

# Report

## Advancing critical dialogue

### *Priming the money pump*

One legacy of the financial crisis has been a growing concern over the risks inherent in the world's USD 582 trillion nominal exposure to OTC derivatives.

Bob Giffords

**O**n both sides of the Atlantic regulators are about to impose central counterparties (CCPs) and clearing on the OTC derivatives industry. Yet no one really knows what impact this might have. Paul Rowady, senior analyst at research firm TABB Group and author of a recent report on the global risk transfer market for the World Federation of Exchanges, says TABB's independent research has found that OTC derivatives are broadly under-collateralised in comparison with exchange-traded derivatives by around USD 2 trillion globally. "Naturally, only a

small part of this portfolio will move on to exchanges in the near-term, given the various corporate and product exemptions and transition arrangements," says Rowady. "However, it does indicate a significant difference in risk exposures. Practically speaking, we're probably talking about up to USD 240 billion in new collateral required globally – mostly for rates and some credit derivatives – as we move to the cleared scenario."

Banu Apers, senior market manager for securities at SWIFT, adds: "The large buy-side firms are happy with the improved risk position, but the cost and complexity will be a challenge."

#### **SAFER BUT MORE COSTLY**

"Growing numbers of investors burnt in the market crisis are seeking more certain single digit returns in contrast to higher but more volatile returns," explains Rajen Shah, global head of collateral management at Citi's Global Transaction Services.

"Derivatives enable investment managers to match their returns very closely to their liabilities, so other things being equal we would expect to see continuing growth in their usage, especially as OTC clearing reduces the counterparty credit risk of using derivatives. However, central clearing is also expected to increase the costs of supporting such instruments. So our clients are watching the rule-making with intense interest and waiting to see what we, as service providers, can come up with to reduce these costs."

Yet cost is not the only challenge. Some analysts are also concerned with the impact on macro-level liquidity. In the Banque de France's Financial Stability Review for July 2010, Manmohan Singh, senior economist for monetary and capital markets at the International Monetary Fund, wrote: "Dealers may... find it costly to move their trades to CCPs and these costs may not be



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trivial for the following three reasons: (i) the inability to effectively net internal positions across products for any given client; (ii) the larger upfront cost of posting initial margin and guarantee fund contributions at CCPs, and; (iii) loss from the inability to rehypothecate the existing posted collateral which they use (and re-use) to finance other parts of their business.”

Since everyone is currently allowed to reuse collateral under the rules of the International Swap and Derivatives Association, eligible securities or cash are often re-used several times by different

*Banu Apers, senior market manager, securities, SWIFT*



counterparties. This is called ‘churn’. Singh’s research suggested, “Since hedge funds have typically contributed about 30-40% of all pledgeable collateral received by the large banks, the churning of hedge fund collateral could have been between 3 and 4.” Yet in a crisis, when it is needed, such collateral comes back on to the balance sheet of only one of those counterparties, so churning creates its own risks.

“Post-Lehman, some investors have taken precautionary measures against rehypothecation by opting to hold assets in custody accounts,” Singh continued. “Data show that the decline between end-2007 through end-2009 for ‘total collateral received that can be repledged/rehypothecated’ by the largest seven US broker-dealers...declined from about USD 4.5 trillion to USD 2.1 trillion.”

Therefore Singh concluded, “[Large complex financial institutions] active in the OTC derivatives market under-collateralise relative to the risk they assume... Whatever collateral already posted is currently allowed to be rehypothecated (so collateral needs will be even more onerous if placed at CCPs). Thus, offloading transactions to CCPs would make this gap obvious and require large increases in collateral.”

Collateral is clearly needed to keep money flowing around the system, but once it is locked down in the new clearing system it cannot be churned, so liquidity will suffer. The issue is how the banks deal with this situation.

### FROM OLD TO NEW MODELS

“The market has traditionally been over the phone,” says Rowady at TABB Group. “An end user calls the dealer bank, providing details of the hedge. The dealer constructs the transaction, quotes a price and embeds his fee in the spread. Collateral will have already been negotiated as part of the overall relationship, and applies to the net position across all transactions, so it can be quite low.”

Netting works across asset classes as well. John Rivett, global head of collateral management at J.P. Morgan Worldwide Securities Services, notes, “Currently with a single prime broker, all these cross-asset trades can be netted off or cross-margined and often with no initial margin at all. That all changes once product-based clearing comes in.”

“The new model can be quite complex,” warns Shah at Citi. “Alongside existing bilateral relationships, firms will need to add multiple clearing house arrangements with at least one general clearing member (GCM) as well. Any of those counterparties could call for more margin at any time, so appropriate collateral management systems will need to be in place. Whilst a clearing model could result in a simpler operational model for some institutions it is the collateral squeeze of having to post significantly more of a narrower band of collateral that concerns many institutions.”

Shah adds: “Firms will have to post initial margin for example. Then client margin may have to be segregated even at the GCM. We don’t yet know



whether some pooling or cross-margin netting efficiencies will be possible. Finally what securities will be eligible with what haircuts? With 'n' different clearing houses across multiple jurisdictions, these issues become critical if the system is to work."

"The US rules come in next July," says Rivett at J.P. Morgan. "That leaves very little time to get a fully operational collateral management system up and running. Scrambling around with manual reports won't work. It has to be automated given recent volatility, the complexity, the criticality, the number of counterparties and margin call deadlines to be managed."

There is some reassurance. "Because of the economic impact on both product pricing and operations," says Rivett, "the clearing rules will only apply to new trades and therefore ramp up more slowly as new business is done."

### EVOLVING MARKET STRUCTURE

The European rules covering clearing of OTC derivatives are currently planned for 2012. "Given the uncertainties and the complexity, achieving these deadlines will be challenging," says Apers at SWIFT.

"However, some things are happening like serious investment in collateral management systems by vendors and participants."

The European authorities envisage significant automation. "If the clearing house requires more margin they will debit the clearing member's ECB account or call on a tri-party agent to reallocate securities," explains Frank Versmessen, head of post-trade at SWIFT. "It will be highly automated, especially once TARGET2-Securities (T2S) comes in. The clearing members will need to have equally responsive downstream systems with their clients to cover these exposures."

"Of course in Europe clearing house members and counterparties may have



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collateral posted with various central banks and tri-party agents in different jurisdictions," adds Apers, "so here efficient reallocation will depend on a central infrastructure known as the new Correspondent Central Banking Model or CCBM2. This cross-border system should be introduced in parallel with T2S by 2013 based on an existing Belgian-Dutch central bank system."

Everyone seems keen to get involved. "Exchanges in Europe are currently expanding their clearing products, building or buying the necessary services and increasing the level of vertical integration," says Christian Krohn, managing director, Association for Financial Markets in Europe (AFME). "Market participants are,

as users of CCPs, concerned to ensure that these developments do not limit their choice of CCPs."

Adds Rivett: "As collateral management agents, J.P. Morgan acts for other broker-dealers, buy-side firms, even exchanges and central counterparties. When the number of CCPs and participants starts to grow, it becomes much more complex. It's our fastest growing area within the collateral management business."

### ALL CLEAR?

"There are still many uncertainties over the boundaries of who has to clear what products, how it will work, and what types of collateral will be eligible for margining,"

*Rajen Shah, global head of collateral management, Citi*



says Versmessen. “What we know is that it will cost more. Of course it’s going to hit liquidity too, because broker-dealers won’t be able to rehypothecate or reuse collateral, as under current bilateral arrangements.”

There are uncertainties in the US as well, even around who will fall into the major swap participant category that will have to use clearing. “Commercial firms hedging cash transactions will probably, or at least mostly, be exempt,” says Rowady.

“In Europe, the Commission has proposed a two-pronged approach to determining clearing eligibility,” Krohn explains. “Central counterparties can, under the ‘bottom-up’ approach, propose to clear products with their members and request regulators make those products subject to the clearing obligation.”

However the Commission also proposes a ‘top-down’ approach where the authorities decide on their own initiative whether a particular class of product should be subject to the clearing obligation. “Depending on how the proposals are implemented, the latter approach may

force CCPs to clear products that are not suited for central clearing,” says Krohn, “generating real risks and serious impact on the size of the market and the levels of collateral required.”

“OTC collateral is still 80% posted in cash, focused on only three currencies,” notes Apers. “If much more collateral is needed, firms will either have to use securities or hold more liquid assets.”

“During the crisis the ECB has relaxed the types of collateral it accepts for repo transactions,” adds Versmessen, “including B, B+ and B- grades and asset-backed securities. Participants are hoping that the CCPs will also

accept these instruments so they won’t have to liquidate positions, but at the moment most are still just talking about government debt and cash.”

According to Krohn at AFME, the real risk to liquidity will depend on the eligibility criteria for clearing. “The margin for liquid products should not be too onerous, but clearly if firms have to clear illiquid products then there could be problems,” he says. “The devil will lie in the detail.”

Will OTC derivatives still be economic to use? “Many firms only use derivatives under the FASB 133 hedge accounting rules to optimise on capital,” comments Rowady. “It will be interesting to see whether the benefits of precise hedging will still outweigh the costs after OTC clearing comes in for major swaps participants. This will also raise capital charges for non-cleared products.”

**MAKING IT WORK**

Some remain optimistic. Neil Wright, senior vice president and head of the Derivative Strategy and Product Group at State Street, argues that once the cleared model is fully developed and the remaining bilateral market is defined, the OTC market will likely show resiliency and continue to grow in use. “Regulators are still in the process of finalising the guidelines, but we are preparing for a variety of scenarios internally to meet the needs of our clients,” he says.

For Rowady, the strong cumulative



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*Manmohan Singh, IMF*

## Report – Collateral management

growth of OTC derivatives – nearly 19% per annum over the past 12 years – means that these collateral requirements could grow quickly. While OTC clearing adds to costs and thus potentially pricing spreads, he also points to the move to swap execution facilities as leading to a dramatic narrowing of spreads for those derivatives in broad demand. “This could significantly increase volumes,” he says.

“What’s still missing of course is a good cross-border, cross-product margin netting framework across CCPs,” says Apers. “That would make a huge difference. While there was talk of this early on, the regulators now appear more focused on managing the risks separately. With more competitors entering the clearing market, in Asia too, the need for such netting standards is growing.”

“The regulators are also pressing for more interoperability between clearing houses for the cash markets, but not for OTC derivatives,” observes Krohn. “Market participants agree that interoperability is inappropriate for OTC derivative products at this time due to the tailored nature of these products compared to the more standardised cash equities asset class.”

“We’ll probably see a new era of cross-margining innovation,” says Rowady, “similar to the New York Portfolio Clearing initiative focused on cash bonds and futures. Such initiatives will be key to making it all work.”

*Manmohan Singh, senior economist, monetary and capital markets, IMF*



### **COLLATERAL MANAGEMENT IS KEY**


“Going forward the effective management of collateral becomes the biggest challenge for efficient OTC operations,” says Rivett. “Firms want to maximise the collateral value of their assets. We’re not just talking about portfolio assets either.” He notes that received collateral on other bilateral trades, such as securities lending and repo, will need to be reused elsewhere, if returns are to be optimised.

“We’re currently looking into what further services we could provide to assist our clients to optimise their collateral in such an environment,” says Shah at Citi. “For example, collateral upgrade services might swap eligible collateral or cash for other assets our client has available to meet a

margin call. Even as the regulations become clearer, we’re evolving new solutions.”

“We should also think about tri-party solutions as developed for the US tri-party repo market to ensure systemic stability,” suggests Rivett. “As soon as someone doesn’t fund a CCP margin call we have a problem. How should we deal with these bumps in the road? We should factor in tri-party models for CCPs as well.”

“SWIFT is working with participants and service providers to establish common communications standards based on ISO 20022 methodology around these collateral movements, including margin calls, substitutions, and reconciliations,” says Apers. “The bilateral trading versions are already in pilot, while CCP versions go into pilot testing in February 2011. At the moment firms are still relying on email and proprietary formats which make interoperability very slow, expensive and error prone.”

That change will have to come quickly, if the money pumps are to keep the markets working. 

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