remedies apply equally to Initial Margin posted under different forms of collateral agreement, including under the rulebooks of organized derivative exchanges, and also the unintentional over-collateralization that occurs between exposure reduction due to market fluctuation and the resulting collateral recall.

This paper is being produced jointly by ISDA, MFA and SIFMA. It is one of the deliverables described in the derivative industry letter to the Federal Reserve Bank of New York and other banking supervisors dated June 2, 2009. The first part of this paper (dealing with the use and risks of IA) will be published on September 9, 2009 and the second part (dealing with potential remedies) will be published in early October 2009 for a public comment period.

[ISDA LOGO - MFA LOGO - SIFMA LOGO]

Contents

Part I The Use and Risks of Independent Amounts

Part II New Practice for Independent Amounts *

To Be Published October 2009

** This is a working title for Part II and is subject to change*

Capitalized Terms

Except as the context requires otherwise, terms in this paper which are capitalized and have either the meaning defined in the standard ISDA Master Agreement and ISDA Credit Support Annex or are specific taxonomy adopted for this paper and are defined in section 1.

Part I

The Use and Risks of Independent Amounts

In Part I of this paper we address the use and the risk of Independent Amounts from an educational perspective. The first seven sections of Part I describe the key terms used in this field, why we have the concept of IA in the market, how the market operates in practice, the risks of IA, and the alternative ways of holding IA. These first seven sections are intended to be factual and not expressive of any particular viewpoint regarding the use of IA. Section 8, however, provides two detailed perspectives on IA from the end user perspective and the dealer perspective.

Part II of this paper (October 2009) will make recommendations for improvements to market practice in the use and risk management of IA.

1. Key Mechanics of the ISDA Credit Support Annex

This paper deals with a complex area of collateralization, where several terms have both technically-specific meaning and are also used broadly in a more colloquial fashion by industry practitioners. In this section we describe the key elements of the ISDA Credit Support Annex[1] as it relates to the computation of collateral requirements.

1.1 Credit Support Amount

The ISDA Credit Support Annex (CSA) defines the overall amount of collateral that must be delivered between the parties, known as the Credit Support Amount, as:

> **(i) the Secured Party's Exposure […] plus (ii) the aggregate of all Independent Amounts applicable to the Pledgor, if any, minus (iii) all Independent Amounts applicable to the Secured Party, if any, minus (iv) the Pledgor's Threshold**
>
> (Source : 1994 ISDA Credit Support Annex - New York Law version [2])

The Secured Party is the party that is holding collateral; the Pledgor is the party that has delivered collateral[3].

It should be noted that this definition of Credit Support Amount is the standard one provided in the boilerplate CSA language. Counterparties occasionally modify the language bilaterally, including one type of modification that causes the Pledgor to deliver no less than the sum of all Independent Amounts; this differs from the standard formulation above by removing the so-called "netting" effect whereby an increasingly negative exposure for the Secured Party (i.e. the Secured

[1] Independent Amounts can be used under any of the ISDA Credit Support Annexes. For illustration purposes, in this document we will mainly refer to the 1994 version according to New York law, except as otherwise stated.

[2] The equivalent definition under the 1995 ISDA Credit Support Annex English Law version is : "(i) the Transferee's Exposure plus (ii) all Independent Amounts applicable to the Transferor, if any, minus (iii) all Independent Amounts applicable to the Transferee, if any, minus (iv) the Transferor's Threshold".

[3] For these purposes we ignore certain esoteric scenarios where both parties may be Secured Party and Pledgor at the same time, and also scenarios where no collateral has yet moved under the agreement. Note also that under the English Law version of the CSA the term "Secured Party" is replaced by "Transferee", and "Pledgor" becomes "Transferor".

Party is out-of-the-money on the underlying derivative contracts) reduces and then eventually eliminates the need for the Pledgor to deliver Independent Amounts[4].

1.2 Exposure

The term Exposure is defined in a technical manner that in common market usage essentially means the netted mid-market mark-to-market (MTM) value of the transactions in the portfolio between the parties[5]. This term is the core of the Credit Support Amount calculation, and tends to drive the overall collateral requirement between the parties, except in situations where portfolios are small (and therefore often have small MTM) in relation to any applicable Independent Amounts or Thresholds. The commercial reason for basing the collateral requirement around the Exposure is that this represents the best estimate of the amount of credit default loss that would occur between the parties if one were to default. However there are some significant limitations to this estimate, which Independent Amounts are intended in part to address:

- Exposure is calculated at mid-market levels, whereas in reality loss upon default would reflect the replacement cost of transactions calculated at the bid or offer side of the market, and inclusive of credit costs
- In common with all derivatives, OTC or exchange-traded, Exposure can only ever be an estimate because the MTM of positions varies (sometimes materially) continually through time.
- Exposure (and therefore the related collateral) is calculated on a netted basis - this will be important later in this paper.

1.3 Independent Amount

The term Independent Amount is defined in the electives and variables section of the CSA[6], or in the confirmation for individual transactions. It can be any amount that the parties agree, but typically is expressed as a fixed currency amount, a percentage of the notional principal amount, or a computation of value-at-risk. Independent Amount can be defined at the level of the portfolio of transactions between two parties, or can be defined uniquely for each individual transaction; it can be zero of course. As can be seen from the definition of Credit Support Amount set out earlier, the Independent Amount will increase the overall amount of collateral that a party is required to deliver - it makes the Credit Support Amount from that party's perspective larger. The underlying commercial reason behind Independent Amounts is the desire to create a "cushion" of additional collateral to protect against certain risks - we shall discuss these in more detail later in this paper.

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[4] The alternative formulation is set out in Appendix C to the User's Guide to the 1994 ISDA Credit Support Annex. It is used on some occasions where a Dealer requires to hold IA amounts even where the net mark-to-market of the portfolio is negative, which under the standard boilerplate CSA terms would reduce, eventually to zero, the IA posted by the End User.

[5] Technically the definition of Exposure refers to [insert text from CSA]. Where termination of the portfolio occurs and neither party is the affected party, that means that the values ascribed to trades being terminated are those measured at the mid-point of the market, in other words half-way between the bid and the offer values that would be used if one of the parties were the affected party (i.e. in default). Interestingly, the definition of Exposure also includes any due but unpaid amounts between the parties - these would be part of the termination calculation, of course. This would include both payments ordinarily in transit between the parties, and also failed payments past due and currently unsettled. General market practice is currently not to include unpaid amounts in collateral calculations, although this topic has been raised within industry forums and market practice may be amended in the future.

[6] Paragraph 13 in the NY law CSA or Paragraph 11 in the English law CSA.

1.4 Threshold[7]

The term Threshold is defined in the elections and variables section of the document, or (rarely) in the confirmation for individual transactions. It can be zero, but otherwise will typically be defined as either a fixed currency amount or a variable currency amount that changes in response to changes in the credit rating of the party concerned. In context of the expression for Credit Support Amount, any non-zero Threshold will decrease the overall amount of collateral that a party is required to deliver - it makes the Credit Support Amount from that party's perspective smaller. The underlying commercial reason behind Thresholds is that often parties will be willing to take a certain amount of credit risk to each other unsecured (equal to the Threshold), before then requiring collateral to cover any additional risk.

1.5 Interaction Between The Elements of Credit Support Amount

When considering the operation of the CSA in practice, four points are critical to remember:

- As can be readily seen, Independent Amounts and Thresholds tend to work in opposition to one another in relation to any specific party under an agreement, which is why a particular CSA will typically employ one or the other in relation to each party.
- In respect of Independent Amounts, it is also obvious that if both parties are subject to an Independent Amount they will tend to cancel each other out, which is why a particular CSA will typically require Independent Amount from neither party or one party, but rarely both parties.
- Exposure and Independent Amount are simply two of several terms netted together in the expression that yields the overall Credit Support Amount, and this has two important practical consequences:
  - Although some market practitioners may sometimes think of two separate pools of collateral (one covering the Exposure and one covering the Independent Amount), under the ISDA CSA there is technically just a single pool of collateral, and the elements that make up that pool are generally not held separately.
  - It is not possible to reverse engineer the collateral nominally associated with a particular transaction from knowledge of the overall pool of collateral. The overall pool is determined by netting Exposure, Threshold and IA terms across many transactions, which is not a mathematically reversible expression[8].

2. Taxonomy

In this highly technical area of collateralization some terms sound similar but are different, and others appear different but carry equivalent meanings. In this section we lay out a consistent taxonomy that will be adopted in this paper and also relate these terms to others in market usage.

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[7] For completeness, it should be noted that the CSA contains another term in the collateral computation, known as the Minimum Transfer Amount or MTA. The parties may agree any level of MTA, which sets a lower limit on the amount of collateral that will be transferred between the parties at any point in time. The purpose is to allow the parties to prevent the movements of small amounts of collateral that are of *de minimus* credit risk protection benefit but of high operational risk and nuisance value. Generally MTAs are small compared to thresholds, and they can be zero where the parties' intent is to move every dollar of collateral every day. The CSA also contains a Rounding term, which is of even smaller effect typically, and used to round collateral movements to the nearest sensible size of unit (often the nearest $1,000 or $10,000). Neither MTA nor Rounding are further considered in this paper.

[8] There are special case exceptions to this, such as portfolios comprising single trades or portfolios of several trades where there is no Threshold, there is no IA or the IA is specified individually for each trade, and in addition the current mark-to-market values of all trades have the same sign. Generally, however, the netting across positive and negative exposures and the blending of terms that exist at trade level with those that exist at portfolio level render non-reversible the computation of Credit Support Amount. This means that, except in the special cases, one cannot impute or separate a specific amount of collateral for any particular trade within a portfolio of other trades. Although this may make it impossible to identify the collateral for a specific trade, it is beneficial to the market because (a) it allows the most efficient use of capital for firms, and (b) it is the closest possible simulation of the situation in an actual default and close-out of the portfolio.

2.2 Taxonomy Employed in This Paper

For clarity we will adopt a consistent taxonomy in this paper:

> **Independent Amount** or IA will have the definition given in the Credit Support Annex and as the context requires will also refer to that element of the overall Credit Support Amount that is related to the IA.
>
> **Variation Margin** or VM will refer to the element of the overall Credit Support Amount that is related to the Exposure as defined in the Credit Support Annex.
>
> **Dealer** will refer to the party that is receiving IA from the other party.
>
> **End User** will refer to the party that is delivering IA to the other party.

It is important to point out that any type of counterparty could be subject to an IA requirement, including banks in some circumstances. The adoption of the Dealer and End User taxonomy set out above reflects the fact that historically the posting of IA has generally been associated with end users transacting OTC derivatives with dealers. However, this is not necessarily so in all cases and this paper should be read with this potential diversity in mind.

2.3 Other Similar Terms Used In The Market

Initial Margin is a term often used interchangeably with Independent Amount, but it is not actually a term used in industry-standard OTC derivative documentation at all; it comes from exchange rulebooks that set out the collateral required to be pledged by exchange members to the exchange clearing house.

Initial Margin is typically an additional amount of collateral that must be posted to the clearing house in excess of the Variation Margin which reflects the market value of the exchange-traded contracts . Thus in generalized terms the Initial Margin on an exchange can be seen as equivalent to the IA term that goes into the computation of Credit Support Amount under an ISDA CSA.

Exchange Variation Margin is likewise analogous to the collateral that covers the Exposure term used in the CSA computation of Credit Support Amount. The CSA does not actually give us a convenient term by which to refer to this collateral; common market vocabulary has adopted the term Variation Margin from the exchange-traded derivative world to refer to this concept.

Various other terms (such as Original Margin and Lock-Up Margin) have developed in certain parts of the market to refer to concepts that are broadly similar to IA, although with some variations. To avoid confusion in this paper we will not use these terms further.

3. Purpose of Independent Amount

The use of Independent Amounts originated in the earliest days of the collateralized OTC derivative market, which date back to the late 1980s. IA has typically been a one-way obligation for an End User (typically a hedge fund) to post additional collateral to a Dealer, primarily as a cushion to guard against the residual credit risk that may exist even under a collateralized trading agreement. Such residual credit risk may arise in four principal ways:

- When mark-to-market fluctuations occur there is a delay before the new collateral amount can be computed, called and settled
- When a counterparty defaults, no more collateral movements will occur but credit exposure may continue to increase until the non-defaulting party closes out the relevant risk positions
- Collateral agreement typically contain structural features designed to ensure that effort and cost are not wasted in moving *de minimus* amounts of collateral between the parties[9]

[9] These terms include Minimum Transfer Amount and Rounding amount in the CSA documents.

- Collateral transfers under the CSA are based on mid-market values of the underlying derivative contracts, whereas a party's loss upon default of the other party will be measured at either the bid or offer side of the market[10]. Thus, some disparity between collateral and exposure is always to be expected, and this may be significant where spreads for a product are particularly wide[11].

The decision to require posting of IA is based on a number of factors, including, but not limited to:

- The credit quality of the End User[12] and the nature of their relationship with the Dealer
- The type of account or vehicle that is entering into the swap transactions (e.g. whether or not leverage is being used, the percentage of liquid assets held in relation to swap notional value, etc.)
- The type of underlying exposure being taken - the riskier the exposure, the greater the Independent Amount requirement will be
- The volatility of a particular transaction or the derivatives portfolio.

There is no over-arching or automatic requirement that any OTC derivative transaction be collateralized at all; and if it should be collateralized there is no automatic requirement that IA be posted. These are credit risk management decisions subject to negotiation between the parties.

4. Risks to Parties Posting Independent Amounts

While a Dealer receiving IA will benefit from the resulting buffer of additional collateral the End User may assume added risk of loss in the event the Dealer becomes insolvent and excess collateral (if any) is not promptly and completely returned to the End User.

It should be noted that a party under administration or bankruptcy protection is not simply entitled to retain IA or any other over-collateralization received from a counterparty. In fact, to the contrary, as the estate of the insolvent party is wound up these excess amounts will be recognized as valid creditor claims[13] and the Trustee or Administrator will work to repay the counterparties concerned. Therefore it is not the case that IA delivered to an insolvent Dealer will always ultimately lead to a loss for the End User. However, if an End User has not taken steps to ensure priority treatment of their claim in bankruptcy, then they will have a general unsecured creditor claim on the estate. This type of claim ranks behind other creditor claims of higher priority, and thus in many insolvencies general unsecured creditors get paid less than 100% of their claim amount.

In the case of Lehman Brothers, investors may be exposed to losses[14] because they may have over-collateralized Lehman through the provision of IA[15]. These IAs were generally delivered

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[10] It is important to note that the determination of the Settlement Amount upon the declaration of any Early Termination Date under the ISDA Master Agreement may also require that mid-market valuations be used, for example upon the occurrence of a Termination Event where both parties are "Affected Parties".

[11] It is noted that both parties are subject to these risks, regardless of the type of party or whether or not IA is posted.

[12] If the End User is significantly more creditworthy than the Dealer, the Independent Amount may be paid by the Dealer to the End User, although this is rare. Independent Amounts are rarely if ever used between Dealers.

[13] Notwithstanding challenges as to validity or common law or contractual set off with amounts due elsewhere between the insolvent party and the counterparty.

[14] Strictly speaking the Lehman case remains on-going so it is not definitively known what losses, if any, will have been suffered by counterparties. However, at the time of writing unsecured general creditor claims against the Lehman estate were trading at under 20 cents on the dollar, implying losses will be realized when the final distribution to creditors eventually occurs.

[15] Although the posting of IA would, all other things being equal, lead to over-collateralization, in reality there are several factors that mean the IA posted may not all be excess collateral. For example, a party's mark-to-market values may be off-market, there may be unreconciled or unconfirmed deals between the parties, there may be operational issues on any given day that mean the VM called is inaccurate.

directly to Lehman, with the right of rehypothecation[16]. This meant that the IAs were permitted to be freely used by Lehman, and were not segregated or afforded any client asset protections. Therefore, following Lehman's bankruptcy filing, claims for return of cash and securities posted to meet IA requirements were treated general unsecured claims on the debtor's estate. These are given the same priority as claims of other general creditors, meaning in this particular case that counterparties will likely only recover a small percentage of the value of any IA posted.

Collateral agreements with Lehman generally allowed direct holding of the collateral with the right of rehypothecation, and this led to the characterization of these amounts as general unsecured claims. It should be noted that selection of a different form of collateral documentation may have yielded a different outcome - for example, had IA not be rehypothecable by Lehman then (for example) in the UK under the FSA's CASS 6 rules the IA would have required to have been segregated, which may have made the assets more readily identifiable and recoverable post-insolvency. The ISDA Credit Support Deed is an example of a document that could accomplish this fact pattern[17]. The key point here is that the characterization of collateral under the relevant legal agreement and the manner of its holding in practice are key determinants of the risks associated with IA.

The Lehman experience has led to an increased awareness of the risks associated with posting IA. It has translated into a strong desire on the part of End Users to ensure that IA posted to a Dealer is held in a manner that ensures it is remote from the bankruptcy of the Dealer counterparty and immediately recoverable (i.e. "portable") upon the occurrence of such an event.

In this context there is industry-wide focus on developing alternate approaches to handling Independent Amounts that:

- In the even of default by the End User, permit the Dealer to perform close out calculations and if necessary to reliably and rapidly seize and liquidate collateral under the CSA[18].
- In the event of default by the Dealer, permit the End-User to regain control of the IA once close out of the underlying portfolio has occurred and any liability to the estate of Dealer has been discharged.
- Are operationally feasible and cost-effective for both parties, notwithstanding the previous points above.

A complicating factor is that as explained earlier Independent Amounts are actually not a separate pool of collateral under a CSA, even though many people may think of IA in this way. In reality IA is an additive term in the mathematical computation of the overall Margin Requirement between the parties. Even though that overall collateral level may be calculated by reference to IA and other terms, what is actually posted between the parties is the overall net collateral requirement, and its sub-elements are indistinguishable legally, contractually and in practice[19,20].

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[16] Rehypothecation rights are included in the standard ISDA CSA documents according to New York law in Paragraph 6(c), and are either given effect or disapplied according to the election of the parties made in Paragraph 13(g)(ii). Under the English law version of the documents, there is no such grant of rehypothecation rights because the document is fundamentally based on the transfer of title occurring when collateral is delivered. Unlike rehypothecation rights under section 6(c) of the New York law document, the title transfer underpinning the English law CSA cannot be disapplied. This presents particular issues with IAs delivered under an English law CSA, which are dealt with in Section 6 of this paper.

[17] The ISDA Credit Support Deed (an English law security interest form of collateral document) contemplates that collateral shall not be rehypothecated and that it will be held in a segregated account. Under the UK FSA rules on Client Assets (CASS 6), where the secured party does not have the right to rehypothecate collateral subject to a security interest, the secured party is obliged to hold the assets as if they are client assets, and thus the collateral is subject to a wide range of protections not applicable to collateral delivered under a title transfer agreement of a security interest with rehypothecation rights agreement.

[18] The close out sequence under the ISDA Master Agreement is that (a) the agreement is terminated, (b) the termination payment is calculated according to the procedures set forth in the Master Agreement, (c) any termination payment is netted against posted collateral (noting that the entire pool of collateral is available for this purpose – IA and VM are not separately distinguished for this purpose), and then (d) after netting and any applicable common law set off rights have been exercised a determination is made whether any amount is owed or owing.

[19] See also footnote 8.

Therefore, IA is generally treated in the same manner as other collateral received. This means that the Dealer generally has the use of cash funds posted as IA and is required to pay interest on those funds to the End User (typically at the Fed funds rate). This arrangement provides a funding benefit to the Dealer and entails a funding cost to the End User. Similarly, with respect to securities posted as IA, the Dealer generally has rehypothecation rights which permit the securities to be re-pledged or used for the purpose of repurchase agreements. Note that even if the Dealer has rehypothecated securities collateral, for the purpose of the CSA they are still obligated to pay any distributions made with respect to the securities to the End User[21].

5. Third Party and Tri-Party Arrangements for Independent Amounts

The following discussion applies IA in the form of securities collateral pledged under a security interest form of collateral agreement. Please see Section 6 for a discussion of cash pledged as IA under a security interest form of collateral agreement. Section 7 addresses cash and securities delivered as IA under a title transfer form of collateral agreement.

There are essentially three ways in which a party may hold IA posted to it:

- Direct holding, in which the IA is delivered by the End User to the Dealer, and the Dealer holds the IA themselves or through an affiliate entity.

- Third Party custody, in which an unaffiliated bank or other party[22] operates under agreement with one of the two counterparties and simply provides typical custody and safekeeping services.

- Tri-Party custody, in which an unaffiliated bank or other party providing tri-party custodial services operates under a three-way contract between it and the two derivative counterparties. Among other duties, the tri-party agent releases collateral to each of the counterparties subject to pre-defined conditions.

The terms “Third Party” and “Tri-Party” therefore connote significantly different custodial arrangements that may be used in connection with a collateral agreement.

Third Party and Tri-Party agreement will always require additional documentation between one or both parties and the custodial entity, and may entail amendment to the CSA documents between the parties.

5.1 Direct Holding of IA

Where IA is delivered directly from the End User to the Dealer with rehypothecation rights and there are no formalized arrangements for the collateral to be segregated in some manner, it becomes impossible to distinguish between the IA and the other assets of the Dealer. In the event of the insolvency of the Dealer, the IA will likely be afforded no special protection and will form a part of the estate of the debtor. Claims for recovery will likely be treated as general unsecured creditor claims.

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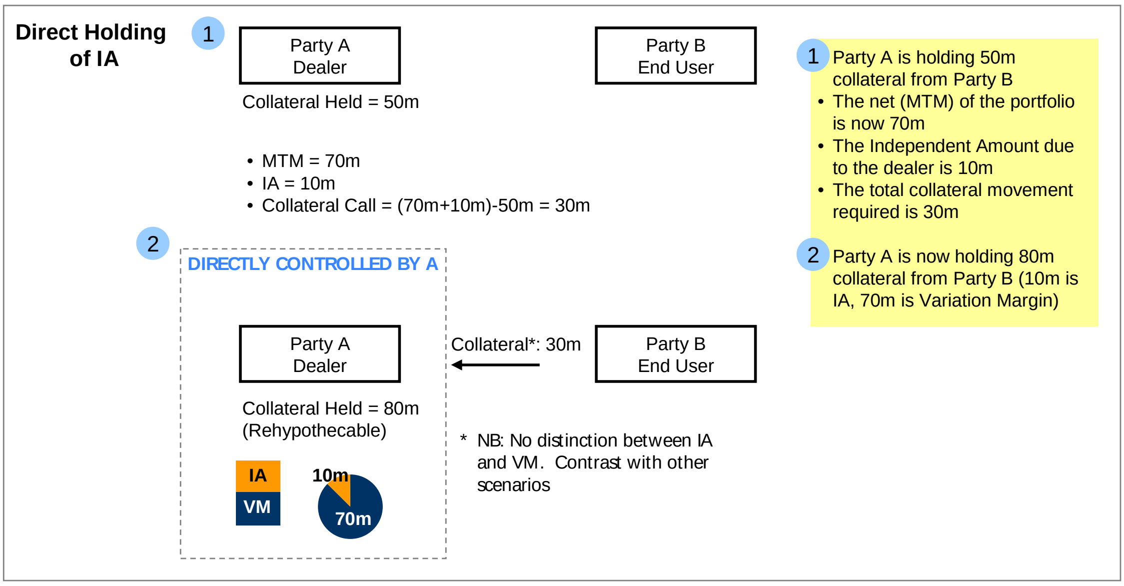
[20] Notwithstanding the issue described under the current CSA, it would of course be possible to amend the language to create two pools of collateral - the IA pool and the VM pool.

[21] This obligation exists as if the securities had not been rehypothecated. Therefore even if such distributions are not received by the Dealer from the third party to which the securities were rehypothecated (or are received net of withholding taxes, for example), the Dealer is obliged to pay the full distribution, actual or manufactured as necessary, to the End User. Rehypothecation of collateral by a party therefore creates additional risk for that party.

[22] Custodians and tri-party collateral agents are generally banks, either commercial banks or the underlying bank entities that operate central securities depositories. There may, however, be other non-bank entities that now or in the future operate such services. It should be noted that additional protection may exist when utilizing bank provided solutions, e.g. FDIC insurance.

Where the Dealer takes IA that was delivered directly to it and passes it over to an affiliate to hold, much will depend on the status of the affiliate. If the affiliate is a *bona fide* custodial bank and is a separate bankruptcy-remote legal entity to the affiliated derivative counterparty entity[23], then this situation should be considered as a third party custody arrangement as discussed below.

Figure 1. Direct Holding of IA Illustrated



5.2 Third Party Custody Holding of IA

Where a Dealer receives IA from an End User, places it with a third party custodian and does not rehypothecate the collateral it will be relatively easy to distinguish between the IA and the other assets of the Dealer.

In this situation there is no privity of contract between the End User and the third party custodian, but nevertheless strong traceability of assets is afforded. This is particularly so if the Dealer is obligated by its contract with the End User to hold the IA in this third party, segregated manner, and the End User is in possession of identifying details such as the custodian name and address, the relevant account number, etc. The End User may have no control or contractual rights over the account containing the IA, but in the event of the insolvency of the Dealer, the End User can explicitly and uniquely identify the IA it had posted.

In fact, under the customer asset protection rules in several jurisdictions, holding of IA that follow the pattern set out above may enjoy certain statutory protections. For example, under the UK FSA's CASS 6 rule[24], in certain cases securities collateral delivered to a counterparty that is not rehypothecated and is held segregated with a solvent custodian will enjoy the full range of customer asset protections. Similar protections under FDIA[25] and SIPA[26] may apply in the United States, with parallel rules in other countries.

The foregoing assumes that the secured party holds collateral with a third party custodian, subject to a bilateral contract between the two, and furthermore that the collateral is not

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[23] This could be established via a legal opinion from an independent law firm supporting non-consolidation of the trading counterparty entity and the affiliated custodian, for example based on the fact pattern that the custodian is a regulated entity subject to a separate insolvency regime.

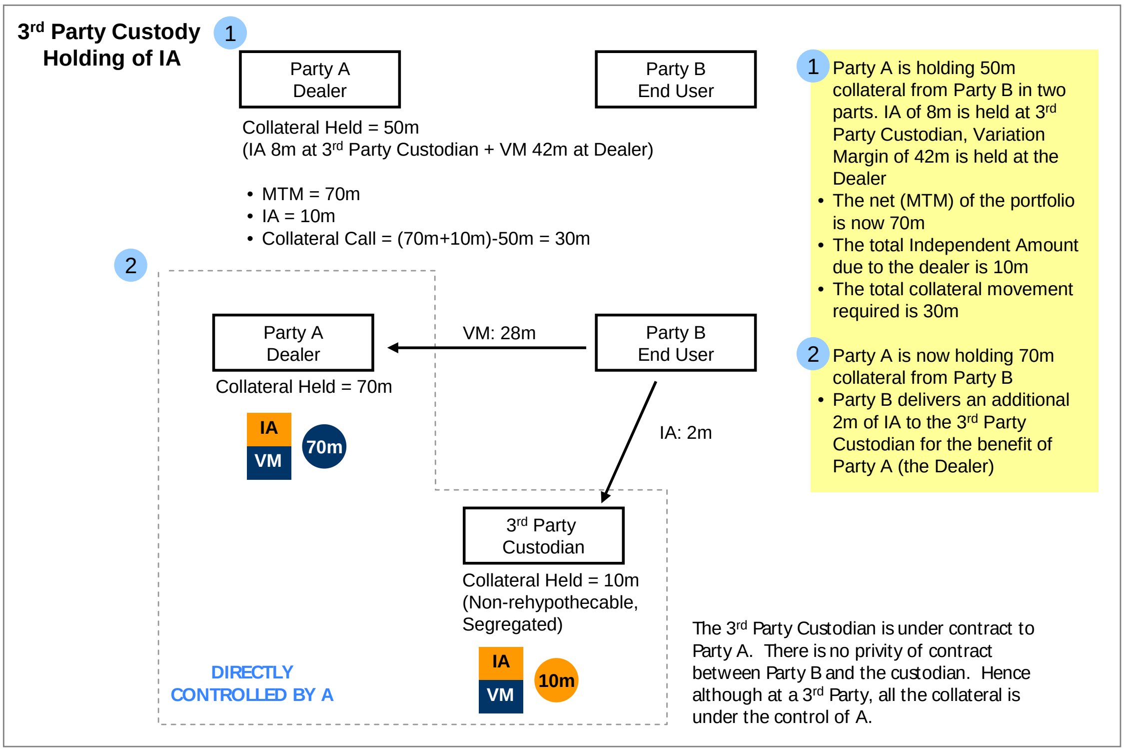
[24] [Insert references to FSA Handbook]

[25] [Insert reference]

[26] [Insert reference]

rehypothecated. Where a third party is used but collateral is rehypothecated, it may be more difficult to establish strong traceability of assets; customer asset protection rules will not apply. This case is therefore similar to direct holding of collateral for these purposes.

Figure 2. 3rd Party Custody Holding of IA Illustrated



5.3 Tri-Party Custody Holding of IA[27]

In a tri-party holding arrangement of IA there is a three-way agreement between the custody bank (sometimes also called the collateral agent) and the two derivative counterparties. The End User delivers IA to the collateral agent for the benefit of the Dealer.

The End User and the Dealer are both in direct privity of contract with the collateral agent, and therefore each can enforce its rights by giving notice to the collateral agent following the default of the other.

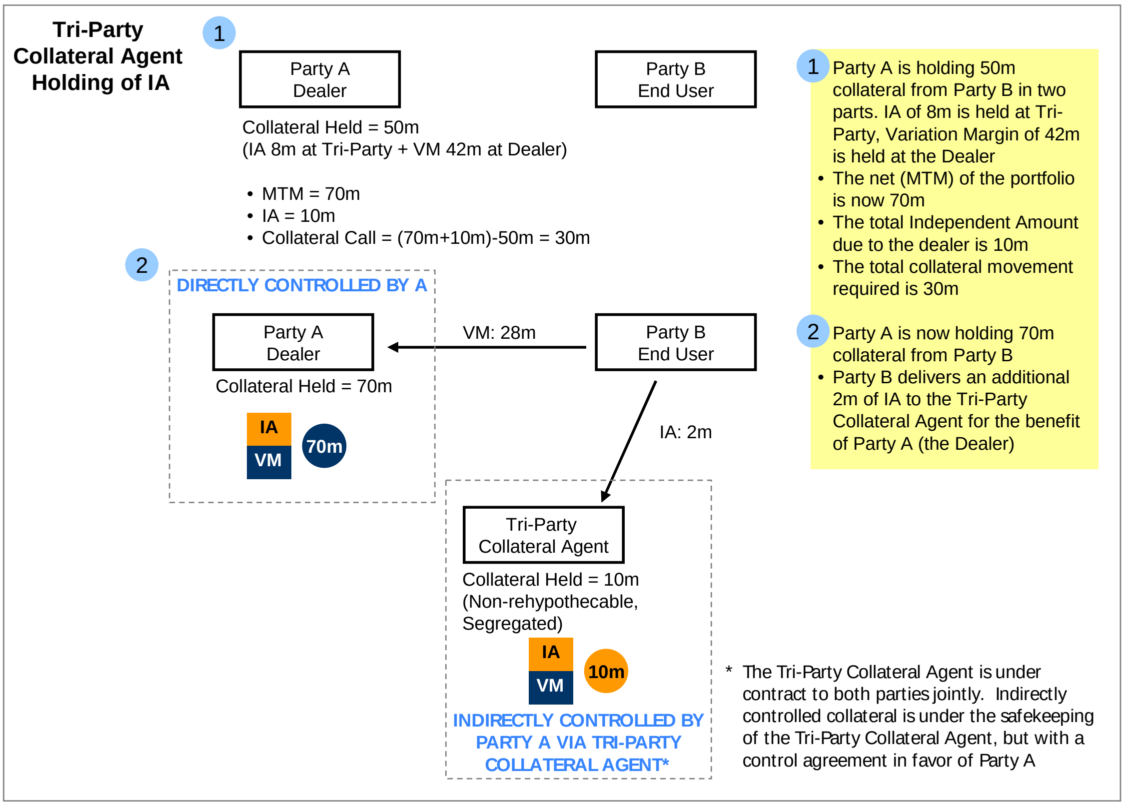
In this, as in all other holding models for collateral, the secured party must ensure that it obtains a perfected security interest in the collateral. The method of perfection of a security interest differs by jurisdiction, but in many cases it is predicated on some notion of the secured party having "control" over the assets[28]. In the tri-party holding model this is slightly more complicated than in other models, because of the existence of the third party and the three-way contract. The collateral agent provides certain undertakings to the Dealer, most particularly that they will follow

[27] Tri-party custody holding of OTC derivative collateral and the well-established Tri-party repo market have some superficial similarities but the differences are probably more numerous that the similarities when considered in depth. A comparative analysis of the two markets is beyond the scope of this paper, but one crucial difference is the legal nature of the collateral arrangement under-pinning the repo market, which is title transfer. There is also no IA concept in the repo market. Thus the issues concerning IA under security interest agreements in the OTC derivative market are largely absent as a concern in the repo market.

[28] Under the Uniform Commercial Code (articles 8 and 9) adopted by most states in the USA and applicable to most types of counterparty, the essential step of perfecting a security interest is to take control over the collateral. In other jurisdiction there may additionally be filings or registrations that must be made to accomplish a perfected security interest. This is a highly complex area of law and readers are advised to take appropriate legal advice from qualified counsel.

the instructions of the Dealer at all times, except when the Dealer is in default under the relevant agreements. In some cases, tri-party agreements provide for a non-defaulting party to issue a "Notice of Exclusive Control" under certain circumstances; this is helpful in that it formally eliminates any rights of the defaulting party to attempt to instruct movement of the collateral. These measures are intended to establish the necessary degree of control to achieve a perfected security interest.

Figure 3. Tri-Party Custody Holding of IA Illustrated



6. Cash as Independent Amount

This section considers cash pledged under a security interest form of collateral agreement.

Cash has the inherent property of fungibility. Therefore, cash delivered to a custodian will be difficult to effectively segregate on the balance sheet of the entity concerned - it will effectively be an unsecured claim on the custodian holding it.

This issue may be possible to avoid in circumstances where cash is held in a defined segregated deposit account and not invested or re-used in any way. However, typically a pledgor would not earn a return on cash sequestered in this way, or would have only limited and low-yielding investment options[29]. By contrast, ISDA CSAs in use in the market generally provide for a rate of return on cash collateral at the standard overnight index rate for the currency in question[30]. However, this return is typically predicated on the ability to invest the cash collateral freely; if the range of investments were more limited, then a reduced return (possibly zero) may result. This may be an important commercial consideration, and also have documentation implications because the typical reference of overnight index rates would need to be amended.

[29] Some End Users have stated that the lack of return on cash posted as IA would be acceptable in order to accomplish proper segregation; it is not yet clear how widely this view is shared.
[30] For example, Fed Funds H-15 for USD, EONIA for EUR, SONIA for GBP, etc. Typically these rates are used flat, with no spread for cash collateral purposes. Other documents, particularly in the Prime Brokerage space may reference other rate indices such as LIBOR, and may apply a spread.

To avoid this zero investment return issue, sometimes cash is delivered as collateral with an accompanying or standing instruction to invest that cash in a defined range of instruments. These typically include mutual fund investment units and short term liquid paper, although any investment could be instructed in this way in theory. In these circumstances, it is not always clear what asset the secured party actually has a security interest in. For example, if cash was delivered as IA for the benefit of the Dealer to the custodian who had instructions to purchase money market funds with the cash, does the Dealer have a security interest in the cash or the money market fund units? Overnight cash sweep products also present similar challenges, since at the close of business on a day D and the opening of business on day D+1 a party may clearly be holding cash collateral, but in the intervening overnight hours the cash may have been swept to an offshore jurisdiction and invested in securities or other assets to earn a return.

In general, it may be preferable to use cash collateral only where the receiving party has unfettered rights of use, and therefore can both generate an appropriate investment return on the cash and avoid ambiguity as to what the collateral actually is; by contrast, where collateral will be segregated it should be delivered in the form of a debt or equity security, or instrument such as a money market fund unit, that is well-characterized and has a defined return to the pledging party.

In either case, careful drafting of documentation should ensure that the secured party has a security interest in the collateral at all stages and in all forms of holding, whether it is in the form of cash or some investment holding purchased or financed with the cash.

7. Independent Amounts Under Title Transfer Collateral Agreements

This section considers both cash and securities delivered under a title transfer form of collateral agreement.

IA can be a feature of both the New York Law Credit Support Annex (security interest form of collateralization) and the English Law Credit Support Annex (title transfer form of collateralization). The legal mechanisms underpinning these otherwise essentially similar documents are very different. The idea of segregating IA into non-rehypothecable accounts is really applicable only to the security interest forms of documentation[31].

Under a title transfer collateral agreement, a transfer of assets inherently creates an unsecured claim for the return of those assets, subject to common law set off rights in respect of other amounts owing between the parties. This is the basis for around half of the collateralized OTC derivative market, in addition to the repo markets.

In fact, if one were to segregate IA (or any collateral)under a title transfer collateral agreement, it would create a high degree of recharacterization risk. Under a title transfer agreement, the recipient of collateral becomes the legal holder of title to the asset concerned - the recipient owns the assets outright. If they were to segregate those assets and treat them in a manner different to that in which they generally treat their own assets, then it invites recharacterization of the agreement as not being a title transfer at all, but in fact being a security interest form of collateral arrangement, but one for which the necessary steps to perfect a security interest might not have taken place.

There has been some significant amendment of the legislation relating to the perfection of security interest arrangements within the European market pursuant to the terms of the Financial Collateral Directive. This may go some way towards allaying this concern about recharacterization risk. However, the Directive has not been implemented in a consistent way across the different jurisdictions within the European Economic Area so it is unlikely that a generic solution will be feasible.

It should be noted that the title-transfer based English Law Credit Support Annex has a parallel security interest based companion document, the English Law Credit Support Deed. In addition,

[31] Primarily this would be the Credit Support Annex under New York Law. It also includes the Credit Support Deed under English law, although this document is very rarely used in practice.

the ISDA 2001 Margin Provisions document contains both title transfer and security interest mechanisms for taking collateral. It may be feasible to create a situation where the VM element of the overall collateral pool is subject to title transfer (freely useable) and the IA element is subject to security interest (segregated) by using either the English Law CSA and CSD in conjunction, or by using the Margin Provisions.

8. Two Perspectives on Independent Amounts

The following two sections express the viewpoints of the Dealer and End User communities regarding IA. Readers will note that they often contradict one another or raise different sides of common issues, as one might expect.

Although the two communities have reviewed the perspectives of the other during the preparation of this paper, except for factual corrections and removal of examples that might identify specific extant legal entities the perspectives expressed by each have been allowed to stand, subject to rebuttal and counter-argument in the alternate perspective.

It should be noted that in spite of the differences of viewpoint expressed, all market participants have collaborated richly in the preparation of this paper and all are committed to the resolution of issues and the improvement of market practices in this field.

8.1 The Dealer Perspective

Purpose of Independent Amounts The purpose of Independent Amounts is to provide additional collateral protection against the risk of counterparty default[32].

IA acts in several ways to accomplish this protection:

- IA is intended to protect the Dealer from potential liquidity or market risk arising from the close-out of a position resulting from the default of an End User client. While the parties often would have exchanged collateral equivalent to the mark-to-market (MTM) or replacement value of the trade, there is potential for a change in value between the last collection of margin and the final termination value, especially when markets are volatile at the time the derivative positions are unwound.
- IA provides important protection in relation to collateral movements that are held up pending the resolution of a disputed margin call by the Dealer[33].
- To the extent that collateral is calculated at mid-market valuation levels and an actual post-default close out would occur at the bid or offer side of the market for each trade, the presence of IA also protects the Dealer against this spread risk.
- IA benefits both parties because it permits a party to safely unwind positions or sell down collateral assets over time, as opposed to being forced to rapidly unwind at fire-sale prices. This obviously benefits the Dealer but also benefits the estate of a defaulting End User because the best possible value is realized for posted collateral, which increases the probability than an excess will remain and be returned to the estate. Avoiding fire sale disposal of assets is of important systemic benefit also.

Mis-Conception Regarding the Operation of IA The market dialogue about IA is sometimes hampered by some misconception regarding the operation of IA under the CSA and the Master Agreement. As explained earlier in this paper, IA does not operate in the same way as Initial Margin for exchange-traded derivatives. Specifically, IA is not a separate pool of collateral to which a party may have recourse in the event that a default event occurs and the VM is insufficient. Under the ISDA documentation, the IA and VM components of the overall collateral

[32] Other benefits such as liquidity enhancement are ancillary; while useful they are not paramount.

[33] For example, in the case of Lehman Brothers, had the firm not ultimately collapsed it may have suffered losses because counterparties were disputing its margin calls in order to avoid delivering collateral and one or more of them subsequently defaulted. The extreme example of Lehman illustrates the point but it is true for all Dealers - IA protects them against disputed margin calls of whatever cause or origin, and this is of systemic importance.

requirement are simply mathematical calculations that combine together with other factors to establish the overall single pool of collateral that must exist between the parties. In the event of default, the secured party has recourse to that entire pool, regardless of the mathematical derivation of different components of the calculation that led to it. Under the CSA and the Master Agreement, the entire pool of collateral is available to offset any net loss arising on the entire portfolio of exposures under the Master Agreement; a particular dollar of collateral calculated in respect of a transaction can provide protection against the risk that the VM taken against other transactions happens to fall short of their actual close-out value. This fungibility of collateral to cover the net exposure between the parties is an essential form of risk reduction in the OTC derivative markets, and of systemic importance because the combination of broad-based close-out netting and portfolio-wide offset of collateral provide for the lowest possible residual exposures between a pair of counterparties. Any solution that bifurcates the collateral pool (or the netting set, for that matter) will increase overall risk. The greater the separation between parts of the collateral pool, and the more restrictions that are imposed around the seizure and use of parts of the collateral pool, so the more sub-optimal the risk reduction becomes.

IA Promotes the Extension of Credit and Liquidity to the Market IA is typically employed with counterparties that present elevated levels of credit risk to a Dealer, either because of their credit quality, their leverage, their risk profile or their trading strategy. In assessing counterparty credit limits and trading line availability, there is a strong relationship between the amount of IA provided, its effectiveness as a credit protection (assured, rapid availability to the Dealer in case of End Users default) and the credit line made available to the counterparty. IA is thus a critical tool to permit Dealers to maintain the flow of credit to the market, and is the foundation of liquidity to large segments of the End User market. A decrease in the effectiveness of IA as a credit protection and/or an increase in the cost of IA would potentially limit credit availability and increase the cost of credit.

Liquidity Benefit from Rehypothecable Collateral IA received under many existing collateral arrangements can be rehypothecated by the Dealer. This ability to rehypothecate collateral provides an additional source of liquidity; this may be a significant consideration at some firms, although it should be clearly understood that no Dealer enters into OTC derivative contracts nor collateral agreements as a source of liquidity - any such benefit is incidental to the core business activity of extending credit to the market in a responsible and well risk managed manner.

Where Independent Amounts are (or become) non-rehypothecable, a Dealer will incur the carry cost of sourcing alternate liquidity. It should be anticipated that the additional costs of collateral segregation and replacement liquidity will be passed on to End Users where applicable.

Establishment of "Control" in Tri-Party Collateral Agent Arrangements A secured party must ensure that it obtains a perfected security interest in collateral received. Under a Tri-Party Collateral Agent arrangement it is intended that this is accomplished by the non-defaulting party issuing a "Notice of Exclusive Control" under certain circumstances. It is uncertain whether this is in itself sufficient to establish the element of "control" needed for the perfection of the security interest of the Dealer in the collateral. Without certainty on this point, it may be unwise to entrust significant amounts of collateral to this type of holding structure.

Risks Upon Seizure of Collateral IA held by a Dealer is normally indistinguishable from other collateral received from the same counterparty[34]. The Dealer holds the collateral in cash or securities accounts, either on its own books and records or on those of a third party agent bank or custodian, but under the full control[35] of the Dealer. In these cases the custodian or agent bank plays no role in the administration of the collateral arrangement - the account is simply a container for collateral under the control of the Dealer. As such, the Dealer can readily and rapidly seize and liquidate collateral in the event of the default of the counterparty - which is of course the essential point of the collateral agreement.

[34] In fact Independent Amount is not a separate pool of collateral, it is merely a separate element of a calculation under the ISDA Credit Support Annex that determines the total amount of collateral to be posted by a party.

[35] Control is an essential element of holding collateral effectively. In some jurisdictions, notably the USA, it is necessary to have control over collateral in order to perfect a security interest in it.

However, if IA were to be held under a tri-party agreement, then the collateral agent would effectively control movement of assets into and out of the account, subject generally to obtaining the Dealer's consent prior to the release of collateral[36]. In the event of counterparty default, there is some risk that the Dealer cannot timely seize and liquidate the collateral related to the IA, possibly at a time when the market value of the collateral may rapidly decline[37] and the market value of underlying derivative trades may rapidly increase, both of which would further result in greater exposure to the End User.

For example:

- The tri-party collateral agent may impose burdensome requirements for the Dealer to provide evidence of the End User's default prior to releasing collateral (this would clearly undermine the concept of "control" and thus the perfected security interest in the collateral; even with evidence, collateral agents may be unwilling to act as arbiters of whether a default has occurred).

- A tri-party collateral agent may elect to release the collateral but require a blanket indemnity from Dealer.

- Other creditors of the End User may bring an action against the tri-party collateral agent to possibly freeze or attach the IA, thus depriving the Dealer of timely (or indeed all) access to the collateral

- Some control agreements provide the custodian a right to take no action if there is a dispute between the parties, or to interplead the parties at their expense.

All of these examples will diminish the certainty that a Dealer will be able to timely seize and liquidate collateral where it is appropriate to do so.

<u>Custodian Risk</u> Although custodians do have extensive fiduciary obligations to customers, there remain material risks:

- In the event of the collapse of a custodian, if record-keeping or segregation procedures are found to have been inadequate there is the potential for additional credit risk to be imposed on one of both derivative counterparties. If the End User remains solvent at the time of the collapse, they would be liable to replace any IA that was compromised by the custodian collapse; if the End User was in default contemporaneously with the custodian collapse, the Dealer would have this risk. Absent a failure of controls at the custodian, securities that are properly segregated on the books of the custodian should not create credit risk for either counterparty. However, in the ordinary course cash deposits do create credit risk to the custodian - although under NY law it may be possible to create a segregated "special deposit" of cash, in which case anyone with an interest in the deposit (the End User or the Dealer) should not be an unsecured creditor in the event of a custodian's insolvency[38]. Although these scenarios are unlikely, recent events show the value of planning in advance for these types of unexpected risk.

- Given the limited set of custody providers, in the unlikely event of the collapse of a major custodian the systemic risk and market disruption likely to occur would be considerable.

- These undertakings required of the collateral agent can limit the benefit of certain rights that custodial banks acting as tri-party collateral agents often reserve for themselves.

[36] In theory, Dealer consent is required by the tri-party agent or custodian before collateral is released to the End User; however, there are several examples cited anecdotally by Dealers where the controls around this process have failed and tri-party agents or custodians have improperly released collateral without prior consent. Given the potential size of collateral amounts being moved in the market, this is a material risk that needs to be addressed if the purpose of collateralization is not to be compromised. Recourse to the tri-party agent or custodian may be insufficient in these cases.

[37] Use of only cash and high quality, low price volatility assets (such as T-bills) as IA may significantly ameliorate this risk.

[38] Such "Special Deposits" are not standard market practice and may not be possible to effect in all jurisdictions.

These may include prior liens over the contents of the account for the purpose of recovering any advances the custodian may make in favor of the End User or the Dealer. Such liens, while typically used to recover payment of custody fees by the account holder, are frequently drafted much more broadly to cover all liabilities owed by the parties to the custodian outside of the ISDA relationship that is being collateralized through the tri-party arrangement. The effect of this is that the Dealer may be unable to ascertain with any precision or comfort the amount secured under the custodian's lien and therefore the balance of collateral that is actually available to the Dealer in effect. In addition to raising credit risk implications for the Dealer, this also potentially affects the ability of the Dealer to calculate the value of IA available to it for regulatory capital purposes.

- In the United States, provisions in the Uniform Commercial Code[39] give custodians a super-priority security interest in respect of advances made and for fees, regardless of what contractual documentation between the parties may state. It is not clear whether this interest can be waived or subordinated, or whether legislative change would be required to give effect to the desire that the secured party should have first claim on the collateral assets; it is also unclear that custodians would be willing to accede to such desires. It may also be contrary to public policy to follow this course of action, because it is in part precisely because of such rights that custodians enjoy their reputation for low credit risk profile and stability.

- The collateral agent may require limitation of liability to the End User and the Dealer for a wide variety of possible risks, including the release and the non-release of collateral in response to attempts to enforce rights of either party against the assets. Under tri-party arrangements the collateral agent must obtain the Dealer's approval to release any excess IA. However, there are examples known in the market where due to control failure at the third party agent such releases have inadvertently occurred prior to the obtaining of that approval. Although operational risk of this type exists in any process, whether involving one, two or three parties, the added complexity of a tri-party arrangement potentially increases this risk.

<u>Legal Risk</u> As the ISDA CSA arrangement operates in a global cross-border environment there is significant complexity in ensuring that tri-party arrangements are legally enforceable in the relevant legal jurisdictions. The analysis required to ensure the full perfection of a Dealer's security interest in the assets held under a tri-party arrangement in these jurisdictions would be a necessary pre-cursor to the widespread use of such arrangements.

<u>Segregation and Non-Rehypothecation of Variation Margin</u> While the foregoing deals with the risk and practical issues associated with IA, it is also necessary to consider the treatment of the VM collateral associated with the Exposure under the CSA, which is essentially the mid-market net mark-to-market value of the trades between the two parties.

While the segregation and non-rehypothecation of IA in order to accomplish a level of bankruptcy remoteness poses challenges as described earlier, it is at least widely agreed conceptually that the posting of IA can lead to over-collateralization. However, when it comes to VM, the risk analysis is very different because unlike IA which might potentially represent an excess of collateral over exposure (when considered in isolation, ignoring other factors), collateral posted as VM will be offset by exposure, and thus no over-collateralization will result (again, considered in isolation). Therefore, a party posting VM to a counterparty who then becomes insolvent will have the contractual and possibly common law right to net and set off the VM posted versus the amount it would have to pay to the estate of the debtor to settle the termination of the underlying derivative contracts.

Since VM is offset by credit exposure, and does not present an over-collateralization scenario and the associated risks, there is no reason to segregate and disallow rehypothecation of VM.

In fact, to do so would partially defeat the purpose of netting contracts and legislation, which ISDA, market participants, regulators and legislators around the world have worked very hard to embed

[39] [Provide citation]

into the relevant bankruptcy codes over the past 25 years. It would also lead to an extremely adverse liquidity impact across the market[40].

Operational Complexity The segregation of IA and VM by its definition creates the potential for two margin movements between the Dealer and End User, whereas in today's model there is simply one. If IA is physically remote from VM, this presents additional operational complexity associated with dual settlement channels for a given client, and the need to rebalance daily between the IA and other collateral accounts. If the IA is held at a different custodial location to other collateral, then this operational complexity is further increased significantly.

- If margin calls increase due to calling IA and VM as distinct elements of collateral, so do the related settlement events. With an increase in settlement events comes a potential increase in settlement fails. The Dealers will need to further resource their operational teams to manage this increased flow of settlements across the market and work to ensure that settlement risk is not increased.

- Similarly, the distinct settlement of IA and VM gives rise to a situation where the Dealer is both delivering margin (VM, for example) and waiting for margin (IA) from one counterpart on a given day. As bond settlements must be complete in the market by 3:30pm (NYT) and cash not till 6pm (NYT) there is potential for the Dealer to be running increased intra-day risk to its counterparties. For example, should the Dealer deliver on its EM requirements at 3pm and be awaiting the delivery of IA, the failure of the counterparty to meet its IA obligation has increased the Dealer's risk[41]. In today's environment the benefit of netting those flows creates a more efficient settlement mechanism and better management of daily settlement exposures; if IA and VM settle separately, to different accounts at different times, risk will be increased for both parties.

Cost Considerations There are also increased operational cost and implications of using tri-party collateral services that that are undesirable. A tri-party collateral agent arrangement will typically cost considerably more in fees than a simple custodial account, and both of these are materially more expensive than direct holding of collateral. The number of segregated IA accounts across the market will be given by number of Dealers multiplied by number of fund entities, which puts the total number of such accounts required in the range of perhaps 100,000 to 150,000 accounts[42].

Further operational cost implications include:

- The extra operational costs for handling the interface with the tri-party collateral agent
- Additional time spent reconciling third party statements
- Additional resources needed to manage settlement risk
- Internal work that will need to be done at each firm to distinguish between IA and VM
- Additional work to exclude certain cash/collateral from profit and loss, general ledger, and inventory reporting
- New internal reporting
- New legal documentation and analysis/remediation of legal risks, etc.

Electronic connectively and reporting provided by custodian banks may ameliorate some of these costs, but not all banks provide these services, some use antiquated systems and may require

[40] The most recent ISDA Margin Survey reports some USD 3 trillion of collateral in circulation within the OTC derivative markets. If all collateral (VM as well as IA) were to be segregated and non-rehypothecable, a large part of this collateral in circulation would need to be replaced by other sources of liquidity.

[41] It should be pointed out that a hedge fund could equally have the same risk in a reverse scenario. The point is that by splitting the IM and VM processes into two settlement events, the timing gap is created that can result in Herstatt risk where one settlement occurs and the other does not.

[42] This estimate provided by an End User firm is based on 25 significant derivative dealers multiplied by 5,000 fund entities requiring such services (=125,000 accounts). Further research to validate these numbers should be undertaken.

dually signed faxes to execute settlements. Overall, across the market as a whole these costs are likely to be very significant and implementation lead times considerable.

Comparison to the Futures Market and Level Playing Field One of the essential features of the OTC derivative market is flexibility to deal with a highly diverse range of credit risk profiles presented by counterparties, which range from private individuals through to sovereign nations. The ability to construct flexible collateral structures are an essential part of that. This is also one of the biggest contrasts to the exchange-traded derivative market, which is based on a much more standardized and thus less flexible approach to managing credit risk. While there is clearly a place for both models, the distinctions between them are of value to the global economy and permit a wider range of solutions to financing and hedging problems. Suggestions to level the credit playing field, and to move OTC derivative margin practice to mimic exchange-traded derivative margin practice will limit the benefits of this diversity. Not all counterparties are alike, and the credit quality of each is a factor in deciding whether, and how, to employ IA in a relationship.

No Conflict of Interest Under the standard ISDA CSA both parties act as risk counterparties, both can call and recall collateral from the other, and neither party has a monopoly on acting as Valuation Agent since that term is defined as the party making a demand on the other. To the extent that individual pairs of counterparties may have modified these terms, this will have been the result of bilateral negotiation[43]. The ability of a party to hold collateral delivered to it has been a feature of the market since collateralized derivatives first developed in the 1980s. In fact, under the English law CSA which accounts for about half of the market, it is essential to the legal mechanism of the agreement that a secured party must directly hold collateral received[44]. There is therefore no inherent conflict of interest in the different roles and actions that either Dealers or End Users may perform under collateral agreements.

Dealer Conclusion The Dealer community recognizes the potential additional risk incurred by any party that posts Independent Amounts. The systemic significance of a Dealer insolvency potentially leading to End Users being deprived of access to their IA is also understood. Dealers reiterate the original purpose of IA - to provide credit protection to cover close-out risk - and stress the systemic importance of not diminishing the effectiveness of this protection or introducing new risks to the IA process. Depending on the circumstances within each bilateral credit relationship, it may well be appropriate to adopt measures that reduce those risks, although there is likely no universal solution that is appropriate given the wide diversity of counterparty type, scale and systemic significance in the market. A range of structures should therefore be available for negotiation between pairs of counterparties, including the current approach to IA in some circumstances (direct holding of IA without restriction), but also solutions involving direct holding of non-rehypothecable IA in segregated accounts, the use of third parties acting in a purely custodian capacity, and the use of tri-party collateral agents. All of these solutions are available today and have been used in practice as appropriate in specific counterparty circumstances. In particular, Dealers point out the extensive and effective investor protections available today under FDIA, SIPA , UK FSA rules and similar schemes in other jurisdictions, and note that deployment of these protections significantly reduces the risk associated with posting IA, without the added complexity, cost and other risks associated with some other solutions. While these solutions may have been available for some time, End Users have not previously pursued these ideas on a widespread basis. Dealers support the need to change this where appropriate and are ready to work with End Users, regulators and legislators around the world to articulate a flexible but robust framework for the future use of Independent Amounts.

[43] It should also be noted that the proposed new Dispute Resolution protocol (currently in development by the market) will fundamentally change the nature of the Valuation Agent role, in effect replacing it with a defined process for resolving disputes by reference to market polling and other methods. This should eliminate any historical concerns regarding the power of the Valuation Agent role.

[44] Not to do so would invite recharacterization risk and possible nullification of the collateral protection.

8.2 The End User Perspective

Independent Amounts Present Additional Risk and Must be Properly Segregated The End User community believes it is essential that IA posted to Dealers be properly segregated in order to protect against the risk of loss or delayed return in the event of a Dealer insolvency. It is acknowledged that IA acts as a "cushion" of additional collateral protection to guard against shortfalls in VM in the event of an End User default, and thus is an important risk mitigant for Dealers. However, in the case of a Dealer insolvency, IAs tend to constitute excess margin posted to the Dealer and, thus, there is an increased risk of limited recovery of End User IA assets (in additional to potential shortfalls in VM for the End User). The additional protection afford to Dealers through IA should not be at the cost of placing the End User at increased risk in the event of Dealer insolvency, which will occur where IA is not properly segregated.

Inability to Recover Independent Amounts from Insolvent Dealers Since IA is typically not segregated from a Dealer's other assets, the End User ends up bearing increased credit risk vis-à-vis its Dealer on these posted amounts, in the event of a Dealer failure or insolvency. In such event, the End User would typically rank only as a general unsecured creditor in attempting to reclaim such margin, even where the End User had retained legal title to such assets. For example, in the case of Lehman, End Users are likely to recover mere cents on the dollar with respect to the excess margin that they posted with Lehman Dealer entities. In the unlikely event an End User could successfully demonstrate that such margin assets were not rehypothecated by the Dealer and should not be considered property of the Dealer's estate[45], the End User nonetheless would incur substantial delays in recovering such margin assets.

As a consequence, End Users stand to incur significant losses (or, at best, delays) in attempting to recover un-segregated IA posted with an insolvent Dealer.

The Case for Change The following factors underscore the need to change the current status and treatment of IA:

- Unnecessary End User Losses. Because IA is rarely, if ever, posted by Dealers with their End User customers, the risk with respect to such excess margin amounts is borne solely by the End User community. Additionally, since the end User does not typically get the benefit of IA, the End User is further exposed, upon a Dealer's default, to possible residual loss associated with closing out the positions, as decribed above (e.g. market fluctuations following the last margin call, bid/offer spreads, minimum transfer amounts). The experience of many End Users in the Lehman Brothers bankruptcy proceedings confirms the need for prompt remedial action to avoid unnecessary future losses or delays. Although Dealers would prefer to hold IA directly to fund liquidity needs and minimize operational expenses, these are not justifiable reasons for putting End User assets at risk, especially where certain Dealers have been demonstrated to present meaningful credit risk.

- Systemic Risk. The risk of loss associated with IA has the potential to increase systemic risk as End Users facing a troubled Dealer will be incentivized to take whatever steps they can to close out or novate trades away from that Dealer. This circumstance creates a potential "run on the bank" scenario, as the early termination or novation of trades will require the Dealer to promptly return IA assets on which it may have come to rely for liquidity purposes, placing additional liquidity and funding demands on the financially-stressed Dealer. This could become an even larger systemic issue if regulatory proposals to require IA for all customized derivatives are implemented[46].

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[45] Under certain customer asset protection schemes, notably the UK FSA CASS rules, collateral pledged under a security interest agreement with the right of rehypothecation that has not actually been rehypothecated by the secured party may actually be subject to client asset protections. However, showing that assets have not been rehypothecated may be highly problematic in practice, and the taking of those assets into an account owned and controlled by the secured party and containing other assets of that party may in and of itself constitute the act of rehypothecation, regardless of whether the collateral in question has been physically onward transmitted to other uses.

[46] See Testimony of Gary Gensler, Chairman of the CFTC, before the Senate Agriculture Committee on June 4, 2009

Standardized Tri-Party Custodial Arrangements   In today's OTC derivatives markets, the best way to protect IA posted by End Users is by requiring that it be segregated and held in a tri-party custodial account. Currently in the market some of the larger End Users are already negotiating *ad hoc* agreements to segregate IA. This is inefficient, costly and unfair to many End Users that simply do not have the negotiating leverage and resources to negotiate such agreements with the respective Dealer counterparties.

Benefits of Custodial Arrangements   The greatest benefits of using a custodian in a tri-party arrangement are:

- Conflicts of interest mitigated   Under customary bilateral ISDA agreement, Dealers act in the role of trading counterparty, collateral agent and (under some agreements) valuation agent. These multiple roles create conflicts of interest that expose End Users to significant additional risks. Some End Users believe certain Dealers have unfairly taken advantage of their powers in periods of market stress and/ heightened credit concerns. Systemic risk would be reduced if these conflicts were removed. Tri-party custodial arrangements provide for a third party to act as collateral agent and thereby mitigate the risks associated with conflicts of interest.
- Credit risk is diversified

Practical Challenges with Custodial Arrangements   Although some Dealers may be concerned about their ability to promptly access IA held by a tri-party collateral agent, these concerns could be relatively easily addressed through appropriate documentation (or possibly legislative/regulatory action) without compromising the additional counterparty credit protection that such margin is intended to provide. If IA is posted to a third party in a manner that provides the Dealer with clear assurance that it can look to the amounts posted in the event of an End User default, then the primary purpose for requiring IA is completely satisfied. There is no reason why a Dealer cannot obtain the desired assurance through a perfected security interest under an appropriate account control agreement with a tri-party collateral agent that gives it clear rights to act in the event of default by its counterparty. The End User community stands ready to work with the Dealer community to identify and address the legal and operational issues raised in the earlier section that presents the Dealers' perspective. End Users believe that many if not all of the concerns expressed by the Dealers can be either completely addressed or significantly reduced.

Cost Considerations   Although there will be some additional costs and administrative burden associated with achieving segregation, End Users believe these concerns can be minimized through the adoption of a standard approach across the industry. This seems entirely reasonably given the current market environment and the magnitude of exposure now imposed on parties required to post IA.

Custodian Risk   It is acknowledged that the insolvency of a custodian presents a credit risk to the End User that is posting IA (and a remote risk to the Dealer in the event of a simultaneous failure of the custodian and the End User, coupled with a collateral shortfall). However, given (i) the low risk profile of custodians (in comparison to certain derivative counterparties), (ii) the fiduciary obligations of custodians to customers, (iii) the benefit of diversifying counterparty credit exposure, and (iv) the legal protections afforded to customers of custodians, End Users believe that this risk is a substantial improvement from the risk posed as a result of current IA practice. In fact, the major Dealers regularly use the major custodians to hold certain assets, and this is likely due to the low risk profile of these custodians. Therefore, the Dealers should be comfortable with the use of custodians for the limited purpose of holding IAs.

Issues with Internal Segregation and Client Assets   It is noted that there have been past examples where Dealers have not proven to be completely reliable when called upon to segregate client assets. It must also be noted that even when client assets are segregated, the delay in getting them back can be very long. A significant portion of the client assets held by Lehman Brothers International Europe, for example, remain undistributed almost a year after the firm's collapse.

Comparison to Futures Markets Dealers and End Users are familiar with the prevailing rules of futures market, which require parties to hold initial margin (the equivalent of IA) through a third party custodian. This is a far better practice as it reduces conflicts of interest and provides adequate default protection to all parties (end Users as well as Dealers/brokers). Note that there is never any debate about "control", "perfecting security interest" etc in relation to futures margin.

End User Conclusion The End User community cannot accept the "business as usual" approach as proposed by the Dealer community. There is a generally recognized concern that IA must be afforded greater protection. Moreover, as recent experience has shown, the current market practice of negotiating *ad hoc* agreements to segregate IA is inefficient, costly and unfair to many End Users that simply do not have the negotiating leverage and resources to negotiate such agreements with their respective Dealer counterparties. The Dealer community has raised concerns with tri-party custodial arrangements, yet admitted that these are mere "practical challenges" and, thus, they should not stifle the process. The end User community believes it is essential that IA posted to Dealers be properly segregated in order to protect against the risk of loss or delayed return in the event of a Dealer insolvency. The End User community is willing to work with the Dealer community, regulators and legislators to formulate the best possible solution for protecting IAs.

TO BE CONTINUED IN PART II

New Practice for Independent Amounts

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