

# Financial **IT**

## Innovations in Technology

A portrait of Tim Howell, Chief Executive Officer of Euroclear, wearing a dark suit, white shirt, and patterned tie. He is smiling slightly and looking directly at the camera.

Tim Howell,  
Chief Executive Officer,  
Euroclear

### **Collateral Management in Focus**

#### **Building a better securities market**

i2i with Nigel Solkhon,  
Director, Citi

#### **Collateral liquidity**

Lead Story, Gary Wright, CEO,  
B.I.S.S. Research

#### **Innovation in financial technology**

Innovation Corner, Michael  
Cooper, CTO, BT Radianz

By Gary Wright,  
CEO of B.I.S.S. Research, founder of the B.I.S.S. Independent Accreditation.

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# COLLATERAL LIQUIDITY

## The unintended consequences of moving OTCs into central clearing

Liquidity in any market is fundamental. Since the global financial crisis, which commenced in late 2007 and which reached its critical phase in 2008, we have seen with absolute clarity the catastrophes that can ensue when liquidity diminishes in markets and even disappears.

In recent years, quality collateral has become more difficult to find. The inevitable consequence of this has been the widespread acceptance of lower quality collateral in order to meet the demands of increasing margin requirements and the effects of a bear market.

Stock borrowing and lending, together with repos, have become seriously impaired. As a mixture of political interference, regulatory focus, market structures and market conditions have hindered these important facilities, the liquidity that is vital to the listed and unlisted markets has been constrained.

This is at a time when the world's economies have been floundering, needing highly liquid markets that will attract investors and investment.

Investors require a solid market, where over time the incline is steady and sustained by sound investments, providing an end profit. Markets that are volatile tend to attract traders looking for quick profits. Such profits have little to do with performance, either in the company that has been invested in, or the general economy.

Since MiFID I, we have witnessed a market structure that has been competitive in narrowing spreads and increasing transaction volume: these trends have benefited investors. But, this has also produced a market that is very volatile and loaded with a massive percentage of smaller sized, professional trader-to-trader transactions, causing the long term investor to be driven into almost inert action.

It can be argued that the enormous rise in the number of transactions has increased market liquidity. To counter this argument, it could also be said that mass trades between fewer players actually increases the volatility and in a way, an ebb and flow of liquidity within the trading day. This can have a detrimental knock-on effect on all forms of liquidity that shape the overall market.

We must not forget that financial markets are made up of many types of financial products that are traded by all the major investment banks. Increasingly, banks have a problem in assimilating data, across their businesses. They need to do this, in order to manage risks, provide regulatory reports and manage their financial condition. This is a tough task for any bank, but virtually impossible for global banks, with their many branch networks.



**John Wilson,**  
Global Head of OTC Clearing, Newedge

Settlement cycles shorten across the world's markets. However, market rules and structures frustratingly remain bespoke, varying widely from centre to centre. The needs of global investment banks and the requirements of their customers have become difficult, if not impossible, to be managed efficiently.

In 2014 and through future years, the financial markets will have to cope with over-the-counter (OTC) trades being introduced into central clearing houses (CCHs), on the face of it a sound choice. This decision was forged out of the experience of the Lehman crisis, where central counterparties (CCPs) proved their worth and had a golden period. However, the resolution to move all OTC products into central clearing based on the example of Lehman Bros is actually fraught with danger.

The fall of Lehman was a unique situation at a unique time within the global

finance industry. It required extraordinary measures, undertaken in the most testing of circumstances. The risks that executives within investment banks took, along with central banks, were outrageous, but necessary at the time. However, that situation has very little relationship to the ongoing operation of global OTC markets.

The move of OTC to central clearing will put untold pressure on the CCPs and central bank, to manage their risks through a greater reliance on margin calls. Positions will need to be effectively managed intra-day. Even if the organisations that provide the market infrastructure are able to step up to the task, can the banks and the range of general clearing members?

According to **John Wilson, Global Head of OTC Clearing, Newedge**, the impact of moving OTC derivatives into CCHs is: "clearing will have a number of profound

*impacts on the market including acting as a credit risk leveller, allowing firms of different standing/rating to trade with each other without having an on-going exposure to each other. Hence one should be able to trade with a wider range of counterparties and potential enable more "liquidity providers" to emerge. It will free up credit limits as trades with counterparties will quickly face the CCP. It will add new explicit direct and indirect costs with clearing charges and collateral costs and concentrate credit risk into systemically important entities, CCPs. It will remove credit risk management from firms in respect of mandatory cleared products, leaving them to handle the rest, but which may actually leave them with higher credit exposures due to the loss of netting benefits. It will considerably simplify administration and collateral management if one only uses cleared products. It will introduce significant new liquidity risks as firms need to meet daily cash margin calls and increasingly prefund activity, thereby draining their liquidity on top of initial margin requirement."*

**Bill Hodgson from the OTC Space** comments: "For most firms clearing will increase direct and indirect costs of carrying OTC business on their books. For all firms this will require significant back office process changes, but also more certainty on the value and settlements for contracts."

As we have seen with the current problems in collateral liquidity, the application of an increased demand for collateral appears to be perverse. If something in a community is clearly in short supply, it does not make sense to ask community members to provide more of it.

Does the securities market today have more or less liquidity within the trading day? How does this impact collateral? **Wilson** comments: "Real-time clearing as opposed to intraday batch clearing means there are no netting benefits. Hence, the largest intraday spikes in margin requirements have to be funded notwithstanding offsetting trades may be seconds behind in the clearing queue sequence. This will demand sizable prefunding and immobilisation of collateral, which seems undesirable and may harm trading liquidity as firms endeavour to remain within their collateral thresholds."

The widespread concern with banks, or at least some of them, has been that they are too big to fail. However, in the case of CCPs small is the real risk. The Bank of England at various times has raised the



**Diana Chan,**  
CEO, EuroCCP

concern about a CCP being brought down. Such an outcome would make the fall of Lehman pale into insignificance, as masses of market players, both large and small, would be exposed to crippling losses.

In Europe, the CCP space is massively fragmented, with far more than are actually needed. The thinking has been to avoid creating monopolies: the assumption has been that increasing competition will improve services and keep costs low. There is even a view that fragmentation reduces risks by spreading the business across multiple domains.

So are there too many CCPs? **Wilson** says: “Undoubtedly, but national/regional regulatory barriers are partly to blame for impeding the operation of cross border CCPs, thereby creating space for local ones. Additionally, there is a wariness in some quarters about ‘foreign’ insolvency regimes which is encouraging some to look nearer home. However, it is questionable whether there is sufficient business for all of them to

survive mindful that open interest naturally tends to cluster around a few big CCPs.”

**Hodgson** adds: “If clearing is a competitive business, then so far the competitors within each assets class are highly skewed towards incumbents, such as ICE for CDS, and SwapClear for Interest Rates, so perhaps you could argue that there needs to be stronger competition. On the other hand splitting risk across multiple CCPs will drive up margin costs, and will lead to equilibrium where the benefits and costs of multiple CCPs evens.”

Most CCPs are naturally undercapitalised, due to their construction and business operations. This is because they are based on their general clearing members collectively supporting the CCP and their clients. However, with OTC entering central clearing, the risk of failure is heightened: indeed it is far more likely that we will see a CCP under stress or, worse still, fail.

Is there a greater risk of a CCP failure after OTC enters central clearing? “OTC products don’t make a CCP more likely to

fail; only poor risk management and a weak margining regime will do that — outside of huge upheavals in financial markets, in which there could be simultaneous, multiple failures of the largest institutions, which leave the surviving clearing members unable to carry the burden of supporting the CCP. Clearly, some products carry more risk, but if a CCP and its’ Risk Committee don’t believe it can handle an orderly liquidation of such products, within reasonably foreseeable loss parameters and then such products should not be cleared. It would be madness to impregnate CCPs with products they cannot handle,” states **Wilson**.

**Hodgson** adds “There is no quantifiable increase in the probability of failure, but most regulators are thinking hard about the typical lines of defence (or default waterfall) to protect against a CCP failure, given that the size of the OTC business being cleared is much bigger than a typical Exchange business. Regulators have suggested including a haircut on Initial Margin for non-defaulting members, the Bank of England has published a paper on haircutting Variation Margin, both adding assets to the layers of protection.”

To cover the increased risks of OTC and to ensure adequate margin requirements, a demand for high quality collateral is a very likely result. When the demands of collateral to cover massively increased margin requirements occur, there will be an impact on the secondary listed markets, where prices and spreads could increase. This is a natural outcome when liquidity becomes tight.

There is also a problem of collateral quality. Once all the best collateral has been assigned, the obvious next step is to accept lesser quality collateral. It then becomes apparent that we need to have an industry-wide standard recognition of what is acceptable quality. As is not the case with ratings agencies, there must be an industry-wide recognised quality rating that is applied to collateral.

Would a standard rating of collateral quality be of value? How could this be achieved? **Wilson** thinks that “Collateral assessment needs to be left with CCPs and Risk Committees as they bear the risks of shortfalls.”

Meanwhile, **Hodgson** states: “The CDS market expresses the quality of an issuer and a bond now — as does bond duration and ratings from agencies. It would seem that the securities market has enough information to know the ‘value’ of a bond — what is hard to



**Bill Hodgson,**  
OTC Space

*measure is the possible intraday volatility of a bond leading to intraday shortfalls.”*

Can the financial markets efficiently manage intraday collateral liquidity? *“This is one of the largest issues to be addressed. The move to real-time clearing at the behest of the CFTC has profound implications in light of some CCPs demanding collateral cover at the point of clearing, together with intra-day P&L cover. This creates considerable volatility in the collateral requirement for clients and clearing firms alike. As a consequence, many clients will need to over margin/prefund their anticipated clearing needs, with consequences for immobilising liquidity, failing which, such liquidity will need to be provided by clearing firms, which is arguably, not their function”,* comments **Wilson**.

In Europe, the fragmentation of CCPs could seriously impair the capability of ensuring that collateral reaches the areas where it is needed. Increased volatility in the market and shortened settlement cycles

could provide a spinning roundabout of collateral movements between CCPs and all the various clearing members: this would in due course massively increase the costs to the investors.

**Diana Chan, CEO, EuroCCP** comments: *“The demand for more efficient intraday collateral management will grow. There is certainly room for new services to be developed in this sector to reduce frictional costs. A major breakthrough will arrive with the launch of TARGET2 Securities in 2015.”*

**Bill Hodgson, the OTC Space** adds: *“Since the acquisition of LCH by the LSE, there are no horizontally aligned CCPs available to merge. ICE, CME, NASDAQ and Deutsche Börse all operate a vertical business and clearing model, with LCH being the exception due to history. So the wider question is whether we will see further consolidation amongst those vertical businesses such as the merger of ICE and NYSE. Given the current CCP landscape, I don't see much changing for some time. CCPs are developing models to*

*support intraday risk, using additional pools of assets to cover shortfalls. In most cases intraday shortfalls will be funded with cash to a CCP to meet delivery timing requirements. Delivering cash is an efficient process, with the funding of that cash in the Repo market.”*

**John Wilson, Global Head of OTC Clearing, Newedge** states: *“Regulatory barriers may impede consolidation to the fullest extent, but it seems unlikely that every existing and ‘talked of’ service can survive on a commercial basis. As to timeframe, the market itself will pick the winners based on where open interest is directed — it's probable that some CCPs will “die at birth” or shortly thereafter, whilst some may limp on for a while before clients vote with their feet.”*

So a number of different views and ideas about the impact of moving OTCs into central clearing; it was of course intended to reduce risks, but it could well have precisely the opposite effect. That is unless structure change is implemented to tackle the results of unintended consequences.