

The role of clearing houses 10 years on after the 2008 financial crisis

Ten years after the market turmoil of 2008, we take a look at how clearing plays an important role in ensuring market stability and preventing the spread of contagion in the financial markets following events such as the Lehman Brothers' default. We'll also explore how the 2008 crash came about, owing to the problems that existed within the financial system at the time.

Clearing and counterparty protection – a reminder

The role of clearing is to provide certainty to market participants that their traded contracts will be settled. A clearing house acts as a central counterparty (CCP) - the seller to every buyer and the buyer to every seller - thereby helping to protect both parties to a trade against a default by another participant. For the LME market, it is LME Clear which acts as the counterparty to all clearing members who have negotiated a trade. Once the trade has been executed a contract is created between the CCP and each clearing member (the buyer and the seller). Both members now have a contract with the CCP directly.

Both parties to a trade are required to post collateral to cover the risk associated with their side of the trade. In the event of a clearing member default, this enables the CCP to close out contracts without the CCP or its non-defaulting clearing members sustaining any losses. In some circumstances collateral can be moved with client positions to another clearing member - a process known as "porting". CCPs therefore act as systemic risk managers by significantly reducing counterparty credit risk for clearing members. This can help to limit the knock-on effects caused by a financial crisis, such as the 2008 financial crash, and prevent a single default from spreading contagion to the entire market.

The Lehman Brothers 2008 default – ETD vs OTC contracts

One of the major triggers of the 2008 financial crisis was the default of Lehman Brothers. It will probably be remembered as one of the biggest bankruptcies in US history with an outstanding debt of US\$613 billion dollars to creditors on 15 September that year. At the time, exchange traded derivatives (ETDs) were managed such that the impact on clients and other market participants was minimised. For LME contracts held in the client accounts of Lehman Brothers, surplus margin was being returned to administrators to allocate to clients within a week of the default. This was possible because of the unique position CCPs are in to facilitate porting of client's positions. Conversely, some over the counter (OTC) contracts were still being disputed in the courts years after the event.

In the aftermath of the default, an increase in credit concerns in the OTC market led to a loss of confidence amongst participants, resulting in a change to trading behaviour, which led to illiquidity and markets trading below their fair value. However, since CCPs had mitigated credit concerns in the ETD markets, they continued to operate more smoothly. This enabled market participants who had traded ETDs to continue their activities securely, whilst OTC markets suffered from significant dislocation as credit concerns prevailed.

Since then, the growing systemic importance of CCPs has focused efforts by regulators to reform the financial system. In 2009 G20 ministers and central bankers stated that, where appropriate, “all standardised OTC derivatives contracts should be traded on exchange or through electronic trading platforms and cleared through central counterparties. OTC derivatives contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements.”

How might trading on exchange and clearing via a CCP help mitigate the impact of events like the 2008 financial crisis?

If a clearing member defaults the positions in their portfolio need to be closed out. Any positions they hold for clients can, where possible and if of benefit to the client, be ported to other clearing members. Trading a standardised contract on exchange and clearing via a CCP, like LME Clear, means that the CCPs have the benefit of a liquid market on which to trade and hedge the counterparty’s portfolio, as well as tried and tested procedures to manage client porting.

In accordance with regulatory guidance, CCPs must have certain risk controls in place and funds that can be drawn upon in the event that a clearing member defaults. For example, in addition to collateral provided by each clearing member to cover the initial margin requirement on the contracts it trades, the CPP makes a capital contribution of its own that can be drawn upon in the event of a clearing member default. LME Clear also maintains a default fund sized to meet the potential default of its two largest members and their clients in stressed market conditions, funded collectively by all clearing members. In the case of LME Clear, 30 years of market data is analysed to produce 440 historical and hypothetical stress testing scenarios, which are applied daily to all members’ portfolios. LME Clear therefore has sufficient collateral to survive at least two simultaneous defaults in extreme market conditions.

LME Clear also runs regular default management exercises. These have been important for improving understanding among market participants and training CCP employees to better identify ways of dealing with and mitigating possible default situations.

These types of risk controls have been gradually improved and are now enshrined in the international principles set by the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO). These, in turn, have been augmented by local regulation leading to increased oversight, protections and controls of CCPs.

What makes clearing so systemically important?

Straight-through-processing and real-time risk management are just two of the initiatives that have contributed to the attractiveness of centrally-cleared contracts and their use for risk management. They have also played a vital role in reducing operational costs for participants by streamlining trade management and contract execution (see fig.1). Furthermore, using a CCP simplifies and detangles the complex web of transactions that can otherwise exist in the OTC market (see fig. 2) Multilateral netting simplifies the relationships between counterparties and reduces the contagion risk that could send shockwaves across the financial community, while increasing operational efficiency.

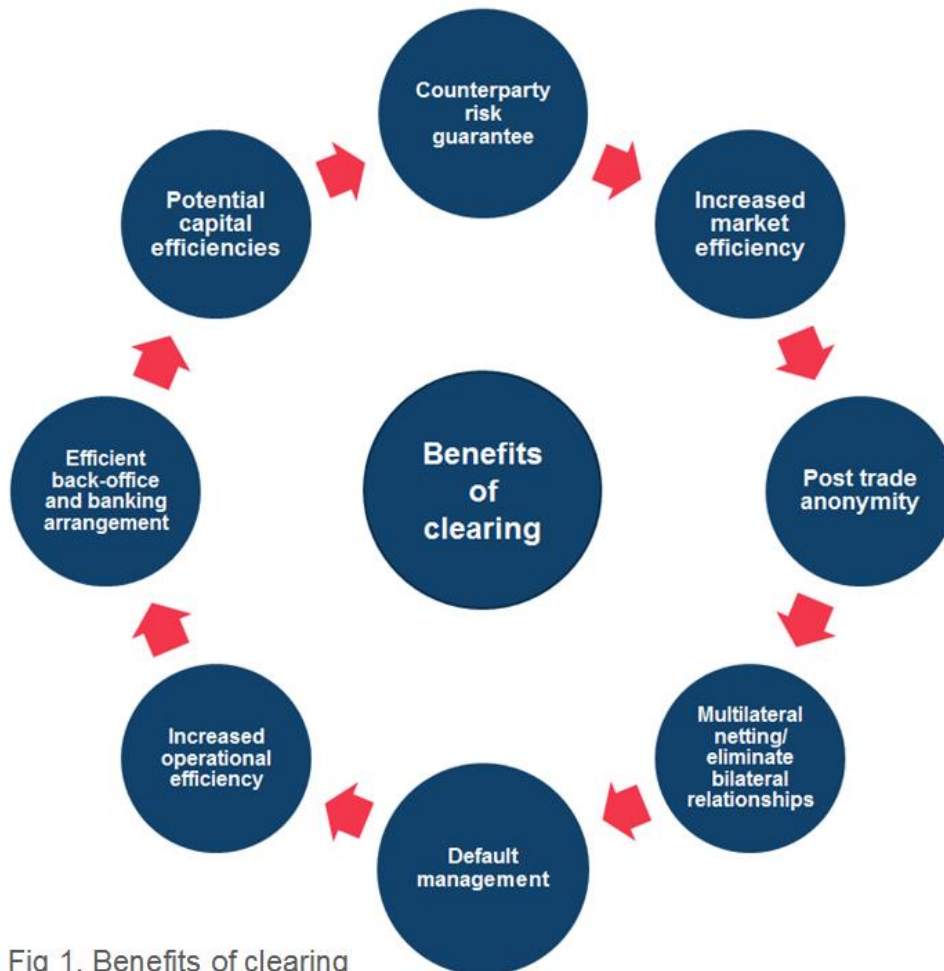


Fig 1. Benefits of clearing

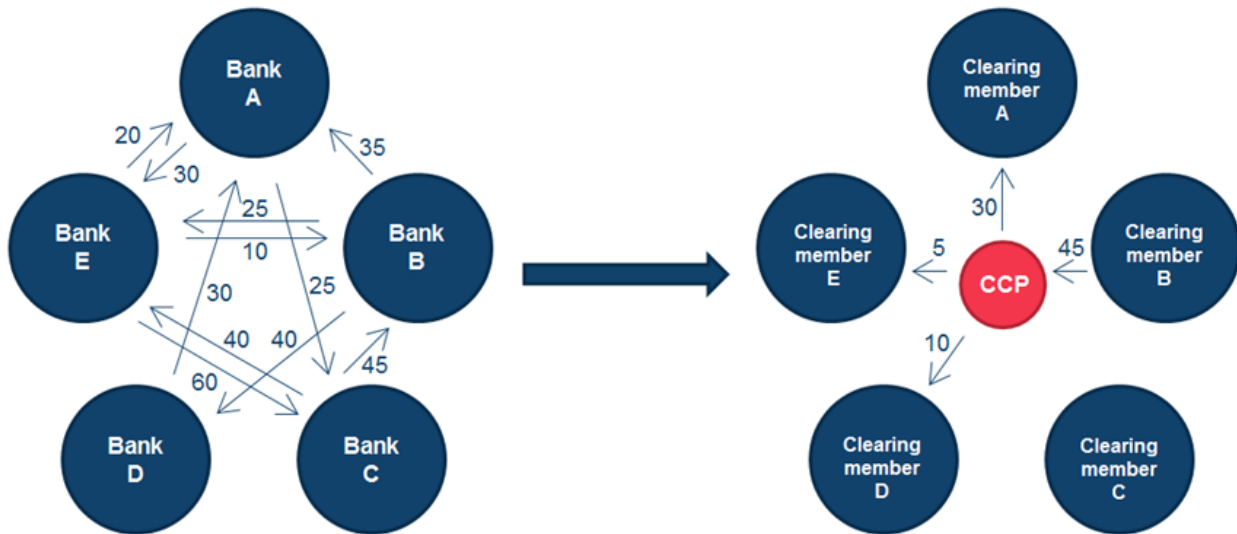


Fig 2. CCPs simplify relationships between counterparties. *Diagram credit: EACH*

LME Clear – clearing innovation for the metals market

LME Clear is specifically designed to clear metals forwards, futures and options traded on the LME. With the advantage of being built only four years ago, it has employed the latest technology in risk management such as real-time clearing (allowing it to monitor and manage exposures instantly) making the market more robust and secure. In terms of collateral, LME Clear has diversified the types available to include LME warrants. Unique to the metals market, using warrants as collateral enables other types of participants' collateral to be freed up to improve capital efficiency for counterparties.

It is the significant reduction in credit risk and the effective operational controls that CCPs have in place in the event of a default that have put the role of clearing at the forefront of regulators' minds, in order to prevent financial crises like 2008 from happening again. By placing themselves between buyers and sellers, CCPs are crucial for financial markets as they detangle complex transaction relationships, net and compress trades and provide effective risk management in a default situation. They are essential for instilling confidence in markets to allow them to operate fairly during times of extreme volatility and in the event of a counterparty default.

For more information on clearing please contact LME Clear: rm@lme.com.

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