INTERVIEW
IOSCO's Paul Andrews on Harmonisation

BENCHMARKS
The Search for Risk-free Rates and Fallbacks

CLEARING
Impact of an EU Location Policy on Margin Levels

IQ

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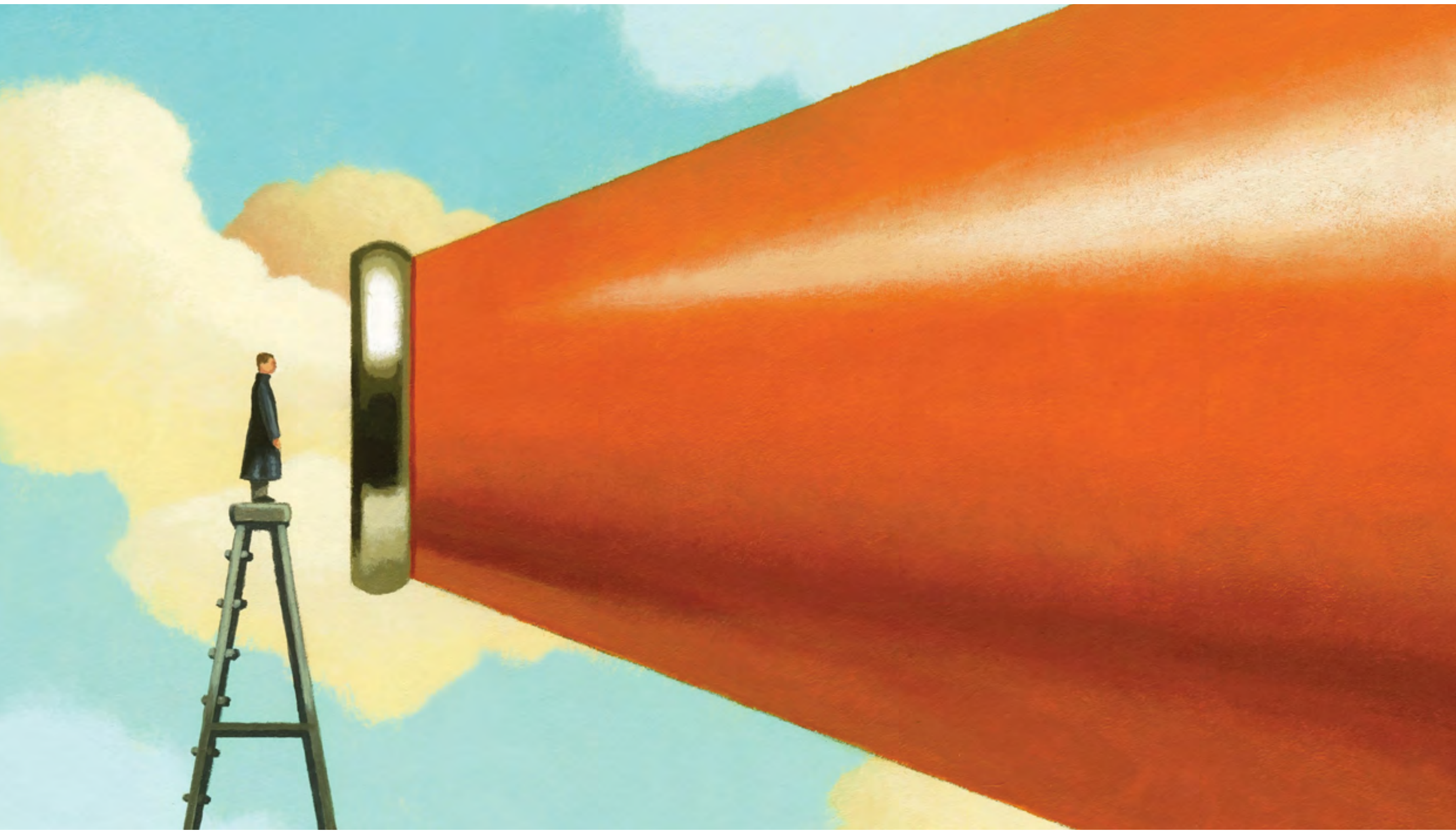

* SPEAKING OUT

End users set out the importance of derivatives to their business – and regulators are listening to their concerns

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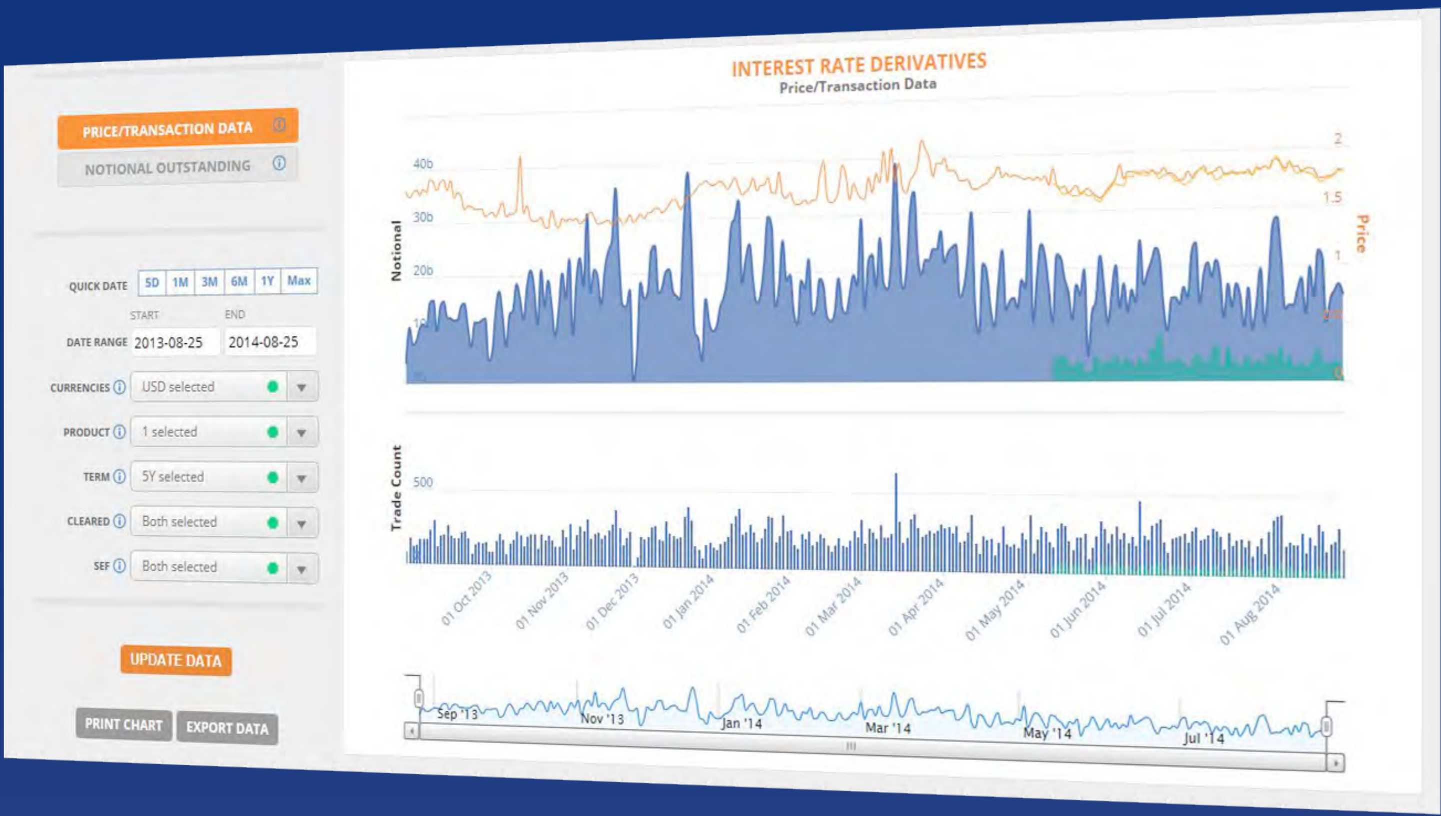

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Market Risk Activity
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The Voice of End Users

Derivatives are used in many ways, by many types of entities – by exporters to ensure they can convert future overseas revenue at a certain exchange rate, by companies to lock in the cost of financing for new investments, by pension funds to protect the value of pensions for future retirees.

While the method may differ, the object is typically the same: to manage risk, and to create certainty and stability. Certain commentators don't always see it that way. An airline that has lower profits than a non-hedging rival because it locked in its future cost of fuel, only to see fuel prices fall, might be labelled as speculating. In fact, the opposite is true. No one can know for sure how markets will move in future. Being in a situation where a company's revenue can vary each year because of shifts in uncontrollable and unpredictable external factors – a commodity price or exchange rate – rather than because of changes in its core business is true speculation.

That doesn't just apply to non-financial companies. Creating certainty and optimising risk profiles is just as important for the financial institutions that provide critically important services to the economy like pensions, insurance, loans, mortgages and wealth management.

The truth is that the ability to achieve greater certainty in risks, costs and revenues gives companies – both financial and non-financial – more confidence to borrow, to lend, to hire and to invest. These are all essential factors for economic growth.

It's therefore important that end users are able to access derivatives markets in as frictionless a way as possible. This hasn't always been the case. As it currently stands, certain regulatory requirements impose unnecessary compliance costs and burdens on end users for little benefit. Reducing these burdens is now one of the prime objectives of regulatory reviews that are under way in both the US and Europe. As the European Commission points out in its review of the European Market Infrastructure Regulation, there is a need to "eliminate disproportionate costs and burdens to small companies" that might impede their access to markets, and this can be done without putting financial stability at risk.

In this issue of **IQ**, we hear from end users on why they use derivatives and the benefits they provide. We also consider the regulatory changes that have been proposed in order to make it easier for end users to dip into this market safely and efficiently. As our cover illustration shows, these end users are getting their voices heard by policy-makers that want to encourage economic growth.

Nick Sawyer
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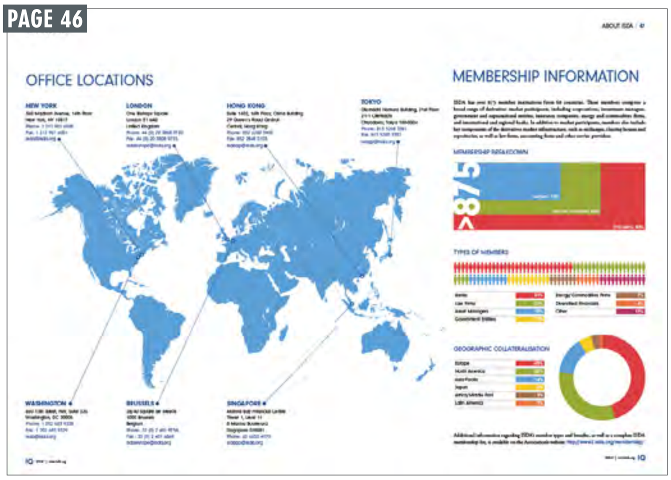

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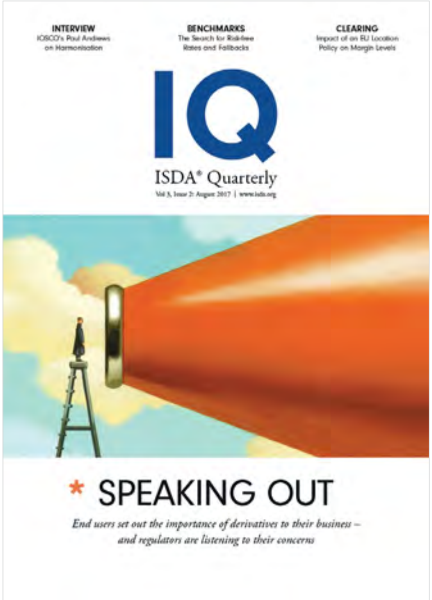

"Our work on benchmarks, and that of the FSB as well, has focused on two important characteristics that a benchmark should have – representativeness of the underlying market, and resiliency during times of stress"

Paul Andrews, IOSCO

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ISDA's Vision for a Smart Future

Many core processes in the derivatives market have become complicated and resource intensive as new regulations have come into force. We need a rethink, writes ***Scott O'Malia***

ISDA has a long history of creating solutions for the derivatives industry. The Master Agreement and countless protocols and definitions have contributed to a safer, more efficient market for derivatives users.

Now we face perhaps our biggest challenge to date. Due to tactical regulatory drivers and a lack of historic planning, many basic, vital processes in our market have become unbearably complex and inefficient. This needs to change – and ISDA is focused on working with the industry to produce new standards to ensure that the derivatives market is built on firm foundations for the future.

At ISDA's annual general meeting in May (see page 8), I outlined a vision for a derivatives market structure that is more efficient, driven by common data, processes and legal standards and automation. This won't happen overnight, so the industry needs to start planning for the longer term now. We need a wholesale rethink of the way the market is connected, how trade flows are managed, and how data is created and shared between participants. ISDA is committed to helping in this task, and we will do what we have always done – bring the industry together, find consensus and hammer out solutions.

The root of the problem can be traced back to the succession of requirements introduced as part of the post-crisis reform agenda. The industry has been focused intensely on meeting successive deadlines for clearing, trade execution, reporting, compression and collateral exchange. There has been little time to think about how all of this can best work together. As a result, processes and workflows are over-complex, duplicative and costly to maintain. The absence of a common approach means counterparties need to constantly reconcile details of a trade to reduce the potential for inconsistencies. This is sapping the energy and resources of all concerned.

Technology is the key to greater efficiency and creating value for our members. For the potential of fintech to be fully realised, a strong foundation of common standards and processes must be constructed. Only then can innovators and entrepreneurs take new technologies forward with the confidence they will be interoperable.

> "For the potential of fintech to be fully realised, a strong foundation of common standards and processes must be constructed"

In an ISDA white paper published in September 2016, we set out the steps we think are needed to create those strong foundations. A critical aspect is the development and implementation of common data standards to ensure everyone can communicate the economic terms of a trade consistently across the lifecycle. ISDA has published principles governing product standards, and we have begun work to define appropriate product taxonomies. We've also been working with regulators to develop a suitable trade identifier framework, and will continue to feed into this process.

In addition, we need standards for processes – an agreed set of definitions for specific lifecycle events or actions, which could be encoded as common domain models that are available to everyone. This would not only aid interoperability; it would also provide a transparent and consistent view of how each step in the process works. This would help oversight and rule-making and simplify regulatory implementation, as specific changes to the common domain model could be recommended in order to comply.

Once that's complete, the path is clear to develop smart contracts that provide an automated legal framework for derivatives, based on the standardised data and processing hierarchy. Here, the existing Financial products Markup Language framework could be leveraged and extended to support self-executing transactions – in fact, we've already rolled out a proof of concept of this. We're also working to develop solutions to automate the existing ISDA documentation and definitions.

These aren't just ideas. We're working with the industry – sell side, buy side, technology firms and lawyers – to put them into practice today. Our goal to overhaul the derivatives market is ambitious. But ISDA and its members have the desire to bring about the necessary change to ensure the continued vitality of these markets.

Scott O'Malia
ISDA Chief Executive Officer

ISDA AGM: Regulations Need to Support Economic Growth, Says Litvack

Derivatives play a crucial role in the economy, but the regulatory framework must enable banks to provide financing and risk management services in an economically viable and sustainable way, said Eric Litvack, chairman of ISDA, speaking at the 32nd ISDA annual general meeting in Lisbon in May.

In his opening remarks on the second day of the conference, Litvack walked through examples of how companies around the globe use derivatives – from companies locking in the cost of issuing debt, to exporters using derivatives to create certainty in the exchange rate at which they can convert future overseas revenues.

"In each case, the certainty that derivatives bring give those firms the confidence to borrow, to invest, to grow, to hire. That all contributes to economic growth," said Litvack.

Given the role of the derivatives market, it's important that the financial sector is resilient, Litvack said, and regulators and the industry have spent the past eight years implementing measures to make the system more robust. This includes introducing mandatory reporting, clearing and margin obligations, and imposing higher bank capital requirements.

While those changes are important, Litvack stressed the need to ensure capital levels are appropriate and risk sensitive. "Progressively increasing the capital requirements of an activity eventually leads to an inflexion point, where the cost of the capital is no longer proportionate to the risk and return of the activity. That encourages bank capital to be reallocated elsewhere. If the amount of capital required for market risk and credit risk activities is disproportionate, then capital is quite naturally allocated away from lending, market making and intermediation," Litvack said.

This is already occurring in certain businesses, and further measures from the Basel Committee on Banking Supervision could move banks closer to the tipping point, Litvack warned. Pointing to an ISDA survey that showed the Basel Committee's Fundamental Review of the Trading Book would lead to an increase in market risk capital of between 1.5 and 2.4 times, he argued that business lines important to end-user financing and hedging would be affected.

Proposals to introduce an output floor as a non-risk-sensitive backstop, on top of the leverage ratio, would also have an impact – particularly for European banks, which have large volumes of mortgages and corporate loans on their balance sheets, he said.

> "The certainty that derivatives bring give those firms the confidence to borrow, to invest, to grow, to hire. That all contributes to economic growth"
>
> **Eric Litvack, ISDA**

"We understand that regulators are keen to address any unjustified variability in bank internal model outputs. But we think there are better ways of doing this than imposing a one-size-fits-all floor that reduces the risk sensitivity of the whole framework. It could be achieved, for instance, through greater consistency in model inputs, or through testing procedures, such as the European Central Bank's ongoing targeted review of internal models."

Eric Litvack

A lack of risk sensitivity in the framework could lead to unintended outcomes, Litvack warned. It could, for instance, encourage banks to aim for the highest return for a given amount of capital, resulting in them targeting higher risk assets. The use of less risk-sensitive standardised models could also encourage herd behaviour, as banks would all have the same view on what assets and businesses to target.

"That's not a good set of incentives to have, because the economically rational choice leads to undesirable outcomes. Recognition of these issues is what drove the Basel Committee to adopt a risk-based capital framework in the first place," Litvack said.

ISDA believes the capital framework should be risk-sensitive, appropriate and consistent.

"With that in mind, we urge the Basel Committee to make adjustments to frameworks or calibrations generally whenever widespread concerns result in the risk of regulatory divergence. These amendments should be made with an eye to economic growth by making the rules proportionate and risk sensitive," he said. IQ

ISDA AGM: Standards Critical for Efficiency, says O'Malia

New technologies offer the potential to increase efficiency and cut costs in the derivatives market, but it is critical the foundations are built on a firm footing – an area ISDA plans to address through the development of standards, according to Scott O'Malia, ISDA's chief executive.

Speaking at the 32nd ISDA annual general meeting in Lisbon in May, O'Malia pointed to the inefficiencies and complexity that have crept into market processes and infrastructures, which he attributed to the rapid changes that have occurred as a result of regulatory reforms. This needs to be tackled in order to ensure future efficiency and growth of the market, he said.

"To meet the multitude of new regulatory requirements, the industry has implemented numerous tactical solutions to comply with the rules. The focus has been on meeting deadlines, rather than creating consistency or efficiency. Now is the time for the industry to take a thorough look at the system and determine what works and what doesn't, and how we can unlock value through efficiency. We need to be bold," said O'Malia.

Two fundamental challenges have emerged, he said – the lack of a consistent data and process hierarchy, and the need to constantly reconcile information between counterparties. This has resulted in a complicated and manually intensive structure where everyone is continually having to reconcile developments through the lifecycle. Technology could be the answer to these problems, but a solid foundation of common standards is required first, O'Malia said.

"We must have data standards that consistently represent the economic terms of the trade, including a globally consistent product definition. Next, we need process standardisation to consistently represent both external and internal trade events. Finally, we can develop smart contracts. These will provide an automated legal framework for financial instruments based on a standardised data and processing hierarchy," he said.

ISDA has started on work to develop these standards in cooperation with members and the wider industry. The association has published principles governing product identifiers, and has begun work to define appropriate taxonomies, O'Malia said. An initiative is also under way to identify and agree sets of definitions for specific lifecycle events and actions, and to encode those as common domain models to encourage interoperability. A further step is to future-proof ISDA's legal documentation by updating and automating product definitions and exploring smart contract applications, O'Malia added.

"This vision isn't a top down, single platform for all users. On the contrary, we believe market innovators will bring new competitive solutions that will be enhanced by a consistent data and process representation. ISDA wants to work with technology providers, process innovators and lawyers to explore these new opportunities and create an environment where innovation and competition bring cost-effective solutions," he said.

"Now is the time for the industry to take a thorough look at the system and determine what works and what doesn't, and how we can unlock value through efficiency. We need to be bold"

Scott O'Malia, ISDA

Regulatory efficiency

Elsewhere in his remarks, O'Malia highlighted the need to review the current regulatory framework to remove duplication, complexity and inconsistencies. Noting that the industry had made tremendous progress in meeting the post-crisis regulatory reforms, he argued the rules could be made to work better by reducing the burden on end users.

Scott O'Malia

As an example, O'Malia pointed to the US Volcker rule, which comprises approximately 70 pages of rules and 850 pages of explanatory notes. The complexity of the rule has created a massive compliance burden for banks of all sizes, regardless of the extent of their trading activities, he said.

O'Malia recommended several high-level fixes to improve the regulatory framework: reducing complexity and removing unnecessary cost and compliance burdens; achieving cross-border harmonisation of capital and market rules; and conducting cumulative impact studies to assess the impact of current and forthcoming rules.

Cross-border harmonisation is particularly important given the rollout of the European Union's revised Markets in Financial Instruments Directive from January 3, 2018. A substituted compliance/equivalence decision between European Union (EU) and non-EU trading platforms – particularly those in the US – needs to be made quickly to prevent fragmentation of trading, O'Malia said. These substituted compliance/equivalence decisions should be made based on broad outcomes, rather than a line-by-line comparison of the rules, he added. IQ

ISDA Calls for EU Post-implementation Position Limits Review

European Union (EU) authorities should commit to conducting a review of the revised Markets in Financial Instruments Directive's commodities position limits rules within two years of implementation, says Scott O'Malia, ISDA's chief executive.

With the position limits rules set to go into effect from January 3, 2018, commodities market participants are scrambling to get systems and processes ready in time for compliance. Firms have been hampered in their preparations by the fact that final position limits implementing standards were only published in the Official Journal of the EU at the end of March.

The squeezed time frame, the complexity of the rules and the fact position limits aren't in place anywhere else in the world means it's difficult to determine what the effect will be on Europe's commodities markets, warned O'Malia. In particular, there are questions over the extraterritorial impact of the position limits rules, which could have an impact on cross-border trading.

"Given that uncertainty, and the potential consequences for end-user hedging if liquidity does start to evaporate, ISDA strongly recommends a review of the position limits regime post-implementation," he said, speaking at ISDA's commodities event on June 14.

"ISDA strongly recommends a review of the position limits regime post-implementation"
Scott O'Malia, ISDA

"That review should be conducted by the appropriate regulatory authorities, with input from ISDA and the industry, and should be completed two years after launch of the position limits regime."

Getting the regime right is critical given the importance of commodity markets for end-user hedging in Europe, O'Malia added. Commodity derivatives are used by agricultural companies to manage the risk of fluctuating crop and livestock prices, energy producers and distributors to manage changes in energy prices, and airlines to hedge the cost of fuel.

"Without them, companies and consumers would be more susceptible to price volatility, to uncertainty and to risk," he said. IQ

O'Malia Urges Action on Close-out Netting

China's derivatives market is continuing to develop and grow, but common standards and a strong legal infrastructure will help create certainty and encourage even greater participation, says Scott O'Malia, ISDA's chief executive.

Speaking at an ISDA China derivatives symposium in Beijing in June, O'Malia stressed the importance of having strong foundations in place to support further growth, and highlighted the value of close-out netting. Being able to offset the positive and negative values of multiple trades between a pair of counterparties into a single net payment from one to the other means a default is likely to be less disruptive to the financial system, he explained.

"Close-out netting is the basis of good risk management, and results in drastically lower credit exposures between counterparties," O'Malia said.

ISDA has long campaigned for netting certainty across the globe, and recently published a netting opinion that states certain Chinese sovereign entities are not subject to any bankruptcy regime in China. This means the legal issues relating to bankruptcy stays, an administrator's 'cherry-picking' right and statutory set-off under China's Enterprise Bankruptcy Law are not applicable, and so would not affect the enforceability of contractual early termination and netting provisions in the ISDA Master Agreements held by these entities.

"Close-out netting is the basis of good risk management, and results in drastically lower credit exposures between counterparties"
Scott O'Malia, ISDA

ISDA has also recently released an updated China netting memo, which provides more information on the issues firms need to consider when trading with Chinese entities that are subject to the Enterprise Bankruptcy Law.

Despite this progress, the ultimate goal is to have legislation in China that recognises the enforceability of close-out netting, O'Malia said.

"We believe the development of close-out netting legislation in China will create more certainty for financial institutions, and encourage more participation. Once these elements are introduced, the conditions will be in place for China's derivatives markets to further develop and flourish," he said.

As China's derivatives market grows, it will become increasingly important that rules are harmonised across jurisdictions, he added. China has made progress in implementing the derivatives reforms set by the Group of 20, particularly in clearing and reporting. But cross-border harmonisation will become increasingly important with the further internationalisation of China's financial markets.

"Why does this matter? Because as markets grow and become more international, anything that hampers the ability of a local counterparty to trade with a foreign participant, or vice versa, reduces potential liquidity and market depth. Less liquidity means less choice, and could make it more challenging for end users to properly manage their risks, particularly in stressed markets," said O'Malia. IQ

ISDA AGM: Cross-border Concerns Continue

Harmonisation of derivatives regulation remains a critical issue, and national authorities should continue working at a global level to ensure coordination and avoid the fragmentation of markets, according to Svein Andresen, secretary general of the Financial Stability Board.

Speaking at the ISDA annual general meeting (AGM) in May, Andresen highlighted the progress made in implementing the Group-of-20 derivatives reform commitments, but stressed that work should continue on tackling cross-border divergences in how the rules are applied.

"Significant regulatory differences across jurisdictions reduce the risk-sharing capacity that the global market is capable of, and increase the costs of doing business. Should there be setbacks instead of progress in recognition of different supervisory and regulatory regimes, the risk for financial institutions is that they have to operate an increasingly fragmented business model with the increased capital and other costs that this involves," said Andresen during a keynote address on the second day of the AGM. "It's critical, therefore, that authorities continue to act and coordinate at the global level."

The indications are positive in certain areas. In a keynote address at the AGM earlier in the day, Commodity Futures Trading Commission (CFTC) acting chairman J. Christopher Giancarlo argued that the US swap execution facility regime had contributed to market fragmentation, and called for a review of the rules to encourage cross-border trading.

"The CFTC must move forward with a better regulatory framework for swaps trading. It must allow market participants to choose the manner of trade execution best suited to their swaps trading and liquidity needs and not have it chosen for them by the federal government. Our regulatory framework must help to attract, rather than repel, global capital to US trading markets," he said.

A key area of focus going forward will be the cross-border supervision of central counterparties (CCPs), following a June proposal by the European Commission (EC) to enhance the supervision of third-country clearing houses (see pages 42-44). In a keynote address on day one of the AGM, before the EC proposals were published, Steven Maijoor, chair of the European Securities and Markets Authority, warned that Europe may need to extend its oversight of third-country CCPs if they are deemed to be of systemic importance to Europe.

"We're all human and all subject to limited resource, and it's natural for a national regulator to have the tendency to give the risks in its own jurisdiction a higher priority," he said. "We're trying to get the same system that helps the global character for derivatives markets, but at the same time ensure that our objectives of investor protection, stability and functioning of markets are met."

The EC proposals set out a multi-tiered approach, with greater oversight of systemically important third-country CCPs. Any CCP deemed to pose a significant systemic threat to Europe could be non-recognised by European regulators – a de facto location requirement.

Responding to rumours of a possible location policy, the CFTC's Giancarlo sounded a word of caution during his AGM address. "To date, the US has not deemed a body of water – even as large as the Atlantic Ocean – as an impediment to effective CCP supervision and examination. Given the closeness of the US and European derivatives markets, what Europe chooses to do on the supervision of CCPs undoubtedly will inform the evolution of US regulatory policy for cross-border swaps clearing," he said. IQ

ISDA Appoints Pension Fund Expert to Board

ISDA appointed a senior executive from the pension fund industry to its board of directors at its annual general meeting (AGM) in May, marking the latest step in an ongoing initiative to expand the scope of the board.

The new director is Thijs Aaten, managing director of treasury and trading at APG Asset Management, a Dutch pensions provider. The appointment represents the first time a senior executive with relevant pension fund expertise has served on the ISDA board.

"ISDA continues to expand the composition of the board to ensure it represents a wide range of perspectives from different types of derivatives users. I'm delighted to welcome Thijs as our first ever pension fund expert," said Eric Litvack, ISDA chairman.

Before taking his current role in 2010, Aaten was head of allocation and overlay management at APG, and before that had a variety of roles at ABP Investments, including head of portfolio analytics and business management.

The addition of expertise in managing pension fund exposures to the ISDA board follows the appointment of a supranational in September and a central counterparty (CCP) in June 2016. The latter appointment is on a revolving, one-year basis, and ISDA announced that the next CCP representative is Kevin McClear, corporate risk officer at the Intercontinental Exchange.

In addition to these appointments, four new directors were elected to the ISDA board at the AGM: Sian Hurrell, head of fixed income and currencies, Europe, RBC Capital Markets; Masanobu Ichiya, managing director, head of the derivative trading department at Mizuho Securities; Tom Wipf, vice chairman of institutional securities, Morgan Stanley; and Rana Yared, managing director, principal strategic investments team, securities division, Goldman Sachs. IQ

| A full list of board directors is on pages 48-49.

THE COVER PACKAGE

Speaking Out

This issue of **IQ** *includes a collection of articles looking at why non-financial and financial institutions use derivatives and the benefits they bring, as well as the changes being considered to reduce the compliance burdens on these firms*

Companies have used derivatives as a cost-effective and efficient way to hedge their risks and manage their borrowing costs ever since the first currency swap was transacted between IBM and the World Bank way back in 1981. Since then, the range of products and counterparties has increased, but the underlying purpose for most end users is largely the same – to optimise risk profiles and lower costs.

Today, thousands of companies across the globe – both financial and non-financial – use derivatives as an effective way of creating greater certainty and stability in their business. This certainty allows firms to borrow and invest with more confidence.

The importance of derivatives as a vital lubricant to capital markets, lending, investment and risk management – and therefore economic growth – has long been recognised by policy-makers. Regulators in the European Union (EU) and the US are now reviewing their regulatory frameworks to ensure end users are able to access derivatives markets without encountering unnecessary compliance burdens and incurring inappropriate costs.

In this issue of **IQ**, we focus on the uses and benefits of derivatives, and the changes that are being considered to make it simpler for non-financial companies and financial end users to access these markets. In our first article, **IQ** looks at the regulatory reviews under way in the US and EU, and considers the changes that have been, or may be, proposed (see pages 12-15).

We then look at the some of the ways end users apply derivatives and the benefits they bring – as well as hearing from a selection of end users on why they use derivatives (see pages 16-21). Finally, **IQ** hears the views of one corporate – Italy based power company Enel. The firm's head of treasury and capital markets, Fabio Casinelli, stresses the need for market liquidity and cross-border harmonisation (see pages 22-23). IQ

"Derivatives are a real support, a simple tool that absolutely helps us to manage financial risk and support our business activities around the world."

Fabio Casinelli, head of treasury and capital markets, Enel

* The Call for Simplicity

Concurrent reviews of US and European regulations may relieve the burden on derivatives end users, but it remains to be seen what concessions will be made and how effective they will be

As project titles go, the label attached to a new initiative by the US Commodity Futures Trading Commission (CFTC) is fairly unconventional: 'Keep It Simple, Stupid', also known as Project KISS. Launched on May 3, Project KISS aims to review CFTC rules and practices to identify areas that could be simplified and made less burdensome and costly.

The title of the review may be unlike that typically used by other agencies, but the CFTC is not alone in its objective. A number of initiatives are now under way to review the regulatory framework in both the US and European Union (EU), with the aim of ensuring a well-functioning financial market, particularly for end users.

The first set of recommendations has already been published – most recently by the US Treasury, which released its initial set of proposals in June. Aimed at banks and credit unions, the paper sets out a number of potential changes aimed at tailoring regulatory requirements to reflect the size and complexity of a financial institution and supporting market liquidity, investment and lending in the US economy.

JUNE 12, 2017:

First US Treasury report on banks and credit unions published

The industry has welcomed the willingness of policy-makers to reconsider elements of the US Dodd-Frank Act and European Market Infrastructure Regulation (EMIR), and believe there is scope to refine the framework to make it simpler and more effective.

"After nearly 10 years of regulatory reform, we welcome the approach being taken to assess what has been done and identify what may need fixing to better achieve the objectives and mitigate any unintended consequences. With such a vast programme of reform, it's unlikely that everything would be perfect first time around, so it makes sense to pause and take stock," says Eric Litvack, chairman of ISDA.

Economic focus

The change in tone is being driven by a growing focus in both the US and EU on economic growth, and a recognition that certain aspects of the rules are too complex, too costly and impose too many unnecessary burdens on end users. Together, this risks hampering the ability of these firms to borrow, invest and hedge.

"These markets exist only to support the real economy, and if they're not able to use certain financial instruments that are vital to hedging or investing, then that can't be the right outcome," said Darcy Bradbury, a managing director at DE Shaw, speaking at the ISDA annual general meeting (AGM) in Lisbon in May.

This sentiment was given weight by Daniel Tarullo, a governor at the US Federal Reserve, in his final speech before leaving the Fed, delivered in Princeton in April 2017. Addressing the legacy of the Dodd-Frank Act, Tarullo acknowledged that such a diverse and complex set of restrictions and requirements was unlikely to have been implemented without some flaws, and there may therefore be a need for some subsequent adjustment.

"Usually, a law like the Dodd-Frank Act would have been followed some months later by another law denominated as containing technical corrections, but also containing some substantive changes deemed warranted by analysis and experience. But partisan divisions prevented this from happening," Tarullo explained.

Meanwhile, the inauguration of Donald Trump as US president in January 2017 has ushered in a new tone on financial regulation, with a preference for a regulatory framework that fosters economic growth.

An executive order issued by President Trump on February 3 set in place seven core principles for regulating

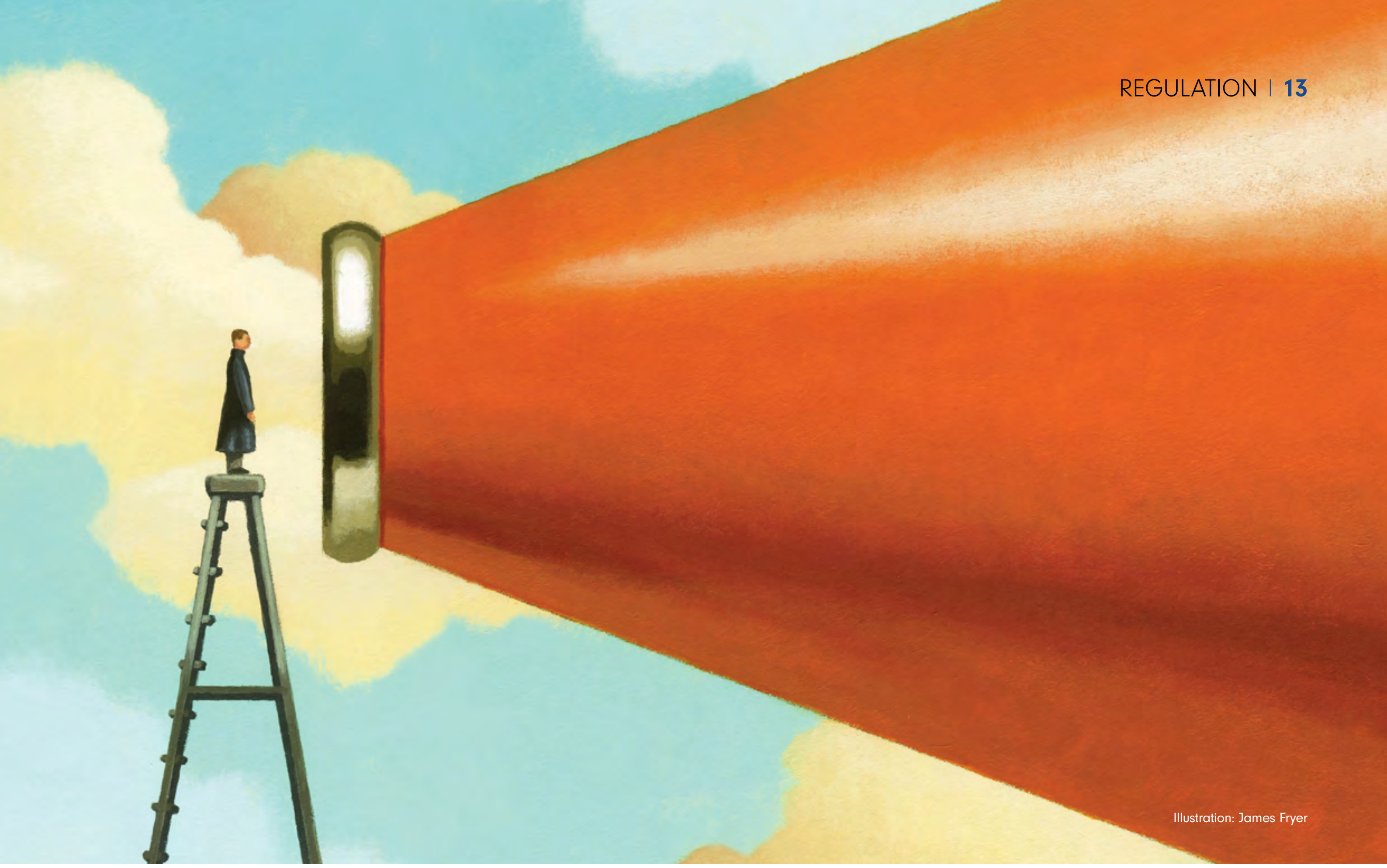


Illustration: James Fryer

the US financial system. In addition to promoting economic growth, regulation must allow US companies to compete with foreign firms, empower Americans to make informed and independent financial decisions, and ensure rules are effective, efficient and appropriately tailored, the President ordered.

US Treasury report

In response, the US Department of the Treasury initiated a full review of the financial system, and published the first of what is expected to be four separate reports – covering banks and credit unions – on June 12. Subsequent reports will cover capital markets, asset management and insurance, and non-bank financial institutions, including fintech.

Among other things, the first Treasury report proposes raising the asset threshold for banks subject to mandatory Dodd-Frank stress tests and the comprehensive capital analysis and review, and reducing the frequency of those requirements. It also recommends a delay in the rollout of the net stable funding review and the Fundamental Review of the Trading Book until they can be appropriately calibrated, and a change in the supplementary leverage ratio to recognise the exposure-reducing effect of initial margin for cleared derivatives. A further area of reform is the Volcker rule, which the Treasury says is too complicated and should be simplified.

In each case, the Treasury notes the changes are needed to support the real economy. "A healthier and more dynamic banking sector that provides improved access to credit for US consumers and businesses is essential to supporting more robust GDP growth," the report states.

The importance of end users and economic growth was flagged by various organisations, including ISDA, during the consultation (see box, ISDA Makes Case for Less Complexity). In a letter to US Treasury secretary Steven Mnuchin on June 1, the Coalition for Derivatives End-Users – which represents nearly 300 companies and business associations – detailed the burdens faced by commercial end users in complying with Dodd-Frank rules. It identified five specific areas of legislative reform that could reduce costs for US businesses and remove "duplicative and ineffective regulatory and administrative burdens".

Among the recommendations are a proposed exemption from the credit valuation adjustment (CVA) capital charge for hedging transactions with end users, as →

> "With such a vast programme of reform, it's unlikely that everything would be perfect first time around, so it makes sense to pause and take stock"
>
> **Eric Litvack, ISDA**

well as an extension of the exemption from mandatory clearing, platform trading and non-cleared margin from non-financial end users to financial end users that use derivatives to hedge business risks.

"As institutions with financial components that use derivatives to hedge commercial risk, we believe pension funds, life insurance companies and certain energy companies should be entitled to an exemption from clearing and margining. With regard to CVA capital, trades with end users have been exempted from the charge in Europe, and we are working to get a similar exemption enacted legislatively in the US," says Michael Bopp, partner at law firm Gibson Dunn in Washington, DC, which represents both the Coalition for Derivatives End-Users and ISDA.

ISDA MAKES CASE FOR LESS COMPLEXITY

Targeted improvements to financial regulation are needed to reduce unnecessary complexity and costly compliance burdens on US businesses, according to an ISDA letter sent to US Treasury secretary Steven Mnuchin on April 28.

The letter, sent in response to a US Treasury review of financial regulation, highlights three important criteria that should be considered: rationalising and harmonising the financial framework; ensuring a level playing field; and making regulation efficient, effective and appropriately tailored.

Meeting this criteria is important in order to ensure US companies can access global derivatives markets to hedge efficiently and cost-effectively, the letter says.

"This global liquidity pool allows commercial end users – which are the Main Street job creators, manufacturers and producers in the United States – to affordably protect against and hedge specific risks associated with their commercial operations," it reads.

The letter highlights a number of duplications and inconsistencies, either between US agencies or internationally, and proposes specific amendments. These include harmonisation of the Commodity Futures Trading Commission (CFTC) and Securities and Exchange Commission's rules, and a scaling back of the extraterritorial reach of CFTC rules. It also stresses the need for an effective substituted compliance regime based on broad outcomes to ensure US companies are not subject to duplicative compliance requirements when trading with overseas counterparties.

To establish a level playing field, the letter proposes a number of amendments, such as specific changes to bank capital and liquidity requirements, including improved calibration of the Fundamental Review of the Trading Book framework and a change to the supplementary leverage ratio to recognise the exposure-reducing effect of segregated customer collateral in client clearing businesses.

"It is important that intermediary activities are not unduly burdened, as it would have significant cost implications for end users, including US commercial business," the letter states.

The letter is available here:
http://isda.link/treasuryletter

Project KISS

Meanwhile, the CFTC's Project KISS, announced by acting chairman J. Christopher Giancarlo in March, is very much in the same vein, aiming to reduce excessive regulatory burdens and practices, while also making them simpler and less costly for derivatives end users. Following the official launch in May, the CFTC has been gathering industry input on what action it might take without repealing the regulations altogether. The work is expected to progress later this year, following the completion of the consultation.

As the Treasury and CFTC continue with their respective reviews, it remains to be seen exactly what changes will be made to the existing framework. While the steps taken so far have given market participants some cause for optimism, there is still a great deal of detail to be fleshed out. For now, practitioners are focusing on articulating the case for change that would benefit end users.

"No one is suggesting we should turn the clock back and repeal Dodd-Frank, but regulatory reform was broad and far-reaching, so now is a good time to stop and assess where it may be impeding risk management and market liquidity. There are sensible adjustments that could be made without threatening financial stability, and we would like to see that opportunity pursued," says Steven Kennedy, global head of public policy at ISDA.

EMIR review

As the US reviews continue, a similar process is under way in Europe that has prompted equal industry scrutiny. While the implementation of EMIR, which was officially introduced in 2012, lagged some way behind that of the Dodd-Frank Act, the European Commission (EC) has already embarked on a fairly wide-ranging review of the regulation.

Following a public consultation on EMIR in 2015 and input from multiple pan-European supervisory agencies, the EC reported in November 2016 that the fundamental requirements of EMIR are crucial to ensuring transparency and mitigating systemic risk, and would therefore remain in place. But it noted that some amendments may be needed to reduce disproportionate costs and burdens on end users, and it published its first set of proposed changes on May 4.

The proposal includes a number of amendments to the reporting and clearing obligations for derivatives market participants in Europe (see box, EMIR Review Targets End Users). For example, non-financial firms with outstanding derivatives that breach a particular clearing threshold would still have to clear through a central counterparty (CCP), but only in the particular asset classes that breach the threshold, rather than having to clear everything subject to a clearing mandate.

"It is important to remember that if a non-financial counterparty is subject to the clearing requirement, it also becomes subject to non-cleared margin risk mitigation as well as trade confirmation and portfolio reconciliation, so these thresholds are very important. The current rules will have been problematic for very large oil firms, for example, that surpass the threshold only for commodity derivatives but then have to clear everything, even if they trade very little in other asset classes," says Roger Cogan, head of European public policy at ISDA.

The review also suggests a clearing threshold for small financial counterparties, so those firms for which it is not economically feasible to clear would not be forced to do so.

"The smallest financial institutions could be scoped out of clearing through these proposals. These firms do not pose a systemic threat, yet face significant compliance and operational burdens in accessing CCPs through a clearing member," says Cogan.

Furthermore, the EC proposals seek to tackle some of the concerns that had arisen over EMIR trade reporting obligations. Under the proposed revisions, the responsibility for reporting transactions with a non-financial counterparty not subject to the clearing obligation will fall entirely on the financial counterparty. Historical transactions that were entered into before the start of the reporting obligation will also no longer need to be reported, given the difficulty of sourcing the relevant data.

Placing the liability on the financial entity to report on behalf of both itself and a small non-financial counterparty marks a change to current rules, which requires both parties to separately report each trade. An end user can delegate its reporting requirement to a dealer under the current rules, but it retains liability for the accuracy of what is reported.

But some believe the change does not go far enough to relieve the pressure faced by the broader universe of end users in having to match trade details and report them in a timely manner. A more desirable objective might have been to remove dual-sided reporting altogether to bring European rules into alignment with the US, say some participants.

"In our view, the EC's proposed changes don't appear to deal with the dual reporting issue to the extent that is required. Dual reporting results in significant compliance costs for end users – we estimate more than €2 billion in aggregate. Despite the cost, the dual reporting requirement doesn't actually improve the quality of data that is reported, with both pairing and matching rates at low levels," said Scott O'Malia, chief executive of ISDA, speaking at the ISDA AGM.

Following the adoption of the EMIR review proposals by the EC, the baton now passes to the European Parliament and Council of the European Union, which must both agree on the same text. Until the conclusion of the discussion and amendment process, it is impossible to determine where changes to the proposal may be made, but some political support has already been expressed for the initiative.

"In the past eight years, we have focused on putting the framework in place so that we have financial stability and we have a globally consistent regulatory environment, particularly for global capital markets. Within that framework, we now have to go back and reassess those things that may be impairing the movement of capital and those things that are preventing companies from getting access to funds when they require," said Kay Swinburne, vice-chair of the European Parliament's Economic and Monetary Affairs committee, speaking at the ISDA AGM. IQ

EMIR REVIEW TARGETS END USERS

The European Commission published its proposed amendments to the European Market Infrastructure Regulation on May 4, a package of measures intended to "eliminate disproportionate costs and burdens on certain derivatives counterparties – especially non-financial counterparties (NFCs) – and to simplify the rules without compromising the objective of the legislation". The proposals include:

- Removal of the frontloading (retrospective clearing) requirement.
- Suspension of the clearing obligation within 48 hours, for renewable periods of three months, for reasons of financial stability, lack of availability of clearing houses, or changes to the suitability of products for clearing.
- Exempts small financials from clearing if their activity falls below threshold levels applied for the purpose of the NFC+/- test. These small financials would be required to comply with non-cleared margin rules.
- Non-financials exceeding the clearing thresholds would only have to clear products subject to mandatory clearing in the asset classes where they exceed the clearing threshold.
- Pension schemes to obtain a further three-year (post entry into force) exemption from clearing, extendable by a further two years.
- Non-financials below the clearing threshold would automatically delegate reporting to financials, with responsibility for accuracy also falling on the financial counterparty.
- Non-financials would not have to report their intragroup trades.
- Removal of the backloading requirement – which requires reporting of derivatives transactions entered into before February 12, 2014, but no longer outstanding on that date.
- A 'fair, reasonable and non-discriminatory' requirement to be imposed on clearing members in relation to their clearing and indirect clearing offer to clients.

* Engine of the Economy

Thousands of companies in all industries and all regions use derivatives to manage their risk and create certainty. **IQ** *looks at some of the common uses by companies, pension funds, insurance companies and governments*

Derivatives play a critical role in helping firms to reduce the uncertainty that comes from changing interest rates and currency markets. Whether used by global corporates to eliminate exchange-rate risk on foreign currency earnings, by pension funds to hedge inflation and interest-rate risk in long-dated pension liabilities, or by governments and supranationals to reduce interest-rate risk on new bond issuance, derivatives allow end users to closely offset the risks they face and to create certainty and stability in financial performance. This security means firms can invest in the future with greater confidence, creating jobs and contributing to economic growth.

According to the latest triennial survey of derivatives by the Bank for International Settlements (BIS), 74% of average daily interest rate derivatives market turnover involves an end user on one side and a reporting dealer on the other (see Chart 1)[1]. In the foreign exchange space, end users account for 73% of average daily forwards activity, 54% of the cross-currency swaps market and 67% of FX options and 'other' FX turnover[2].

74%

Interest rate derivatives market turnover that involves an end user

Non-financial customers

Trading with 'non-financial customers' – one of two end-user categories within the BIS triennial survey – accounted for $210 billion in average daily interest rate derivatives notional turnover in 2016, up from $169 billion in 2013 and $25 billion in 2001.

This activity is primarily driven by trades with corporates, governments and supranationals. For instance, a company might decide to issue debt to finance an expansion of its business, and use interest rate derivatives to lock in the cost of financing. Or an exporter might look to convert foreign currency revenue into domestic currency at a pre-agreed rate, eliminating earnings uncertainty.

In most cases, the primary aim is to mitigate risk, reduce balance-sheet volatility, and increase certainty in cash flows, allowing firms to invest in new business initiatives with greater confidence. That enables businesses to invest, expand, hire and grow.

Governments and supranationals, meanwhile, may decide to issue debt in foreign currency as a means of helping to develop overseas capital markets, to access a new investor base or to tap into cheaper funding rates, then use a cross-currency

[1] Bank for International Settlements (BIS), Triennial Central Bank Survey OTC Interest Rate Derivatives Turnover in April 2016 (https://www.bis.org/publ/rpfx16ir.pdf). End users defined as 'non-financial customers' (corporations and non-financial government entities) and 'other financial institutions' (end users such as smaller commercial banks, investment banks and securities houses, mutual funds, pension funds, hedge funds, currency funds, money market funds, building societies, leasing companies, insurance companies, other financial subsidiaries of corporate firms and central banks) within the BIS report

swap to eliminate interest rate and currency mismatches. By using derivatives, these entities can effectively and efficiently manage and optimise the risk profile of their debt portfolios and manage their overall balance sheet.

Other financial institutions

For the purposes of the BIS triennial turnover data, this category includes trades between reporting dealers and pension funds, mutual funds, insurance companies, central banks, hedge funds, money-market funds, building societies, leasing companies and smaller commercial and investment banks.

Daily turnover of trades involving entities in this segment has steadily grown over the past decade, climbing from $450 billion in 2004 to $1.77 trillion in 2016. At 66% of average daily turnover, non-dealer financial end users represent the largest customer type.

These non-dealer financial institutions use derivatives for a variety of purposes – from pension plans hedging pension liabilities, to asset managers managing client investments, to banks and building societies hedging the risk associated with fixed-rate mortgages.

Pension funds

Pension funds have to manage a complex mix of risks. A rise in life expectancy will increase the size of the overall pension liability, as providers will be required to pay out to retirees for longer. Any drop in interest rates will also push up the present value of liabilities, while at the same time making it harder to find assets that provide high enough interest income to make up the shortfall, potentially leading to deficits.

According to the UK Pension Protection Fund (PPF), the aggregate funding position of 5,794 defined-benefit

pension schemes in the UK was a deficit of £221.7 billion at the end of March 2016, down from a £244.2 billion deficit the year before[3]. This funding level can be volatile: a 10-basis-point drop in UK gilt yields would increase the aggregate pension deficit by £22.6 billion, according to analysis based on 2016 data.

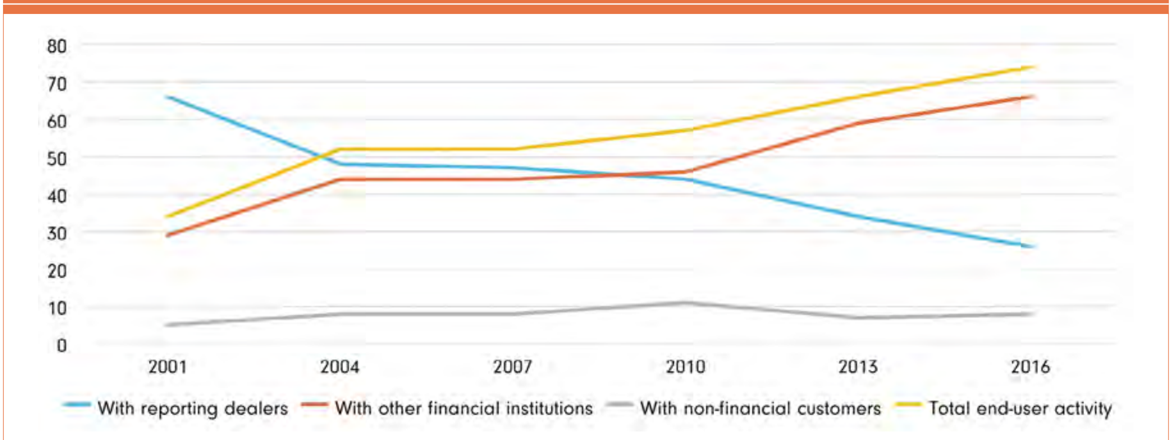
This has driven an increase in liability-driven investment (LDI) strategies, where asset allocation decisions are based on the ability to meet current and future liabilities. The main goal is usually to improve funding levels – the difference in the value of assets and liabilities – and minimise funding-level volatility. For many of these entities, interest rate derivatives are a key part of the LDI process, with interest rate swaps, caps, floors and swaptions used to manage the uncertainty and volatility in funding levels.

For example, an LDI might choose to cost-effectively protect itself against falling interest rates by buying a low-strike receiver swaption – a receiver swaption gives the purchaser the right to receive fixed rate in an interest →

^ WATCH VIDEO

How Do Derivatives Benefit the Global Economy? at: http://bit.ly/2udt1is

CHART1: PERCENTAGE OF MARKET TURNOVER BY COUNTERPARTY TYPE



[2] https://www.bis.org/publ/rpfx16fx.pdf

[3] http://www.pensionprotectionfund.org.uk/Pages/ThePurpleBook.aspx

rate swap. The pension scheme would exercise the option if rates fall below the strike, and would receive a higher fixed rate than it would otherwise be able to obtain in the market. If rates rise, the fund wouldn't exercise the option and would buy bonds or interest rate swaps at market levels.

Derivatives are also widely used to hedge the inflation risk inherent to many pension schemes. In the UK, for instance, there is an explicit requirement to adjust pension payments by an amount linked to inflation, posing a significant risk to pension schemes. According to the PPF, a 0.1% increase in the assumed rate of inflation would lead to an aggregate increase in defined-benefit pension scheme liabilities of 0.7%, or £10.4 billion. Inflation swaps, caps and floors can be used to help insulate pension funds against the risk of high inflation.

Mitigating these risks is vital. An inability to meet future pension liabilities would dramatically impact the income of pensioners, reducing their ability to spend.

Insurance companies

Insurers also face a variety of risks. A life insurance policy, for instance, would involve a regular premium being paid by the policyholder for a certain period, followed by a lump sum payment by the insurance firm after the death of the policyholder, or a stream of payments following incapacity or retirement.

There are complex actuarial assumptions on longevity that need to be taken into account by the life insurance firm, but, all else being equal, a fall in rates would increase the size of the liability posed by certain policies, while making it more difficult for the insurer to find long-duration assets that provide a high enough interest income to meet the anticipated liability. This is particularly problematic if falling rates are accompanied by declining equity markets.

An inability to meet liabilities could have a dramatic impact on the spending power of retirees, as well on those households that need to claim due to incapacity or death. Like pension plans, insurance companies use a variety of derivatives to manage this uncertainty. Depending on the specific business, and the policies being offered, this can include interest rate swaps, caps, floors, swaptions, inflation swaps, equity options and equity swaps.

Banks/building societies

The ability to borrow money to buy property is a central feature of many economies – and the housing market is seen as a key barometer of economic health. However, the availability of mortgages would become constrained without the ability of banks and building societies to hedge

THE REGULATORY VIEW

"Farmers, ranchers, producers, commercial companies and other end users across the globe depend on well-functioning derivatives markets. These markets are essential so that end users seeking to hedge a risk can lock in a future price of a commodity and thus focus on what they do best – efficiently producing commodities and other goods and services for the economy."
Former CFTC chairman Gary Gensler, International Monetary Fund Conference, March 20, 2013

"Most fundamentally, our markets serve our real economy. By financing firms to hire, invest and expand, our markets help drive UK growth. By opening up cross-border trade and investment, our markets create new opportunities for UK businesses and savers. By transferring risks to those most willing and able to bear them, our markets help UK households and businesses insure against the unexpected."
Mark Carney, governor of the Bank of England, at the Lord Mayor's Banquet for Bankers and Merchants of the City of London at the Mansion House, London, June 10, 2015

"Derivatives are a key part of our financial markets and account for hundreds of trillions of euros in volume. Under the right conditions, they contribute to financial stability, by allowing market participants to redistribute risk among each other. For example, they allow exporters to fix their prices despite fluctuating exchange rates, and banks to offer fixed-rate mortgages even as interest rates move."
Valdis Dombrovskis, vice-president, European Commission, May 4, 2017

"Most Americans do not participate directly in the derivatives markets. Yet these markets profoundly affect the prices we all pay for food, energy, and most other goods and services. They enable farmers to lock in a price for their crops, utility companies and airlines to hedge the costs of fuel, exporters to manage fluctuations in foreign currencies, and businesses of all types to lock-in their borrowing costs. In the simplest terms, derivatives help businesses throughout the US economy manage risk."
Former CFTC chairman Timothy Massad, Economic Club of New York, December 6, 2016

"Let us again be reminded of the essential role of global derivatives markets: to help moderate price, supply and other commercial risks – shifting risk to those who can best bear it from those who cannot. Thus, well-functioning global derivatives markets free up capital for business lending and investment necessary for economic growth – economic growth that still remains far too meagre on both sides of the Atlantic."
Acting CFTC chairman J. Christopher Giancarlo, ISDA Annual General Meeting, May 10, 2017

the risks posed by fixed-rate mortgages, or free up balance sheets and raise funding to continue lending.

Fixed-rate mortgages comprise a large share of global mortgage books, providing borrowers with certainty over their mortgage repayments. This poses an asset-liability management issue for the lender, which may use interest rate derivatives to manage the mismatch between predominantly short duration floating-rate borrowings (deposits and wholesale financing, for instance) and its longer-term fixed-rate mortgage book.

It also exposes the lender to prepayment risk – simply, the risk that borrowers may increase payments or pay off their outstanding loans early, reducing the interest income anticipated by the lender. This is very much reliant on the direction of interest rates: as interest rates fall, it becomes more likely the borrower will look to refinance at more attractive rates, meaning the duration of the loans gets shorter. Conversely, duration quickly extends as interest rates rise, due to the fact that prepayment rates slow. This characteristic, known negative convexity, means the loans rapidly lose value in a rising rate environment, but gain in value at a slower rate than normal fixed-rate debt in a falling rate environment. Mortgage lenders tend to hedge this risk through derivatives, including interest rate swaps, swaptions and caps and floors.

Asset management

Global assets under management are estimated to have reached $71.4 trillion in 2015, up from $43 trillion in 2008 and just $29 trillion in 2002, according to Boston Consulting Group[4]. The asset management sector therefore plays a vital role in wealth creation and preservation – important factors in the well-being of the global economy. Asset managers use derivatives for a variety of purposes – to hedge unwanted interest rate or foreign exchange risk, to protect portfolios against a sharp fall in markets or volatility more generally, to quickly rebalance asset allocations or take views on specific markets or sectors, and to enhance returns.

For instance, out-of-the-money equity index put options could be used to obtain downside protection on equity portfolios, insulating investors against a market crash. Alternatively, investment managers could use equity swaps and options to temporarily reduce or ramp-up exposures to a particular security, sector or market in response to changing market conditions.

That could be done without the use of derivatives – the asset manager could physically sell securities to reduce exposure in falling markets, then buy them back as markets recover – but that would come with high transaction costs. It would also create problems for those mutual funds with mandates that require them to stay fully invested. Derivatives enable managers to manage risk flexibility, without requiring them to change or rebalance their physical asset allocations.

Asset managers could also use derivatives to diversify and efficiently gain exposure to an entire market – through equity index swap or option overlays, for instance – or to enhance performance through the sale of options. In the latter case, a manager might look to monetise a view that markets will remain range-bound by selling out-of-the-money index calls and puts.

In short, derivatives are used to help asset managers preserve and create wealth – vital for the financial security and spending power of investors, and an essential component in the health of the economy. IQ

IN YOUR WORDS:

A selection of end users tell **IQ** why they use derivatives and the benefits they bring

- **Sovereign Debt Management ··>**
- **Corporate ··>**
- **Asset Management ··>**
- **Insurance ··>**
- **Pensions ··>**
- **Supranational ··>**

FURTHER READING:

Dispelling Myths: End User Activity in OTC Derivatives, ISDA, August 2014: http://isda.link/dispellingmyths

Size and Uses of the Non-Cleared Derivatives Market, ISDA, April 2014: http://isda.link/nonclearedderivatives

[4] https://www.bcgperspectives.com/content/articles/financial-institutions-global-asset-management-2016-doubling-down-on-data/?chapter=2

"Because the choice of maturities to be issued depends, to a great extent, on market appetite, without derivatives the sovereign issuer would have limited room for manoeuvre with respect to the interest rate risk profile of its debt portfolio. Through the use of simple derivatives, such as plain vanilla interest rate swaps, a targeted debt profile becomes more easily attainable. In the FX space, derivatives also allow the sovereign to enlarge its investor base by tapping foreign markets, while not having to bear foreign exchange risk. In a nutshell, if properly used, derivatives can be valuable efficiency enhancers in terms of public debt management."

Cristina Casalinho, chief executive, Portuguese Treasury and Debt Management Agency (IGCP)

"Derivatives are used in order to optimise the debt service costs over the long term, while hedging financial risks."

Inese Sudare, deputy director of financial resources department, Treasury of the Republic of Latvia

"We manage interest rate risk in a multibillion dollar debt portfolio and foreign exchange risk from a multibillion dollar turnover, globally. Not only do derivatives make it much easier to manage risks – derivatives are essentially the only way of doing it effectively. Managing these risks are key to stabilising our cashflow, preserving our credit rating and ultimately generating shareholder value."

Carl Burman, head of financial markets and cash treasury and risk, MAERSK

"For companies with a global footprint like Siemens, currency risk is one of the biggest obstacles to successful operations. Our risk management concepts would simply not work without the flexibility that derivatives offer for risk-mitigation strategies. The same holds true to a degree for interest rate and commodity price hedging."

Ralf Lierow, senior financial manager, Siemens Treasury

"Derivatives are an important risk management tool, either to gain exposure where it may not be available physically, or to manage the risk of a physical exposure, without forcing liquidation."

Scott Rissman, director, overlay solutions, Queensland Investment Corporation (QIC)

"Derivatives allow our clients to access global markets and to implement exposures in a cost-effective and timely manner."

Alison Towers, director, global liquid markets trading, QIC

"Derivatives in various forms are crucial instruments for large institutional investors to achieve cost-efficient and optimised portfolio positioning."

Bas Kragten, head of fixed income, VIVAT

"Derivatives form an essential part of our investment strategy, and are very important tools to reduce the volatility of the investment returns and hedge undesired risks."

Ido de Geus, head of fixed income, PGGM Investments

"Derivatives are really part and parcel of the way we risk manage and run the bank as a business."

Axel van Nederveen, treasurer, European Bank for Reconstruction and Development (EBRD)

"The appropriate use of applicable derivatives enables the IFC to manage its debt profile and mitigate many of the aspects of risk in both a cost-efficient and effective manner."

Andrew Cross, deputy treasurer, Asia & Pacific, International Finance Corporation (IFC)

"Derivatives are an integral part of the business model that CABEI has in place to manage market risks, making it possible to execute a wide range of funding and investment alternatives."

Hernan Danery Alvarado, chief financial officer, Central American Bank for Economic Integration (CABEI)

"NIB finances projects that contribute to a prosperous and sustainable Nordic-Baltic region. We use derivatives to efficiently convert AAA funding in various currencies and structures into the currencies and interest rates that our lending customers require. Derivatives help us to protect against the risk of exchange rate losses and to live up to sound banking principles, as stated in our statutes."

Nordic Investment Bank (NIB)

* Cross-border Business

*Regulators are starting to review their rules with an eye to reducing the burden on end users and small financial institutions. For a global business like Italy-based power company Enel, cross-border harmonisation and market liquidity are important priorities, says **Fabio Casinelli**, the firm's head of treasury and capital markets*

The European Commission's (EC) publication of proposed amendments to the European Market Infrastructure Regulation (EMIR) on May 4 highlighted some key objectives: to reduce inappropriate costs and burdens on certain derivatives users, especially non-financial corporates, and to cut complexity without damaging financial stability.

The proposals included a number of measures aimed at achieving that, including a change to the clearing requirement, so a non-financial entity that breaches a clearing threshold in one asset class only has to clear mandated products in that asset class, rather than all of them. But it is the proposed changes to the European reporting rules that are likely to be most closely watched by corporate entities.

As it stands, European rules require both parties to a derivatives trade to separately report to a trade repository – a different approach to the one taken by regulators in many other jurisdictions, which only require one party to report. According to research conducted by ISDA, this dual-sided reporting requirement is estimated to impose an aggregate compliance cost of €2 billion for end users, but without improving the quality of reported data, as pairing and matching rates are low. An end user can delegate the reporting process to a dealer, but it retains legal responsibility for the accuracy of the data reported on its behalf. Combined with a current requirement to report intragroup trades, many firms have opted to keep the task in-house.

"Trade reporting is one aspect of the regulation that isn't easy for corporates. It continues to be something that requires ongoing digital as well as manual management within our finance department," says Fabio Casinelli, head of treasury and capital markets at Italy-based multinational energy company Enel. "In the future, in line with the digitisation process at Enel, reporting is no longer going to be a manual activity, but fully solved through systems and interconnection."

As part of its proposed amendments to EMIR, the EC has suggested changing the reporting rules for over-the-counter derivatives so the trade reporting requirement for small non-financial corporates would automatically be delegated to the financial counterparty, with that counterparty also assuming the legal liability. It has also suggested exempting non-financial corporates from reporting intragroup transactions, and removing the obligation to report historic trades altogether.

Nonetheless, Enel will continue with its push to automate its processes, says Casinelli. "Looking to the future, much of the resource and cost burdens consumed by reporting could be reduced by automation and digitisation. This is not just an important goal for Enel, but for the whole market. We have focused on using a restricted number of trade processing and reporting systems so that we are fully aligned with our counterparty banks," he says.

Harmonisation

The development of common data and reporting standards would likely help the push to automation, but these requirements currently differ from jurisdiction to jurisdiction. This highlights an important theme – the need for harmonisation within rule sets.

"We are absolutely in favour of harmonisation across all countries, not only between the US and Europe," says Casinelli. "We must rule out any arbitrage opportunity due to different regulations. We must also make sure the derivatives market remains global in nature. This is an important issue for us because we are active across more than 30 countries. To speak the same language with colleagues around the world and operate from the same derivatives framework would absolutely be a benefit for us. This is difficult to push for from our side. It is up to governments to secure this level of coordination."

Despite the fact that the derivatives reforms were agreed by the Group-of-20 nations, differences have emerged in the scope and detail of national rule sets. An effective equivalence/substituted compliance regime based on broad outcomes is therefore essential to ensure cross-border trading is not affected.

Without this, the risk is that the global derivatives market will fragment into separate liquidity pools, potentially reducing choice and increasing costs for end users.

"Our global footprint is one reason why we believe a harmonised, truly global derivatives rule set is so important. When we hedge our risk, we want to be able to choose from as wide a liquidity pool as possible," says Casinelli.

Evidence has emerged that fragmentation has already occurred in certain markets. According to ISDA research[1], a distinct liquidity pool has developed in the European interdealer market for cleared euro interest rate swaps, with US dealers now much less active in this market than they were before US trading rules came into effect. Despite this, Casinelli says the impact hasn't yet fed down to Enel.

"We completely support regulations in the derivatives market, but it is also necessary that regulation allows liquidity to remain strong. We need sufficient liquidity to hedge our exposures. The market has yet to have problems in this regard, but we can't say if that's the same for all of its end users," he says.

Using derivatives

The company uses derivatives for a variety of reasons, across a variety of asset classes, including interest rates, FX and commodities. While the derivatives market has changed significantly in recent years, with clearing, margining, reporting and electronic trading now much more prevalent, Casinelli says Enel's use of derivatives has remained more or less unchanged.

"We remain substantially stable in terms of our derivatives use. Derivatives are a sufficiently elastic product to keep us aligned with underlying risks, despite the challenges in the market," he says. "Derivatives are a real support, a simple tool that absolutely helps us to manage financial risk and support our business activities around the world."

> "Derivatives are a real support, a simple tool that absolutely helps us to manage financial risk and support our business activities around the world"
>
> **Fabio Casinelli, Enel**

A major focus for Casinelli's team is the hedging of exchange rate risk on its non-euro purchases and sales and its overseas investments and borrowings, and to manage interest rates exposure on its debt and to minimise borrowing costs.

"Hedging our interest rate in the long term, up to 30 years in some cases, continues to be present in our book. As such, our main focus for the next 12 months is whether the European Central Bank is going to start tapering its monetary easing policy," explains Casinelli.

As a non-financial corporate, Enel is only obliged to clear under European rules if it hits certain notional thresholds in outstanding derivatives exposures. According to the company's 2016 annual report, it did not breach the mandatory clearing thresholds under EMIR over the course of that year. However, it does post collateral on some of its derivatives trades – and Casinelli suggests that liquidity issues may increasingly become a focus for the corporate sector.

Corporates are generally exempt from global clearing and non-cleared margin regulations, but banks are required to hold capital against credit valuation adjustment (CVA), which tends to be higher for non-cleared, non-collateralised trades. While European legislation currently exempts European banks from holding CVA capital when trading with non-financial corporates, other jurisdictions have not followed suit.

If margining practices become more widespread in the corporate sector, companies will need to consider how to source eligible high-quality assets to meet collateral calls. While some firms might look to leverage credit lines from banks, this may not prove scalable over time, says Casinelli.

"The market needs to expand its focus from financial risks to credit lines and liquidity management. We continue to receive credit support annex (CSA) requirements from banks, which we are comfortable with. However, regulators and the broader industry need to consider whether corporates can continue to have sufficient credit lines from banks to manage this kind of relationship, especially if CSAs become more prevalent across the corporate sector," says Casinelli. IQ

[1] http://isda.link/crossborderfragupdate

Going to the Polls

The impact of regulation is the biggest concern for market participants, and capital requirements are the top priority, according to polls conducted during ISDA's annual general meeting

The impact of financial market reforms remains the key concern for derivatives market participants, according to live polling at ISDA's 32nd annual general meeting (AGM) in Lisbon in May.

Over 700 conference delegates were posed a series of questions on everything from regulation to technology during the event. Responding in real time through the ISDA conferences app, delegates were asked for their biggest focus or concern for the year ahead by ISDA chief executive Scott O'Malia during his opening address on May 9 (see Chart 1). Fifty-five per cent chose the impact of regulation, with the audience relatively unconcerned about interest rate changes, market liquidity and upgrading technology. Perhaps unsurprisingly given the succession of unexpected events in the political sphere, political risk was highlighted as the second biggest priority.

Despite the concern about regulatory impact, 42% of the AGM audience at a public policy panel felt ensuring financial stability should be the top priority for policy-makers, compared with 37% who thought reducing regulatory complexity should be the primary aim. The three options were relatively evenly split, though, with one-fifth of delegates flagging the need for economic growth (see Chart 2).

This chimes with the current focus of US and European policy-makers, which have begun to review their regulatory frameworks with the objective of reducing complexity and unnecessary compliance burdens and encouraging economic growth.

Delegates were also asked to highlight their own policy priorities. Given the increased volume of cleared trades – approximately three quarters of interest rate derivatives notional outstanding is now cleared – central counterparty resilience, recovery and resolution was flagged as a key priority by 29% of delegates (see Chart 3).

Margining requirements for non-cleared derivatives also continue to be important, with 21% of the audience highlighting this issue. While the largest derivatives dealers were required to start posting initial margin from September 1, 2016, the next wave of participants will be phased-in for initial margin exchange from September 2017. In addition, variation margin requirements were meant to come into effect for a wide universe of derivatives users from March 1, 2017, but concerns about the ability of all firms to amend their collateral documentation in time prompted regulators to provide forbearance under certain conditions.

Capital

The biggest concern for AGM delegates, however, was capital, with 33% choosing this as their top priority. The Basel Committee on Banking Supervision is currently working to finalise its latest package of measures, but disagreement about the proposed inclusion and level of an output floor has delayed the process. Asked to give their thoughts on an output floor, 58% of delegates thought it should be set at a low level, while 36% thought a floor was unnecessary given other constraints and backstops in the framework, such as the leverage ratio.

The disagreement over the level of a floor has prompted concern about divergences in how the Basel requirements are applied

CHART 1: WHAT IS YOUR BIGGEST FOCUS OR CONCERN FOR THE YEAR AHEAD?

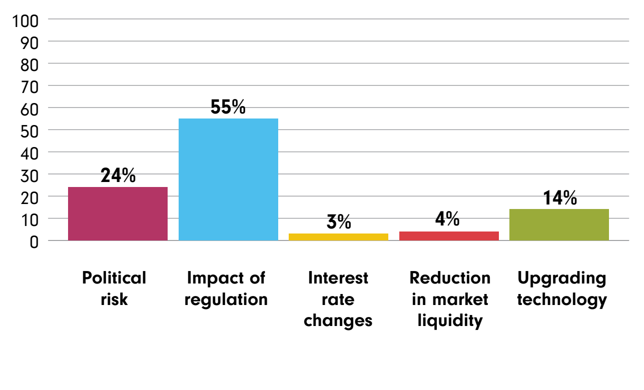


CHART 2: WHAT SHOULD BE THE TOP PRIORITY OF POLICY-MAKERS?

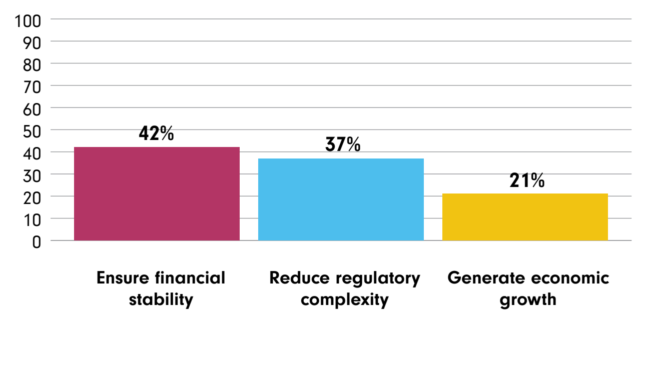


CHART 3: WHICH DERIVATIVES POLICY ISSUE IS THE TOP PRIORITY?

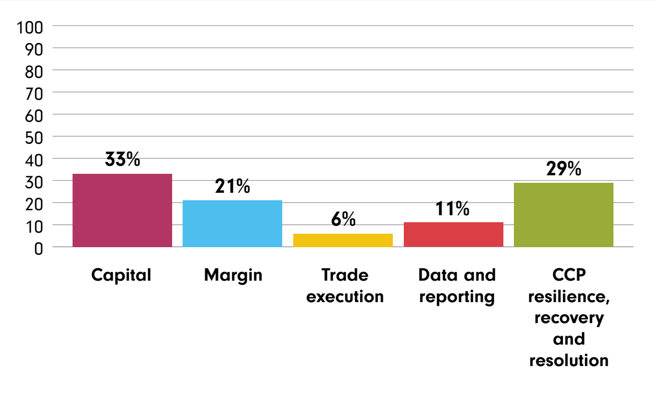
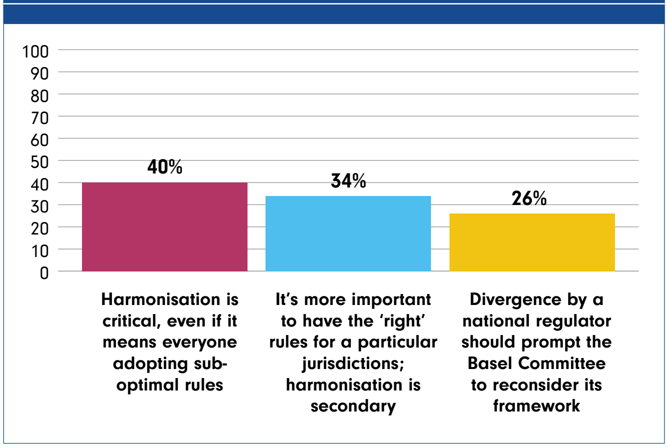


CHART 4: HOW IMPORTANT IS IT TO HAVE HARMONISED CAPITAL RULES?



from country to country – and not just on floors. A proposed revision to the Capital Requirements Directive and Regulation by the European Commission at the end of last year outlined several changes from the Basel text, including a 65% scalar on market risk capital requirements during a three-year phase-in. The US Treasury has also recently proposed modifications to its implementation of the Basel requirements, including a delay to the Fundamental Review of the Trading Book while the calibration is reassessed.

ISDA believes the Basel Committee should make adjustments to frameworks or recalibrations generally whenever widespread concerns result in the prospect of regulatory divergence. AGM delegates were largely split on the issue. Twenty-six per cent thought divergence by a national regulator should prompt the Basel Committee to reconsider its rules, 34% thought it is more important to have appropriate rules in place in each jurisdiction, and 40% felt harmonisation is the most important factor, even if it means every jurisdiction adopting sub-optimal rules (see Chart 4).

One issue that delegates generally agreed on was that capital requirements should not increase above current levels – although there was disagreement on whether current levels are affecting the ability of banks to participate in the market. Forty-six per cent thought capital is now at an appropriate level but should not be increased further. However, 29% felt current capital requirements have affected bank intermediation and led to a reduction in market liquidity. A quarter thought current capital levels are a step in the right direction, and the remaining measures should be completed as soon as possible.

Along with regulatory developments, delegates were also asked for their thoughts on technology – in particular, the potential for new technologies, such as distributed ledger and smart contracts. More than half (55%) thought distributed ledger would have an impact on post-trade processes within the next three years, with another third choosing seven years (see Chart 5).

However, this doesn't appear to be feeding through to the technology priorities of firms. Just 10% of delegates picked distributed ledger and smart contracts as their firm's biggest technology priority. Trading platforms and straight-through processing came out on top with 38%, while automation of collateral exchange was second at 25% (see Chart 6). IQ

CHART 5: WILL DLT HAVE AN IMPACT ON POST-TRADE PROCESSES?

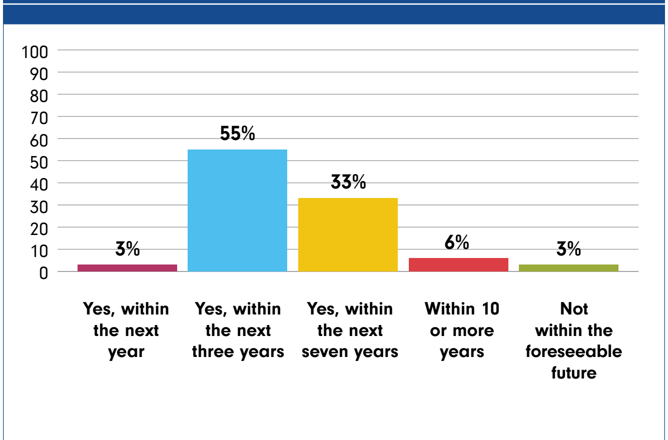
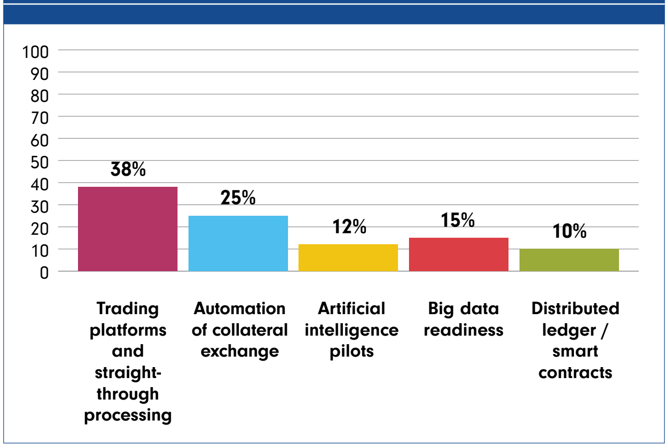


CHART 6: WHAT IS THE BIGGEST TECHNOLOGY PRIORITY FOR YOUR FIRM?



What Hope for Harmonisation?

Cross-border harmonisation is now a key concern across many different aspects of the derivatives reform agenda, including data, margin and infrastructure interoperability. **IQ** *discusses these issues with* ***Paul Andrews****, secretary general of the International Organization of Securities Commissions (IOSCO)*

IQ: What are the primary areas of focus for IOSCO over the next 12 months?

Paul Andrews (PA): For this year, our board has decided on five focus areas that we will spend most of our time on: strengthening the structural resilience of capital markets; addressing data gaps and information-sharing issues; applying new insights into investor protection and investor education; analysing the role of securities markets in capital-raising and sustainability issues, and the related role of securities regulation; and the role of regulation in financial technology and automation.

Each of these five areas have specific workstreams attached to them. For example, on the first focus area, we are spending a great deal of time working on recommendations related to liquidity risk management of asset managers, as well as looking at issues around market volatility. Our goal is to produce key pieces of work that will be meaningful and have an impact for our members.

IQ: Do you think cross-border harmonisation of the global derivatives reforms is more or less likely now than it seemed at the time the Group-of-20 (G-20) commitments were made?

PA: I think significant progress has been made to harmonise derivatives reform since the G-20 commitments, so in that sense, I think we are on the right path. Nevertheless, we shouldn't minimise some of the important remaining issues. Here, I am thinking in particular about cross-border impacts, such as the effectiveness of market participants to hedge their risks in a global market. These are not easy questions to answer given the various local legal and regulatory challenges that must be overcome, but the challenges should not stop us from continuing to examine how we can keep moving forward.

IQ: What can be done to improve cross-border harmonisation, and what role can IOSCO play?

PA: This is a difficult question to answer because this is the Holy Grail for both the industry and for regulators. How to get there, of course, is the most challenging part, and I am hard-pressed to think that we will ever have complete harmonisation. With that said, however, I do think that harmonisation will come on an issue-by-issue basis. Take, for example, IOSCO's

"I am hard-pressed to think that we will ever have complete harmonisation. With that said, however, I do think that harmonisation will come on an issue-by-issue basis"

"I think we need to do more to make these initiatives – LEI, UTI and UPI – known to those that are less or not directly affected by the OTC market reforms"

work with the Committee on Payments and Market Infrastructures (CPMI) on the Principles for Financial Market Infrastructures (PFMIs), or the work on data harmonisation. With the PFMIs, CPMI-IOSCO set forth a number of sound principles that the industry, as a whole, has pretty much adopted and that serve as a key part of the foundation for how each regulator in various jurisdictions supervises the FMIs it oversees. This is not perfect harmonisation, of course, but it is in the right direction. I think that, collectively, we need to identify key areas where harmonisation makes the most sense, and to the extent that IOSCO can help lay the foundation for that area through standards, principles, recommendations or guidance, I think we can play a key part.

IQ: IOSCO has been working to develop data standards, including unique trade identifiers (UTIs) and unique product identifiers (UPIs). How does IOSCO intend to encourage their use by national regulators?

PA: We have been pretty upfront about our support for uniform identifiers. In fact, we made our views quite public almost five years ago as part of a press release by emphasising our strong support for IOSCO's involvement in the development of legal entity identifiers (LEIs), and noting that this "initiative seeks to uniquely identify participants to financial transactions and meet the demand of the global regulatory community for accurate, consistent and unique entity identification". More recently – about a year ago – we held a regulatory workshop at the 2016 annual meeting on data harmonisation.

The key players that regulate large over-the-counter (OTC) derivatives markets are already at the table, as they have an interest in using these identifiers. Going forward, I think we need to do more to make these initiatives – LEI, UTI and UPI – known to those that are less or not directly affected by the OTC market reforms. Personally, I can imagine also that these identifiers, particularly the LEI, could be included in future IOSCO standards, guidance and best practices.

IQ: Some regulators have expressed concern about an apparent deterioration in market liquidity, citing the increased regulatory burden as a contributory factor. Do you share these concerns?

PA: As you probably know, IOSCO recently issued a report looking at this very issue of bond market liquidity. We came to the conclusion that while there have been changes in market liquidity, we didn't see strong evidence that there was an overall deterioration. A number of others have reached similar conclusions as well. One of the things that we hear all the time is that regulatory burden is the cause of a great many ills. And, to that end, I think it is a very helpful exercise that we are participating with the Financial Stability Board (FSB) in looking at the effects of the various reforms over the past 10 years. This will be a thorough and thoughtful review, and it will help us get a better handle on whether and how the various reforms put into place since 2007/08 have affected things like market liquidity. →

→ **IQ:** Is there a case for conducting a cumulative impact study to gauge the effects of the entire market, capital and margin framework? Could IOSCO conduct such as study?

PA: As I mentioned earlier, we are working with the FSB and other international bodies, such as the Basel Committee on Banking Supervision (BCBS), in looking at the cumulative effect of reforms. I think this review will take us some time to sort through the various causes and effects, but I think it is a helpful exercise, and I give the FSB much credit for taking on this challenging task. We, of course, need to be a part of it because a number of the key reforms affect capital markets, which is the very core of all that IOSCO does. IOSCO has also begun its own study on what we are calling efficient resiliency for derivatives markets. This will examine regulatory reforms in derivatives markets to determine whether any aspects of the reforms, while contributing to financial stability, may have had negative, unintended effects that may need to be addressed by regulators.

IQ: In light of the phase-one implementation of initial margin (IM) and the March 1 variation margin (VM) deadline, are there any lessons that can be learned for the industry and regulators? Do you expect further work on harmonisation ahead of the broader rollout of IM rules to phase-three/phase-four firms?

PA: We have been actively coordinating the monitoring of the implementation of the BCBS-IOSCO framework by the Margin Requirements Monitoring Group since the adoption of the framework – in particular, regarding implementation by the industry of IM and VM. With respect to IM, the monitoring group concluded that compliance by counterparties covered by phase one had been quite successful, particularly in view of the enormous scale and complexities involved. For VM, the monitoring group observed that the major challenges market participants are facing are a matter of scale rather than complexity, due to the fact that the exchange of VM on March 1, 2017 directly affected a large number of buy-side, non-bank entities, among others. The monitoring group and authorities in each jurisdiction have been closely monitoring preparedness of these firms and the industry as a whole to exchange VM.

We are also having a close look at progress made in the implementation of VM after March 2017 – in particular, in jurisdictions where a transitional period was adopted, and we hope that full VM implementation takes place at the end of those transitional periods.

For the moment, the focus is on the implementation of the framework and rollout of the rules on a phased basis, which we are monitoring carefully. We do not intend to do further work on harmonisation of the framework ahead of the next phases of implementation, unless further harmonisation is necessary as a result of the monitoring of the implementation.

IQ: Has there been sufficient progress on the interoperability of market infrastructures? How important is this?

PA: Some progress has taken place on interoperability of market infrastructures, but there is still potential for improvement. To be able to fully enjoy the advantages and benefits of interoperability, critical arrangements should not expose financial market infrastructures to risks that are not appropriately managed. In this respect, for example, significant systemic risk implications would likely arise from the default of an interoperable central counterparty (CCP). Therefore, appropriate recovery and resolution arrangements need to be developed to avoid contagion from the default of an interoperable CCP. In addition, CCP stress tests should take into account this potential contagion risk.

IQ: IOSCO published a paper recently that reported good progress in meeting the principles on financial benchmarks. How do you expect use of benchmarks to change in the future, if at all? Is there a challenge associated with recognition and cross-border use of benchmarks?

PA: Our work on benchmarks, and that of the FSB as well, has focused on two important characteristics that a benchmark should have – representativeness of the underlying market, and resiliency during times of stress. In my view, there is another very important aspect, which has not yet been addressed effectively in the benchmarks

“Our work on benchmarks, and that of the FSB as well, has focused on two important characteristics that a benchmark should have – representativeness of the underlying market, and resiliency during times of stress”

"Building liquidity in alternative rates may take some time, although some of the identified alternatives are already promising in terms of the transaction volume in their underlying markets"

reform – the use of benchmarks. Fortunately, IOSCO is also working on this issue, and we intend to issue a statement on matters for users to consider when selecting a particular benchmark. One key question is whether an interbank offered rate (IBOR) type of interbank lending rate should be the appropriate benchmark for all types of transactions, simply because it is the most commonly used. Failure to address the challenges for users may result in market participants using benchmarks without fully understanding the associated risks. We are looking at this issue, and plan to have something more to say later this year.

This aspect is also linked to the current transition efforts to move away from IBORs to alternative risk-free rates (RFRs). I think substantial progress has been made to identify RFRs, but creating sound benchmarks, particularly for long tenors, continues to be a challenge.

In relation to your question about the change in the use of benchmarks in the future, the appropriate use of benchmarks will be a key issue in steering and supporting the transition, and creating a sound benchmarks environment. Building liquidity in alternative rates may take some time, although some of the identified alternatives are already promising in terms of the transaction volume in their underlying markets. Given all of this, I think the transition from IBORs to alternative RFRs may continue for quite some time. We will likely see a period where IBORs and RFRs will co-exist and be used in parallel. Regulators may also have a role to play here to accelerate this transition process.

Finally, we were happy to see the recent European Union (EU) Benchmarks Regulation referenced the IOSCO financial benchmarks and price reporting agency principles (for commodities), but I would add that substituted compliance or equivalence determinations using our work and the EU regulation remains a difficult issue. We know there are discussions on the recognition of third-country benchmarks and their use in the EU, and we plan to monitor these discussions to see how things develop.

IQ: How important is technology to the future development of the derivatives market? What role can regulators play as new technologies emerge in this space?

PA: Predictions are always subject to a certain level of uncertainty, but I think it is fair to say that technological innovations will have a huge impact on the entire financial industry. This includes the derivatives markets, particularly if you consider the amount of data that it produces and that needs to be considered by market participants and supervisors. In this regard, it is important for regulators and supervisors to stay ahead of the curve, or at least not to fall too far behind. In addition, we will need to think about what supervisory and regulatory implications technology is having, given that market participants are themselves becoming more and more automated.

In particular, a number of market participants are exploring the use of distributed ledger technology (DLT) in post-trade processes, which includes things like maintaining basic records on clearing and settling financial transactions. On the positive side, using DLT in this manner could provide efficiency gains from cost savings, faster settlement, greater efficiency and quicker reconciliation from the use of an automatically updated source of consistent information along the value chain. On the other side of the coin, DLT also poses some questions. Here I am thinking about things such as cyber intrusions and a more basic question of where regulators fit into the DLT process – do they become a node like other market participants? If so, what entanglements does that raise? We need to watch industry developments in this area and be sure we find a common way forward.

IQ: What role can IOSCO play in helping to educate emerging markets on the uses and benefits of derivatives and, in particular, the important of close-out netting? How can the industry help?

PA: This is indeed a very important issue and one that is becoming more and more relevant for many markets, including emerging markets. The first way we can help is by raising awareness, given how the use of derivatives and close-out netting may be affecting the banks in numerous countries. That is, access to funding from banks may be limited in some or even many cases, which can cause a number of difficulties for the real economy. Second, IOSCO conducts a number of training seminars each year, and one in particular that comes to mind is the annual training seminar put on by our Affiliate Members Consultative Committee (AMCC), of which I know that ISDA is a member. The AMCC comprises self-regulators, exchanges, industry bodies and others and provides a good mix of views. Derivatives and close-out netting could be interesting topics for an upcoming edition of this programme. IQ

Building New Foundations

New technologies offer the potential for the derivatives industry to increase efficiency and reduce costs, but a strong foundation of common standards is needed for that possibility to be fully realised

It feels like the derivatives market is on the cusp of a great leap forward. New technologies are springing up that could transform how derivatives are executed and managed through the entire lifecycle, offering the prospect of greater efficiency and cost savings. Work is under way to develop applications for technologies like distributed ledger and smart contracts, and the first concept launches have been rolled out.

The trouble is that current market processes and infrastructure are creaky, complicated and duplicative. A lack of consistency in data and processes has meant each firm has its own unique representation of every trade and lifecycle event, requiring continual reconciliation with counterparties to resolve discrepancies. Harnessing new technologies in this environment would be like bolting a Formula One engine into a regular four-door family saloon: it'll probably go faster than the neighbour's car, but nowhere near as fast as it could.

The only way to realise the full potential of these technologies, and to ensure they can work seamlessly across firms and platforms, is to develop a set of common data and processing standards that everyone can access and deploy. That's no easy task – it effectively means rebuilding the foundations of the entire derivatives market – but the benefits could be significant.

"With new technologies growing in power day by day, the case for sitting back and maintaining the status quo is untenable. The industry needs to grasp this opportunity for lower costs and greater efficiency, and start making the transition away from legacy infrastructure systems. That means a fundamental reshaping of the foundations that support the market. ISDA has always promoted standardisation within the industry, and we are working hard to help market participants with this ambitious task," says Clive Ansell, head of market infrastructure and technology at ISDA.

> "The industry needs to grasp this opportunity for lower costs and greater efficiency, and start making the transition away from legacy infrastructure systems"
>
> **Clive Ansell, ISDA**

Lack of standards

One of the biggest challenges is the lack of commonality in market processes and events. Specific activities may have a common name – for example, the terms 'margin call', 'compression' and 'novation' all conjure up some common market practices – but the individual components and actions that make up those terms or processes have never been centrally established or documented. That means each firm has tended to develop its own policies and procedures for each lifecycle event, and has represented those events differently within its internal systems.

Similarly, regulatory changes have tended to be interpreted at the individual firm level and mapped back to internal data and processes. That has lead to differences in interpretation between entities, resulting in inconsistencies in how the data is represented and what is reported.

In response, ISDA has started an initiative to identify and define core lifecycle events and actions, and to translate and consolidate them into concise, standard, machine-readable code that sits in a so-called common domain model (CDM). This will essentially provide the industry with a common, shared representation of basic industry processes – areas where there's no commercial advantage in individual firms developing their own approaches.

"ISDA has worked for some time

"ISDA has worked for some time to develop common data standards and taxonomies, but the common domain model goes beyond that: it spells out what happens for each event and process, and represents that in a consistent way"

Ian Sloyan, ISDA

to develop common data standards and taxonomies, but the common domain model goes beyond that: it spells out what happens for each event and process, and represents that in a consistent way. It's important that technology solution providers use the same standards for processes, as well as for data," says Ian Sloyan, a director in the data and reporting group at ISDA.

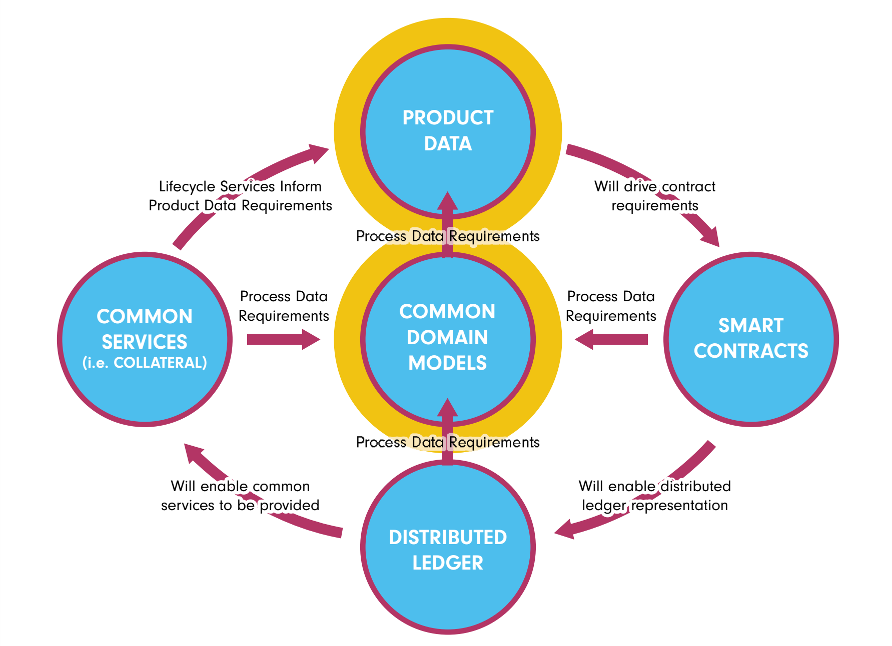
The ISDA CDM

At a basic level, this involves breaking down each event to a before state and an after state, and defining the change that occurs. These are as far as possible asset class and product agnostic. For example, the exercise of an interest rate option expressed as inputs and outputs would be similar or identical to the exercise of an equity option – the two events wouldn't necessarily require a separate CDM representation simply because they occur in different asset classes.

The industry already has a starting point – the templates developed for the Financial products Markup Language (FpML) messaging standard. "It is important that common domain models are built on existing standards, such as FpML. This makes it easier for them to integrate into current market practices and adapt to new events," says Sloyan.

While the task of defining events and processes is huge, the job in theory becomes easier over time, as existing representations in one asset class can be applied to similar events in other asset classes, without needing to reinvent the wheel. The biggest challenge instead will be to encourage widespread adoption and the replacement of internal models.

ISDA'S INFRASTRUCTURE PLAN



As it currently stands, many vital processes have become bogged down by complexity, duplication and inconsistency. Successive regulatory requirements covering trading, clearing, reporting and margining have added layer upon layer of complexity to the execution- and lifecycle-management process within legacy systems. The tight implementation deadlines imposed by these regulations have meant market participants have often opted for tactical and ad-hoc fixes, rather thinking about how everything will work together.

As a result, infrastructure is resource intensive, slow and prone to error, and firms have to constantly check they have the same details as their counterparties after each step in the lifecycle.

"The current system just isn't scalable. Everything is manually driven, and the fact each firm has its own representation of the trade and its own processes for managing lifecycle events means constant reconciliation between counterparties is required. Adopting a CDM would simplify the management of a trade and make it more consistent – which translates into potentially significant cost savings. These savings can be re-routed into areas that allow firms to deliver added value to their clients," says Ansell. →

"The current system just isn't scalable. Everything is manually driven, and the fact each firm has its own representation of the trade and its own processes for managing lifecycle events means constant reconciliation between counterparties is required"

Clive Ansell, ISDA

→ There are other benefits too. Rather than each firm individually interpreting a regulatory text and independently altering internal systems, processes and data, a regulator could point to specific elements within the CDM that need to be reported, altered or added to. This would streamline internal efforts and ensure everyone is applying the rules in the same way, without the need for costly compliance projects. It would also create greater transparency for regulators due to far superior data integrity.

New technologies

In the longer term, a CDM paves the way for widescale adoption and interoperability of new and emerging technologies, such as distributed ledger and smart contracts. Employing these technologies will further reduce complexity and duplication by creating a single secure representation of each trade that both counterparties are permissioned to access and modify, along with clearing houses and regulators if necessary.

This would eliminate the need for reconciliation through the lifecycle and reduce operational inefficiencies. Instead of the messy, spaghetti junction of data flows and relationships that exist now, the ISDA CDM would result in standards that could be stored directly on a ledger and used without translation at every stage by every participant. Maintaining and operating market infrastructure would therefore become less time consuming and costly, allowing banks and other market participants to devote vital resources to other tasks.

Smart contracts can then be used that automatically respond to events and process them in a pre-defined way, resulting in an updated version of the trade. The CDM is a key component to enabling the inclusion of common automated processes and economic terms, but certain standard legal definitions and contractual obligations may also need to be included in code form.

This legal aspect poses an additional challenge, and one that ISDA is working on in parallel alongside law firms. Key issues include how to transform ISDA contracts into a smart-contract format: could a smart contract ultimately replace an existing legal contract in its entirety, or will it only automate the execution of certain actions specified within the contract? It seems likely there will continue to be elements within a contract where human intervention and control are necessary (for example, triggering events of default under the Master Agreement).

"In an operational sense, the establishment of smart contracts is within reach, and the development of a CDM paves the way for interoperability between the various technology platforms. However, legal standards are also needed. We already have a robust and tested legal framework for derivatives through the ISDA documentation, definitions and opinions. We now need to translate that into the smart contract environment, and ISDA is working on that," says Ansell.

As part of that, ISDA plans to transform its paper documents into digital versions, starting with high-volume asset classes. Having a fully functional, interoperable and enforceable set of smart contracts may be a longer-term goal, but rapid progress is being made.

Path forward

By September, ISDA plans to have developed an initial version of the CDM design. A format and mechanism for the publication of CDMs will have been established, and a governance model put in place. ISDA has already engaged extensively with various stakeholders on these objectives. September 2017 will also see the creation of a supporting business case for the use of CDMs, which will demonstrate the potential opportunity arising from developing and adopting a CDM. ISDA will also work with its members to identify areas where the use of CDMs may deliver near-term benefits.

"The common domain model design and business case will be put together with input from a wide range of industry participants on the buy side, the sell side, and from infrastructure providers," says Ansell.

The challenge will then be to encourage industry participants to adopt the ISDA CDM, and to work with technology providers to facilitate the use of the CDM in distributed ledger and other technology platforms.

"ISDA is committed to working with its members and the broader industry to deliver the necessary foundational components to facilitate the required transformation. We all need to be bold to ensure the future efficiency and vitality of this market," says Ansell. IQ

Towards a Risk-free Rate

Efforts to reform key interest rate benchmarks are progressing, and attention must now focus on ensuring a smooth transition to selected risk-free rates

The reform of major interest rate benchmarks was a late addition to the post-financial crisis package of regulations, but it has turned out to be no less significant than the revisions to capital requirements and market structure. After several years of groundwork, alternative risk-free rates (RFRs) have now been selected in several key jurisdictions, and attention is turning to how best to transition to the new benchmarks without disruption or adverse impact to the market. That's become even more important following recent remarks by the UK Financial Conduct Authority's (FCA) chief executive, Andrew Bailey, in which he said that the FCA would not use its influence or legal powers to persuade or compel panel banks to make LIBOR submissions after the end of 2021.

"Significant progress has been made, but the next stage is very important," says Scott O'Malia, chief executive of ISDA. "It is critically important for regulators and the industry to continue to work together to produce a clearly articulated transition that takes the needs and concerns of benchmark users into account."

The transition to new risk-free benchmarks will mark the next stage in a journey that began back in 2012, when manipulation of LIBOR first prompted regulators to rethink the use of benchmarks in financial markets. A series of reviews followed, starting with the Wheatley Review of LIBOR in the UK in September 2012. This was followed by a broader set of principles issued by the International Organization of Securities Commissions (IOSCO) in July 2013, and a further, more targeted report on interest rate benchmarks by the Financial Stability Board (FSB) in July 2014.

While these reports set in motion the move towards RFRs, they did not contemplate a near-term discontinuation of existing interest rate benchmarks altogether. Instead, they included recommendations to strengthen interbank rates such as LIBOR, EURIBOR and TIBOR, collectively known as the 'IBORs'. The FSB established an Official Sector Steering Group of regulators and central banks and a Market Participants Group that jointly decided on an approach whereby existing IBORs would be strengthened, while alternative RFRs would also be developed.

"The recommendation was to make the IBORs more robust and transparent. The FSB recommended reviewing benchmark methodologies and definitions, and considering transitional and legal changes that might come into play if changes to the IBORs were to be implemented. These were all things the IBOR administrators have undertaken in partnership with regulators over the past three years," says Ann Battle, assistant general counsel at ISDA. →

"It is critically important for regulators and the industry to continue to work together to produce a clearly articulated transition that takes the needs and concerns of benchmark users into account"

Scott O'Malia, ISDA

RFR working groups

At the same time, individual working groups were set up in several jurisdictions, including the US, the UK and Japan, to bring together public- and private-sector market participants to review their respective markets and determine the most appropriate RFR. A Japanese study group on risk-free reference rates overseen by the Bank of Japan carried out a consultation last year, and subsequently recommended the use of the uncollateralised overnight call rate for yen, known as TONA.

In April 2017, the Working Group on Sterling Risk-Free Reference Rates, a UK dealer group supported by the Bank of England, announced it had selected the Sterling Overnight Index Average (SONIA) as its preferred RFR. Most recently, the US Alternative Reference Rates Committee (ARRC) announced on June 22 that a broad Treasury repo financing rate had been chosen as its preferred alternative.

All three decisions were made after detailed analysis and consultation to ensure the proposed RFR satisfies IOSCO principles and meets specific criteria established by the relevant groups in coordination with the FSB. In the US, for example, the ARRC chose the broad repo rate after considering the depth and likely robustness of the underlying market over time, the rate's usefulness to market participants, and whether its construction, governance and accountability would be consistent with IOSCO principles.

"The FSB report concluded that risk-free or near risk-free reference rates would be more appropriate for some financial transactions, including many derivatives," says Battle.

Europe

There is not yet a formal working group in place in Europe, but some participants expect EONIA, an unsecured overnight rate, could ultimately serve as the RFR in that jurisdiction. The European Central Bank has also indicated that it could consider publishing an overnight unsecured rate based on available data. In the meantime, the European Money Markets Institute (EMMI), which is the administrator of EURIBOR and EONIA, has conducted extensive analysis on the possibility of

STRENGTHENING FALLBACKS

While the various risk-free rate (RFR) working groups have committed to ensuring an orderly transition to new interest rate benchmarks, legacy contracts and some new contracts are likely to continue referencing the IBORs.

Continuation of the IBORs, where appropriate, should prevent disruption in the short term and allow the RFRs to be gradually phased in. But a process is also needed to ensure stability in the event of a sudden discontinuation of a key IBOR in the future. If this were to happen, it could drive sudden changes in valuation as participants independently select a new reference rate for their IBOR contracts.

"We recognise the disruption that could occur if there is a permanent discontinuation of one of the IBORs. There would be confusion and uncertainty with regards to what IBOR-referenced transactions should now reference. Therefore, even for those currencies where an RFR has been chosen, there needs to be a contingency framework in place for those contracts that still reference the IBORs," says Ann Battle, assistant general counsel at ISDA.

The Financial Stability Board has also recognised the importance of this issue, and last year asked ISDA to work on ensuring robust fallback rates are written into derivatives documentation in case a key IBOR is discontinued. ISDA working groups have been set up in the relevant regions, and their preliminarily conclusion is that the selected RFRs would probably be the most appropriate fallback rates for the industry to adopt with respect to the relevant IBORs in the corresponding currencies.

While the transition to RFRs is likely to focus first on new transactions, market participants generally agree that there is a logic to applying the fallbacks to both new and legacy transactions. That's because if an IBOR permanently ceases to be published, it makes sense for everyone to use the same, published fallback rate. Certainty regarding which rate to reference would be just as important for legacy contracts.

If it is agreed that legacy contracts should also specify a robust fallback, then ISDA could develop a protocol to enable the change to be made to documentation in an efficient way. However, its effectiveness would rely on widespread adherence to the protocol.

"All protocols are voluntary, and some entities may decide not to sign up. That might be due to a variety of reasons – adherence might simply pose too much of an additional operational burden for some firms. However, if one part of the market specifies a certain fallback and another part doesn't, firms could face significant basis risk in the event of a sudden discontinuation of the relevant IBOR," says Scott O'Malia, chief executive of ISDA.

Some form of regulation may ultimately be required to ensure robust fallback provisions are put in place across the board. In the meantime, the ISDA working groups are continuing to consider other issues associated with fallbacks.

One major concern is that IBOR rates are traded with tenors of one, three, six and 12 months, while the RFRs are traded overnight. Another is that the IBORs reflect bank credit risk, while the RFRs do not. These issues could impact valuations in the event a fallback is triggered, so ISDA has determined that a spread needs to be added to the overnight rate, and that term fixings are necessary for the relevant RFRs.

"In order for this to work, it would be important for there to be a single set of spreads, rather than everyone calculating their own. There would also need to be a centralised calculation and publication engine that everyone can access. We have raised this point with regulators, and are working to develop more specific recommendations," says O'Malia.

transitioning EURIBOR from a quote-based benchmark to a transaction-based rate, reducing the role of expert judgement. However, EMMI concluded it is not feasible to move to a fully transaction-based methodology under current market conditions, and is now working to develop a hybrid approach.

EMMI's work represents some progress on benchmark reform, but there is still a general lack of clarity on the future of interest rate benchmarks in Europe. Some believe this could be resolved by the formation of a clearly mandated body, supported by the public sector, to drive the selection of a new RFR and the subsequent transition.

"There is a concern that while IBOR reform is reasonably well advanced and well coordinated by the public and private sectors in Japan, the UK and the US, the public sector is less involved in Europe, and that has made it more difficult to make progress on EURIBOR reform. As we look towards a possible future transition, we will need the support and involvement of a public authority to give greater credibility to this process," says Eric Litvack, chairman of ISDA.

EU BENCHMARKS REGULATION LOOMS

Against the backdrop of the intensive industry work on risk-free rates and fallbacks, the European Union (EU) Benchmarks Regulation is due to enter into force on January 1, 2018, and covers a broad range of benchmarks, including interest rates, foreign exchange, commodities, credit and equity indices.

First drafted in 2013 in response to widespread benchmark manipulation, the regulation aims to improve governance and controls over benchmarks, and protect consumers and investors by increasing transparency and data quality. Contributors to benchmarks will be required to abide by a code of conduct, and plans that set out the steps that will be taken in the event a benchmark ceases to be published or is materially changed must be put in place for products that reference benchmarks.

One of the biggest concerns is a requirement for EU benchmark administrators to be authorised or registered, while those located outside the EU will need to qualify under equivalence, recognition or endorsement regimes in order for their benchmarks to continue to be used. This means European end users could find themselves effectively prevented from using benchmarks they have traditionally relied on.

It remains unclear how these processes will work in practice. ISDA has been engaging with regulators to resolve this issue.

"While most jurisdictions are using the International Organization of Securities Commissions principles to guide benchmark reform, Europe is the only region to have legislated and introduced recognition measures. We don't have much clarity on which third-country benchmarks will be recognised as equivalent and therefore eligible for continued use once the transitional period expires on January 1, 2020," says Eric Litvack, chairman of ISDA.

Transition plans

In those jurisdictions where an alternative RFR has been identified, the priority will now be to ensure an orderly transition to the new rate – a process that will need to involve all relevant stakeholders, including end users, dealers and regulators. In developing a transition plan, ISDA has recommended a number of considerations that should be taken into account.

The first priority is to ensure the alternative rate is sufficiently liquid to support a reliable benchmark. If there is insufficient liquidity, then trading in the underlying market must increase before any transition can begin. This will be particularly important in the US given the broad Treasury repo financing rate does not yet exist. A liquid basis market is also needed to allow the hedging of basis risk between the existing rate and the new rate.

Once it is determined that a new RFR is ready for more widespread adoption, the public and private sectors must agree on a time frame and a process for an orderly transition. While it is largely accepted that there will still be a place for the IBORs in the near term, there will need to be appropriate incentives in place to encourage the transition to RFRs. Consideration must also be given to how to address legacy contracts once the transition begins.

While the working groups have until now focused mainly on identifying the most appropriate alternative rates, thought has been given to transition strategies. In an interim report published in May 2016, the ARRC recognised the importance of building a certain level of liquidity in any new rate before transition begins, and suggested a "paced transition" focusing on new transactions rather than a "big bang" that sweeps in legacy contracts and risks disruption. The paced transition plan is aimed specifically at increasing liquidity in the new rate. This will likely start with a transition of the US dollar overnight indexed swaps market to the new rate, before market participants use it as an alternative to US dollar LIBOR.

The Working Group on Sterling Risk-Free Reference Rates has also recognised the importance of building a robust and liquid SONIA market before any transition begins. The benchmark is currently in the midst of a reform process that is expected to be completed by April 2018, and will result in the Bank of England becoming the administrator for SONIA.

In June 2017, the working group published a white paper on SONIA as the new RFR that sets out its early thinking on transition. The group is considering how adoption could be facilitated by the development of interest rate derivatives referencing SONIA, although it recognises liquidity will take time to build.

"The next part is to promote the risk-free rate and create the market infrastructure and the right inducements for users to switch out of LIBOR into RFR-based contracts. LIBOR will still be useful and is quite appropriate for some categories of contracts, but for other contracts it might not be the best benchmark," says a source close to the working group. IQ

Scrutinising SA-CCR

A recent impact study highlighted the potentially punitive impact of the Basel Committee's standardised approach for measuring counterparty credit risk exposures, especially for certain end-user trades. How can this be addressed?

The Basel Committee on Banking Supervision's new standardised approach for measuring counterparty credit risk exposures (SA-CCR) will have a major impact on multiple components of the emerging regulatory capital framework. SA-CCR will not only replace both the current exposure method (CEM) and the standardised method (SM), but will also affect those banks that use the internal model method (IMM), as it will be used as the foundation of several key calculations in the overall capital framework.

ISDA and FIS recently completed a quantitative impact study (QIS) using the Basel Committee's own hypothetical portfolios. The study shows that SA-CCR's lack of risk sensitivity and conservative calibration could lead to a surge in exposures and capital requirements. This comes at a time when the Basel Committee has been directed not to introduce further significant increases to capital requirements. Critically, it could adversely impact derivatives trades entered into by certain end users, including corporates, sovereigns and pension funds.

What is SA-CCR?

The Basel Committee finalised its new standardised approach for measuring counterparty credit risk exposures in 2014, with implementation scheduled for January 1, 2017. National regulators have yet to transpose the rules into law, meaning rollout has been delayed in most jurisdictions. It is understood the Basel Committee recently agreed to formally review the calibration of SA-CCR by 2024 at the latest. But banks remain mindful of the likely impact of SA-CCR, particularly as the approach could apply to more areas of the regulatory framework than initially expected.

In developing a new standardised approach to counterparty credit risk, the Basel Committee's objective was to find a more granular, risk-sensitive methodology that would appropriately differentiate between margined and non-margined trades, while also recognising the benefits of netting.

Given the growing volume of trades being cleared and margined, the failure of CEM and SM to recognise the risk-mitigation benefits arising from margin posting was acknowledged as a deficiency that needed to be addressed. The Basel Committee identified the need for a methodology that could be easily applied to a wide variety of transactions, while avoiding undue complexity and minimising discretion on the part of national regulators.

SA-CCR is calculated using replacement cost (RC), which is essentially the mark-to-market exposure with margin taken into account, and potential future exposure (PFE). Exposure at default under SA-CCR is calculated by multiplying an alpha factor of 1.4 by the sum of RC and PFE. The framework also introduces the concept of a 'hedging set', which is a set of transactions within a single netting set within which partial or full offsetting is recognised when calculating PFE.

Why does SA-CCR matter?

At first glance, SA-CCR may appear to be of little relevance to banks with large derivatives portfolios that are able to continue using the IMM to measure counterparty credit risk exposures. In reality, SA-CCR will be used

SA-CCR's lack of risk sensitivity and conservative calibration could lead to a surge in exposures and capital requirements

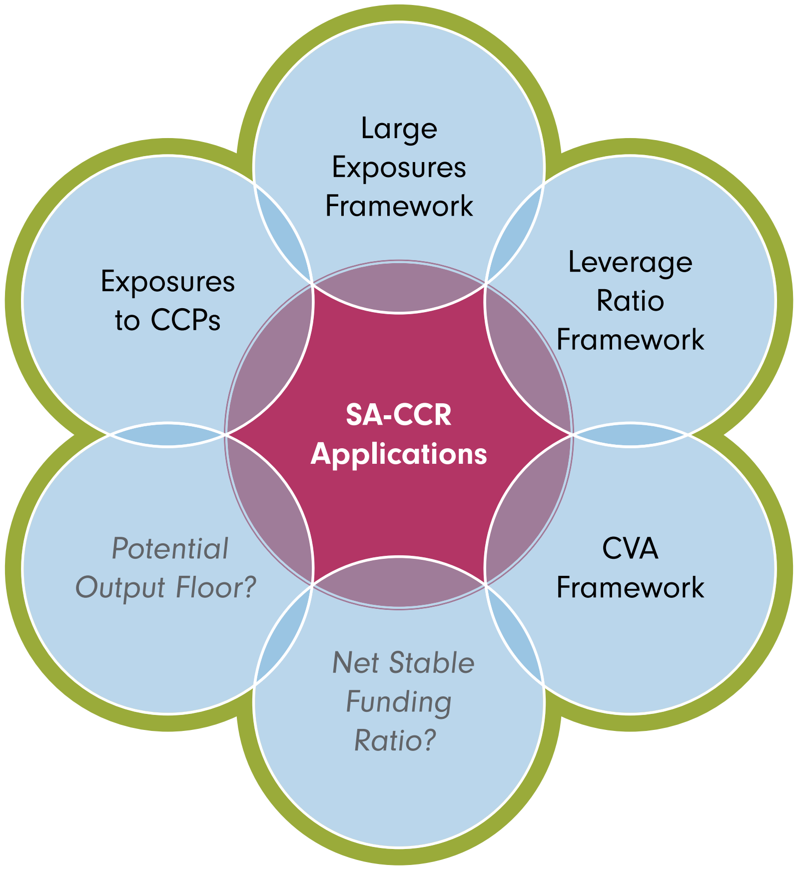
as the foundation of multiple calculations within the capital framework, such as the leverage ratio, which means its influence is likely to be felt by all institutions, irrespective of the size and sophistication of their derivatives portfolios (see Figure 1).

Final standards on the Basel Committee's capital floor framework have not yet been published, but based on a previous consultation, it is expected that banks employing internal models will be required to use SA-CCR, alongside other standardised approaches, as inputs to an aggregate capital floor calculation.

In addition to the leverage ratio, the large exposures framework and the central counterparty exposure calculation, SA-CCR is likely to be applied to other parts of the capital framework, including credit valuation adjustment capital requirements and the net stable funding ratio. SA-CCR will also be used for credit risk capital calculations for banks without IMM approval.

In all of these cases, SA-CCR looks set to be deployed either as an automatic replacement to CEM, as the mandatory method for new regulatory constructs, or as a floor to the IMM. However, the design and calibration of SA-CCR could drive significant increases in exposures and capital requirements, according to the impact study.

FIGURE 1: HOW WILL SA-CCR BE USED?



What is the expected impact?

In early 2017, ISDA partnered with FIS to study the likely quantitative impact of SA-CCR, using the Basel Committee's own hypothetical portfolios drawn from its regulatory consistency assessment programme (RCAP). The study shows that SA-CCR exposures can be a multiple of equivalent CEM or IMM exposures across different products and portfolios.

Significant differences can be observed in Figure 2 between the exposures calculated under SA-CCR, CEM and IMM. Netting set 16 represents all 18 hypothetical portfolios within the RCAP, which includes interest rates, equities and FX. Netting set 15 comprises all of the interest rate and FX portfolios, while netting set 13 comprises only the equity portfolios.

For non-margined trades – represented by the first three sets of bars – SA-CCR would result in far greater exposures, and hence higher capital requirements, than both CEM and IMM across all three netting sets. In the case of interest rates and FX, SA-CCR exposures could be as much as four times greater than CEM exposures. For equity portfolios, SA-CCR would lead to exposures of around double the size of those calculated under both CEM and IMM.

> Interest rates and FX: SA-CCR exposures could be 4x greater than CEM exposures; 1.9x greater than IMM

When cash variation margin is received, the effects are somewhat different, because SA-CCR is deliberately calibrated to recognise the effects of collateral. As a result, SA-CCR generates a lower exposure than CEM for both the full portfolio and equity portfolio. But the fact there is still such a large jump from IMM to SA-CCR for margined portfolios – as much as 2.8 times in the case of the full portfolio and 2.2 times in the case of equities – shows that the calibration of SA-CCR does not fully recognise the risk mitigation delivered by variation margin.

While regulators have sought to avoid a direct comparison between CEM and SA-CCR in the past, on the basis that CEM is considered to be flawed, it will still be the starting point in many of the areas where the new methodology will apply. The potentially significant increase in capital requirements when moving from CEM to SA-CCR is therefore important to consider.

The large gap between SA-CCR and IMM in all of the portfolios in Figure 2 is also an issue because IMM will continue to be used by larger banks. The QIS suggests SA-CCR cannot yet be considered a credible fallback for firms that do not use internal models, nor can it play the role of a floor to IMM, →

The simplest and most practical solution would be to address the conservative calibration of SA-CCR via the alpha factor

→ because the resulting exposures on the same portfolios are so much higher.

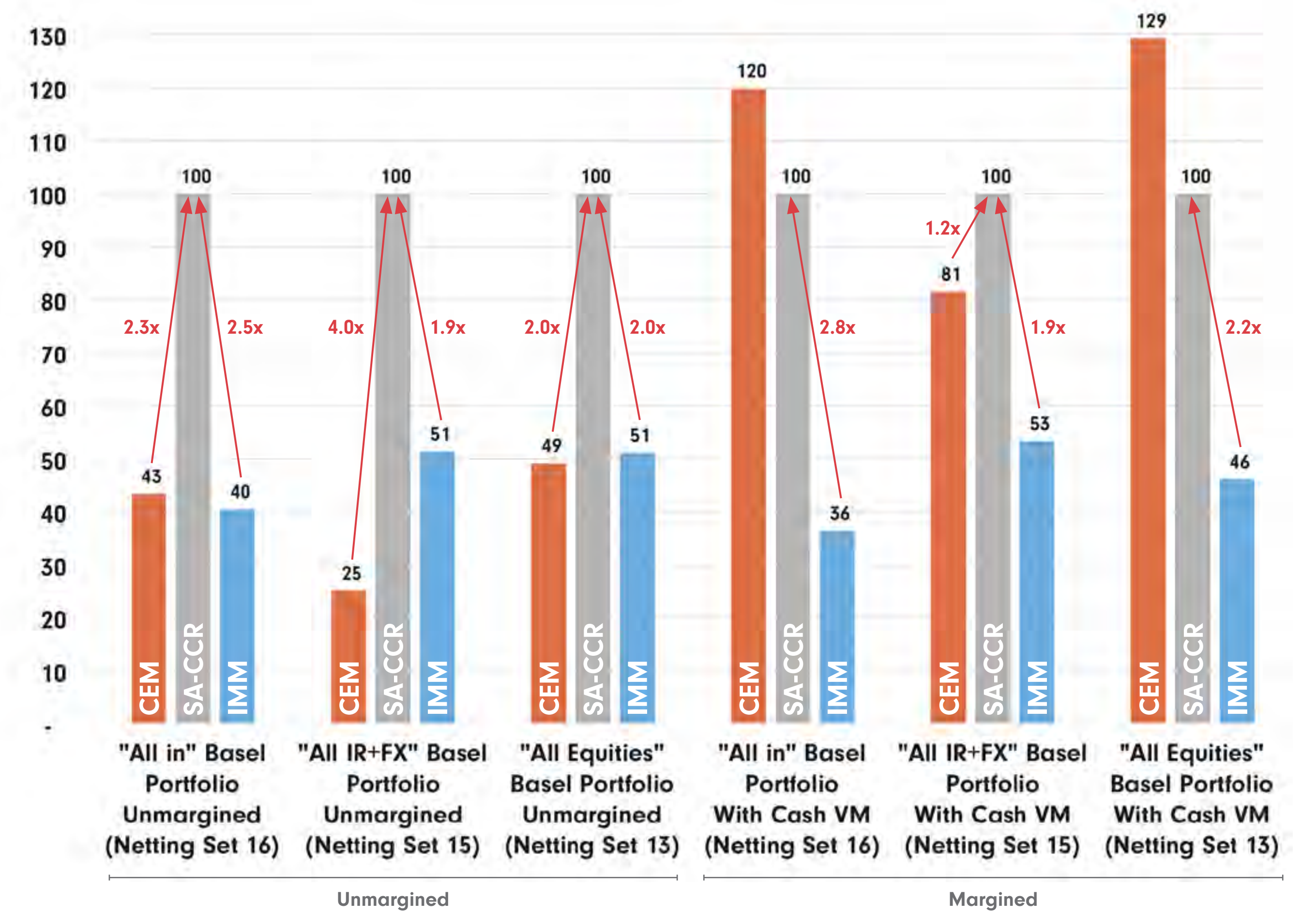
Furthermore, although the new framework is designed to better recognise the benefits of collateral, the fact that non-margined portfolios appear to be punitively hit by SA-CCR stands to adversely affect certain financial and non-financial end users relying on bespoke hedging products to manage financial risks. It is corporates, sovereigns and pension funds that will most often trade on a non-cleared, non-margined basis as a result of end-user exemptions, but they may now find themselves facing limited hedging availability at a much higher cost as a result.

What's driving the impact?

The steep increase in exposures and capital requirements identified by the study derive from a number of key factors in the design and calibration of SA-CCR.

Firstly, the alpha factor is set at 1.4 – the original value set by the Basel Committee for IMM in 2005. This calibration is based on studies dating back to 2003, and does not reflect the current market environment, particularly in light of larger portfolio diversification effects, and wider clearing and margining practices.

FIGURE 2: COMPARISON OF SA-CCR, CEM AND IMM EXPOSURES



In addition, the alpha factor of 1.4 was never designed to apply to a standardised methodology, but rather to account for model risk and severe market moves that could affect the use of an internal model to calculate exposures. If recalibrated accurately with a larger pool of counterparties and risk factors, ISDA analysis suggests the alpha value should fall to 1.01.

In addition to the punitive effects of the alpha factor, it can be observed that the degree of exposure reduction resulting from the exchange of initial margin is not sufficiently aligned with the actual level of risk mitigation provided.

In Figure 3, the interest rate and FX portfolio benefits from both cash variation margin and independent amount (initial margin). Having a negative mark to market, the RC of the portfolio is zero and the initial margin should offset the PFE in the SA-CCR calculation, which should result in significantly reduced exposure.

Equity: SA-CCR exposures would roughly 2x higher than exposures under CEM and IMM

The fact that the independent amount posted on the portfolio is larger than the PFE is reflected in the relatively low exposure resulting from IMM (while exposure under CEM is zero as a result of the negative mark to market), but the exposure calculated under SA-CCR on the same portfolio would be 10 times higher than under IMM.

This clearly shows that the risk-mitigating benefits of initial margin are inadequately captured by the current calibration of SA-CCR.

A number of other factors are also driving the disproportionate impact of SA-CCR:

- There is no recognition of diversification across hedging sets within asset classes, which is excessively conservative and risk insensitive, resulting in counterparty credit risk being overstated.
- In the FX asset class, the framework does not allow for netting of cash flows in each currency to a single net amount.
- Multiple credit support annexes (CSAs) in a single netting set are penalised, as SA-CCR requires banks to divide a netting set into sub-sets to align with the CSAs, thereby reducing netting.
- The framework's options delta calculation approach is operationally challenging, and unsuitable for negative interest rates, American and Bermudan options.

What can be done?

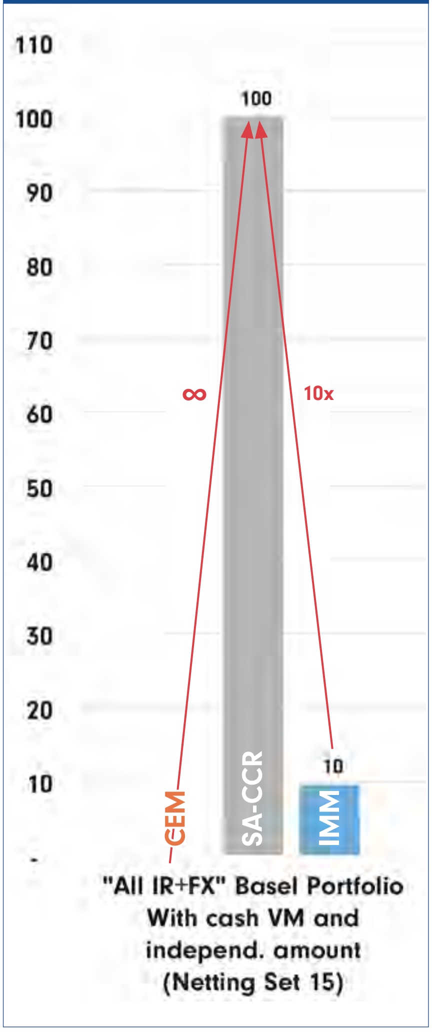
As there are multiple factors in the design and calibration of SA-CCR that could result in significantly increased capital requirements, there are various ways in which each factor could be addressed to reduce the impact. The PFE multiplier, for example, could be made more sensitive to collateral to ensure the benefits of initial margin are fully recognised, or the framework could be adjusted to allow for diversification across hedging sets and netting of cash flows in different currencies to a single net amount.

However, SA-CCR was finalised in 2014, and should already have been implemented by now, so substantive technical changes to the framework may not be practicable. In addition, if multiple tweaks are made to the calibration, the resulting improvements will inevitably be uneven across exposures. In solving one issue, further problems may be introduced.

In light of this, the simplest and most practical solution would be to address the conservative calibration of SA-CCR via the alpha factor. As highlighted by the QIS, an alpha factor of 1.4 is not only outdated, having been conservatively calibrated in 2005 on the basis of market conditions at that time, but was never designed for a standardised methodology. Applying a 40% increase to all exposures when SA-CCR is already highly conservatively designed and calibrated would have a detrimental impact on the availability and cost of financial hedges to end users.

Removing alpha from SA-CCR calculations would better align actual exposures and associated capital requirements, while retaining the risk-sensitive methodology and recognition of margin that lies at the heart of SA-CCR. The logic behind the alpha factor must be revisited in the context of SA-CCR, and must reflect current market conditions and higher levels of margining, clearing and counterparty credit risk capital.

FIGURE 3: THE IMPACT OF VARIATION MARGIN AND INDEPENDENT AMOUNT



Conclusion

The need to replace CEM and SM with a more up-to-date, risk-sensitive methodology is clear, and the Basel Committee's objectives in developing SA-CCR were fundamentally sound. However, the results of the QIS clearly show that implementing the framework as currently calibrated is likely to have far-reaching negative consequences.

Focusing solely on the alpha factor may appear to neglect some of the more nuanced SA-CCR issues. But if properly reconsidered and recalibrated, an adjustment to alpha could significantly improve the alignment between actual levels of exposures, risk and capital requirements resulting from SA-CCR, and result in a far more effective and truly risk-sensitive framework.

10 Questions with...

Bill De Leon

Bill De Leon, managing director, global head of portfolio risk management at PIMCO, discusses the biggest challenges for derivatives end users and how the derivatives markets have changed since the financial crisis

IQ: What are the main areas of focus for you in your role at PIMCO?

Bill De Leon (BDL): My focus is portfolio risk management, which encompasses ensuring that investments are consistent with the PIMCO themes, as well as counterparty and collateral management. The risk management team works with portfolio managers, credit, technology, middle office, analytics and other parts of the firm to partner and try to ensure we are achieving the best for each client.

IQ: For what reasons does PIMCO use derivatives, and how important are they in managing investments for clients?

BDL: PIMCO uses derivatives as a way to add returns to client portfolios where appropriate, gain or hedge exposures and as an alternative to cash investments when they offer better risk/reward or liquidity profiles. We view them as an additional arrow in the quiver; we do not use them arbitrarily. Interestingly, there are times where derivatives can offer better liquidity than cash investments.

IQ: What are the biggest challenges for derivatives users at this time?

BDL: The revised Markets in Financial Instruments Directive (MIFID II) reporting requirements, potential uncertainty from Brexit and lack of cross-border harmonisation are the biggest challenges for derivatives users at this time. MIFID II is the most worrisome as it is less than six months away and it not only affects European-based entities – it affects anyone trading with a European-based entity.

"MIFID II reporting requirements, potential uncertainty from Brexit and lack of cross-border harmonisation are the biggest challenges for derivatives users at this time"

IQ: You joined ISDA's board in 2010. How do you see ISDA's role in the derivatives markets?

BDL: To help educate regulators regarding the impact of current or proposed regulations to ensure the market continues to function safely and efficiently, as well as to have a place to get market participants to work together on industry wide solutions.

IQ: How has the Association changed since you joined the board?

BDL: ISDA has become more inclusive in its membership (less dealer-focused) and also more focused on regulatory impacts.

IQ: More broadly, how have the derivatives markets changed since the financial crisis?

BDL: The changes have been substantial since the crisis. The most dramatic is that most interest rate and credit default swaps have moved to clearing and become standardised structures (eg, big and small bang, market agreed coupon swaps) with much more electronic trading of those products. Some other changes include: virtually all trades are now documented, confirmed and collateralised, compression algorithms are run regularly and real-time reporting of trades.

IQ: What changes do you see in the years ahead?

BDL: More standardisation and migration of products to central counterparties (CCPs), especially as initial margin for non-cleared swaps becomes mandatory for all users. I expect non-deliverable forwards and FX to become centrally cleared, which will substantially reduce daily margin movements and settlement risks throughout the system.

IQ: What ISDA initiatives are most important from your perspective?

BDL: Safeness and soundness of CCPs, specifically having them put more skin in the game.

IQ: What attracted you to a career in finance?

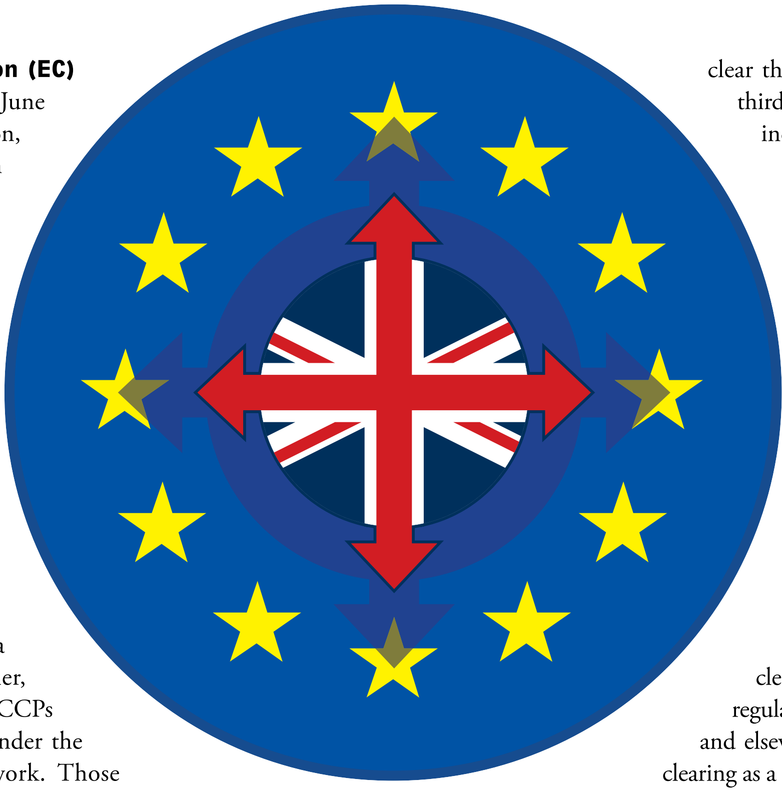
BDL: I took a finance class in college so I could learn about Wall Street terms. My professor got me an interview with AIG Financial Products for a summer internship, where I then went to work. It was there where I learned about swaps and derivatives and decided that I didn't want to become an engineer.

IQ: Tell us something interesting about yourself.

BDL: I love spending time with my family – my wife and two girls. Additionally, I love cars and racing. I get to combine family time with cars by playing Uber driver to sporting events for them on the weekends. IQ

Risk of Location

The European Commission has released a legislative proposal that could result in a location policy for certain third-country central counterparties that are of systemic importance to Europe. But a location policy creates cost, operational and risk issues, ISDA finds



15%-20%

Average initial margin increase following any relocation requirement for euro-denominated interest rate swaps

The European Commission (EC) dropped its bombshell on June 13. After months of speculation, and after mooting it as an option the month before, the EC confirmed a proposal that could require certain third-country central counterparties (CCPs) to relocate to the European Union (EU) if they are deemed to pose a significant systemic threat to Europe.

The proposal divides third-country CCPs into two main tiers, with the nuclear option of a relocation requirement as a third tier. Under the first tier, non-systemically important CCPs would be able to continue under the existing equivalence framework. Those second-tier CCPs deemed to be of systemic importance to Europe would have to comply with additional requirements – compliance with the relevant EU prudential and central bank requirements, and oversight and onsite inspections from the European Securities and Markets Authority (ESMA), for example.

However, ESMA and the relevant EU central bank could also decide that a third-country CCP poses a "substantial systemic significance" for the EU financial system, and recommend to the EC that the clearing house should not be recognised. Given the implications – European entities and their branches are not allowed to use a non-recognised clearing house, and it would also be classed as a non-qualifying CCP for the purposes of the EU Capital Requirements Regulation (CRR) – the CCP would almost certainly lose its European business unless it relocates to the EU and obtains authorisation to provide clearing services.

The proposal marks a big change from the existing regime, and would have a number of implications for EU firms that clear through systemically important third-country CCPs – which would include LCH after Brexit.

Growth of clearing

Central clearing volumes have increased significantly since the Group-of-20 (G-20) nations identified the clearing of standardised derivatives as a key commitment following the financial crisis. More than 70% of total interest rate derivatives notional outstanding is now cleared, compared with less than 20% prior to the crisis[1].

This shift is not solely due to clearing mandates put in place by regulators in the US, Europe, Japan and elsewhere. Dealers have embraced clearing as a means to manage counterparty risk, and because of the economic and operational efficiencies it provides.

Those benefits depend on economies of scale, which arise from the ability of globally active firms to clear contracts on a cross-border basis. The greater the participation at a CCP, the greater the potential to realise offsets and reduce collateral requirements. The ability to net all exposures to one CCP from instruments in the same asset class – known as multilateral netting – is risk reducing and cost-efficient for clearing members and clients.

The EC has stated there is a need for safeguards to support the financial and monetary policy responsibilities of EU and member-state institutions, particularly after Brexit. From that point, a substantial volume of cleared derivatives denominated in euros and other EU currencies might no longer be subject to the European Market Infrastructure Regulation (EMIR) or EU supervisory architecture.

In a letter sent to Valdis Dombrovskis, vice-president for the euro and social dialogue, financial stability, financial services and capital markets union on June 8[2], ISDA acknowledged the EC's concerns, but argued that EU and UK authorities (in the case of UK CCPs) should agree appropriate arrangements for oversight and cooperation with respect to UK CCPs.

Any requirement to locate a CCP within the EU comes with several economic and financial implications, the letter stated.

End users would experience higher costs associated with hedging commercial and treasury risk

Cost of splitting netting sets

A location policy could mean that certain derivatives are removed from the netting set at a large non-EU CCP, and are instead cleared at an EU CCP. The smaller netting sets at both CCPs would lead to greater costs, because of reduced netting and collateral efficiencies for clearing members.

According to a survey of 11 banks conducted by ISDA, a requirement for euro-denominated interest rate swaps to be cleared post-Brexit at an EU-based CCP would result in an overall initial margin increase of between 15% and 20%. However, some larger clearing members have reported a more significant impact on initial margin (up to 54%), or a more significant impact on client accounts than on house accounts. The increased margin also indicates increased risk caused by fragmentation.

The costs for clearing members associated with this additional initial margin will ultimately be passed on to clients, the ISDA letter states. End users would therefore experience higher costs associated with hedging commercial and treasury risk.

Capital costs

If a non-EU clearing house is unable to obtain recognition as a third-country CCP under EMIR, then it would be classed as a non-qualifying CCP under the EU CRR. That means groups subject to EU capital requirements would face a significant capital hike, with risk weights associated with derivatives exposures at non-QCCPs rising from 2% to 100%. That applies even if they clear through local subsidiaries incorporated in that third country. In addition, EU firms cannot act as clearing members of a non-EU CCP that is not recognised under EMIR – and this prohibition extends to their non-EU branches.

According to LCH, 72% of the activity at its SwapClear service is denominated in currencies other than the euro and 86% of total activity is conducted by firms located outside the EU. Should the EC decide not to recognise SwapClear after Brexit, European banks would be unable to access these liquid cleared pools.

Price volatility and execution costs

Any location policy that applies to certain contracts traded from a specified date in the future would artificially exacerbate differences in pricing (basis) that currently exist between CCPs. This basis often exists because different CCPs have diverse sets of participants, with varying objectives in their derivatives use. For example, pricing at a CCP used predominantly by large derivatives dealers would diverge from that of a CCP used primarily by end users, because dealer books tend to be flat while end users are often more directional. As firms build new portfolios at EU-based CCPs, liquidity in euro derivatives trading in particular could see dramatic fluctuations, exacerbating the risks associated with this basis.

If the location policy were retroactive, then firms would have to reprice existing trades that are moved to the EU CCP. If a significant number of counterparties seek to unwind positions at one CCP and reopen them at another at the same time, then the pricing basis will be severely exacerbated, causing unwanted volatility and stress in the market.

The impact of a basis between a non-EU and EU CCP will not only be felt by clearing members. Increased funding costs caused by this basis will ultimately be felt by clients, with consequences for financial and corporate investment and hedging decisions.

On top of the basis, bid/ask spreads might also widen because there would be less competition for contracts cleared at a smaller CCP.

Smaller, weaker CCPs

To the extent that a location policy has been considered in jurisdictions other than the EU, it has only been considered for small CCPs in much smaller local swap markets, and has either typically been abandoned as a policy option (in Canada and Australia, for example) or drastically scaled down (Japan).

In the Canadian case, a working group chaired by the Bank of Canada and including representatives from other Canadian regulatory agencies assessed the case for an onshore clearing requirement for Canadian counterparties from late 2010, but concluded against it in 2012. The working group recognised that global CCPs support liquidity and efficiency in the over-the-counter (OTC) derivatives market, making them more robust to financial shocks. This, in turn, supports the ability of derivatives users to prudently manage risk. The →

[1] http://isda.link/marketanalysisdec2016

[2] http://isda.link/ecresponse

If the EC was to impose a location requirement, it is not clear that global liquidity in euro-denominated cleared contracts would flow to the EU CCP

→ Canadian regulators view adherence to the Committee on Payments and Market Infrastructures (CPMI) and International Organization of Securities Commissions' (IOSCO) Principles for Financial Market Infrastructures as a sufficient safeguard[3].

The Australian clearing regime stipulates mandatory clearing of certain interest rate derivatives denominated in Australian dollar, US dollar, euro, sterling and yen, but permits counterparties to these trades to clear at local CCPs or in a number of overseas CCPs. The Australian Securities and Investments Commission cited a wish to minimise disruption to Australian participants in OTC derivatives markets, and referred to the adequacy of CPMI-IOSCO standards for foreign CCPs in this regard.

Where an onshore clearing requirement has been mandated in derivatives markets of a material size in other jurisdictions, the requirement has been limited to local market participants trading swaps (with an identified local nexus) with each other. This is the case in Japan. Even here, volumes are insignificant in comparison to the volume of euro-denominated derivatives in LCH, and the final regime represents a scaling back from the original counterparty scope of the requirement. For example, average daily cleared volume in yen-denominated swaps at the Japanese Securities Clearing Corporation over 10 trading days (May 18-May 31) was ¥3,888 billion (€34.9 billion). That compares to €670.8 billion traded in euro-denominated swaps at LCH on May 31.

If the EC was to impose a location requirement, it is not clear that global liquidity in euro-denominated cleared contracts would flow to the EU CCP. According to LCH, only 25% of its euro-denominated activity is cleared by EU firms, meaning the effect of such a move may simply be to create a smaller, balkanised and less liquid CCP in the EU, subject to higher margin and other costs, and with a great burden on its members in terms of underwriting risk. That would be the case at times of market calm, but also in market stress, where the remaining clearing members would have to manage the default of one or more of the CCP's members.

Concentration at one CCP

The introduction of a location policy would prohibit access to large CCPs located outside the EU that are deemed to be non-recognised. In some cases, only one EU CCP may be available to clear certain derivatives. This could create an increased concentration of risk at a systemically important CCP without a viable alternative to clear in the event of a period of market stress that leads to a clearing member default and/or CCP resolution scenario. At such a time, it would be important for market participants to have access to another CCP to fall back on (to 'port' positions).

Operational risk

No regulator in any jurisdiction has to date attempted to implement a location policy involving the movement of such a vast amount of derivatives-related risk from one CCP to another, let alone from a CCP in one political and legal jurisdiction to another ($84 trillion notional volume of euro-denominated swaps has been cleared at SwapClear so far in 2017, $21 trillion between EU counterparties). The consequences are unpredictable.

Curb access

In the event of a location policy being implemented, it will take a long time for many end users to be able to access clearing of euro-denominated OTC derivatives at an EU CCP. Effecting connectivity to a CCP is a time-consuming and labour-intensive process, requiring legal, operational, financial and risk management expertise. A bottleneck in clearing may prevent access to OTC derivatives hedging business, meaning important financial and commercial risks cannot be adequately managed – an obstacle to investment in the wider economy.

G-20 principles

The EU has implemented the 2009 G-20 commitments on derivatives reform, including a commitment avoid "fragmentation of markets, protectionism, and regulatory arbitrage".

This approach is reflected in the EU's advocacy in favour of the principles of deference and international comity in international forums – for instance, IOSCO and the Financial Stability Board (FSB). These principles have been made explicit in successive FSB progress reports on the implementation of OTC derivatives reforms.

An EU CCP location policy would run contrary to the deference principle, and would fragment markets. Fragmentation is harmful to the wider economy and society, as well as to financial markets.

ISDA believes it is appropriate for EU and non-EU regulators to agree arrangements ensuring that EU regulators have adequate oversight of risk managed at third-country CCPs that are relevant to the EU financial system and wider economy. However, a CCP location policy would result in higher margin costs that would feed through to European end users. IQ

[3] See http://www.bankofcanada.ca/2012/10/statement-by-canadian-authorities/

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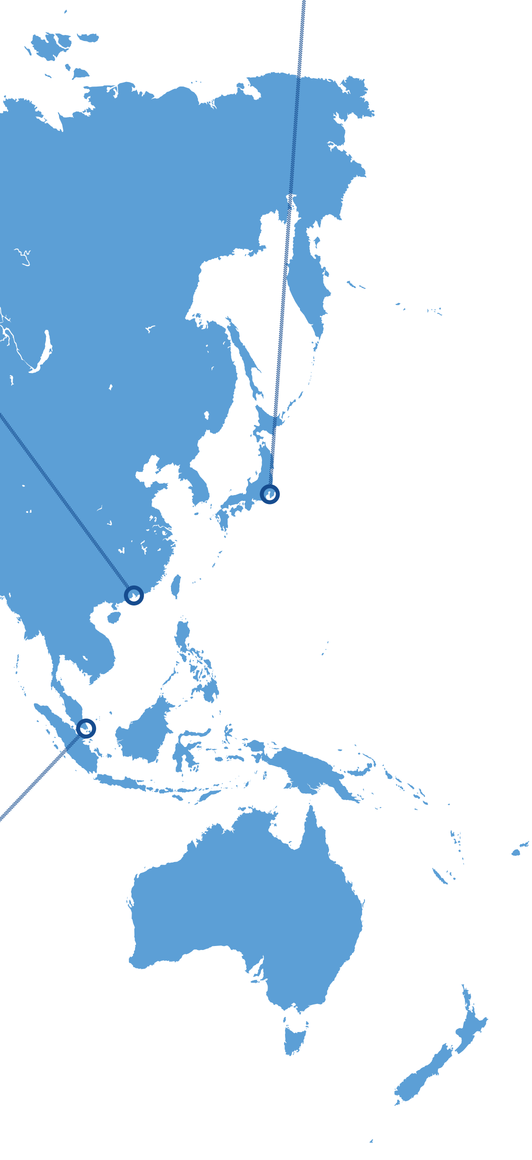

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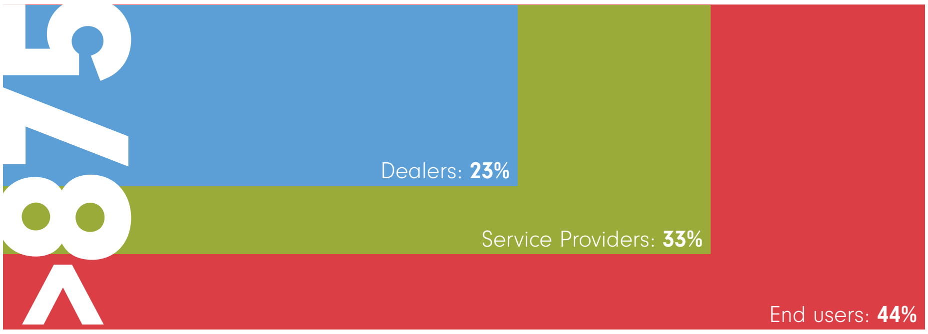

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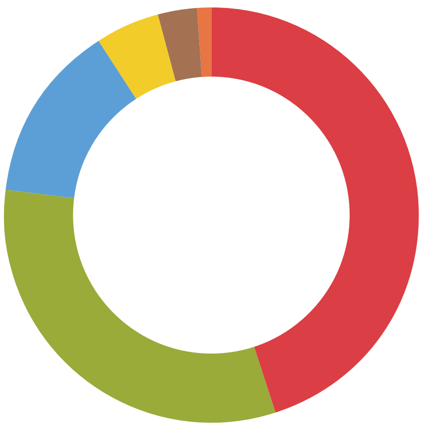

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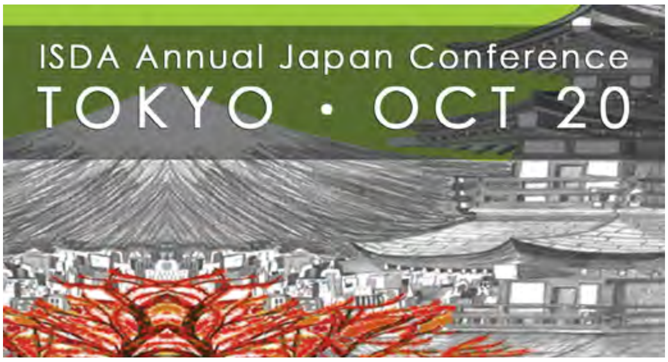

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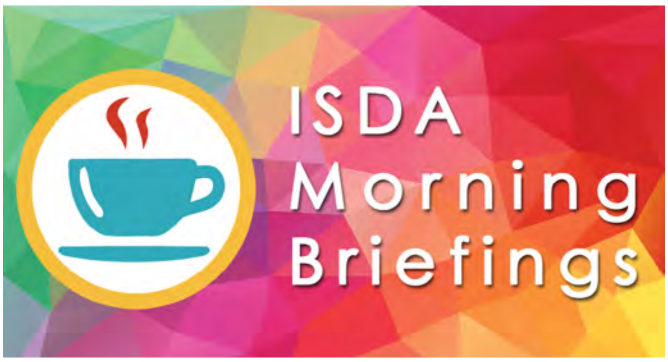

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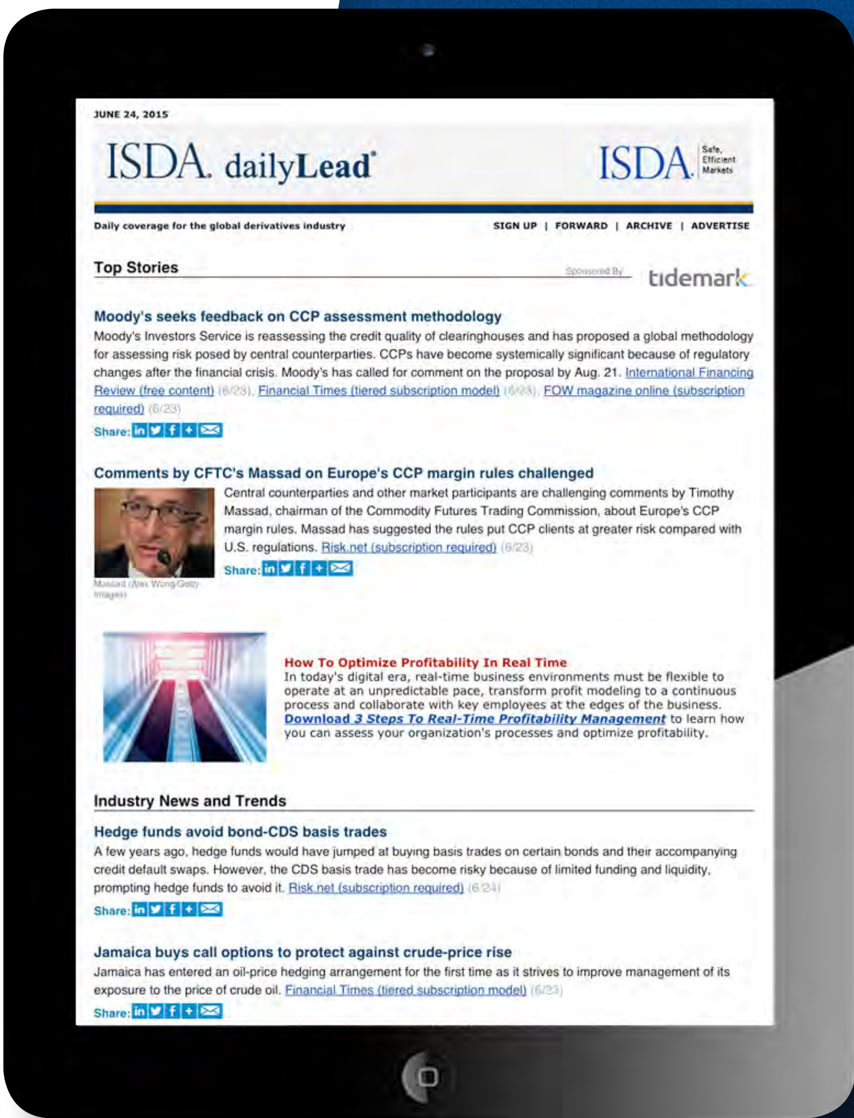
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Central counterparties and other market participants are challenging comments by Timothy Massad, chairman of the Commodity Futures Trading Commission, about Europe's CCP margin rules. Massad has suggested the rules put CCP clients at greater risk compared with U.S. regulations. Risk.net (subscription required) (6/23)

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