New rules, new risks, new choices

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About us

The Futures and Options Association (FOA) is the principal European association for the futures and options industry, representing its interests in the public and regulatory domain

The FOA works with its members to maintain constructive dialogue with government and regulatory authorities and deliver high standards of industry practice.

It submits formal position papers and responses to regulatory discussion and consultation papers, facilitates an exchange of views and resolves issues between members and others through committees and member meetings. It represents members by engaging proactively with parliamentary groups in the UK and Brussels and issuing industry guidelines, publications and legal opinions.

An extensive documentation library helps reduce members' costs through initiatives that involve the pooling of member resources in order to meet regulatory requirements and/or common commercial objectives, such as facilitating commercial dealings or addressing areas of risk.

Currently, these subscription services include a comprehensive set of Client Terms of Business documentation, as well as Netting Analyser, a recently re-launched and enhanced legal opinions library, which helps firms to maximise their regulatory capital efficiency, reduce the amount of required collateral, effectively mitigate credit risk by funded credit collateral and ensure that collateral posted with CCPs is bankruptcy remote.

In addition to its core activities, the FOA was a founder member and continues to be an active supporter of the European Parliamentary Financial Services Forum (EPFSF) in Brussels.

In the UK, the FOA initiated the establishment of the Associate Parliamentary Group (APG) on Wholesale Financial Markets and Services and is a member of its Industry Advisory Group.

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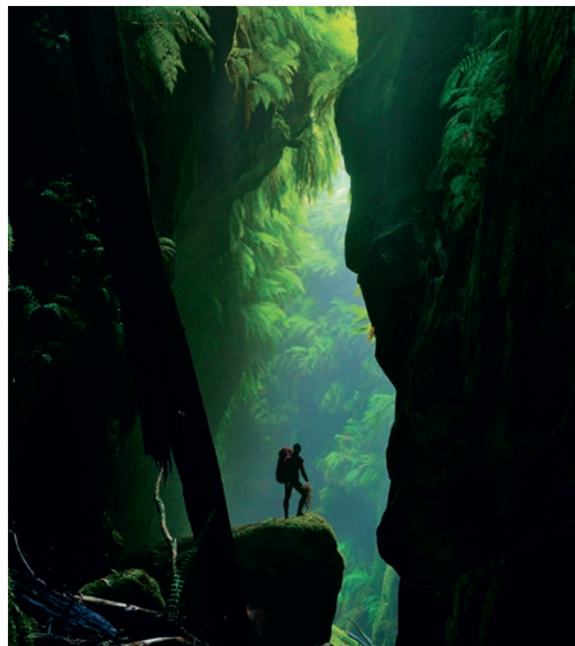

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A global response

By **Steve Sparke**, chairman,
Futures and Options Association

It has been widely agreed that the remedy for the fractured financial markets of the post-2008 world should include centralised clearing.

This function, which has performed routinely and successfully through the long and sustained period of growth in the exchange listed futures and options markets, could, and most believe should, be extended and adapted to provide the risk management, transparency and counterparty protection seen as lacking in the over-the-counter (OTC) derivatives space.

It has not been an easy, smooth or swift process to implement the clearing of bilaterally executed derivatives mandated by the regulators of the largest financial markets in the world. It has taken four and a half years since the credit crisis of 2008 for the rules to be put in place to enforce such a migration, March 2013 being the key trigger date in the US for the start of clearing of swaps under Dodd-Frank. Europe will follow.

These developments provide opportunity for growth, but at the expense of increased risks and an increase in costs

For participants in the listed derivatives industry, these developments provide opportunity for growth, but at the expense of increased risks and an increase in costs. The opportunity comes from the expected growth in clearing volumes as OTC derivatives are brought into the central counterparty (CCP) structure, which futures commission merchants (FCMs) are already integral to as members of clearing houses – and of course for the CCPs themselves through increased fees and interest income.

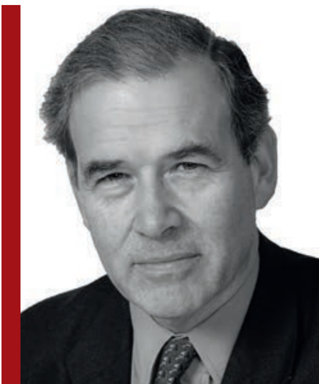
They have the expertise and experience of the CCP methodologies (particularly around the handling of defaults) to accommodate this new activity, understanding the processes and managing the systems. On the face of it, increased volume can only mean one thing – more business.

The flipside comes from the risk and costs. This lies in the (in some cases massive) changes that the new regulations are forcing them to make to those very processes and infrastructures that make FCMs and CCPs the expected natural beneficiaries in this new game.

It is not just the new OTC products that they will have to handle that are the issue. The changes are also having an impact on their core exchange products. The reporting of ETD trades in a format designed for OTC products, for example, is causing enormous headaches among the FOA membership. The rules (and varying methodologies) governing the creation of new segregated client accounts as well as the need to meet portability requirements present further challenges.

While many of the new regulations in the process of implementation emerged out of a global response and desire to find solutions to the global crisis – and meet the objectives of the G20 – their application and nuances have to fit their own regional models (in the case of Europe).

The industry's response, however, has had to be global. The challenge has been to meet the (frequently conflicting) swathe of demands from regulators across the globe, to ensure that the industry is prepared to comply with them all in a timely and effective manner. The prize for CCPs and FCMs, if all goes well and according to plan, could be significant, but the risks, workload and the costs involved are of a different magnitude to anything we have experienced before. ■



A complex agenda

By **Anthony Belchambers**, chief executive, Futures and Options Association

After the recent financial crisis, the need for regulatory reform, closing loopholes and establishing a safer system and safer markets are understandably driving the regulatory reform agenda.

However, that agenda has become increasingly complex and fragmented by regional and national differentiation – and the cost of delivering a 'super safe' financial system will not come cheap. Less innovation, more oppressive rules, greater compression on risk, higher capital costs will all have an adverse impact on the economics of market participation.

This is particularly true of clearing, where there could be higher counter-cyclical 'cushions' placed on margin (and increased cashflow problems generated by more intraday margin calls); collateral being restricted to highly liquid and loss-resistant assets (exacerbating the prospect of a collateral crunch); increased clearing fees generated by closer CCP regulation; and increased capital costs for clearing members.

While some of the rules are being eased, David Wright noted recently that the regulated community is signalling "that we need to do more economic thinking on the balance of the overall package".

The fact is that severe cost increases will economically restrict clearing access for low-volume users and indirect clearing is unlikely to be the answer for a variety of reasons.

Execution choice as a means of competing on cost will not be an option for contracts required to be CCP cleared and multilaterally executed – and even if it was, the imposition of new margin and collateral requirements for non-CCP cleared contracts may make any form of cost choice along these lines illusory.

Some end-users are already reviewing their risk management programmes to cut back on cost. Others may use standardised contracts (as a cheaper, but still an expensive, option) instead of tailored OTC contracts to manage complex underlying risk profiles, but this will increase basis risk and could deny hedge accounting treatment.

Smaller clearing houses could find it particularly difficult to compete with the big 'portfolio' CCPs and their ability to offer a much wider range of margin offsets. Even setting up a new clearing house could become prohibitively expensive and that may, in turn, marginalise the ability of new platforms to enter the market.

There is also the question of the recently issued HMT Consultation Paper, which proposes that CCPs will have to introduce new loss allocation rules once all other alternative sources of capital support have been exhausted.

However, what is the level of risk that will 'trigger' these new rules and who will be called upon to meet any such loss? Some CCPs have abandoned the traditional use of a capped insurance solution and the government is determined that no recourse should be made to public funds (although, arguably, the public would be much more tolerant of public sector payout to support a systemically important market infrastructure than a systemically important bank). That leaves the clearing members!

It would be wholly unreasonable to expect them to pick up an unquantifiable in extremis cash call by way of loss allocation (on top of their existing obligation to support a CCP) and the consequential prudential capital hit. At a time of considerable market stress, this kind of allocation 'add on' could trigger additional 'domino' defaults, which could exacerbate a market crisis situation.

The migration to CCP clearing signals a growing rethink about risk mitigation. Traditionally, the previously accepted ethos was one of diversification, but so far as CCPs are concerned, it is now more about risk concentration – but has a proper analysis been done as to whether this shift in thinking could exacerbate or mitigate risk to the financial system? ■

What is the level of risk that will 'trigger' these new rules and who will be called upon to meet any such loss?

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How did we get here?

As Dodd-Frank and EMIR approach implementation, G20 plans for a co-ordinated regulatory shift are slipping. By **Huw Jones**

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Regulators are reshaping the global market by pushing over-the-counter (OTC) derivatives onto electronic platforms, through clearing houses and into trade repositories so that when the next bank crashes, they can see who is exposed rather than face an opaque meltdown such as the Lehman Brothers collapse in 2008.

"It may become smaller and more expensive, but that's in our view a justified trade-off given the impact this market can have on financial stability," UK Financial Services Authority (FSA) director, David Lawton, said of the future shape of OTC.

This is creating a sharp new focus for trading venues and clearers. The IntercontinentalExchange's whopping premium for NYSE Euronext says it all: derivatives will be the battleground in 2013.

Faced with a deflating commodities bubble and share trading margins thinned by weak volumes and relentless competition, it's little wonder relative newcomer ICE wants to exploit regulatory changes, transforming a $640 trillion OTC derivative market hitherto the preserve of a few banks.

If the $8.2 billion deal goes through, ICE will hive off Euronext's stock markets in Europe, leaving it with the Big Board in New York, still a key place to list, and Liffe, one of Europe's two main derivatives exchanges.

ICE is already the dominant clearer for credit default swaps in Europe, having pushed aside Deutsche Boerse's Eurex, the region's other main derivatives exchange. Still, a lot of dust must settle before it becomes clear that ICE's money was well spent.

World leaders wanted the new global regulatory regime in place by the end of 2012 by implementing new laws such as Dodd-Frank in the US and the European Markets Infrastructure Regulation (EMIR) in the EU. "I think 2013 may not be the big bang year for derivatives reform but change is coming, even though at a slower pace than originally expected," Larry Thompson, general counsel of clearing house and trade repositories operator DTCC, told us.

"We won't see the full effect of derivatives reforms until the last quarter of 2013 or even 2014. That is when we will begin to see if there is more transparency or whether the structure that emerges is one of fragmentation, resulting in a less accurate view of risk in the system," Thompson said.

Winners and losers

Spotting winners and losers in the new derivatives world will take time and depend on many factors: will EU and US rules avoid gridlock; will the rules allow banks to compete with exchanges like ICE, CME and Eurex; will Asia align itself fully; where will the extra collateral needed come from; how far will 'futurisation' of the market go?

"There are differences in detail and in timing. There is an attempt to align EU and US rules but they are only superficially the same," said Roger Cogan, head of EU regulation at the International Swaps and Derivatives Association (ISDA).

The industry fears these discrepancies in reporting requirements and scope could muddy the risk picture. For example, if regulators insist on having trade repositories on their own turf it could lead to duplication such as double-counting of trades.

This could make it harder for regulators to get a clear, full picture of risks, defeating the core aim of the reforms.

The US has already finalised its rules for trading OTC derivatives, ushering in a new breed of swap execution facility (SEF) platform, but

The EU Regulation Implementation Handbook

Financial market participants are in the process of implementing the most costly and complex regulatory change agenda for decades. *The EU Regulation Implementation Handbook* was created with a view to helping firms to comply with these swathes of new rules which have significant market, customer, documentation and IT consequences.

Together with the Association of Private Client and Investment Managers (APCIMS), the European Federation of Energy Traders (EFET) and the Wholesale Market Brokers Association (WMBA), FOA last summer retained Clifford Chance and KPMG to develop a web-based EU regulation implementation handbook covering the entirety of the post-crisis EU regulatory change agenda, including the European Markets Infrastructure Regulation (EMIR), the Market and Financial Instruments Regulation and Directive (MiFIR/MiFID), the Market Abuse Regulation and Directive (MAR) and the market integrity rules of the Regulation on Energy Market Integrity and Transparency (REMIT).

In addition to covering the overarching articles and the supporting technical standards and guidance of ESMA and ACER, the Handbook provides heat maps designed to help firms prioritise their implementation programmes, legal and operational checklists, action points and guidance. Users of the Handbook are also being supported by a programme of periodic workshops providing updates on content and the change agenda.

The Handbook, which is available at no cost to full members of the participating trade associations, is updated regularly to ensure that it is reliable and topical on a continuing basis over the full term of the project, expected to last for two to three years. It already covers EMIR and the draft supporting technical standards issued in December by ESMA as well as an early, high-level view of MiFID/MiFIR.

KPMG is providing operational input into the Handbook, including guidance, action points and checklists covering some of the more difficult areas of EMIR implementation including, for example, the clearing obligation, the intra-group exemption, portability and segregation, reporting and record keeping and issues facing non-financial counter-parties.

Further information can be obtained from the Handbook Secretariat, which is based at the FOA (contact Anthony Belchambers – belchambersa@foa.co.uk, +44 (0)20 7929 0090 or Sally Hughes – hughess@foa.co.uk, +44 (0)20 7929 0091 or any of the partnering associations).

The US has opted for a single rule on segregated accounts while the EU allows choice for customers

in the EU there won't be agreement for months over its counterpart, the organised trading facility (OTF), and in any case what will be agreed won't be law until at least 2014 or later.

The US will also see mandatory clearing of some OTC products far sooner than in the EU, where regulators say the first clearing obligation should start mid 2014 – 18 months after the G20 deadline.

To protect client assets, the US has opted for a single rule on segregated accounts while the EU allows choice for customers.

The US may also apply the credit valuation adjustment charge (CVA) on all OTC trades while Europeans are looking at legislative proposals for certain trades with non-financial firms and others to be exempt from the CVA charge.

Conflicting rules

Such conflicting rules may make the industry smaller and more regional. "We anticipate the business will shrink somewhat and the beneficiaries of this will be the firms best equipped in terms of infrastructure and technology. It remains to be seen whether the larger firms will still be able to operate on a global basis and we may see subsidiarisation," ISDA's Cogan said.

Differences in enforcement, and not just substance, could also emerge. The US Commodity Futures Trading Commission, under pressure globally because of the cross-border reach of its new derivatives rules, has given foreign banks an extra six months until mid-2013 to comply with its new rules.

EU regulators don't have this option and must apply rules once they are in force, a situation one industry official likens to driving down a mountain without a handbrake.

Few believe big banks will let established exchanges scoop up trading in OTC contracts or replace them with 'futurised' on-exchange versions. Morgan Stanley, for example, is buying a stake in Eris, a U.S. futures exchange that offers interest rate swap futures, and the bank will also provide clearing services.

Brave new world

"The futurisation of swaps is emerging as a major concern," DTCC's Thompson said, noting that Congress was becoming aware of how futures were taxed more lightly and covered with less of a margin than swaps, potentially adding more risk to the system.

Sufficient collateral to grease the brave new derivatives world is also a concern: "These reforms will oblige many firms to post collateral and who may not currently hold collateral eligible assets," FSA's Lawton said.

The slow phase-in of reforms will at least give regulators time to address what could be the worst unintended consequence of all – turning clearing houses into new centres of risk, pumped up on trillions of derivatives before new rules on their recovery and resolution are in place.

"Clearing is not necessarily the sole answer to systemic risk management. It certainly plays an important role but it is not risk free, especially if we have concentration of clearing in certain derivatives asset classes," DTCC's Thompson said. ■

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The long and winding road

Dodd-Frank has been several years in the making, but there remains much to do before its final path is clear. By **Elise Coroneos**

The road to Dodd-Frank has been full of starts and stops. Many dates have been set along that road since the Dodd-Frank Wall Street Reform Act was voted upon in 2010, yet there have been many obstacles that have come to delay the start of regulations taking effect. At the start of 2013 there were 237 of 398 rule-making requirement deadlines passed, or 59 per cent. Of these 237, nearly 60 per cent of the deadlines were missed, and of these 31 were awaiting proposals as we went to press.

Of all asset categories impacted by Dodd-Frank, derivatives have the greatest percentage of its required rules finalised.

Of the rules impacting derivatives, 2012 did see some significant milestones activated and some new start dates set for regulations still to be implemented.

One of the most significant relevant milestones was the requirement that US hedge fund advisers register with the US Securities and Exchange Commission (SEC) in March 2012. Some hedge funds had already registered with the SEC on a voluntary basis, however, many had not. While some question whether the Commission has the necessary resources to regulate the entirety of the hedge fund industry, few dispute that bringing it under the overarching US regulatory banner is a significant development towards a culture of enforcement overall.

Also significant in 2012 was the road for swaps. As part of Dodd-Frank, the Commodity Futures Trading Commission (CFTC) was

given oversight over most issues dealing with swap transactions and shared-jurisdiction of securities-based swaps with the SEC. However, what had been a 1 January 2013 start date for implementation was delayed until 1 May 2013.

Very expansive, the rule, once implemented, will bring many transactions under the regulatory umbrella, including forward contracts, swaps and a variety of other transactions.

More time needed

In explaining the delay in implementation, the CFTC cited a letter from the International Swaps and Derivatives Association (ISDA), which pointed to the fact that it needs more time to seal up its protocol system, which will bring its members' ISDA Master Agreements with multiple counterparties into compliance.

According to ISDA, by early December 2012, it had received only 17.5 per cent of adherence letters from market participants, with less than 1 per cent having answered and submitted necessary questionnaires.

Pursuing implementation by 1 January 2013, ISDA argued, would have resulted in swap dealers and major swap participants having to stop dealing with counterparties and would have caused major disruption in the markets.

In another part of the Act, changes have been made so that the requirement for swap dealers and major swap participants to agree on the process for reaching the value of a swap before executing a transaction is now scheduled for commencement on 1 July 2013.

Also recently moved is the 'swap push-out' rule, which has been delayed from 16 July 2013 until 16 July 2015, making the implementation of Dodd-Frank a longer road yet.

Under that rule, dealer banks will be required to 'push out' all their swap activities that are not

On the exchange front, new operations have emerged that will change the face of the industry

conforming swap activities into a separate entity, which will not be eligible for Federal assistance. This does not include using swaps for hedging or risk mitigation or dealing activities that relate to interest-rate swaps, FX swaps and cleared credit default swaps.

Nevertheless, swap dealers and futures commission merchants will be required to officially register, giving the government authority to oversee the industry in a unprecedented fashion.

Further delays

According to law firm Davis Polk, the tasks required for compliance by swap dealers and major swap participants are greatest on the operations front, which the firm counts as comprising 1,181 tasks. This is followed by legal, 949 tasks; technology, 742 tasks; business/trading 640; and lastly records, 414 tasks.

On the exchange front, throughout 2012, new operations have emerged that will change the face of the industry. Infrastructures have been busily set up to deal with what will surely be unprecedented volumes of exchange traded and cleared derivatives, which had previously been bilaterally negotiated over-the-counter transactions.

Once set for 2011, the implementation of mandatory exchange trading, clearing, margining and reporting is now due to take effect in the second quarter of 2013.

"We are going to see exchange volumes raised," says Holland West, a New York-based partner at law firm Dechert LLP. "The industry is going to expand like never before, by way of new exchanges and the volumes of futures transactions they process."

In another piece of related legislation, the Volcker Rule continues to be debated. With the Rule requiring complex editing and final completion needing approval by five government agencies, the speculated timeframe of late 2012 has also been pushed back.

The proposal was expected to be submitted to Congress in the first quarter of 2013, depending on other priorities. The Volcker rule places limits on banks' ability to trade speculatively for their own gain. One of the biggest sticking points of the rule relates to core client functions, such as the use of derivatives to hedge against swings in interest rates for corporate clients.

Also on the minds of those watching Dodd-Frank is the requirement for commodity pool operators (CPOs) and commodity trading advisors (CTAs) to register with the CFTC to the extent that they trade commodity interests that include swaps.

According to Holland West, 2012 saw CPOs and CTAs getting their compliance infrastructure and registrations earnestly in order to be effective, starting January 2013.

"While this is not strictly addressed in Dodd-Frank, it is among the most significant events of the past year. Some parts will have as late as the third quarter of 2013 to register, but many people, including mutual funds, were required to register as CPOs or CTAs on January 1," says West.

With many deadlines to be met in 2013, and others beyond, the road to Dodd-Frank is still being navigated and will likely see still more changes. ■

Small steps, giant leaps

Re-shaping OTC markets into a cleared environment with minimal exceptions has been a major task involving sweeping oversight, detailed rules and international co-ordination. By **Tim Aron**, a partner at Katten Muchin Rosenman UK LLP and **Nathaniel W. Lalone**, senior associate at Katten Muchin Rosenman UK LLP

In 2009 – when the idea of clearing over-the-counter (OTC) derivative contracts was just a twinkle in a G20 minister's eye – few could have predicted the legislative and economic burden that attempts to implement the proposal would have on both sides of the Atlantic.

The methods of imposing mandatory clearing in the US and EU have now been finalised and, in the case of the US, have also been put into practice. The wider repercussions of mandatory clearing for the swaps markets are also becoming apparent.

The road to mandatory clearing

In the USA, section 2(h)(2) of the Commodity Exchange Act and the implementing regulations of the Commodity Futures Trading Commission (CFTC) generally adopt a bottom-up approach whereby a derivatives clearing organisation (DCO) must submit any swap (or group, category or type of swap) it anticipates accepting for clearing to the CFTC for a mandatory clearing determination. The CFTC also has the authority to take a top-down approach and subject a swap that is not otherwise accepted for clearing by a DCO to mandatory clearing.

Each DCO swap submission is made available for public comment and the CFTC has 90 days to assess the submission against a set of predefined criteria, including the DCO's operational expertise and credit arrangements as well as trading liquidity and adequacy of pricing data for the swap. The DCO must also be eligible to clear the submitted swap or group, category or type of swap.

The CFTC has established a phased implementation schedule for compliance with a mandatory clearing determination, where Category 1 entities, i.e., swap dealers, major swap participants and certain funds that trade actively in swaps, must comply within 90 days of the CFTC's determination, whereas Category 2 and Category 3 entities will have 180 and 270 days to comply, respectively. Counterparties that qualify for the end-user exemption for clearing are not

subject to the mandatory clearing requirement.

In fact, mandatory clearing for swaps has become a reality in the United States. On 13 December 2012, the CFTC issued its first mandatory clearing determination in respect of North American untranched credit default swap (CDS) index contracts and European untranched CDS index contracts, as well as to fixed-to-floating rate swaps, basis swaps, overnight index swaps and forward rate agreements on certain common indices. It is expected that the foregoing swaps between Category 1 entities entered into on or after 1 March 2013 will be required to be cleared through a registered DCO.

The European approach

In Europe the route and timescale to clearing is somewhat different. A consultation conducted by the European Securities and Markets Authority (ESMA) is necessary before a class of over-the-counter (OTC) derivative products becomes subject to mandatory clearing.

The trigger for the consultation will either be: (1) a national regulator informing ESMA that a clearing organisation in its jurisdiction is clearing a particular class of contracts (the bottom-up approach); or (2) ESMA taking the view that a class of contracts may pose a particular risk and may therefore need to be cleared (the top-down approach).

Under the top-down approach ESMA is also required to consult the European Systemic Risk Board and, where appropriate, national regulators, before notifying the European Commission of the classes of derivatives that should be required to be cleared. Having notified the Commission, ESMA is then required to publish a call for a development of proposals for the clearing of those classes of derivatives.

The bottom-up consultations are likely to begin in late 2013 when member states have completed the necessary re-authorisation of clearing organisations in their jurisdictions. The mandatory clearing obligation for some contracts is therefore likely to start in late 2013 or early 2014.

Mandatory clearing is but one of the major reforms affecting the swaps markets and further clearing-related challenges are just over the horizon

Financial counterparties, non-financial counterparties and even entities established outside the EU that trade OTC derivatives should by now be carrying out the necessary analysis to see if they will be in scope in the event that ESMA decides the contracts they trade must be cleared.

If any such counterparties are in scope, and the contracts they trade are likely to be declared subject to mandatory clearing, these counterparties must enter into appropriate clearing arrangements in order to carry on trading once mandatory clearing begins.

Wider implications

Implementation of mandatory clearing for swaps has either signalled or been accompanied by a variety of changes to the regulation and structure of the trans-Atlantic swaps markets. For example:

- Mandatory clearing determinations have a cross-border dimension and may require compliance by swaps market participants in other jurisdictions. For example, non-US counterparties are likely to be affected by the CFTC's recent mandatory clearing determination and must consider the resulting costs and compliance obligations, which may lead some non-US market participants to adjust their swaps activities to minimise the impact of the CFTC's mandatory clearing requirements on their business.
- Reporting cleared and non-cleared swaps to trade repositories is meant to give regulators unprecedented insights into the swaps market. However, the experience of implementing real-time and swap data reporting in the US has been characterised by delays and special carve-outs for certain products due to ongoing operational challenges, which suggests that regulators may ultimately have a less than complete overview of the overall swaps market.
- Oversight of clearing organisations is becoming increasingly internationalised. Many large clearing organisations are now subject to regulation in multiple jurisdictions, which requires greater co-operation between national regulators but also increases the complexity of the regulatory and compliance burden for the clearing organisation and its clearing members. In addition, authorisation and supervision of European clearing organisations is becoming the shared responsibility of, among others, central banks, the national regulators of the trading platforms served by the clearing house and ESMA.
- In the EU, the use of regulations that have direct effect in all member states is likely to be used much more frequently for financial markets legislation in the future and may herald the advent of a single European rule-book. Regulations are often drafted in a somewhat ambiguous manner, which may induce regulated entities to seek more frequent dialogue with national regulators as to how the regulators are interpreting EU law.

Mandatory clearing is but one of the major reforms affecting the swaps markets and further clearing-related challenges are just over the horizon, in particular mandatory trading of swaps subject to mandatory clearing, as well as the regulatory capital treatment of bank exposures to clearing organisations. ■

Enforcing the new regime

New regulations are spawning a large and complex body of rule-makers and enforcers, but will their proliferation produce clarity or confusion? By **Robert Finney**

The European Market Infrastructure Regulation (EMIR) takes the form of a regulation rather than a directive, so it has direct effect in EU Member States. There is no need for each Member State to legislate in order for EMIR's substantive provisions to have effect.

However, EMIR places several responsibilities on Member States and their regulators, in relation to penalties and the authorisation and supervision

of central counterparties (CCPs), for example. In addition, some Member States such as the UK are making consequential adjustments to existing regulation, including removal of inconsistencies which could cause uncertainty.

The Financial Services Authority's (FSA's) investigation and enforcement powers are being broadened (to cover non-financial counterparties, for example) and the regime for regulating clearing houses is being changed by HM Treasury and the FSA.

Most of EMIR's substantive provisions depend upon the European Commission adopting regulations, and this process is not yet complete – on 19 December 2012 the Commission adopted six regulatory technical standards (RTS) and three implementing technical standards (ITS) developed by the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA).

At the time of writing (January 2013), these had been expected to enter into force in late February or March 2013, after which registration of trade repositories (TRs) and authorisation of CCPs (and recognition of third-country equivalents) could start.

On this basis, while the first TR could be registered in April 2013, it is likely to be early 2014 before the first clearing house is authorised as an EMIR CCP. Hence reporting of interest and credit derivatives may begin mid-2013 (with derivatives on other asset classes reportable from January 2014), but the mandatory clearing obligation is unlikely to apply to any derivatives until mid-2014.

However, the European Parliament may reject some of the RTS, leading to a delay of several months while changes are made. Furthermore, several sets of standards required by EMIR have not yet been drafted, such as:

- RTS on detailed risk mitigation standards for non-cleared OTC derivatives (notably on capital and collateral requirements and intra-group exemptions) and on extra-territoriality, i.e. which contracts between non-EU parties have a "direct, substantial and foreseeable effect" within the EU or should be subject to the clearing obligation to prevent "evasion" of EMIR; and
- ITS determining equivalence, i.e. which third-country legal and supervisory arrangements for derivatives reporting, clearing, TRs and CCPs are equivalent to the requirements under EMIR.

Most of EMIR's substantive provisions depend upon the European Commission adopting regulations, and this process is not yet complete

The European System of Financial Supervision

The European System of Financial Supervision (ESFS) will apply to EMIR. The ESFS was introduced in 2011 to address weaknesses in the European supervisory framework revealed by the financial crisis, and comprises ESMA and the two other European Supervisory Authorities (ESAs), the European Systemic Risk Board (ESRB), a joint committee of ESAs to deal with cross-sectoral issues, such as financial conglomerates, risk transfer and contagion, and the national supervisors (competent authorities) of the 27 Member States.

All of these have roles under EMIR. The ESRB, for example, must be consulted on various issues relating to the clearing obligation, clearing thresholds, margin and collateral, and interoperability.

The three ESAs are jointly developing the risk mitigation standards mentioned above, but these have been delayed pending the results of a Basel Committee/IOSCO consultation on margin requirements for non-centrally cleared derivatives, which closed in September 2012.

National supervisors such as the FSA in the UK are generally responsible for supervision and enforcement in their respective Member States, but are allocated some specific roles in the authorisation and supervision of CCPs and in handling exemption notifications and applications (such as intra-group exemptions from margin and clearing requirements).

Member States had until February 2013 to notify the Commission of their rules on penalties applicable to breach of EMIR's reporting, risk mitigation and clearing obligation provisions. Importantly, EMIR expressly provides that breach of those provisions "shall not affect the validity of an OTC derivative contract or the possibility for the parties to enforce the provisions of an OTC derivative contract."

Member states must also have in place effective powers to investigate and enforce against CCPs.

ESMA has various responsibilities under EMIR beyond developing technical standards for the Commission. Although it will authorise and supervise TRs, it may delegate tasks to national authorities. ESMA will also be involved in co-ordinating Member State competent authorities, negotiating co-operation agreements with non-EEA regulators and, together with relevant competent authorities, in the supervisory "college" required for each CCP.

Power to recognise third-country (i.e. non-EEA) CCPs and TRs is reserved for ESMA. ESMA can impose fines, withdraw authorisation and take other enforcement action against TRs: appeal lies with ESMA's Board of Appeal, the European Court of Justice or even national courts, depending on the type of enforcement action and grounds of appeal.

In addition to specific powers under EMIR, ESMA's powers under the Omnibus Directive and the

regulation establishing ESMA will be important in applying EMIR. For example, ESMA can issue recommendations and guidelines to establish consistent, supervisory practices across the EU and deal with cases where a supervisor is incorrectly applying EMIR.

Accountability

The ESAs such as ESMA are constitutionally independent but report to all three of the EU's main legislative institutions, namely the Council of Ministers, European Parliament and especially the Commission.

The Commission has a key role under EMIR in adopting the RTS and ITS, but has only very limited accountability to the European Parliament. However, its discretion to change the RTS and ITS drafted by ESMA is limited in practice, while the Council and Parliament have powers to reject RTS adopted by the Commission.

Grey areas

Although it comprises 56 pages of small print, EMIR left many questions unanswered. Many of these have been resolved by the 170-plus pages of regulations (RTS and ITS) adopted by the Commission last December.

However, numerous uncertainties remain, not least in areas where technical standards remain outstanding. In practice, there remain serious questions to be resolved on almost every aspect of the reforms, for example:

- Reporting: how can the EMIR ITS on trade reports be applied to exchange-traded derivatives (ETD) – an FOA-sponsored exercise on this is underway (see page 40) – and when will TRs be available?
- CCPs: will these institutions be (or become) too big to fail and too big to rescue, and how will the development of CCP resolution regimes impact the risks to which members and other market participants are exposed?
- Clearing: how will segregation and porting provisions work in practice, given the diverse insolvency laws across the EU and beyond (e.g. in other countries where there are clearing members and market participants)?
- Documentation: what changes are required to OTC derivatives and ETD client and counterparty documentation?
- Risk mitigation: what steps should parties be taking to observe the requirements in EMIR that are already in effect, and what capital and margin requirements will the RTS impose?
- Collateral: how broad a range of assets will be eligible as collateral, and will sufficient be available?
- Impact: how will the changes to the economics and requirements of derivatives dealing and clearing impact the market and the availability of hedging instruments to corporates and other users of derivatives?

Regulators are alive to the potential conflicts, inconsistencies and duplication within the rules they have adopted or are contemplating

Ever since G20 leaders agreed on OTC derivatives market reform in 2009, international issues have generated considerable heat, but so far little light. In all the areas mentioned above there are key issues on how the regimes implemented in different jurisdictions will interact.

Discussion has tended to focus on the US and EU. But the problems go well beyond the Dodd-Frank Act and EMIR given that many other jurisdictions, from Australia to Switzerland, are adopting regulations to effect the high-level principles agreed at Pittsburgh.

The issues are not limited to cross-border transactions. They can arise, for example, where a foreign branch or subsidiary is subject to regulations applicable to its headquarters or parent, or where a transaction between parties in one jurisdiction relates to an asset or risk most closely connected with another.

Fixed timetable

Regulators are alive to the potential conflicts, inconsistencies and duplication within the rules they have adopted or are contemplating. In December 2012, responsible authorities from the EU, US, Australia, Brazil, Canada, Hong Kong, Singapore and Switzerland agreed operating principles to resolve these.

Through "no action" letters, development of the concept of "substituted compliance" and holding back on finalising its proposed *Interpretative Guidance on the Extraterritorial Reach of Title VII of the Dodd-Frank Act*, the CFTC has already made a material contribution to this process while other jurisdictions finalise their rules.

We can look forward to some substantial harmonisation of requirements, but must accept that significant differences will remain.

EMIR and the Level 2 regulations set a timetable that is difficult to change – the US "no action" letter approach is generally unknown in Europe. While many firms are well advanced in their planning for the new derivatives regulatory regime, some have barely begun.

Regulators accept that continuing uncertainty makes planning more difficult, and are likely to show some initial leniency on enforcement. But they have emphasised that this goodwill may not extend to counterparties that have been slow to prepare. ■

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Asia treads carefully

Although not large players in OTC markets, Asian countries do not want their potential to be dampened by blind acceptance of US and EU regulations. By **Jeremy Grant**

For anyone interested in how Asia is likely to be affected by the wave of regulatory reform sweeping in from the US and Europe, one of the first signs came at a derivatives conference in Singapore in October last year.

Speaking on a panel at the International Swaps and Derivatives Association's (ISDA's) annual Asia Pacific conference, Tse Chiong Thio, managing director at DBS Bank, said his bank saw no "immediate commercial benefit" in registering with US regulators to become a swaps dealer. It was the first sign – in public, at least – of the chilling effect that the Dodd-Frank swap registration rules are having on Asia-based players.

Effectively, Southeast Asia's biggest bank was saying it simply wasn't worth the investment needed to register with the Commodity Futures Trading Commission (CFTC) to be able to trade swaps with a US counterparty.

Parties must register if they hit a threshold of US$8bn in the value of trades over a 12-month period, triggering a swathe of compliance and reporting requirements. Admittedly DBS is not a big swaps trader. It does not trade much with US counterparties – or "US persons", in CFTC parlance. But given the perceived onerous reporting and other compliance requirements in Dodd-Frank, the message was clear: no thanks.

An important part of the jigsaw

Asia may only make up about 8 per cent of the $648tn in notional value traded in the over-the-counter (OTC) derivatives market. But this should grow as the region's fast-growing economies create an appetite for risk management and hedging.

At the same time, jurisdictions in Asia – notably Japan, Hong Kong, Singapore, Australia and Hong Kong – are working on their own rules to enable them to comply with the G20 mandate on OTC derivatives reform.

So while it may seem that the clean-up of the financial system in the wake of the 2008 crisis is rooted in the wave of regulations being implemented in the US and Europe, Asia is becoming an increasingly important part of the jigsaw.

Yet as the DBS case shows, there is already considerable disquiet in the region over the perceived onerous burdens associated with Dodd-Frank, and of the extra-territorial nature of how it would be applied under CFTC rulemakings.

At the Futures Industry Association's annual Asia derivatives conference in Singapore in November, Jacqueline Low, ISDA's senior counsel for Asia, said regional members were trying to avoid having to register as swap dealers.

Instead, they were booking swaps business through the London branch of US banks, rather than the head office, to avoid being snagged by the CFTC's "US person" definition.

Ananda Radhakrishman, the CFTC's director of the division of clearing and risk – speaking with the standard US regulatory disclaimer that his view did not reflect official CFTC thinking – said that while he understood foreign concerns, his agency had little choice but to obey the Dodd-Frank statute and thus had limited room for manoeuvre.

Small wonder that Asian regulators are stirring into action. In August, four of them took the unprecedented step of writing to the CFTC saying that lack of clarity on the rules meant their banks would be forced to comply with two sets of "overlapping and conflicting" regulations in the US and in their home country.

The letter was signed by the Monetary Authority of Singapore, Hong Kong Monetary Authority (HKMA), Hong Kong's Securities and Futures Commission, the Australian Securities and Investments Commission and the Reserve Bank of Australia.

What's behind this is a fundamental dilemma: how Asian jurisdictions should reconcile complying with the G20 mandate on greater trading of OTC derivatives, more clearing and ensuring that counterparties report transactions to bodies like trade repositories – much of it driven by the US – with a need to nurture their own nascent OTC derivatives markets.

Asian jurisdictions see an opportunity to grab a piece of the OTC derivatives business as its capital markets mature. That also means they are determined to prevent any added regulatory burdens coming from the US, potentially adding to costs.

Asian jurisdictions see an opportunity to grab a piece of the OTC derivatives business as its capital markets mature

Infrastructure building

Already plenty of work is underway in the region in building market infrastructure.

Japan started clearing yen-denominated interest rate swaps in October while Hong Kong Exchanges & Clearing has hired Calypso Technology of the US to provide a clearing and risk management platform for a planned OTC clearing service.

The HKMA and the territory's markets regulator in July published a proposed regulatory regime for Hong Kong's OTC derivatives market.

South Korea's markets regulator is to decide when mandatory clearing should start, probably early this year. In the meantime Korea Exchange is building a clearing system "and doing interface tests with clearing members". The exchange is set to finalise clearing member rules early this year.

Singapore has said there will be mandatory clearing and reporting of OTC swaps, but further consultation is underway to deal with exemptions and how non-members of a central counterparty (CCP) will handle clearing.

Facilities for trade reporting are emerging too. The Depository Trust & Clearing Corporation, the US post-trade group, has just established a data centre in Singapore. That would be a precursor to the approval of the regulator of a trade repository, which could come by the third quarter.

Yet market participants still fret about the possibility that initiatives may lead to fragmentation of market infrastructure, creating uncertainty about what and where to clear. It could also, ISDA believes, undermine the usefulness of netting if firms are forced to break up "netting sets" to deal with conflicting regulatory demands in different jurisdictions.

HKMA, at least, has taken note, and in July 2012 said it had decided, after industry consultation, not to require that OTC derivatives of systemic importance to Hong Kong be cleared at a CCP in Hong Kong. Hong Kong is expected by the first quarter to have passed its "framework legislation" giving some detail on the licensing regime and requirements to meet its G20 commitments on clearing.

The Australian Securities and Investments Commission (ASIC) believes there are "strong in-principle benefits" from participants in the domestic OTC derivatives market making greater use of centralised infrastructure, such as trade repositories, CCPs and trading platforms. But it recognises that the suitability of using centralised infrastructure "will not be the same for all products and participants".

Smooth transition

Singapore has taken arguably the most nuanced approach so far, meeting the clearing mandate but stopping short of requiring that swaps be traded on electronic platforms. There are signs that the Monetary Authority of Singapore may exempt foreign exchange from clearing too.

"They've taken a very flexible approach and are very mindful of the extra-territorial aspects of the global OTC reforms and how the Singapore version integrates globally," says Paul Landless, counsel at Clifford Chance in Singapore.

Loo Siew Yee, executive director in the capital markets department at the Monetary Authority of Singapore, says: "The challenge is that rules are made by national regulators. How do you translate them in a way that does not bring about unintended consequences?

What we'd like is to bring about a smooth transition in how the rules are implemented." ■

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Bringing OTC into the fold

Moves to bring OTC derivative markets onto trading venues signal upheaval for market participants and a new competitive execution platform landscape. By **John Beck**

Also in this section:

The wider implications of OTC clearing remain unclear **P.32**

The lack of harmonisation between regional CCP regulation **P.34**

How will regulation impact directly on trade repositories? **P.38**

More than three years after the leaders of the G20 nations pledged to shift trading on the much-maligned OTC derivatives markets onto exchanges or electronic platforms, the new market structure is finally starting to take shape.

Competition has already heated up in the listed derivatives space, with trading platforms that once focused exclusively on equities, such as Turquoise or NASDAQ OMX, beginning, or planning, to make their presence felt as margins in their base markets grow perilously thin. Interdealer brokers are getting in on the act too – ICAP recently purchased RIE assets from London's PLUS Markets Group as a platform to expand its futures and options trading operations.

But the upheaval is only just beginning. Two more additions to the alphabet soup of trading venues are set to be introduced as a result of the G20 agreement.

In the US, Dodd-Frank will require standardised over-the-counter (OTC) derivatives to be traded on a swap execution facility (SEF), while equivalent European regulation would see such trades migrate to less specialised organised trading facilities (OTFs).

Platform modifications

The US is leading the way in implementation, and while some SEF rules are yet to be fully finalised by the Commodity Futures Trading Commission (CFTC), numerous parties have expressed an interest in applying for the new designation.

Both in the US and Europe, a likely trend is for the larger incumbents, particularly those already active in interest rate markets, to extend their platforms to fit the new contracts, says Tom Riesack, a managing principal at Capco. He adds that firms such as Bloomberg will also be well placed to fill this role, particularly as the ubiquitous nature of its terminals would make accessing new functionality easy for users.

And indeed, the data and technology giant has begun to modify its ALLQ derivatives platform to support SEF type trading; registering swap dealers and connecting to clearing houses, says George Harrington, global head of Bloomberg's fixed-income business.

"We expect to have finalised SEF rules in the first quarter of 2013 and after a 90-day implementation period, roll out Bloomberg's SEF sometime in the second quarter."

Safety first

Less familiar players are expected too. However, unlike the equities world, new SEFs and OTFs may find the odds rather stacked against them.

The Markets in Financial Instruments Directive (MiFID) in Europe and Regulation NMS in the US unleashed a flurry of fragmentation because the larger exchanges were exposed to competition from nimbler, cheaper and more technologically advanced upstarts.

Unlike the breakneck world of equities, speed will not always be of the highest concern. Rather, says Riesack, market participants are

likely to value qualities retained by established firms.

"From my point of view the incumbents are better suited to taking the OTC world on to a platform. Not because they have the better technology, but because they have been in the market longer and I think people will try to go to places where they feel safe to perform these transactions."

Support essential

TABB Group research suggests that while the number of SEFs that initially join the market could be high, this could fall to 3-4 in each asset class. Liquidity will be the toughest obstacle for new players attempting to establish themselves, says TABB senior analyst Paul Rowady, and the support of dealers and their clients to make and take prices will be essential.

This may not be easily won, he adds, particularly as market complexity increases.

"The sense I'm getting from those who trade and operate around swaps and derivative markets is that they're so overwhelmed with various initiatives related to regulation and market structure transformation etc… that if there's any way to introduce a modicum of simplicity – such as consolidating round a shorter list of execution venues – then they'll do it."

Given that, even at the best of times, adoption of new products and platforms tends not to happen overnight, failure to accumulate sufficient liquidity to maintain the business could quickly prove fatal for new entrants, particularly as a start-up will require significant investment in systems and connectivity to banks and clearing houses.

New platforms entering into the swaps market will have to navigate regulatory changes at the same time as building liquidity, which will be challenging

Fighting talk

Existing venues certainly appear to be confident that they will have the upper hand: "New platforms entering into the swaps market will have to navigate regulatory changes at the same time as building liquidity, which will be extremely challenging for them," says Jodi Burns, senior director, head of market analysis and development with FXall – which intends to file for SEF status as soon as rules are finalised.

"FXall has been around for 12 years, we have built our network, we have liquidity on our platform, we have reliable technology and we're already embedded in the workflows of our clients."

The larger venues may also be favoured by users looking to offset margin requirements, something more easily accomplished on a platform which allows a broad spectrum of instruments as opposed to a thin vertical.

"I think, primarily, these incumbents will persist because they have greater ability to expand their product offerings to outflank any new entrants," says Rowady.

That is not to say, however, that there will not be any new players. Certainly, Harrington expects the competitive landscape to heat up. "In the electronic client to dealer trading space today, Bloomberg competes with the likes of Tradeweb, MarketAxess, as well as other players that are new entrants to the space, such as Eris.

"These are some of the names that are likely to be working in the SEF space."

He adds that the interdealer broker community will be a major new source of competition, as the worlds of client dealer trading and interdealer trading combine.

ICAP certainly plans to prosper in the new world of derivatives trading. Chris Ferreri, managing director with ICAP North America, says the firm's objective is to become top two in every market in which it operates, adding that given its sheer size and breadth of products, it is well placed to compete.

"ICAP has a unique position in its diversity of products. We have platforms for all of the key products that are going to be part of the SEF world, and which we feel will be competitive and meet the regulatory requirements."

There is, then, fighting talk from all sides, and while exactly how the best laid regulatory plans will ultimately pan out is yet unclear, the one thing which is inevitable is change, and, most likely, a tough ride for all concerned. ■

Legislated demand: An exciting era of change

Ed Pla is managing director and global head of FX prime brokerage and clearing at UBS.

Ongoing innovation and change

New OTC regulations are driving a period of change that will last for some time. Buy-side clients and their service providers are working together to understand the impact on their businesses and service relationships, and are adapting as needed.

Indeed, a great deal of structural change has already been achieved, such as swap dealer registrations, ISDA amendments and the introduction of trade reporting. But with many new regulations yet to be phased in, much preparatory work is still underway.

For example, sell-side service providers are allocating significant resources to design and deploy FX client clearing capabilities complementary to current listed and OTC derivatives clearing services.

When possible, existing platforms and processes are adapting – adding new functionality, new connectivity and new post-trade workflows. "Futurisation," or the introduction of new swap-type products such as exchange-listed futures, is gathering momentum. Planning for and delivering these new capabilities requires a delicate balance of ever-evolving regulatory imperatives, industry initiatives and client requirements.

The risk management 'waterfall'

The impact will extend beyond the initial operational setup and testing. The distinguishing feature of derivative clearing – the novation of multilateral counterparty transactions to a single central counterparty – requires collateralising positions through the payment of initial margin. This margin becomes part of a risk management 'waterfall', which is fundamental to the concept of 'mutualised risk' – another defining characteristic of a central counterparty (CCP).

Such standards for the framework of counterparty risk management serve the greater good, but margin payments (in cash or government securities) may create a drag on performance for the buy-side. This opportunity cost will need to be factored into the decision process in the use of OTC derivatives.

The role of the financial intermediary

Some clearing brokers are developing intermediary services such as 'collateral transformation' whereby clients can exchange ineligible securities for the cash or government securities CCPs typically require for initial margin. As a client's gateway into a CCP, clearing brokers function as conduits for initial and variation margin and guarantee a client's performance on their cleared derivative contracts. The clearing broker must also contribute substantial funds to a mutualised default fund and participate in any default management proceedings at the CCP. These essential elements of the client clearing offering will incur capital charges from regulators in direct proportion to the degree of risk taken.

While many participants are currently focused on the new technology and process-related components of new OTC clearing services, it is important to realise that client clearing is fundamentally a risk management business. Clearing brokers must maintain and evolve their tools and techniques for monitoring and managing the risk they are underwriting.

Increased choice, increased complexity

The original G20 imperatives dating back to late 2009, requiring mandatory exchange trading, clearing, trade reporting and margin on cleared and un-cleared swaps, were a catalyst for a number of new services and service providers.

As a result, client choice has and will likely continue to increase. But with choice comes complexity.

What the derivatives market is experiencing now is analogous to the structural shift that occurred 10-15 years ago in electronic FX trading, when single-dealer platforms, multi-dealer portals and ECNs began to emerge. We saw then a similar level of excitement and change as the market evolved toward a new state of equilibrium between voice and electronic execution.

Service providers must offer the buy-side that all-important bridge to the new environment

However, there are two major differences between now and then. First, today's changes are responding to regulation, rather than the forces of client demand, competition and innovation. Second, the adoption of new services such as clearing and SEF trading is mandatory for many and will have deadlines. So while market participants previously had the luxury of gradually adjusting to each round of change, today's looming regulatory deadlines create a more compressed timeline – a kind of legislated intensity.

Service providers must offer the buy-side that all-important bridge to the new environment. It is a commitment that we at UBS take quite seriously: to be at the forefront of innovation and reduce complexity for our clients throughout this exciting era of change.

UBS

Clearing set to re-shape derivative markets

Three years after G20 Pittsburgh the wider implications of OTC clearing remain unclear, and may not be fully understood for years to come. By **David Wigan**

Central clearing of interest swaps, credit default swaps and other instruments in the $650 trillion over-the-counter swaps markets is already underway, with as much as 70 percent of some products already cleared. Many banks have also completed back loading of years of transactions. However, the dealer to client space remains relatively untouched, with one issue in particular dampening enthusiasm – the cost.

From building new IT infrastructure, to initial and variation margins, capital charges and default funds, there is universal agreement that the costs of moving to cleared over-the-counter (OTC) are huge.

As the market moves away from the bilateral prime broker model, in which banks were able to offset counterparty credit risk with higher value business, the cost of collateral in particular is likely to rocket, and by some estimates will add $2-6 trillion in costs to the derivatives business in the coming years.

"Multiple CCPs [central counterparties] means a loss of netting and the use of collateral in this business is going to be intense," says Darrell Duffie, Dean Witter distinguished professor of finance at the Graduate School of Business, Stanford University. "Prices will adjust and the likely result is that the derivatives market will shrink as it becomes economically less viable."

Banks are likely to be required to take on a large part of the additional cost burden, but few senior bankers envisage a situation in which they will subsidise clients to any great extent. "Regulatory change is pushing costs higher, so it's inevitable that clients will have to weigh up whether certain trades are cost effective," said Hester Serafini, global co-head of OTC clearing at JP Morgan.

"The potential impact is difficult to measure but certainly for some clients, it may be cheaper to use some other instrument which gets them part of the way to the hedge they wanted to choose. Alternatively they may not hedge at all."

One segment likely to benefit from increased costs of clearing is exchanges, and several in recent months have moved to take advantage, launching swap look-a-like futures products aimed at leaching market share away from the OTC space. In a recent example, the CME in December launched listed USD Interest Rate Swap futures for trading on CME Globex, the collateral costs of which are substantially lower than anything on the OTC market.

Weighing the options

As clients consider their alternatives, dealers are weighing whether it is worth maintaining an OTC derivatives business, which incidentally brings additional higher capital charges and funding costs to uncleared trades, or to just drop the whole thing.

"Given the capital and funding requirements, whether in the cleared or uncleared space, and the dramatic changes in trading infrastructure, banks will be compelled to reassess their offering in the derivatives market," said John Wilson, former managing director and global head, OTC clearing, RBS Global Banking & Markets. "As we saw with UBS, it may lead to decisions to exit or downsize services."

Certainly the new orthodoxy is that if clearing is to work, it must be seen as a standalone, profitable business, a move to some extent mandated under regulatory guidelines such as the Commodity Futures Trading Commission (CFTC) rules on conflicts of interest, which came into force in July 2012.

"The regulations require that clearing and trading in the OTC market must be separated, and that you cannot let one influence the other and, given the size of the commitment required for clearing, banks are looking at it more as a business that needs to be profitable in its own right," says JP Morgan's Serafini. "I would not be surprised if, at the end of day, only the bigger banks remain offering these products."

For those institutions which survive the likely shake out, one area of potential opportunity is in collateral transformation

While it may be a relatively linear cost decision as to whether banks should become members of CCPs, a complication is the potential impact on other parts of the business, and in particular execution and trading, mandated to be conducted on electronic trading platforms under MiFID in Europe and Dodd-Frank in the US.

Under the old prime brokerage model, banks provided a bundle of services to clients and would expect to be rewarded with execution business, the wheels being oiled by the bank's balance sheet. Much of that business is now constrained by own-capital trading restrictions under the US Volcker rule and related legislation. In addition, in an electronically traded universe, clients will transact with anonymous counterparties on venues that have little or no connection with their dedicated dealer platforms.

Still, the question remains for banks as to what extent an absence from clearing may have an impact on those parts of the execution business, for example in non-standard derivatives or block trades, not already lost to independent facilities. There is also a host of additional services to consider, from research to post-trading processing to related commercial activities.

"The issue is how the client sees the clearing broker, but certainly it would make sense that if you clear through a particular bank then you are more likely to execute and do other things through them," said Gavin Dixon, head of market initiatives & OTC clearing at BNP Paribas Group. "Banks will be concerned that if they don't clear, execution will start to shrink."

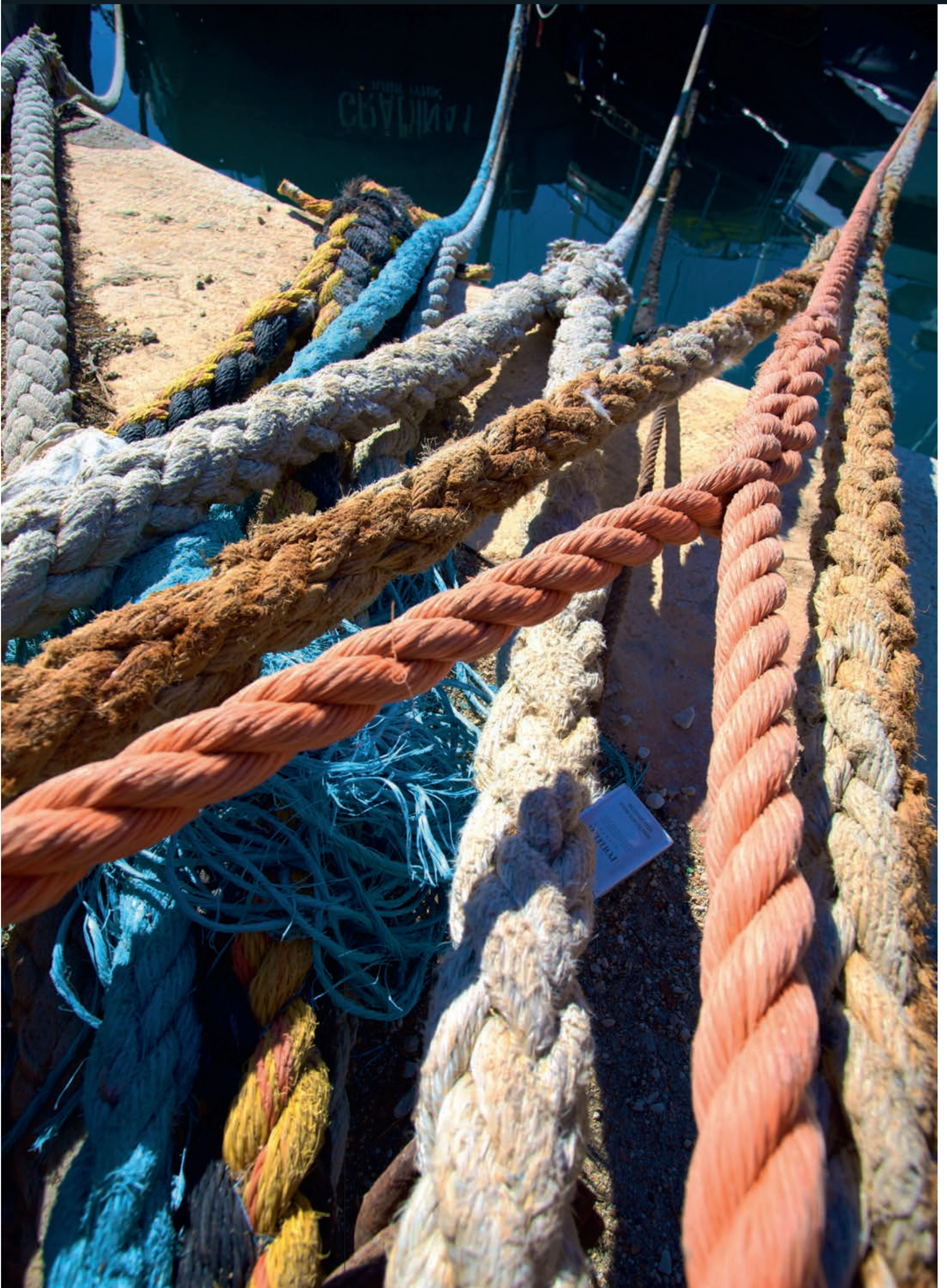
Collateral transformation

Under the bilaterally cleared system clients have relationships with up to 30 counterparties. In a cleared world, they are likely to have relationships perhaps with five clearing members, so the risks to banks are manifest.

For those institutions which survive the likely shake out, one area of potential opportunity is in collateral transformation. With asset managers and pension funds unlikely to carry sufficient cash in funds to pay CCP margin requirements, banks can offer repo-style conversion of equities or government bonds into cash. However, even this seeming silver lining is not without its potential downside.

"Collateral transformation looks like a great business opportunity, but could present a problem if you have an extreme event and its application isn't risk-managed properly," said JP Morgan's Serafini. "Our main concern is that it provides short-term financing against what may be a long-term OTC swap contract. If you get an extreme event, short-term financing is likely to disappear and in addition you are going to see huge jumps in collateral requirements, even when positions remain unchanged. Both could lead to funds being forced to close out positions." It could get very messy.

In the wider context of central clearing, market participants are faced with a difficult choice; become a hostage to fortune now or risk missing the boat in the future. ■



New CCP rules need international cohesion

The G20 signalled central counterparties were the solution to the problems of over-the-counter markets, but a lack of harmony in new regulations may thwart this ambition. By **Roger Barton**

The world of central counterparties (CCPs) and clearing houses was changed the moment the G20 determined that they should be used to clear all standardised OTC derivatives.

The logic is clear: CCPs provide a formalised, structured and centralised approach to risk management, provide netting benefits and simplify an otherwise complex web of multi-party exposures. They have the ability to reduce uncertainty and contagion, and to mutualise default defences. And their track record is excellent. So it was agreed.

This commitment, intended to be implemented by the end of last year, has thrust the techniques, safeguards and stability of CCPs into the global spotlight. What was previously regarded by many as a somewhat arcane, albeit important, backwater has received substantially greater scrutiny from a wide range of market participants and, of course, regulatory authorities.

CCPs are now widely acknowledged as seriously systemically important. In many cases they were previously, but in a low-key manner. Regulatory authorities have been busy setting out comprehensive and often quite prescriptive standards, principles and regulations for CCPs – regionally and globally. In many cases, these provisions have been extended to listed as well as OTC derivatives.

This new raft of regulations and standards relates to all aspects of CCPs' business. Four stand out:

- Capital requirements, both for CCPs and for users of CCPs, have been reviewed and increased substantially.
- Standards relating to margin and default fund requirements have been set out.
- Liquidity arrangements, operational practices, governance, testing, segregation controls, and a range of other practices have been scrutinised and standards set.
- And finally, each CCP is expected to have in place formalised recovery plans, which will form a backstop in the event of an extreme (but plausible) default scenario occurring which breaches a CCP's other defences. And as a backstop to this backstop, each jurisdiction is expected to put in place 'resolution' arrangements to come into effect in a catastrophe scenario where even recovery arrangements are not effective.

These arrangements will increase the resilience of CCPs and in turn the financial system as a whole. Furthermore they will result in a substantial increase in the range and depth of documentation available relating to CCP practices, allowing participants to perform their own assessments of each CCP's controls and resilience.

Of course, all this comes at a cost – capital costs and margin costs will inevitably result in higher costs to the end user. In addition, even for the better run CCPs, which already met most of the exacting new controls, the need for proceduralisation, documentation, assessment, audit, verification and validation, all stipulated in detail, carries costs.

The new regime

There is a desire among some regulators to eliminate competition between CCPs, at least relating to risk management.

Fortunately for users this desire is unlikely to be achieved in practice: the preferable and most likely outcome is that CCPs will continue to explore improved processes and more technologically advanced risk management techniques, within the framework of agreed standards. Such competition

benefits users, CCPs themselves and regulators, and should be welcomed.

Inevitably the new regime will lead to fewer CCPs. The higher hurdles (including capital) established by the new regulatory framework will increase the degree of difficulty in developing a new CCP from scratch.

While we are unlikely to see a single pan-galactic CCP emerge any time soon, it is reasonable to expect a relatively small number of global CCPs competing on a broad range of products, including vigorous competition relating to the clearing of OTC products. The service offered by these global CCPs will be supplemented by a larger number of smaller, more specialist providers of clearing services.

There has been a tendency over the past decade for CCPs for listed derivatives to come within the same organisational structure as the exchanges which they serve.

Such structures have clear commercial and operational advantages, particularly given the natural tendency for listed derivatives to coalesce into centralised pools of liquidity. Competition takes place on a full-service basis between these groups, and by most standards competition has increased over time.

However, in order to accommodate the clearing of OTC derivatives, the trading of which is by its very nature fragmented, regulations have been drawn up both in the US and Europe to ensure that access to clearing for OTC derivatives is open. European regulatory authorities are (at the time of writing) investigating extending open access provisions, for trading and clearing, to listed derivatives.

Such a substantial change in market structure would be far-reaching, and is controversial. Proponents argue that it will increase competition. Opponents argue that it will fragment the listed derivatives markets and increase financial instability and costs to users. This is one to watch!

Harmonisation issues

The most important outstanding issue relating to regulation of CCPs is the lack of harmonisation between regional CCP regulations. While the recent CPSS-IOSCO principles provide a solid global framework, regional regulators have in a number of cases produced regional regulations which go beyond these global standards.

Differences in what might be perceived as technical details can have substantial effects on costs to users, and have a major impact on competition.

As the regulatory proposals currently stand there are substantial differences, particularly between the US and Europe in a range of areas, including margin levels, capital requirements (for both CCPs and their users) and access arrangements.

These differences need to be ironed out. Otherwise there is a likelihood of organisations jostling for use of the most favourable regulatory regime to perform clearing – a practice which the G20 committed to avoid. ■

Netting Analyser – FOA's new legal opinions library

The Futures and Options Association (FOA) has launched its new legal opinions library – Netting Analyser – to help subscribers satisfy certain prudential regulatory requirements. The library, drafted by Clifford Chance LLP, supersedes previous FOA netting opinions and comprises netting opinions, collateral opinions and CCP opinions.

The netting opinions, covering 75 jurisdictions, address the effectiveness of: close-out netting provisions, set-off provisions and title transfer collateral provisions. The collateral opinions, covering 76 jurisdictions, address the effectiveness of collateral taken on a security interest basis and take into account, where appropriate, the FOA's standard rehypothecation clause. The 46 CCP opinions cover, at a minimum, cleared exchange traded derivative (and in some cases, OTC derivative) exposures with CCPs and address the effectiveness of netting and set-off against the CCP on the CCP's default and whether cash and non-cash collateral posted with a CCP is bankruptcy remote in the case of the insolvency of the CCP.

Firms are generally required, by applicable regulatory capital rules, to hold capital against their derivative transaction exposures. Under UK (and many other jurisdictions') capital regulations, such capital must generally be held against gross transaction exposures, except where a firm has access to legal opinions confirming the effectiveness of any netting provisions contained in contractual documentation with clients. In this case, capital may be held against the net exposure.

The ability to hold capital against net, rather than gross, exposures is particularly significant given the increase in general capital requirements and introduction of the requirement to hold regulatory capital against CCP exposures, with the implementation of Basel III/CRDIV/CRDR.

In addition, under UK (and many other jurisdictions') capital regulations, firms may only recognise credit risk mitigation techniques (such as funded collateral), where such techniques are supported by legal opinions or other legal due diligence.

Accessing the opinions via the Netting Analyser Library is very cost effective for firms when compared to the cost of procuring such opinions independently.

For further information please visit www.foa.co.uk or contact Mitja Siraj – sirajm@foa.co.uk, +44 (0)20 7090 1342 or Hugo Jenkins – jenkinsh@foa.co.uk, +44 (0)20 7090 1336.

Spotlight: OTC Clearing from Commerzbank

Getting the right guidance is vital when it comes to understanding the new regulations. By Eugene Stanfield, Managing Director, Head of OTC Client Clearing, Commerzbank AG

Central clearing is at the forefront of regulatory changes that are being implemented in light of the 2008 financial crisis and subsequent commitment by the G20: "All standardised OTC derivatives contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivatives contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements."

While cleared OTC volumes have increased significantly since the beginning of 2013, this trend is likely to continue with mandatory clearing in the US commencing in a few weeks and in Europe in early 2014. Nevertheless, the OTC clearing market is still in its infancy and Commerzbank seeks to be a reliable partner for our clients in face of the further regulatory changes throughout 2013 and beyond.

"The OTC clearing market is still in its infancy and Commerzbank seeks to be a reliable partner for our clients in face of the further regulatory changes throughout 2013 and beyond."

The introduction of central clearing and trade reporting should create the desired transparency for regulators of the OTC market, however, understanding when to clear is still an open question in some regions.

Whilst mandatory clearing in the US is due to commence on 11 March 2013, in Europe as recently as 4 February there were initial objections to some of the European Securities and Markets Authority (ESMA) regulatory technical standards. These have since been resolved but there is lot more work required by the regulators before there is an exact date for mandatory clearing in the region.

The introduction of mandatory clearing is not the only change the market faces. Existing procedures for bilateral margining will also be affected. The latest joint consultation paper from the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO), described as a "near-final proposal", will require, from 2015, all covered entities to exchange on a bilateral basis the full amount of Variation Margin and Initial Margin. These changes will require not only the development of new suitable margining models but also the rebuilding of the existing operational infrastructure.

Understanding the many forms of different regulation is imperative for our clients in order to maintain current business practices. Clearing, reporting and capital implications of new regulations are just some of the critical topics our clients currently face. Commerzbank provides guidance in these areas by producing informed and up-to-date reports on the latest developments from around world regarding EMIR, Basel III, Dodd-Frank and MIFIR, ensuring that our clients are the first to find out about the recent changes in the regulatory environment.

Commerzbank's clearing service offers dedicated resources and an unparalleled service and clearing experience. Our overarching goal is to partner with our clients and guide them through the changing regulatory environment.

For further information on the latest developments in the OTC client clearing space and to request inclusion on a regulatory update distribution, please contact the OTC client clearing team:

OTCClientClearing@commerzbank.com

And there was light

New transparency requirements for regulatory supervision will impact directly on trade repositories, but not uniformly. By **Anna Reitman**

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Among the market structures mandated by regulators, trade repositories are well positioned to deliver early, tangible results. These market utilities, essentially warehouses for trade data, are one of the solutions to increased transparency and supervision requirements as part of G20 commitments in the wake of the financial crisis.

In Europe, trade repositories (TRs) fall under European Markets Infrastructure Regulation (EMIR) guidance while in the US, they are labelled swap data repositories and regulated by the Dodd-Frank Act.

There are notable differences in implementation strategies between the two regions. In the US, reporting is mandated for over-the-counter (OTC) and exchange-traded swaps, single-sided, in real-time with one reporting counterparty.

For rates and certain credit trades it has already come into effect for clearing houses and any registered swaps dealers (SDs) and major swap participants (MSPs). SDs should have been registered by the end of 2012 and MSPs had until the end of February. For other swap types, commodity, FX and equity, mandates were in effect from January 2013. Reporting covers all open trades and those executed since July 2010.

In Europe, reporting is mandated for OTC and listed derivatives in T+1, double-sided, with optional delegation. Though physical reporting commences from July 2013 for interest rate and credit derivatives and from January 2014 for other classes, there is an obligation to back report all transactions from 16 August 2012.

Linking in

Though implementation dates have sometimes seemed like moving targets, reporting mandates do appear to be ahead when compared with clearing and execution.

"The question is just what are the deadlines going to be for mandatory reporting and clearing? There are signs now that a lot of the deadlines for clearing are starting to slip and will that affect start times for trade repositories?

"Then again, there will still be a bilateral model and there is really no reason why reporting mandates need to wait," says Jonathan Philp, senior manager, treasury and capital markets at everis.

In terms of the links between the reporting market participants, he points out that there are several solution vendors providing middleware, such as MarkitWire and Traiana, to smooth the process.

"The links are coming together. As counterparty to the trade, CCPs are in the middle and are stepping up to clear OTC derivatives, and there are already many CCPs clearing listed derivatives today. Trade repositories are popping up and, in Europe, there are a number of ways to report to them – if you are a buy side institution for example, you can delegate your reporting obligation to the clearing broker or CCP. It is taking shape," he says.

Global scope

There are currently nine organisations operating or planning to operate TRs located in Brazil, the US, Korea, India, Hong Kong, Japan and Singapore and in Europe in the UK, Netherlands and Luxembourg.

As one of the most global post-trade services providers, DTCC has multiple multi-asset class TRs at various stages of regulatory approvals. In Europe for example, DTCC Data Repository has already established links to six CCPs and one settlement system for credit, equity, interest rate and FX derivatives.

Stewart Macbeth, managing director at DTCC and president and CEO at DTCC Deriv/SERV and DTCC Derivatives Repository, points out that parallel to regulatory reporting, TRs are also becoming an integral utility with links to electronic confirmation and portfolio reconciliation.

"The regulation will look at these functions separately and it is left to the market to work out how

FOA regulatory reporting groups

Trade reporting requirements under EMIR are proving to be one of the unexpected and critical challenges facing the ETD space. Although primarily designed to address the need for greater oversight of OTC transactions, the EMIR rules also apply to listed derivatives and, in doing so, are forcing firms to assess how a reporting obligation designed to account primarily for OTC markets is to be applied to the ETD market structure.

The FOA has established a number of working groups, under an overall FOA Regulatory Reporting Working Group, looking at the legal and operational requirements under EMIR and agreeing the best approach for the industry.

The overall working group is designed to look at issues on an industry-wide basis, and includes CCPs, exchanges, financial and non-financial firms as well as vendors. Below this sits an Operations Sub-group, a Drafting Sub-group and a Non-financials Sub-group.

The Operations Sub-group works to ensure a consistent interpretation of EMIR requirements across the dealer community. The Drafting Sub-group is looking at the feasibility of drafting a practical EMIR reporting User Pack to assist the industry in following a common approach to reporting. Finally, the non-financial group aims to represent non-financial companies in assessing their reporting requirements under EMIR and REMIT (the Regulation for Energy Market Integrity and Transparency).

Many steps will have to be taken along the way, not least reaching consensus between counterparties and CCPs (and agreement with regulators) on who should report and at what level to comply with EMIR, and reaching consensus on the technical field reporting requirements.

As well as working with firms' legal and compliance functions, the FOA is, of course, engaging with CCPs to ensure consistency of approach. The Association is also forging constructive dialogue with ESMA and national competent authorities and the Commission to communicate the industry's concerns and progress with implementation. Lastly, the project includes active dialogue with potential trade repositories and vendors to communicate industry requirement to both.

The complexity does not end there. Where applicable, the FOA working group aims to factor in other reporting requirements under MiFID/R.

The pressure from clients to report on their behalf is mounting, but firms are facing huge challenges in meeting their own reporting obligations first.

Without knowing the full structure of the network, the significance of any firm or set of firms can't be measured

to optimise them in terms of the cost base and connectivity between those services," he notes.

Industry readiness

Macbeth sees the large market makers as well advanced of other market participants because of their obligations under US reporting requirements. This substantial effort is expected to translate in some degree to European processes.

"Reporting obligations were not as heavy in the US for buy side and corporate customers and Europe only recently received additional clarity regarding similar obligations with the publication of the ESMA Level II text.

"The focus internationally has consistently been on OTC derivatives, so in Europe, where there is an exchange-traded product requirement including futures and options, the industry is still trying to get its head around that," he explains, adding that this last piece brings in slightly different actors such as the transaction services arm of large banks.

For now, the industry is looking to better define how to translate the requirements into the exchange-traded workflows between clients, exchanges, executing and clearing brokers. It is becoming apparent that as the parties with the most complete view of data flows, clearing brokers and banks may be the optimal point for reporting.

Meanwhile, for some elements of incoming regulations, for example clearing thresholds, users are still seeking a consistent understanding and interpretation of what does and does not apply.

Putting it together

Even when all counterparties successfully report trades, there are still challenges related to data aggregation. TRs will provide a range of authorities with access to data on both a routine and ad hoc basis.

In Europe, the issue is exacerbated by a proliferation of TRs being set up by clearing houses or as stand-alones, which fragments data, and by the number of financial watchdogs expected to require bespoke reporting. The reported challenges to supervisory access are generally legal rather than technological in nature.

"Although the EU is one market, there are 27 countries and an even larger number of national authorities who may want sliced or consolidated data. Certainly the pan-European bodies such as the European Systemic Risk Board will want consolidated data. It is no small challenge to aggregate all this data," he says.

The big picture, Macbeth points out, is in establishing a complete data set for regulators and central banks wishing to analyse systemic risk. The Bank of England, for example, is keen to understand concentration risks in markets and the role of any given firm within them.

For such a network analysis, the kind of holistic data set TRs provide is necessary. Without knowing the full structure of the network, the significance of any one firm or set of firms cannot be truly measured.

Looking further into the future, securities lending and repo trades are also being considered for regulated reporting to TRs. At the moment, Macbeth says this could be considered "an aspiration". ■

The new model derivative

Brokers building smarter flow business for derivatives can make net gains.

By Alun Green

The sell-side is acclimatising to streamlined derivatives trading. National and regional regulations are standardising products, in accordance with the 2009 G20 mandate. Those rules will deliver a more transparent and structured market, but will also change the revenue stream for brokers. The income from higher margin services, such as delivering structured products, will be cut back by regulation; trading of lower value derivatives instruments at greater frequencies will mean firms will have to now compete on their ability to process high volumes and to scale.

The cost of this change to the industry will initially be borne by the sell-side. However, as the characteristics of derivatives products converge, the technology underlying the trading of these instruments will likely be consolidated to create greater efficiency for sell-side firms.

Much of that efficiency can come from the post-trade environment. Within the post-trade processing of derivatives, many functions are really utilities that bring no competitive advantage; for example, functions such as trade capture, reconciliation and fee calculation. The exercise of identifying the different activities within business flows that can be extracted and brought to a common group, across multiple asset classes, is not a trivial one. But with cost pressures increasing, brokers must look for more places where they can potentially leverage the same piece of technology or the same operations group to perform a function that services many asset classes.

Senior level technology and information officers are finally getting a wider view of the enterprise – and are seeing a lot of duplication

An obvious example might be with reconciliation; many firms have insourced or outsourced their reconciliation function and delivered a standardised service that supports the business globally across more than one product set. Significant effort is still required but the potential savings and efficiency gains are clear.

A more challenging function to standardise might be connectivity; on the face of it there are very different protocols and messages that are used between different clearing houses and asset classes. SunGard's own research, however, suggests that by bringing all of those development groups from different business lines into a single unit at each firm, and by moving the firms onto a single utility or hosted environment, the cost for each firm's direct lines and hardware is removed – potentially reducing the total connectivity costs by between 50-60%.

Of course, there are historical barriers to change: business verticals are using technology paid for under their own individual (and tightly squeezed) P&L accounts; IT departments at many firms are often staffed by professionals with the ability to build and maintain best-of-breed technology stacks. Yet with the trading game changing so significantly, this is an important time for firms to take an enterprise-wide view across the equation of buy vs. build.

As they begin to do so, senior level technology and information officers are finally getting a wider view of the enterprise – and are seeing a lot of duplication. This realisation, more than anything, is a driver for change.

Further pressure will come from outside. For the next 3-4 years more G20 countries will establish similar regulations. Existing rules will be adapted and systems changed accordingly. Over this period costs will only increase.

It is clear that by looking for synergies now, and building a system that will support the new derivatives business model from the ground up, the outlay in the short term will deliver significant efficiency gains and long-term savings.

Alun Green is general manager, SunGard's post-trade derivatives business

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Overlaps and exceptions

Transforming EU and US regulations contain key differences, but the overall impact is likely to be similar – and sizeable. By **John Beck**

There is no doubt that Title VII of the Dodd-Frank Act and the European Market Infrastructure Regulation (EMIR) will both have a major impact on the derivatives markets and their participants, and indeed each share a broadly similar framework.

However, with the final rules adopted by the US Commodity Futures Trading Commission (CFTC) in August 2012, and the corresponding provision of draft EU rules submitted by the European Securities and Markets Authority (ESMA) to the European Commission for endorsement in September 2012, the precise details will differ somewhat on each side of the Atlantic.

In terms of scope, the products which will be required to be cleared or subject to bilateral collateralisation requirements will vary slightly. Under EMIR, legislation covers the entire spectrum of over-the-counter (OTC) derivatives, inclusive of interest rate, foreign exchange, equity and commodity products. In the US, however, foreign exchange swaps and forwards will be exempt from central clearing and exchange trading requirements.

Historical trades executed before the clearing obligations are imposed will not have to be cleared under Dodd-Frank, so long as they are reported to a trade repository, while under ESMA rules, clearing will be required for any trade outstanding at the time of an imposed clearing obligation.

When it comes to participants, EMIR will exempt non-financials that are conducting hedging business below a predefined threshold – yet to be agreed. Certain intra-group transactions will also be exempted.

This should cover proxy and direct hedging activities on a widespread basis, allowing these firms to avoid the clearing process. Some pension scheme transactions may also qualify for a three-year exemption.

In the US, only non-financials hedging commercial risk will be exempt, and then only if the board of the company applies to the CFTC or Securities and Exchange Commission (SEC) as appropriate.

The precise nature of margins for non-cleared trades may also vary. In Europe, this is currently being determined by ESMA alongside the European Banking Authority and the European Insurance and Occupational Pensions Authority. In the US, the Federal Reserve will set margin for banks, with the SEC working alongside the CFTC to determine initial and variation margins for regulated non-banks.

While some of these differences could be significant for some participants, the overall impact is likely to be similar under both regulatory regimes.

The effects on the liquidity and size of the current OTC market are likely to be sizeable. Adjusted volumes are already in decline and compression continues to impact the level of outstanding notional. Further decline is predicted, however.

The new regulatory landscape has already impelled a substitution of OTC notional towards swap futures via a process of 'futurisation', a trend illustrated by IntercontinentalExchange's (ICE) recent decision to migrate all of its energy swaps into futures.

This has seen a number of trading venues moving to offer futures which emulate swaps in an attempt to move into a market which is more clearly defined from a regulatory point of view and, compared to OTC demands, cheaper. Given the long tenor of some interest rate swaps, for example, a number will undoubtedly remain on firms' books, but a general migration is expected.

Similarly, a process of standardisation and relative shift away from exotics is forecast, as a result of rising capital and margin-

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related costs of ongoing exotic, un-clearable, bilateral trade deals. This was always designed to render clearing the only way to remain cost effective in the OTC markets. While vanilla products will be more expensive too, the shift is likely to be dramatic.

This may mean that firms are not able to completely cover themselves; the less bespoke nature of vanilla products means that some residual risk is left with the counterparty. For that reason, it is unlikely that exotics die out completely, because certain firms and operations will always require a complex and customised contract to completely cover liabilities. But the capital cost will be severe. ■

Organising for OTFs

Dr Jeremy Bezant is an independent adviser to fund managers

The Markets in Financial Instruments Directive (MiFID) II, which follows the European Market Infrastructure Regulation (EMIR), will introduce new rules for trading which, for the first time, cover over-the-counter (OTC) derivatives.

MiFID I facilitated the proliferation of many new trading venues called multilateral trading facilities (MTFs), which competed directly with traditional exchanges. While we have seen some venue consolidation, new entrants are still arriving. In contrast, the OTC market does not have regulated trading venues such as recognised investment exchanges.

MiFID II will introduce a new category of trading venue called the organised trading facility (OTF). Originally the OTF was conceived as mopping up other activities such as broker crossing networks (BCNs) along with OTCs under the same umbrella. However, its role is still being debated. The European Commission (EC) has recently confirmed that BCNs will not come under OTFs, leaving them mostly for the trading of OTCs along with other instruments such as structured products.

But, more important, are two of the key characteristics of OTFs. First, market operators can use discretion on choosing where their orders are executed. Second is the restriction on the use of proprietary capital for client trades. As the current presidency ends, opinion at the EC is divided. One side is in favour of the introduction of OTFs, but would like less strict rules. The other side would like stricter OTF rules, or even to remove this new category and ensure that organised trading can only take place on existing regulated exchanges or MTFs.

Both sides have particular concerns about the execution clients' orders in an OTF against the proprietary capital of the market operator, which of course may be a bank. As a compromise, the current proposals allow only matched principal trading, which is not considered to be proprietary trading by the EC.

While the EC debates this new category, one thing is certain, this will not be a re-run of MiFID I. Firstly, OTC trade contract volumes are lower. Even though we may see a reduction in average trade size and thus higher volumes as a consequence of central clearing, the most liquid OTC contracts will not trade as often as equities.

There will also be fewer counterparties. In the bilateral world, an end user trades with an investment bank. This model is changing. And will there be restrictions on what contracts can trade where, perhaps in the same jurisdiction where they are cleared? Mark Twain is supposed to have said "History does not repeat itself, but it does rhyme." So venue proliferation is likely, but maybe as a large number of small trading facilities and not a small number of large trading venues.

Segregation stress

After MF Global and Peregrine, client asset security and segregation is a major concern of the new rules. By **Will Mitting**

Client fund segregation and portability of positions are two of the more complex issues tackled by the new regulations. However, they are also important areas to mitigate systemic risk.

In the wake of the collapse of Lehman Brothers, many clients who had entered into transactions and placed collateral for positions held by the firm found themselves unable to easily transfer those positions to new clearing members without tackling local insolvency laws.

Meanwhile, MF Global and PFG Best have since highlighted the need for better protection and oversight of client positions. These are now being addressed at every level of the pyramid from client to central counterparty (CCP).

Under the European Market Infrastructure Regulation (EMIR), a CCP must keep accounts enabling the real-time distinction of assets of a clearing member from those of the CCP itself and other clearing members.

CCPs and clearing members must offer clients a choice of omnibus or individually segregated accounts. The omnibus accounts fall under the legally segregated, operationally commingled (LSOC) model adopted by the Commodity Futures Trading Commission (CFTC) for cleared swaps and offer clients a low-cost option for asset protection.

Under the individual client segregation model, assets and excess margin must not be exposed to any losses incurred by the positions of other clients and must be clearly distinguished as that specific client's asset throughout the process.

All costs associated with both models must be publicly disclosed by both CCPs and clearing members. CCPs must also offer more extensive segregation options enabling individual clients to hold more than one account.

Lower risk

While the costs of individual segregation are higher, under CRD IV, clients opting for this model can allocate a lower risk rating to trades operated within the framework.

A clearing member that has a client operating under the individually segregated model must post any excess margin with the CCP in that client's account, which eliminates the opportunity for clearing members to net off client positions prior to posting with the CCP.

Another thread of the new rules concerning segregation is the issue of portability, or the transfer of assets away from a defaulting clearing member. Under EMIR, CCPs must commit to transferring client positions to another clearing member in the event of a default without the approval of the defaulting clearing member.

In the event of a default, all of those clearing members' positions revert to the CCP, leaving the CCP with the options of transferring the positions to another clearing member or liquidating them if the former option is not possible.

Under EMIR, CCPs must also commit to transferring client positions and assets to another clearing member on the request of the client. However, that

client must have a pre-arranged agreement with the back-up clearing member and even then the back-up clearing member is not obliged to take on the positions.

Clarity required

The workability of the rules governing portability in practice is far from clear. It is highly unlikely that a clearing member would commit to a long-term deal to take on positions that it has little visibility of at the time of signing and so accepting the contracts becomes a decision to be made in the wake of default.

In stressed market conditions (where one might assume the default or approaching default of a clearing member) back-up clearing members will be conservative about what they take on and may be stretched themselves. The issue is further complicated in instances of an omnibus account unless all clients in that account have specified the same back-up clearing member, a highly unlikely scenario.

Should portability not be possible in a defined time frame, the CCP "may take all steps permitted by its rules to actively manage its risks in relation to those positions, including liquidating the assets and positions held by the defaulting clearing member for the account of its clients". Which is what used to happen anyway. ■

Segregation isn't simple

OTC and exchange traded markets manage customer assets in different ways; bringing OTC into clearing will shine a harsh light on customer asset protection. By **Gary DeWaal**

After the collapse of MF Global in October 2011, derivatives industry participants were already second-guessing the bedrock safety of customer funds posted with brokers. The collapse of Peregrine Financial Group in July 2012 left them staggering even more and clamouring for enhanced protection of customer funds – a chorus that was quickly joined by regulators in the US and Europe.

The reason? In the OTC industry, counterparties could protect themselves against perceived weak credits by utilising third-party custodial arrangements to facilitate collateral arrangements, as well as engage in other protective behaviours.

But in the US in particular, no such capability existed in the exchange-traded futures industry or as contemplated under Dodd-Frank. Users of swaps could be inheriting an unexpected risk – the risk of failure of their clearing broker – in order to comply with the mandatory requirement that most swaps clear through government-regulated central counterparties (CCPs).

In response, the Commodity Futures Trading Commission (CFTC) instituted legally separate, operationally commingled (LSOC) for cleared swaps – a complex regime whereby brokers and clearing houses helped ensure that no one customer's margin deficiencies were paid for by any other customer.

Though not quite individual segregation, LSOC was still a big step towards protecting individual customers against fellow-customer risk – although, even had it applied to futures, it would not have protected a single customer of MF Global or Peregrine.

Moreover, LSOC introduces significant moral hazard by transferring the risk of irresponsible brokers away from their potential customers who are best able to evaluate them, to responsible brokers who are in no practical position to control their irresponsible peers and will have to make up any deficiencies at a clearing house because of a failed member.

Towards the end of 2012, the CFTC proposed comprehensive rules related to the protection of customer funds that built upon three pillars:

- require brokers to update their risk procedures and to always

maintain a certain minimum amount of residual interest in customer segregated funds at least to cover the potential aggregate of customer deficiencies on any day;
- enhance general disclosures about the risks of maintaining funds with a broker and specific disclosures about the business practices and financial well being of each broker itself; and
- increase periodic disclosures to regulators about investments of customer funds and ensure direct reporting to regulators of brokers' customer fund balances by depositories.

There is a precedent. Such a system has been highly effective in helping protect broker fraud since it was implemented in China under the auspices of the China Futures Margin Monitoring Center in 2006.

However, it is not clear that, if adopted as drafted, the CFTC's proposed rules won't increase customers' broker risk by encouraging brokers to require clients to pre-fund their trades (thus keeping more collateral at each broker), while at the same time diminishing brokers' likelihood of generating sufficient profits to invest in better internal controls.

Additional protections

European Market Infrastructure Regulation (EMIR) requires brokers and CCPs in Europe to offer ultimate clients individual segregation and, upon a default of a clearing member, CCPs must commit to transfer client positions and assets to another member. It will be interesting to see how brokers and CCPs cover the operational and opportunity costs to provide these additional protections.

That being said, there still remain great differences in insolvency laws from jurisdiction to jurisdiction and complications in resolving the bankruptcies of global brokers will continue to shadow the derivatives industry for some time. ■

Buy-side favours segregation

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Hyperbole is uncommon in FSA language, so its 2012 statement that changes to client asset segregation and pooling could result in "the most significant changes we have made to the client assets regime in over 20 years" has required attention from market participants.

The changes, as clearly explained by the consultation documents, are being designed through the prism of Lehman's and, more recently, MF Global, and are primarily concerned with the protection and return of clients' assets in the event of a firm's insolvency. But with those protections come major changes to the operating and funding model adopted by brokers since futures markets modernised in the 1970s.

EMIR will require that CCPs must segregate client assets from a GCM's own assets and that individual client accounts are identifiable within that reporting scheme. This follows from requiring GCMs to segregate house and client assets. In this instance, EMIR matches Dodd-Frank, but then it goes further, requiring GCMs to offer clients individual segregation, which must then be mirrored at the CCP.

As OTC firms join the cleared world, one of the first decisions they face is how to manage the question of segregated margin funds. Under EMIR they can post their margin funds into omnibus accounts with their clearing member, elect to have individually segregated accounts at that member, or set up a direct clearing account with the CCP.

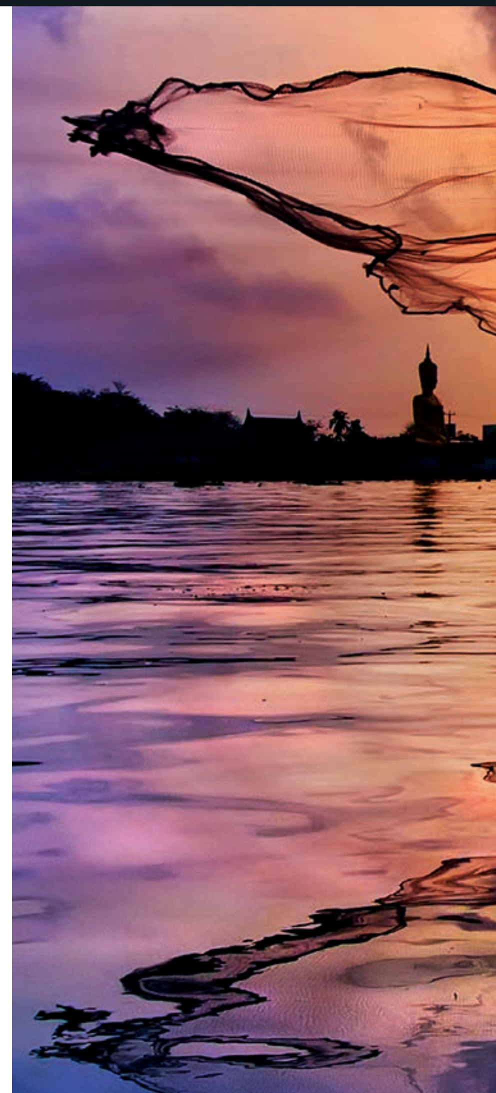
Daniel Maguire, global product head of SwapClear, LCH.Clearnet's interest rate swap clearing business, suggests the early indications are that option two – individual clearing accounts at the GCM – is so far proving to be the preferred route for most OTC clients in the new cleared OTC swap regime.

However, he also notes that there are variations within option two. "Some OTC clients have perceived 'fellow customer risk' [from being in an omnibus account] very clearly. The broad diversification of potential new OTC clients moving to clearing means that the anonymity of fellow customers in an omnibus account could contain unacceptable risks for many new clients from the OTC world. Similarly, while LCH.Clearnet operates an open access direct membership model, the obligations assumed by direct members in the event of a member default may make the option to clear as a direct member less attractive."

Eurex Clearing seemed to be endorsing this trend. In just one day in February it announced two European asset managers were being registered for individually segregated clearing by GCM Barclays and one hedge fund by JP Morgan. Heiner Seidel, spokesman for Eurex, says "Our market consultation has revealed a strong preference of buy-side clients for a full segregation of their individual margin and collateral from the assets of the clearing member/broker. We expect that the vast majority of independent asset managers and funds will decide to use our Individual Clearing Model with their GCMs, which offers full portability and maximum protection of client assets."

Netting the key to cost squeeze

Portfolio margining is an established technique in exchange traded derivatives markets, but how will the concept translate to the new cleared over-the-counter regime? By **Will Mitting**



Cross-margining was one of the industry buzzwords of 2012. In the wake of estimates that trillions of dollars of additional collateral will be required to meet the G20 mandate for central clearing of over-the-counter (OTC) derivatives, cross-margining is seen as one of the key tools to mitigate the collateral squeeze.

Under the old regime, margining for uncleared bilaterally traded derivatives operated on an ad hoc basis with swap dealers having discretion over what margin arrangements their clients traded under, with initial margin often not being required for the most creditworthy clients. Historically, OTC variation margin requirements were equally relaxed and called only occasionally.

All that is about to change. One of the central strands of the mandate is to increase the amount of collateral held against OTC trades and clearing OTC contracts at central counterparties (CCPs) imposes upon them the requirement to always post initial and variation margin on positions.

This has led to the need for efficiencies within the margining process, with collateral optimisation and cross-margining widely seen as the two sharpest weapons in the fight for efficiency. Exchanges and CCPs spent 2012 proclaiming the efficiencies they could offer using cross-margining, touting figures of up to 95 per cent reductions in the total collateral required for highly correlated positions.

The theory behind cross or portfolio margining is simple enough. In any portfolio, a single investor will have hedged positions that will neutralise the risk he or she is exposed to. Even if it is not an intended and direct hedge, positions within a single portfolio will likely have naturally offsetting positions that reduce a portfolio's overall exposure.

Innovative margining

In some instances this correlation is clear. For example, a long position on a 10-year government debt instrument hedges against exposure to a 10-year interest rate swap in that government's currency or in situations where an option is based on a benchmark asset such as a FTSE 100 option and a FTSE 100 future.

Portfolio margining is not a new concept in the cleared world having existed on cleared futures since the advent of SPAN margining and is in use in one form or another in all large CCPs.

Innovation has accelerated since 2009 with initiatives such as New York Portfolio Clearing, a joint venture between the DTCC and NYSE Euronext (and joined by LCH.Clearnet) to launch 'one-pot' margining in the US. One-pot margining is a system in which investors can net off positions that, due to separate Commodity Futures Trading Commission (CFTC) and Securities and Exchange Commission (SEC) rules, were previously subject to separate margining regimes.

ICE has also pioneered cross-margining agreements in which investors can clear single name CDS against an index, again bridging the divide between SEC and CFTC regulated products.

Many in the market view the margining of exchange traded derivative (ETD) and OTC positions as the real opportunity for efficiencies, with the CME and Eurex aggressively pushing into this area.

In May 2012, CME began offering cross-margining of listed Eurodollar and Treasury futures against cleared interest rate swaps – something that Eurex is seeking to rival on its suite of ETD interest rate contracts.

Dodd-Frank allows for the co-mingling and cross-margining

of cleared and security-based swaps but the different regulatory regimes have led to delays in implementing cross-margining.

Challenges ahead

One of the challenges of cross-margining ETD and OTC products has been the different margining calculation traditionally used for each trade type, with ETD predominantly relying on SPAN and OTC using a Value-at-Risk calculation. For that reason, some clearing houses have developed a single methodology to accommodate both, such as Eurex's Prisma methodology.

Another challenge is accurately identifying correlations that hold between instruments in times of market stress and CCPs are understandably currently shying away from cross-asset class cross-margining. What may be correlated may not necessarily be connected when markets stress. ■

Clearing consequences and constraints

Bill Templer is managing director, Faventus Consulting

These are the worst market conditions for the derivatives markets in many years, with low volumes, low trading risk appetite, concerns over counterparty credit and a zero interest rate environment that has all but eliminated interest revenues on balances held. And there is no sign of an immediate change to these conditions.

Lower revenues for the futures commission merchant community and a model for OTC clearing that appears to leave no room for profitability has left many banks asking whether clearing client business is a viable proposition.

The drive within banks to reduce overall balance sheet usage, higher capital charges for client balances held and the reduced profitability of derivatives businesses have many asking whether they shouldn't focus on more profitable business areas.

If some large banks and many second tier banks move away from clearing client business, as seems increasingly likely, the consolidation could have a number of effects. Greater pricing power for those who remain is possible, but unlikely. The considerable growth of a small number of larger firms with significant balance sheets to which the clearing would be driven leads to a concentration of risk and an increase in firms that are too big to fail.

There is no doubt that a financial crisis, such as that of 2008, is less likely now as a result of new regulations. Banks are no longer able to make the types of leveraged trades in the size they did and given the level of scrutiny and transparency that they face. But the risks of bank liquidity problems and contagion still remain and in spite of all of the new controls, two of the largest banks recently faced massive trading losses, which might have brought them down. Sophisticated fraud remains hard to spot.

The need for greater bank profitability to restore confidence is being hampered by greater capital, regulatory and technical costs as well as market conditions – and yet there is no escaping that they are necessary. So it seems that we face a long, slow grind out of the financial mire and the longer it goes on the greater the likelihood of further consolidation of clearers. Round and round we go...

Collateral conundrum

Central counterparties and clearing members have developed specific collateral definitions and procedures for exchange traded derivatives markets, but the extension into over-the-counter poses new challenges. By **Galen Stops**

There are two ways of defining collateral. The first is that it is simply an obligation or security that is linked to another obligation or security to guarantee its performance.

The second is that collateral is additional but subordinate; it is something that sits alongside the main subject, with the main subject being risk. Assets are therefore used as collateral to reduce risk and ensure that even if one side of that trade defaults then the other party can liquidate these assets to realise the value of its exposure in the trade.

Central counterparties (CCPs) are risk averse institutions with strict requirements on both the type and amount of collateral they demand for guaranteeing each side of a trade. The collateral pledged to them can therefore be considered very secure. The only way that assets held by a CCP could be at risk would be if the CCP itself were to collapse.

The vast majority of firms that are not direct clearing members will have to provide collateral to a clearing broker that will in turn use that asset or its equivalent to cover the margin calls from the CCP.

In Europe, regulators have determined that clearing members must offer their clients the choice between individual segregation and omnibus segregation

Traditionally clearing members have held client funds in omnibus accounts, where these funds are ring-fenced from the member's own assets, but are contained in one single large account.

However, the misuse of client assets committed at MF Global and PFG Best in the US, where client funds were used for other purposes, have highlighted the need for better segregation rules to secure firm's collateral. As a result, in the US the Commodity Futures Trading Commission (CFTC) introduced the 'legal segregation with operational commingling' (LSOC) model.

Offering a choice

In Europe, regulators have determined that clearing members must offer their clients the choice between individual segregation (where their collateral is ringfenced completely individually in their name) and omnibus segregation (where client assets are bundled together but kept separate from the broker's).

Variation margin is additional margin posted on an ongoing and usually intraday basis to ensure that each party is compensated for any variations on an open position. Variation margin is posted in cash while initial margin, which is posted upon the opening of a trade, can be posted in cash or securities.

In the CCP model the collateral requirements are standardised and CCPs only accept high- quality collateral that can be easily liquidated in the event of a default. Firms will be expected to provide their clearing member with assets that they can then post as collateral at the CCP on their behalf.

However, it is becoming increasingly clear that many firms which currently use OTC swaps, such as more traditional asset managers, will not necessarily have CCP eligible assets in their portfolio.

Firms without CCP eligible collateral will then have to either liquidate part of their portfolio in order to cover this initial margin or find another way to acquire the collateral needed.

Not a low-cost option

Collateral transformation could provide firms with the capability to access high-quality collateral by allowing them to swap ineligible securities with a clearing member or custodian for eligible securities that can then be posted as collateral with the CCP.

However, to avoid taking on too much risk themselves the clearing member will only perform this swap by accepting the lower grade or less liquid collateral at a haircut.

This haircut is subjective to how difficult the clearing member thinks that the collateral they are receiving will be to sell or how volatile the price of the collateral is.

The clearing member will have to use their own balance sheets to fund the collateral transformation process or go into the repo market in order to find the collateral required.

How willing pension funds are to repo out their assets will be important for collateral transformation as they hold much high-quality CCP acceptable assets. The assumption is that this will not, initially at least, be a low-cost option for clearing brokers. ■

Trade reporting tests OTC

Paul Pickup, Trading Technology Consulting

The major difference between trade reporting of exchange traded derivatives (ETDs) and over-the-counter (OTC) contracts is that in ETDs the instrument structure is clear, standardised and understood. OTC contract structures tend towards the unique.

A risk model can be relatively easily derived from the bare bones of a trade report in exchange-traded instruments as it is understood by exchange, guarantor, clearer and all counterparties.

In OTC markets the risk model is highly dependent on the structure of the product and there may only be a handful of trades in each. Currently the counterparties understand the pricing (and therefore risk) model, but the central counterparty (CCP) and regulators do not.

However, trade reporting systems, which would meet the requirements of an OTC market, do exist. One, for example, is operated by the Russian Trading System (RTS), spawned no doubt from a former Soviet love of bureaucracy, where effectively whole contracts were sent back and forth for affirmation and confirmation between market participants.

Some fields have specific values and some are free text. Such a structure could be used as a rudimentary trade reporting vehicle. However, CCPs would still be at a loss as to how to unscramble the contents into a risk model, making it not a good solution.

Many firms have excellent bipartite margining systems in place. In mapping the business processes needed to perform this it is clear that trading and margining through a CCP is significantly less work for members to do. In all instances it is preferable to use a CCP for risk management between counterparties. This suggests that most members would welcome more centrally cleared business.

The problem is much more business-process than IT related. The eventual IT requirements for increased central trade reporting and risk management may result in greater IT requirements for the CCPs and regulators, however, it should not – if implemented properly – be too strenuous for the market participants.

High-frequency trading (HFT) is also being scrutinised by regulators, but for other reasons. HFT can only be deployed on fungible, deep-liquidity products so should not be a feature of the European Market Infrastructure Regulation, they have enough to worry about!

Bring out the balance sheets

Routine futures brokerage was never a particularly big balance sheet business – failures generally resulted from misuse of funds, not their inadequacy – but new rules are going to make broking and clearing more capital intensive. By **Galen Stops**

The most significant trend in exchange membership in modern times has been the demutualisation of exchanges. No longer member-owned, they are now often publicly quoted companies with numerous disinterested shareholders.

Their proliferation has introduced greater competition between exchanges, while their shareholder structure causes them to be sharply focused on maximising profit and delivering dividend to their shareholders.

As the capital markets became increasingly global, so did exchange membership. With cross-listing agreements between exchanges and electronic platforms such as CME's Globex platform, firms that are members of one exchange are in many cases able to trade on products from another.

The role of the General Clearing Member (GCM) under the European Market Infrastructure Regulation (EMIR) and Dodd-Frank is to provide clearing services to counterparties (CCPs) on terms that are commercially reasonable and publicly disclosed.

Only the clearing members can have a contractual relationship with a CCP. However, firms that are not members of a CCP will be able to access clearing services either directly with the CCP or indirectly via a GCM.

Building infrastructure

Firms are likely to connect to multiple clearing members on OTC markets, even if they only actually send order flow through one of them. Established practice in exchange traded derivatives (ETDs) is for client firms to connect to their execution venues via several brokerage routes – providing an execution fallback should one route fail.

OTC users will also need the technology infrastructure in place to connect to the GCMs and all the necessary legal documentation ready and in place before the compliance deadline.

Although the GCMs in Europe will have to offer firms the option of individual segregation it is unclear how affordable it will be as the additional operational procedures will be significant

Are CCPs the new ratings agencies?

CCPs have many of the business characteristics of rating agencies, and face similar pressures

Business over-reliance on ratings of questionable accuracy is seen as a cause of the financial crisis. The legal and regulatory emphasis on CCPs instead of OTC collateralisation is dangerous because it may create the preconditions for an avoidable repeat of the financial crisis from a similar over-reliance on CCP prices and methods, according to an argument advanced in an academic paper* by Chris Kenyon and Andrew Green of Lloyds Banking Group.

CCPs have many of the business characteristics of rating agencies, and face similar business pressures. The business of a rating agency is to produce ratings – but the rating agency bears no direct risk from changes in those ratings. The business of CCPs is in intermediating trades, which requires them to set prices for those trades for every collateral call – but CCPs are designed to bear no risk from changes in those prices. Other similarities include the pressure to expand their product coverage (e.g. futurisation), and the competitive pressure to reduce costs.

Hence CCP prices may take on the same reported poor quality and conflicted dynamics as ratings before the financial crisis.

The authors state that a CCP does not remove credit risk but only blocks one credit risk transmission route. In a systemic crisis, e.g. assets dropping suddenly in value, CCPs offer no protection because the issue is not counterparty exposure but credit risk from asset value. Also, as CCPs transform credit risk transmission into liquidity risk, and actualise day-to-day market price volatility, CCPs may increase default risk.

The two most significant potential consequences of the similarities in business characteristics between CCPs and rating agencies, argue the authors are: an assumed safety from CCPs that may produce a complacency that CCP prices and pricing methods are correct in terms of having long-term validity or stability; and that the privileged status and scope of CCP prices may grow over time.

The solution, claim the authors, is not to have prices with privileged status in terms of law, regulations, or capital, from any source. They advocate a scepticism towards making pricing systematically institutional with legal and regulatory privileges. If the removal of credit risk transmission is desired then they advocate equal regulatory treatment of all equivalent collateralisation arrangements. Collateralisation does not require institutionally privileged prices, nor CCPs.

**Will Central Counterparties Become the New Rating Agencies?* By Chris Kenyon and Andrew Green, published 27 November, 2012 by the Social Science Research Network. The views are the authors' own.

Clearing member capitalisation assumes new importance if the substantial new risks and exposure of OTC markets are introduced

and this will be factored into the pricing of it. Individually segregated accounts have in principle been available in ETD for some time, but rarely used because of the prohibitive cost.

The OTC clearing mandate means that firms will have to source and post more high-quality collateral to guarantee their trades. This presents a challenge because as the demand for this high-quality collateral increases, so will its price.

As a result it's possible that for some firms it will become too expensive to acquire the collateral needed and they will drop out of the market, creating a further drain on liquidity.

Extraterritorial issues

The extraterritorial reach of the OTC regulation, particularly Dodd-Frank, could also create difficulties.

The Dodd-Frank Act states that any activities that occur outside the US but that have a direct and significant connection with activities in, or effect on, the commerce of the US will fall under the Act.

Additionally, it says that trading activities must comply with the regulations that the CFTC implements to prevent any evasion of the Commodity Exchange Act.

Clearing houses require their members to contribute to a default fund in addition to the initial margin held against positions at the clearing house. The size of the default fund varies between clearing houses, but it is normally computed as its two biggest members defaulting simultaneously.

The clearing house allocates this default fund requirement between all its clearing members in proportion to the risk that it calculates that they bring to the CCP. That calculation relies heavily on both the volume of trading and the nature of the resulting exposure,

By contributing this in support of client positions, the clearing member is exposing itself to both funding costs and counterparty risk, because the default fund could be subject to losses if another clearing member defaults.

Clearing member capitalisation therefore assumes considerable new importance if the substantial new risks and exposure of OTC markets are introduced.

Creating strain

In the US the 'legal segregation with operational commingling' (LSOC) model of client fund segregation prevents client assets being used as part of the default fund, meaning that clearing houses will have to collect increased amounts of initial margin or increase the size of their default funds.

European regulation requires that, in addition to the assets that must be contributed to the default fund, clearing members must also hold regulatory capital against clients' cleared positions under the Basel III requirements.

Meanwhile, the CFTC requires futures commission merchants to hold a minimum capital of 8 per cent of the total initial margin requirement for positions cleared in customer accounts.

Given the need to secure markets against risk this is clearly worthy, but it may create some strains among those brokers who are historically 'balance sheet lite' because of the low-risk nature of the client business they undertake. ■

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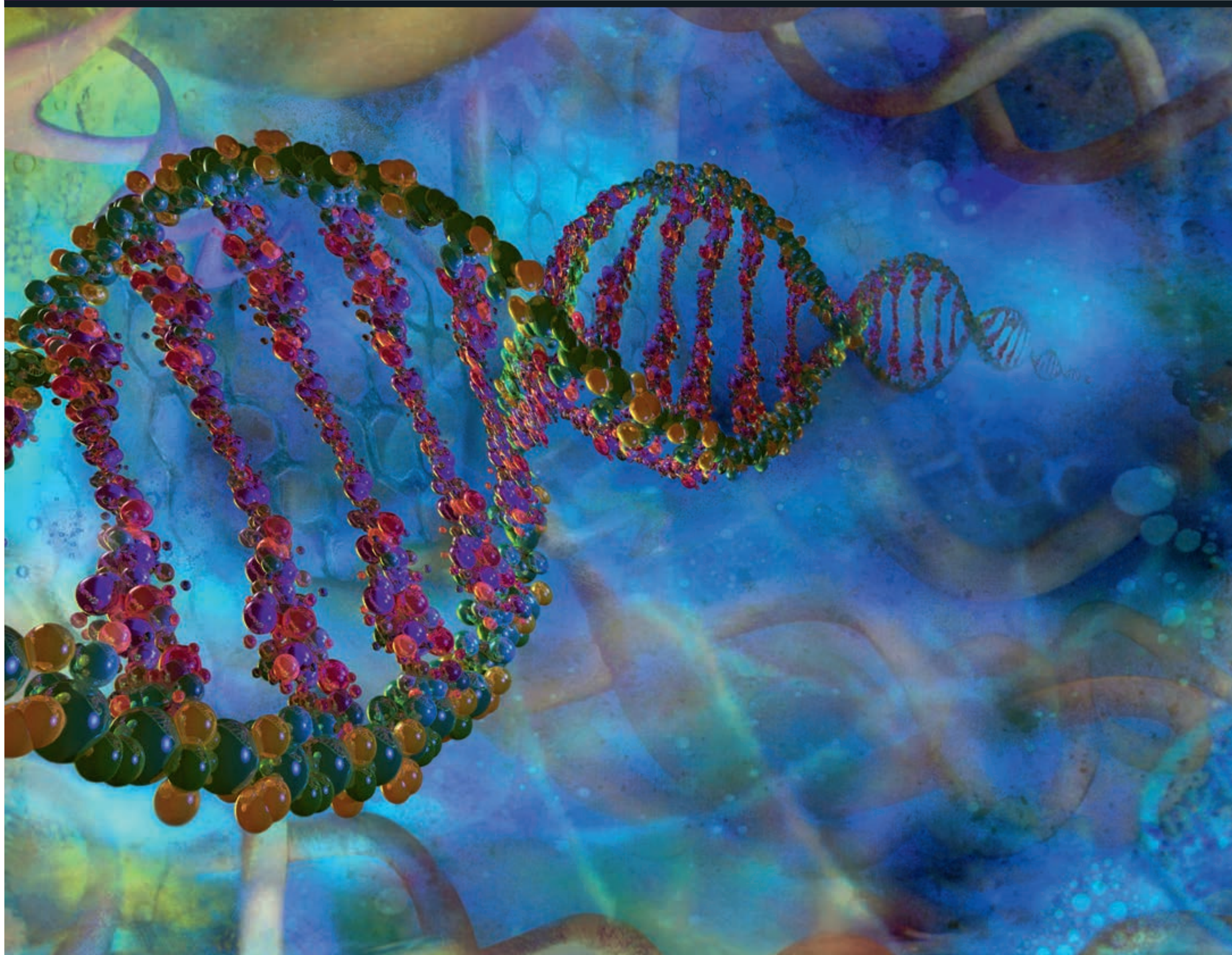


Default rules defined

CCPs are core to the newly regulated OTC markets but questions remain about how exactly they will perform in this new regime. By **Will Mitting**

Central counterparty (CCP) clearing houses held their own during the default of Lehman Brothers. While legal arguments continue today over many of the investment bank's bilateral positions, all Lehman trades held at LCH.Clearnet were settled within two weeks of its declaring bankruptcy in September 2008.

The game has now changed, however, and the new regulations mandating the central clearing of OTC derivatives introduce significantly more complexity into CCPs and new rules will formalise many of the default processes that have been established by convention over the years among CCPs.

The first and foremost line of defence against default at a CCP is the default fund. The default fund is intended to provide a buffer to cover any losses that exceed the losses covered by the margins held by the CCP against the defaulting member.

The onus falls on the CCP to establish the minimum levels of default fund and the contribution of each clearing member (so long as they are proportional to the exposure of that clearing member).

Under European Market Infrastructure Regulation (EMIR) proposals, the default fund must now be established with a view to "withstanding the default of at least two of the clearing members to which it has the largest exposure under extreme but plausible market conditions".

Once the margins held against the defaulting member's positions are exhausted, the process enters what is known as the "default waterfall". In reality it is the opposite of a waterfall, the next layer of funds is tapped when the supply of funds in that layer has been exhausted, not filled.

Initially the CCP sources margins

posted by the clearing member. Once those have been used, the CCP moves on to the default fund collateral that was posted by the defaulting clearing member. If that is not sufficient to cover the losses then the CCP takes funds from the default fund that have been posted by non-defaulted clearing members, but only once it has used its own resources set aside for that purpose.

It is this layer of CCP resources that caused the most debate. Initially EMIR proposed that a CCP should reserve 50 per cent of the capital requirements, but it was feared that such a high bar might threaten the financial viability of the CCP itself or result in a breach of its minimum capital requirements should a large clearing member default.

It also raised fears of creating moral hazard in a situation where clearing members would be disincentivised to participate in a close-out auction in the knowledge that the CCP would cover a significant part of any losses.

The European Securities and Markets Authority (ESMA) settled on a level of 25 per cent for the CCP to hold against default, with the CCP being granted one month to replenish resources once tapped. Even this was enough to force the London Stock Exchange to reduce its offer for LCH.Clearnet as analysts speculated the clearing house would have to raise up to €375m to cover the additional capital requirements.

Once the default fund is exhausted, clearing members will be required to top it up to prevent further losses to a certain level.

What is less clear is the processes that would save a CCP from collapsing if the default fund and top up funds were exhausted. One solution has been termed the "last gasp" approach. Pioneered by LCH.Clearnet at the launch of CDS Clear, the "last gasp" approach reduces or blocks payments of variation margins to net gainers during the day according to a pre-agreed formula.

This buys time and eases the pressure on the CCP to function while the decision is taken to wind down or recapitalise the clearing house.

Ultimately, there seems to be a broad understanding that the consequences of a failure of a large CCP would be so great a central bank would have to step in to prevent default, despite assertions from the Bank of England, among others, that this should not be an option. But if the banks are no longer 'too big to fail' then these new rules create an even bigger 'too big to fail' organisation with a systemically important role. ■

Re-engineering risk management

Brian Taylor is managing director, BTA Consulting Limited

There is nothing like a crisis to create a catalyst to re-engineer a business or a whole industry. The 1970s oil crisis kick-started engine management efficiencies and automobile 'just in time' manufacturing, electronically integrating the industry from customer to component supplier, driving down costs by minimising inventory levels.

Following the 2008 financial crisis, the goal has been to create a robust global financial infrastructure resilient to systemic risk. Central counterparties (CCPs) historically syndicated financial risk, but now need to combine this with granular capital management. But how?

The strategy for managing CCP capital is through supply chain integration – design a regulatory compliant risk management methodology that optimises capital requirements of clearing members and their clients.

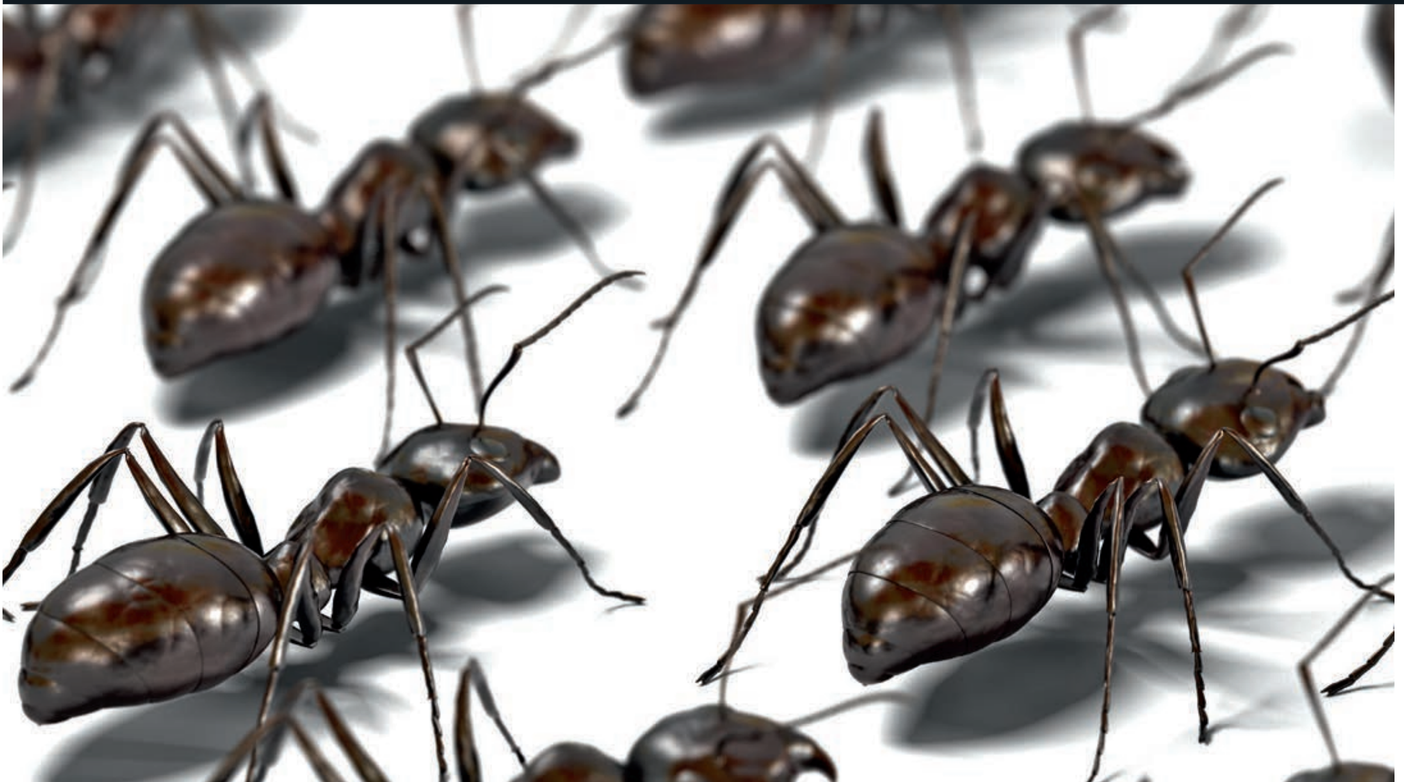
CCPs must calculate their benchmark capital requirement for 'normal' activity (volumes, liquidity, volatility, default risk etc). Benchmark scenarios must be stress tested, but not just by hypothetical models that adjust parameters to simulate potential counterparty or systemic events.

Additionally, capital requirement premiums and discounts must be simulated based on the specific capital allocation and trading policies of individual clearing members and their clients under extreme conditions, including insolvency.

For example, becoming a qualifying CCP (QCCP) immediately benefits members and their clients. As a QCCP, principal or agency transactions submitted by bank clearing members in respect of over-the-counter derivatives, exchange traded derivative transactions and securities financing transactions, can attract the minimal headline risk weight of 2 per cent against the trade exposure, less offsets and deductions from qualified collateralisation, margining, legally enforceable netting rules and liquidation. Similarly, there are potential offsets or efficiencies for the contributions to default funds.

For banks using non-qualifying CCPs, the equivalent risk weight is 1,250 per cent. A CCP could not survive as member banks could not afford such capital requirements.

The ultimate route to capital efficiencies will be to dissect the CCP's capital by simulating the behaviour under member default conditions. This simulation requires information integration across the end to end value chain to synthesise a prediction of an insolvency administrator's behaviour.



New pressure on data management

Data comes out of the back room into the spotlight as new regulations seek clarity. By **Dan Barnes**

European Market Infrastructure Regulation (EMIR) and Dodd-Frank are imposing new data reporting obligations on over-the-counter (OTC) derivatives markets. Increased margin call frequency, a predicted growth in trading volumes and the potential fragmentation of liquidity will drive demand for accurate and timely data about previously obscure markets.

As data requirements under these rules are focused on regulatory reporting, a commercial platform may be needed to deliver better pricing transparency for traders.

"The issues that people have around pricing are quite complex; I'm not sure a [transaction price] tape is going to help them," says Jeff Gooch, CEO, MarkitSERV. "If a product only trades every few months you'll never know enough [from a tape] to compare it with what you have bought."

A positive development for transparency is the Legal Entity Identifier (LEI), a unique code generated for every trading entity. The LEI project, which was expected to go live in March 2013, is being overseen by the Financial Stability Board (FSB), a cross-border agency focused on enhancing financial stability, formed out of the G20 in 2009.

Dodd-Frank and EMIR support the project; the removal of inconsistent data for identification will simplify risk management tasks and compliance reporting.

Under Dodd-Frank, starting July 2013, every OTC trade must be reported by a designated counterparty. They will be required to make reports both publicly and to regulators in real-time, meaning, "as fast as is technologically practicable" or within 15 minutes.

Public reports will include price and volume data without counterparties identified and can be sent to a swaps data repository (SDR), a third party for dissemination, or if necessary straight to a regulator.

The information reported to regulators can be sent directly or via an SDR and will include counterparty data so that individual firms can be monitored. These reports will require a unique counterparty identifier (UCI), a unique swap identifier (USI) and a unique product identifier (UPI) to be attached, with the LEI usable as a UCI once established.

Once the electronic derivatives trading venues, or swap execution facilities (SEFs), are up and running

they will have a responsibility for reporting to the SDRs, as will any clearing house involved in the trade. SDRs must make that data available to the US regulators, the SEC and CFTC. The mechanism they are most likely to use is web-based reporting.

"Clearly trades reported in the same asset classes and possibly the same contracts could be reported at different SDRs," says Andrew Allright, Thomson Reuters. "It's not clear how the regulators will consolidate that."

Under EMIR, trade data must be reported by financial counterparties "as soon as possible" and by the end of the day at the latest (two days for non-financial counterparties), with any trades unconfirmed beyond five days being reported on a monthly basis.

Under the Markets in Financial Instruments Directive (MiFID) II, Approved Publication Arrangements (APAs), which may be markets or data vendors, will publish investment firms' trade reports across asset classes. APAs operate using prescribed standards, checking trade reports for accuracy and formatting it correctly.

"We might have players who are effectively trade repositories in derivatives who also act as APAs," says Allwright, "But MiFID II, which requires transparency beyond equities into fixed income and derivatives, won't be finalised any earlier than the end of 2014, so the precise nature of what the obligations will be isn't yet established."

For market participants seeking to capture accurate valuation data the environment envisioned by regulators is not very benign.

"Products that trade frequently, like the five-year dollar interest rate swap, have tight spreads and prices are known, so public transparency won't make much difference there," says Gooch. "The bulk of OTC trades happen maybe twice a day, so it won't exactly pin the price down for people. Conversely, if you are trading anything very illiquid or large, everyone will know that you have got it."

This uncertainty will add pressure on traders to better understand the sources of their pricing data, says Anthony Belcher, director, EMEA pricing and reference data at Interactive Data.

He says, "You will want to understand what the central counterparty is doing around valuation and where they are getting their values from for the margin calls. For example, if you are seeing data from small trades and you are holding a large position, how relevant is that information to you?" ■

Data proliferation problems

Hirander Misra is chairman of Forum Trading Solutions Ltd

As with stock exchanges after the Markets in Financial Instruments Directive (MiFID) I, new trading venues and fragmentation are likely to affect over-the-counter (OTC) derivatives markets. Many OTC derivatives products such as interest rate swaps (IRS) will migrate to an exchange type environment with central counterparty (CCP) clearing. This will lead to new trading venues being established, such as Eris Exchange in the US.

Additionally, existing exchange players will look to diversify beyond their traditional product base or geography. NASDAQ is due to go live in the first half of 2013 with NLX in Europe and CME is establishing a European-based exchange and CCP during 2013. New venues in this space are likely to be categorised as swap execution facilities (SEFs) in the US and multilateral trading facilities (MTFs) or organised trading facilities (OTFs) in Europe, depending on how the regulations will be finalised.

This will lead to the 'electronification' of markets with trading on central limit order-books with associated pre- and post-trade data transparency. Data vendors such as Thomson Reuters and Bloomberg already source OTC data from multiple OTC contributors, mainly the main banks and inter-dealer brokers, who trade bilaterally today. These vendors create consolidated composite pages, incorporating quote and trade data.

These products will now be traded order-driven, which will result in dissemination of data from new venues leading to an increase in data volumes.

This will drive the need for low latency data feed from vendors such as Activ Financial, Fixnetix and Quanthouse to go more multi-asset, source multiple feeds in a fragmented market and offer them out either in single venue normalised format or as part of a consolidated feeds product.

Banks are also likely to automate their IRS trading more and establish their own liquidity pools, as they have done in equities and FX. Smart order routing and algorithmic trading will then become more prevalent in this space. What technology fragments, technology can also knot together.

All this does not come for free and requires considerable investment in technology during lean times. Banks have already cut numbers and are now also looking to consolidate systems given they no longer have the headcount to run them, in addition to reducing complexity and cost.

This, coupled with the significant approvals required to run a regulated trading venue, will therefore encourage a trend for outsourcing exchange technology and operations to managed services vendors, who can do this more cost effectively through economies of scale.

Gearing up for Dodd-Frank and EMIR

Under the new regulations, traders will inevitably have to increase the amount of computer processing they dedicate to the business, the rigour of scrutiny they apply and their connectivity to third-party service providers. By **Dan Barnes**

One of the most significant changes to over-the-counter (OTC) trading will be in the calculation and sourcing of margin to be posted with central counterparties (CCPs). Failure to calculate margin with a counterparty correctly can lead to ballooning costs or even default.

To service their clients' collateral management needs, sell-side firms will require a range of updated systems: valuation processing platforms to deal with transactions and collateral; a data feed from a trade confirmation service; an accounting system for balancing the collateral portfolio; a reporting system for clients; and connectivity to clearing houses/CCPs.

The balancing of collateral is one of the most challenging aspects of this: under the old rules bilateral arrangements were simple and often only addressed variation margin, which was

checked quarterly. The new rules include initial margin, with collateral posted in myriad ways to custodians, brokers or CCPs and daily variation margin calls, which may lead buy-side firms to over-post margin so they are cleared. Custodian State Street has counted 20 possible ways that initial and variation margin payments can be structured by a client, putting flexibility at a premium in custodian IT.

Increased processing and reporting of data, part and parcel of the more frequent margin checks, is also weighing upon market participants.

Legal entity data

In its report *Data Management in 2012: Big Fish, Little Fish, or in a Box?*, research firm Aite Group said 41 per cent of financial institutions are focusing their data management budget on tackling legal entity data, a requirement

Avoiding a crisis

Jerome Rousseaux is general manager, SunGard's post-trade derivatives business

What is your view of the widely-predicted collateral shortfall that central clearing may cause?
While estimates from different industry experts vary widely, a general collateral shortfall seems unlikely. However, there may very well be isolated shortages of high-quality assets resulting from local market tensions as the clearing initiatives are implemented.

In the long term, central clearing for OTC swaps will certainly add significant demand for collateral, making collateral management solutions both more complex and more necessary.

How well are proposed collateral management and collateral sourcing services meeting the needs of buy-side firms at present?
I think until the clearing mandates start to take effect, it is very hard to say with certainty who is ready and who is not. I expect that the needs of the buy-side as well as the collateral services they are offered will evolve rapidly over the next few months.

What effect would the futurisation of swaps have on their post-trade requirements?
The new clearing model for OTC swaps makes OTC business more expensive. A big driver of that expense is the required posting of initial margin requirement, while another is the increased IT costs incurred by more stringent regulatory oversight.

Futurisation of these products could potentially lower those costs, both due to the lower initial margin requirement on futures, as well as by virtue of being part of a class of products that regulatory agencies are much more comfortable with.

In addition, the number of firms that have the expertise and financial capital to clear futures is much greater compared to those that can clear OTC, so this may ultimately add competition to the market and be a downward pressure on costs to the buy-side customer.

Who are the real winners from the introduction of the central clearing model?
The clearing houses are the real winners in the short term. In the long term, I believe that innovative firms will find ways to deliver value to their customers and capture greater market share with new services to address the needs created by this model.

What are these needs? We will have to see how the new market dynamics evolve and stabilise over time to see them, but our customers can count on us to help them harvest these opportunities.

Re-wiring connectivity

Hirander Misra is chairman of Forum Trading Solutions Ltd

Firms trading the new over-the-counter (OTC) markets will need to think carefully how they will physically access these new liquidity pools and central counterparties (CCPs). Firms may want to establish connectivity through infrastructure vendors that interconnect to multiple data centres, and order management service vendors who leverage that physical connectivity to connect to several trading venues. Using managed services will allow firms to access these markets in a less resource-intensive way. Data centre providers such as Equinix also allow new trading venues to gain critical mass quicker through access to the existing financial ecosystems that have developed.

When products become more accessible, with lower and quantifiable frictional costs of trading, it also affords opportunities for electronic liquidity providers to enter the market. This will certainly be the case in some of these new OTC markets. The likes of DRW and Getco are already invested in Eris Exchange as are banks like Morgan Stanley, who are hedging against the move from OTC trading to exchange trading.

But regulation is not the only factor driving a change in the way OTC markets operate. The additional cost of new margins and collateral on OTC products, combined with the multiple strains on balance sheets, has driven many market players to search for new ways to hedge and trade existing products.

Success in this space will go to venues that introduce products onto platforms using innovative methods for developing index-based futures contracts, which address numerous issues affecting current OTC futures contracts. These will need to be simple to understand, easy to manage, reflect the underlying physical market, and be easy to trade. Such indices are dependent on the quality of the underlying market data sources, both real-time and also historical, to back-calculate the indices for the purpose of algo testing and technical analysis.

Such contracts will also enable institutions to access these markets at a drastically reduced cost to balance sheet, margining and internal back office resources by using central counterparties to reduce risk.

One thing is clear, in this era of dramatic change, simplicity and low cost must now be the watchwords of financial markets enabled by innovative products underpinned by good, scalable multi-asset technology services and data. But in the short term there may be increased risk through fragmentation before natural selection holds true and the best trading systems survive and prosper.

The lack of finality in the regulation is not encouraging early adoption of technology and certain trends threaten to significantly change the way that derivatives are currently traded

of the new rules, with 18 per cent citing Dodd-Frank more broadly as an investment driver.

Analyst and report author Virginie O'Shea cites, "a historic underinvestment in the management of client and counterparty data, combined with increased business and regulatory scrutiny of credit risk" as the reason for the scale of the investment.

Additional checks

Trading systems themselves are expected to cope with trading both exchange traded derivatives (ETDs) and standardised OTC products that are moved onto electronic trading platforms, although the change is seen as an opportunity for investment by some, says Hamish Purdey, CEO of derivatives trading technology supplier Ffastfill.

"We see some firms using the same systems for processing both OTC derivatives and ETDs, while others are introducing new systems for OTC processing; there's some variance between trading companies," he says.

Pre-trade risk management checks are required under the European Securities and Markets Authority (ESMA) guidelines issued in February 2012 and on 9 April the Commodity Futures Trading Commission (CFTC) amended the Commodity Exchange Act with Regulation 1.73, which added a requirement for pre-trade risk checks that sell-side firms must impose on orders coming through their books.

Although not prescriptive about the checks themselves the US rules have required re-engineering of some derivatives trading systems, such as that of Trading Technologies (TT), which had previously only offered risk checks at a trader rather than an aggregate level.

"For TT we have had to make a number of changes [to our systems] throughout the year for regulatory compliance; we spent the first half of the year reacting to the ESMA guidelines and then the second half of the year we spent reacting to Reg 1.73," said Jeff Mezger, product manager, Trading Technologies.

Regulators' demands are not always supportable by the technology that is being used, warns Purdey.

"Some of the rules regarding pre-trade risk management of give-up trades are a big issue for the industry," he says. "If you are the clearing firm and you are receiving trades from other brokers, being able to apply pre-trade limits on those trades is almost conceptually impossible when you are not in control of the [technology] architecture."

Exercising caution

The lack of finality in the regulation is not encouraging early adoption of technology and certain trends threaten to significantly change the way that derivatives are currently traded, which makes firms more wary.

The introduction of swap-futures contracts by CME and ICE in October 2012 may yet lead to a migration away from traditional OTC products that have been the focus of regulation in the US; any change in liquidity levels will further affect the trading dynamic and adoption of equity-like market innovations such as smart order routing and high-frequency trading. ■

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CCPs face tests from new risks

Huge new responsibilities for market risks are being loaded onto clearing houses – but are they ready? By **David Wigan**

It is widely accepted in the financial industry that central counterparty clearing will make the OTC derivatives business safer, but few believe it is a panacea, and some are concerned that clearing houses could even replace banks as the new crucibles of extreme risk.

From a regulator point of view the observation is salutary, and was implicitly recognised in June 2012 when the US Financial Stability Oversight Council (FSOC) designated eight financial market utilities, including ICE Clear Credit, CME (which runs CME Clearing) and Fixed Income Clearing Corp to be systemically important under Title VIII of the Dodd-Frank Act.

The systemically important tag imposes on clearing houses prudential and capital requirements commensurate with their anointed position in the new financial markets. They are the new incarnations of too-big-to-fail.

Certainly, as clearing house businesses proliferate in response to the commercial opportunities in derivatives, there remain questions as to whether the framework is in place to ensure they are as safe as can be.

One of the key issues is the optimum number of central counterparties (CCPs): too many pose the risk that smaller businesses will be less robust in times of stress, while too few raise the possibility of systemically destructive events from concentration risk.

"There is a balance to be struck because if a CCP has an implicit guarantee from the central bank then you want it to be a certain size, but then if you have fewer bigger CCPs, you are creating risk concentrations," says Jon Gregory, a partner at consultancy Solum Financial. "The best theoretical number, from a cost and netting point of view, is one, but that clearly is not possible."

The ideal number and size of CCPs has emerged as one of a growing list of concerns over CCP risks, many of which have yet to be resolved only months before compulsory clearing comes into

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CCPs are heading into uncharted territory P.66
New clearing commitments raise questions about capital P.70
Buy-side and investor clients bear the burden of costs P.80

force in the US (Europe is now expected in 2014).

At supervisory level there is little by way of conformity. For example, while FSOC has designated US clearing houses CME and ICE as systemically important there is no mention in its rule-making of LCH.Clearnet, an institution which processes large portions of the interest rate swaps market in the US, but which is based in the UK.

"We have to assume that the US regulator thought that LCH would come under the auspices of the UK regulator," says Darrell Duffie, Dean Witter distinguished professor of finance at the Graduate School of Business, Stanford University. "Most countries are doing their own supervision of CCPs, with no clear international co-ordination of responsibility for supervision and central bank liquidity."

National regulation raises some interesting – and as yet theoretical – questions of ultimate responsibility. For example, if the default of three Canadian banks were to cause the bankruptcy of a CCP based in London, should the UK or Canadian tax-payer be the lender of last resort?

"CCP default management plans have not been clarified or made sufficiently robust," Duffie says.

Away from regulation there are concerns about how CCPs operate. For example, there is little certainty over the potential impact of market volatility on margins in the new regime.

"When the market gets distressed, margins could go up very significantly, leading to forced sales and potentially greater volatility," says Hester Serafini, head of European and Asian OTC clearing at JP Morgan.

For banks there is also concern around default funds, used to bail out clearing members that go under.

"The default fund risk is opaque because in credit terms your calculation addresses something like the second to default in a financial basket," says Solum's Gregory. "One member defaulting may be OK but a second one could wipe out the default fund, or maybe it won't – these sort of uncertainties are tough to evaluate."

Another problem for banks is that under international standards drafted by the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) CCPs must make public plans for one or two clearing member failures, but no more.

"That strikes me as somewhat short-sighted," says Stanford's Duffie. "Two is just a negotiated number, which has no connection to how many might actually fail."

Potential problems

In addition, CCPs have been slow to publish default management plans, despite requirements that they must do so to a reasonable level of detail. One suggestion is that if default funds are exhausted, CCPs should have the option to haircut outstanding positions to cover their liabilities, but again very little as yet is in the public domain.

The problem may be exacerbated if for competitive reasons CCPs are tempted to reduce initial margins requirements, offsetting those shortfalls with guarantee fund contributions.

"We are a great believer in the 'defaulter pays' model, where initial margin is sufficient to pay for the clients' risk, and not subsidised by clearing members' default fund contribution," says Andy Sterry, head of OTC clearing, EMEA, at Citi in London. "We have to recover the costs from the clients, and feel that it is better to be transparent and fair in the first place."

Another potential problem for banks centres on simple operational challenges. If one clearing member goes bust and is a member of multiple CCPs then other banks will be asked to provide default management teams to manage the workout.

"That means exactly when the problem hits we could be seconding staff to a bunch of different CCPs," says Jason Cohen, EMEA head of interest rate swaps at Citi. "The CCPs may not have the resources to sort out all of the transactions themselves, which means banks are likely to be stretched at exactly the wrong time."

As banks fret over potential risks, buy-side clients have their own concerns over margin payments and the potential for losses should another party default. Pension funds and asset managers have been pushing for segregation of margins, a demand which has been met with a muted response from banks and CCPs.

In the UK, the Investment Managers Association says that clearing houses will fail to attract buy-side investors until they offer better protection against banks or themselves going bust.

Under current arrangements, initial margins paid by customers to clearing members are passed to clearing houses, where they are kept in segregated customer accounts. Margin assets are moved under a 'title transfer financial collateral arrangement', in effect giving ownership to the clearing house.

Investors insist assets be held in their own names, and the matter has been added to the list that CCPs must address if they are to inspire confidence in their new status as guardians of the world's most complex markets. ■

Unknown risks, unintended consequences

CCPs are going into uncharted territory and the hope is they can avoid crises while they find their way. By **Peter Norman**

One irony of the new regulatory system for de-risking the $640 trillion global over-the-counter (OTC) swaps market is that it is being launched amid reservations from the very regulators responsible for its conception and design.

When the US begins mandatory clearing of swaps this year, market participants will do well to recall the warnings from regulators with responsibility for OTC markets that followed a meeting late in 2012 to review progress towards the G20 commitment for mandated clearing of standardised OTC derivatives by the end of that year.

Their statement underlined that "differences in implementation dates may create gaps in regulations and uncertainty in the application of certain cross-border regulatory requirements, and may lead to risks in financial markets that are unaddressed, to regulatory arbitrage and to an uneven playing field for market participants, intermediaries and infrastructures."

A week later, the European Securities and Markets Authority (ESMA) disclosed that it would be 2014 before the EU caught up with the US, which had already announced it would miss the G20's end-2012 deadline by 10 weeks.

One of the flagship global policies for making the international financial system safer after the disasters of 2008-2009 has got off to a shaky start. What the OTC regulators omitted to say was that the entire ecosystem surrounding the shift to mandatory clearing is wanting, with a considerable baggage of unintended consequences and risk.

Unsurprisingly, the US Dodd-Frank Act and the European Union's European Market Infrastructure Regulation (EMIR) legislation have proved unequal to the task of providing globally acceptable regulations for the hitherto unregulated, bi-laterally negotiated OTC derivatives market.

Flanking measures, in the form of standards set by the Financial Stability Board, and an alphabet soup of committees of central bankers and securities regulators, have failed to extend the reach of the US and EU rules. For much of 2012, the US and EU were at loggerheads over the extraterritorial application of their respective laws.

While pressing ahead with the clearing mandate for 'standardised' swaps, the G20 has failed to provide timely and clear guidance for that part of the OTC derivatives market that will stay uncleared because the instruments traded are illiquid or in other ways unsuited to risk management by central counterparties (CCPs).

Planning ahead

The Basel Committee on Banking Supervision also missed an important end-2012 deadline when long-promised rules on the margining of uncleared swaps did not appear. For financial markets, the issue of whether uncleared swaps should be subject to initial margin was important for determining collateral needs.

At the level of the firm, such regulatory delays have contributed to operational risk and higher costs. Companies are having to plan ahead in such areas as IT investment on the basis of incomplete information, ad-hoc shifting of deadlines and late rule changes.

The absence of clarity from regulators has led users of bilateral OTC derivatives, such as buy-side investors and corporate end-users, to delay their preparations for CCP clearing.

The regulatory mix is symptomatic of an agenda that has focused heavily on CCP clearing, even though the September 2009 G20 meeting in Pittsburgh, which agreed that "all standardised OTC derivatives contracts... should be cleared through central counterparties by end 2012 at the latest," also accepted the continuation of a market for "non-centrally cleared contracts" provided these were "subject to higher capital requirements".

The policy followed from analysis that the OTC market contributed to the crisis by spreading toxic products through the system. It recognised that CCPs had a long and distinguished record of managing risk in exchange traded derivatives markets.

LCH.Clearnet's SwapClear service, then the only CCP handling financial swaps, successfully and quickly wound down Lehman Brothers' $9 trillion portfolio of interest rate swaps following Lehman's bankruptcy in September 2008. CCPs had a good safety record – far better than banks – although less well known at the time were instances of past failure, most

recently in 1987 when the CCP serving the Hong Kong Futures Exchange had to be bailed out.

In the early stages of post-crisis policy formulation, there was a tendency among politicians and some regulators to view CCPs as a silver bullet solution for the OTC markets. Less attention was paid to the fact that by intervening in markets as the buyer to every seller and seller to every buyer, CCPs not only mitigate risk, but also concentrate it in one central point.

Economic consequences

This focus on CCPs may have economic costs, especially for end users of derivatives. Depending on the final out-turn of the margin rules, companies may find that bespoke OTC derivative contracts for hedging specific risks become economically unviable. Some may have to purchase 'futurised' swaps that leave them partially exposed to basis risk, because the fixed nature of the cleared contract does not precisely match their needs.

There is also a risk that too much may be expected of CCPs, while overlooking one of the big unintended consequences of the regulatory tsunami that has washed over the derivatives markets: the proliferation around the world of CCPs preparing to clear swaps.

Companies reacted far faster than legislators to the G20's Pittsburgh commitment. Encouraged by user demand and the profit motive, the large US and European clearing houses moved swiftly to gain first mover advantage and exploit new opportunities promised by legislation.

Meanwhile, CCPs in countries such as Poland and South Korea made their own plans to clear rate swaps. In some cases the motive was entrepreneurial. In others, governments were keen to have CCPs to clear swaps denominated in their home currencies.

This proliferation marks a big change since the Lehman crisis. One way of looking at the spread of CCP clearing for OTC derivatives is to argue that it is creating up to 40 pockets of systemic risk, comprising CCPs clearing swaps and

Encouraged by user demand and the profit motive, the large US and European clearing houses moved swiftly to gain first mover advantage

big dealer banks, in place of the 14 to 15 leading dealer banks which previously traded and cleared OTC trades bilaterally among themselves.

Not all CCPs will be the same or face the same regulation. Large systemically important institutions such as SwapClear, CME Group, ICE and Eurex will exist alongside smaller regional clearers.

Large clearers of systemic importance face more onerous regulation than smaller CCPs, reflecting concern that CCPs could be the next 'too big to fail' institutions as they take on the job of mitigating the risk of a significant share of a market that is historically – in nominal value terms – 11 times larger than that for listed derivatives.

On the other hand, for large CCPs, clearing swaps holds out the prospect of new market opportunities, such as offering clients portfolio margining of swaps and exchange traded derivatives.

There are several worries associated with this proliferation of concentrated risk nodes around the global financial system. Fragmentation of CCP clearing threatens to reduce the efficiency of netting, creating extra demand in an already stretched market for liquid collateral. Nor will the risk of contagion be banished, because the same limited number of dealer banks will be clearing members in all the large CCPs.

The shared reliance of big CCPs on a limited population of clearing members may be a source of more than one type of risk when CCPs face their ultimate test – the default of one or more clearing members.

SwapClear's success in September 2008 was partly dependent on the remaining clearing member banks despatching experienced traders on the morning after the Lehman default to manage down the risk.

In preparing for defaults, CCPs clearing swaps will have to ensure that they can rely on similar skilled personnel from outside who are prepared to put the general good ahead of their employer's narrow interests.

Challenging times

CCPs must also be braced for unravelling contracts linked through portfolio margining and handling a wider variety of asset classes, including credit default swaps. According to one market expert, some of the swaps declared eligible for clearing may be a known type of risk but have a tail or behaviour that "you can't measure, describe or envisage".

CCPs and swap market participants face challenging times ahead. The emerging architecture for clearing swaps is complex and will be costly for all concerned. But clearing houses have faced challenging times before, notably in the years following 1987 when October's Wall Street crash sent shockwaves around the world and exposed weaknesses in the clearing infrastructure of Hong Kong and elsewhere.

Those flaws were corrected, thanks to lessons learned from a series of smaller shocks in the following years, so that CCPs performed well in 2008-2009.

The hope must be that the way ahead for today's swaps CCPs is similarly testing, but not too testing. After years of preparation, clearing houses, clearing members, users and regulators need opportunities to iron out the inevitable problems and risks lurking in the OTC markets' post-trade architecture so that the system can be safe and supportive of economic growth. ■

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CCP capital questions

Huge new clearing commitments will raise important questions about the capital that supports central counterparties. By **Christian Baum**

Dodd-Frank in the US and the European Market Infrastructure Regulation (EMIR) in the EU will lead to a significant part of the as yet uncleared over-the-counter (OTC) derivatives business having to be cleared.

The largest part of that is interest rate swaps, of which the International Swaps and Derivatives Association (ISDA) indicates $112.6 trillion were uncleared in June 2012. Over half of these are probably sufficiently standardised to be clearable, as are most of the $25.5 trillion uncleared forward rate agreements (FRAs).

Also clearable are significant parts of the swaption market. The total interest rate option market is estimated at $50 trillion by the Bank of International Settlements (BIS), of which about half are swaptions. So too are parts of the FX option market – $11 trillion net according to BIS.

Of the total $27 trillion notional credit derivatives outstanding, only $5.2 trillion were in clearing, according to BIS data. But ISDA estimates that only $1.9 trillion of the total were not electronically confirmable, leaving plenty of scope for additional clearing.

The potential for clearers is therefore vast and the huge notional amounts of trades that they will have on their books is making them systemically important institutions, which attracts the attention of financial markets regulators.

The multi-dimensional nature of these regulatory efforts, however, leads to a potential conflict between a) the intention to drive as much OTC derivatives business as possible into clearing and discourage bilateral uncleared transactions and b) increasing capital requirements, not only with respect to the clearing houses' own capital, but crucially with regard to significantly increased impact on the capital of clearing members contributing to a central counterparty's (CCP's) guarantee fund.

These requirements originate from different and seemingly uncoordinated regulatory streams with Basel III/CRD4 on one side and EMIR/Dodd-Frank on the other and have the potential to lead to unintended consequences.

Transaction structures

The increased capital requirements imposed on the shareholders of the clearing houses and the clearing members may actually lead to the creation of transaction structures that exploit loopholes in the regulation and lead to less transparency and increased risk in the financial system.

At first sight, increased capital requirements seem sensible. However, there are a number of issues with this. Traditionally a clearing house was the means to mutualise the risk of its users. Unlimited assessment rights effectively meant that the strength of the clearing house was essentially correlated to the resources of its members, not its own capital.

The fact that EMIR requires clearing houses to insert 20 per cent of their own capital in the default waterfall ahead of the mutual guarantee fund contributes to breaking that link.

It also reduces the return on equity of clearing houses, which disincentivises them from increasing their clearing activities, for example by new product innovation. Increasing clearing fees on the other hand might encourage market participants to circumvent clearing their transactions.

Increasing capital requirements on members' guarantee fund contributions is also contentious. Most clearing house members in Europe have bank status and thus are subject to Basel III/CRD IV regulations.

With a 1,250 per cent capital weighting, contributions to a CCP guarantee fund have to be fully deducted from the members' capital (8 per cent Basel III minimum capital times 1,250 per cent = 100 per cent). They are effectively treated as a equity investment by one bank into another bank.

While Basel III and its transposition in EU law, CRD IV, are not yet finalised, current proposals point in that direction.

This will result in clearing houses having to limit their assessment rights to a fixed multiple of members' original contributions. They have to do this in order to limit the capital impact open-ended commitments would have on their clearing members.

If they didn't, that might lead to a wave of clearing member departures. Consequently, most but not all CCPs have already adapted their rule books accordingly. This further reduces mutualisation of default losses and could actually increase the probability of default of the clearing house.

Furthermore, even with capped guarantee fund contributions, the high capital requirements for members for client clearing are likely to lead to a reduced number of OTC clearing general clearing members (GCMs).

Combined with other factors pressurising futures commission merchants (FCMs), this reduced number of clearers will result in a further concentration of risk, aggravating the too-big-to-fail issue and increasing systemic risk.

What steps might be undertaken to mitigate some of the consequences of this contradictory regulation?

Defaulter pays

As a reaction to high capital requirements for clearing house members, CCPs are switching away from mutualisation and towards a 'defaulter pays' model. In effect this means increasing the amount of initial margin posted in order to reduce the default fund contribution.

While net positive for members' house business, unfortunately the reduction in the default fund contribution is not inversely proportional to the increase in initial margin (IM).

As always, market participants will work out mitigation strategies to operate within the new environment

Also, increased IM has a disproportionally negative effect on the willingness of some clients to engage in cleared business, in particular buy-side customers such as pension funds.

This is not only because of the amount of IM to be posted, but also as a result of regulations restricting the types of eligible assets that can be posted to fulfil IM obligations.

Less legal entities

Consolidating OTC derivatives business in less legal entities to take advantage of netting effects and, for clients, also reducing the number of clearing members and clearing houses used to benefit from netting (i.e. offsets).

This is a strategy that sell-side institutions are already pursuing. As the extent of Dodd-Frank extraterritoriality and 'push out' is still in flux, as is legislation outside of the US and EU, this will be an ongoing process. Given that this requires restructuring of corporate entities, it is not a process that can be adopted overnight.

For larger buy-side entities, who seek to isolate themselves from the default of a single clearing member, there are also limits on how few clearing members they can use. To ensure portability of trades and collateral in the event of member default, they will want to have agreements with at least two clearing members and feed them ongoing business.

Interoperability between CCPs

Interoperability could introduce increased risk into the system via the requirement for a 1,250 per cent capital allocation to the guarantee fund contribution of one clearing house to the other and the prohibition of portfolio margining between two separate clearing pools not owned by the same corporate entity.

These, and the fact that this is not on the ESMA agenda in the immediate future, suggests it is unlikely to happen any time soon and therefore will not contribute to a mitigation of the regulatory consequences.

Margining and default management

More efficient margining and corresponding default management on a portfolio basis could capture offsets in complex portfolios, including listed derivatives, more efficiently. If combined with corresponding default management (i.e. on a portfolio basis) it would reduce the risk to the clearing house in a default.

It will lead to a phase-out of SPAN (standard portfolio analysis of risk) margining in favour of Value at Risk (VaR) based portfolio margining. On client and member portfolios with significant offsets, that should lead to reduced IM requirements.

Reduced risk should also mitigate the amount of capital and guarantee fund contributions needed. However, the increased complexity of default management will also necessitate co-operation agreements between CCPs and market participants, in the first instance their clearing members.

Futurisation

Re-working OTC derivatives into futures would attract lower margin and capital requirements. This path has been pursued by ICE and CME for certain energy derivatives.

However, some OTC derivatives have been very similarly specified to listed futures and options so that turning them into futures did not entail a significant change in market practice.

This is, however, not necessarily the case with the largest of all OTC derivatives markets, the interest rate swap market.

Although there are attempts to 'futurise' this market, notably from the CME (deliverable swap futures) and the ERIS exchange, it remains to be seen whether they will gain significant traction.

Trade compression

This has been successfully used in the cleared interest rate swaps (IRS) and credit default swaps (CDS) market to significantly reduce notional outstandings booked in CCPs and thereby mitigate IM and capital requirements.

In conclusion, financial regulation is having a significant impact on OTC derivatives markets as we know them.

In particular, CRD IV in its current draft format is likely to have a significant impact on capital requirements regarding the cleared OTC business.

As always, market participants will work out mitigation strategies to operate within the new environment. Short term, however, the collective impact of the regulation is likely to increase the cost of doing business and might lead to a reduction in transaction volumes and some participants exiting the market.

Over time the increased transparency and standardisation might compensate for this, attracting new entrants to the market, resulting in an increase of transactions. ■

Are clearers ready for the new demands of OTC?

Daniel Maguire is head of SwapClear US

LCH.Clearnet's SwapClear service has the benefit of 14 years of experience clearing OTC interest rate derivatives for the global marketplace. During this time, SwapClear has successfully cleared many trillions of dollars of trades, providing the reassurance of a battle-tested and robust clearing infrastructure.

We have also worked through a range of challenging risk management situations, including the successful resolution of the 2008 Lehman default, where we oversaw the close-out of a $9 trillion IRS portfolio well within the defaulter's margin and with no recourse to the mutualised default fund.

Our years at the forefront of OTC derivatives clearing have enabled us to forge strong working relationships with executing brokers, clearing members and the buy-side. This ongoing engagement with key market participants has played an important role in helping us improve and shape the way that the industry and regulators across the globe manage risk. Most notably, LCH.Clearnet has been leading the way as buy-side clearing has evolved, and SwapClear currently commands a greater than 80 per cent share of the market.

LCH.Clearnet's horizontal clearing model provides buy- and sell-side participants with a broad choice of execution venues across an extensive OTC IRS product set, uniquely positioning us to provide cross-product clearing solutions. Our vast experience clearing IRS through SwapClear has helped develop and expand LCH.Clearnet's OTC clearing offering to include other asset classes, including foreign exchange and credit default swaps.

From the outset SwapClear has been a pioneer, clearing more and more products in line with market demand, while maintaining high standards in risk and default management. Today, we clear 17 currencies in IRS out to a maturity of 50 years, forward rate agreements in 11 currencies as well as overnight index, variable notional, basis and zero coupon swaps to name but a few. This continual product diversification provides material portfolio margining benefits to all market participants.

SwapClear also provides access to the deepest pool of interest rate liquidity, and to the widest selection of executing brokers. In fact, we have 74 direct clearing members allowing for much the same level of counterparty choice as is enjoyed by participants trading and collateralising in the bilateral world. Other CCPs do not offer this same level of flexibility or choice.

In a nutshell, over the years we have developed SwapClear into a derivatives clearing service that is tailored to the market's specific requirements, enabling participants to transfer from an OTC bilateral environment to the safety of an OTC cleared environment while maintaining the maximum choice of product, counterparties/clearing brokers, and capital efficiency.

And while the regulatory timetable is accelerating the adoption of OTC clearing, we remain focused on expanding our product set and enhancing our service in North America, Europe, Australia and Asia throughout 2013.

Balancing regulation, risk and recovery

Well-intentioned regulations, if not properly calibrated to the real risks in the markets, may impair recovery. By **Robin Poynder**

Speaking at a conference in early 2010, I highlighted the impending regulations that would surely hit the markets following the G20 pronouncements at their meeting in Pittsburgh that previous September.

In the subsequent two years we have all experienced the new focus on prospective and impending G20 regulation from Dodd-Frank in the US and the European Market Infrastructure Regulation (EMIR) in the EU, as well as the wider impacts of the Markets in Financial Instruments Directive II (MiFID II), the Foreign Account Tax Compliance Act (FATCA), Basel III – the list goes on.

Focusing on the G20 commitments and subsequently Basel III , the thrust of new regulation maintains a clear political policy goal to drive OTC markets towards clearing and to remove pure OTC risk as far as possible.

The impacts from this policy goal are profound and are starting to be felt. Already banks are re-structuring, jobs are being lost and spreads are widening. But is this the end effect or just the beginning of a longer-term trend? A deeper look at the symptoms indicates the underlying problem.

The cost of execution is rising. Risk that was previously traded on a bilateral basis, with the cost of credit being borne by the bank, will now be required to clear. There is a cost of clearing both from the initial and variation margin associated with that particular trade, as well as the wider cost of membership and collateral that has been applied by the bank to participate in the clearing house.

Any marginal profit that may be derived from the trade is unlikely to cover the clearing costs and so these must be passed on to the customer.

If the total cost of execution looks too expensive, the end user has some alternative approaches. They could execute a strip of relevant futures on an exchange, which may prove cheaper to execute, however, this leaves the exposure to the remaining basis risk.

While the overall outcome may appear attractive to politicians in that the majority of market risk as a percentage of volume will show as cleared, and therefore 'safe', history has shown how the outlying basis risk is the very area that can suddenly and rapidly expand into a major area of concern.

Another alternative could be for the end-user to trade directly with the bank, as before, where the trade will now attract a regulatory demand for mutual collateralisation. Both counterparties are required to put up initial margin and then to manage the risk through the life of the trade.

The calibration of this collateralisation is crucial and being debated by the regulatory community as the cost will again be borne by the end-user. With the 'double hit' involved on their cost of trade it is hard to see how this will remain a realistic prospect for all but a small number of trades.

The end-user will be forced to find a trade that makes financial sense. One outcome could be that the holder of risk looks for another end-user with whom to execute a trade directly, where the risk does not pass through a bank, clearing house or exchange – with the resulting lower costs.

However, this approach retains counterparty credit risk, disintermediates banks and is contrary to regulatory goals. The area of shadow banking has grown steadily if slowly over recent years, and there is a real prospect that if the cost of execution in established markets becomes prohibitive, end-users will find alternative arenas in which to manage their risk.

The cost of capital and its use has risen significantly over recent years, whether due to increased sovereign risk, increased requirements for capital reserve due to Basel III, or due to increased demand for capital in servicing business through clearing or collateralisation.

Bearing in mind that this restriction on capital availability is taking place at the very time when world markets are in a slump, the impact on wider growth prospects is magnified, with a related drag on recovery.

When considering where a bank can grow its business, the decision now also explicitly involves a decision as to where it is able to disinvest, so allowing capital to become available for investment. The fallout from this is already being seen in the markets.

The Centre for Economics and Business Research estimates that in 2007 London's financial services firms employed around 350,000 people – but that by 2012 the number had fallen to around 250,000 and has further to fall. While these numbers are derived from the wider area of financial services and only in London, they are a reflection of the significant impact that is being felt within the global financial markets.

Outcomes of the newly regulated world

The core regulatory goals are sensible and well intentioned. Bilateral risk, which so exacerbated the fallout of the last financial crisis, should be controlled through clearing and all trades should be reported and visible to the regulators for a far greater understanding of where any risk might reside.

However, the impact felt by the markets, when coupled with the global economic malaise, is far-reaching and significantly deeper in terms of fallout than the headline intentions might suggest.

Over the last 20 years the broad strategy taken by banks has been to become as large and as global in their reach as possible. While the end consumer of banking products has benefited from the competition in terms of wider choice and lower pricing, the market became a broadly scaled and low-margin business.

As the cost of running this business due to higher capital costs has risen, so banks have had to withdraw from the areas into which they had expanded, and the last few months have seen examples of this. What was recently held to be strategically interesting is now forecast as unprofitable.

With less capital to invest and restrictions on risk appetite, banks are severely limited in how much they can lend and to whom. Companies looking to raise new finance are now faced with fewer banks being able to offer this service, and with reduced capacity to participate in the lending directly.

Asset managers and pension funds trying to cover their risk into the core markets are experiencing wider spreads as the cost of clearing and increased capital costs are reflected within the spread of even relatively standard interest rate swaps.

Spreads will continue to widen as liquidity is reduced, risk appetite is controlled and cost of capital rises. Ultimately it is possible to imagine the spread narrowing back to reflect the core market risk but with each and every trade carrying a specific charge for execution, which reflects the cost of capital and clearing.

What will the market look like in three years' time?

The trend for large global banks has turned and almost all will retreat from the broad expansion plans seen in recent years. This will leave some breathing room for regional

banks, which have a natural reason to be active within a given geography or asset class.

The rising cost of execution will drive those with risk exposure to source new methods of managing that risk, whether through expanding geographic markets where regulatory costs are less severe or through finding new counterparties with whom to trade where the regulatory burden falls less heavily.

History shows us many examples of man's ingenuity when it comes to finding new and more efficient ways of trading. From the growth of Eurodollar accounts to circumvent restrictions in the US during the 1980s or the growth of non-deliverable forwards to circumvent national currency restrictions; it is clear that if a given commercial risk exists, a solution will somehow be found to manage that risk.

The markets are at a crossroads. The effects of the new regulatory burdens on use and availability of capital, aligned with the economic challenges faced by the majority of jurisdictions, will have a significant influence on the global economy over the coming years.

New regulations are intended to ensure that the markets are safer places in which to do business. The challenge that faces the regulators is not to be underestimated; the correct interpretations and calibration of legislation will protect investors and the market infrastructure while also allowing growth and continued access to liquidity.

Misjudged calibration will stifle growth, impair liquidity, raise costs for the end-user and drive a search for alternative, less regulated markets. It is only with the benefit of hindsight that we will look back in future years and know if the path that was chosen turned out to be a path that avoided the minefield of unintended consequences. ■

Robin Poynder is global head of regulation, marketplaces, Thomson Reuters. These opinions are the author's and do not necessarily reflect the views of Thomson Reuters.

CCPs face ratings scrutiny

OTC counterparties were subject to severe credit filters, but now that CCPs will intermediate in OTC markets, their creditworthiness will attract close attention.

Integration between exchanges and central counterparties (CCPs) has been a major part of the development of futures markets worldwide for decades and is one of the strengths that the post-G20 regulators recognised when reforming over-the-counter (OTC) markets. However, there is some concern that simply adopting CCP functionality into OTC markets will not necessarily resolve the problem, but merely move it elsewhere.

In a December 2012 analysis, for example, Standard & Poor's (S&P) examines potential weak points at CCPs. The agency sees "differences in the approach of clearing houses", which includes the acceptability in some cases of less liquid assets as collateral. From this it argues that in the event of a member default the reliance on less liquid collateral assets could pose a threat to the CCPs' ability to deal fully and promptly with a default.

S&P also recognises differences where collateral is pledged by a member as opposed to full transfer of title. It recognises that pledging works well where the underpinning law works efficiently, e.g. in the US, but in jurisdictions where the process is less well-tested and slow, pledging may highlight weaknesses.

CCP contingent liability is often covered by committed credit facilities from commercial banks. But S&P thinks it is "questionable whether all credit facilities would always be available in case of need, particularly in the scenario of the default of the two largest members.

"First, it could well be that the defaulted members were among the liquidity providers. Second, this default would represent in some systems such a shock that it could give rise to liquidity issues for other liquidity providers."

In practice, S&P observed that clearing houses it monitors, which include all the major western European CCPs, except ICE, and CME and DTCC in the US, do sacrifice interest income by keeping cash placements at very short tenors and by using high-quality counterparties such as central banks for unsecured placements.

Despite regulations designed to bolster clearing house safety, S&P concludes collateral-related credit and liquidity risks could rise at some clearing houses.

This is partly because of the increased incentive to take more risk with their investment of collateral because of weakened interest income and partly because softening trading volumes in some products have reduced clearing revenues. However, it also recognises that none of the CCPs it rates has gone down this path.

However, one tangible and potentially worrying trend is that of the decline in excess collateral from members. Quoting the example of Eurex at end 2011, S&P noted effective contributions of €51.3bn against Eurex Clearing requirements of €42.2bn.

"Members generally do this for operational reasons – for example to avoid intraday margin calls – but they may also do it in times of market-wide risk aversion because they may perceive the clearing house to be a relative safe haven."

But given that members may face greater calls on their collateral pools in the future, making it a scarcer resource, over-collateralisation could decline, and therefore so too some level of clearing houses' protections against a member default, according to Standard & Poor's.

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Hindsight hasn't helped

US regulators are over-regulating the problem and failing to address core issues. By **Gary DeWaal**

> It is too late to turn back the clock, as the first swaps dealers are already registered and the reporting of certain swaps publicly has already commenced

It is increasingly clear that Title VII of Dodd Frank is bad law, albeit very well-intentioned.

Following the 2008 financial crisis, Congress could have chosen more expeditiously and less painfully to increase transparency in the trading of over-the-counter (OTC) swaps, to promote central clearing, and to mandate better capitalised swap dealers, while at the same time finally addressing the archaic regulatory framework in the US, based on post-Great Depression concerns, that continues rigidly to differentiate between securities and futures – and now adds a third category for regulators to oversee: cleared swaps.

Since the financial crisis in the commodities industry in 2001, following the collapse of Enron and various trading partners, at least three clearing houses globally had developed systems to centrally clear certain commodity swaps, as swaps themselves or novated as futures. LCH, too, had seen its volume of cleared interest rate swaps steadily increase since its launch of SwapClear in 1999.

If, following the collapse of AIG and other household financial giants in 2008, Congress had simply mandated registration of all swap dealers; imposed capital requirements on such dealers, including requiring greater haircuts for non-cleared vs. cleared swaps; and required the public reporting of all swap transactions, whether transacted OTC or ultimately centrally cleared, the percentage of cleared swaps would have increased dramatically. Instead, a complex law was enacted and even more complex regulations imposed that are now often challenged in courts, and it appears that an unsustainable amount of risk will now be concentrated in just a few clearing houses globally.

At the same time the number of brokers critical to the system to help intermediate this risk continues to decline, in large part because of the great costs imposed upon them to comply with the complex new laws and the large contingent risks they now blindly incur to help insure these too-big-to-fail central counterparties (CCPs).

Meanwhile, both the Securities and Exchange Commission and the Commodity Futures Trading Commission continue to co-exist, each with a portion of narrow financial product oversight – despite the fact that more and more individual players are under both regulators' jurisdiction, and financial products are often fungible, and more and more straddle the traditional boundary of futures and securities.

Unfortunately it is too late to turn back the clock as the first swaps dealers are already registered and the reporting of certain swaps publicly has already commenced.

However, rumbles of the 'futurisation' of swaps clearly indicates that the marketplace is already exploring alternatives to a new complex regulatory scheme, and one can only hope that regulators in the USA as well as elsewhere can agree on a framework of regulation that respects other country's regulatory approaches and does not further impede global transactions.

At the same time, it is not too late to explore the creation of a single financial oversight authority in the USA that respects the increased fungibility of financial products, and removes once and for all dark holes in regulatory oversight that permit complex multi-national players rapidly to fail (as happened in 2008) or nefarious wrong-doers like Bernie Madoff or Allen Stanford to conduct their wrong doing for so long undetected. ■

Buy-side bears the burden

Higher operational and capital costs are being imposed on financial markets, but ultimately it is the buy-side and their investor clients who will bear them. By **Sunil Chadda** and **John Parry**

Asset managers, certainly those in Europe, played little or no part in the credit crisis of 2008. Their actions did not cause nor exacerbate the crash.

Many suffered from the collapse of asset values in 2008-2011 and now, in 2013, when a modest asset value recovery seems to be underway, they are being faced with punitive costs of new over-the-counter (OTC) derivative market regulations, which are likely to impair the performance of all and threaten the viability of some.

The core problem is a clear case of the unintended consequence. The G20-inspired regulations represent the effort to repair perceived faults and excesses in OTC markets.

But these regulations pay little heed to the investment and commercial requirements of buy-side OTC market users and, more importantly, their underlying investors – who ultimately pay for the services they receive and will therefore bear the cost.

Additionally, the asset management business is large, sprawling and non-uniform. So called 'solutions to the problems of OTC markets' will likely create new problems for asset managers in investment approach and operational complexity at a time when they are already struggling in a low-return, high-risk and high-cost environment.

Fixed income and credit managers who use 'standardised' OTC interest rate and certain credit default swaps will be impacted first and quite heavily in terms of capital requirements, market change and cost.

Different workflow

Ultimately, the regulations will impact all those managers who trade any kind of OTC swap. Products such as hedge funds, UCITS, certain managed accounts and liability-driven investment (LDI) funds who use OTC swaps will be impacted, some far more than others, and will more than likely need a different operational workflow – adding considerably to a manager's operational complexity and cost. Legacy OTC contracts and new central counterparty (CCP)-traded contracts will have to be treated differently, so they too will need a different workflow.

Some managers may decide to close impacted products rather than face additional capital adequacy and higher operational complexity and cost. It is also possible that managers may seek out simpler and cheaper 'proxy' assets with similar correlations as alternative hedging strategies. For some though, the new derivatives regulation may simply be the final straw.

Swaps are used in different ways, for example as a risk management hedge, for one-to-one exposure or for more exposure via gearing. When swaps are used in hedging they tend to be against a specific risk and date. And in both hedging and exposure they are commonly rolled.

The avoidance of basis risk has attracted asset managers to the tailored nature of the OTC swaps market and this may act as a possible deterrent to the trading of exchange-traded futures at some point in the future.

Furthermore, regional variabilities in asset management and the impact of size and operational scale of the largest asset managers versus smaller, niche managers such as private wealth or hedge fund managers, highlights the lack of uniformity of 'asset managers' as a class facing OTC reforms. With implementation now slipping into 2014 and much still not decided, the European Market Infrastructure Regulation (EMIR) proposals for OTC regulation and their potential effects are still far from clear.

Complex guidelines

All clients and products will have investment guidelines that the asset manager will be expected to adhere to in their day-to-day investment activities. But in reality this will become unbearably difficult due to complex workflows for OTC derivative instruments for order capture and execution and a plethora of other data, collateral and systems issues.

The ability to check pre-trade and post-trade compliance with client investment management

agreements and applicable regulatory rules may be nigh on impossible.

Asset management operations will become a far more real-time environment than now for heavy OTC derivative users. This is something that hedge funds understand and are set up for.

Reconciliations (of items such as stock/cash, margin and collateral etc) will have to be undertaken on a daily basis with more counterparties, including all CCPs, and may additionally have to be done on an intra-day basis in fast markets. All of this implies more process complexity, a higher level of operational risk and higher staff costs.

Pricing and valuation is another minefield. It is possible that in due course cleared OTC liquidity may concentrate in highly visible pools but meanwhile asset managers are preparing for fragmented market liquidity between trading platforms, CCPs and trade repositories.

For standardised (or vanilla) contracts this fragmentation may be quickly resolved, but for the less liquid contracts the regulatory requirements, and the associated cost, will be extremely arduous. Regulators, of course, may claim that is the point.

Collateral transformation?

But possibly the biggest problem in the trade life-cycle will be collateral for margin. Unlike futures markets, asset managers may not be in possession of CCP-eligible initial margin collateral, particularly in the form of cash or defined bonds.

This is partly a question of the type of asset available, which conforms to CCP eligibility requirements, and partly a question of size – collateralising the existing OTC markets will require trillions of dollars. Do existing asset managers have that available and in eligible formats?

Collateral transformation is one proposed solution – using custodians or other market participants to swap high-quality collateral in exchange for lower-quality assets the manager already possesses. During stable market conditions such a procedure sounds perfectly feasible. But will it work when markets blow up, correlations change, liquidity dries up and there is another flight to quality, just as in 2008? And let us not forget that there is already a shortage of high-quality collateral in the market.

There remains a jaundiced view that G20 was not about enhancing market protection, it was about de-leveraging and diminishing the OTC markets

Other issues

Other CCP-related issues are also causing some asset manager head-scratching. Legal title to assets among asset managers is fundamentally different from futures markets and hedge funds, for example, where exposure to performance is the driver.

In a cleared OTC market, margin assets lodged with the CCP will be 'owned' by the CCP. Failure to meet a margin call will constitute a default and that client can then be wound up. It may seem an extreme result but today's rule-makers are working through the prism of Lehman, Bear Stearns and AIG. And it will not do to avoid CCP markets. The new capital requirements for trading on the non-cleared rump of OTC markets are punitive too.

Further complexity will come from the proliferation of CCPs, possibly with varying acceptable collateral definitions and different margining algorithms.

The uncertainty over netting off between CCPs (or even cross-product netting with the same CCP), either via prime brokers and/or through the CCPs' levels of interoperability, also requires asset managers to prepare for the least benign outcome.

Direct clearing has been suggested as an option for larger asset managers but this does not necessarily resolve the complexities which will result from multi-CCP membership nor reduce their costs.

As banks continue to be hit by the current poor economic environment and the regulators' ire, they will not necessarily be willing to enter all or parts of the new OTC derivatives market once the Dodd-Frank/EMIR regulations are fully live.

This is where new market participants such as 'shadow-banking' entities may be willing to enter to provide competition in areas such as collateral transformation, correlations and other analytics and services, which will thereby reduce costs for the buy-side. With EU shadow banking legislation looming too, it is possible that the market structure may change a few times before it finally stabilises.

There remains a jaundiced view of all this that G20 was not about enhancing market protection, it was about de-leveraging and diminishing the OTC markets. Certainly the clear prospects at present are twofold: huge additional cost and risk is about to be loaded onto asset managers and, secondly, the size of the OTC markets, at least while these changes take effect, will be dramatically reduced.

That immediately suggests a reduction in the range and type of contracts previously used by asset managers, which itself suggests unhedged risks or unreached performance. It seems that asset managers are being punished for something they didn't do and that investors have been completely forgotten.

And will regulatory arbitrage be the hottest strategy of 2013 and 2014? ■

Settlement Trade management Risk management pre-trade,
Position management Listed instruments Back testing
Cross-asset classes Stress testing Pricing
Collateral management
Settlement Back testing Position management
Risk management pre-trade, at-trade, post-trade
Trade management Interoperability
OTC instruments Multiple risk algorithms
Listed instruments Collateral management
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