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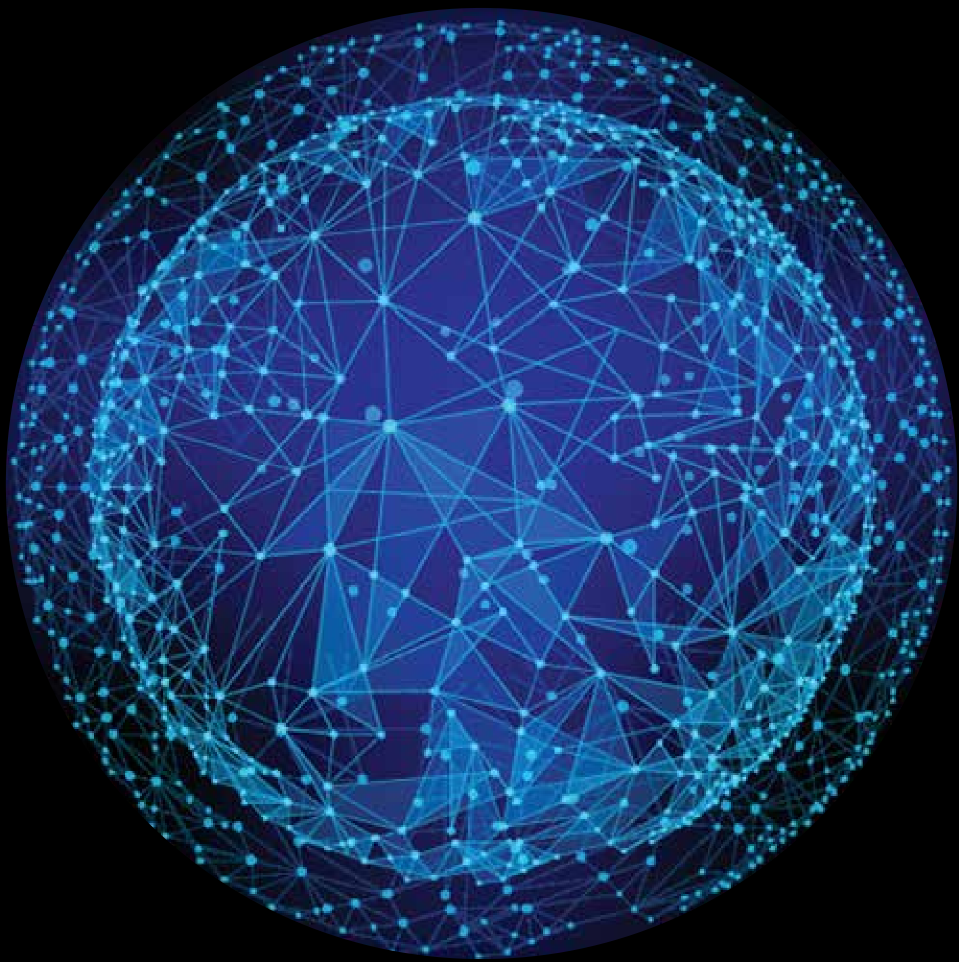

Credit Support Annexure

Leveraging CSA for Collateralised Margining

For private circulation only

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Risk Advisory

Contents

Background

The International Swaps and Derivatives Association (ISDA) has developed a standard suite of documents, which are applicable to all OTC derivative transactions. These standardised documents enable institutions to optimise OTC derivative trade execution and management without the need to re-negotiate the terms of trade and document each OTC transaction separately. The suite of standardised documents include:

- **01** Master Agreement
- **02** ISDA Schedule (to the Master Agreement)
- **03** Confirmations
- **04** Credit Support Annexure (CSA) and
- **05** ISDA Definitions

Our endeavour, through this note, is to highlight the benefits and implications of entering into a CSA. In addition, we will focus on the changed regulatory landscape and its impact on margining

Credit Support Annexure (CSA)

A CSA regulates collateral under the ISDA Master Agreement by defining the terms and conditions under which collateral is posted to mitigate counterparty credit risk. Under the present supervisory environment, a CSA is usually required for banks or financial institutions designated to act as “calculation agents”. CSAs can be either ‘unilateral’ signifying that only the lower rated counterparty be required to post collateral, or ‘bilateral’, wherein either party to the agreement may be required to post collateral.

As with the ISDA Schedule, a CSA can be customised and negotiated as deemed ‘fit and appropriate’ and accordingly, the types of permitted collateral, thresholds, minimum transfer amounts and margin vary between counterparties.
The following provisions are part of a typical CSA agreement:

a. Eligible Credit Support: Eligible credit support are list of eligible collaterals, which could be posted. E.g. cash, cash equivalents, government securities etc.

b. Independent Amount (IA): Initial margin or “Independent Amount” refers to the amount that the counterparties may need to transfer at the commencement of their relationship. IA can also take the form of an agreed sum to be transferred during the tenor of the agreement, if the risk exposure on a particular transaction warrants it or the inherent risk profile of a counterparty changes. E.g. incidents of credit/ratings downgrade.

c. Margin call: A margin call is a demand by one counterparty party to the other for depositing additional collateral to cover possible losses due to over-exposure. Margin calls are generally triggered on a counterparty level.

d. Margin call frequency: Margin call frequency refers to the periodic timescale after which collateral may be called.

e. Threshold amount (TH): It is the level of unsecured exposure each counterparty will allow the other before any margin call is made.

f. Minimum Transfer Amount (MTA): The minimum amount that can be transferred for any margin call. The amount is specified in the margining agreement.

Given below is an illustrative example of a standard CSA agreement and its resultant pay-offs.

ABC Corporation Ltd. has entered into a 5yr USD/INR cross-currency swap with a bank on a notional of Rs 35.0 mn, whereby the bank pays a fixed USD coupon of 3% per annum and the Corporate pays a fixed INR coupon of 8% per annum. The swap is documented under a CSA with the

following terms and conditions:

- Threshold amount: Rs 6.0 mn
- Margin call frequency: weekly
- Eligible Collateral: INR cash only
- Minimum Transfer Amount (MTA):Rs 2.5 mn

The table below illustrates the Margining call process for ABC Corporation Ltd:

Day	MTM	Change in MTM	Collateral Posted	Commentary
1	0	-	0	-
7	7	7	0	MTM < (TH+MTA, 0), no collateral posted.
14	9	2	3	MTM > (TH+MTA, 0), collateral posted.

***Table 1**: Margin call process*

In the above example,

Day 1 — The Mark to Market (MTM) on the trade date is always zero.

Day 7 — The amount of MTM was more than the TH amount. However, to initiate a margin call, it should be more than (TH+MTA) and consequently, we observe that no collateral was required to be posted.

Day 14 — The amount of MTM was more than the TH and MTA amount inclusive on this instance, and hence margin call is initiated thereby requiring collateral to be posted.

Benefits and issues of CSAs for corporates

Benefits of entering into a CSA

By entering into a CSA, corporates would realise certain benefits like risk reduction, better pricing, easier market access, flexibility in maintaining trading relationships, etc. The key benefits of a CSA are explained below:

a) Risk mitigation

A major benefit of a CSA is its character for mutual risk reduction. Signing a CSA with calculation agents may help corporates obtain a finer pricing on their hedging transactions as credit and funding charges may be reduced. Banks and financial institutions have incorporated risk based pricing in all types of lending, especially embedded derivatives such as forwards, options and swaps – as these have implications on their capital charge.

To illustrate the effect of entering into a swap transaction subject to a CSA, we analyse the difference in credit charges by the bank while entering into a Rs.10 mn Interest Rate Swap (IRS) with/without a CSA for a BBB+ rated company:

Deal tenor and type	With CSA	Without CSA	CSA Benefit
5 year IRS	10 bps	20 bps	10 bps
7 year IRS	15 bps	30 bps	15 bps
10 year IRS	20 bps	40 bps	20 bps

***Table 2**: CSA Benefits*
Please note that the above figures are for illustration purpose only.

b) Flexible trading relationships

CSAs will also allow corporates to enter into trades with the major banks, and avail the best pricing and service quality without having concentration risk. A CSA can also contribute to provide access to more products (new bilateral loan or extension of credit/trading lines) as the internal approval process at banks may require lesser time.

Practical issues of entering into a CSA

Along with the realised benefits, firms may come across certain issues/costs when they enter into a CSA such as operational costs, liquidity planning and management, negative carry on posted collateral etc. The key issues/costs associated with entering into a CSA are noted below:

Resource intensive

Corporates may deter from entering into CSAs as dealing with CSAs may be viewed as time consuming and relatively resource intensive (both in terms of management attention as well as costs).

Liquidity crunch

Corporate treasurers will have to accurately plan/forecast their liquidity needs in advance, decide upon the cheapest to deliver collateral as they might have to post additional cash/ collateral under a CSA.

Negative carry

Negative carry may have a cost impact on firm's short term cash flows. For example, suppose under a derivative transaction, a corporate receives 3.50% per annum on the cash posted as collateral v/s receiving 4% per annum on a 7 day term deposit in a bank. This leads to a net interest rate cost of 0.50% per annum. A possible mitigant to managing negative carry is to customise CSAs specific to calculation agents.

To understand the logic of negative carry granularly, let us continue with the trade structure in Table 2. The table below illustrates that even with negative carry cost, entering into a CSA is more beneficial for the firm.

Deal tenor and type	With CSA (A)	Without CSA (B)	CSA Benefit (C)	Negative Carry cost (D)	Net Benefit from CSA (C-D)
5 year IRS	10 bps	20 bps	10 bps	5 bps	5 bps
7 year IRS	15 bps	30 bps	15 bps	8 bps	7 bps
10 year IRS	20 bps	40 bps	20 bps	12 bps	8 bps

***Table 2**: CSA benefit exceeding negative carry*
Please note that the above figures are for illustration purpose only.

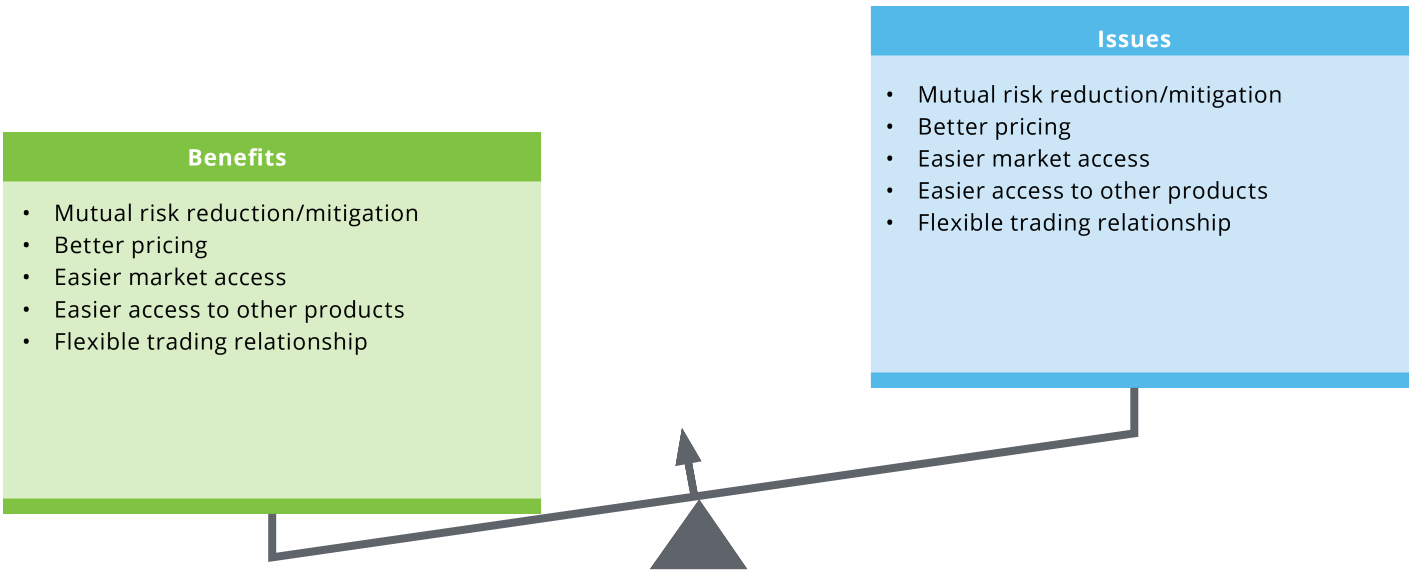


Fig1. Benefits v/s Issues of CSA

Regulatory changes impacting margining

Standardised Approach for Counterparty Credit Risk (SA-CCR)

The Basel Committee on Banking Supervision (BCBS) introduced SA-CCR for computing the Exposure at Default (EAD) for a wide variety of derivative transactions. On similar lines, the Reserve Bank of India (RBI) issued the final standards on SA-CCR, specific to the Indian markets in November 2016. These guidelines will be effective in India from March 2019. SA-CCR takes into account difference between margined and unmargined transactions, over collateralisation and negative MTM. A new concept of Net Independent Collateral Amount (NICA) has been introduced for margined transactions which may help banks in reducing their EAD.

Net independent Collateral amount (NICA)

NICA represents any collateral (segregated or unsegregated) posted by the counterparty less the unsegregated collateral posted by the bank, both a bank and its counterparty may be required to post Independent Collateral Amount (ICA). NICA describes the amount of collateral that a bank may use to offset its exposure on the default of the counterparty.

Independent Collateral Amount (ICA)

It includes:-

(i) Collateral (other than VM) posted by the counterparty that the bank may seize upon default of the counterparty, the amount of which does not change in response to the value of the transactions it secures and/or;

(ii) The IA parameter as defined in standard industry documentation.

ICA can change in response to factors such as the value of the collateral or a change in the number of transactions in the netting set.

***Table 2**: NICA and ICA*

Implications of NICA

As per the new exposure computation method SA-CCR, banks can reduce the exposure by taking into account the NICA amount [TH+MTA- NICA] in case of margined trades which was not the case with Current Exposure Method. Hence, any collateral in the form of NICA if placed by the corporate may help the bank reduce their exposure at default and consequently its capital charge.

Key implications and considerations of a CSA

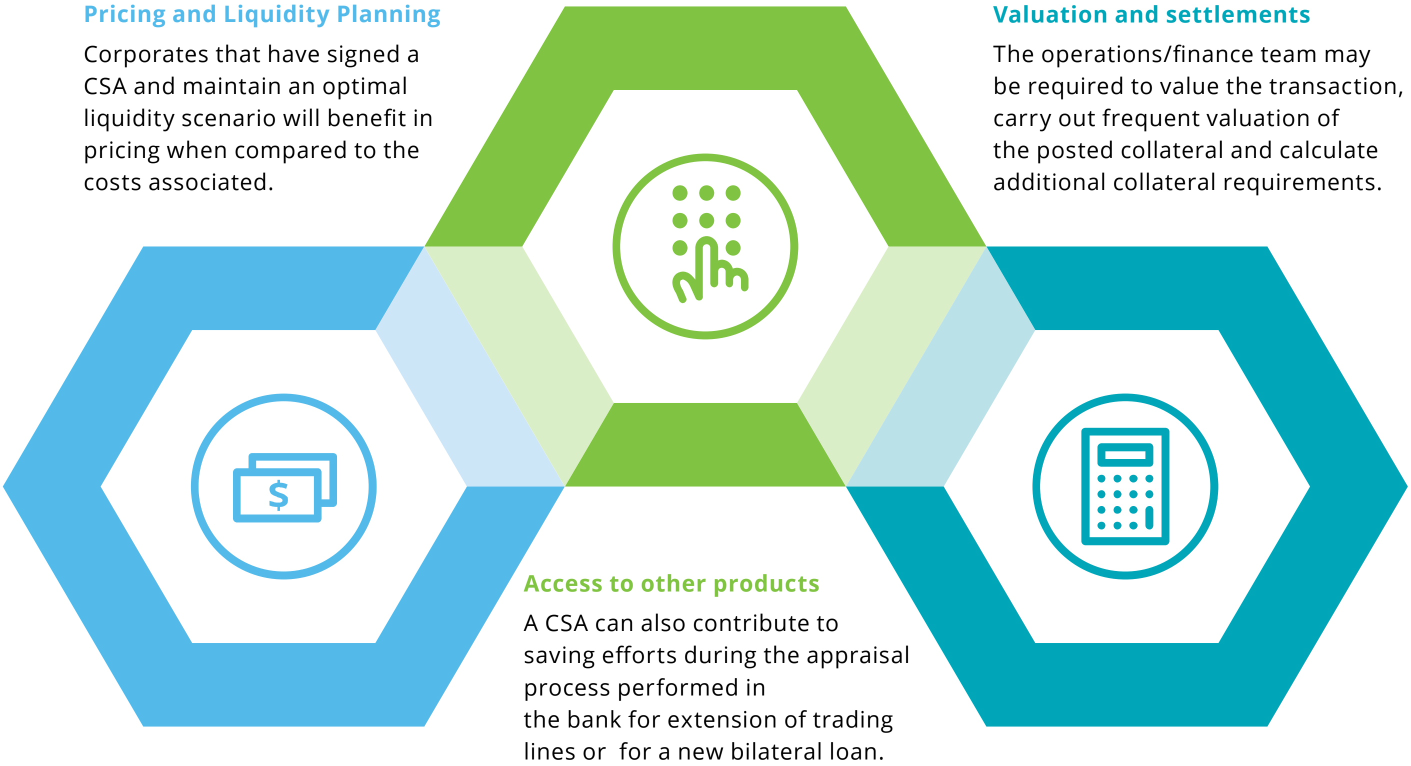
In the current volatile and challenging market scenario, corporate treasurers may face challenges in hedging their exposures due to insufficient information on counterparty credit worthiness. A CSA in conjunction with the ISDA Master Agreement will help to reduce legal uncertainty and allow for a reduction of counterparty credit risk through netting of contractual obligations.

The key implications and considerations of adopting a CSA are highlighted below:

Implications of entering into a CSA

The key impacts of entering into a CSA on corporates have been illustrated below:

Fig2. Implications of entering into a CSA



References

1. RBI Guidelines for computing exposure for counterparty credit risk arising from derivative transactions
2. Basel Committee on Banking Supervision - The Standardized Approach for Counterparty Credit Risk

The Deloitte Difference

Deloitte has rich experience in India and across the globe, which includes working with the largest corporates across the areas of corporate treasury, risk management, collateral management and optimisation.

Proven competence

Deloitte provides end-to-end comprehensive advisory where we can assist the corporate across risk and technology aspects.

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Access to a number of unique tools which are leveraged to capture customer requirements, analyse and test data.

Global network

Deloitte teams are led by a group of senior professionals and include consultants from Deloitte's offices around the world. These teams draw on Deloitte’s global network of partners, subject matter experts on corporate treasury, collateral management and optimisation.

Tried and tested methodology

We have developed comprehensive methodologies for computation of multiple risk parameters which include collateral management, optimisation, liquidity planning and modelling.

Client Benefits

Deloitte through its innovative and modular approach provides efficient and optimised solutions to clients.

01 Rich experience and expertise in the areas of corporate treasury, collateral management and optimisation, counterparty credit risk

02 Customized solutions for collateral management and optimisation

03 Modular approach for timely and effective implementation to comply with regulatory timelines

04 Enable smooth hand-over to the business and operational teams

05 High degree of transparency with continuous involvement of firm’s management in each work-phase

06 Other benefits such as:

- Quick project initiation
- High quality documentation
- Enable smooth hand-over to the business and operational teams

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