Cleared Forwards

A View From the Front Line

By David Gornall, Head of Precious Metals, Natixis Commodity Markets Ltd

The LBMA recently organised a seminar on OTC cleared forwards for its Members and Associates, which was attended by more than 100 market participants.

Some precious metals traders wondered why we were all there as, after all, the forward market has worked on a bilateral basis (figure 1) for years with few issues and none that would warrant a major change such as clearing. But nonetheless, they did all attend. To compare a major change in market practices and the reasons behind the seminar, it is worth looking back at previous events in one particular marketplace that has a similar structure to precious metals forwards (in that it also accommodates daily physically settled trades).

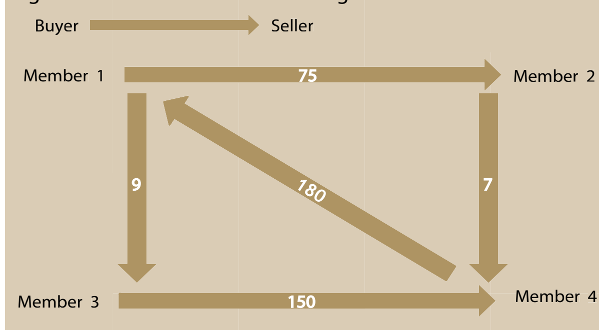
In October 1985, an impending default was about to paralyse the London Metal Exchange (LME), the world's most prominent arena for base metals trading and pricing. The Tin Crisis was unusual in that the defaulting party was a collective of tin producers and consumers, the International Tin Council (ITC). Backed by sovereign state cash, the ITC, prior to 1985, was seen as the least likely of any metal trader to be a potential defaulter.

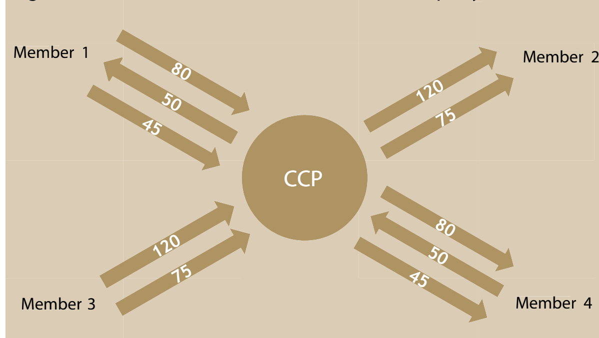
In the days that preceded clearing on the LME, the 31 ring dealing members traded with each other on an OTC basis, building up risk between each other over a tenor that could be many years forward.

Unlike today's precious metals markets, credit policies barely existed between the LME members. As the crisis unfolded, some members realised that if their biggest creditor did not pay, they would then default on the other members of the exchange. I can remember one ring member showing a bid and another completely ignoring it, as he did not want to increase his risk with the former – a form of credit management I suppose. Apart from a breach of exchange rules, this began to create a disorderly market with sometimes inverted bid-offer spreads. A regulatory system to ensure good credit management policy also did not exist.

By the standards of the day, the eruption that followed was massive. £985 million was shredded when the ITC could not pay. Remarkably, most of the major members of the market managed to carry on after losing this huge sum. To solve the issue, the exchange managed a "ring-out" of all outstanding trades between all members at one fixed price under a new rule known as Rule K. The outcome would be the implementation of a clearing system that elevated the LME trading volumes to a level that would have seemed inconceivable prior to the existence of a central counterparty (CCP).

There are other parallels today where market practices have had to change, such as the credit default swaps market. Following the demise of Lehman Brothers, a ring-out was also held on its CDS, followed rapidly by regulatory approval to create a cleared solution for certain credit default swaps that could cause systemic risk.





How a Clearing House Works

I will use the London Clearing House (LCH) as an example as it is, at this time, the only metals clearing house that clears daily physically settled contracts. A clearing house or central counterparty operates by registering matched trades transacted between its members with the intention of reducing overall default risk in a cleared marketplace. It replaces bilateral credit risk between members by becoming the central counterparty to all trades (figure 2).

For this to operate, the members pay the clearing house two forms of collateral payment following a trade:

- The first is the *initial margin* payment, the level of which is set by the clearing house according to market conditions. This is basically a performance deposit against the trade (to cover the cost of closing out the position in the event of a member default), which is repaid by the clearing house when the trade is settled or closed out, and is interest bearing if covered by cash as collateral. Here, a central counterparty can have an advantage over a collection of market bilateral risks, as counterparties that trade bilaterally do not hold 5-10% initial margins with each other. This extra margin often provides a cushion at the time of liquidating the positions of a defaulting party.
- The second payment, *variation margin*, is dependent on the marked-to-market amount of the trade. The trade is revalued at the close of business each night. If it is a loss-making value, then the member can cover this with an acceptable form of collateral. If it is a profit-making value, this can be used to offset initial margin charges. This is measured against the member's portfolio has a whole.

Both margins can be covered by acceptable collateral rather than cash, however, the clearing house charges an accommodation fee for this service.

Other futures exchanges realise profits and losses on the positions each night and post the amount to the cash ledger. In this manner, you can access profit balances straight away, but you must pay losses straight away rather than at maturity of the trade.

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The method used to collect cash from the members is known as a Protected Payment System or PPS. This is similar to a direct debit scheme that allows the clearing house to take the cash required without having to wait for the member to make a money transfer. This speeds up the whole process and works particularly well with members that are not in the London time zone.

The process following a member's default:

- In the event of a default, the clearing house closes all positions of the defaulting member. This can be done by trading out positions in the market entirely or sufficiently to reduce or eliminate outright positional exposure, and then auctioning the entire matched position with forward cash flows amongst all of the clearing house members.
- As the trades would have been marked-to-market on the day before default, the only risk of further erosion of the defaulting member's equity comes from a negative market move of his position between the close of business before default day and the day on which the positions are liquidated.
- Should this occur, the clearing house uses the collateral covering initial margin liabilities to cover any resulting losses.
- If the negative price move exceeds the initial margin deposit, the clearing house will then use cash from the member's default fund or MDF. Only when this has been exceeded will the clearing house have to resort to using its own shareholders' funds and the default fund contributions from the other members.

Methodology – How it Could Work for Precious Metals

It is fair to say that without the guidance of the LBMA on this subject, the governance for cleared forwards will rest with the precious metals market's main participants. This is effectively what happened with the CDS market. Meetings between clearing houses and precious metals traders have been continuing for some time. Once the criteria have been established, for example, agreeing products (forwards, spot and options), value dates (daily out to two or five years), margining and delivery processes, minimum amounts and initial margins, the clearing house would provide a platform or an interface that routes principal-to-principal trades to be given up to and or novated by the clearing house. Without a trade capture facility or central order book (a forward version of EBS or something similar), novation could be done by clearing house members directly or by using the existing forward trading method, that is, via brokers.

Cash Cleared or Physically Settled?

Cash settlement could pose a problem when clearing forwards of several hundred thousand ounces of gold or several million ounces of silver. The volume of trades that could mature on the fixes would create increased turnover and prolong the fixing process, notwithstanding the major issue of fixing charges to be paid. If trades were physically settled, the existing clearing structure of unallocated deliveries could be maintained. To achieve this, the clearing house would simply need to set up clearing accounts with all of the members of the London Precious Metals Clearing Company (LPMCL). The clearing house would then be in a position to clear all longs and shorts between all of the clearers.

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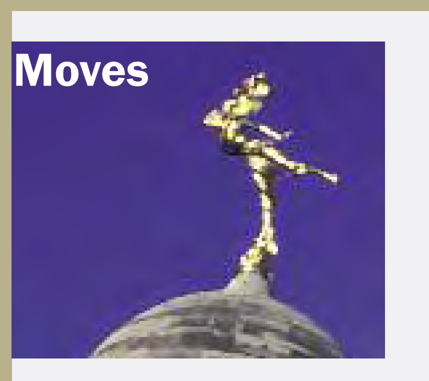
Pros and Cons
Clearing House Credit Risk

There are serious considerations for credit assessment of clearing houses, as volatility increases with price moves of standard deviation of three or more and other black swan events. However, this would seem to be a less onerous task for credit officers, who would only have to monitor a handful of clearing houses, rather than the multiple credit risks of all of their counterparties.

There have been cases of clearing house defaults. A common problem is that they are slow to react to extreme price movements and therefore increase the levels of initial margin required to avoid a meltdown. In 1987, the Hong Kong Futures Guarantee Corporation collapsed following a four-day suspension of trading, and the Kuala Lumpur Commodities Clearing House went the same way four years earlier. The Caisse de Liquidation did in fact become a liquidation case in 1974, because it did not increase initial margin rates during a period that saw sugar prices doubling. However, major exchanges today have a good track record of credit and cash monitoring, plus we have greater regulatory oversight today than in the 1970s and 1980s. Anyone who has doubts in a clearer's ability to close out defaulting positions has to look at each house's history. The unwinding and settlement of Lehman's commitments at the LCH was well drilled, quickly enforced and, most importantly, did not give rise to a loss of MDF or LCH cash.

Market Moves



Chris Fergus to **G4S International Ltd**

Chris Fergus is now Managing Director of G4S International Ltd. Chris has been with G4S for 10 years and has held a number of positions within G4SI, most recently as Deputy Managing Director and Regional Director, Americas, leading the company's entry into the Diamonds and Jewellery market.

Stephen Pender to **INTL Commodities Inc**

Stephen Pender joins INTL on 1 June. Stephen previously worked at Fortis Bank S.A/N.V., where he covered market making in both precious and base metal derivatives, and before that at JP Morgan as a precious metals spot dealer.

Gerry Schubert to **INTL Commodities Inc**

On 1 May Gerry Schubert will join INTL in London. Gerry's career in precious metals spans 30 years with various houses, most recently Fortis Bank.

Jeff Shiu to **Standard Bank**

Jeff Shiu has joined the precious metals team at Standard bank in London where he will be responsible for precious metals options business. Jeff has joined Standard Bank from Citigroup where he was running the trading desk for precious and base metals. Previously Jeff was with Dresdner where he ran precious metals options.

Costs Clearing Benefits

The price for clearing credit is known in advance, as the clearing houses set the initial margin levels to suit the current market conditions along with the clearing fees. If the price of clearing becomes too expensive relative to the benefits of mitigating credit risk, the exchanges run the risk of losing clients, and so they strive to maintain margins and clearing fees at a level that does not let this occur. The cost comparisons between OTC and exchange-cleared transactions are easy to make. Regulatory counterparty risk requirements based on the FSA's Counterparty Risk Requirement can be as high as 5%. Even short dates and transactions between regulated financial institutions bear a 2% charge for some regulated entities, whilst clearing charges are a fraction of 1%. Today, cash consumption of a bank's balance sheet on bilateral terms has to be justified more than ever before. I cannot think of a reason to justify or even want to use this amount of regulatory capital when the alternative is cheaper, more efficient and risk-reducing.

Potential Benefits for the Precious Metals Market

With a single CCP, a member would make or receive one payment and one delivery per day. This compares well to the multiple transfers that occur each day between all customers of the LPMCL and the clearers themselves. When you are on the end of a transaction that still has not been settled at the 4pm cut-off time, you often feel like a house buyer waiting for the dreaded chain to complete. The London 4pm cut-off on a cleared system would be quicker and easier for the LPMCL to manage. Imagine not having to agree ISDAs (and therefore, credit thresholds), settlement limit monitoring and collateral management systems to manage bilateral risk with your major bullion clearing counterparties.

Uniform give-up agreements allowing a customer to use their credit line to trade with a named third party would also be possible under a cleared forward. Although this exists today in the bullion market, it can only be achieved with a few prime brokers and has to be more strictly monitored as they absorb all of the risk in the absence of a central clearer.

Cross-correlation calculations that allow initial margin offset between different metals or asset classes could be achieved. The most obvious would be offset margining on the Chicago Mercantile Exchange gold futures contract against an opposing CME cleared OTC forward, saving on cash consumption if you are running an EFP position.

In London, it may well be possible to offset interest rate futures with gold forwards, creating a synthetic cleared lease rate contract. Add to this the potential reduction of margins by offsetting the delta on options against forwards and you again conserve cash. Once the clearing house has its correlation co-efficient for copper and gold, it could in theory allow offset of a percentage of initial margin that equates to the correlation.

Driving Factors Towards CCP OTC Forwards

The two main drivers of OTC precious metal clearing will be the participants in the wholesale bullion market and the regulatory authorities. Whilst all bullion banks have the choice to maintain bilateral credit facilities with one another, the choice not to do so must be available. Futures clearing is one option, but it is limited to New York delivery and delivery days. The only real option would be to adopt a similar model to the LME's clearing as it also has a delivery day for each London working day of the year. The shareholders of the major financial institutions feel the growing cost of maintaining bilateral credit terms are likely to encourage the use of cleared OTC forwards if they are available.

Regulators have discovered that oversight of individual regulated entities does not always ensure a stable financial climate. What would be preferable, and possibly non-intrusive, would be to force all OTC derivatives to be cleared. We have seen already how the CDS market plans to become cleared due to regulatory concerns around systemic risk. This market, previously unregulated, will now be monitored and regulated by one single US regulator, along with all other OTC derivatives.

On Thursday 26 March, Tim Geithner, United States Secretary of the Treasury, proposed several regulatory reforms in reaction to the current financial crisis. One of the proposals was to force all vanilla OTC derivatives to use a CCP (see box at right).

In the US, at least, it looks like forward clearing has arrived. ■

US Treasury Proposal for OTC Derivatives

"Clearing All Contracts Through Designated Central Counterparties
We will force all standardized OTC derivative contracts to be cleared through appropriately designed central counterparties (CCPs) and encourage greater use of exchange traded instruments. These CCPs will be subject to comprehensive settlement systems supervision and oversight, consistent with the authority outlined above.

Requiring Non-Standardized Derivatives to Be Subject to Robust Standards: We will require that all non-standardized derivatives contracts report to trade repositories and be subject to robust standards for documentation and confirmation of trades; netting; collateral and margin practices; and close-out practices.

Making Aggregate Data on Trading Volumes and Positions Available: Central counterparties and trade repositories will be required to make aggregate data on trading volumes and positions available to the public and make individual counterparty trade and position data available on a confidential basis to appropriate federal regulators."

David Gornall *started his career in 1979 trading silver at Lonconex Limited, part of the Primary Industries/Golodetz commodity trading group. After a spell at Morgan Guaranty Trust of New York, he moved to Sogemin, trading in the LME ring and heading the bullion and FX desk. In 1992 he joined NM Rothschild to start their LME base metals operation, before returning to Sogemin – now Natixis - where he is Head of Precious Metals. David has been a Member of the LBMA Management Committee since 2005 and the Management Committee representative on the Physical Committee since 2008.*