

WHITE PAPER SERIES

The Changing OTC Market Place

Future demands on infrastructure for clearing

by Tim Dodd, head of product management, SunGard Front Arena

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Future demands on infrastructure for clearing



Worldwide political pressure continues to grow for enhanced oversight of financial markets to avoid a repeat of the banking catastrophe we have experienced in the past two years. Such political pressure is behind the push to increase the powers of financial regulators, to improve transparency of the entire OTC market place and to force more business to be cleared through central counterparties.

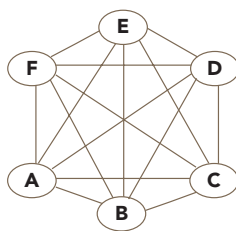
In this paper Tim Dodd, head of product management for SunGard's Front Arena solution looks at the changing OTC market place.

Central Counterparties

Central clearing counterparties are a longstanding feature of exchange traded products. Their major attraction is that they significantly reduce both settlement complexity and counterparty credit risk. Rather than many bilateral agreements with all counterparties, an institution only needs to establish one agreement with the central exchange (see fig 1).

Bilateral clearing

- Web of counterparty exposure
- Complex collateral movements
- Potential domino effect of one dealer default



CCP Clearing

- Hub and spoke with central guarantor
- All collateral moves to/from CCP
- CCP capitalised to withstand dealer default

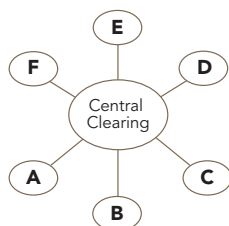


Figure 1: The simplification that central counterparties brings

Users of such counterparties benefit from being able to deal with others anonymously (as they have the credit assurance of the clearing counterparty.)

The central counterparty also provides services to its members for:

- verifying trades
- managing collateral posting
- providing consistent and transparent valuations
- processing lifecycle events and
- netting/compression of offsetting trades.

The cost for maintaining the guarantee from the clearing counterparty is set against the value of executing only one agreement, which significantly simplifies the process of market participation.

This cost arises from the need to post collateral against net trading losses and, for general clearing members, the cost of capital pledged to the central counterparty's default fund. One benefit arising from the capital pledge is that general clearing members can clear for other members and charge them margins for doing so.

Both margin posting and the capital fund serve to ensure smooth market operation in the event of member default.

When an institution fails, margins charged by the clearer or by the general clearing member on behalf of the clearer, should cover the cost of closing the failed entity's positions.

In some cases the posted margin may be insufficient to cover the loss on the failed member's position (usually because the value of the member's positions deteriorated so fast that additional margin could not be collected prior to the member's failure). Here the excess losses are covered by the general clearing member or, in the event that a general clearer fails, these are covered out of the default fund and the cost is shared among all general clearing members

Equity markets have operated this way (sometimes without margin facilities) for many generations. Futures clearers also follow this model. The OTC market, however, grew as a consequence of the need for completely flexible contracts and had benefited from the lower capital and infra-structure cost required to trade in this way. Bilateral agreements rely on credit lines alone and can allow trading in one-off transactions unavailable on exchanges.

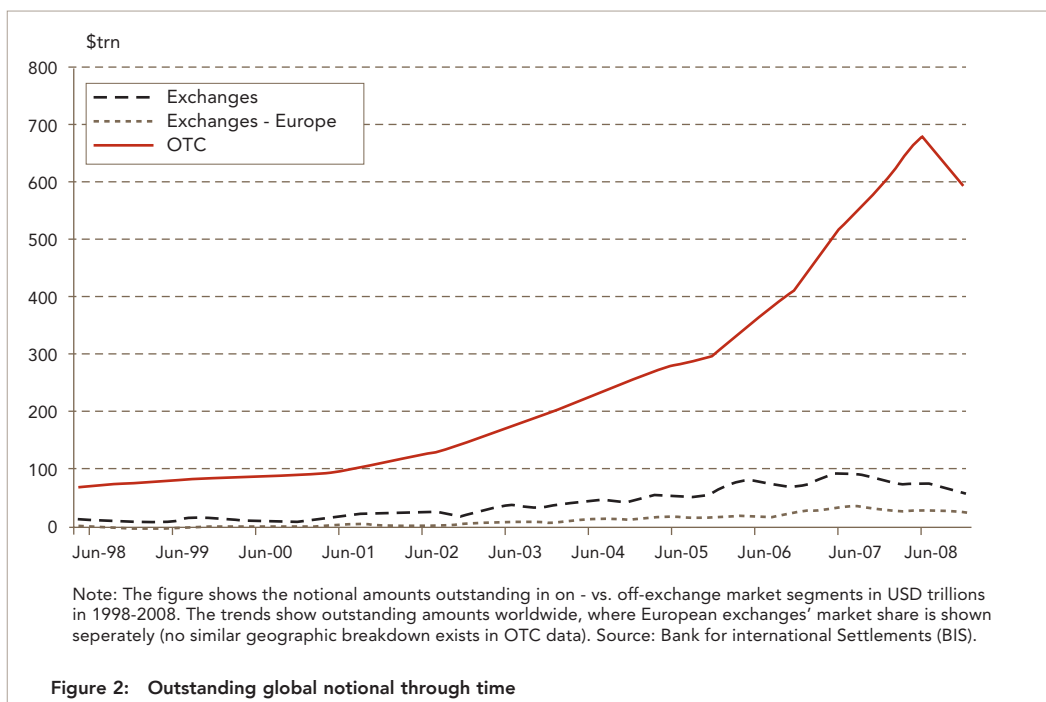
Today, with processing costs having fallen and with a growing focus on regulatory reform, many types of OTC products are being cleared centrally. This is a very important development, since the OTC markets are several times larger than exchange traded markets (see fig 2).

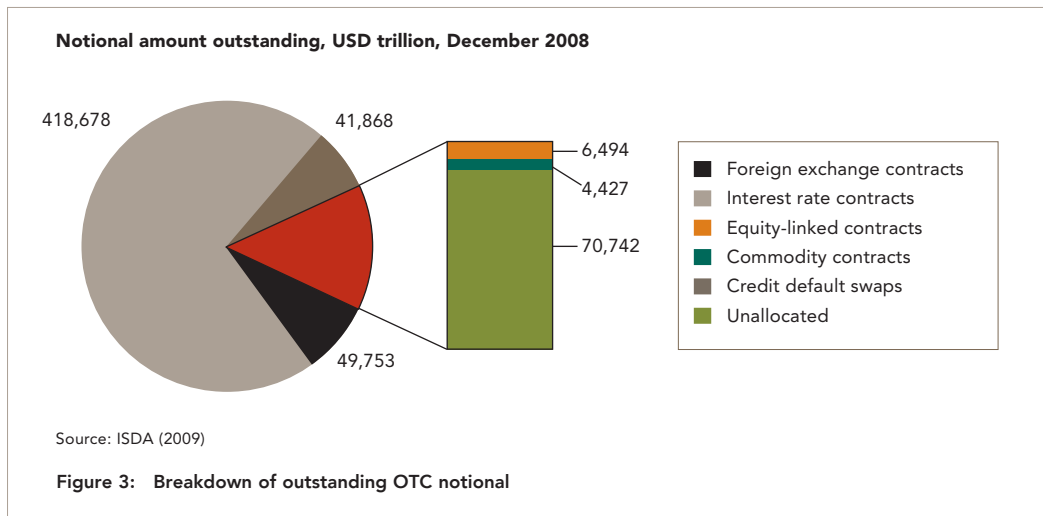
It is important to recognize, however, that there is a limit to the complexity of transactions that can be cleared in this way.

Contrary to headlines suggesting that this is a very recent development for the OTC market, standard swaps, repos, FX, freight, energy and trade types have been cleared centrally for many years.

For example, USD 85 trillion of the swaps interdealer market is cleared by SwapClear, a service from LCH Clearnet, the dominant London clearing house. It now has 22 general clearing members and it is difficult to see another player becoming established in this space.

We have seen regulatory pressure from both sides of the Atlantic to move credit derivatives towards a central clearing model. This is because of the highly geared payouts on these derivatives in the event of a default.





In existing central clearing arrangements, only the largest of organizations have become clearing members because of the capital and infrastructure investment required. Other players (in particular hedge funds) are interested in indirect participation as it simplifies processes dramatically.

Influences changing the market

Political attention on financial markets has been intense since the crisis reached its crescendo in September 2008. Self-preservation and a desire to be seen to be active in addressing the crisis has motivated politicians of all parties to promote agendas that include more legislation for control of both banks and other trading institutions.

Many jurisdictions have undertaken studies on what went wrong and how to avoid similar catastrophes in the future. The US, the UK and Europe have drafted new regulations that include a drive towards greater capital requirements, a focus on protecting the financial system and international co-operation to ensure a better global response to any future event.

The spring 2009 G20 summit in London issued a communiqué, "Strengthening the financial system", that sets all these leaders on the same course, driving their

own regulators toward common goals. Of particular note is the mention of central clearing for Credit Default Swaps (CDS):

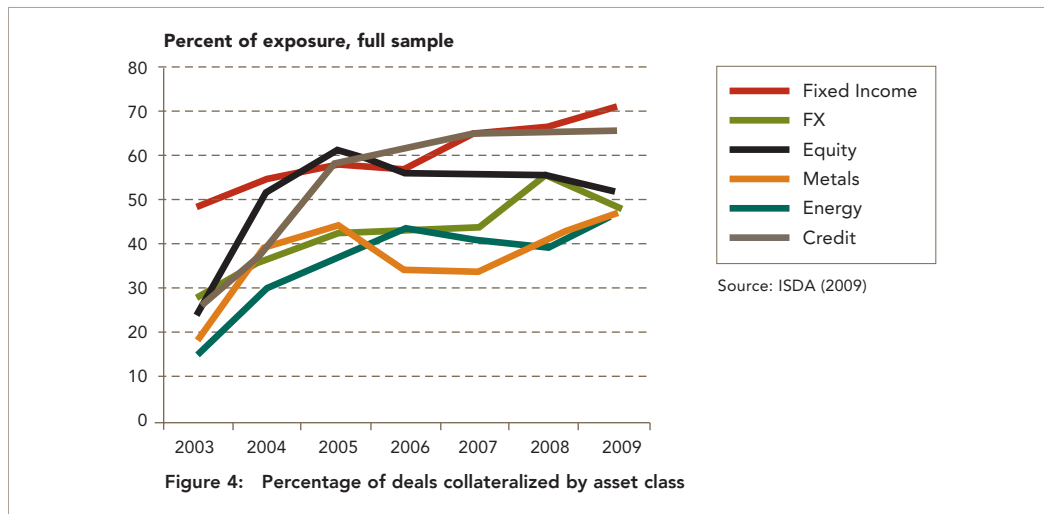
" We will promote the standardisation and resilience of credit derivatives markets, in particular through the establishment of central clearing counterparties subject to effective regulation and supervision".

This is despite, in our view that Lehman's default was effectively unwound in the credit markets and was a modest contributor to the overall crisis, although some naysayer's comment to the contrary.

It's also important to recognize that in the broader OTC market, where returns have smaller standard derivations than for CDS, a great deal of bilateral trading is now conducted on a collateralized basis, which significantly reduces counterparty risk.

Any move toward central clearing will have limits. Many small corporate participants are reluctant to post collateral for losses that are only matched by non-cash benefits that accrue over time.

If trading is forced onto exchanges, this is likely to discourage such entities from hedging at all, which will have the effect of increasing their business risk.



Furthermore, the customization and complexity of certain contracts means too little interest will be generated to clear them effectively. While some of this complexity has been created to increase opacity and give an edge to the sell-side, much of it serves the genuine needs of end-users. Eliminating the ability to structure such customized trades would create a real loss in the ability of end-users to manage their business risk effectively.

Exemplifying the above point is a bill under consideration in a committee of the US Congress that would require all commodity derivatives to be traded on exchanges. This would force hedgers to use the limited contracts and maturity dates available on an exchange rather than being able to match specific production schedules as is currently possible in the over-the-counter market. In fact, a web site has been formed by disgruntled dealers: www.swapmyswaps.com!

For the latter, consider the interest rate market: standard contracts like IMM Swaps are easy to clear and net because many times their terms and conditions will match. Simple vanilla swaps terms and conditions can also be easily parameterized without much misunderstanding of lifecycle events and, again, can see easy netting.

However, swaps with exotic pay-dates and special flows become much more difficult. Although forcing a standardization (like that seen in the CDS market to 1% and 5% coupons) could help, this would destroy the efficacy of the market for hedgers who need non-standard contracts. Therefore, it is almost impossible to unify risk easily to charge margins and special processes are needed to net these contracts.

Despite these inherent limitations, we believe the push toward centralized clearing cannot be ignored, since political momentum is behind the change.

In May 2009, Timothy Geithner, Secretary of the Treasury wrote this to congress:

“ Market efficiency and price transparency should be improved in derivatives markets by requiring the clearing of standardized contracts through regulated CCPs... and by moving the standardized part of these markets onto regulated exchanges... and by requiring development of a system for timely reporting of trades and prompt dissemination of prices...”

And more recently in September 2009:

“ We simply cannot walk away from the worst financial crisis since the Great Depression and not do everything in our power to reform the system that contributed to this breakdown.”

The extra transparency and certainty will motivate most politicians to push for more central clearing. Similarly, larger banks will be supportive since they will be able to increase profitability as general clearing members: standard contracts on exchanges will be priced more keenly increasing the margins non-standard OTC business could provide.

We expect to see a number of central counterparties appear in the new competitive environment but, if developments in Credit Default Swap clearing are any guide, only a few will come to dominate .

In the CDS arena, in response to regulatory pressure many clearing houses have attempted to establish a niche in the market. None offer fungible services: some use variations of Chicago Mercantile Exchange SPAN algorithm for calculating initial margin amounts while others use a VaR (value-at-risk) based margin approach with stress scenarios. Some clear both index and single name contracts whilst others offer index clearing only.

We also expect to see centralized reporting come of age for the entire market. We can expect one or several institutions to be given the mandate for this. We do not expect a single institution to dominate as there is systemic and political risk in that.

Specifically, the Depository Trust & Clearing Corporation (DTCC) currently sees reporting of 90% of the global activity in the CDS

market and this provides considerable comfort to regulators and the market alike. The broader OTC derivatives market is 15 to 20 times larger than the CDS market and is characterized by less extreme tail risk. There also is international resistance to a single US organization dominating the reporting for all OTC derivatives.

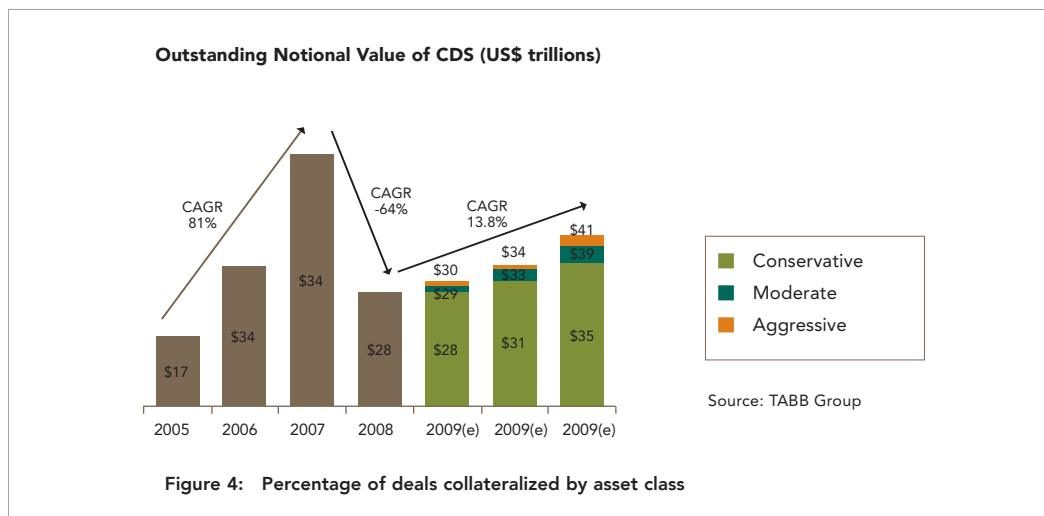
Despite this, however, some are pushing for a single central reporting point for major segments of the market. Hence, Tri-optima has been chosen by ISDA to deliver the interest rate derivatives trade reporting depository and more such mandates are likely to follow.

As with CDS clearing, we will see a competitive environment for OTC derivative reporting.

With all this emphasis on collateralization, centralized clearing, enhanced reporting requirements and continued strong volumes, everyone can see the costs of maintaining outstanding positions increasing. **This has led to huge successes of companies offering compression** (or “tear up” services) that take multilateral portfolios and identify trades that can be closed out, reducing the total number of contracts among counterparties, whilst maintaining roughly constant net exposure with minimum net cash settlement requirements.

Although volumes in the CDS market did grow during the later half of 2008 (and we believe on into 2009), default events and compression (via specialists like Tri-optima and ICE, the only successful CDS clearer) have lead to a drop in outstanding notional amounts:

The interested reader is urged to follow up by reading the reference material detailed in the appendix.



Key Takeaways

- There is continued strong political pressure to force a substantial portion of OTC derivatives trading onto CCPs (central counterparties).
- Sell-side institutions will need to have both the ability to clear derivatives through CCPs and run an OTC operation if they want to offer a complete service to their customers.
- We expect a number of new central counterparties to appear, but only a few to thrive and ultimately dominate.
- Centralised reporting will come of age with a handful of international players given a mandate to do so and everyone who wants to continue to trade actively will need to report more frequently and in greater detail.

For software providers this means ensuring that solutions that provide infrastructure for OTC sales, trading, risk management and clearing need also to offer their customers the ability to clear through CCPs and, ideally, the ability to trade contracts that migrate to exchanges.

Front Arena is just such a solution and in combination with GMI (SunGard's solution for the management of all clearing and trade processing activities www.sungard.com/gmi) offers a complete solution for clearing of those OTC contracts complementing Front Arena's current ability to trade on exchanges directly.

References

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- CMIB Internal Document from Richard Dyson: **"Future Developments in Credit Risk Control"**, May 2009
- The Aite Group: **"CDS Central Clearing: Look both ways before crossing"**, November 2008

About Front Arena

SunGard's Front Arena is a global capital markets solution that delivers position control across multiple asset classes and business lines. Integrating sales and distribution, trading and risk management, and settlement and accounting, Front Arena helps capital markets businesses around the world improve performance, transparency and automation.

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