

COLLATERAL INITIATIVES COORDINATION FORUM

Collateral Fundamentals

A Dictionary Definition of Collateral:

“Something pledged as security for repayment of a loan, to be forfeited in the event of a default”

...for example, a house typically serves as collateral for the bank mortgage loan used for its purchase.

Collateral Initiatives Coordination Forum (“CICF”)

Established at the beginning of 2012, the CICF has been conceived as a joint trade associations’ body, in order to facilitate appropriate coordination across the private sector of all collateral-related initiatives.

Further information regarding the CICF can be found at:
<http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/collateral-initiatives-coordination-forum/>

Those involved in the production of this document have taken reasonable steps to ensure that the information contained herein is correct at the time of going to print. They cannot however accept any responsibility for errors or omissions, nor for any loss occasioned to any person that results from reliance on the contents of this publication.

Collateral – a primer regarding fundamentals

The on-line dictionary definition quoted on the cover of this paper, together with the example given, provides a simple starting point for thinking about collateral.

Nevertheless collateral has many uses, forms and users, so the objective of this paper is to rehearse the basics, providing in relatively few pages a primer regarding the fundamentals of collateral.

1. What are the uses of collateral?

Collateral is held by one party (the collateral holder) in an agreement in order to provide cover against credit risk exposure taken in respect of another party (the collateral giver). It must be clearly understood that the primary risk is the counterparty credit, which needs to be properly assessed. The collateral serves to mitigate loss in case of a counterparty default.

Historically collateral has mainly been used in context of secured lending, repo and listed derivatives. The taking of collateral is a commonplace activity, occurring on a daily basis. In many cases the amount of collateral required is evaluated through a daily mark-to-market process. The effectiveness of collateral as a risk mitigant is dependent on the robustness of the operational framework under which the collateral is taken and held.

During the 1990s the practice of secured OTC trading, which had become well established in relation to FX margin trading, was adapted for use with virtually all OTC derivative products. Currently in excess of US\$ 2.5 trillion (85% cash) is employed to secure OTC derivative counterparties. Importantly, the taking of collateral is also used as the secure basis upon which many central bank money market operations (e.g. ECB; Bank of England) are conducted.

The simple diagrams on the appended pages provide schematic illustrations of a series of basic transaction types in which collateral is utilised.

2. What is used as collateral?

Whilst cash is often used as collateral many other types of collateral exist, such as:

- fixed income bonds (sovereign/corporate);
- covered bonds
- securitisation programs;
- commercial paper;
- metals;
- commodities;
- equities;
- funds (ETFs, MMFs, etc.); and
- credit claims.

Any liquid and investment grade product that allows transferability of legal ownership to other parties and is priced regularly should in principle be available as collateral. Such collateral instruments should not be prone to losses in value in a way which is linked to, or positively correlated with changes in the value of, the party against which exposure is being secured.

3. Who uses collateral?

The population of collateral holders is as wide as market participants, including:

- CCPs (Central (Clearing) Counterparties);
- banking institutions;
- central banks;
- CSDs & ICSDs (Central Securities Depositories & International CSDs);
- insurance companies;
- asset managers;
- pension funds; and
- other parties, such as prime-brokers and clearing members also play important roles in effecting collateralised transactions.

4. How is collateral legally mobilised?

There are two main techniques for collateral mobilisation in Europe, which the EU's directive on financial collateral arrangements defines in the following way:

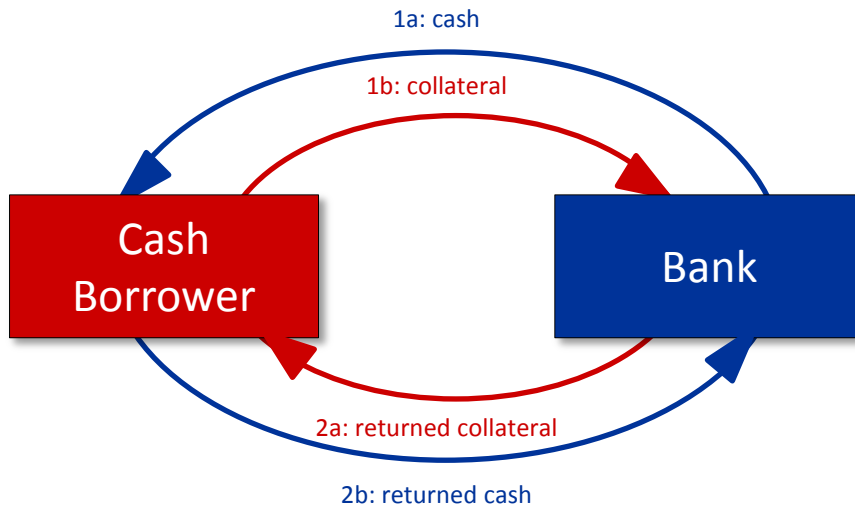
- (1) Security financial collateral arrangement, which means an arrangement under which a collateral provider provides financial collateral by way of security to or in favour of a collateral taker, and where the full or qualified ownership of, or full entitlement to, the financial collateral remains with the collateral provider when the security right is established.
- (2) Title transfer financial collateral arrangement, which means an arrangement, including repurchase agreements, under which a collateral provider transfers full ownership of, or full entitlement to, financial collateral to a collateral taker for the purpose of securing or otherwise covering the performance of relevant financial obligations.

APPENDIX

Schematic illustrations of a series of basic transaction types in which collateral is utilised:

Collateral: Secured cash borrowing

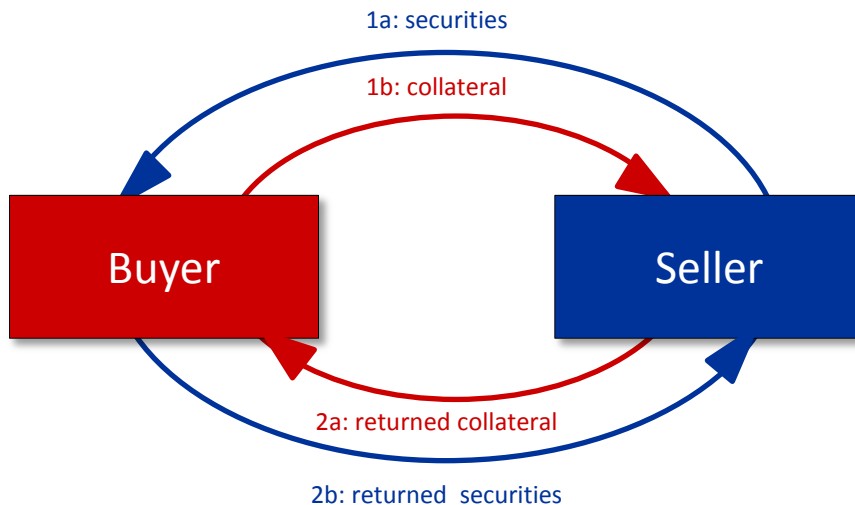
Secured cash borrowing is an arrangement between a borrower and a bank: the bank commits to lending a specific cash amount over a specified period of time in one or more currencies against receipt of collateral



- Collateral adjustments might be provided for by the contract but in many case, like mortgages, this is typically not the case (although the lender will often enjoy the protection of an element of over-collateralisation)

Collateral: Repo

Repo is a two-sided transaction involving one party selling securities to a counterparty with an agreed repurchase on a future date. The collateral in repo transactions is used to mitigate the seller's risk of the buyer failing to return its assets. At the same time the securities bought protect the buyer from the risk that the seller fails to return the collateral, which is typically in the form of cash. To take account of the change in the securities' value, repo transactions are subject to mark-to-market.

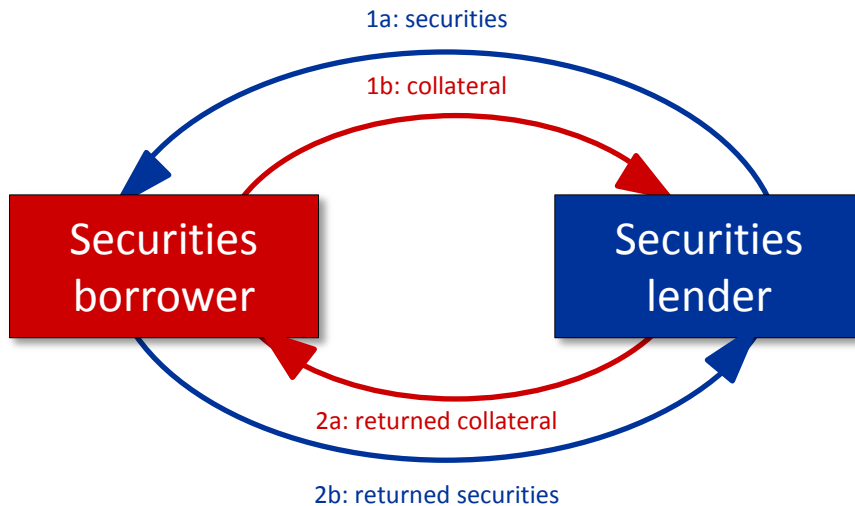


Repo transactions are subject to mark-to-market because:

- the value of the primary sold securities will change on a daily basis
- as will the value of any securities collateral
- account must be taken of daily accruals on both the securities and the collateral

Collateral: Securities lending & borrowing

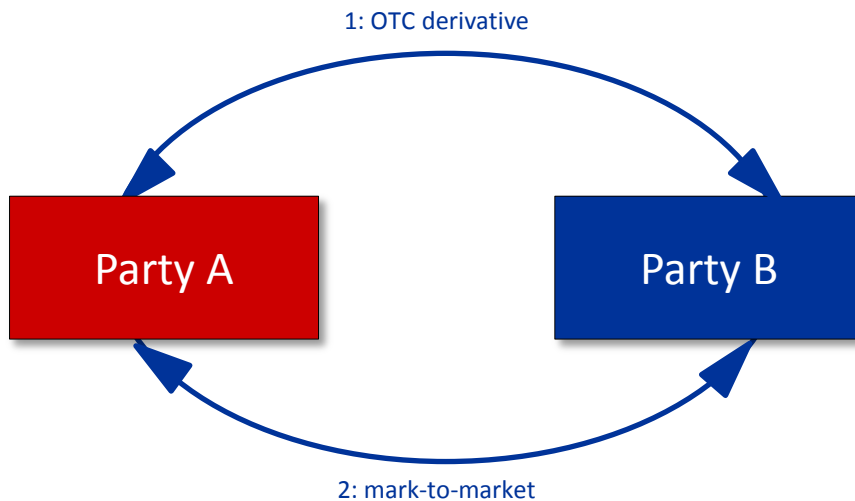
In securities lending and borrowing, the collateral is used to mitigate the lender's risk of the borrower failing to return borrowed securities. At the same time the securities borrowed protect the borrower from the risk that the lender fails to return the collateral, which is typically in the form of cash or other securities.



- The agreement is subject to mark-to-market as the value of the securities will change on a daily basis, as will the value of any securities collateral
- Whilst economically similar to repos, different legal agreements apply and the securities lent are often equities (although bonds are also lent) and lenders are typically long term investors such as pension funds and insurance companies

Collateral: OTC derivatives

OTC derivatives trades start from a position of zero value, but over time mark-to-market value will accumulate to one of the parties. Collateral is used to mitigate that party's risk (i.e. counterparty credit exposure).

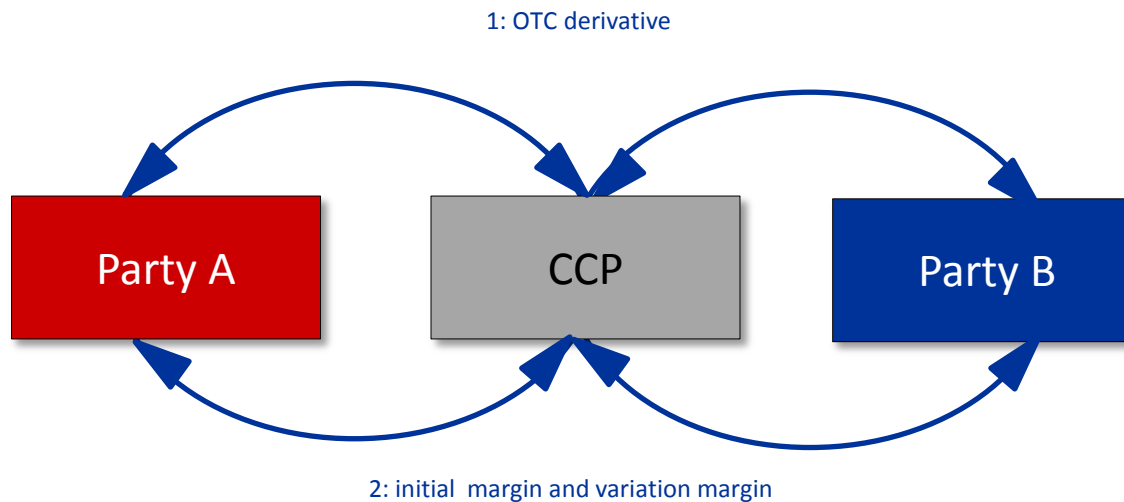


- Mark-to-market is actioned periodically (preferably daily)
- As profits and losses on the derivative contract change, the collateral must be increased/decreased accordingly
- Whilst two way credit support is preferable there are agreements where collateral is only required on a one way basis (eg if B owes A and not vice versa)

Common OTC derivatives are: Interest Rate Swaps (IRSs), Forward Rate Agreements (FRAs), equity derivatives and bond derivatives

Collateral: CCP cleared derivatives

OTC derivatives cleared through central counterparties (CCPs) require clearing members (both Party A and B) to put up margin to the CCP. This margin represents returnable collateral given by each clearing member to cover the CCP's risk.

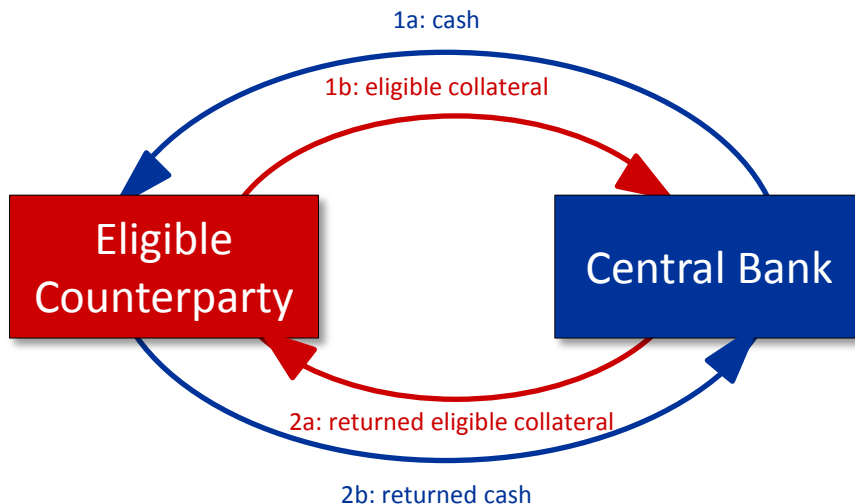


- The interposition of the CCP relieves clearing members from bi-lateral counterparty credit line
- Margin requirements consist of Initial Margin (IM) and Variation Margin (VM)

- Payable by both parties, IM is applicable to every trade as a protection against default of a clearing member
- VM is applied when price movements occur. In this case the CCP passes cash from one clearing member to another

Collateral: Central bank market operations

Most central banks undertake repo transactions in the market to control short-term interest rates and deliver their monetary strategy. Assets eligible as collateral in market operations have to fulfil certain eligibility criteria



- If the central bank wants to lower interest rates, it buys eligible collateral, subject to applicable valuation haircuts, infusing the banking system with cash. With more money available, interest rates decrease
- On the contrary, if the central bank wants to raise the interest rates, it sells eligible collateral decreasing the amount of cash available in the banking system

- Margin call procedures are applied to maintain the haircut-adjusted market value of the underlying securities collateral over time
- Evaluation of required margin calls should take account for confirmed settlement of the underlying.