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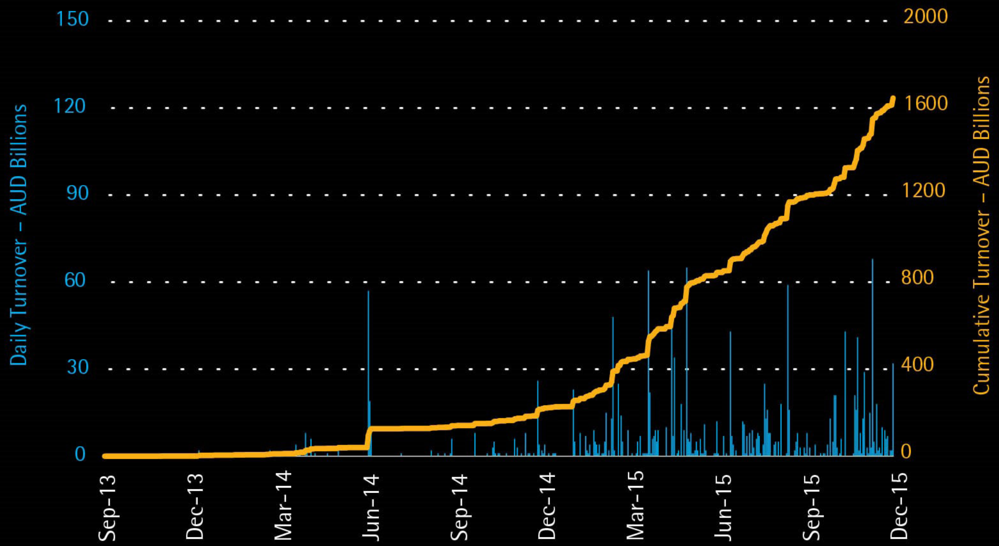

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Vol 2 Issue 1: January 2016
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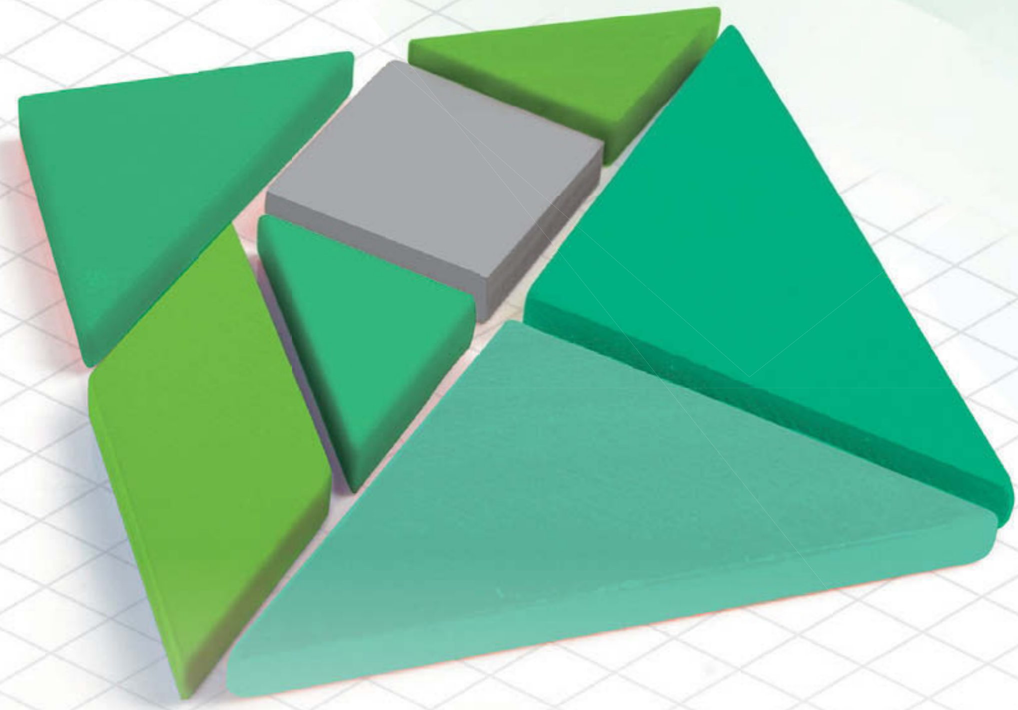
DERIVATIVES: THE YEAR AHEAD

- Q&A with Greg Medcraft, IOSCO
- Interview: Michael Spencer, ICAP

ISDA. Safe, Efficient Markets



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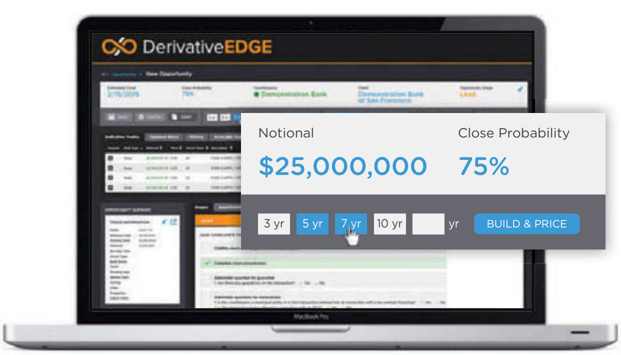

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Safe, Efficient Markets

RARELY DOES A phrase so perfectly capture and encapsulate an organisation's essence as this one does for ISDA. It shapes who we are and what we do. Since its introduction into the association's corporate identity in 2011, 'Safe, Efficient Markets' has become the touchstone for our efforts and initiatives across the globe.

The phrase is, of course, embedded in our mission statement: ISDA fosters safe and efficient derivatives markets to facilitate effective risk management for all users of derivative products.

And it also drives the strategy statement that frames how we work to achieve that mission. In fact, ISDA's board recently reviewed this statement to ensure it – and the association – are strategically aligned with the dynamics and priorities of our markets and our members.

Toward that end, we made several important changes to the strategy statement – changes that recognise, and focus ISDA's commitment and resources on, strategic challenges and opportunities in key areas: public policy advocacy and education; capital, margin and risk management; documentation and netting; and derivatives trading, clearing, reporting and processing.

The strategy statement in full reads:

> ISDA achieves its mission by representing all market participants globally, promoting high standards of commercial conduct that enhance market integrity, and leading industry action on derivatives issues. This includes being:
>
> **The preeminent voice of the global derivatives marketplace**: Representing the industry through public policy engagement, education and communication.
>
> **An advocate for effective risk and capital management**: Enhancing counterparty and market risk practices and ensuring a prudent and consistent regulatory capital and margin framework.
>
> **The source for global industry standards in documentation**: Developing standardised documentation globally to promote legal certainty and maximise risk reduction.
>
> **A strong proponent for a safe, efficient market infrastructure for derivatives trading, clearing and reporting**: Advancing practices related to trading, clearing, reporting and processing of transactions in order to enhance the safety, liquidity and transparency of global derivatives markets.

As we move into 2016, our mission and strategy statement provide a strong foundation and direction for ISDA in what will surely be a busy and complicated year. Economic and market conditions continue to evolve. New rules are due to be implemented in jurisdictions across the globe. Emerging technologies have the promise to reshape the rules of the road.

We have invited a number of industry leaders to share their views on the key issues shaping the derivatives markets in the years ahead. We hope you enjoy our first issue of *IQ: ISDA Quarterly* in 2016. ■

Steven Kennedy
Global Head of Public Policy
ISDA

ISDA Safe, Efficient Markets

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A Big Year Ahead

FOR SOME TIME now, regulatory and industry focus has been shifting steadily from the development of the new regulatory framework for derivatives to addressing the practical challenges of implementation. That will crank up another level this year.

Perhaps most significantly, September 2016 will see the first phase of new margining requirements for non-cleared derivatives. These rules, when fully implemented, will fundamentally alter the derivatives markets. Those affected counterparties will need to post initial margin on their non-cleared trades, in many cases for the first time, while all counterparties will need to post variation margin. Putting aside cost implications, derivatives market participants will need to replace or modify all existing collateral documentation, set up new technology and infrastructure, and establish custodial relationships to meet new and varying segregation requirements in the US, European Union (EU) and Japan.

Helping the industry prepare for these changes has been one of the ISDA's biggest priorities over the past year. A critical part of that has been the development of a common initial margin methodology, called the ISDA SIMM – a model that will enable industry participants to consistently calculate the margin that needs to be exchanged, and so reduce the potential for disputes. Efforts are under way to provide the model to service providers and users to enable sufficient time to prepare for the initial implementation date of September 2016. We're also working to draw up the necessary changes to collateral documentation in each jurisdiction, as well as ensure these modifications can be applied in the most efficient way.

Final national rules were released by US prudential regulators at the end of last year, and are expected from EU and Japanese authorities shortly. Once published, ISDA can intensify work to finalise these initiatives. But there's a lot of development, implementation and testing that needs to be completed between now and September 2016. This will be a major priority for ISDA and its members in the months ahead.

This year will also see the introduction of the first clearing mandates in the EU, Australia, Hong Kong and Singapore, among others. As these jurisdictions implement their own national clearing regimes, cross-border issues will likely come to the fore. Again, this has been a major priority for ISDA in 2015. We've looked to engage with regulators across the globe to flag cross-border issues, backed by quantitative research, and suggest possible solutions.

As an example, we published a principles paper on regulatory reporting early last year, which made several key recommendations aimed at reducing costs and complexities for firms that have to meet different reporting rules in multiple jurisdictions. ISDA is also leading an industry initiative to develop a global open-source standard derivatives product identification system. Similar work is under way for trading and clearing, and will continue this year, with the ultimate aim of encouraging greater consistency in global rule sets.

In anticipation of new clearing and trading rules being rolled out (including the EU's revised Markets in Financial Instruments Directive), ISDA is working with its members to develop the operational standards to facilitate the broad adoption of financial technology solutions to increase efficiency and reduce costs. ISDA is also working to enable the exchange of massive amounts of collateral that will be required under the non-cleared margin rules, with the aim of automating this currently manually intensive process.

Regulatory capital rules will be another major focus in 2016, as several important initiatives come to fruition. Last year, ISDA led an industry effort to collate and analyse bank submissions for two Basel Committee impact studies on the Fundamental Review of the Trading Book (FRTB), and one related to a review of the credit valuation adjustment (CVA) capital charge. These data collection exercises formed the basis of industry responses and policy recommendations, resulting in notable changes to proposed methodologies.

This year will see the introduction of a crucial monitoring period for the FRTB, another CVA quantitative impact study, a further consultation on the leverage ratio, likely finalisation of the rules on capital floors, and the continuation of a broader debate on internal models, coherence and calibration. ISDA will continue to work to analyse the impact of these changes, engage constructively with regulators, and ensure member feedback and policy proposals are heard on all of these issues.

Given the importance of these issues, ISDA has modified its mission and strategy statement to ensure our strategic priorities reflect market dynamics. Importantly, our new strategy statement explicitly recognises the importance of a prudent and consistent regulatory capital and margin framework, and commits the association to advancing market practices related to trading, clearing, reporting and processing transactions. Underlying all of this is ISDA's mission to foster safe and efficient derivatives markets to facilitate effective risk management for all users of derivatives.

As new regulations are implemented and market participants look for practical solutions to make these rules work efficiently on a cross-border basis, ISDA's mission has become ever more important. It will be a busy year ahead, and one where significant changes will need to be made to documentation, infrastructure and systems. But by the end of 2016, it should be a little clearer how the various rules will work together. ■

Scott O'Malia
Chief Executive Officer

ISDA Launches Revised Resolution Stay Protocol

ISDA has relaunched its Resolution Stay Protocol in order to capture securities financing transactions (SFTs). The protocol, published on November 12, was signed by 21 banking groups at launch.

The ISDA Resolution Stay Protocol was originally launched in November 2014, in coordination with the Financial Stability Board, but only covered derivatives transactions between adhering parties. The ISDA 2015 Universal Resolution Stay Protocol includes a new SFT annex, developed jointly by ISDA, the International Capital Market Association, the International Securities Lending Association and the Securities Industry and Financial Markets Association.

The protocol opts adhering parties into certain existing and forthcoming special resolution regimes, with the aim of ensuring cross-border derivatives and SFT transactions are captured by statutory stays on cross-default and early termination rights in the event a bank counterparty enters into resolution. These stays are intended to give regulators time to facilitate an orderly resolution of a troubled bank.

"The relaunched ISDA Universal Resolution Stay Protocol captures a wider universe of financial contracts, further reducing the risk that a bank resolution triggers a chaotic unwind of financial contracts. ISDA has worked hand in hand with other trade associations and market participants to meet the regulatory objective of broadening contractual stays to support cross-border resolution and strengthen systemic stability," said Scott O'Malia, ISDA's chief executive.

Statutory resolution regimes have been rolled out in several jurisdictions, including the US and European Union. These regimes provide resolution authorities with broad tools and powers to respond to a failing bank, including the imposition of a temporary stay on counterparties' early termination rights in the event a bank enters into resolution. However, it is uncertain whether these stays would extend to contracts governed by foreign law. By adhering to the protocol, firms are opting to abide by certain overseas national resolution regimes, ensuring cross-border trades with other adhering counterparties in those jurisdictions are subject to the stays.

The original protocol was voluntarily signed by 18 major banks and certain of their subsidiaries at launch. On top of the 21 banks that signed the revised ISDA 2015 Universal Resolution Stay Protocol, it is expected other systemically important banks will sign the protocol over time.

In addition, the ISDA Resolution Stay Protocol Working Group is developing a separate protocol for other market participants, including buy-side and end-user firms and other banks, providing them with a tool to comply with forthcoming regulations requiring the inclusion of stays within financial contracts.

Working with buy-side members and trade associations, ISDA will publish the separate protocol next year for those firms that choose to use it. Regulations requiring new trades to incorporate contractual stays are expected to be implemented in several jurisdictions from early 2016. The provisions of the protocol will be developed to facilitate compliance with the specific legislative or regulatory requirements in different jurisdictions.

In a statement published on November 12, Blackrock and Vanguard expressed support for the forthcoming protocol as a means to meet regulatory requirements.

"BlackRock and Vanguard commend the Financial Stability Board, global regulators, and the International Swaps and Derivatives Association on the execution of the ISDA 2015 Universal Resolution Stay Protocol by 21 global systemically important banks and other banks, and their continued work in developing the jurisdiction-specific ISDA Resolution Stay Modular Protocols for non-bank counterparties (such as ourselves) to amend certain trading agreements to comply with anticipated regulations requiring contractual recognition of special resolution regimes in cross-border situations," the statement read. ■

Additional information on the ISDA Universal Resolution Stay Protocol can be found at: http://www2.isda.org/functional-areas/protocol-management/open-protocols/.

ISDA Publishes Tax Protocol

Changes in US tax laws have prompted ISDA to launch a new protocol that makes clear who has to pay a new withholding tax on equity derivatives that reference US equity securities.

The ISDA 2015 Section 871(m) Protocol was published on November 2, and enables market participants to amend their ISDA Master Agreements to allocate the 30% withholding tax to the party that takes the long position.

Final regulations under Section 871(m) of the Internal Revenue Code were issued by the US Treasury and Internal Revenue Service on September 17, 2015, and will affect transactions entered into from January 1, 2016.

ISDA has published two previous protocols prior to the release of the final regulations that address the impact of Section 871(m): the ISDA 2010 HIRE Act Protocol and the ISDA 2010 Short Form HIRE Act Protocol. The latest protocol preserves existing provisions under the 2010 protocols for transactions entered into before January 1, 2017. The new protocol provisions would apply from that date. The burden of withholding tax in all three protocols is effectively the same.

Section 871(m) was enacted in 2010, and required dividend-equivalent payments on certain US total return products to be subject to a US withholding tax of up to 30% when the long party to the trade is a non-US person. The final regulations will require withholding, unless an exception applies, on all US equity derivatives with a delta of at least 0.8 for: (i) transactions entered into during 2016, but only with respect to payments made on or after January 1, 2018; and (ii) transactions entered into from January 1, 2017. ■

Additional information on the ISDA 2015 Section 871(m) Protocol can be found at: http://www2.isda.org/functional-areas/protocol-management/open-protocols/.

ISDA Announces Expansion of Board of Directors

ISDA's board of directors has voted to increase the size of the ISDA board from 26 to 30. The expansion comes in response to changes in derivatives market structure, and is intended to broaden the perspective and scope of the board by appointing members from diverse sectors of the market.

The new board members will be elected during the first quarter of 2016.

"Changes in regulation and market structure are altering the dynamics of the derivatives market, and resulting in the entrance of a variety of new participants. The ISDA Board wants to ensure its composition reflects ISDA's already broad and diverse membership," said Eric Litvack, ISDA chairman.

"ISDA's strategic priorities are evolving in line with market dynamics and in anticipation of the needs of our members. Expanding ISDA's board of directors ensures there will be even broader expertise to help further shape these priorities in the future," said Scott O'Malia, ISDA's chief executive.

The board of directors also voted to revise ISDA's mission and strategy statement to ensure the association's strategic priorities reflect changing market dynamics and the primary concerns of members. The changes explicitly recognise the importance of a coherent and appropriate margin and capital regime, and commit the association to promoting market practices related to trading, clearing, reporting and trade processing. Underlying the revised strategy statement is ISDA's mission to foster safe and efficient derivatives markets to facilitate effective risk management for all users of derivatives.

> "Changes in regulation and market structure are altering the dynamics of the derivatives market, and resulting in the entrance of a variety of new participants"
>
> *— Eric Litvack, ISDA*

Specifically, the strategy statement emphasises ISDA's role as the voice of the global derivatives industry, and its work to represent the industry through public policy engagement, education and communication. Margin and capital are highlighted as key areas – in particular, efforts to enhance counterparty and market risk practices and ensure a prudent and consistent regulatory capital and margin framework.

Documentation and legal opinions remain a focus for ISDA, with the aim of developing standardised documentation to promote legal certainty and maximise risk reduction. Finally, the strategy statement highlights the role of ISDA as a proponent for a safe, efficient market infrastructure for derivatives trading, clearing and reporting. This includes advancing practices related to trading, clearing, reporting and processing of transactions in order to enhance the safety, liquidity and transparency of global derivatives markets. ■

The revised mission and strategy statement can be read here: http://www2.isda.org/about-isda/mission-statement/.

ISDA and China Futures Association Sign China MOU

ISDA and the China Futures Association (CFA) signed a memorandum of understanding (MOU) on December 4, aimed at increasing cooperation between the two associations.

Specifically, the agreement facilitates the exchange of information and strengthens cooperation between ISDA and the CFA in order to advance the derivatives markets and industries the associations represent.

"We are delighted to enter into this MOU, which marks an important step for ISDA in building a strong partnership with the CFA and in facilitating the mutual sharing of global best practices and expertise in the derivatives industry. With today's fast-changing market and regulatory dynamics, it is vital that industry bodies like ISDA and the CFA are able to work closely together to address challenges and opportunities in the markets we serve," said Scott O'Malia, ISDA's chief executive.

"We are very pleased to sign this MOU with ISDA, and look forward to working together toward the same goal of educating market participants. With the joint efforts of both parties, we truly believe this collaboration will promote the development of the derivatives industry. We look forward to working with ISDA in the years ahead," said Zhichao Liu, chairman of the CFA.

The MOU covers the sharing and exchange of information, regular communication to promote understanding and cooperation, the exchange of staff and training, and the co-hosting of educational industry conferences. The MOU will be in force for an initial term of five years, and will take effect on December 4, 2015. ■

Scott O'Malia, ISDA and Zhichao Liu, CFA

Determinations Committees Change Rules and Procedures

The ISDA Credit Derivatives Determinations Committees (DCs) have changed their rules as part of an effort to further strengthen the process for determining whether a credit event has occurred in the credit derivatives market.

The changes are primarily aimed at reinforcing controls and procedures by setting globally consistent minimum standards on the internal conduct of DC member firms. This includes explicit requirements for written policies or procedures to be in place at all member firms concerning the identity of DC decision-makers, identification and management of potential conflicts of interest, and record keeping. These requirements complement existing securities laws and anti-manipulation requirements, which DC member firms are already subject to.

The changes are part of an ongoing process of review to ensure the DC process is robust and transparent. ISDA announced it will continue to assess policies and processes, and will consider all available options to further support the DCs and the credit derivatives market more broadly.

The agreed changes include obligations for written policies or procedures to be in place at DC member firms that require the identification and management of any conflicts of interest arising from DC membership and potential profits or losses from trading or holding economic positions in instruments where the price may be affected by a DC decision. The policies or procedures must also set limits on the individuals who can act on the DC firm's behalf. Those individuals cannot work within departments that carry out core activities in various business lines (such as credit trading, hedging, lending, investing, advisory or similar functions), unless the firm is satisfied that the relevant function is independent of the business.

In addition, the policies need to make explicit how any material non-public information received through the DC process should be handled, in accordance with any applicable securities laws, and describe the DC member firm's internal process of deciding how to vote.

The policies or procedures set to satisfy these requirements need to be retained by the firm for at least five years. ISDA, in its role as secretary of the DCs, will maintain records of the individuals authorised by DC member firms to participate on their behalf, as well as records of individuals' attendance on DC calls, for at least five years.

The changes will be implemented from mid-February 2016. ■

Additional information regarding the DCs is available on the ISDA Credit Derivatives Determinations Committee website www.isda.org/credit.

ISDA Review: The Year that Was

The past year has seen a clear shift in regulatory and industry focus from the formulation of new rules to preparing for implementation. Whether it be planning for the introduction of domestic clearing and trading mandates and their interaction on a cross-border basis, assessing the impact of further capital, liquidity and leverage requirements, or preparing the ground for forthcoming non-cleared derivatives margin rules, ISDA has focused on developing globally consistent solutions to the challenges faced by members.

ISDA focused on several strategic priorities last year, including cross-border harmonisation. Differences in the substance and timing of national regulations are creating significant complexity and cost for industry participants. ISDA has published several principles papers (covering central counterparty resilience and resolution, data standards and trade execution), which recommend a path forward for convergence. ISDA has also worked to develop global standards for data and reporting to enhance consistency.

Non-cleared derivatives margin rules are another priority. ISDA has focused on helping the industry prepare for the introduction of margin rules for non-cleared derivatives from September 2016. Central to this initiative is the development of the ISDA SIMM, a standard model for calculating initial margin. ISDA has published the SIMM methodology documentation, and has continued to make progress on calibration and back-testing of the model. The results have been shared with regulators across the globe as part of the regulatory review and approval process. The association is also working to draw up the necessary changes to collateral documentation in each jurisdiction, as well as ensure these modifications can be applied in the most efficient way. In addition, ISDA is creating a global dispute resolution framework, as well as developing solutions for collateral processing. The publication of final regulations by national regulators is necessary in order to finalise these efforts.

ISDA has also led industry responses on a number of key issues, including the Fundamental Review of the Trading Book (FRTB) and a review of the credit valuation adjustment (CVA) capital charge. In particular, the association has coordinated efforts to collate and analyse bank quantitative impact study submission data on the FRTB (twice) and the CVA review. An additional analysis was conducted on the net stable funding ratio to assess its impact on derivatives. ■

Details of other ISDA initiatives covering legal and documentation, infrastructure, clearing, trading, reporting and capital can be found on the ISDA website www.isda.org.

Derivatives: The Year Ahead

PREDICTIONS ARE NEVER easy. Ask any group of people to submit their forecasts for the year ahead, and the opinions offered tend to differ considerably, both in terms of substance and in accuracy. We at *IQ: ISDA Quarterly* expected something similar when we approached more than 20 market participants to submit their views on the hot topics for 2016. Drawn from ISDA board members, regulators, investors, derivatives infrastructures, lawyers and technology providers, the contributors came from diverse backgrounds. Despite this, a common issue ran through many of the responses: the implementation of margining requirements for non-cleared derivatives.

The rules will be rolled out from September 1, 2016, and will require eligible counterparties to post initial and variation margin on their non-cleared derivatives trades. The implications are significant, requiring major changes to technology, infrastructure and documentation, among other things. The funding implications are significant too: the total amount of initial margin that will eventually be locked down is not yet clear, but conservative estimates put it in the hundreds of billions of dollars.

Given final rules had not been published by most national authorities by the time *IQ: ISDA Quarterly* went to press, the timeline for implementation will also be challenging.

On the plus side, the rules could spark something of a transformation in technology, as participants look to automate as much of the collateral process as possible in an attempt to create efficiency and reduce costs. Already, a number of solutions are in the works, including the ISDA SIMM standard initial margin model, and more are set to follow.

Other issues highlighted by the contributors include the introduction of the first European clearing mandates in June, the need for changes to the supplementary leverage ratio, particularly as it pertains to client clearing, the impact of the Fundamental Review of the Trading Book, and ongoing attempts to resolve cross-border trading and clearing issues.

IQ: ISDA Quarterly would like to thank all of our contributors, and wish everyone the best for 2016. ■

IOSCO: What's in Store for 2016

Greg Medcraft, chairman of the International Organization of Securities Commissions and the Australian Securities and Investments Commission, discusses IOSCO's work on data reporting and market conduct, challenges and opportunities in technology, and the efforts to address cross-border divergences

IQ: What are the key accomplishments of the International Organization of Securities Commissions (IOSCO) over the past year?

Greg Medcraft (GM): I would point to three achievements, in particular. First, finalising IOSCO's 2020 strategy. This is a five-year strategic plan for IOSCO, which builds on our post-crisis work and expands our commitment to capacity building, broadens the scope of our risk-assessment capabilities, and deepens our involvement with other international standard-setting bodies. It is supported by a resourcing and funding plan. Second, publishing our report on credible deterrence. This report drew on the extensive experience of IOSCO's members to identify the key elements that help ensure securities regulators' enforcement activities credibly deter wrongdoing in the market-place. This is a valuable report that will assist our members tailor their deterrence strategies.

Finally, redirecting the international work on asset management. As a result of IOSCO's input, which brings with it the experiences and expertise of securities regulators, the discussion in this space shifted from how to designate certain asset managers as globally systemically important, towards better understanding the risks posed by the sector and properly tailoring any regulatory response, if any, to these risks. This was a positive development that acknowledged the specific characteristics of

> "There is no doubt that the implementation of derivatives reforms has been a challenge, and continues to be one. But the rationale for the changes is compelling and, once implementation is complete, they will do a great deal to foster financial stability"

participants in financial markets, as compared to banks.

IQ: What are IOSCO's priorities going into 2016?

GM: Over the next 12 months and into the future, I see the following developments as being very relevant to IOSCO and its members in meeting those strategic objectives: gatekeeper conduct; globalisation and the increasing interconnectedness in ever more globalised financial markets; structural change, the growth of market-based finance and its increasing importance as a funding source; complexity – in particular, the ongoing innovation-driven complexity in products, markets and technology; and digital disruption – in particular, the disruption to business models posed by the digital economy.

The IOSCO board has discussed addressing these challenges, and has given several workstreams priority. They are all about making sure we continue to meet IOSCO's mission of building trust and confidence among investors, ensuring that fair, efficient and transparent markets continue to allocate capital efficiently to promote economic growth, and making sure systemic risk is mitigated.

On gatekeeper conduct, we will work to better understand and develop approaches to address conduct risk in professional and wholesale markets. On globalisation, we will work on finalising the IOSCO enhanced multilateral memorandum of understanding. Over time, this will better enable IOSCO members to help each other investigate misconduct that crosses borders. We will also develop our capacity building programmes to support our many members in growth and emerging markets in meeting the challenges of globalisation.

On structural change, we are looking at ways to encourage the use of capital markets as a means to fund infrastructure investment and small to medium enterprises. On innovation-driven complexity, we are continuing our work to better understand and address the systemic risks the asset management sector and central counterparties might pose, in collaboration with the Financial Stability Board (FSB).

> "The message from some emerging-market jurisdictions is that there needs to be a balance between ensuring effective regulation globally and tailoring approaches to the genuinely diverse needs and characteristics of different markets"

Lastly, on digital disruption, we are finalising the preparation of a regulatory toolkit on cyber resilience, which is of ever-growing importance due to technological developments across financial markets. We are also working to understand the emerging risks and challenges posed by fintech developments as part of our emerging risk monitoring agenda.

IQ: Cross-border harmonisation of derivatives rules continues to weigh on the markets. Can you share your thoughts on how these issues might be resolved?

GM: We have made good progress, but still have some way to go. Issues remain between the US and European Union (EU), but each has dealt effectively with the rest of the world.

Meanwhile, the Committee on Payments and Market Infrastructures and IOSCO have been working to develop standards to ensure consistent data is reported under different national reporting regimes. This will help minimise compliance costs for firms by keeping global standards as similar as possible, and make the data aggregation task of regulators much easier.

The FSB has also recently published its first peer review on the implementation of the trade reporting obligation. This includes a number of recommendations designed to ensure a closer alignment of global trade reporting requirements.

There is no doubt that the implementation of derivatives reforms has been a challenge, and continues to be one. But the rationale for the changes is compelling and, once implementation is complete, they will do a great deal to foster financial stability.

IQ: Some countries, particularly those in the Asia-Pacific region, say their markets are different to the US and EU, and so will take a different route to implementing the Group of 20 derivatives regulatory reform commitments. As chairman of the Australian Securities and Investments Commission and IOSCO, how do you view these developments?

GM: I do not believe this is a regional issue, as such. Indeed, a number of jurisdictions in our region are well advanced in implementing derivatives reforms. Not unreasonably, it is the smaller, less developed markets where progress has not been as rapid. So it is more about a distinction between developed and less developed markets.

Overall, I think we all agree on the need to address the issues in derivatives markets, which came to light during the crisis. However, the message from some emerging-market jurisdictions is that there needs to be a balance between ensuring effective regulation globally and tailoring approaches to the genuinely diverse needs and characteristics of different markets. This includes taking a proportionate approach to risk, while also maintaining a level playing field globally.

IOSCO, which has a large and very active emerging markets membership base, is a forum where these issues are being discussed.

IQ: Bank of England governor and FSB chairman Mark Carney has voiced concerns that banking rules and regulations might in some instances be going too far and require attention.

Do you share these concerns, and what areas do you believe might require specific attention?

GM: It is not really appropriate for me to comment on banking regulations. However, what I will say is that there is a clear need for us to work together to ensure we understand the collective impact of the regulations we develop. We are getting better at doing this across sectors and intend to keep getting better.

IQ: Both you and Mark Carney have talked about the need for financial markets to regain trust and confidence. How much progress do you think has been made in this regard, and what remains to be done?

GM: I think there have been some steps taken on this, but more needs to be done to win back public trust in financial institutions. Concerns about conduct risk and how it is being managed have been a primary driver of quite a bit of IOSCO work. This includes the credible deterrence report that I mentioned earlier, our work on financial markets benchmarks, and our current workstream looking at market conduct and the tools our members have to regulate it.

But this is really something the industry needs to take ownership of. Firms need to honestly examine the culture and incentives they have in place, and ask 'how do we make sure we are promoting good conduct and deterring misconduct throughout the organisation?'. And, of course, the lead here needs to come from the very top.

> "Firms need to honestly examine the culture and incentives they have in place, and ask 'how do we make sure we are promoting good conduct and deterring misconduct throughout the organisation?'"

IQ: The impact of new technologies on the financial markets is also being widely discussed today. In what areas do you see the potential for significant change?

GM: Technological change is, in many ways, nothing new in financial markets. But, at present, we are definitely seeing a very rapid rate of change. I see this as something that may affect all categories of financial service and the firms that provide them. Of course, digital disruption presents both opportunities and challenges, both for industry and for regulators.

Key issues we are looking at in IOSCO include crowd funding, which is becoming an important platform for some companies to raise capital, and cyber resilience. The latter point is becoming ever more vital for providers of financial market infrastructure, in particular.

More generally, we have already seen innovations like peer-to-peer lending and robo-advice starting to gain acceptance in the market-place. However, a technology like blockchain certainly has the potential to be transformative in how we transact. Again, this presents both opportunities and challenges to incumbent firms.

In all these cases, the role of regulators is to work to ensure we meet our regulatory goals, while creating an environment where innovation is fostered rather than stifled.

IQ: Both market participants and some regulators have expressed concern about the decline and dearth of market liquidity. How concerned are you and the global regulatory community about liquidity, and what steps can and should be taken to address it?

GM: As with all risks and issues, we need to monitor liquidity in the market. There are obviously reasonable concerns about liquidity, which have been well documented. However, we need to be smart about how we go about addressing the issue, making sure we collect the facts, do the analysis and tailor any regulatory responses to the real issues. To this end, IOSCO has started work on analysing liquidity in the corporate bond market to look into what the problems might be, and then will consider any solutions.

Not to pre-empt the outcome of this work, there may be some possible, measured responses we could consider on liquidity. For example, market infrastructure providers may be able to use technology more effectively to improve market access and boost post-trade transparency. In addition, issuers could look to standardise documentation to attract investors by reducing the complexity of required due diligence. Facilitating cross-border issuance and investment could also improve liquidity, as could – potentially – banks moving from a market-maker or principal-trading approach to more of an agency approach.

In any event, we believe market regulators are well placed to monitor market liquidity, as well as other emerging risks, and act accordingly.

IQ: International harmonisation of data and reporting is another focal point for IOSCO and CPMI. What can we expect to see in this area in 2016?

GM: You are right that this is a key area for us, and the work of the CPMI-IOSCO data harmonisation group continues to progress well. As you know, the group launched a public consultation on the unique trade identifier (UTI) in August. It also commenced a consultation on the harmonisation of a first batch of key data elements in September. So there has clearly been quite a lot going on. The group aims to publish guidance on the UTI and the unique product identifier in 2016. It is also preparing for two further public consultations on harmonisation of the remaining key data elements. These are expected to take place later this year and early next. The target is to publish guidance on all data elements by 2017.■

> "IOSCO has started work on analysing liquidity in the corporate bond market to look into what the problems might be, and then will consider any solutions"

IQ

What will 2016 bring for derivatives markets?

Eraj Shirvani, head of fixed income for EMEA and global head of the emerging markets group in the global markets division at Credit Suisse

Derivatives markets around the world are undergoing a radical transformation but their final shape – which will determine where and how derivatives are executed in the future – will largely be dictated by market participants' ability to trade on a cross-border basis. Demand for derivatives to hedge risk has risen, and isn't likely to fall anytime soon given liquidity, volatility and market and political risks in nearly all jurisdictions. As a result, it is imperative that derivatives remain accessible.

Looking specifically at the credit default swap (CDS) market, a number of key issues are likely to emerge in 2016. First, we anticipate the return of negative basis trades. Expect clients to be attracted to situations where the CDS is trading substantially below the cash product, both in investment-grade and high-yield markets. We also expect an increase in cleared CDS, which will reduce the cost of trading and result in a more attractive risk/return profile for the product. We anticipate clients will respond favourably to this move, which will be led by large clients and dealers, and will result in differentiated pricing between cleared and non-cleared transactions.

In addition, questions may emerge about the structural integrity of CDS. In particular, there could be a renewed focus on whether the product adequately protects bond holders, as restructuring credit events can potentially result in situations where both bond and CDS holders are at risk of losing money. Finally, regulators themselves could come under the spotlight. Can they work together to achieve a globally consistent framework?

Elsewhere, there are plenty of securities and prudential regulatory reforms still to be implemented. The issues with the most visible and direct market impact for 2016 are: 1) clearing implementation in an increased number of markets; and 2) the new non-cleared derivatives margin requirements.

On the first issue, clearing mandates will be introduced in a number of new jurisdictions this year, including the European Union (EU), Australia, Hong Kong and Singapore. They join the US, Japan, China, India and South Korea, which have already introduced their first clearing obligations. This will put regulators' ability to defer to each other's regulatory regimes to the test. To maintain cross-border trading, it is necessary for market participants to meet their clearing obligations using central counterparties (CCPs) established outside their home markets. In this respect, the outcome of the ongoing EU equivalence assessment of US CCP rules will set an important precedent for the effectiveness of the deference principle to address cross-border regulatory issues.

On the second point, the industry faces a major implementation challenge to be ready for the phased introduction of new margining requirements from September 1, 2016. The margin rules – which hadn't been finalised by most national regulators at time of writing – will bring unprecedented changes to existing margin calculation models, collateral management practices and legal documentation.

Other areas of focus include preparing for the EU's revised Markets in Financial Instruments Directive and associated regulation (MIFID II/MIFIR), the implementation of which now looks likely to be deferred until 2018. The complexities of the liquidity calibration for derivatives are considerable, have been extensively revised and are still to be finalised. Getting this right is crucial to limit the impact on already challenged market liquidity. Obligations to trade certain derivatives on organised trading venues and the expansion of the trading scope of systematic internalisers under MIFID II will also impact where and how frequently derivatives trade.

Finally, banks will likely continue to rationalise their derivative-products offerings to optimise their balance sheets and capital allocation given the persistent regulatory focus on capital and risk. Most notably, the Basel Committee on Banking Supervision's Fundamental Review of the Trading Book (FRTB) will further increase market-risk risk-weighted assets, while the net stable funding ratio (NSFR) and leverage ratio are expected to further constrain market-making activity and result in reduced liquidity.

> "The industry faces a major implementation challenge to be ready for the phased introduction of new margining requirements from September 1, 2016"

IQ

What will 2016 bring for derivatives markets?

Eric Litvack, managing director, head of regulatory strategy, Société Générale Global Banking and Investor Solutions

Significant progress has been made by the derivatives industry in implementing the requirements of regulatory reform. According to ISDA's data, roughly 75% of interest rate derivatives and CDS index volume in the US is now cleared, and well over half is traded electronically. All swaps are subject to reporting requirements. In addition, derivatives counterparties have significantly boosted their capital and liquidity ratios in advance of the Basel timetable.

But as we look to 2016, much still remains to be done that will challenge the derivatives industry.

The first margining requirements for non-cleared derivatives are set to go live in September 2016, kicking off a four-year implementation schedule. But with that deadline imminent, few of the national regulations are yet finalised, jeopardising the implementation schedule.

Reporting norms are still a long way from being harmonised, challenging the ability to aggregate data between trade repositories and across borders in order to achieve appropriate visibility for supervisors.

> "Faced with the higher cost and complexity of meeting conflicting cross-border rules, derivatives users are retreating to their home jurisdictions, creating a fragmentation of liquidity along geographic lines"

Cross-border recognition of clearing and trading rules has yet to be achieved. Faced with the higher cost and complexity of meeting conflicting cross-border rules, derivatives users are retreating to their home jurisdictions, creating a fragmentation of liquidity along geographic lines. That results in reduced choice and higher costs, and could make it more challenging for end users to properly manage their risks, particularly in stressed markets.

Finally, aspects of prudential reform will continue to be a headwind in 2016. Prominent among these is the treatment of segregated client margin in the leverage ratio, which acts as a disincentive to the development of client clearing. But the heavy-handed treatment of derivatives in the FRTB and NSFR are equally concerning.

These challenges in 2016 and beyond require our continued engagement to ensure derivatives are an efficient and affordable tool for end users to manage their risks. For all of us in the derivatives industry, as for ISDA, this is a critical mission.

Koji Sakurai, senior vice-president, head of business planning team, derivative products division, Mizuho Bank

The major focus for the derivatives market in 2016 will be the commencement of new margin rules for non-cleared derivatives. In the interbank market, large financial institutions will be required to post segregated two-way initial margin from September 2016. It is expected to take a considerable amount of time for all market participants to rewrite existing credit support annexes (CSAs) or put in place new documentation. It will also require firms to sort all their counterparties by category.

The problem is that there are slight yet unmistakable differences in the margin requirements across jurisdictions. This will require further sorting of counterparties, which comes with cost implications, meaning the business strength of the counterparty will be important.

It could mean certain buy-side entities or financial institutions that do not prioritise cross-border transactions could end up trading derivatives within local jurisdictions, rather than trading on a cross-border basis.

Elsewhere, financial institutions are beginning to meet leverage ratio rules, while the FRTB is more or less complete. As a result, many financial institutions are likely to see the cost of derivatives transactions rising due to balance-sheet constraints and regulatory capital restrictions. This could see costs being passed on to customers and – in the worst-case scenario – financial institutions could be forced to shut down some operations. Hopefully, the rules will be adjusted and revised in the future to avoid this possibility.

> "The problem is that there are slight yet unmistakable differences in the margin requirements across jurisdictions"

David Wright, secretary general, IOSCO

This year promises to be important for the regulation of global derivatives markets. Much of the regulatory reform work conducted under the aegis of the Group of 20 (G-20) in the wake of the financial crisis is expected to reap significant results over the year, particularly in key areas such as CCPs, data aggregation and margin requirements.

CCPs continue to be a priority area for the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO), as part of the G-20 commitment in 2009 to reform derivatives markets. The industry should see an increase in publicly available data on CCPs from January 2016, when CCPs are expected to follow CPMI-IOSCO quantitative disclosure standards. Stress testing, the adequacy of pre-funded resources, contribution of CCP own resources (skin in the game), margin practices and recovery planning are also important. CPMI-IOSCO is examining CCP policies and practices in these areas, and will develop more granular standards or guidance if needed. In mid-2016, CPMI-IOSCO expects to publish two important reports on CCP resilience and recovery and the results of an assessment of CCP risk management.

Also essential is to have a resolution framework for CCPs in place that enables continuity of critical services. Here, the Crisis Management Group for FMIs will serve as a useful forum in 2016 for sharing experiences and monitoring progress in CCP resolution.

Data aggregation is another priority, as it helps authorities gain a comprehensive view of the over-the-counter (OTC) derivatives market and the concentration of risks, enabling better-informed policymaking. CPMI-IOSCO is currently developing global guidance on the harmonisation of data elements reported to trade repositories, which is important for the aggregation of data by authorities. Publication of final guidance on unique transaction identifiers and unique product identifiers is expected by end-2016, and is expected for other data elements by end-2017. When employed as envisioned, the guidance and harmonised data elements should improve the quality of trade-repository-held data and help regulators fulfil their mandates.

> "Margin requirements are a good example of how regulators should cooperate before writing their rules"

The phase-in of the Basel Committee and IOSCO margin requirements for non-centrally cleared derivatives begins in September 2016. National regulators are discussing divergent aspects of their proposed rules ex-ante to ensure maximum harmonisation before they finalise their domestic requirements. The Basel Committee and IOSCO are engaging with the industry over the development of quantitative margin models in order to inform the model review processes of member jurisdictions.

Margin requirements are a good example of how regulators should cooperate before writing their rules. They should agree ex-ante on definitions, scope and timing to achieve maximum global convergence. Such an approach reduces inefficiency, duplicative requirements and implementation costs arising from inconsistent regulations across different jurisdictions. Once a law is in place, changing it becomes all the more difficult.

Elsewhere, the new blockchain distributed ledger technologies could have important consequences for clearing and settlement in the future. IOSCO will examine these technologies in 2016, and think hard about the long-term regulatory implications.

> "Much of the regulatory reform work conducted under the aegis of the G-20 in the wake of the financial crisis is expected to reap significant results over the year"

TRADING IQ

What factors do you expect to affect derivatives trading in 2016, and what impact will this have?

George Harrington, global head of fixed income, currency and commodity trading, Bloomberg

Global regulatory reforms continue to present uncertainty to all financial institutions. Despite the evolving regulatory timelines, firms will continue to go to great lengths to implement these measures. As we have seen for the past few years, firms will be challenged to balance imminent market developments against the medium- and longer-term global regulatory requirements. The costs of doing business will continue to rise and will likely compress margins and force standardisation of products. As a result, further implementation of regulatory reforms will require firms to be more strategic in the types of products and services they offer and more diligent about resource allocation. All of this probably leads to more electronic trading across products.

While we do not anticipate major reforms to be announced for the single-name CDS market, we do expect trading volumes to increase in response to the US Federal Reserve starting to lift interest rates and as market participants look for ways to hedge trading portfolios. The industry move to semiannual roll dates for on-the-run contracts should help concentrate liquidity and further align the market with credit indices. This change should also help increase netting fungibility, increase clearing and reduce capital costs.

> "The costs of doing business will continue to rise and will likely compress margins and force standardisation of products"

Elie El Hayek, managing director, global head of rates, credit and emerging markets, HSBC

The fixed-income market has been evolving significantly in recent years. Hit by higher capital and funding requirements, and significant changes to the regulatory framework, the sell side has been in deleveraging mode. The derivatives business has been reducing its exposure and outstanding number of trades, moving to clearing, simplifying the product offering, and – on the asset side – significantly reducing inventories and balance sheets.

New entrants to the sell side have emerged and will continue to emerge, particularly high-frequency trading firms in the very liquid part of the fixed-income market – from benchmark US Treasury bonds to cleared swaps. This increases the trading volume on these products, and will certainly amplify volatility.

Traditional participants in this market, whether they are from the buy side or sell side, will continue to adjust to the new world.

Buy-side firms will have to adapt to the new environment of Solvency II, mandatory clearing, initial margin funding and costs, and will probably need to make significant changes to the way they use derivatives. They may need to increase their use of derivatives in some cases and stop using them completely in others.

> "Sell-side institutions will have to adapt to new capital rules and costs, and enhance the return on equity in this business"

Sell-side institutions will have to adapt to new capital rules and costs, and enhance the return on equity in this business. Some will continue to reduce balance sheets, activity and teams. As we saw in 2015, some will exit certain businesses, pushing liquidity lower in those markets and driving prices higher for non-cleared or non-collateralised businesses.

In this challenging environment of low returns on equity for the sell side, any cost or capital affecting exposures (whether derivatives or bonds) filters through, which significantly changes the price of assets. The buffer between imbalanced flows is also severely reduced, contributing to higher volatility.

A lot has been done, there is a lot still to do, and many questions will need to be answered by the industry in 2016. How do we restore profitability on the sell side? How much capital and funding is still required as progress is made on the FRTB and bilateral initial margin? How does the buy side cope with the costs, the new regulatory framework and the lack of liquidity? How do we manage imbalances inside clearing houses, and fragmentation? How do we assess exemptions from certain rules such as clearing, and the importance and impact on products, clearing houses and other market participants that are not exempt?

One thing is very clear: 2016 will be another busy year.

Bill De Leon, managing director, global head of portfolio risk management, PIMCO

One of the most important factors in global derivatives trading this year will be the risk of higher clearing costs due to increased capital requirements from the supplementary leverage ratio (SLR) and the consequent consolidation of futures commission merchants (FCMs), which can affect both the ability to clear and the portability of trades.

> "Unless capital relief is applied to the SLR, the trend of consolidation of FCMs will likely accelerate as capital costs rise"

The SLR under Basel III needs to be adjusted with respect to cleared derivatives trades where client collateral is segregated. If the rule is not modified, then costs will increase dramatically for cleared derivatives, making the market inhospitable to banks and to end users as well. Under the new rules, banks will be required to hold significant – and most would say excessive – capital to support derivatives trading activities, even when they are functioning as financial intermediaries (ie, not taking positions of their own).

Unless capital relief is applied to the SLR, the trend of consolidation of FCMs will likely accelerate as capital costs rise, which is counter to the goals of increased clearing and portability. As we have already seen, many firms will simply exit the business. Again, this goes directly against the spirit of the Dodd-Frank Act and its goal to increase the ability to clear derivatives and augment the portability of positions in the event of a crisis.

With a reduced number of participants in the market, clients may not be able to find a new FCM to take their positions in the event of a failure of their current FCM. As a result, they would find themselves in a position where it becomes necessary to unwind trades – again, contrary to the purpose of moving trades to central counterparty clearing. Unlike the bilateral OTC transactions with Lehman Brothers that needed to be unwound following its collapse, futures trades where Lehman had served as FCM were not unwound, but moved to another FCM, facilitated by CCP infrastructure.

Investors will need to continue to optimise the use of collateral to minimise the costs of clearing and capital, especially in a world where balance sheet is at a premium. Custodians will also need to continue to improve their technology to meet processing requirements for centrally cleared derivatives. But, most importantly, onerous capital requirements – those that run counter to most of the stated policy goals following the financial crisis – need to be addressed.

Lee Olesky, chief executive, Tradeweb Markets

As a banner year for the electronification of derivatives markets comes to a close, some of the key issues and advances in swap trading we've seen to date may serve as clues for what's next in the 12 months ahead.

Mandated trading on swap execution facilities (SEFs) began in the US in 2014, but the past year has shaped a new normal for electronic derivatives trading. Market participants are leveraging new tools to source liquidity and optimise portfolios, while keeping a watchful eye on reform efforts in Europe and Asia. Most importantly, we can now say with conviction that electronic derivatives trading functions more effectively than ever before, delivering greater transparency and operational efficiency in a compliant workflow.

On Tradeweb, we've seen average daily trading volumes increase to more than $30 billion on TW SEF, alongside a 25% increase industry-wide in gross notional volume for interest rate swaps since November 2014, according to ClarusFT. The factors driving this growth will continue to become more apparent as electronic derivatives trading increases with, and ahead of, regulatory reform in other key regions in 2016.

These include the rising use of tools like buy-side compression, helping to improve line-item management at derivatives clearing organisations, and the adoption of products like market-agreed coupon swaps, offering more standardisation to ease the process of rolling positions.

> "We can now say with conviction that electronic derivatives trading functions more effectively than ever before"

This level of innovation will continue to manifest itself in new ways, in both Europe and Asia, as market participants partner with market-places to introduce new products and protocols – all focused on improving access to liquidity with better quality of execution.

In Japan, electronic trading platforms have already launched successfully, and we'll see European players allocate resources to address the coming clearing mandate and eventual reform of trading and reporting under MIFID II.

It's a brave new world for trading swaps, but with growing adoption of electronic trading driving greater transparency, efficiency and compliance, the future is bright.

IQ

What is the focus for clearing houses and clearing participants for 2016?

Ray Kahn, head of futures clearing and head of agency derivatives services, Americas, Barclays

The largest focus for clearing participants in 2016 will be adapting their business to produce greater return metrics under the new Basel III framework. By the first half of 2016, the Basel Committee is expected to have finalised its rules on the SLR/leverage balance sheet treatment of cleared derivatives (futures and swaps). At time of writing, it appears the Basel Committee may decide not to allow client initial margin to be recognised as a risk mitigant, which will put more pressure on clearing members' overall returns for providing services to buy-side clients. Overall, clearing participants will continue to focus on all three major components of the return metrics: revenue, costs and financial resources. Efforts will be made to improve each of these in ways that may not be ideal to market participants or overall market liquidity.

> "The largest focus for clearing participants in 2016 will be adapting their business to produce greater return metrics under the new Basel III framework"

Christopher Perkins, managing director, global head of OTC clearing, Citi

This year will be pivotal for our clearing business as we focus on driving scalable returns while expanding into new markets, clearing new classes of derivatives and continuing to invest in applied technology solutions. Providing a cleared derivatives experience – across OTC and exchange-listed derivatives – will be a continued theme as we seek to deliver operational and capital efficiencies to our global client base.

Mandatory clearing under the European Market Infrastructure Regulation (EMIR) will begin, and we will focus on onboarding and implementation.

Basel III will remain in the spotlight as we seek further reform of clearing-member capital requirements, including changes to the SLR. Our advocacy will aim to cultivate a more resilient clearing ecosystem, where portability is more achievable in a time of stress and clearing members are capable of generating a reasonable return on equity.

The implementation of non-cleared margin rules may have a profound impact on clearing markets, as the economics of cleared versus non-cleared derivatives will further diverge and the industry grapples with the operational challenges of non-cleared regulations. Accordingly, we expect to see greater demand to clear products not subject to the clearing mandate across foreign exchange, credit and interest rate markets. Against this backdrop, we will focus on maintaining the highest standards of risk management as these products are considered for the clearing paradigm.

> "The implementation of non-cleared margin rules may have a profound impact on clearing markets, as the economics of cleared versus non-cleared derivatives will further diverge and the industry grapples with the operational challenges of non-cleared regulations"

Risk management will continue to be a core focus as market forces, geopolitical events and the impact of regulation could test the resiliency of the system. Accordingly, we will remain focused on advancements that strengthen the system, including minimum standards of CCP skin in the game and better defined recovery and resolution regimes.

Finally, we will continue our focus on protecting against cyber threats, while exploring the application of new, emerging technologies, including distributed ledgers.

Martin Pluves, chief executive, LCH.Clearnet Ltd

As markets increasingly adapt to new regulatory standards and the adoption of central clearing, the role of LCH.Clearnet will continue to expand and deepen. While LCH.Clearnet remains the guardian of systemic risk for some of the world's largest financial markets, we are also well placed to help participants address an array of capital and regulatory challenges during this evolution in our markets.

> "Capital and operational efficiencies matter at a time when FCMs are under increasing business pressure. That's why efforts such as compression, new product launches and the emergence of direct clearing are so important to the industry"

We remain committed to partnering with the industry to ease capital pressures and deliver greater operational efficiencies for our members and their clients. Recent innovations, including our solo-with-blended-rate compression offering, have already had a significant impact. The recently announced cross-margining offering, LCH Spider, will directly address the need for greater margin efficiency and enhanced risk management. This kind of project strikes at the heart of the benefits of open access, which has been LCH.Clearnet's operating model for many years.

We also plan to launch a range of collateral services, including custodial segregation, expand access to clearing to other products, including foreign exchange options, and broaden collateral eligibility wherever possible. Capital and operational efficiencies matter at a time when FCMs are under increasing business pressure. That's why efforts such as compression, new product launches and the emergence of direct clearing are so important to the industry.

Clearing in the US derivatives markets is now approaching business as usual, with the focus on optimising capital efficiency and fine-tuning processes and procedures. In Europe, it's a particularly big year with the implementation of the clearing mandate and the subsequent surge in on-boarding and clearing activity.

I am confident we will come through 2016 stronger than ever before. Our focus will therefore be to help members and their clients achieve the significant risk management and efficiency benefits associated with central counterparty clearing.

Sam Priyadarshi, head of fixed-income derivatives, Vanguard

The focus for clearing houses will be on providing transparency on risk controls and stress-testing results, and explaining the adequacy of their equity capital (skin in the game) in the default waterfall. Clearing houses will continue to work on cross-margining, portfolio line-item compression, refining collateral eligibility and market risk management. Clearing houses will need to prepare for client clearing in Europe ahead of the introduction of clearing mandates in the EU.

The focus for clearing participants will be on getting ready to clear single-name CDS, non-deliverable forwards and non-vanilla interest rate swaps. Since margin requirements for non-cleared swaps will be substantially higher than cleared swaps, market-makers will provide tighter pricing and deeper liquidity for cleared swaps, and clearing participants will look to take advantage of this. Since dealers are facing higher capital charges on their clearing business, they will look to either scale back or charge their clients higher prices for clearing services. Clearing participants that are based in the EU or manage money out of the EU will have to start getting ready for mandatory clearing under EMIR, as well as all aspects of MIFID II, including trading venues.

> "Since margin requirements for non-cleared swaps will be substantially higher than cleared swaps, market-makers will provide tighter pricing and deeper liquidity for cleared swaps, and clearing participants will look to take advantage of this"

IQ

Which regulatory changes are likely to have the biggest impact on market participants in 2016?

Keith Bailey, managing director, market structure, Barclays

The EMIR clearing mandate requires market participants to clear certain trades on European Securities and Markets Authority authorised (EU) or recognised (non-EU) CCPs, with the first category phase-in starting on June 21, 2016. This includes trades executed after February 21. Although the capital costs incurred by certain EU firms for clearing via non-qualifying CCPs continue to be deferred, June 21, 2016 represents a firm date by which equivalence (a prerequisite for non-EU CCP recognition) must be granted. Without equivalence, all EU/US clearing will have to migrate exclusively to dually registered CCPs when required to comply with both the Dodd-Frank Act and EMIR.

The regulatory efforts to adopt equivalence assessments have been commendable, but the time taken over this process for CCPs raises concerns about similar evaluations needed for eligible venues, in order to allow the derivatives execution mandate to be satisfied across multiple jurisdictions.

> "Although the capital costs incurred by certain EU firms for clearing via non-qualifying CCPs continue to be deferred, June 21, 2016 represents a firm date by which equivalence (a prerequisite for non-EU CCP recognition) must be granted"

Granting an equivalence determination between US SEFs and EU multilateral trading facilities/organised trading facilities should be fairly straightforward. Many of the G-20 policy objectives for introducing a trading mandate – impartial access, conflicts management and operational certainty, for example – have direct parallels in both rule sets. And while it is true that the approach to enhancing transparency is slightly different, both address this issue. Ultimately, the measure of whether the regimes are equivalent on an outcomes basis is reflected by whether the market moves with its feet one way or the other following an equivalence determination. We believe these regimes are sufficiently similar that there is no basis on which to think this will occur.

Steven Lofchie, partner, Cadwalader, Wickersham & Taft

We are sufficiently distant from the financial crisis that we should be able to evaluate our response and not just produce new rules. But that's not really happening. At best, the rate of regulatory increase has slowed – and that's an optimistic take. We may just be so exhausted by the rate of change that we have lost the ability to perceive it.

So, what lies ahead? The US Securities and Exchange Commission (SEC) will come out with a comprehensive set of requirements for security based swap dealers, and will set a deadline for such entities to register. Both the Commodity Futures Trading Commission (CFTC) and the SEC will adopt capital regulations for swap entities, but the biggest capital issue will be leverage capital requirements from US banking regulators. These require banking organisations to hold capital against collateral posted by customers on swaps and held in segregated accounts. This provision is sufficiently burdensome that it has been the subject of opposition even by the CFTC chairman.

Elsewhere, the SEC is working on new liquidity requirements, which will hit the largest firms the hardest. When these rules are adopted, they will impose a further drag on firms serving customers. The SEC will also adopt margin requirements for non-cleared derivatives following the CFTC and prudential regulators, which issued their final rules at the end of 2015. The big questions are: will the SEC (1) mandate two-way margining; and (2) permit the holding of customer collateral in tri-party accounts.

Meanwhile, the systemic risks of central clearing are being recognised by regulators. While clearing-house failure gets the most attention, it may actually be a less of a risk than increased interconnectedness, exacerbation of too big to fail, and the potential for clearing houses to suck liquidity from the system in a market downturn. Expect the expansion of mandatory clearing to be put on hold.

A new challenge will be the continuing transformation of operations and technology into regulated areas. Sufficient safeguards on operational change will become legal requirements. The big risk will be that any operational failure will be deemed a legal violation.

Darcy Bradbury, managing director of DE Shaw & Co, director of external affairs, DE Shaw Group

There are generally two kinds of regulations: those that change how we invest, which are most important, and those that drive up the cost and complexity of compliance. In the first category, we are focused on rules that will dictate margin for non-cleared swaps. The funds we manage have always had to post initial margin on such swaps, unlike some other end users. But the new rules being considered by regulators across the globe could change both the amount of margin, as well as the ability to net margin requirements across portfolios when there are offsetting exposures. In addition, the requirement for banks to post initial margin to our funds for non-cleared swaps, if exposures are large enough, may indirectly increase costs and inadvertently limit access to certain counterparties.

> “We are focused on rules that will dictate margin for non-cleared swaps”

There are also investment-related rules that could impact our counterparty credit exposure, including SEC and bank capital requirements relating to arrangements where our initial margin is held in third-party custody. In addition, new rules from bank regulators would reduce our protection in cases of bankruptcy and/or resolution of systemically important banks. The rules would impose temporary stays if a counterparty fails, eliminating our current close-out netting rights, which would diminish our protection.

Finally, we continue to believe that impartial access for investors to trade on all SEFs could be enhanced. On the compliance side, there are a wide range of new transaction and reporting rules, especially in the EU, which will require investment firms to create systems for daily reporting of a wide range of transactions and holdings, including swaps and other derivatives. This will be costly and complex, and will also pose cybersecurity risks as more proprietary information is transmitted to multiple parties around the globe.

Diane Genova, general counsel, corporate and regulatory law, JPMorgan Chase & Co

The mandatory margin requirements on non-cleared derivatives will have a significant impact on the derivatives market in 2016 and beyond. The US, EU and Japan have already proposed or finalised non-cleared derivatives margin rules, which will become effective from September 2016. Because the substance of the rules and the implementation timelines are coordinated between regulators in different jurisdictions (a first among the regulations coming out of the G-20 derivatives market reform commitments), the impact of the rules could be felt globally on a ‘big bang’ basis.

The non-cleared derivatives margin rules will generally require market participants to re-document their existing credit support arrangements and use approved models to calculate initial margin (IM). Market participants will have to exchange IM on a gross basis and to segregate that IM at a third-party custodian, where it cannot be rehypothecated or reused. A quantitative impact study on the proposed rules published by the Basel Committee and IOSCO in 2013 indicated that the amount of required IM market-wide would be about €600 billion. Given the magnitude of the requirements, many market participants will need to make substantial investments in their collateral infrastructure and change the way they manage collateral. It is also notable that inter-affiliate transactions will need to be collateralised in the same way as external trades under the margin rules of some jurisdictions.

Although national margin proposals are generally aligned with the standards published by the Basel Committee and IOSCO, there are some material differences that will pose challenges for market participants in any cross-border context. As derivatives businesses are conducted at a global level, substituted compliance and equivalence determinations will be key.

The margin requirements become effective on September 1, 2016 for the largest derivatives market participants. Therefore, major dealers will be the first group to test new documentation, model solutions and operational mechanics, before they apply to a substantially broader group of market participants from March 2017. Mandatory margin requirements are expected to result in higher costs and reduced liquidity for non-cleared derivatives. In the end, this may cause counterparties to relinquish the use of derivative hedges tailored to their risks and instead opt to hedge using less effective, but more standardised, cleared derivatives, or decide not to hedge their risks at all.

> “Mandatory margin requirements are expected to result in higher costs and reduced liquidity for non-cleared derivatives”

IQ

What technological changes affecting derivatives markets do you expect to see over the next year?

Chris Walsh, chief executive, AcadiaSoft

New margin regulations that come into effect from September 2016 will spur the biggest technological changes affecting derivatives markets over the coming year.

The new regulations for the margining for non-centrally cleared derivatives will require mandatory exchange of bilateral IM, enhanced variation margin (VM) calculations and the segregation of collateral assets. It will also introduce possible incentives to create currency silos. For major industry participants, these regulations will take effect on September 1. While the IM component will be rolled out over several years, the VM requirement has a limited phase-in period, forcing many participants to post VM where it was not previously required. This will create significant operational challenges, which will be further complicated by the need to clear certain trades that previously went uncleared, creating a perfect storm of change across the industry.

These major rule changes have motivated an industry-wide redesign of the collateral process, with a focus on leveraging technology to increase automation and prevent disputes. No longer will the industry rely on the highly manual, dispute-prone process of having each party independently calculate and compare daily margin amounts. Instead, through industry collaboration, a new utility-based process is emerging that we refer to as straight-through-margining. With straight-through-margining, margin inputs are standard and, where possible, shared between parties. Transactions are automated through a standard central workflow, which prevents disputes by accessing these pre-agreed shared inputs, applying standard calculations and resolving differences in real time, prior to the release of margin calls. As a result, straight-through-margining will allow the significantly increased margin activity mandated by regulation to be managed without a proportional increase in operational and dispute-related costs.

The concepts that underlie straight-through-margining have been developed through collaboration among the major global banks in preparation for the mandatory exchange of IM on September 1. The development of straight-through-margining highlights the role that financial technology can play in centralising homogenous, non-core banking functions within innovative industry utilities. Straight-through-margining not only provides the potential for tremendous cost savings – it also will drive standardisation, transparency and automation across the industry.

> "With straight-through-margining, margin inputs are standard and, where possible, shared between parties"

Mike Bodson, president and chief executive, DTCC

The most prominent technological development will likely be the introduction of industry-wide utility collateral management solutions to address the operational challenges resulting from new regulations. This trend toward creating community-based solutions, which we've also seen in areas like entity reference data, reflects the growing recognition among firms that deploying technological platforms individually is not nearly as efficient or cost-effective as enabling a utility to centrally manage certain non-differentiating processes.

The challenges of managing collateral in an environment dominated by legacy technology and siloed workarounds are areas of pain for many firms. With the volume of margin calls expected to increase by up to 10 times due to regulatory risk management requirements, existing operational processes and point-to-point technologies are not practical in this new world. Many processes are still manual and technologies are fragmented. Greater automation and efficiency are the only ways to avoid the trade fails, disputes and bottlenecks that are likely to rise.

> "Existing operational processes and point-to-point technologies are not practical in this new world"

Firms realise they cannot make the required technological changes alone, and that achieving the necessary degree of messaging standardisation, processing automation and inventory aggregation can only be realised through collaboration. An industry-wide margin and collateral processing utility, such as the one being developed by DTCC-Euroclear Global Collateral, will streamline collateral processing on a global basis and deliver transparency, mobility, efficiency and security to the market. It will also allow the industry to align with the primary goals of regulators to enhance transparency and strengthen systemic risk monitoring.

Mark Beeston, managing partner and founder, Illuminate Financial Management

It is poised to be another banner year for the evolution of derivatives market infrastructure. The wave of post-crisis regulation continues to drive multi-year deliverables that impact everything from pre-trade price discovery, trade execution and post-trade requirements.

In the pre-trade space, 2016 will see further adoption of compliance and reporting tools, such as Droit, which ensures point-of-execution compliance across the myriad complex intersections between SEF, know-your-customer, cross-border sales and clearing-house rules.

> "Make no mistake: blockchain is coming, but not in a way that will change the world in 2016"

In the post-trade area, the introduction of mandatory clearing in Europe creates new challenges that will need to be met. Away from clearing, there are further new deliverables in the bilateral margin arena. Both have implications for the industry's chosen solutions for collateral management. Here, I would expect to see widespread adoption of the ISDA SIMM initiative by risk vendors, which can assist in the bilateral margining space by integrating the ISDA SIMM as part of their offerings. The collateral universe remains hugely under-invested by large parts of the Street. AcadiaSoft has made great headway in the messaging space. The next stage of the market's journey has to be for collateral workflow solutions, such as CloudMargin, to be adopted by the long tail of thousands of counterparts that operate their derivatives portfolios under CSAs. Broad adoption of these types of solutions is absolutely key to achieving levels of automation and straight-through processing that can dramatically reduce both cost and errors in this key risk-mitigation arena.

One of the areas we will continue to hear the most about in the financial press will be the large number of blockchain initiatives that are set to change the settlement landscape of financial markets forever. Make no mistake: blockchain is coming, but not in a way that will change the world in 2016 – no matter what the headlines might make you believe.

Per Sjöberg, chief executive, TriOptima

Seamless collaboration and interoperability will drive new technology initiatives this year and into the future. TriOptima has already developed strong partnerships with clearing organisations around the globe to deliver ever more effective triReduce compression results to their members. Recently, we announced a collaboration between triResolve, the AcadiaSoft MarginSphere communications hub, 13 major financial institutions, and the evolving DTCC-Euroclear margin utility to deliver an automated margin solution that will meet the challenges of new regulatory margin requirements. We already offer a repository reconciliation service that automatically receives data from trade repositories and compares it to the data on our reconciliation service, triResolve, in order to identify misreported transactions.

While these efforts involve TriOptima post-trade services, they also represent strong collaborations with a broad range of partners, like AcadiaSoft, CLS, CME Group, Depository Trust & Clearing Corporation, Japan Securities Clearing Corporation, LCH.Clearnet's SwapClear, NASDAQ, Regis-TR, and other financial institutions. Going forward, these partnerships will be crucial to creating effective services. Market participants recognise the importance of flexibility and connectivity in existing and emerging technology.

This trend is accelerating in the derivatives market for cleared and non-cleared transactions as new regulatory requirements evolve and cost-control pressures increase for all types of market participant. New initiatives in trading, clearing and other post-trade processing all build on the integration of services – some old and some new. ICAP's recent announcement of the merging of its global broking service with Tullett Prebon's will strengthen both entities and enable the better use of technology for their clients. A new company combining TriOptima and post-trade service providers Traiana, Euclid and Reset with ICAP's electronic market entities, EBS and Broker-Tec, will focus on delivering automated, collaborative and efficient technology based solutions that underscore the future direction of the market. ■

> "Seamless collaboration and interoperability will drive new technology initiatives this year and into the future"

The HK Way

The chief executive of the Hong Kong Securities and Futures Commission, talks to *IQ: ISDA Quarterly* about his priorities for the SFC, the regulatory framework in Hong Kong and his efforts to address cross-border challenges

GLOBAL DERIVATIVES USERS have had to get used to a complex lattice of domestic and international regulations. Counterparties need to know what rules apply where, and in what circumstances. For cross-border trades, it might mean more than one set of rules applies at the same time, giving rise to conflicts and inconsistencies. And this situation could be about to get more complicated. Over the coming year, the European Union (EU), Australia, Hong Kong and Singapore are expected to launch their first clearing mandates, joining the US, Japan and a smattering of others that already have mandates in place.

The conventional wisdom is that cross-border spats can be avoided by domestic regulators allowing firms in their own jurisdiction to comply with foreign rules when trading with an overseas counterparty, so long as those rules are deemed to be equivalent to the domestic framework. In theory, these equivalence or substituted compliance decisions would be based on broad outcomes, rather than requiring the rules to be virtually identical. So far, it hasn't worked out that way. The result has been a fragmentation of global liquidity pools, as derivatives users opt to trade with counterparties in their own jurisdiction where possible, rather than risk being subject to multiple sets of rules.

For some, the answer is for the International Organization of Securities Commissions (IOSCO) to play a greater role in tackling the issue. In response, the organisation set up a task force in June 2013 to consider cross-border challenges, chaired by Ashley Alder, chief executive of the Hong Kong Securities and Futures Commission (SFC). The group's final report, published in September 2015, outlined a toolkit of regulatory options, and set out a series of proposals for next steps, including a recommendation that IOSCO policy committees explicitly consider cross-border issues at the start of any project, and the setting up of an information repository for supervisory memorandums of understanding (MoUs).

> "An intensely granular approach when it comes to substituted compliance or equivalence gives rise to all sorts of problems"

Nonetheless, the report fell short of what some in the industry had hoped for: a recommendation that granular rules should be developed at the international level, and then applied consistently in local markets. For Alder, this ideal fails to recognise the constraints imposed on regulators by local laws and national priorities, and the fact that IOSCO does not have legal or binding authority over its members. As a result, regulatory coordination and recognition is likely to remain bilateral at this stage, rather than multilateral. In fact, this realism is a strength of the report, says Alder. "I think it was a good report because it was realistic and actionable, rather than something that was aspirational and useless," he tells *IQ: ISDA Quarterly*.

The report notes that the direction of travel is for greater regulatory coordination and more emphasis on determining when, and under what circumstances, it may be appropriate to recognise foreign laws as equivalent to domestic rules. In this respect, Hong Kong intends to practice what IOSCO is preaching. The SFC and the Hong Kong Monetary Authority (HKMA) published a consultation paper on the introduction of mandatory clearing in Hong Kong in September, with the first mandates expected to come into force in mid-2016. The proposal covers fixed-to-floating interest rate swaps and basis swaps denominated in Hong Kong dollar, US dollar, euro, sterling and yen, and overnight indexed swaps denominated in US dollar, euro and sterling. Unlike several other markets, forward rate agreements are not included in the proposed mandate.

Crucially, the paper sets out a flexible substituted compliance regime, based on membership of the OTC Derivatives Regulators Group (ODRG), a collection of regulatory authorities with responsibility for regulation of derivatives markets. All member countries of the ODRG – Australia, Brazil, Canada, the EU member states, Japan, Singapore, Switzerland and the US – will be included in the initial list of comparable jurisdictions, based on the fact they share similar objectives. That's despite the fact there may be differences in the timing of implementation. However, the Hong Kong authorities have proposed a stricter-rule approach, meaning clearing under Hong Kong rules would be required if a mandate isn't yet in place in the comparable jurisdiction. The trade would also need to be cleared through a designated central counterparty (CCP), requiring clearing houses to apply to the SFC for authorisation.

Nonetheless, the flexibility stands in contrast to the rigid stance taken by some other jurisdictions. Alder says the approach was chosen to reduce complexity and duplication for derivatives users. "An intensely granular approach when it comes to substituted compliance or equivalence gives rise to all sorts of problems," he says.

> "It's actually impossible to replicate foreign rules in a satisfactory way. If you try to replicate the US and the EU at the same time, then you end up with a complete mess"

In this interview, Alder discusses the work conducted by IOSCO's cross-border task force, the impact of extraterritoriality on Hong Kong, and the priorities for the SFC in 2016.

IQ: What are the main priorities for the SFC in the year ahead?

Ashley Alder (AA): One priority is to enhance Hong Kong's role as a leading asset management centre, with the mainland/Hong Kong mutual recognition of funds being an important of it. This has been a major project, and we hope the first batch of funds will be authorised soon. We're also looking at our fund manager code of conduct, with an eye on what has been happening elsewhere in the world. Connected with that, we're keen to promote alternative distribution channels for retail mutual funds. Hong Kong is very concentrated in this regard, because funds are distributed almost wholly through a narrow bank-dominated distribution channel, which effectively means costs are high and choice is limited for investors.

We're also working on ways to better conduct surveillance of the market, including enhancing our ability to detect misconduct and market manipulation. In particular, we're exploring whether it would be feasible for us to identify market orders directly at a client level to better detect potential misconduct. That's something that's being considered elsewhere too, and we want to get on top of it because otherwise we have a fragmented picture. We want to join up the dots a lot better.

Another area that is very important for us is listing policy. Over the past few years, we have tightened up the rules that apply to sponsors handling initial public offerings. However, we think it is now time to look at some of the broader listing policy issues.

We're also working with the HKMA on our approach to enhancing the oversight of wholesale securities market activity carried out by banks. This coincides with an international initiative on this topic. IOSCO has just launched a task force, which we lead, that will look at the international landscape in light of what has been happening, for example, in the UK with the Fair and Effective Markets Review.

IQ: What issues will this task force cover?

AA: It's focused on conduct. It's early days – we've only just kicked this off – but the basic idea is to first assess where IOSCO has got to on these issues, because it's not, in fact, a regulatory vacuum. The next thing from an international perspective is to get a good understanding of what regulators in the main markets have in place now covering wholesale market conduct and trader behaviour, with a particular focus on the fixed-income, currencies and commodities markets. Finally, we'll think about a deliverable, which is likely to be some sort of toolbox. But we haven't decided exactly on the deliverable because we need to survey different regulatory approaches to wholesale markets. For example, do regulators currently have a market manipulation regime that applies to wholesale markets? If they do, are supervision, surveillance and detection up to scratch? Part of it will be to work out whether there are gaps internationally and the extent to which these markets may be unregulated. That's a term that has been used in this context, but that may not necessarily be true. Or perhaps the regulations are too high level to deal with misconduct issues.

> "We've seen ISDA's research on this, and our view is that there may be a degree of market fragmentation as a result of the implementation of the SEF rules. Some Asian participants do not want to trade in the SEF environment"

IQ: What's the timeline for that?

AA: We want to get a response to a regulator survey by the next IOSCO board meeting, and then firm up the timetable at that point. Once we have the information, we're in a better place to figure out what the timeline is going to be. But it will be as soon as possible.

IQ: The SFC and HKMA recently published a consultation paper on the introduction of mandatory clearing. Do you think introducing a clearing mandate three years after the US is an advantage or disadvantage? What are the challenges?

AA: I think it's probably an advantage. And while it's later than the US, it's not out of sync with other jurisdictions. Europe is starting in 2016, for example. Australia and Singapore haven't published their consultation conclusions yet, so I think our timetable is pretty much in sync, although the US went quite early. It is an advantage to an extent because harmonisation of clearing mandates is really important. If it's not harmonised sufficiently, then you end up with fragmentation and potential regulatory arbitrage. Now, achieving that consistency in clearing mandates is not easy. Having said that, we're a member of the ODRG, along with other regulators. That group has had extensive discussions, and we have agreed on a framework that we will consult each other on determinations so we can aim for as much harmonisation as possible.

IQ: Given the need for harmonisation, is there a tacit requirement to follow the lead of the early movers?

AA: We will certainly take into consideration what other people are doing, but we are not just following blindly. So, for example, although we propose to mandate G-4 currency interest rate swaps, we're not doing anything on forward rate agreements in our phase-one mandatory clearing, even though some other major jurisdictions are mandating these products. That's because these types of products are not very active in Hong Kong, so there is not the same systemic concern.

IQ: Hong Kong has proposed a very flexible substituted compliance regime for clearing, allowing a local entity to clear under the rules of an overseas jurisdiction with comparable rules, with comparability based on membership to the ODRG. That contrasts with the more granular, rule-by-rule and lengthy equivalence/substituted compliance process adopted by the US and European Union. Why have Hong Kong regulators chosen this approach?

AA: I think it speaks for itself. An intensely granular approach when it comes to substituted compliance or equivalence gives rise to all sorts of problems. Actually, regulators globally recognise that. Unfortunately, under their own legislation and for reasons that are to do with political process and other issues, their hands are often bound. So, in essence, it's not the regulators' fault.

Most of our discussions on this topic have been with the EU. And although the EU started with a fairly granular and rigid approach, a lot of the Asian jurisdictions worked together to make the point that the process needs to be appropriately flexible and outcomes-orientated. It's actually impossible to replicate foreign rules in a satisfactory way. If you try to replicate the US and the EU at the same time, then you end up with a complete mess. So we are comfortable with an outcomes-based approach in relation to recognising overseas regimes, including for CCPs. That's what we want to pursue because we think it's correct. We'll refer to international standards as much as possible. Fortunately, there are

> "Looking at the trading requirements, if a local market participant wishes to trade with a US counterparty, then it needs to go through a SEF platform. That's something for each market participant to decide"

international standards for CCPs, which is useful.

From a timing point of view, it's also not possible to go through a very detailed and granular rule-by-rule approach for our substituted compliance regime for clearing, which we hope will be available when we implement our mandatory clearing requirements in the coming year. At the end of the day, it's more important that we reduce counterparty risk by introducing the mandatory clearing obligation. We should be comfortable with the mandatory clearing regime in other jurisdictions achieving the same outcome and, as a result, we should be able to allow a flexible framework so market participants don't have to compare all the different requirements on clearing a transaction. There isn't any additional benefit in requiring participants to clear under the Hong Kong clearing rules, as long as the transaction is being cleared and so long as it's clearing through a designated CCP.

IQ: Evidence has emerged that markets are fragmenting into regional liquidity pools. A lack of equivalency and the extraterritorial reach of certain rules mean derivatives users have looked to trade more with counterparties in their own jurisdictions to avoid having to comply with two or more sets of duplicative and potentially inconsistent requirements. Are you seeing evidence of this in Hong Kong, and Asia more generally? What impact will that have on Asian markets?

AA: On clearing, it is important that the two counterparties of a trade are able to use the same CCP for clearing that transaction. We are in discussion with global CCPs that are interested in providing services to participants in Hong Kong. Our local CCP, OTC Clearing Hong Kong, obtained equivalence from Europe, and is currently discussing its status as an exempt derivatives clearing organisation under Commodity Futures Trading Commission rules in the US. Once that happens, we don't really see any issues about not being able to use the same CCP for clearing from a Hong Kong perspective.

So far as inconsistent clearing obligations are concerned, if a product is systemically important in one jurisdiction and is mandated, but is not seen as systemically important elsewhere and is not mandated – for good reason – then the question is whether activities in that product would move offshore to avoid the local clearing mandate. That's why we need to do what I discussed earlier: try to harmonise and communicate as much as possible about clearing mandates to get consistency where appropriate so you don't get trades moving around, which then ultimately results in fragmentation.

There's also the trading issue, which stems back to the inclusion of Footnote 88 within US swap execution facility (SEF) rules. We've seen ISDA's research on this, and our view is that there may be a degree of market fragmentation as a result of the implementation of the SEF rules. Some Asian participants do not want to trade in the SEF environment. But we've also seen some bridging participants – in other words, people who can trade in both SEF and non-SEF pools. They can operate to limit price differences and connect trading between the two pools, so we haven't seen a big divergence in pricing. But there is certainly the potential for a loss of efficiency and also a loss of depth and diversification, so we need to keep an eye on that. We also obviously need to keep an eye on the EU's implementation of its trading requirements.

IQ: Are you seeing any evidence of liquidity deterioration in Hong Kong? Is it something you're monitoring?

AA: We have discussed this with the HKMA, and we haven't observed any material change in the willingness of international banks to make markets in Hong Kong, but we are obviously aware of the additional regulatory requirements that potentially put a stress on bank balance sheets and affect their ability to take on more positions. So we are definitely keeping an eye on this.

IQ: In terms of extraterritorial impact, which US or EU regulations have required the biggest adjustments for Hong Kong market participants?

AA: Looking at the trading requirements, if a local market participant wishes to trade with a US counterparty, then it needs to go through a SEF platform. That's something for each market participant to decide. As mentioned earlier, the availability of bridging participants means it's still possible for local participants to tap into the SEF pool of liquidity via these bridging participants. But we are hoping that with more harmonisation and regulators working together, we can create an environment where market participants will be able to choose where to trade purely because of a business decision, as opposed to any reason related to regulatory requirements, which create an additional layer in that decision-making process.

> "Firstly, IOSCO has no legal or binding authority over its membership. Secondly, members are bound by their own national laws and, by and large, national laws do not refer explicitly to international standards"

IQ: So, to sum up, the extraterritorial impact of overseas rules is being felt, but it's not having a significant impact on the region?

AA: Not to the extent that it creates an extreme disparity in pricing or a complete dry up in liquidity. But it's definitely something that we need to keep in view as more countries implement their requirements.

IQ: Hong Kong has opted not to introduce mandatory trading rules, unlike Europe and the US. Do you anticipate this creating problems for cross-border trading in the

longer term with US and European counterparties?

AA: We have said all along that we need the market data from mandatory reporting in order to study how best to implement a trading mandate. That's why we have so far focused on mandatory reporting and introducing mandatory clearing. Trading will come at a later stage when we have more market data. But because we don't currently have a trading requirement, there won't be any conflict in the rules. If a trade is between a Hong Kong counterparty and a US counterparty, then it is only subject to one set of trading rules, as opposed to having two different sets of rules that may result in duplication or even conflict.

> "I know the industry would have liked us to conclude there is only a single global rule book and a single global regulator, and local jurisdictions should not do anything outside that boundary, but life is more complicated"

IQ: You played a prominent role on IOSCO's cross-border task force, which published a report earlier this year. Can or should global bodies like IOSCO do more?

AA: Yes, I think they can. The question is how much more. The cross-border task force concluded there are a number of inhibiting factors that make it challenging for IOSCO to do more. Firstly, IOSCO has no legal or binding authority over its membership. Secondly, members are bound by their own national laws and, by and large, national laws do not refer explicitly to international standards. Some contain the idea of bilateral recognition or equivalence assessments, but there is mostly a lack of reference to international standards.

The other issue is that the IOSCO membership and the IOSCO subject matter are far, far broader and probably more complex than the subject matter the Basel Committee on Banking Supervision is dealing with. When it comes to it, the Basel Committee is dealing almost wholly with capital requirements for banks. There's a long tradition of Basel putting the rules together and then the rules being implemented fairly harmoniously, although there are differences in practice. But the way in which capital regimes operate together and interlock is not quite the same as trading, especially in derivatives, which is intensely cross-border. It's a different type of subject matter altogether. These cross-border issues, when there is a difference in approach, can be a lot more acute than they are in the bank capital world.

The task force report highlighted a couple of areas. Within IOSCO, before any proposed new standard receives a mandate to progress, potential cross-border issues must now be explicitly addressed so they can be factored in early on. That's a good approach. Secondly, many of the bilateral decisions are underpinned by MOUs, which are by and large supervisory MOUs to underpin cross-border recognition. As recognition decisions proliferate, it's a good idea to have a central repository of those MOUs, so jurisdictions can learn from each other on what sorts of MOU provisions are more commonly seen to be important.

Thirdly, experience in making the recognition decisions will help. There are two aspects to recognition. One is making the recognition decision, which is very resource intensive. The second one, which is even harder, is making sure the enforcement and supervision of the rules that have been recognised are up to scratch going forward, which is where the MOUs come in. All of those things come into the mix. I know the industry would have liked us to conclude there is only a single global rule book and a single global regulator, and local jurisdictions should not do anything outside that boundary, but life is more complicated. That's why personally I think it was a good report because it was realistic and actionable, rather than something that was aspirational and useless.

IQ: The Basel Committee and IOSCO announced last year that the implementation date for non-cleared margin rules would be delayed until September 2016, partly because final rules hadn't been published by national authorities. Hong Kong published its first set of proposals at the end of 2015. Do you think this will give market participants enough time to prepare for implementation?

AA: Industry participants have voiced their concern about not having enough time. We are committed to implementing non-cleared margin rules according to the international timetable, but obviously we are also watching developments elsewhere to see how things go.

IQ: Do regulators in the region have a loud enough voice in global forums?

AA: We've made a big effort in IOSCO's Asia-Pacific regional committee (APRC), which I chair, to focus on this. We want to make sure the Asian voice is loud and clear, because we know that dealing with Asia is quite difficult from the perspective of foreign regulators because there are lots of jurisdictions with different levels of development and priorities. From our perspective, we've found we do have commonalities when it comes to extraterritoriality. So through the APRC, we've written to US regulators about things like SEFs, and we've engaged with Europe, and we've found that the best way to do that is on a collective basis. I think foreign regulators also prefer dealing with Asia on that basis because it is efficient, the message is clear and we can express our views on the ways in which our markets may differ and how that might affect an equivalence assessment. I think the situation has completely changed over the past three or four years, from one where Asia's voice was very quiet to one where it is now noticed – and noticed in a good way. We're not taking an aggressive approach – we're just making sure it's a strong voice. ■

ISDA SwapsInfo Update: Clearing Up in Q3

The proportion of interest rate derivatives and credit default swap index volume traded on an electronic trading venue and cleared through a central counterparty increased slightly in the third quarter, according to the latest ISDA SwapsInfo.org analysis

MORE THAN 80% of both interest rate derivatives (IRD) and credit default swap (CDS) index trading volume was cleared in the third quarter of 2015, climbing slightly from the levels in the previous three-month period. The proportion of volume executed on electronic trading venues also crept higher over the quarter, reaching nearly 60% of IRD trading volume and more than 70% of CDS index activity.

Despite these quarterly increases, the longer-term picture is one of relative stability. After an initial jump in clearing and electronic trading volumes following the launch of regulatory mandates in 2013 and 2014, the proportion of cleared and electronic-traded volume has remained relatively constant over the past year, albeit trending upwards.

According to trade information reported to US data repositories and compiled by ISDA SwapsInfo.org[1], 80.5% of average daily IRD notional volume was cleared at a central counterparty in the third quarter of 2015. That represents an increase from the 76.3% reported in the previous quarter, and is the highest level recorded over the past year. However, the pace of growth has been steady rather than spectacular. Clearing accounted for 77.9% of average daily notional volume in the third quarter of 2014, with little quarter-on-quarter variation since then. In fact, the proportion of cleared activity has remained within a tight 8 percentage-point band over the past five quarters.

It's a similar story with CDS index trades. SwapsInfo analysis reveals that 81.2% of CDS index transactions were cleared in the third quarter of 2015, up from 75.1% in the previous three-month period. That compares to 79.4% in the third quarter of 2014.

The volume of trading activity transacted on swap execution facilities (SEFs) also saw an increase in the third quarter of 2015, reaching 58.4% for IRD and 72.5% for CDS indices – in both cases, higher than the levels recorded in the previous quarter, and the highest over the past year. But the same stability in the proportion of cleared trades is also reflected in SEF activity. SEF trading in the IRD market has stayed within a 9

AT A GLANCE

Approximately 80.5% of average daily IRD notional volume was cleared in the third quarter of 2015.

More than half of average daily IRD trading activity – 58.4% by notional volume – was executed on a SEF during the third quarter of 2015.

Third-quarter average daily IRD notional volume fell by 2.1% compared with the third quarter of 2014, and decreased by 4.4% versus the second quarter of 2015.

In the CDS index market, 81.2% of average daily notional volume was cleared in the third quarter of 2015.

SEF trading accounted for 72.5% of average daily CDS index notional volume.

CDS index average daily notional volume fell by 6.4% compared with the third quarter of 2014, but increased by 13.4% versus the second quarter of 2015.

[1] ISDA SwapsInfo is available at www.swapsinfo.org. The site compiles data reported to the Bloomberg and Depository Trust & Clearing Corporation swap data repositories

percentage-point band, while the proportion of SEF trading in the CDS index market has been locked within a 6 percentage-point range over the past five quarters.

This suggests the US clearing and trade execution mandates are now firmly established. US regulators introduced clearing mandates for certain IRD and CDS index products from March 2013 for swap dealers, major swap participants and so-called active funds, with requirements for other users to clear introduced in June and September of that year. The first trading mandates for a limited number of IRD and CDS index contracts came into force from February 2014. No further mandates have emerged since then.

While IRD clearing and trade execution activity increased in the third quarter, average daily notional volume declined to its lowest level of the year, reaching $507.2 billion versus a year high of $601.2 billion in the first quarter of 2015. There was better news in the CDS index market, with average daily notional volumes rising to $29.5 billion, an increase of 13.4% compared to the prior quarter. In comparison, average daily notional volumes were at $35 billion in the fourth quarter of 2014.

The following analysis provides a high-level summary of trends in the third quarter of 2015. More detailed analysis can be found at ISDA SwapsInfo.org.

CHART 1: IRD AVERAGE DAILY TRADE COUNT: TOTAL, SEF, BILATERAL

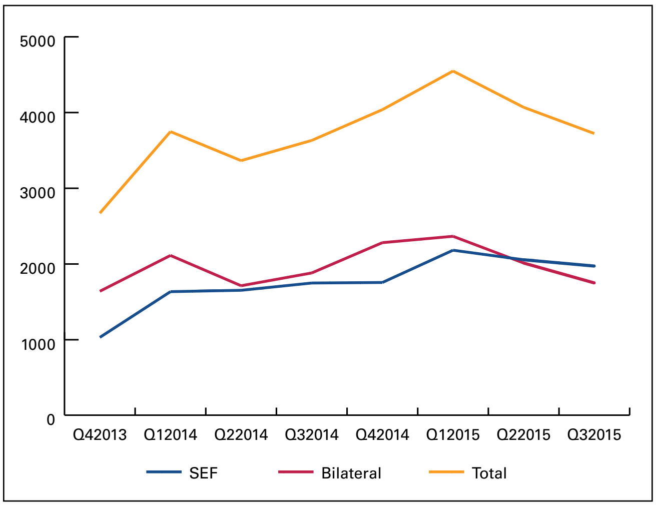
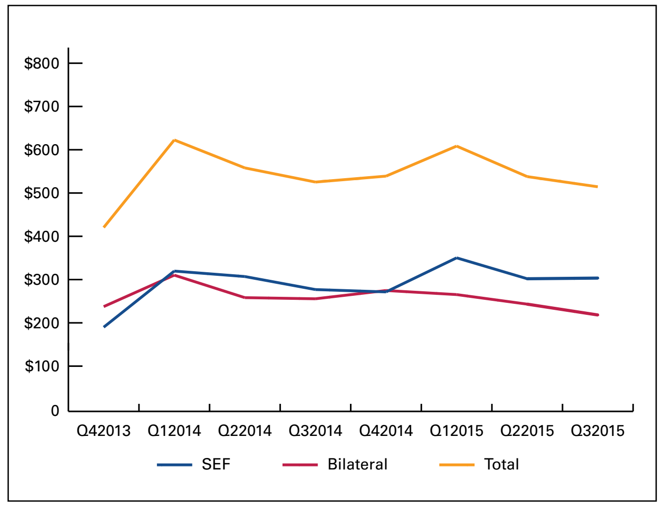


CHART 2: IRD AVERAGE DAILY NOTIONAL VOLUME (US$ BILLIONS): TOTAL, SEF, BILATERAL



IRD Trade Count (Chart 1)

- Average daily IRD trade counts in the third quarter of 2015 rose by 2.5% compared to the same period a year before, but declined by 8.5% versus the second quarter of 2015.
- SEF trading accounted for 53% of the total average daily trade count in the third quarter of 2015, compared to 48.2% in the same period a year before and 50.5% in the second quarter of 2015.
- SEF average daily trade counts rose by 12.8% in the third quarter of 2015 compared with the same period a year earlier, but declined by 4% compared to the second quarter of 2015.
- Bilateral average daily trade counts decreased by 7% versus the third quarter of 2014, and fell by 13.1% compared with the second quarter of 2015.

IRD Notional Volume (Chart 2)

- Average daily IRD notional volume declined by 2.1% in the third quarter of 2015 compared with the same quarter a year earlier, and fell by 4.4% versus the second quarter of 2015.
- SEF average daily notional volume represented 58.4% of total volume in the third quarter of 2015, compared with 52.1% in the third quarter of 2014 and 55.5% in the second quarter of 2015.
- SEF average daily notional volume increased by 9.8% in the third quarter of 2015 compared with the same period a year prior, and rose by 0.5% compared with the second quarter of 2015.
- Bilateral volumes declined by 15% compared with a year before and by 10.6% versus the previous quarter.

CHART 3: IRD AVERAGE TRADE SIZE (US$ MILLIONS): TOTAL, SEF, BILATERAL

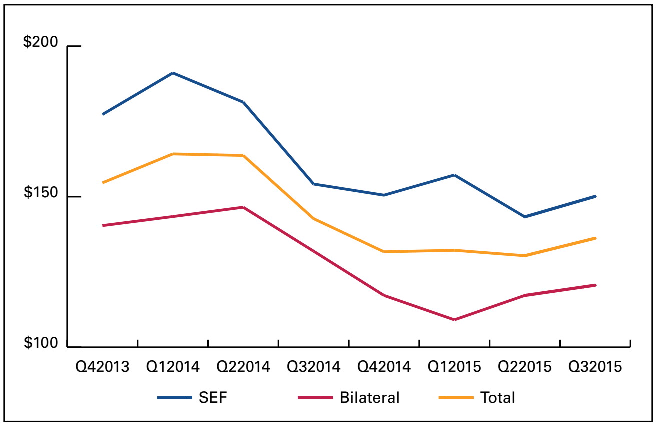
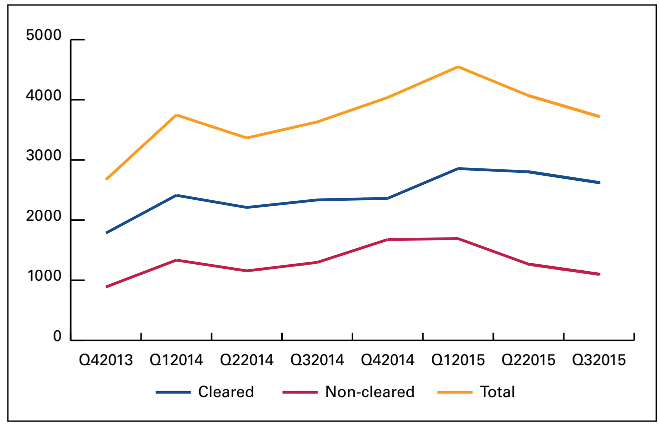


CHART 4: IRD AVERAGE DAILY TRADE COUNT: TOTAL, CLEARED, NON-CLEARED



IRD Trade Size (Chart 3)

- Average IRD trade size declined by 4.5% in the third quarter of 2015 compared to the same period a year earlier, but increased by 4.5% from the second quarter of 2015.
- SEF trade size declined by 2.6% in the third quarter of 2015 compared with the same period a year before, but rose by 4.7% compared with the second quarter of 2015.
- Bilateral trade size declined by 8.6% in the third quarter of 2015 compared with the third quarter of 2014, but rose by 2.9% versus the second quarter of 2015.

IRD Cleared Trade Count (Chart 4)

- Cleared IRD trade counts represented 70.5% of total average daily trading activity in the third quarter of 2015, compared with 64.3% in the same period a year prior and 68.9% in the second quarter of 2015.
- Average daily cleared trade counts increased by 12.4% in the third quarter of 2015 versus the same period a year earlier, but fell by 6.4% compared with the second quarter of 2015.
- Non-cleared trade counts decreased by 15.2% in the third quarter of 2015 compared to the corresponding period a year before, and fell by 13.2% compared with the second quarter of 2015.

CHART 5: IRD AVERAGE DAILY NOTIONAL VOLUME (US$ BILLIONS): TOTAL, CLEARED, NON-CLEARED

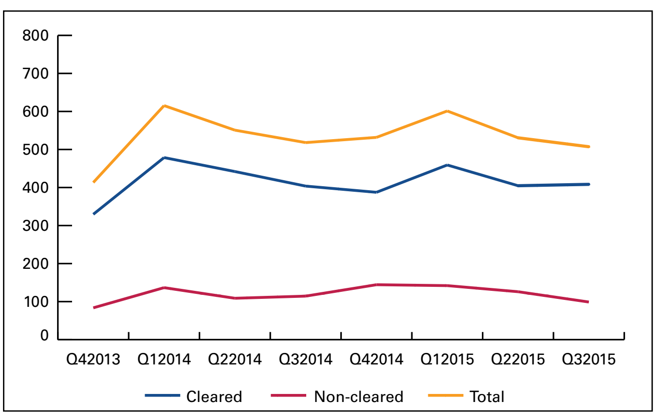
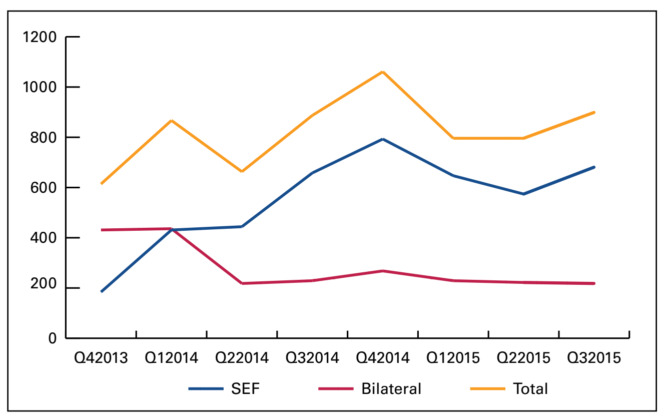


CHART 6: CDS INDEX AVERAGE DAILY TRADE COUNT: TOTAL, SEF, BILATERAL



IRD Cleared Notional Volume (Chart 5)

- Cleared average daily IRD notional volume represented 80.5% of total notional in the third quarter of 2015, compared to 77.9% during the corresponding period in 2014 and 76.3% in the second quarter of 2015.
- Average daily cleared notional volume rose by 1.1% in the third quarter of 2015 compared with the same period in 2014, and increased by 0.9% compared with the second quarter of 2015.
- Non-cleared notional volume decreased by 13.5% during the third quarter of 2015 compared with the corresponding period a year earlier, and declined by 21.5% versus the second quarter of 2015.

CDS Index Trade Count (Chart 6)

- Average daily CDS index trade counts rose by 1.2% in the third quarter of 2015 compared with the same period in 2014, and increased by 12.9% versus the second quarter of 2015.
- SEF trades represented 75.7% of the total CDS index average daily trade count in the third quarter of 2015, compared with 74.1% in the third quarter of 2014 and 72.1% in the second quarter of this year.
- SEF average daily trade counts rose by 3.4% during the third quarter of 2015 compared with the same period a year earlier, and increased by 18.6% compared with the second quarter of 2015.

CHART 7: CDS INDEX AVERAGE DAILY NOTIONAL VOLUME (US$ BILLIONS): TOTAL, SEF, BILATERAL

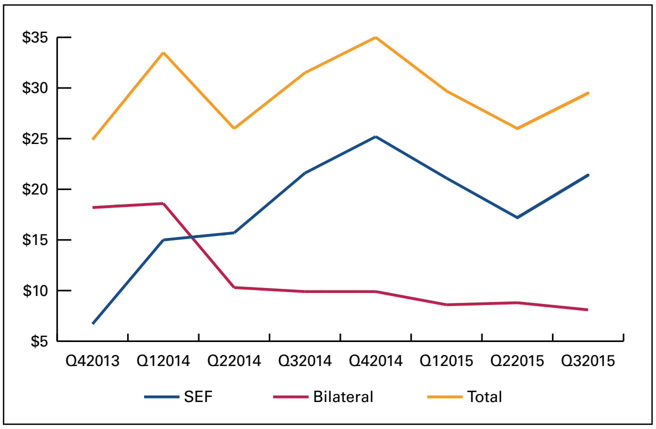
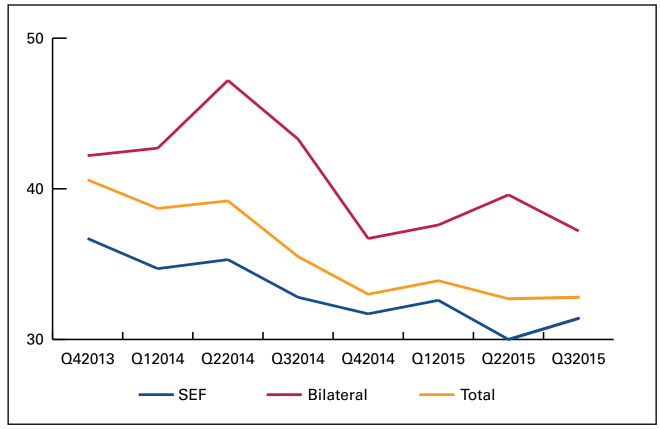


CHART 8: CDS INDEX AVERAGE TRADE SIZE (US$ MILLIONS): TOTAL, SEF, BILATERAL



CDS Index Notional Volume (Chart 7)

- Average daily CDS index notional volume decreased by 6.4% in the third quarter of 2015 compared to the same period a year earlier, but increased by 13.4% compared with the second quarter of this year.
- SEF notional volumes comprised 72.5% of the total average daily CDS index notional in the third quarter of 2015, compared with 68.5% in the third quarter of 2014 and 66.2% in the second quarter of 2015.
- SEF average daily notional volume decreased by 1% in the third quarter of 2015 compared with the same period a year earlier, but increased by 24.2% compared with the second quarter of 2015.

CDS Index Trade Size (Chart 8)

- Average CDS index trade size fell by 7.6% in the third quarter of 2015 compared with the third quarter of 2014, but increased by 0.4% versus the second quarter of 2015.
- SEF trade size fell by 4.3% during the third quarter of 2015 compared with the same period in 2014, but increased by 4.7% versus the second quarter of 2015.
- Bilateral trade size declined by 13.9% in the third quarter of 2015 compared with the same period a year earlier, and fell by 6% compared with the second quarter of 2015.

CHART 9: CDS INDEX AVERAGE DAILY TRADE COUNT: TOTAL, CLEARED, NON-CLEARED

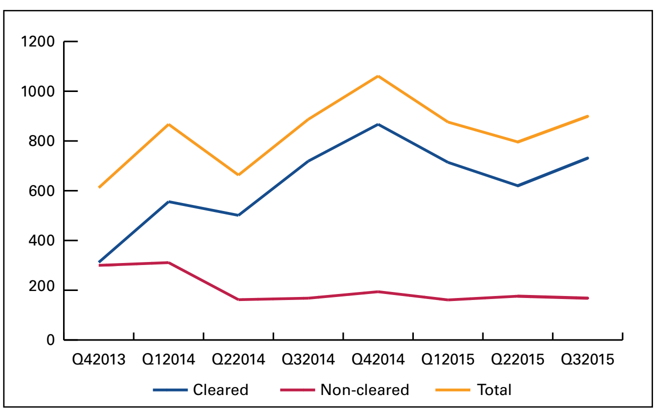
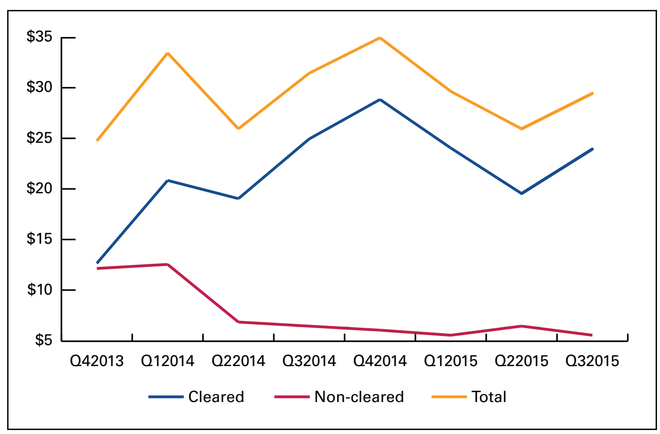


CHART 10: CDS INDEX AVERAGE DAILY NOTIONAL VOLUME (US$ BILLIONS): TOTAL, CLEARED, NON-CLEARED



CDS Index Cleared Trade Count (Chart 9)

- Cleared trades represented 81.4% of the total average daily CDS index trade count in the third quarter of 2015, compared to 81% in the same period in 2014 and 77.9% during the second quarter of 2015.
- Average daily cleared trade counts increased by 1.6% during the third quarter of 2015 compared to the same period in 2014, and rose by 17.8% versus the second quarter of 2015.
- Non-cleared trade counts decreased by 0.5% in the third quarter of 2015 compared to the same period a year earlier, and fell by 4.6% compared with the second quarter of 2015.

CDS Index Cleared Notional Volume (Chart 10)

- Cleared CDS index trades represented 81.2% of total average daily notional volume in the third quarter of 2015, compared to 79.4% in the third quarter of 2014 and 75.1% in the second quarter of 2015.
- Cleared average daily notional volume fell by 4.3% in the third quarter of 2015 compared with the third quarter of 2014, but increased by 22.5% compared with the second quarter of 2015.
- Non-cleared notional volume declined by 14.4% in the third quarter of 2015 compared with the same period in 2014, and fell by 14.1% versus the second quarter of 2015. ■

INTERVIEW

10 QUESTIONS WITH…

Michael Spencer

Michael Spencer, group chief executive at ICAP, discusses the recent deal to combine ICAP's voice and hybrid broking and information business with Tullett Prebon, the potential for post-trade services and the impact of regulatory change

1 ***IQ:* You have been in the derivatives markets for a long time now. What is the biggest challenge for the industry at the moment?**

Michael Spencer (MS): From our perspective, a key challenge continues to be the subdued trading volumes in a low-rate environment and the ongoing deleveraging of the dealer community due to capital constraints. In addition, like everyone else, we are also dealing with an extraordinary amount of regulatory change that is taking place across jurisdictions and ensuring it is implemented in a manner that supports the effective functioning of financial markets.

2 ***IQ:* How can ISDA help firms meet this challenge?**

MS: Given the global nature of the derivatives markets, it is vital there is a strong and respected body that can support consistency of approach. ISDA has been doing this very effectively for the past 30 years, all with an underlying aim of making derivatives markets safer and more efficient. ICAP's post-trade risk and information (PTRI) users of financial products reduce operational and system-wide risks, which increases the efficiency of trading, clearing and settlement and reduces costs.

3 ***IQ:* Can you briefly explain ICAP's changing business focus and the rationale behind it?**

MS: The effect of financial regulatory reform means the global financial markets have profoundly changed. Our transaction with Tullett Prebon is designed to ensure both companies are better suited to meet the market's changing needs and better serve our customers. Regulatory change is clearly driving an increased demand for post-trade and risk mitigation solutions, and there is also an ever-increasing drive towards trading on electronic platforms. Our strategy has consistently been to increase the proportion of revenues from our PTRI and electronic markets divisions, and we believe there are continued and substantial growth opportunities within these services. Alongside this, we have a long history of investing in innovative products and new technologies, and will continue to do this as a focused electronic and post-trade group through our Euclid Opportunities arm.

4 ***IQ:* What changes/innovations do you expect to see in the post-trade world in the next two years?**

MS: There will be a continuing focus on finding efficient ways to reduce outstanding risk in the system, free up collateral and reduce capital requirements. There will also be a need for more comprehensive data warehousing and data mining. And lastly, the big question is how big a disrupter the blockchain innovations will prove to be.

5 ***IQ:* If you were a regulator for a day, what would you do?**

MS: Work on ensuring there is coordination between regulators in different jurisdictions.

6 ***IQ:* How do you expect derivatives markets to change in the next five years?**

MS: Recent events have shown it is always difficult to predict how things will change. Overall, I think it is inevitable we will see further increases in transparency and reporting, and ever more trading done across electronic platforms.

7 ***IQ:* What's your favourite memory from the early days of ICAP?**

MS: Our first interest rate swap trade of over $1 billion in notional, which was in 1986 – a one-year swap in dollars between Salomon and Hill Samuel.

8 ***IQ:* What do you personally expect to be doing in five years' time?**

MS: Still running the company – this is such an exciting time and there is so much going on.

9 ***IQ:* What advice would you give someone starting out in the derivatives market?**

MS: Study events of the past – although things are always changing, it's important we learn from previous issues.

10 ***IQ:* If you didn't work in the financial markets, what do you think you would be doing?**

MS: I have always had an interest in wine, and I am chairman of Bordeaux Index, which is one of the world's leading fine wine merchants. Therefore, I would probably be involved in the wine business. ■

Cross-border Fragmentation Persists

More than two years on from the start of the US swap execution facility regime, liquidity in the euro interest rate swaps market remains fragmented, with European dealers preferring to trade with other European entities. In comparison cross-border trading of US dollar swaps has been hit less hard

BACK IN OCTOBER 2013, something dramatic happened in the European market for cleared euro interest rate swaps (IRS). Before that point, roughly a quarter of cleared monthly volume had been traded between US and European dealers. Almost overnight, that share collapsed to less than 10%[1]. Rather than trade with US counterparties, European dealers suddenly started to transact almost all their euro IRS business with other European dealers. Very little has changed since then.

The sudden shift in trading activity coincides almost exactly with changes in US trading rules. From October 2, 2013, all electronic trading venues with US clients, including those outside the US, had to register with the Commodity Futures Trading Commission (CFTC) and comply with new US swap execution facility (SEF) rules. Most non-US platforms opted not to register or meet the conditions necessary for CFTC no-action relief, closing those venues to US participants.

A further drop in US dealer participation in the European market for euro IRS occurred early the following year. This corresponds with the introduction of US trading mandates in February 2014, which captured certain interest rate and credit derivatives products under a process known as 'made available to trade', or MAT. From that point, any transaction involving a MAT instrument with a US participant had to trade on a CFTC-registered SEF or designated contract market. No similar obligation exists for trades between European participants.

ISDA analysis shows the fragmentation of liquidity has continued into 2015. While the cross-border European-dealer-to-US-dealer pool for euro IRS has increased modestly since a low point in August 2014, European dealers are still trading much less frequently with US dealers than they were before the introduction of the SEF rules. This means the largest liquidity pool for euro IRS is between European dealers, away from SEFs – in turn, creating access issues for US entities that are required to trade euro IRS MAT instruments on CFTC-registered venues.

AT A GLANCE

The cleared euro IRS market has become more fragmented since the start of the CFTC's SEF regime in October 2013.

During the second quarter of 2015, a monthly average of 88.6% of total cleared euro IRS volume in the European market was transacted exclusively between European dealers. This compares with a monthly average of 73.4% in the third quarter of 2013, prior to the start of the SEF regime.

Trading between European and US dealers averaged 10% of cleared euro IRS volume in the second quarter of 2015. A monthly average of 25.8% of euro IRS volume was transacted between European and US counterparties in the European market in the third quarter of 2013.

Although regional pools exist in the market for US dollar IRS, evidence of fragmentation is more subtle than in the market for euro IRS.

Continued growth of the cross-border pool will rely on the harmonization of rules in various regions.

[1] To measure the impact on cross-border relationships, ISDA used monthly regional clearing data from LCH.Clearnet between January 2013 and June 2015 for US dollar- and euro-denominated IRS

Euro IRS

An ISDA analysis of monthly regional clearing data shows the evolution of regional and cross-border trading since January 2013. Chart 1 shows the market for cleared euro IRS traded between European dealers and all of their counterparties by region.

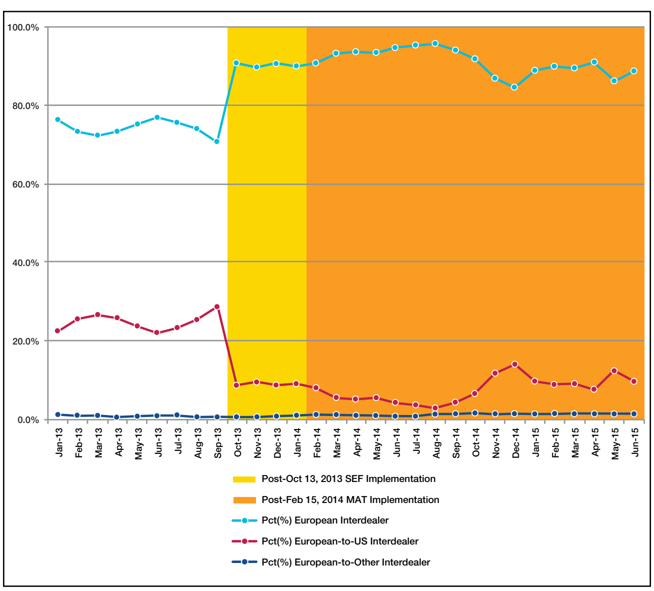
The data shows a 20-percentage-point jump in the share of European-dealer-to-European-dealer euro IRS trading at the time the SEF rules were implemented, from 70.7% in September 2013 to 90.7% the following month (blue line). A further increase occurred a few months later, with the share of European-dealer-to-European-dealer trading climbing from 89.9% and 90.7% in January and February 2014 to 93.2% and 93.6% in March and April 2014, respectively. Exclusive European interdealer market share continued to increase over the next few months, reaching 95.7% in August 2014.

Conversely, the European-to-US interdealer pool (red line) fell sharply following the introduction of US SEF rules, dropping from 28.7% in September 2013 to a low of 2.9% in August 2014.

Since that low point, the cross-border market has recovered slightly, with the share of European-dealer-to-US-dealer volume rising to 11.8% and 14% in November and December 2014, respectively. That dropped back marginally at the start of 2015, falling to a monthly average of 9.1% in the first quarter and 10% in the next three-month period.

However, the majority of activity continues to occur between European dealers, indicating the market for euro IRS remains fragmented. The exclusive European pool reached an average monthly share of 89.4% in the first quarter of 2015 and 88.6% in the three months to June 30, 2015.

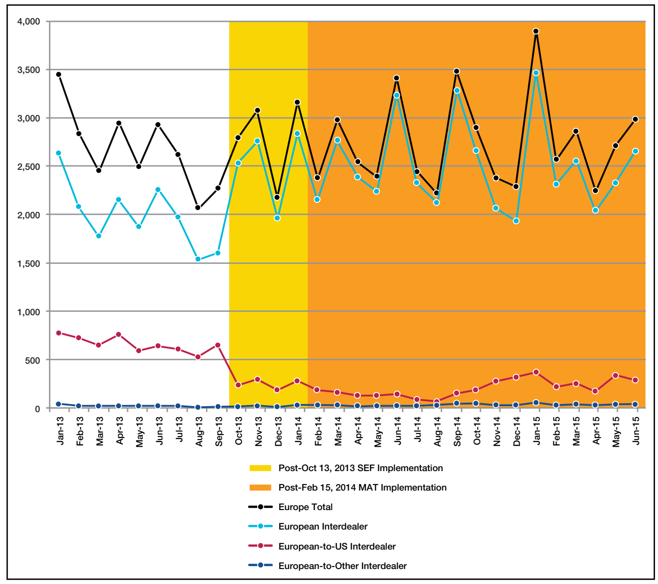
CHART 1: THE EUROPEAN MARKET FOR EURO IRS: PERCENTAGE OF MARKET SHARE



Not surprisingly, trading volumes are driven by activity in the European-dealer-to-European-dealer liquidity pool (see Chart 2). A spike in European trading activity in January 2015, for instance, helped propel total euro IRS notional volumes from €1,934 billion in December 2014 to €3,462 billion the following month.

Total trading levels have subsequently fallen, with average monthly notional dropping by 14.7% between the first and second quarters of 2015, from €3,109 billion to €2,650 billion. Again, this was primarily driven by European-dealer-to-European-dealer activity, which declined 15.6% over the period.

CHART 2: THE EUROPEAN MARKET FOR EURO IRS (€ BILLIONS)

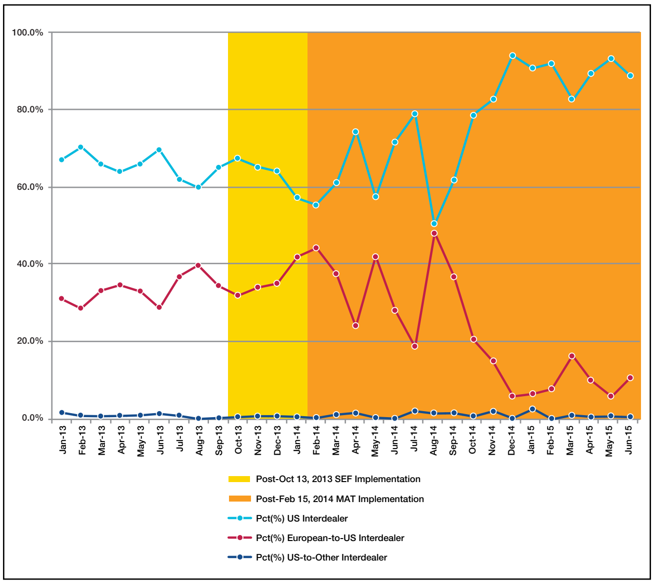


In contrast, the US interdealer market for cleared euro IRS is much more cross-border in terms of trading activity (see Chart 3). US dealers had tended to prefer trading euro IRS with European dealers before the introduction of US SEF rules, but US-dealer-to-US-dealer trading was also active, accounting for roughly a third of the total US interdealer market for euro IRS in the nine months to September 2013.

Following the implementation of the MAT determination in February 2014, exclusive US interdealer market share became more volatile, peaking at 48% in August 2014. More recently, this subset of the market has become more illiquid, accounting for 10% of total volume on average during the first half of 2015. The exclusive US interdealer market reached a new low in May 2015, representing just 5.9% of volume, before rising to 10.7% in June.

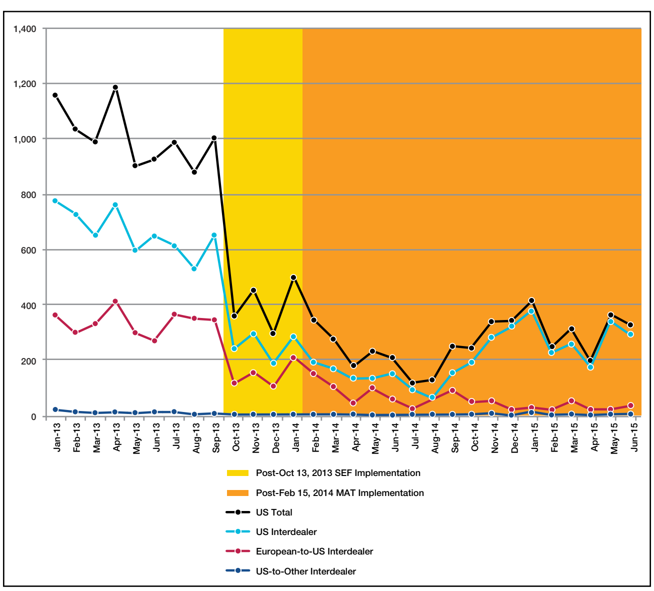
The cross-border market, meanwhile, has become much more dominant, accounting for the overwhelming majority of US interdealer euro IRS activity. The proportion of trades between US and European dealers reached 88.5% on average in the first quarter of 2015 and 90.4% in the next three month period. That represents a significant increase from the 62.9% and 74.4% average market share in the first and second halves of 2014, respectively.

CHART 3: THE US MARKET FOR EURO IRS: PERCENTAGE OF MARKET SHARE



Despite the fact cross-border trading has increased its share of US interdealer euro IRS volumes, total trading activity has collapsed since the introduction of US SEF rules (see Chart 4). In a nutshell, euro IRS trading is far less prevalent in the US market than it was before the SEF rules came into effect. Volumes have recovered slightly from a low of €116 billion July 2014, reaching €414 billion in January 2015. But volumes have dipped since then, with an average monthly amount of €295 billion in the second quarter of 2015.

CHART 4: THE US MARKET FOR EURO IRS (€ BILLIONS)

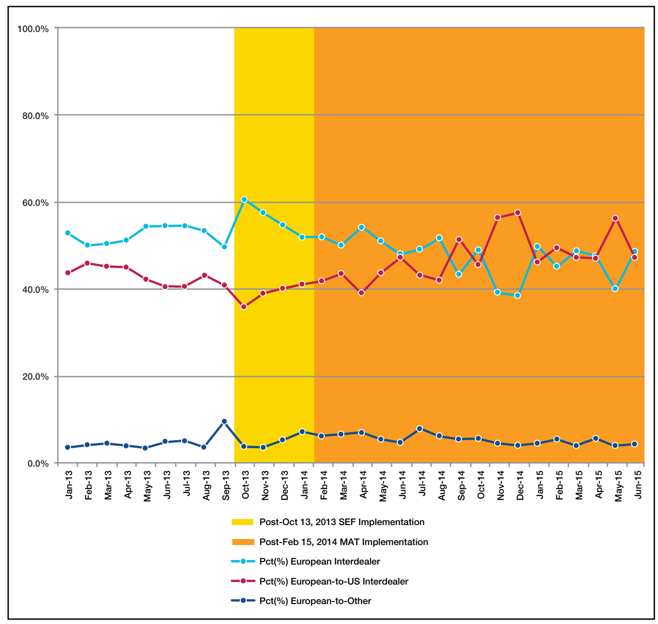


US Dollar IRS

Unlike the market for euro, trading in US dollar IRS has remained much more stable since the introduction of US SEF rules. In Europe, the exclusive European interdealer liquidity pool for US dollar IRS (blue line, Chart 5) has gradually given way to cross-border liquidity (red line). European interdealer liquidity accounted for 49.7% of market share in September 2013, before jumping to a high of 60.5% the following month. A year later, volume dipped below the cross-border pool for the first time in September 2014.

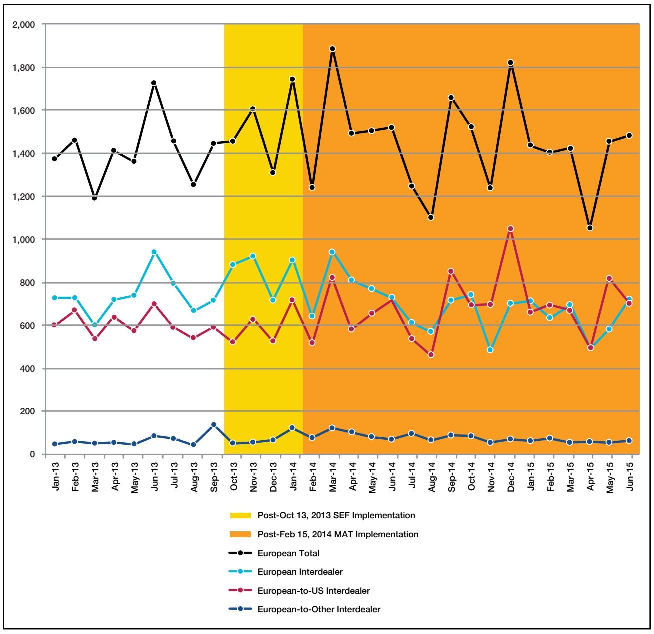
Since then, US dollar liquidity pools have become far more integrated. During the second quarter of 2015, European interdealer market share represented a monthly average of 45.3% of total volume compared to 50.2% for the cross-border market.

CHART 5: THE EUROPEAN MARKET FOR US DOLLAR IRS: PERCENTAGE OF MARKET SHARE



While the share of cross-border versus European-dealer-to-European-dealer activity has been relatively stable, trading volumes in the European market for US dollar IRS have been more volatile. Total volume (black line) hit a low of $1,052 billion in April 2015, driven by similar double-digit percentage drops in both the European and cross-border pools. However, the cross-border pool was quicker to recover in May, before converging again with European-only volumes in June 2015.

CHART 6: THE EUROPEAN MARKET FOR US DOLLAR IRS (US$ BILLIONS)



As with Europe, cross-border trading of US dollar between US and European dealers has become more prevalent in the US interdealer market (see Chart 7). Cross-border activity has dominated trading flows since the end of 2014, reaching a peak of 60.5% in December 2014. That trend reversed slightly in 2015, with US-dealer-to-US-dealer trading accounting for 50.3% of trading flows in April 2015, versus 45.6% for cross-border activity. Cross-border activity subsequently rebounded, averaging 51.3% of monthly volume in the second quarter of 2015, versus 45% for the US-dealer-to-US-dealer pool.

CHART 7: THE US MARKET FOR US DOLLAR IRS: PERCENTAGE OF MARKET SHARE

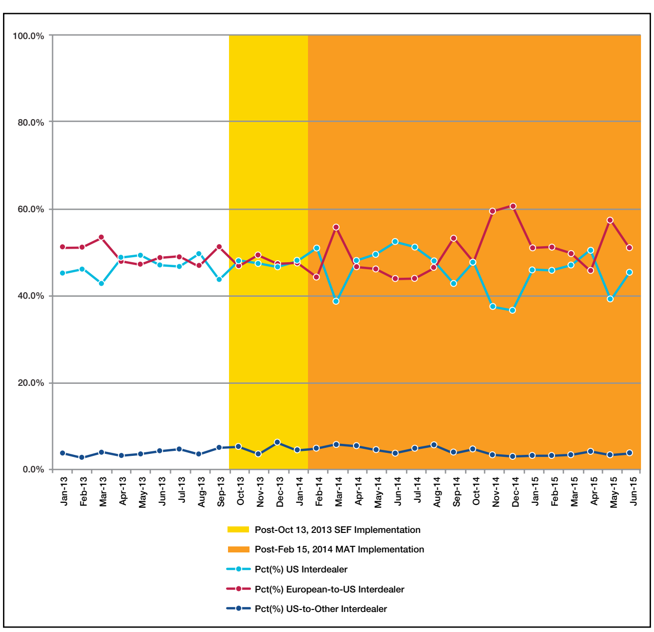
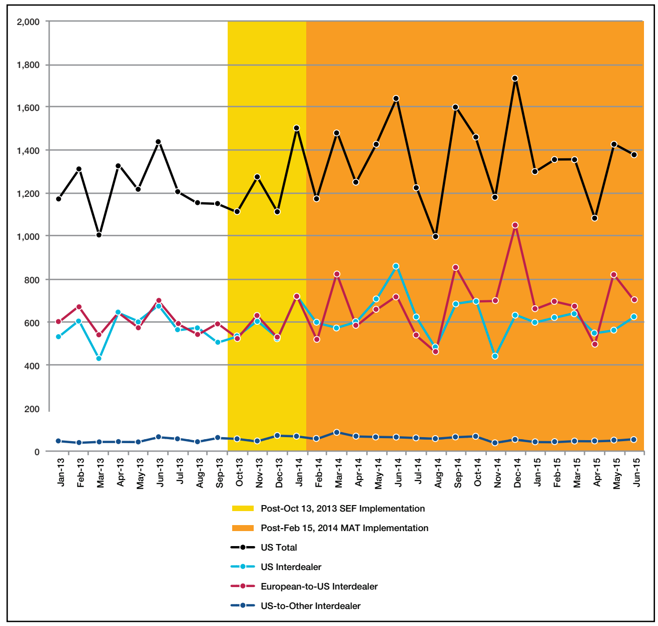


Chart 8 shows the notional volume of US dollar IRS traded between US dealers and their regional counterparties. Total volume (black line) decreased in early 2015 after a strong end to 2014. Total volume fell 3.1% from a monthly average of $1,337 billion in the first quarter of 2015 to $1,296 billion in the second quarter. The decline was mostly influenced by a slowdown in trading in April 2015. While activity in the cross-border pool rebounded strongly in May (red line), the exclusive US dealer pool was slower to recover (blue line).

CHART 8: THE US MARKET FOR US DOLLAR IRS (US$ BILLIONS)



Conclusion

The global derivatives market continues to feel the effects from the implementation of US SEF rules in October 2013. This analysis shows that liquidity in the interest rate swaps market has fragmented since the start of the SEF regime, and particularly since the introduction of the first MAT determinations in February 2014. Most notably, fragmentation has continued to impact the market for euro interest rate swaps, with European dealers predominantly opting to trade with other European dealers.

The market for US dollar IRS is much less affected, and cross-border trading is more prevalent. This likely reflects the fact that European dealers are increasingly willing to trade with US dealers – and therefore trade on SEFs – in order to access the larger US dollar liquidity pool. The largest pool for euro IRS, however, is in Europe, away from SEFs. Further cross-border growth will depend on the harmonization of rules in various regions. Specifically, the implementation of similar trading rules across jurisdictions, combined with an effective and outcomes-based equivalence/substituted compliance regime, would likely help reduce fragmentation in the interest rate swaps market.

Further Reading

A full version of this report is available here: http://isda.link/marketfragoct.

Clear Solution for Single-name CDS

Liquidity in the single-name CDS market has been in continuous decline since the financial crisis. But participants hope a voluntary move to central clearing might reverse the market's fortunes

AT FACE VALUE, the single-name credit default swap (CDS) market appears to be fading fast. Notional outstanding volume has fallen by more than 75% since June 2008, following a period of sustained growth leading up to the financial crisis. With fewer market-makers active today and widespread concerns over illiquidity, there seems to be little cause for optimism.

But scratch beneath the surface, and there is a wave of activity that suggests the future could be brighter than the data suggests. Market participants are actively exploring ways to boost liquidity, ranging from changes to market conventions to a concerted push towards central clearing. If such efforts succeed, then the single-name CDS market may yet make a comeback.

"Liquidity is strained across financial markets as regulatory capital means dealers just don't have as much inventory available to make markets any more. But if we can make the changes we're working on in single-name CDS and bring more participants back to the market, that should lead to an uptick in liquidity both in CDS and in cash," says Dave Gibbs, head of trading at BlueMountain Capital Management in New York.

AT A GLANCE

Liquidity in the single-name CDS market has been in decline since the financial crisis, for a variety of reasons, including increased regulation and capital requirements.

Market participants point out that single-name CDS are useful instruments that allow users to hedge credit risk, diversify their portfolios, and take exposure to companies that rarely issue bonds.

A number of initiatives are under way to revive the single-name CDS market, including a change to market conventions and a push to clearing.

Participants believe a move to clearing, in particular, could make the product more accessible for a wider universe of users.

Development of single-name CDS market

The CDS market first developed in the mid-1990s as a means of managing the credit risk associated with lending. In a typical single-name contract, a protection seller effectively commits to compensate a protection buyer if a named reference entity defaults on its obligations. At the market's peak in June

2008, gross notional outstanding in single-name CDS amounted to $33.4 trillion, having grown from just $7.3 trillion three years earlier, according to data from the Bank for International Settlements.

The sharp growth in CDS trading prior to the crisis was fuelled by broad-based demand for the product, as a wide range of market participants looked to buy or sell credit protection, including bank proprietary trading desks, correlation desks, hedge funds, pension funds and insurance firms. CDS spreads also became an important measure of creditworthiness, as the price paid to purchase protection would be indicative of the likelihood of the reference entity defaulting.

But following its peak in 2008, the single-name CDS market declined as sharply as it had grown, with notional outstanding plummeting to just $8.2 trillion by June 2015. A number of factors have contributed to the market's contraction, not least the low interest rate environment, which has reduced the need for hedging, with corporate default rates falling to record lows. The decline may also appear superficially severe as a result of an increase in portfolio compression, which reduces gross notional outstanding volume by netting offsetting trades.

> "We use CDS as much as we can, but liquidity has become a real problem and it is getting harder to trade anything of a longer maturity than five years"
>
> *— Edward Ground, JP Morgan*

Declining market liquidity

The macro-economic environment is cyclical, and a rise in corporate defaults in the future may yet drive a surge in protection buying that could support an uptick in volume. But regulation threatens to have a more sustained impact on market liquidity. The combined effect of Basel III's leverage ratio and a capital charge for credit valuation adjustment (CVA), coupled with the forthcoming Fundamental Review of the Trading Book, has made the business much more capital intensive for dealers.

"Post-crisis, there are far fewer sellers of protection. Furthermore, it is increasingly difficult for dealers to facilitate liquidity in single-name CDS when you factor in the implications of Basel III and the supplementary leverage ratio, in particular, which is extraordinarily punitive on sold protection," says Amy Hong, head of market structure strategy for global credit at Goldman Sachs.

In late 2014, Deutsche Bank became one of the highest-profile dealers to exit single-name CDS trading, a decision it attributed to regulatory changes. Estimates vary as to the number of dealers providing liquidity today, but some believe there are as few as three or four firms actively making markets across the full range of reference entities globally.

For users of single-name CDS, the contrast between pre- and post-crisis liquidity is stark, as the reduction in participation has made it much more difficult to access credit protection for certain reference entities and tenors. Edward Ground, managing director for credit portfolio trading at JP Morgan in London, is responsible for hedging the bank's CVA and loan portfolios, but the reduction in liquidity has made CDS a less reliable hedge than it used to be.

"We use CDS as much as we can, but liquidity has become a real problem and it is getting harder to trade anything of a longer maturity than five years. Hedging longer-dated exposures with five-year CDS may mean we end up buying more notional protection than the underlying risk," says Ground.

Other users of CDS report similar challenges, with a growing tendency to avoid tenors either longer or shorter than five years due to lower liquidity and higher costs for those maturities. The decline of the structured credit market since the crisis, which had bolstered liquidity in longer-dated CDS, is partly responsible, says Gibbs.

"The lack of liquidity beyond five years is an issue for market participants who want to hedge in longer tenors. The structured credit market previously gave us that liquidity, but it's probably not coming back, so we need to find a spark to relight that part of the market," he says.

Reviving the market

While gross notional outstanding in single-name CDS has been in continuous decline for more than seven years, it is only recently that market participants have begun to take stock of the situation and consider ways in which the market's fortunes might be reversed. While there is little that can be done to dampen the punitive effects of regulatory capital, there are changes that can be made to market conventions that may improve liquidity.

Following a request from a number of buy-side firms in 2014 to reduce the frequency with which single-name CDS roll to new on-the-run contracts, a revised schedule of semiannual, rather than quarterly, rolls was due to take effect in December 2015. The change is expected to improve liquidity around the new roll dates, while also reducing costs (see box).

The benefits of moving single-name CDS to central clearing are also becoming increasingly apparent to both liquidity providers and end users. While CDS indices must already be cleared under the US Dodd-Frank Act, and will also be subject to the clearing obligations of the European Market Infrastructure Regulation, there is currently no expectation of a mandate for single-name CDS, partly due to lower levels of liquidity in individual names. However, it looks increasingly likely that single-name contracts may move to clearing voluntarily.

"The industry is mobilising to improve liquidity in CDS. The move to semiannual rolls is a step in the right direction, but clearing is where we will see real momentum. Clearing will make the product more accessible to more market participants by reducing concerns related to counterparty risk and removing the burden of costly bilateral documentation," says Hong of Goldman Sachs.

Clearing single-name CDS through central counterparties (CCPs) will not only improve liquidity provision and overall confidence in the product and foster greater innovation in execution mechanisms, but it will also have a positive knock-on effect on the corporate bond market, Hong adds.

"Corporate bond market liquidity concerns are well publicised. I expect that a healthy CDS market will lead to improved information discovery in underlying names and increase market appetite for corporate bonds, as participants will have a more effective means to hedge bond positions with CDS," she explains.

Given the regulatory mandate to clear CDS indices rather than single-name contracts, indices have naturally been the focus of clearing houses in recent years, but both LCH.Clearnet and Intercontinental Exchange (ICE) offer clearing in some single-name CDS. For example, ICE Clear Credit, the exchange's US CCP, had 35 buy-side firms clearing single-name CDS contracts, including Sovereign and European corporate names, and had cleared a notional volume of $27.5 billion as of November 2015.

"We saw a lot of progress in single-name CDS clearing in 2015, mainly focused on North American corporates. The best way for firms to reduce their capital requirements is to have as much of the portfolio in clearing as possible, so we will continue to review expanding our eligible instrument set while keeping in mind our risk principles and eligibility criteria," says Mark Woodward, vice-president for corporate development at ICE Clear Europe.

ICE currently offers clearing in more than 425 single-name contracts, but is looking to expand that list. The difficulty is that while clearing might be an important means of increasing liquidity, the contracts need to meet certain liquidity requirements in the first place in order for a CCP to accept them for clearing. The danger is that a degree of deadlock could set in, preventing more of the market from moving to clearing.

> "Going forward, non-cleared margin requirements will also apply to single-name CDS contracts, so the key question is whether the cost of non-cleared trades will then make clearing more attractive"
>
> *— Emma Dwyer, Allen & Overy*

ROLLING FORWARD

Increasing liquidity in single-name credit default swaps (CDS) and rendering the product more suitable for central clearing will not happen overnight, but it is likely to be achieved more gradually through a number of market-led initiatives.

One example is a move to reduce the frequency with which single-name CDS roll to new on-the-run contracts. The standard convention used to be that the market would simultaneously move to a new contract on the same date at the end of each quarter. But, as of December 21, 2015, the standard roll frequency was due to be reduced to just twice a year.

It might sound like a minor technical change, but the request initially came from a group of buy-side firms that felt there could be real benefits for the product in changing the convention. Following an assessment by ISDA's Credit Steering Committee, it was agreed that rolling twice a year could significantly reduce costs, as well as improve liquidity around the two remaining roll dates.

"Moving to a semiannual roll aligns single-name CDS more closely with indices and provides increased netting fungibility. In making this change, the market should see reduced capital and roll costs, with a goal of also improving liquidity by focusing on a smaller set of tradeable contracts. It's not a silver bullet, but it is a necessary step in further standardising the product and facilitating the march towards clearing," says Andrew Kayiira, director of US public policy at ISDA in New York.

In practical terms, the roll formerly took place on the 20th day of March, June, September and December, but contracts will now only roll on March 20 and September 20, which coincides with the index roll. However, the change is not compulsory, and some dealers will still support quarterly rolls if requested by their clients.

"Some participants may choose to continue managing CDS risk to quarterly dates, and we will continue making markets according to client demand, but we expect the majority of the market to shift to semiannual rolls. This will help participants reduce gross notional and concentrate trading activity across fewer contracts, which should improve liquidity and reduce margin generally," says Amy Hong, head of market structure strategy for global credit at Goldman Sachs.

Nevertheless, buy-side participants remain committed to finding ways to break that deadlock, with clearing seen as the means of creating a more liquid market for single-name CDS. It is not just about the potential operational, risk-mitigating and cost-reducing benefits of central clearing, but the simple need to attract and retain reliable liquidity provision, says Gibbs.

"We have already seen banks downsize and even discontinue their CDS businesses because it was too expensive. If we don't do something about it, we could see other market-making institutions leave. If we can make the product simpler and more standardised, dealers can better offset their risk and reduce their regulatory capital – it absolutely has to happen for the product to thrive," he says.

Driving the transition towards central clearing

Recognising the benefits, the biggest question confronting the industry at this stage is how best to drive the transition towards clearing. While there might not be a regulatory mandate to clear single-name contracts, there may be an economic incentive to do so once the phased implementation of margin requirements for non-cleared trades begins in September 2016. When they are combined with the higher capital requirements that apply to bilateral trades under Basel III, the economic advantages of using CCPs could be considerable.

"Generally speaking, cleared derivatives get better capital treatment than non-cleared derivatives under Basel III and CRD IV because of the lower risk weights for exposures to authorised CCPs and the effects of the CVA charge. Going forward, non-cleared margin requirements will also apply to single-name CDS contracts, so the key question is whether the cost of non-cleared trades will then make clearing more attractive," says Emma Dwyer, partner at Allen & Overy in London.

But given the potential power of clearing to secure a brighter future for the market, some participants are reluctant to wait for economic incentives to drive the adoption of clearing as margin and capital rules are phased in. A number of other options are also being considered, including a public commitment to clearing or the introduction of tiered pricing, whereby market-makers would make non-cleared contracts explicitly more expensive.

"There are several ways to skin a cat, and while it may be beneficial to use clearing, we need to find an effective way for the market to get there, given that a regulatory mandate is unlikely. We are therefore working on making a buy-side commitment to clearing and standardisation, which we hope will empower the banks to differentiate between cleared and uncleared markets in their pricing and thereby transition more volume to clearing," says Gibbs. ■

ISDA MISSION STATEMENT

ISDA fosters safe and efficient derivatives markets to facilitate effective risk management for all users of derivative products. ISDA achieves its mission by representing all market participants globally, promoting high standards of commercial conduct that enhance market integrity, and leading industry action on derivatives issues. This includes being:

The Preeminent Voice of the Global Derivatives Marketplace

Representing the industry through public policy engagement, education and communication

An Advocate for Effective Risk and Capital Management

Enhancing counterparty and market risk practices and ensuring a prudent and consistent regulatory capital and margin framework

The Source for Global Industry Standards in Documentation

Developing standardized documentation globally to promote legal certainty and maximum risk reduction

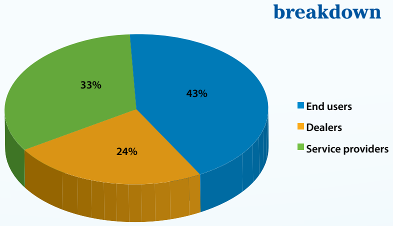
A Strong Proponent for a Safe, Efficient Market Infrastructure for Derivatives Trading, Clearing and Reporting

Advancing practices related to trading, clearing, reporting and processing of transactions in order to enhance the safety, liquidity and transparency of global derivatives markets

MEMBERSHIP

ISDA has over 850 member institutions from 68 countries. These members comprise of a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. Members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers.

Membership breakdown



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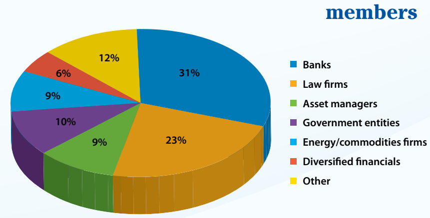
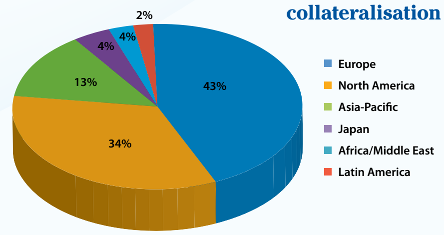


Geographic collateralisation



Additional information regarding ISDA's member types and benefits, as well as a complete ISDA membership list, is available on the Association's website: http://www2.isda.org/membership/

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ISDA Safe, Efficient Markets

ISDA CONFERENCES

Education has been part of ISDA's mission since the Association's inception. With now over 150 conferences, seminars, training courses and symposia held each year, ISDA's highly qualified instructors continue to educate members and non-members globally on topics including legal and documentation, clearing, collateral, data and reporting, risk management, regulation and other related issues. Conferences in 2015 have focused on margin rules for non-cleared derivatives, the ISDA Resolution Stay Protocol, regulatory developments for the buy side, and the commodity derivatives markets.

An additional bonus in most of these courses is the availability of continuing education credits. ISDA's educational efforts have been accredited by the New York Continuing Legal Education Board, the National Association of State Boards of Accountancy (NASBA) and other regional continuing educational organisations.

In addition to ISDSA's regular courses, the Association also offers regional updates during the third and fourth quarters in New York, London, Sydney, Hong Kong or Singapore (these rotate every year) and Tokyo. These one-day conferences are intended to inform both members and non-members, regulators and the press of ISDA's regional work.

The ISDA Annual General Meeting (AGM) is ISDA's premier, members-only event. Every year, the ISDA AGM takes place in different financial centers around the world, rotating among the major economically developed countries. ISDA's 30th AGM took place in Montreal and featured a discussion on cross-border harmonisation by leading regulators and legislators. ISDA's 31st AGM will be held on April 12-14, 2016, in Tokyo.

The current conference schedule is posted on the ISDA website at www2.isda.org/conference. For additional updates on ISDA's conferences, please follow us on Twitter at @ISDAConferences.

@ISDAConferences

UPCOMING ISDA 2016 CONFERENCES AND EVENTS

ISDA 31st Annual General Meeting
April 12 – 14, 2016
ANA InterContinental
Tokyo

ISDA Annual Legal Forum
February 10, 2016
London

UPCOMING CONFERENCE TOPICS

- Advanced Derivatives Clearing: CCP Resilience, Recovery and Continuity
- Arbitration Seminar
- Bank Recovery Resolution Directive
- Cross Border Debate - Issues to watch in 2016 and Beyond
- Documenting and Confirming Index Volatility Swaps
- Fundamental Review of the Trading Book
- Fundamentals of Credit Derivatives
- Fundamentals of Derivatives
- International Developments - Reporting
- ISDA Resolution Stay Protocols
- ISDA WGMR Workshop on the Standard Initial Margin Model (SIMM)
- ISDA's WGMR Initiatives
- Markets in Financial Instruments Directive II/Regulation
- New Regulatory Environment of Commodity Derivatives
- Overview of Capital Regulations
- Regulatory Developments for the Buy-side: Current Issues
- SEC Security-Based Swap Reporting & Symbology
- Tax Issues: Special Topics Impacting the ISDA Master Agreement
- Understanding the ISDA Credit Support Annex and Updates in Collateral Issues
- Understanding the ISDA Master Agreements
- Update on Key Global Regulatory Initiatives and Cross-Border Considerations

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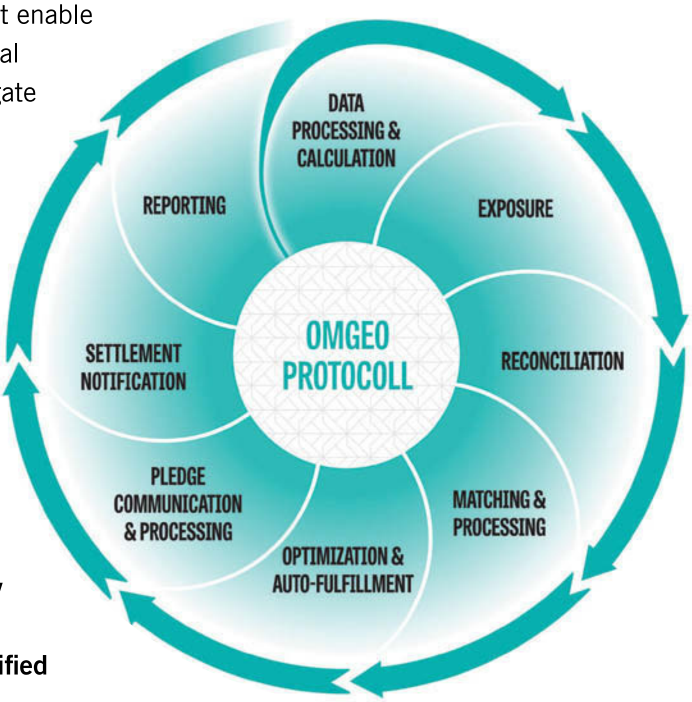

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Please go to **Omgeo.com/protocoll** or to see automation in action go to **dtcc.com/collateral-automate**