INTERVIEW
The CFTC's Caroline D. Pham on key priorities

REGULATION
The UK's planned approach for financial services

ESG
Banks prioritising climate risk scenario analysis

IQ
ISDA® Quarterly

Vol 8, Issue 3: December 2022 | www.isda.org

* TOWARDS TRANSPARENCY

Taking a digital approach to implementing derivatives reporting rule amendments will deliver more accurate data to regulators

ISDA® SwapsInfo

ISDA SwapsInfo brings greater transparency to the over-the-counter (OTC) derivatives markets. It transforms publicly available data on OTC derivatives trading volumes and exposures into information that is easy to chart, analyze and download. ISDA SwapsInfo covers interest rate derivatives (IRD) and credit derivatives markets.

Interest Rate Derivatives

Transaction Data

Daily, weekly and quarterly traded notional and trade count by product taxonomy.

Notional Outstanding

Notional of all IRD contracts outstanding on the reporting date.

Credit Derivatives

Transaction Data

Daily, weekly and quarterly traded notional and trade count by product taxonomy.

Market Risk Activity

Traded notional and trade count for single-name and index credit default swaps (CDS) that result in a change in market risk position.

Notional Outstanding

Gross and net notional outstanding and trade count for single-name and index CDS.

SwapsInfo.org

ISDA® Safe, Efficient Markets

Realising Potential

It's been 13 years since the Group-of-20 (G-20) leaders decided on a package of measures to reform derivatives markets. Of the measures agreed, the reporting of over-the-counter derivatives got most traction early on, but – while an improvement on what went before – the reporting framework never really lived up to its full potential. That's because of deviations in rule sets across jurisdictions, differences in data formats and discrepancies in how individual firms interpreted the various written regulatory texts.

Two key developments could change that. First, regulators across the globe are revising their reporting rules to incorporate internationally agreed data standards, starting with the US Commodity Futures Trading Commission (CFTC), which implemented its first batch of amendments on December 5. Regulators in Australia, Canada, the EU, Hong Kong, Japan, Singapore and the UK are set to follow suit in the coming years, making global rule sets more consistent.

Second, firms can now access an industry consensus interpretation of the CFTC revisions, available as human-readable and machine-executable code, which can be used as the basis for their implementation or as a benchmark to check their own understanding of the rules. As the first step of ISDA's Digital Regulatory Reporting (DRR) initiative, this should cut down on the discrepancies that can emerge when each firm has to independently interpret a written regulatory text. Version 1.0 of the DRR was launched in November, and will be extended over time to cover reporting rule amendments in other jurisdictions.

This issue of **IQ** explores the changes to regulatory reporting rules and looks at how ISDA's DRR can increase the efficiency of implementation and improve the accuracy and consistency of what is reported. Thirteen years after the G-20 Pittsburgh summit, regulators could soon be receiving the accurate, comprehensive data they need to better monitor potential sources of risk.

Nick Sawyer
Global Head of Communications & Strategy
ISDA

ISDA® Safe, Efficient Markets
International Swaps and Derivatives Association | www.isda.org
NEW YORK | WASHINGTON | LONDON | BRUSSELS | HONG KONG | SINGAPORE | TOKYO

Global Head of Communications & Strategy, **Nick Sawyer**, nsawyer@isda.org
Senior Director, Communications, **Joel Clark**, jclark@isda.org
Global Head of Public Policy, **Steven Kennedy**, skennedy@isda.org
Art Director, **Nick Palmer**, nick@sidelong.co.uk

IQ: ISDA Quarterly is an official publication of ISDA. Statements of fact and opinion expressed are not intended as endorsements.
Copyright 2022 by ISDA with all rights reserved. Published December 2022

CONTENTS

REGULARS

PAGE 22

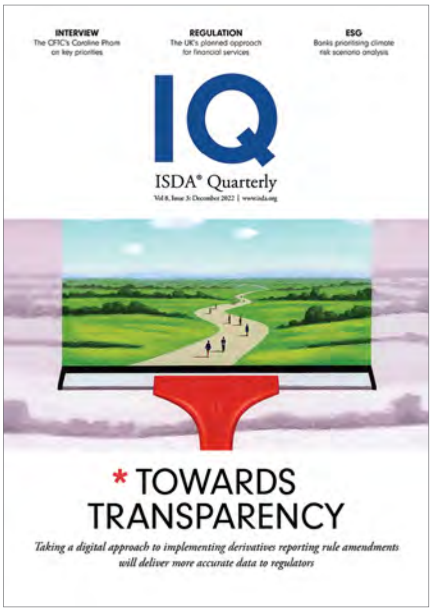
PAGE 28

ALSO IN THIS ISSUE

Volume 8, Issue 3: December 2022

THE COVER PACKAGE

TOWARDS TRANSPARENCY



PAGE 18

"It is in the interests of reporting entities to rationalise processes and costs associated with data compilation and submission. It is also important for market participants to ensure they have high-quality data that is consistent, so they can form a more precise view of the risks faced"

Merion Anggerek, Harry Lee, Monetary Authority of Singapore

An Unpredictable Year

*After a volatile and unpredictable 2022, **Scott O'Malia** considers the issues that will likely be top of the agenda in 2023*

A single word can be used to sum up 2022: unpredictability. From the war in Ukraine to the meltdown in the crypto sector, this year has seen a succession of unanticipated market and geopolitical events. Given the uncertainty and volatility of the past 12 months, it's perhaps unwise to make too many predictions about 2023, but there are several key issues we think will continue to be a priority: the treatment of non-bank financial intermediation (NBFI), further improving transparency and the ongoing development of sustainable finance.

Regulators globally have been looking at the impact of NBFI on financial stability since the March 2020 'dash for cash', amid concern that it has the potential to amplify shocks, creating wider price volatility and liquidity stresses and disrupting the ability of markets to function. Recent events like the sharp rise in UK gilt yields and subsequent intervention by the Bank of England in September have further underscored the importance of this issue.

"A single word can be used to sum up 2022: unpredictability"

In response, regulators have begun a programme of work coordinated by the Financial Stability Board to understand and address potential vulnerabilities in NBFI, covering the use of leverage, liquidity readiness, transparency and margining practices. We expect this topic to be a core focus in 2023.

ISDA can potentially feed into this work in several areas by providing analysis on margin models, procyclicality and capital treatment, as well as developing industry solutions on collateral operations and regulatory reporting and transparency.

The latter issue has been a big focus for ISDA for some time, and we recently launched our Digital Regulatory Reporting (DRR) initiative to cover revisions to the US Commodity Futures Trading Commission's (CFTC) swap data reporting rules, the first batch of which come into effect on December 5.

The DRR is intended to improve the accuracy and consistency of what is reported to regulators by giving firms access to a collective interpretation of the CFTC amendments developed by an industry working group. Using the Common Domain Model, this mutualised interpretation is available as human-readable and machine-executable code that firms can either use as the basis of their implementation or to check their own understanding of the rules is in line with the industry consensus.

Other regulators are set to follow the CFTC's lead, meaning this will remain a key priority in 2023 and 2024. ISDA is working to extend the DRR in response, increasing the efficiency of implementation and ensuring regulators are better able to monitor potential sources of risk.

Another area of focus in 2023 will be the continuing development of sustainable finance. Following the recent COP 27 climate summit, there is growing recognition that efforts to eliminate greenhouse gas emissions need to accelerate, but this will require an estimated $110 trillion in capital by 2050 to fund the necessary sustainability projects, technology and infrastructure.

ISDA has focused on supporting the transition by developing robust legal and risk management standards to ensure markets linked to environmental, social and governance function safely and efficiently. For example, we've published several papers exploring the key legal and regulatory issues relating to the voluntary carbon market and we will shortly launch the 2022 ISDA Verified Carbon Credit Transactions Definitions, together with template confirmations for spot, forward and options contracts.

In addition, we have published several whitepapers to support the development of standards for sustainability-linked derivatives (SLDs). We're now exploring whether to draft standardised terms for documenting SLDs, which will bring greater harmonisation and efficiency to this nascent product. We're also looking closely at the capital treatment of carbon credits and progress by banks to develop scenario analysis to assess the impact of climate risk on their trading books.

These are just three of the many topics that will likely dominate in 2023, but there are plenty of others. In the digital assets space, for instance, we remain committed to developing definitions for certain over-the-counter crypto derivatives, as well as work on netting, collateral and bankruptcy protections. While the issues may change year to year, ISDA's focus will be the same as it's always been – to develop the legal documentation, standards and mutualised solutions needed for derivatives markets to function safely and efficiently.

Scott O'Malia
ISDA Chief Executive Officer

Action Needed to Address Non-bank Leverage, Says BoE's Breeden

Banks, non-banks, regulators and financial stability authorities have a role to play in reducing the risks arising from poorly managed leverage among non-bank financial institutions, according to Sarah Breeden, executive director, financial stability and risk, and a member of the Financial Policy Committee at the Bank of England.

Speaking at an event hosted by ISDA and the Alternative Investment Management Association in London on November 7, Breeden set out how recent volatility in the UK gilt market following the government's mini budget on September 23 was the latest example of poorly managed leverage outside the banking sector. Other recent instances include the failure of Archegos Capital Management in 2021 and the so-called 'dash for cash' in March 2020.

"It's clear that leverage is a key function provided by the financial system in support of a thriving and productive economy. But it comes with inherent risks that need to be managed. A common factor across all the uses of leverage is that it can increase the exposure of the leverage taker to underlying risk factors – whether that be house prices, earnings, interest rates, currencies or asset prices. It follows therefore that leverage can amplify shocks to each of these risk factors," said Breeden.

Systemic risk can arise when excessive or poorly managed leverage increases the potential for forced asset sales during periods of stress, said Breeden. Margin requirements for derivatives have been an important part of the post-crisis regulatory reforms, but if market participants are not prepared for increased margin calls in volatile markets, then their efforts to raise cash can lead to a drain on liquidity.

"What can seem rational behaviour for an individual firm has the potential to cause negative second-round effects when aggregated across the market as a whole. For example, low initial margins and haircuts in normal times can result in significant margin increases when a stress hits. If these occur market-wide, it can lead to a reduction in market activity, damage market functioning and potentially amplify market moves at a time of stress," Breeden explained.

In response, regulators have begun a program of work coordinated by the Financial Stability Board to understand and address potential vulnerabilities in non-bank financial intermediation. For example, a report on margin practices published in September by the Basel Committee, the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions identified six possible areas where further work is needed, including enhancing the liquidity readiness of market participants.

While regulators are looking at a variety of policy options, Breeden emphasised that non-bank financial institutions themselves must ensure they can properly manage the liquidity consequences of their risk exposures. That includes ensuring firm stress testing and resilience is set with reference to the financial system and market dynamics. Banks also have an important role to play in requiring enhanced transparency from their counterparties, she added.

"As seen with Archegos, imperfect information on overall positions leads to inadequate risk management. So, a first step is for lenders to require greater transparency of hidden leverage taken by their counterparties. Prime brokers should have access to data on a fund's overall leverage, not just the portion to which they have contributed, just as banks ask household borrowers about their student loan repayments and credit card debts when issuing a mortgage," said Breeden.

In addition, banks need to improve their stress testing and give greater focus to the potential for wrong-way risk, where the value of margin held may decline following the default of a counterparty.

> "What can seem rational behaviour for an individual firm has the potential to cause negative second-round effects when aggregated across the market as a whole"
>
> **Sarah Breeden, Bank of England**

"Bank supervisors can play a role in limiting the risks from leverage in the non-bank system to the core financial system through strengthening of risk management practices of dealer banks and prime brokers. My supervisory colleagues are indeed taking steps to ensure this," Breeden said.

Further work is also needed in the global regulatory community to improve transparency and data availability and consider market-wide measures to ensure excessive leverage is better controlled in the future, Breeden added.

"Transparency is an important first step. That enables the necessary next step of ensuring non-banks' positions and interlinkages with the rest of the financial system can be comprehensively stress tested and understood in a system-wide manner. Non-banks themselves can use that understanding to increase their resilience and liquidity preparedness," she said. IQ

ISDA Launches Digital Regulatory Reporting for CFTC Rewrite

"The DRR represents a big step forward in bringing greater efficiency to regulatory reporting by establishing a collaborative, peer-reviewed interpretation of the rules"
Scott O'Malia, ISDA

ISDA has launched version 1.0 of the Digital Regulatory Reporting (DRR) model and opened access to ISDA members and non-members to support compliance with the US Commodity Futures Trading Commission's (CFTC) amended swap data reporting rules.

The CFTC is the first regulator to amend its swap data reporting framework to incorporate new international data standards, with the initial round of changes taking effect on December 5. The DRR, which is free to access, provides market participants with a mutualised industry interpretation of the rules in human-readable, machine-executable code that firms can use as the basis for implementation or to check their own interpretation of the rules is consistent with the peer-reviewed industry version.

The DRR has been developed in close collaboration with a diverse range of market participants and stakeholders, including buy- and sell-side firms, trade repositories and technology providers. The initiative leverages the Common Domain Model (CDM) to transform a mutualised interpretation of the CFTC rule amendments into code, thereby reducing the inconsistencies that can emerge when each firm independently implements its own interpretation of the rules.

"We're delighted to make DRR 1.0 freely available to all market participants. The DRR represents a big step forward in bringing greater efficiency to regulatory reporting by establishing a collaborative, peer-reviewed interpretation of the rules that firms can either use as the foundation of their build or to compare their reading of the rules with the industry view. This will result in better quality, more accurate and more consistent data reported to regulators," says Scott O'Malia, chief executive of ISDA.

The launch of DRR 1.0 follows the successful implementation and testing of the initiative by BNP Paribas, which used the DRR in a real-world, production-level environment to submit data required under the revised CFTC rules to the Depository Trust & Clearing Corporation (DTCC).

"We're pleased to be the first to use the DRR in a production-level environment with real data, enabling us to automatically generate a report for submission to the DTCC's CFTC swap data repository testing simulator. We're now in a position to implement the DRR for the CFTC rewrite on December 5, and subsequent changes to reporting rules in Europe and Asia-Pacific," says Harry McAllister, information architect at BNP Paribas.

As well as the DRR for the CFTC rules, the ISDA industry group is working to digitise revised reporting requirements under the European Market Infrastructure Regulation, expected to come into force in April 2024. Additional reporting rule sets will be added over time as amendments are made in other jurisdictions, including those in Asia-Pacific. IQ

For more on the DRR and reporting rule changes, see pages 12-16

ISDA, ICMA and ISLA Appoint FINOS For CDM Repository

ISDA, the International Capital Market Association (ICMA) and the International Securities Lending Association (ISLA) have appointed FINOS to provide a repository, with a view to fostering the growth of an open-source community for the Common Domain Model (CDM).

In May 2022, the three associations invited potential host organisations to provide a service proposal to meet the requirements of providing a repository for the open-source CDM, which establishes a single, common digital representation of trade events and actions across the lifecycle of financial products.

The requirements included maintenance of the CDM code, facilitating the growth of a community to contribute to the development of the CDM, allowing for governance of the contributions to be overseen by the associations, and assisting in building awareness of the CDM. In September, it was announced that FINOS had been selected.

"We are thrilled to have been selected to host the CDM as a FINOS open-standard project and grow the open-source community around it. An open, standard representation of transactions and events will bring many benefits to the industry and will significantly advance the much-needed data and process interoperability across the business lifecycle," says Jane Gavronsky, chief technology officer of FINOS.

The appointment of FINOS will advance the development and increase the speed of adoption and distribution of the CDM.

"Having a completely transparent, open-source CDM maintained by FINOS and supported by three trade associations will help accelerate adoption, bringing greater consistency across derivatives, repo and securities lending. It will also avoid fragmentation of standards and duplication of effort across the industry," says Scott O'Malia, chief executive of ISDA. IQ

ISDA Develops Legal Standards for Voluntary Carbon Credits

ISDA has finalised new industry documentation for the trading of voluntary carbon credits, as part of a broad effort to support the transition to a green economy by developing robust legal and risk management standards to ensure markets related to environmental, social and governance (ESG) activities function safely and efficiently.

The 2022 ISDA Verified Carbon Credit Transactions Definitions and related template confirmations for spot, forward and options contracts have been drafted with the flexibility to support trading of carbon credits across jurisdictions and registries (see pages 22-24). Due for launch as **IQ** was going to press, the new standards will be available digitally on ISDA's MyLibrary electronic documentation platform, which will allow for seamless updates as market practices evolve in future.

"Voluntary carbon markets are seen by many as a vital means of allowing companies to act on emissions they can't otherwise reduce, and to channel financing to green infrastructure and technologies. The development of new definitions and confirmation templates will bring greater standardisation to this important market," says Scott O'Malia, ISDA chief executive.

> "Voluntary carbon markets are seen by many as a vital means of allowing companies to act on emissions they can't otherwise reduce, and to channel financing to green infrastructure and technologies"
>
> **Scott O'Malia, ISDA**

The definitions follow publication of an ISDA whitepaper in December 2021 that explored the key legal issues associated with the voluntary carbon market and recommended steps to create greater legal certainty, which included the development of standard documentation.

Finalisation of the definitions coincides with other industry efforts to scale the voluntary carbon market. For example, the Integrity Council for the Voluntary Carbon Market, an independent governance body for voluntary carbon credits, published a proposed set of core carbon principles in July, aimed at setting a global benchmark for high-integrity carbon credits that have a verifiable impact on climate change.

"Initiatives like these are critical in the quest to minimise greenwashing and ensure carbon credits enable genuine, verifiable offsetting projects. It's also important we develop a robust legal and regulatory framework, so market participants have confidence to use the voluntary carbon market to meet their carbon reduction targets," said O'Malia, speaking at ISDA's ESG Forum in London on November 21.

In addition to voluntary carbon markets, ISDA has worked to bring greater standardisation to the nascent sustainability-linked derivatives (SLD) market. These products embed a sustainability-linked cashflow in a derivatives structure and use key performance indicators (KPIs) to monitor compliance with ESG targets, with incentives to encourage parties to meet their sustainability objectives.

ISDA last year published guidelines on drafting KPIs to help establish best practice and common principles, and has since circulated a series of whitepapers that explore key regulatory issues for SLDs in the EU, UK, US, Hong Kong and Japan. This was followed by the results of a survey on November 21, which reveal how firms are currently documenting SLD transactions and identifies areas where standardisation would be beneficial.

"Based on the survey, we will now move forward with creating a set of standardised key terms and clauses that are used to document SLD transactions. These will be available from the ISDA Clause Library so members can pick which terms or clauses best suit their objectives when drafting their SLDs. This will be an important step in improving the efficiency of this market and allowing it to reach its potential," said O'Malia.

In addition to drafting legal documentation, ISDA has also explored the risk and capital implications of ESG and climate change. In October, ISDA published the results of a survey in conjunction with EY that looked at the development of market risk management practices to address climate risks.

The survey of 18 banks found that climate risk scenario analysis for trading book assets is at a relatively early stage, but most banks have prioritised this as a key area of focus (see pages 32-34). Some scenarios have already been developed by the regulatory community, but more work is needed to make sure the scenarios adequately capture climate-related financial risk. The survey also identified challenges in selecting and calibrating the parameters that should be used, as well as a lack of availability of quality data.

"It's still early days and there is little consensus on the methodology for identifying and defining climate risk shocks and mapping those shocks to market risk factors. There's also a need for consistent, granular and reliable data to support robust scenario analysis – banks have indicated greater standardisation of data would be a welcome step," said O'Malia. IQ

FURTHER READING ON ISDA'S CLIMATE-RELATED WORK

- *Legal Implications of Voluntary Carbon Credits*, December 2021: bit.ly/3Uf9zuV
- *Regulatory Framework for Sustainability-linked Derivatives: Hong Kong Analysis*, September 2022: bit.ly/3isW50r
- *Climate Risk Scenario Analysis for the Trading Book*, October 2022: bit.ly/3gCvGg6
- *Regulatory Framework for Sustainability-linked Derivatives: Japan Analysis*, November 2022: bit.ly/3UiGopZ
- *The Way Forward For Sustainability-linked Derivatives*, November 2022: bit.ly/3ip9LJY
- *The Legal Nature of Voluntary Carbon Credits: France, Japan and Singapore*, November 2022: bit.ly/3FfBfeb

ISDA Passes 1,000 Member Milestone, Scoops Regulation Asia Award

Membership of ISDA has exceeded 1,000 firms for the first time in its history, reflecting strong demand across the globe for ISDA's suite of industry products, services, solutions, documentation and advocacy. ISDA has also been recognised in the Regulation Asia Awards for Excellence 2022 for its contribution to regulatory reforms.

ISDA's members span 79 countries and comprise institutions from across the derivatives market, including banks, asset managers, insurance companies, government and supranational entities, corporations, market infrastructure, vendors and law firms.

"Hitting the 1,000-member landmark shows there continues to be very strong support for ISDA's mission of fostering safe and efficient derivatives markets. ISDA was built on a strong foundation of developing legal documentation and legal opinions and has kept a constant focus on providing value to the membership and the derivatives community as a whole. This has benefitted member institutions from all corners of the derivatives market, both in developed and emerging and developing jurisdictions," says Eric Litvack, chairman of ISDA.

> "ISDA was built on a strong foundation of developing legal documentation and legal opinions and has kept a constant focus on providing value to the membership and the derivatives community as a whole"
>
> **Eric Litvack, ISDA**

"This is a big milestone for ISDA and reflects the work we're doing on many fronts to provide value to our membership. As well as providing documentation, definitions and legal opinions that provide critical clarity to derivatives counterparties on their rights and obligations following a default, we've expanded our services to provide a variety of industry solutions, including the ISDA Standard Initial Margin Model, ISDA Create, digital regulatory reporting and benchmarking for standardised approach capital models. We'll continue to serve our members by developing services and solutions that create efficiency and reduce costs," says Scott O'Malia, chief executive of ISDA.

In November, ISDA was awarded the outstanding contribution to regulatory reforms gong at the Regulation Asia Awards for Excellence 2022, recognising its leadership in developing mutualised, cost-effective solutions to support regulatory compliance, as well as its work to promote safe and efficient markets.

Regulation Asia specifically recognised ISDA's work to support LIBOR transition, regulatory initial margin requirements, digital regulatory reporting and the extensive work that led to the recognition of close-out netting in Chinese law this year. IQ

ISDA Teams Up with Imperial College Business School for Executive Education

ISDA has joined forces with Imperial College Business School to deliver targeted executive education programmes to ISDA members.

The programmes are designed to help executives at all levels develop new expertise and leadership skills in topics such as risk management, digital transformation and sustainability, and are led by Imperial's faculty of academics and senior industry practitioners. Members can choose to learn virtually or at Imperial's campus in London.

"We're delighted to announce this collaboration with Imperial College Business School. Derivatives markets are changing rapidly, and use of new technologies and the move towards net zero are transforming how market participants operate. These targeted executive education programmes will equip attendees with the skills and expertise to be at the leading edge of this change, enabling them to help their organisations navigate the evolving landscape safely and efficiently," says Scott O'Malia, chief executive of ISDA.

"We are incredibly excited to be working with ISDA to continue to attract the brightest minds from around the globe to our executive education programmes. Through this collaboration, ISDA members will have the opportunity to apply the expertise of some of the world's brightest minds to their work challenges and earn a certificate from Europe's only university at the intersection of science, technology and business. We look forward to welcoming ISDA members to the Imperial community," says David Brown, director of executive education at Imperial College Business School.

ISDA will continue to run its own training courses on legal and policy issues. IQ

More information is available here: bit.ly/3OKMEFX

THE COVER PACKAGE

Towards Transparency

Taking a digital approach to implementing derivatives reporting rule amendments will deliver more accurate data to regulators

The targeted revisions to the US Commodity Futures Trading Commission's (CFTC) over-the-counter swaps reporting requirements that took effect on December 5 represent a critical milestone, not just for domestic firms but also for the global derivatives market.

By adopting international data standards, the CFTC has taken an important step towards greater global consistency of reporting rules that is set to be replicated in other jurisdictions in the years to come. This should ensure that what is reported in one jurisdiction is comparable to what is reported in another, giving regulators the data to develop a more thorough picture of derivatives market activity than has been possible in the past.

Essential as this is, however, it's not enough to deliver full transparency – market participants also need to implement the rules in a uniform way, because even minor deviations in interpretation can lead to inconsistencies in reported data.

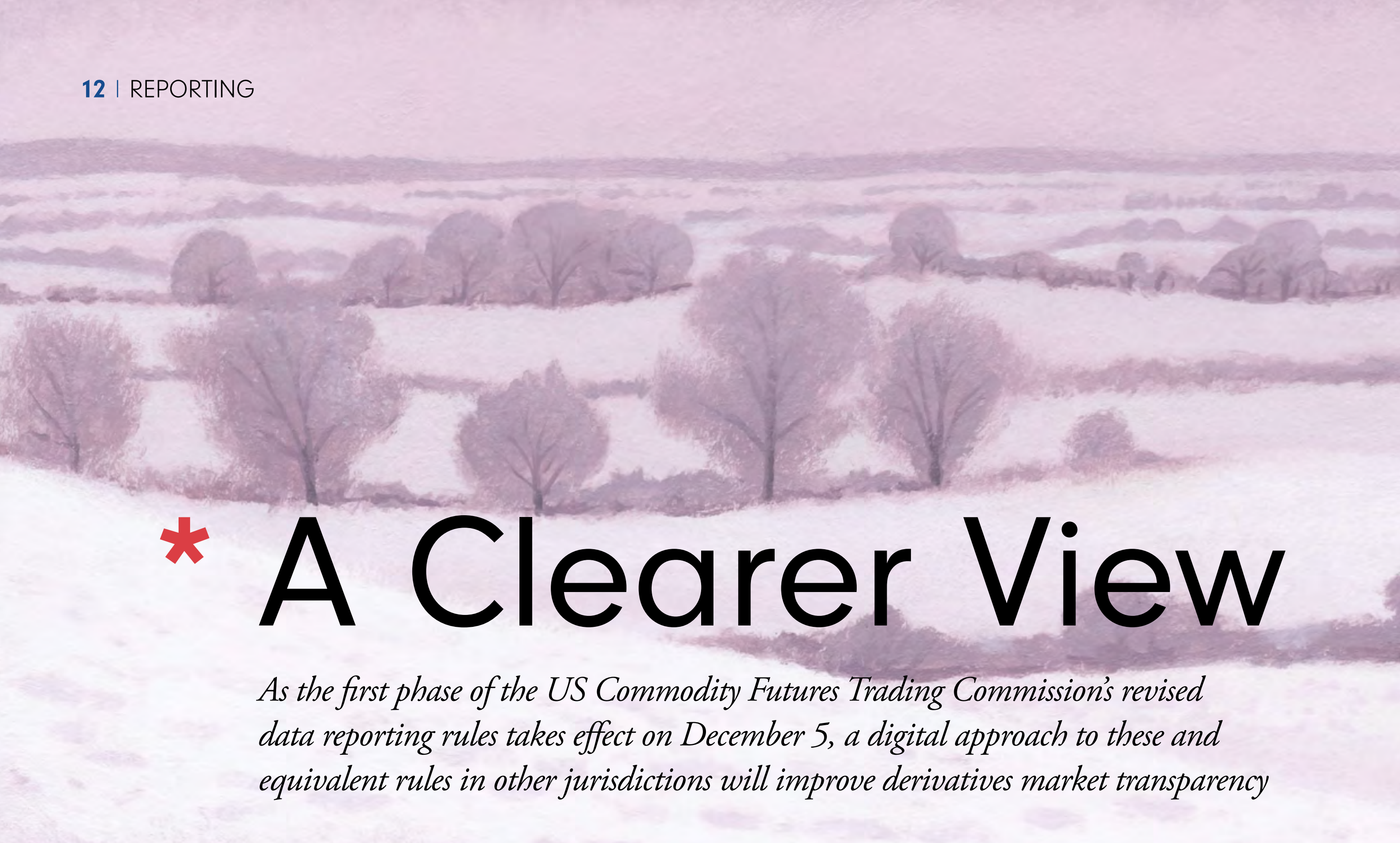
This is where ISDA's Digital Regulatory Reporting (DRR) initiative can help. As part of this endeavour, an ISDA working group developed a collective interpretation of the CFTC rules and the Common Domain Model was used to express that consensus view as human-readable, machine-executable code. That code was made freely available in November, enabling firms to either use it as the basis of their implementation or cross-check their own interpretation is consistent with the industry view (see pages 12-16).

As other jurisdictions introduce their own reporting rule changes, the DRR will be extended accordingly. The work to tailor the DRR for the EU has already begun, as rule changes will be implemented under the European Market Infrastructure Regulation Refit on April 29, 2024. Regulators in Asia-Pacific are also expected to implement their revised reporting rules in 2024, including the Monetary Authority of Singapore, which is targeting the second half of that year (see pages 18-21).

The implementation of this new batch of reporting rules will be an industry priority over the next few years. Thanks to the DRR, market participants will be able to implement the rules consistently and efficiently, paving the way towards more transparent markets. IQ

"As the technical implementation of the industry consensus on reporting, the DRR means that when we do report, if there are issues of interpretation, we can be confident we're addressing this from a defensible position"

Harry McAllister, BNP Paribas



A Clearer View

As the first phase of the US Commodity Futures Trading Commission's revised data reporting rules takes effect on December 5, a digital approach to these and equivalent rules in other jurisdictions will improve derivatives market transparency

In May 2012, Gary Gensler, then chairman of the US Commodity Futures Trading Commission (CFTC), delivered a keynote address at ISDA's 27th Annual General Meeting (AGM) in Chicago in which he described the global swaps market as "the largest dark pool in our financial markets". Significant effort has gone into developing and rolling out trade reporting requirements for over-the-counter (OTC) derivatives since then, but divergences in how the rules were implemented and applied have restricted the ability of regulators to get a clear, unambiguous picture of derivatives activity.

That's about to change. Planned revisions of the rules by regulators in the US, Canada, EU and Asia-Pacific to include global data standards alongside a digital approach to reporting have the potential to meaningfully improve transparency for regulators, while also creating efficiencies for financial institutions.

Ten years after originally implementing its swap data reporting framework in 2012, the CFTC is the first regulator to introduce the global standards into its rules, with the initial phase taking effect on December 5.

"We designed the DRR with the objective that it should be a real game changer that avoids firms having to devote resources to interpreting requirements and building their own reporting logic. This will not only improve efficiency and reduce the costs of reporting, but it will also result in better quality data that is more accurate and consistent"

Eric Litvack, ISDA

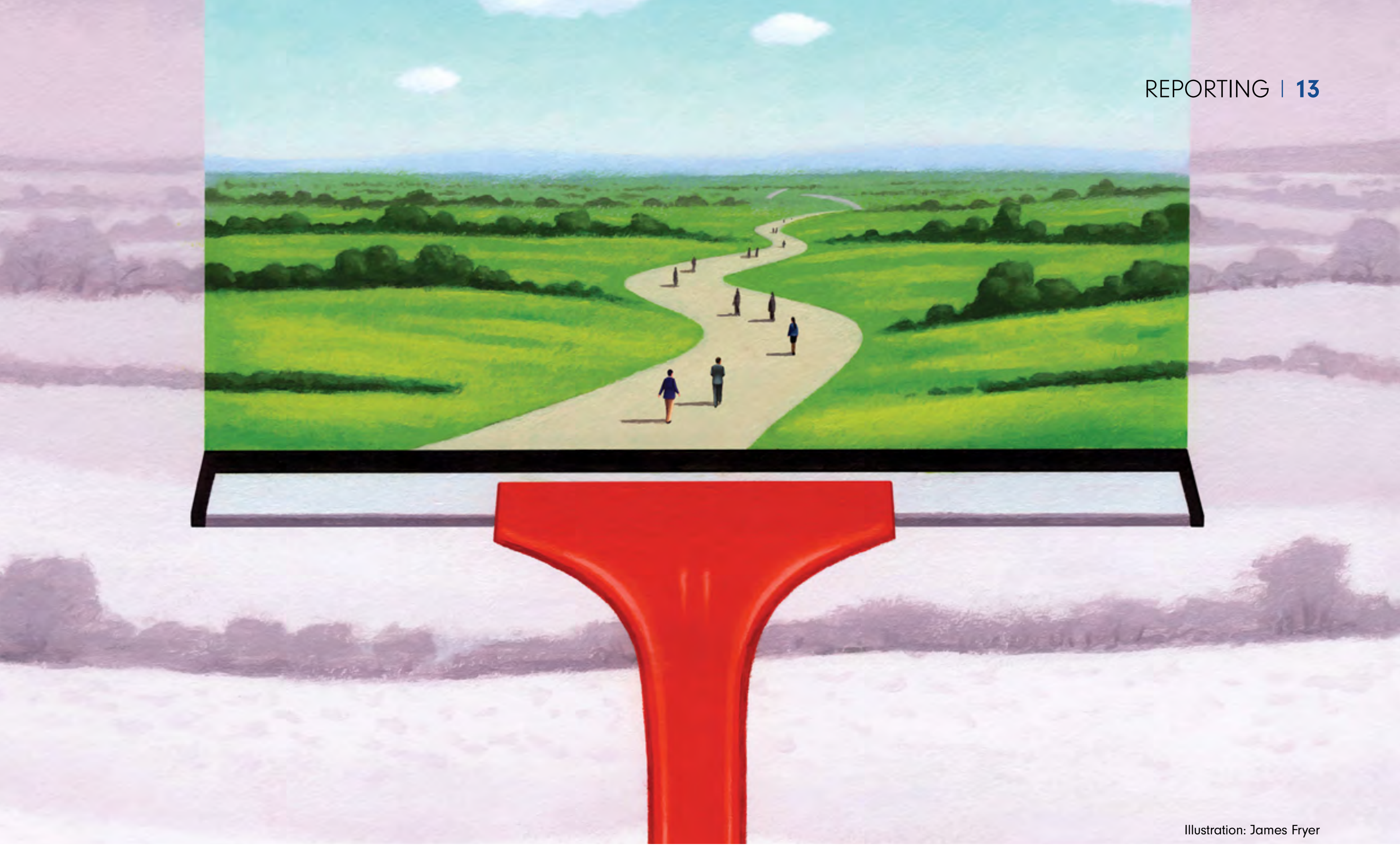


Illustration: James Fryer

For the first time, firms will have access to an industry-agreed digital version of those amendments – part of ISDA's Digital Regulatory Reporting (DRR) initiative – which they can use as the basis for implementation or to benchmark their own rollout, resulting in greater efficiency and more consistent data than has ever previously been possible.

"The reporting rule changes that start with the CFTC and will continue in other countries are a critical step in successfully completing the post-crisis derivatives reforms. We designed the DRR with the objective that it should be a real game changer that avoids firms having to devote resources to interpreting requirements and building their own reporting logic. This will not only improve efficiency and reduce the costs of reporting, but it will also result in better quality data that is more accurate and consistent, helping regulators to monitor potential sources of risk," says Eric Litvack, chairman of ISDA.

Data standards

The concept of derivatives trade reporting envisioned by the Group-of-20 (G-20) nations in 2009 was straightforward: market participants would be required to report the key details of their derivatives trades to designated repositories, which would maintain central records, allowing regulators to monitor emerging risks across the market. Although most countries fulfilled the commitment and implemented reporting rules, there was a lack of consistency in the way rules were drafted, with each jurisdiction developing its own version of the requirements.

This inconsistency created operational challenges for market participants – and has resulted in jurisdictional differences in what is reported and the format in which the data is submitted.

"In implementing the G-20 commitment, each country drafted trade reporting rules independently, which inevitably led to different requirements and different interpretations of how derivatives should be reported. A single trade can be represented in a variety of ways and until all aspects of a trade are required to be reported in a standard manner around the world, existing reporting solutions will be unable to satisfy the original G-20 goal of transparency in this global market," says Kate Delp, general manager of the Depository Trust & Clearing Corporation's (DTCC) US-based trade repository, DTCC Data Repository (U.S.) LLC.

Policymakers have long recognised the need to address these challenges in pursuit of more effective transparency. In 2014, the Financial Stability Board (FSB) published a feasibility study on approaches to aggregating OTC derivatives data. The FSB subsequently tasked the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions to draw up a globally harmonised set of data standards, including the unique transaction identifier (UTI), the unique product identifier (UPI) and critical data elements (CDEs) that would be maintained by the Regulatory Oversight Committee.

The UTI, UPI and CDEs, which span more than 100 data fields and specify a common definition and format for the reporting of trade information, are intended to form the basis of a more harmonised global trade reporting framework. They range from data elements relating to counterparties and margin to those covering clearing, trading and settlement.

Speaking at ISDA's 36th AGM in Madrid in May 2022, current CFTC chair Rostin Behnam underscored the importance of data standardisation.

"If the CFTC receives data in an automated and standardised way, it can be integrated with our existing

"To overcome inconsistencies in interpretation, we have developed a digital solution that establishes a reporting best practice to help firms comply with requirements in each jurisdiction"

Scott O'Malia, ISDA

→ analytics. This ensures that subject matter experts spend less time cleaning data and more time developing insights in support of surveillance, enforcement and monitoring programmes aimed at ensuring our markets maintain the highest level of integrity and transparency," said Behnam.

The development of the CDEs was a critical step in promoting greater harmonisation of reporting rules, giving regulators a framework of standards to adopt in their domestic rule books. The first round of CFTC amendments on December 5 effectively fires the starting gun in that process, with a further round expected in late 2023 and equivalent amendments in other jurisdictions in 2024 (see box, *Reporting Rule Changes Around The World*).

Important and welcome as the rule changes may be, they are not sufficient to create a truly harmonised and effective reporting framework. As long as firms conduct their own interpretation of the rules and implement them independently, there will always be inconsistencies. That is why ISDA has worked closely with its members on a digital approach that enables firms to leverage a peer-reviewed interpretation of the rules.

"To overcome inconsistencies in interpretation, we have developed a digital solution that establishes a reporting best practice to help firms comply with requirements

CFTC REWRITE RUNDOWN

The US Commodity Futures Trading Commission (CFTC) was the first global regulator to implement swap data reporting requirements back in 2012. Ten years later, it is now the first to incorporate critical data elements developed by the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions – often referred to as the CFTC rewrite.

The first phase of amendments, originally due for implementation in May 2022 but delayed until December 5 to give market participants time to make the necessary changes to their systems, introduces the relevant global data elements into the CFTC's Part 43, 45, 46 and 49 reporting rules. These sections cover a wide range of requirements, including which parties must report, what information has to be reported, when reporting must take place and how reports must be submitted, as well as the obligations for swap data repositories.

"This round of CFTC amendments significantly reduces the overall number of swap data elements required to be reported and achieves greater consistency with international standards. This is an extremely significant step – as I regularly pointed out as a CFTC commissioner when the original rules were developed, having a situation where each jurisdiction independently sets its own rules and reporting formats results in incomplete data, inconsistencies and unnecessarily high compliance costs," says Scott O'Malia, chief executive of ISDA.

The specific changes are multi-faceted and include amendments to the timing of reporting in some instances, as well as the introduction of a requirement for firms to report details of collateral they have posted or collected. Firms are also required to go through a more robust process to check the quality and completeness of data and address any errors or omissions.

Further CFTC rule changes are expected later in 2023, which will incorporate a new global unique product identifier (UPI), the ISO 20022 standards and revised block trade reporting requirements. These additional revisions will require further changes to reporting systems and processes next year.

"The first phase of the CFTC rewrite is a highly significant milestone in improving the harmonisation and consistency of global trade reporting through the adoption of international data standards. It's now important we have a clear and transparent implementation roadmap for the next phase, including the adoption of the UPI and the ISO 20022 standards," says Tara Kruse, global head of infrastructure, data and non-cleared margin at ISDA.

in each jurisdiction. This is achieved by establishing an industry-wide taxonomy and using software to optimise the operational process of reporting to ensure consistent and accurate implementation," says Scott O'Malia, chief executive of ISDA.

Development of DRR

At the heart of the DRR initiative is the Common Domain Model (CDM), a standard representation of events and processes that occur throughout the trade lifecycle. Over the past year, a dedicated ISDA working group has developed a mutualised, industry-agreed interpretation of the CFTC's amended rules, using the CDM to express that consensus view as human-readable, machine-executable code.

The DRR is free to access for all market participants and can be used either as the basis of their implementation or as a benchmark to check whether their own reading of the rules is in line with the market, allowing them to address any potential discrepancies.

"As the technical implementation of the industry consensus on reporting, the DRR means that when we do report, if there are issues of interpretation, we can be confident we're addressing this from a defensible position. In other words, where there is room for interpretation on how a regulation should be adopted, what the implications are and how we actually perform reporting, we're doing that in line with the industry consensus and we're doing so working from a mutualised code base that has been developed with our industry partners," said Harry McAllister, information architect at BNP Paribas, speaking at an ISDA virtual event on global transaction reporting on October 12.

In the lead-up to the December deadline for the CFTC rules, BNP Paribas successfully tested the DRR in a production-level environment, submitting real data to the DTCC's CFTC swap data repository testing simulator. After months of industry work to interpret and code the CFTC rules, the test demonstrated the ability to use the DRR for end-to-end implementation. In late November, version 1.0 of the DRR was launched and made available to the whole market.

"We're intrinsically interested in the potential of the CDM to address a variety of post-trade processing domains, by which we mean clearing, confirmation, collateral management and, of course, regulatory reporting is an obvious and primary use case. So, in terms of selling the idea of implementation of the CDM to our sponsors, that wasn't really a problem, and we worked on a mandate to adopt the CDM and DRR as the basis first for the CFTC go-live, but with the explicit intention of leveraging that for all the other reporting regime revisions coming in its wake," said McAllister.

With further reporting rule changes on the horizon in other jurisdictions in 2023 and 2024, work on the DRR will not stand still after implementation of the first phase of the CFTC revisions. The model was designed to be used for other rule amendments, and because all jurisdictions are expected to adopt a substantial proportion of the CDEs, much of the work to code the CFTC rules will be transferred directly to the DRR for the EU rules that will come into effect in April 2024.

By the time regulators in the UK, Canada and Asia-Pacific implement reporting rule changes – also expected in 2024 – the lion's share of the coding is expected to be complete and only incremental efforts will be required to apply the DRR to each rule book. For those firms that have already tested or implemented the model for the CFTC revisions, there is little doubt of its potential to bring considerable improvements to trade reporting.

→

REPORTING RULE CHANGES AROUND THE WORLD

Australia
Australian Securities and Investments Commission currently expected to implement revised reporting rules in 2024, with final rules to be published soon.

Canada
Canadian Securities Administrators' consultation on revised reporting rules closed in October 2022, with compliance deadline expected in 2024.

European Union
Revised reporting rules to be implemented under the European Market Infrastructure Regulation Refit on April 29, 2024.

Hong Kong
Hong Kong Monetary Authority consultation paper on revised reporting rules expected soon.

Japan
Japan Financial Services Agency's revised reporting rules to be implemented on April 1, 2024.

Singapore
Monetary Authority of Singapore currently expected to implement revised reporting rules in the second half of 2024, with final rules to be published soon.

UK
Financial Conduct Authority consultation on revised reporting rules completed in February 2022, with compliance deadline expected in the third quarter of 2024.

US
First phase of Commodity Futures Trading Commission's revised data reporting rules come into effect on December 5, 2022, with the second phase expected by the end of 2023.

"You need unambiguous regulations to turn them into code. The DRR primarily solves the interpretation question, so instead of every firm having to interpret, code and test independently, they can easily access the industry consensus through an open-source architecture"

Miles Barker, Credit Suisse

"You need unambiguous regulations to turn them into code. The DRR primarily solves the interpretation question, so instead of every firm having to interpret, code and test independently, they can easily access the industry consensus through an open-source architecture," says Miles Barker, global lead of the investment bank IT business analysis team for regulatory reporting at Credit Suisse.

In time, it is also expected that regulators themselves could publish reporting rules as machine-executable code that can be interpreted automatically by the technology systems of reporting entities. This has the potential to bring significant efficiencies to the process of updating regulations, further reducing the risk of inconsistent interpretation.

"Through the DRR, we have created an example of standards-based *implementation* of regulation, and the hope would be that this can develop into standards-based *expressions* of regulation. The model has been produced in a domain-specific language that is readable at any level of industry expertise, so it's very transparent and creates the necessary preconditions for machine-executable regulation," says Barker.

This longer-term possibility of having regulators issue new rules in machine-executable code would reduce the challenges, resources and expense involved in issuing and implementing regulations. Effective use of the CDM – through the DRR – to implement this round of trade reporting rules could certainly pave the way for the model to be extended to the regulatory community in the future.

"Together with market participants, we have deliberately put in place an industry-wide design pattern that will pave the way towards the longer-term goal of having a standardised representation of derivatives contracts and lifecycles using a common blueprint that regulators can leverage as the basis to issue new regulations or update existing rules in the future," says Alan Milligan, head of data and digital solutions at ISDA.

DIGITAL REGULATORY REPORTING IN BRIEF

ISDA's Digital Regulatory Reporting (DRR) initiative enables all firms to implement regulatory reporting rules consistently using the open-source Common Domain Model.

This allows a scalable implementation of regulations by using one standardised representation of required reportable data and turning trade reporting regulations into unambiguous, human-readable and machine-executable code for any reporting jurisdiction The DRR can be used as core internal reporting logic or to validate an internal or external implementation.

The DRR can provide numerous benefits to institutions and the regulatory community, including:

- A mutualised industry effort to create a digital interpretation of reporting requirements;
- Eliminates the need for firms to dedicate significant resources and budget to changing their systems for each new or amended reporting rule, allowing more time to be spent on implementation;
- Requires only incremental effort to extend the DRR model to other jurisdictions and future changes once the core regulatory reporting rule set is established;
- Decreases inconsistencies in the way individual institutions prepare for a trade reporting rule or implement industry best practice;
- Increases interoperability between firms' reporting processes;
- Reduces reconciliation breaks in dual-sided reporting regimes;
- Results in efficient and consistent implementation of global recommendations, including critical data elements, unique product identifiers, unique transaction identifiers and legal entity identifiers;
- Improves the quality of reported data for regulators to evaluate systemic risk effectively;
- Will ultimately enable regulators to publish reporting rules as executable code that can be automatically read and interpreted by the technology systems of reporting entities.

ISDA®

Annual General Meeting | May 9 – 11, 2023

CHICAGO

Contact Rob Saunders for sponsorship and exhibitor opportunities:

RSaunders@isda.org | +44 (0) 20 3808 9727

agm.isda.org @isda @isdaconferences #isdaagm

* A Collaborative Approach

*The Monetary Authority of Singapore (MAS) expects to implement revised reporting rules in 2024 and has explored the potential of technology to enhance data-driven supervision. **Merion Anggerek** and **Harry Lee** of MAS talk to* **IQ** *about the priorities for regulatory reporting*

IQ: What challenges have arisen in global derivatives trade reporting that have made it necessary to revise the rules around the world?

Merion Anggerek (MA), Harry Lee (HL): Back in 2009, when Group-of-20 leaders put forward their commitment to improve the resilience of over-the-counter (OTC) derivatives markets, three primary outcomes were set out – to improve transparency, mitigate systemic risk and protect against market abuse. Trade reporting was one of the core pillars of the OTC derivatives market reforms. Following this commitment, the work on OTC derivatives reporting was set out and several preparatory steps were taken for all OTC derivatives transactions to be reported to trade repositories.

This was the beginning of a reasonably large undertaking, both for firms and regulators, in handling huge volumes of OTC derivatives data. This undertaking was necessary to support the overall objectives of the global regulatory reforms and to allow authorities to derive a comprehensive view of OTC derivatives markets and activity so they could better assess the risk to financial stability. The global nature of OTC derivatives markets further emphasised the need for data to be collected and stored in a consistent manner to facilitate data aggregation on a global basis.

One of the challenges identified after the trade reporting rules were implemented in 2012 was the lack of standardisation in global reporting. This led to the Financial Stability Board's recommendation in 2014 for global regulators to take further steps to standardise and harmonise critical data elements (CDEs) for reporting of OTC derivatives transactions. The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO) have issued three sets of technical guidance to support global aggregation of OTC derivatives transaction data, which include the harmonisation of unique transaction identifiers (UTIs), unique product identifiers (UPIs) and OTC derivatives CDEs.

With the CPMI-IOSCO technical guidance, there has been a strong push for international coordination and a commitment to adopt the guidance and revise domestic OTC derivatives reporting rules. The rule rewrites will enable a comprehensive, standardised and reliable means of facilitating data aggregation on a global basis. It is worth highlighting that support and consensus among market participants, including industry associations like ISDA, are paramount to facilitating a smooth transition and adoption of reporting rewrite best practices and to bring regulatory reporting to a more practical, efficient and sustainable level.

IQ: What are the most important changes that need to be made to global OTC derivatives reporting rules to reduce inaccuracies, duplication and omissions?

MA, HL: The CPMI-IOSCO technical guidance on UTIs, UPIs and CDEs provide an important set of internationally agreed standards that will harmonise the way OTC derivatives data is reported going forward. The global adoption of this technical guidance is also essential to improve the existing process for regulatory reporting and facilitate consistent data that will support data aggregation.

The global UTI and UPI systems provide an effective and reliable way to uniquely identify each OTC derivatives transaction and product across jurisdictions. Currently, transaction and product information may be reported with codes or numbers that are generated internally by reporting entities or referenced from various industry taxonomies. This creates a problem with standardisation and aggregation.

The CDE guidance provides a set of harmonised definitions, formats and data values for reportable OTC derivatives data across jurisdictions. This includes common reportable data fields and definitions to align stakeholders' interpretations. Without this standardisation, significant amounts of data mapping, cleaning and processing are required to sift out potential inaccuracies before any data aggregation and analysis can be performed.

Collaboration with the industry is also important to improve the overall experience of the regulatory reporting process. Initiatives such as the Common Domain Model (CDM) will help enhance overall regulatory reporting and support industry compliance. The Monetary Authority of Singapore (MAS) is supportive of initiatives that will help the industry build technology solutions that improve regulatory reporting.

IQ: What approach is MAS taking to reviewing trade reporting requirements and when might any changes come into effect?

MA, HL: MAS has been actively involved in the global regulatory reporting rule rewrites, starting from the development of the CPMI-IOSCO guidance on UTIs, UPIs and CDEs in 2017. We have also been working closely with industry stakeholders and supervisory authorities when revising our rules to adopt a standardised and practical approach to OTC derivatives reporting that will deliver real benefits to firms and regulators.

In July 2021, we issued a public consultation on proposed amendments to enhance our OTC derivatives reporting requirements by adopting the standards in the CPMI-IOSCO guidance. We have also been closely engaged with industry associations including ISDA and have conducted industry engagements to get valuable feedback from the ground. We are in the process of refining our proposals based on industry feedback, before finalising them for implementation.

We are considering a workable timeline to allow sufficient lead time for reporting entities to make the necessary preparations for operational and system enhancements to comply with the revised rules. We are also looking to align with regional Asia-Pacific regulators' commencement dates where practicable and manage the pace of implementation with other major jurisdictions to avoid a bunching up of commencement dates.

The response paper with the revised rules is targeted for publication in early 2023, and we are currently looking to implement our revised rules sometime in the second half of 2024.

> "We are considering a workable timeline to allow sufficient lead time for reporting entities to make the necessary preparations for operational and system enhancements to comply with the revised rules. We are also looking to align with regional Asia-Pacific regulators' commencement dates where practicable"

IQ: MAS, the Bank of England and ISDA worked together with the Bank for International Settlements (BIS) Innovation Hub Singapore Centre on phase one of Project Ellipse, in which mortgage reporting rules were coded using the CDM digital data standard. What benefits can be achieved by taking a digital approach to regulatory reporting?

MA, HL: Digital reporting involves the use of machine-executable code as part of the process of regulatory reporting, with data modelling playing an integral role. By representing data attributes in a manner that enables programming to reference and automate the reporting of regulatory metrics, one benefit is the potential scope for process efficiencies within reporting entities.

The representation of the data attributes, or the data model, will clarify the relevant data standards that need to be →

"The adoption of a more digital approach to regulatory reporting must be done with a view to lightening the burden of data reporting and boosting the quality of data submitted"

→ established. By expressing regulatory reporting requirements in unambiguous logic, with agreed data standards, we can reduce the risk of financial institutions misinterpreting reporting instructions. Where a data model is robust enough to accommodate multiple products, transactions and reporting use cases, financial institutions may also benefit from a reduction in the number of data models they need to map to for regulatory reporting purposes.

Project Ellipse explores how technology can help supervision be more data-driven, insights-based and forward-looking, using a regulatory data and analytics platform. The platform integrates both structured and unstructured data, and provides supervisors with early warning indicators and impact assessments through the application of advanced analytics.

In phase one of Project Ellipse, we extended the CDM to include mortgage loans by tapping the CDM's existing concepts like quantity, price and party in the representation of financial transactions and adapting the model to capture the concepts of collateral and borrower credit profile. Reporting logic and executable code were developed based on retail mortgage regulatory reports in Singapore and the UK, referencing the same extended model, automating the creation of regulatory reports for two supervisors in two different jurisdictions.

Collecting data in accordance with a data model that enables the use of machine-executable code may also increase the volume of granular data available to supervisors. This data may be used in advanced analytics to enable better supervision.

More work is needed to see if the exercise we undertook in phase one can be extended to other reporting use cases.

PROJECT ELLIPSE USES CDM TO EXPLORE DATA-DRIVEN SUPERVISION

Launched in January 2021 by the Bank for International Settlements Innovation Hub Singapore Centre and the Monetary Authority of Singapore (MAS), with the support of the Bank of England, ISDA, Financial Network Analytics and Accenture, Project Ellipse explores how technology could enable supervision to become more forward-looking, insights-based and data-driven using an integrated regulatory data and analytics platform.

In the first phase, Project Ellipse investigated how data-driven supervision could be enabled by machine-executable digital reporting, using the Common Domain Model. This illustrated the possibilities and efficiencies that could be gained if machine-executable reporting using common data models were adopted. This could also increase the volume of granular data available to supervisors, enabling the use of advanced analytics.

In the second phase, Project Ellipse took existing large exposures regulatory data and integrated these with unstructured data. Advanced analytics such as machine learning and natural language processing were applied to these data sources to make risk correlations and to analyse sentiment, alerting supervisors in real time of issues that might need further investigation. Network analytics were also used to demonstrate how exposures could be mapped, indicating possible systemic risks to the banking system.

Project Ellipse is a prototype that authorities can test in their own environments, and which may help them to explore new solutions. It also presents an opportunity for the global regulatory community to further consider, explore and collaborate on common solutions to future-proof the data and analytical capabilities of supervisors.

"Technological advancements in recent years mean that there is scope to significantly improve supervisory effectiveness and outcomes by leveraging on data and technology. Project Ellipse demonstrates how data analytics techniques like natural language processing and sentiment analysis can help supervisors to collate and analyse vast volumes of data from disparate sources to gain more timely situational awareness of adverse events that could impact our financial institutions or system," says Hern Shin Ho, deputy managing director (financial supervision) at MAS.

Importantly, governance and legislative considerations that would need to be addressed before digital reporting can be implemented remain, and this would require a process of engaging with both reporting entities and other data collecting authorities.

IQ: The broad objective of Project Ellipse was to explore how technology could be used to enable more real-time risk surveillance and conduct pre-emptive supervision. What were the key findings from Project Ellipse and how is this work now being taken forward?

MA, HL: In phase one, Ellipse investigated the possibilities and the efficiencies that can be gained if machine-executable reporting using common data models was adopted. The second phase explored how news and structured data can be integrated on a single platform to enable the development of early warning indicators that would inform supervisory assessments.

Our key findings from phase one are: i) regulatory reporting requirements can be provided in unambiguous machine-readable instructions, based on a data model; ii) steps for generating regulatory metrics can be published, so reporting entities have a clear understanding of the expected data at the most granular level; and iii) supervisors may also be able to generate other regulatory metrics by adding logical instructions that reference that model-standardised data.

Phase two demonstrates that: i) regulatory data of sufficient granularity can be integrated with other sources of unstructured information, such as news and market data; and ii) advanced analytics can be used to generate early warnings of at-risk exposures of reporting entities and automate impact assessments, enabling supervisors to investigate and intervene earlier, if needed.

After completing phase two, we shared the source code of the Ellipse platform with interested central banks and financial supervisors via the BIS Open Tech initiative. This is in line with our original goal of using the platform as a basis to establish a collaboration community within financial authorities and to create applications that serve our common use cases. By working together, we hope these solutions can scale faster and we can converge on a common solution that can, in turn, increase the potential for convergence on data inputs and standardisation.

IQ: What challenges might market participants face if they don't adopt a digital approach to regulatory reporting over the coming years?

MA, HL: Market participants should expect to continue to encounter fresh requests for data from financial authorities because risks and vulnerabilities do emerge or change. These requests will likely come on top of existing data submissions that reporting entities are already preparing and can involve data that the reporting entities may not currently have, especially in climate-related areas.

It is in the interests of reporting entities to rationalise processes and costs associated with data compilation and submission. It is also important for market participants to ensure they have high-quality data that is consistent, so they can form a more precise view of the risks faced. The adoption of a more digital approach to regulatory reporting must be done with a view to lightening the burden of data reporting and boosting the quality of data submitted. This can lead to more streamlined mapping between operational data and regulatory requirements, which allows financial institutions to also develop timelier insights on potential risks. IQ

> "With the CPMI-IOSCO technical guidance, there has been a strong push for international coordination and a commitment to adopt the guidance and revise domestic OTC derivatives reporting rules. The rule rewrites will enable a comprehensive, standardised and reliable means of facilitating data aggregation on a global basis"

Merion Anggerek is director in the capital markets policy division and Harry Lee is deputy director in the data governance and transformation division at MAS

Carbon Standards

*ISDA has developed standard documentation for the secondary trading of voluntary carbon credits. **Deepak Sitlani**, **Leanne Banfield**, **Amy Whitney** and **Nour Jishi** explore the importance of carbon trading and the benefits of the new templates*

Following a series of extreme weather events, climate change remains high on the agenda for financial market participants and corporates alike, with sustainability objectives attracting greater attention from governments and regulators around the world. In recent years, growing awareness of sustainability and environmental, social and governance (ESG) issues has been heightened by coordinated global commitments on meeting obligations in the legally binding 2015 Paris Agreement and aims set out in the United Nations' (UN) 17 Sustainable Development Goals (SDGs).

At the recent UN Climate Change Conferences of the Parties – in Sharm el-Sheikh in November 2022 and Glasgow in 2021 – world leaders have stressed the importance of directing financial flows to support and enable the objectives of the Paris Agreement and the SDGs. The global nature of the derivatives market makes it ideally placed to support the green transition by facilitating funding for sustainable investments and helping businesses manage and hedge the associated risks.

This does not necessarily mean the market needs a whole new set of products. In fact, many products have been used for this purpose for several years, including weather and catastrophe derivatives and credit default swaps to hedge ESG-related risks. Nonetheless, new transaction types are starting to emerge, including sustainability-linked derivatives, which are structured to include an adjustment to payments under the derivative, depending on whether one or both of the parties meet certain ESG targets set out in pre-defined key performance indicators.

However, with the ultimate goal of the Paris Agreement and the subsequent raft of regulation from around the world to limit the rise in global temperatures to below 2°C, and preferably 1.5°C, there is a major global focus on the reduction of carbon emissions and the transition to greener, more sustainable economies.

ISDA has been active in documentation for carbon emissions trading for many years, with the first template documentation for EU emission allowances (EUAs) published in 2005. In recent times, there has been increased demand for standard documents for trading of secondary market emission allowances across both compliance and voluntary markets, and new templates have recently been completed.

Carbon markets

There are two types of carbon market – the mandatory compliance market and the voluntary market.

Compliance markets are created when a government imposes a mandatory cap on

"The global nature of the derivatives market makes it ideally placed to support the green transition by facilitating funding for sustainable investments and helping businesses manage and hedge the associated risks"

greenhouse gas emissions by establishing an emissions trading system (ETS). Under this framework, the relevant government body issues a certain number of carbon allowances to the market by direct allocation or auction, with that number decreasing annually to incentivise firms to reduce their emissions. Entities regulated by the relevant ETS need to surrender enough allowances to cover their emissions. If their free allocation is not sufficient, they need to purchase more allowances in the market to cover any shortfall. Conversely, they can sell or hold any allowances they don't use. This creates a secondary trading market where parties can buy and sell surplus allowances.

To date, almost 70 jurisdictions have adopted ETSs, which can be international (such as the EU ETS), regional (such as the Regional Greenhouse Gas Initiative and California's cap-and-trade programme) or national (such as the newly operational China ETS and the UK ETS, which was created to replace the UK's participation in the EU ETS following Brexit).

Over-the-counter derivatives, alongside exchange-traded contracts, have an important role to play in compliance markets, as spot, forward and options contracts can help market participants meet their regulatory obligations and manage their risks.

ISDA has been active in this area since the inception of the EU ETS and has published a variety of emission allowance documents and templates for swaps, options and forwards, including the ISDA EU Emissions Annex, the ISDA US Emissions Annex and the ISDA UK Emissions Annex. Most recently, it published a new US Renewable Energy Certificate (REC) Annex, enabling parties to trade RECs, which are issued when one megawatt hour of electricity is generated from a renewable energy source, on standard terms.

The voluntary carbon markets allow participants to mitigate their greenhouse gas emissions by purchasing voluntary (or verified) carbon credits (VCCs) relating to approved projects that remove greenhouse gases from the atmosphere. Once a VCC is used to offset the corresponding amount of the buyer's emissions (one metric tonne per VCC), it is 'retired' and permanently removed from circulation in the market. Unlike the compliance markets, the voluntary markets are largely unregulated and there is no legal framework governing them.

A voluntary carbon market has existed alongside the compliance markets for some time, but there has been particular interest in recent years in growing the market globally.

Read ISDA's whitepaper, *Legal Implications of Voluntary Carbon Credits*: **bit.ly/3Uf9zuV**

This has been driven by the Taskforce on Scaling Voluntary Carbon Markets, a private-sector-led initiative that was established in September 2020 to develop a roadmap for further developing voluntary carbon markets. Alongside the launch last year of exchange-traded derivatives contracts in VCCs, this has led to increased focus on developing VCC derivatives and related documentation.

Legal framework

To address the increased focus on VCCs, Linklaters worked with ISDA on its whitepaper, *Legal Implications of Voluntary Carbon Credits*, which was published in December 2021. The paper provides an overview of the evolution of voluntary carbon markets, considers the legal nature of VCCs, explores key legal issues and recommends steps to foster greater legal certainty. →

"As with all new market documentation, it is expected that market practice will continue to evolve. The digital architecture of the VCC documentation means it can be updated accordingly. The aim of these documents is to create global templates that can be used across jurisdictions and registries to trade VCCs"

→ As discussed in the whitepaper, the legal nature of VCCs is particularly important as the potential legal treatment currently differs across jurisdictions, meaning it is not possible to reach a global conclusion. Although VCCs are likely to be recognised as a form of intangible property under English law (as is the case with EUAs), other jurisdictions may characterise them as a bundle of contractual rights. This is less favourable, as it will affect the way in which VCCs are transferred and would likely require users to comply with additional formalities. In addition, there are important legal issues relating to the fungibility of VCCs, obtaining good title, intermediated relationships, the treatment of VCCs in an insolvency (including in relation to netting) and how security can be created and enforced over VCCs.

These are complex questions, and the whitepaper suggests steps that could be taken to address the uncertainties – namely, the issuance of an authoritative market-wide legal statement, targeted legislative amendments and regulatory guidance, and the creation of a global standard by the United Nations Commission on International Trade Law and/or the International Institute for the Unification of Private Law that recognises VCCs as a form of intangible property. Together, these steps should increase certainty over the legal nature of VCCs and address market fragmentation issues.

Standard documentation

Following publication of the whitepaper, market feedback indicated demand for standard documents for the secondary trading of VCCs. ISDA recently published the 2022 ISDA Verified Carbon Credit Transactions Definitions, together with template confirmations for spot, forward and options transactions. The ISDA Energy, Commodities and Developing Products Group has provided several rounds of valuable feedback on these documents, which will be available on ISDA's MyLibrary electronic documentation platform. Template documentation has also been published by the International Emissions Trading Association, which has worked closely with ISDA to align core provisions where possible.

There are a number of key themes and features of the documents, which relate back to the legal issues explored in the whitepaper.

For example, there were discussions at the beginning of the project on whether the documents should cover both sale and retirement, or whether retirement should be treated as a service provided and, accordingly, sit outside the secondary trading documents. It became clear that many market participants do want this to be included in the ISDA template, and it can be switched on depending on the needs of the parties.

One of the biggest challenges has been to create a document that works across different carbon standards and registries, all of which have their own rules. To achieve this, certain provisions, such as delivery and purchase obligations, have been drafted generically so the documents can be used across registries and do not need to be updated every time a carbon standard or registry modifies its rules.

What is capable of actually being delivered under the document is a key point and relates to the issue of fungibility. The template has been designed so parties can specify any particular attributes the VCCs being delivered must satisfy (eg, a particular vintage, registry, project, etc), thereby limiting the pool of what can be delivered. Alternatively, they can take the approach that they are happy to receive a wider pool of VCCs, helping to aid liquidity in the market.

As with all new market documentation, it is expected that market practice will continue to evolve. The digital architecture of the VCC documentation means it can be updated accordingly. The aim of these documents is to create global templates that can be used across jurisdictions and registries to trade VCCs. In doing this, ISDA can support the development of a safe and efficient market for this asset class. Coupled with greater certainty over the legal nature of VCCs, this should help to develop a robust and credible voluntary carbon market. IQ

Deepak Sitlani is partner, Leanne Banfield is counsel, Amy Whitney is associate and Nour Jishi is trainee at Linklaters in London

A New Path

*The UK's Financial Services and Markets Bill provides a framework for the future of financial services in the country following Brexit, including policy priorities for the OTC derivatives market. **Toby Coaker** explores the key elements of the legislation*

In July 2022, as UK Members of Parliament (MPs) were preparing for the summer recess, HM Treasury (HMT) tabled proposed legislation on financial services. While the UK has been through a period of unprecedented political turmoil since then, the Financial Services and Markets Bill (FSMB) continues its journey through parliament and is expected to become law in 2023. The legislation has the potential to transform the UK's regulatory framework, with the stated objective of creating a more agile and competitive financial sector following Brexit.

At 335 pages, the FSMB is intended to shape the post-Brexit development of capital markets in the UK. It is the main vehicle through which the conclusions of the Wholesale Markets Review (WMR), as well as changes to the regulation of central counterparties (CCPs) and central securities depositories (CSDs), will be implemented.

Once the FSMB has passed, the UK government is expected to revoke 48 pieces of EU-derived legislation relating to financial services, including the Markets in Financial Instruments Regulation and Directive (MIFIR/MIFID) and the European Market Infrastructure Regulation (EMIR). In their place, the Financial Conduct Authority (FCA) and the Bank of England will draft new rules specifically tailored to UK markets, using either their existing rule-making powers under the Financial Services and Markets Act 2000, or new powers specified in the FSMB.

As changes are made to EU-derived legislation, the FSMB will have a direct impact on over-the-counter (OTC) derivatives markets, although most new rules – for example, changes relating to market transparency or a new resolution regime for CCPs – will be subject to consultation after the relevant legislation has been revoked. Across the whole of the UK's financial services sector, this process is expected to take several years.

> "The future regulatory framework will give UK regulators an unprecedented level of influence over how rules are developed. To ensure scrutiny over their judgements, the FSMB proposes greater accountability of regulators to HMT and parliament"

Implementing WMR

The FSMB establishes a hierarchy of ways in which regulators will be held to account on the rules they set, as well as clarity on the roles of HMT and parliament. Some provisions make immediate changes to EU-derived legislation, including amendments initiated by the WMR, and there are several specific implications for OTC derivatives markets.

First, the FSMB changes the definition of a systematic internaliser (SI). SIs are investment firms that deal on their own account, using their own capital, when executing client orders outside of a trading venue on an organised, frequent, systematic and substantial basis. The EU's SI regime requires that internalised transactions are made public to the market. However, the EU SI definition was changed in 2018, with the introduction of a number of quantitative thresholds. To avoid costly calculations to determine whether they are classified as SIs, many firms simply opted into the regime and complied with its obligations.

The FSMB would revert to a qualitative definition of systematic internalisers, giving the FCA the power to specify how the new definition should be interpreted. This is intended to make the regime more

ENHANCED POWERS FOR FCA AND BANK OF ENGLAND

The Financial Services and Markets Bill (FSMB) would delegate sweeping new powers to the Financial Conduct Authority (FCA) and the Bank of England.

These include giving authority to:

- The FCA to specify which post-trade risk reduction services can benefit from exemptions from the derivatives trading obligation, as well as the conditions attached to their use. The FSMB also gives the Bank of England a similar rule-making power, so the same types of services can, if appropriate, be exempted from the clearing obligation;
- The FCA to simplify the transparency regime for fixed income and derivatives by:
  - Developing a qualitative and quantitative assessment to ensure the right instruments are in scope of the pre- and post-trade fixed income and derivatives transparency regimes;
  - Specifying the circumstances under which pre-trade transparency requirements should apply, and what those requirements are; and
  - Developing a post-trade transparency regime.
- The FCA to develop a framework to outline how trading venues should apply position limits and position management controls;
- The Bank of England to make rules in relation to central counterparties (CCPs) and central securities depositories (CSDs), although these do not include a power to make rules directly applying to clearing members or clients of clearing members, and the FCA in relation to recognised investment exchanges and data reporting service providers. This would give the FCA (in the latter case) tools to facilitate the development of a consolidated tape;
- The Bank of England to determine that a non-UK CCP is systemically important and to apply its domestic rule book in whole or in part to those CCPs, and giving the bank further powers to apply domestic rules to non-systemic, non-UK CCPs and CSDs in the future;
- The Bank of England to replace the resolution regime that applies to CCPs; and
- Both regulators to set rules over stablecoins and 'digital settlement assets' (broadly, crypto assets used for the settlement of payment obligations).

flexible, increasing transparency and price formation while removing unnecessary burdens on firms.

Second, the FSMB aligns the counterparties in scope of the MIFID II derivatives trading obligation (DTO) with those in scope of the EMIR clearing obligation (CO). The legislation would give the FCA the power to modify or suspend the DTO, subject to HMT approval, to prevent or mitigate disruption to markets. Changes to EMIR in 2019 amended the counterparties in scope of the CO but not the DTO – a misalignment that has led to uncertainty and complications for firms. These amendments will also put the UK in line with similar proposals made by the European Commission in its revision of MIFIR.

Third, the FSMB simplifies the position limits regime for commodity derivatives by revoking the requirement for the FCA to apply position limits to all commodity derivatives contracts that are traded on a trading venue and economically equivalent OTC contracts, and transferring responsibility for setting position limits from the FCA to trading venues.

Position limits were introduced by the EU in MIFID II, with the objective of managing market volatility and preventing market abuse. However, the UK government made clear during the WMR consultation that it considers the current regime to be excessively complicated, duplicative and disproportionate, and prevents liquidity from developing, which would be detrimental for market participants. The EU has also come to this conclusion, reducing the scope of position limits for commodities in the so-called MIFID Quick Fix, which became effective in 2021, after the UK had left the EU. Transferring responsibility for setting position limits back to trading venues is intended to ensure limits can be set more flexibly, as venues will have full visibility on all market positions and can respond accordingly.

On top of this, the FSMB will reform financial market infrastructure (FMI) in the UK, extending the FCA's Senior Managers and Certification Regime to CCPs and CSDs. It also allows HMT to set up FMI sandboxes to enable firms to test and adopt new technologies and practices, such as distributed ledger technology. And it makes new arrangements for the powers of the court in relation to an insurer in financial difficulties, which will have consequences for protections for derivatives contracts and related collateral.

Beyond these measures, the FSMB gives the FCA and the Bank of England increased rule-making powers in several areas (see box). One example relates to post-trade risk reduction (PTRR) services, which are designed to reduce operational and liquidity risks in derivatives portfolios without changing the market risk of those exposures.

UK authorities want to expand the list of PTRR services that are exempt from the DTO, the CO and other requirements. The FSMB therefore gives the FCA a new rule-making power to specify which PTRR services can benefit from these exemptions, as well as the conditions attached to their use. It also hands the Bank of England a similar rule-making power, so the same types of services can – if appropriate – be exempted from the CO as well. This change is designed to incentivise the uptake of PTRR services, given the potential benefits for liquidity, operational risk, collateral efficiency and market stability.

Growth and competition

The Financial Services Act 2021 gave regulators an obligation to 'have regard' to the relative standing of the UK as a place for international firms to be based. The FSMB upgrades this to a secondary objective, which requires regulators to take a more proactive approach when setting rules to consider their impact on facilitating growth and international competitiveness.

The Prudential Regulation Authority (PRA) set out some of the principles it will follow when considering the objective in a

> "The FSMB is intended to enhance UK capital markets following Brexit and overhaul certain existing requirements that are perceived to be unnecessarily burdensome"

discussion paper published in September. On prudential standards, it will seek to avoid "reducing standards for potential short-run improvements to firms' competitiveness… which may undermine financial stability, and therefore economic growth, over the medium to long term". The regulator's logic is that robust prudential standards should instil trust and confidence among stakeholders, including international investors, firms and regulators.

The PRA plans to demonstrate the commitment to growth and competitiveness by integrating these priorities into its policymaking process and explaining its judgements in consultation papers and policy statements. The regulator will also set out how it has advanced the objective as part of its annual reports.

The future regulatory framework will give UK regulators an unprecedented level of influence over how rules are developed. To ensure scrutiny over their judgements, the FSMB proposes greater accountability of regulators to HMT and parliament. There will be a new sub-committee of parliament's Treasury Committee, and new statutory requirements for the PRA and the FCA to provide greater transparency on the decisions behind the rules they set.

HMT has intended to broaden its powers to influence the rules developed by regulators – a move PRA chief executive Sam Woods opposed on the grounds it would undermine the UK's international credibility and create a system in which "financial regulation blew much more with the political wind – weaker regulation under some governments, harsher regulation under others".

Andrew Griffith, economic secretary to the treasury, confirmed in November that the government had decided not to proceed with a so-called 'public interest intervention power', demonstrating its commitment to the operational independence of the regulators. While the government has, in the near term, backed away from being able to direct a regulator to make or amend rules where there are matters of significant public interest, the move demonstrates just how active the debate over the balance of power between government and regulators will continue to be as the future regulatory framework develops.

The FSMB is intended to enhance UK capital markets following Brexit and overhaul certain existing requirements that are perceived to be unnecessarily burdensome. The legislation will create stronger roles for regulators, HMT and parliament when it comes to developing and implementing financial regulation.

The new framework does pose some risks, however. For example, there is concern that a greater focus on competitiveness may lead to a weakening of the UK's regulatory standards, and that new rules may not receive sufficient scrutiny. The safeguards embedded in the legislation would mitigate some of these risks, but there is likely to be fierce debate about how to ensure the right outcomes for financial regulation before the FSMB receives royal assent in 2023. IQ

Toby Coaker is assistant director, UK public policy at ISDA

DerivatiViews on ISDA.org!

*ISDA Chief Executive Officer **Scott O'Malia** offers informal comments on important OTC derivatives issues in derivatiViews, reflecting ISDA's long-held commitment to making the market safer and more efficient.*

Visit: https://www.isda.org/category/news/derivativiews/

Growth and Progress

*In her first eight months at the US Commodity Futures Trading Commission, commissioner **Caroline D. Pham** has been actively engaging with market participants and policymakers around the world. She talks to **IQ** about the importance of developing both traditional and new markets*

IQ: You were sworn in at the Commodity Futures Trading Commission (CFTC) in April 2022 as one of an almost entirely new set of commissioners working with chairman Rostin Behnam. What have been your priorities as you have taken on this role?

Caroline Pham (CP): My approach to work has always been to get all the information, learn as much as possible, and then find pragmatic solutions. I'm approaching my role as commissioner in the same way. Just like starting a new job in the private sector, I have been getting out to meet people on the ground to do a current state assessment and hear what's working and what's not, so I can then do strategic planning that is informed by data points and feedback.

This effort has included meeting various types of stakeholders, from market participants and service providers to policymakers, including other regulators, central banks, finance ministries and international standard setters.

I've been doing learning tours with market participants and service providers to learn as much as possible about their businesses, products, opportunities and risks, including demos of technology, systems and processes. How can we regulate something if we don't understand it or know how it works? When I was a compliance executive, I found the most effective policies were tailored to reflect the lines of business and operational processes. To me, that is especially important when we are considering new products or markets, or new technology or infrastructure. Digital asset markets are a good example of this.

I've also been travelling internationally to better understand regional dynamics and factors in each financial markets hub and any shifts in market structure or capital flows, so I can then analyse the current challenging

> "Regulation shouldn't unnecessarily increase complexity and costs – that can actually increase risks. In addition, because our markets are global, we need to consider our rules from a holistic perspective against the backdrop of international standards and other regulatory regimes, not in a vacuum"

global macroeconomic and geopolitical environment in context as I carry out the CFTC's mission to ensure market integrity. I've discussed important policy issues and priorities with both policymakers and market participants, which will help me set the agenda for the CFTC's Global Markets Advisory Committee (GMAC) that I sponsor.

As far as priorities are concerned, I'm approaching my commissionership through two lenses: enabling growth and progress.

First, we need to support growth in both traditional and new markets. In traditional markets, we need deep, liquid markets that best provide risk management and price discovery and are well functioning even during times of market stress or disruption. Even though a lot of the discussion today focuses on crypto or environmental, social and governance issues, we cannot forget that the markets need to work so end users and others have reliable and efficient ways to hedge their risks. Then, for new markets and products, we have a mandate to promote responsible innovation and fair competition while ensuring market integrity, and prevent fraud, manipulation and abuse.

Second, we should be making progress on what's in front of the CFTC right now, and it should not take us too long. That is the goal of my relaunch of the GMAC with a fresh approach.

Given my past experience and senior roles, it's no surprise that my current areas of focus are global market structure, digital assets and international engagement.

IQ: Prior to your current role, you worked at the CFTC as special counsel and policy adviser to then commissioner Scott O'Malia and then spent almost eight years at Citi, where you held senior global roles in compliance, regulatory affairs and market structure. How does this previous experience inform your new role?

CP: When I was in commissioner O'Malia's office during the period of Dodd-Frank rulemaking, one of my favourite parts of the job was meeting with the public to learn more about how our rules actually impact the markets, market participants and end users. Then, when I worked at Citi, one of my favourite parts of the job was working with the lines of business to understand what clients needed. The importance of listening and learning in order to provide the right solutions is the foundation of how I'm tackling the job of commissioner. One of my favourite – and most important – parts of the role is to hear from people trying to run their businesses, create jobs and support the economy.

I have seen from my prior experience that you need practical and clear rules. When you make business decisions, there's no grey area in yes or no. This is especially true when you are building something new or implementing changes. The operational experience I gained from implementing global regulatory reforms is critical to my evaluation of policy proposals to make sure they are realistic and achievable. Regulation shouldn't unnecessarily increase complexity and costs – that can actually increase risks. In addition, because our markets are global, we need to consider our rules from a holistic perspective against the backdrop of international standards and other regulatory regimes, not in a vacuum. It doesn't make sense to have conflicting or duplicative rules if harmonization is an option.

Unfortunately, there have been CFTC rules in the past where it is simply not possible to implement the requirements because the rules were drafted without a full understanding of market structure or operations. That's why the CFTC is stuck in a constant cycle of expiring no-action relief that needs to be extended until we fix the rules to reflect reality. →

→ To think about it another way, we can only achieve our policy objectives if the rules work in the first place. It's better to measure twice and cut once.

IQ: As sponsor of the CFTC's GMAC, you have sought input on potential topics to be prioritised. Where can we expect the GMAC to put its focus in the months ahead?

CP: Under my sponsorship, the GMAC will focus on firms' global business strategy and operations, and the markets that are needed to support growth and effective risk management. It is an international forum for executive leaders from both the public and private sectors to come together and create a shared vision for the future of markets. The big picture is that the GMAC promotes a level playing field for global business and global markets. Members include financial market infrastructures, market participants, end users, public interest groups and regulators, among others.

I have been sharing my plans for the GMAC in meetings with senior officials from international and domestic organisations like the Basel Committee on Banking Supervision, the US Department of the Treasury, the Financial Stability Board and the International Organization of Securities Commissions (IOSCO), as well as regulators and central banks across the UK, EU, Asia-Pacific and Middle East. I know from my experience at Citi that global collaboration and coordination are critical to promoting regulatory cohesion and financial stability and mitigating market fragmentation and systemic risk. These discussions with the international policy community will help frame the GMAC's priorities, since one of the GMAC's mandates is to assess and inform international standards.

The top concerns that have been raised for the GMAC's agenda include important global market structure issues, such as cross-border harmonisation and market fragmentation, the impact of prudential regulation on market liquidity and resilience, global commodity markets and volatility, and interconnectedness of cash and derivatives markets, including Treasury market reform and sovereign debt. Another top issue is digital asset markets, particularly distributed ledger technology infrastructure and tokenisation of money and financial instruments. So, at the outset, I'm looking to establish potential subcommittees on at least global market structure and digital asset markets to hit the ground running in these areas.

We received a wide range of impressive nominees. I'm so pleased at the number of successful executives who have built leading global firms and are willing to take the time to serve and now build the future of markets, in addition to running their businesses. With their insights and those of others, the GMAC will be a driver of growth and progress.

> "Digital regulatory reporting could provide a solution to fix trade reporting and finally deliver on the goal of transparency in the G-20 derivatives reforms. Industry efforts in this area have been encouraging, both in the number and type of institutions that have taken part, as well as the ambitions"

IQ: Changes to the CFTC's swap data reporting rules came into effect on December 5. Will these changes resolve the problems of inaccuracy and duplication that have plagued trade reporting? How can digital regulatory reporting improve data quality and what do you think of the industry's efforts in this area?

CP: The CFTC's Dodd-Frank swap data reporting rules were adopted around the time I was working in commissioner O'Malia's office. At the time, the CFTC was one of the first regulators to adopt swap data reporting rules as part of the Group-of-20 (G-20) reforms. Since then, I have worked on many of the issues in implementing these rules in my previous roles. As a result, I appreciate regulators' need for accurate swap data, as well as the industry's need for clear rules and standards and cross-border recognition. Trade reporting is incredibly complex because there are many different jurisdictional requirements, even though these are global firms transacting in global markets and reporting to a global trade repository.

"I've proposed 10 fundamentals for responsible digital asset markets, as well as next steps for regulators under existing authorities"

Regulators have come together through the Committee on Payments and Market Infrastructures and IOSCO to establish harmonised swap data reporting standards. I hope the CFTC adopts consistent international standards and does not perpetuate further divergence or impracticality in trade reporting requirements. I cannot emphasise enough how important it is from a systems perspective to have reporting requirements and implementation timelines that are aligned.

Digital regulatory reporting could provide a solution to fix trade reporting and finally deliver on the goal of transparency in the G-20 derivatives reforms. Industry efforts in this area have been encouraging, both in the number and type of institutions that have taken part, as well as the ambitions. I am excited that this is an industry-led initiative that could improve data quality and data utility in order to better address systemic risk. Digital regulatory reporting could also minimise operational risk, enable more effective risk management by firms, and create significant efficiencies and reduce costs.

IQ: Following the unprecedented growth of crypto-asset markets, there has been major turbulence this year, with plummeting asset values and some high-profile collapses. As a regulator who has been closely following the evolution of crypto, what additional measures do you think may be needed to maintain the stability of this market?

CP: I've proposed 10 fundamentals for responsible digital asset markets, as well as next steps for regulators under existing authorities. The priority is to bring crypto financial activities within the regulatory perimeter so that entities are subject to robust prudential requirements, such as capital, liquidity and risk governance, and activities are subject to market conduct rules and protections against fraud, manipulation and abuse. In particular, firms engaged in crypto financial activities must maintain effective risk management and compliance programmes with appropriate governance and accountability, and must prevent or mitigate conflicts of interest. It's important for the US to continue its international engagement and provide input into common standards, and to work with non-US authorities on initiatives.

It's very encouraging that Congress is undertaking such a comprehensive effort to create a clearer and more holistic regulatory framework for digital assets in the US. Regulatory clarity for the industry will enable growth in compliant digital asset markets that are fair and responsible, with protections for the retail public. It would position the US at the forefront of innovation and promote US competitiveness in the international arena.

I've also identified that, should the CFTC be granted additional authorities over retail markets, then one proposal could be to also establish an Office of the Retail Advocate that would further enshrine the CFTC's current customer protection mandate under Dodd-Frank.

In the meantime, the CFTC has important tools in its toolbox. From my perspective, the Securities and Exchange Commission regulates the securities markets and the CFTC has regulatory touchpoints with virtually everything else. The CFTC has repeatedly used its strong anti-fraud and anti-manipulation enforcement authority over spot commodity markets, successfully bringing nearly 60 crypto enforcement actions since 2015, with hundreds of millions of dollars in penalties. The CFTC also has oversight over certain spot retail FX and spot retail leveraged commodity transactions. These could be good places to start while Congress thoughtfully works through tasking us with additional authority.

IQ: The CFTC is currently staffed by four female commissioners serving alongside chairman Behnam. How important is it to have diversity in financial regulation, and what more should be done to promote diversity, equity and inclusion in financial markets?

CP: The benefits of diversity in any profession or sector have been well documented. As the first Vietnamese American woman nominated by the President and confirmed by the Senate to the executive branch, I think I am living proof that diversity outreach and leadership development programs do work. They are the kind of structural reforms that build a talent pipeline that pays off year after year, and they have a powerful network effect.

These diversity programs are most successful when they are coupled with leadership opportunities, such as specific roles with significant responsibilities. It's also important to have diversity goals for talent recruitment and retention and to monitor progress to ensure accountability. Ultimately, to be successful, I think organisations need to make diversity, equity and inclusion a key element of culture so it's embedded into how every manager and team member approaches work and the values they stand for. IQ

Managing Climate Risk

A recent survey by ISDA and EY showed climate risk scenario analysis for trading book assets is at a relatively early stage, but most banks have prioritised this as a key area of focus

As climate-related events continue to occur with increasing frequency and severity, environmental risks need to be considered in the trading book, given the value of financial instruments that may be affected by environmental factors.

As a result, potential financial risks arising from climate change remain a key area of focus, particularly for investors and regulators. As part of a May 2022 discussion paper, the European Banking Authority noted that environmental risks can materialise through market risk and the trading book via multiple channels. For instance, the transition to a low-carbon economy can impact commodity markets (such as fossil fuels), and physical risks emerging from climate change can cause market price fluctuations, such as more frequent and severe extreme weather events causing losses in equities due to the destruction of firms' assets or capacity to produce.

Scenario analysis is a core tool to help inform strategy and business decision-making by assessing the scope and severity of these risks. However, much of the focus from regulators and banks has so far been on credit risk impacts in the banking book. How these risks affect the trading book has received less attention and research, and inclusion in regulatory exploratory exercises has been limited (for example, a carbon price shock in the European Central Bank's (ECB) short-term disorderly transition risk scenario).

In the third quarter of 2022, ISDA and EY conducted a survey of ISDA members to gain a better understanding of the maturity of firms' approaches to climate risk and scenario analysis in the trading book. The survey also sought to explore bank target states and the key challenges affecting their ability to achieve this. The survey reflects responses from 18 banks that have a global footprint across nine countries and five regions. Fourteen are global systemically important banks and three are domestic systemically important banks. They collectively represent $35 trillion of assets and more than $1.3 trillion of trading book risk-weighted assets.

18

banks across nine countries responded to the ISDA-EY survey in the third quarter of 2022

Scenario capabilities

Nearly all participating banks (89%) have taken part in a regulatory-driven scenario analysis, and more than two-thirds have conducted internally-driven scenario analysis for their banking book. Regulators have played a key role in accelerating work on climate risk, and their focus on the banking book is reflected in banks' responses that this is an area they have developed more.

Progress on the trading book is at an early stage of development, with half of responding firms having carried out an internal climate scenario analysis for their trading book.

Overall, banks qualify their climate risk scenario analysis capabilities as basic or evolving. Where banks have carried out a climate-driven scenario analysis for the trading book, some have focused on updating existing market risk scenarios and looked to tie them to a climate-risk-driven shock.

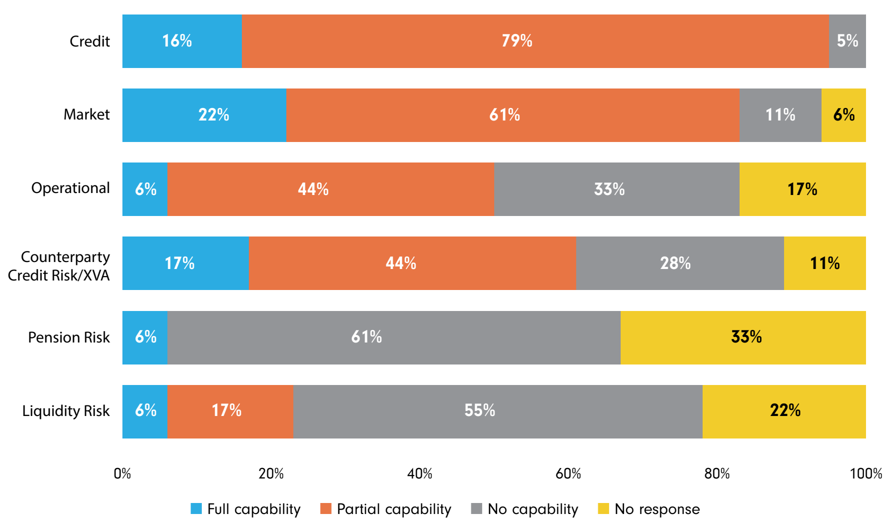
In considering scenarios for both the trading and banking books, banks almost exclusively focus on climate change and greenhouse gas emissions, with a few expanding their coverage of environmental, social and governance topics to capture other dimensions, such as resource depletion, reputational risks due to exposure to conflict regions and data protection.

The level of bank capacity to quantify the effects of defined climate risk scenarios varies by risk type (see Figure 1).

More than 80% of banks have at least the partial ability to quantify climate scenario impacts for credit and market risk, with 22% of respondents stating they have full market risk capabilities. By contrast, 17% of banks have developed the full capability to run climate scenario analysis for counterparty credit risk and XVA, while 44% have partial capability.

Only 6% of banks are fully able to run scenario analysis for operational risk, while 44% have partial capability. Pension and

FIG 1: LEVEL OF CAPABILITY TO QUANTIFY THE IMPACT OF DEFINED CLIMATE RISK



liquidity risks are not currently well covered, with 6% of banks having full capability.

Among the banks that hold partial or full capabilities, strategic implementation efforts have focused on climate scenario definition (56%) and assessing credit risk (50%). Market risk and scenario expansion were identified as a key focus by 38% and 57% of respondents, respectively.

Most banks have developed internal capabilities, although external vendor solutions are being used for credit risk and to incorporate specific parameters across scenarios. Overall, firms indicate their climate risk scenario analysis capabilities are more advanced for credit risk than for market risk.

Most banks have prioritised the development of trading book scenario analysis capabilities in 2022 and 2023 as regulatory exercises continue to progress.

Scenario definition

Overall, banks recognise climate change as a new driver of risk and see value in understanding how it may affect their business.

Most banks use scenario analysis for risk assessment and measurement and therefore to achieve regulatory compliance (see Figure 2). Fewer firms currently use assessments for disclosure purposes (39%) or for strategy definition (22%). However, there is potential for scenario analysis to enhance senior management understanding of possible vulnerabilities and how these feed into overall strategy.

Within this context, the survey explored the choices being made on scenario definition. These include the choice of reference scenarios and decisions on risk coverage, scenario duration, scenario expansion and the use of third parties.

The results show that most banks (61%) have leveraged existing regulatory or public scenarios, with a smaller proportion having developed their own scenarios. Looking forward, most banks plan to develop new scenarios to focus on firm-specific climate vulnerabilities and concentrations.

The types of scenarios reflect regulatory work to date, with banks almost exclusively using ECB and Network for Greening the Financial System (NGFS) scenarios. The scenarios most referenced for the trading book were the ECB short-term disorderly transition scenarios (50% of participants) and the NGFS delayed transition scenario (25% of respondents).

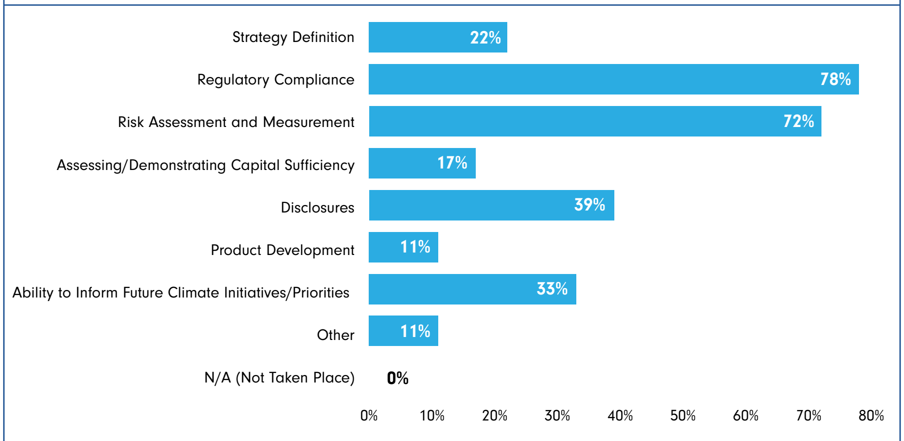
Irrespective of the scenarios used, a range of scenario expansions and overlays are applied to reference scenarios. These include the use of expert judgement, benchmarking, historical analysis to broaden scenario scope, internal expansion and addition of parameters to the scenarios, and adapting the scenario for a short-term trading horizon by accelerating some of the impacts.

The scope of assets included in trading book climate risk analysis varies by bank. The most commonly listed assets are credit and equities. Only 44% listed commodities cash and derivatives products as currently included, but this rose to 72% when firms were asked about their aspirations for scope. A small number of banks stated the whole trading book is in scope.

Transition risk is included in most banks' trading book scenario analysis (75%), although coverage of physical risk is much lower (40%). For transition risks, shocks to carbon and commodity prices are the most commonly considered climate drivers in scenarios (approximately 70% of firms). Almost half of firms are considering counterparty failure and 56% are applying multi-factor shocks across market segments.

Some banks stated they expect acute physical risks to potentially have material impacts on the trading book, but this is not currently fully addressed in either regulatory or bank-specific approaches. →

FIG 2: PURPOSE OF TRADING BOOK CLIMATE RISK SCENARIO ANALYSIS CONDUCTED



→ Scenario execution

In completing scenario analysis, banks use either a top-down or a hybrid of top-down and bottom-up approaches to define trading book climate risk scenarios, with only 6% using a bottom-up-only approach. Most banks conducted purely quantitative or a hybrid of quantitative and qualitative analysis.

No banks are currently integrating climate risk directly into their valuation models. Some banks noted that climate risk is already reflected in other market parameters, that it is currently only relevant to niche products, and that work is ongoing to establish whether there is evidence of observable climate risk factors and available market data.

In carrying out scenario analysis, most banks consider a number of dimensions, with sector the most common to assess the impact of climate scenarios.

The survey explored the key challenges banks have identified in developing and executing climate risk scenario analysis for the trading book. These include mapping climate drivers to market risk factors, data availability and quality, and lack of consensus on methodology and approach (see Figure 3).

When viewed in combination with wider survey inputs, these challenges reflect two key themes: trading book scenario analysis execution choices, and data availability and quality.

A majority of respondents (78%) acknowledged challenges in identifying and defining climate risk shocks, as well as mapping climate drivers to market risk factors. A lack of consensus on methodology and approach was identified by 72% of respondents, while 67% highlighted challenges in selecting and calibrating parameters.

As a result of these challenges, banks see the potential benefits of engaging with regulators to help define and run an exploratory scenario for the trading book. This would allow the ability to compare outputs and identify emerging standards, as well as provide a valuable learning exercise for both the industry and regulators.

A majority of banks (78%) identified data availability and quality as a key issue. This includes access to consistent, granular and reliable data to assess climate risk, including information from firm disclosures.

To address this issue, respondents expressed a need for greater data availability from data providers and further data standardisation from regulators and international bodies such as the Task Force on Climate-Related Financial Disclosures (TCFD). Data standards across sectors, industries, firms and asset locations are identified as necessary to help achieve greater consistency and reliability.

In particular, standardisation of climate-related information and definitions is considered important for promoting clarity and consistency in scenario analysis.

A majority of banks (72%) agree that climate risk scenario analysis should be included in trading book risk management processes and frameworks. Others plan to incorporate it when understanding of climate risk in their trading book is more mature. Specific details such as metrics, risk factors and methodologies are yet to be finalised.

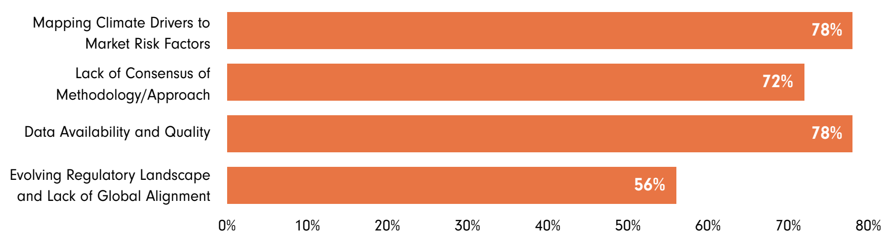
If not implemented already, firms plan to incorporate climate risk into their broader market and counterparty credit risk management frameworks during 2022–2024. Evaluation of climate risk materiality under different scenarios will be prioritised, followed by updating relevant policies and associated processes and controls. Overall, climate risk is not viewed as a new type of risk for the trading book, but primarily as a driver of risk.

Next steps

Most banks are completing climate risk scenario analysis and intend to develop their capability, with particular focus on the trading book. This is aligned with efforts by global regulators, including the ECB, to embed climate risk and wider environmental risks into broader risk management.

The survey identified key challenges relating to data, methodology and standardisation – for example, the ability to translate acute physical risks (such as floods and hurricanes) into scenario parameters. The survey highlighted an appetite for joint initiatives to address this, including with regulators – for example, via a targeted trading book exploratory scenario exercise that builds on recently completed initiatives that have helped accelerate progress for the non-trading book.

FIG 3: CHALLENGES IN DEVELOPING A CLIMATE RISK SCENARIO ANALYSIS FOR THE TRADING BOOK



There is substantial regulatory focus on climate risk and capital treatment in risk management frameworks. In June 2022, the Basel Committee on Banking Supervision published *Principles for the Effective Management of Climate-related Financial Risks*, which covers expectations for banks and regulators, including issues to consider when assessing capital accuracy for market risk management. A number of regulators are also developing approaches aligned with these principles.

Broader market initiatives on disclosure (for example, by the TCFD) could also help drive greater availability and consistency of data. However, further work is required on definitions and standards – for example, reporting against the EU taxonomy and the treatment of derivatives in various sustainable finance disclosures. As it stands, green taxonomy initiatives in Europe, the UK and a number of Asian countries are continuing to evolve.

Read the full report, *Climate Risk Scenario Analysis for the Trading Book*: bit.ly/3gCvGg6

Fresh Perspectives

The second phase of ISDA's Future Leaders in Derivatives programme began in October with a new cohort of future leaders focusing on energy security. ***James Fitzgerald****, who participated in the first phase, reflects on the value of the programme*

As a senior associate in the financial services regulatory team at McCann FitzGerald LLP, a commercial law firm in Ireland, I have a keen interest in how technology and innovation can positively affect the provision of financial services. Technology has had a significant impact on how financial services can be delivered, helping to ensure greater efficiencies that, in turn, mean better options for service providers, customers and the economy as a whole. Greater choice, lower costs and quicker processes are just some of the benefits that can be achieved through technology and innovation, and recent economic events have demonstrated the need for better value for end users.

With this in mind, I was delighted to contribute to the ISDA Future Leaders in Derivatives (IFLD) whitepaper, *The Future of Derivatives Markets: A Roadmap for Innovation*. Developed during the first phase of the IFLD and published in May 2022, the paper encourages current leaders to embrace transformational change and supports them in adopting an ambitious strategy for defining a digital future for financial markets, fostering an environment for technological innovation and building a safer, more robust global financial system.

One of the main benefits of participating in the IFLD was working with a group of highly skilled professionals from a variety of backgrounds and jurisdictions and understanding their perspectives. The other participants came from different sectors of the derivatives market and brought their own unique insights to the issues and possible solutions. Having representation from various jurisdictions also meant we had valuable experience of several regulatory regimes. The sharing of information and ideas was very valuable in allowing our group to look holistically at the issues that arose.

Our challenge was to identify specific use cases for the transformative potential of technology and innovation. It was certainly useful to hear everyone's views on this and then work as a team to prioritise possible areas of focus. After some discussion, we agreed to focus on two use cases – the application of distributed ledger technology to trade reporting and the use of digital assets in collateral management.

In addition to the development of the whitepaper, the IFLD programme included five virtual training sessions that were run at different times and recorded to enable maximum participation. The training covered valuable professional skills, including leadership style, giving and receiving feedback, developing executive presence and empowerment. These sessions were very useful and perfectly tailored to the stage of participants' careers. They have helped to equip me with practical tools to develop in a leadership role, while also helping to grow my confidence and experience.

I was delighted to be chosen to be part of the IFLD and it has had a really positive impact on my career, allowing me to develop important skills and expand my network. I have no doubt the programme will continue to grow and would encourage anyone who is thinking of getting involved to apply for the next phase. IQ

James Fitzgerald completed a Bachelor of Civil Law at University College Dublin before undertaking a Master of Laws (LLM) at the University of Michigan. After working for Rubicon Capital Advisors, an investment banking firm focused on the infrastructure, energy and utilities sectors, he trained and qualified as a solicitor with McCann FitzGerald LLP, where he has worked since 2013, becoming a senior associate in July 2021.

ABOUT THE IFLD

The ISDA Future Leaders in Derivatives (IFLD) initiative launched in October 2021 as a professional development programme for emerging leaders in the derivatives market to support their career progression and enable them to gain experience of working alongside other practitioners from all parts of the market.

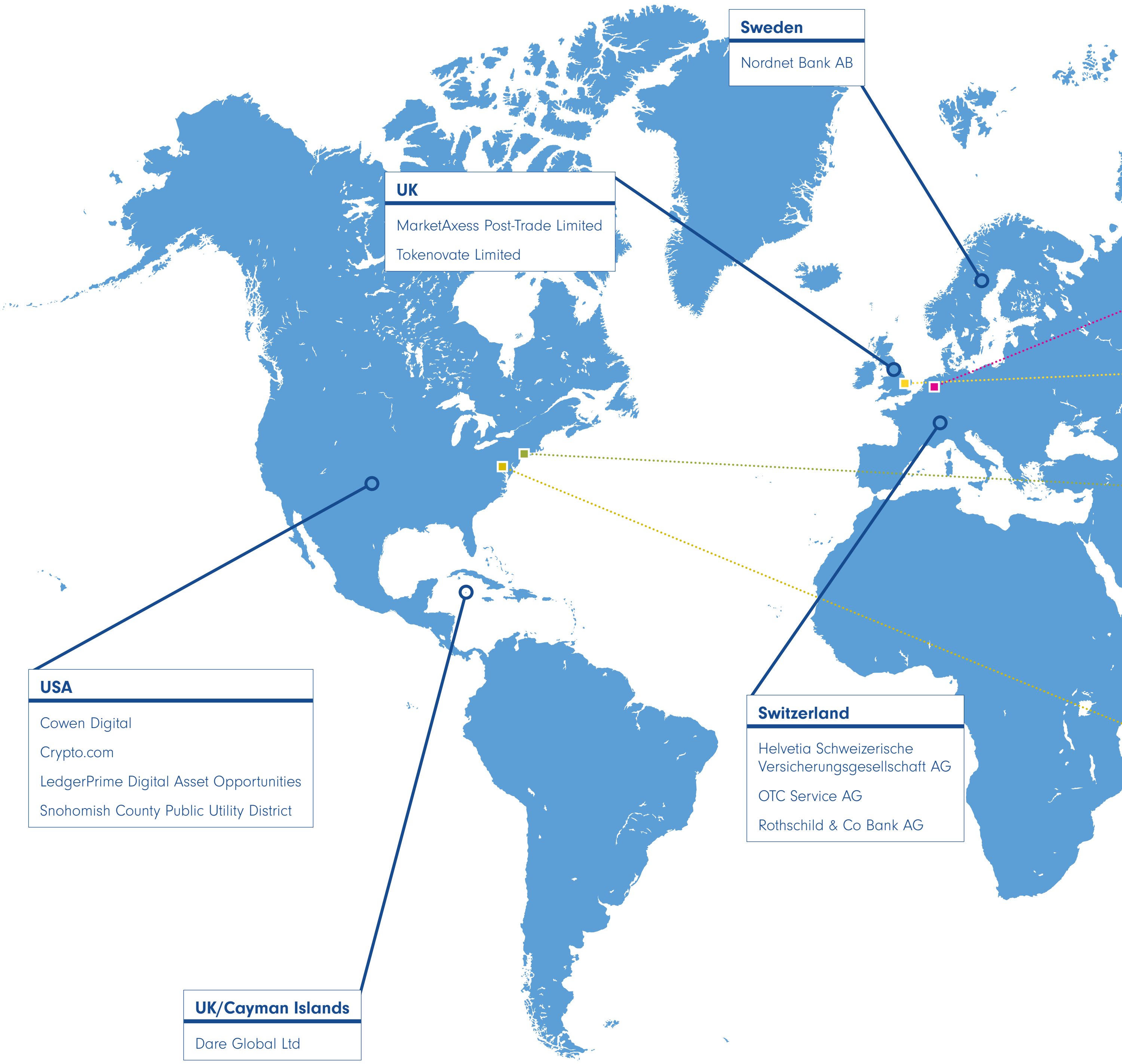
In the first phase, ISDA enrolled a diverse group of derivatives professionals into two working groups and tasked them with developing whitepapers relating to environmental, social and governance and technology and innovation. The two papers were published at ISDA's 36th Annual General Meeting in Madrid in May 2022, and participants were then given access to a virtual training programme.

The second phase of the IFLD began in October 2022, with a new group of 30 derivatives market professionals asked to develop a whitepaper on energy security, due for publication next year. Nominations for the subsequent phase of the programme will open in the second half of 2023.

Read the IFLD papers *Sustainability-linked Derivatives: Where to Begin?* (bit.ly/3TByuYy) and *The Future of Derivatives Markets: A Roadmap for Innovation* (bit.ly/3USiWkb). For more information on the IFLD, visit: bit.ly/3tw3Cy6

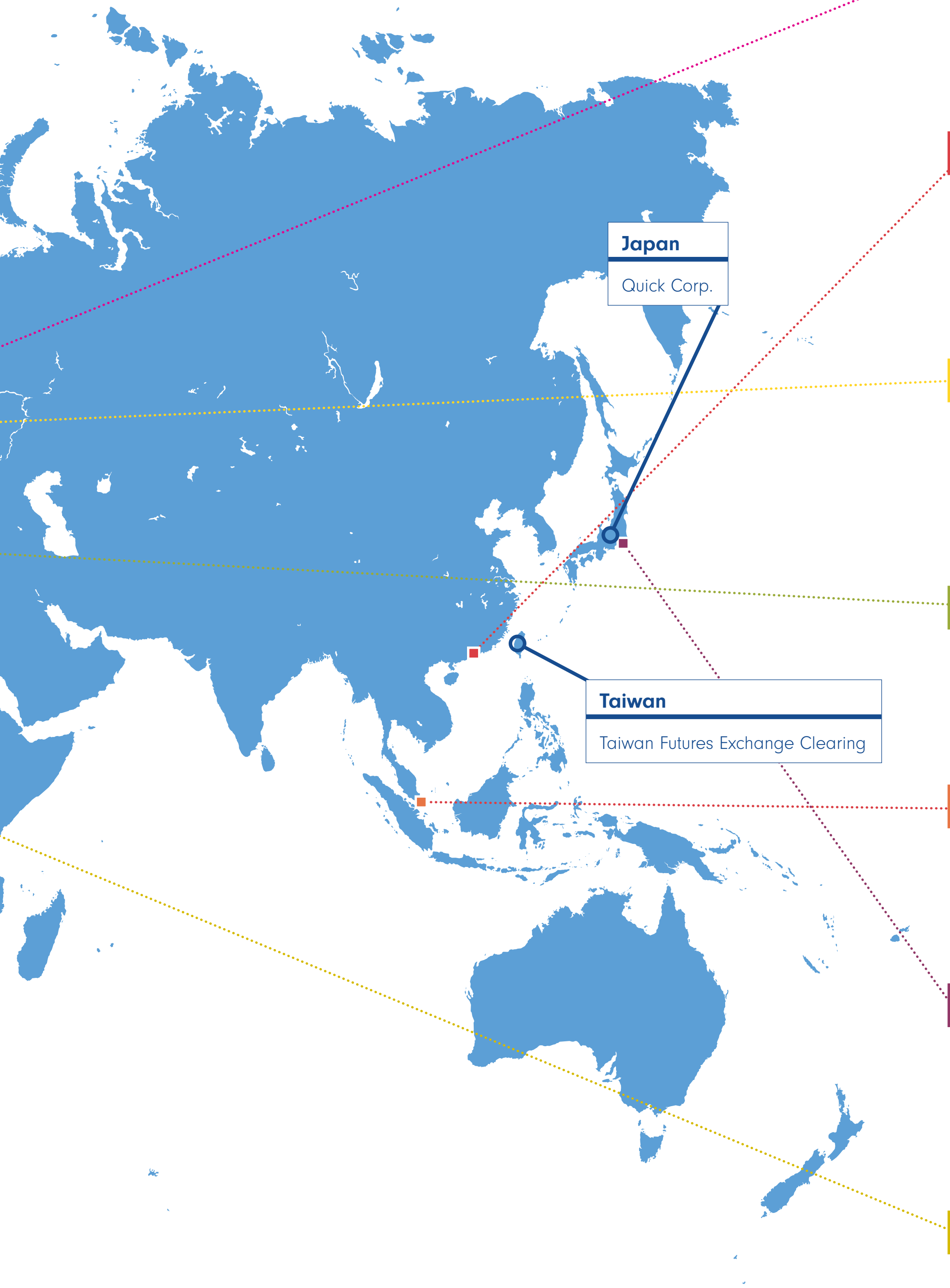
NEW ISDA MEMBERS

A big welcome to all new members that joined ISDA in the third quarter of 2022. We look forward to working with you in the future



For additional information on joining ISDA, please visit the ISDA Membership

OFFICE LOCATIONS



BRUSSELS
2nd floor, Square de Meeûs 5/6
1000 Brussels
Belgium
Phone: 32 (0) 2 808 8013
isdaeurope@isda.org

HONG KONG
Suite 1602, 16th Floor, China Building
29 Queen's Road Central
Central, Hong Kong
Phone: 852 2200 5900
Fax: 852 2840 0105
isdaap@isda.org

LONDON
25 Copthall Avenue, 3rd Floor
London EC2R 7BP
United Kingdon
Phone: 44 (0) 20 3808 9700
Fax: 44 (0) 20 3808 9755
isdaeurope@isda.org

NEW YORK
10 East 53rd Street, 9th Floor
New York, NY 10022
Phone: 1 212 901 6000
Fax: 1 212 901 6001
isda@isda.org

SINGAPORE
One Raffles Quay
North Tower, #49-51A
Singapore 048583
Phone: 65 6653 4170
isdaap@isda.org

TOKYO
Otemachi Nomura Building, 21st Floor
2-1-1 Otemachi
Chiyoda-ku, Tokyo 100-0004
Phone: 813 5200 3301
Fax: 813 5200 3302
isdajp@isda.org

WASHINGTON
600 13th Street, NW, Suite 320
Washington, DC 20005
Phone: 1 202 683 9330
Fax: 1 202 683 9329
isda@isda.org

Portal at **https://membership.isda.org/**

ISDA | Safe, Efficient Markets

Fundamentals of Derivatives

ISDA has produced a series of short educational videos on the functioning and key features of derivatives markets. The full series is available on the ISDA website, via the links below

How do Derivatives Benefit the Global Economy?

Derivatives play a critical role in helping to reduce the uncertainty that comes from changing interest rates and exchange rates, as well as credit, commodity and equity prices

bit.ly/3PiiB7N

How Big is the Derivatives Market?

This animation sets out the size of the market and describes some of the changes that have taken place in recent years to make the derivatives market safer and more resilient

bit.ly/3cgVb4d

How is Collateral Used in the Derivatives Market?

Collateral acts as a backstop that protects market participants and the economy as a whole. The requirement to post collateral makes the derivatives market more transparent, resilient and safe

bit.ly/3PfjSwz

How do Derivatives Help Firms Access Global Markets?

This animation shows how the global nature of the derivatives market allows companies to borrow outside their domestic market and hedge that risk efficiently

bit.ly/3INjKlr

What are the Benefits of Close-out Netting?

Close-out netting occurs when two counterparties agree to combine their various obligations into a single net payment following a default, drastically reducing credit exposure

bit.ly/2K1KJf1

Who Uses Derivatives and Why?

Thousands of companies around the world, including mortgage providers, retirement funds, asset managers, food and beverage companies and airlines, use derivatives to reduce risks and increase certainty for their customers

bit.ly/3PgU0Aq

The Resilience of Financial Markets

The global pandemic significantly disrupted economic activity, but derivatives markets and the financial system in general remained robust, allowing firms to continue to borrow and manage risk

bit.ly/3Pyv4E5

What Role will Derivatives Play in Tackling Global Climate Change?

Countries across the globe have pledged to reduce the amount of carbon dioxide they release into the atmosphere, and derivatives will play a critical role in the transition to a greener world

bit.ly/3yQI8hl

Understanding the ISDA Master Agreement

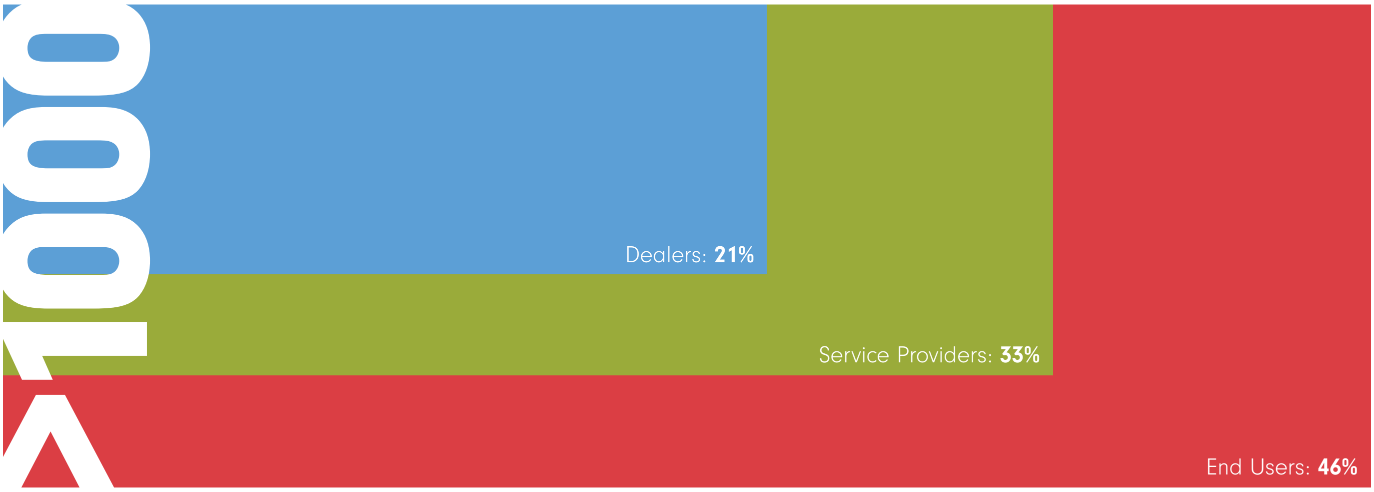
For 35 years, the ISDA Master Agreement has helped create standardisation in the derivatives market by providing a common contractual template for the trading relationship between two derivatives counterparties

bit.ly/3AYWuiG

MEMBERSHIP INFORMATION

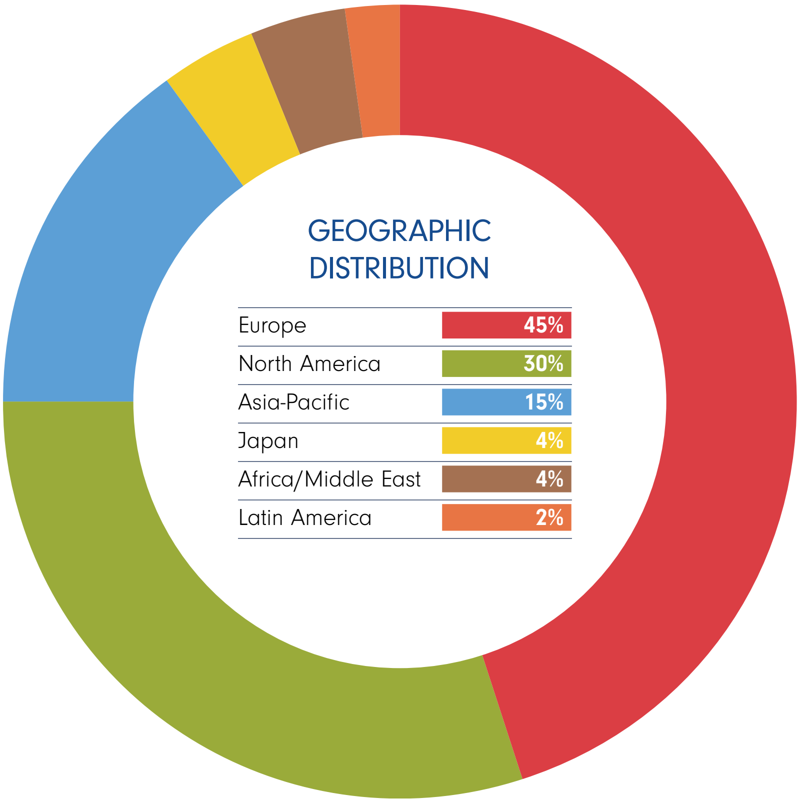
ISDA has over 1,000 member institutions from 79 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers.

MEMBERSHIP BREAKDOWN



TYPES OF MEMBERS

Banks	30%
Law Firms	21%
Asset Managers	8%
Government Entities	13%
Energy/Commodities Firms	7%
Diversified Financials	6%
Other	15%



GEOGRAPHIC DISTRIBUTION

Europe	45%
North America	30%
Asia-Pacific	15%
Japan	4%
Africa/Middle East	4%
Latin America	2%

Additional information regarding ISDA's member types and benefits, as well as a complete ISDA membership list, is available on the ISDA Membership Portal: https://membership.isda.org/

BOARD OF DIRECTORS

OFFICERS

Eric Litvack, Chairman
Managing Director, Group Director of Public Affairs
Société Générale

Jack Hattem, Secretary
Managing Director, Global Fixed Income
BlackRock

Axel van Nederveen, Vice Chairman
Managing Director, Treasurer
European Bank for Reconstruction and Development (EBRD)

Darcy Bradbury, Treasurer
Managing Director
D. E. Shaw & Co., L.P.

DIRECTORS

Thijs Aaten
Chief Executive Officer
APG Asset Management Asia

Marc Badrichani
Head of Global Sales & Research
J.P. Morgan

William Black
Managing Director and Global Head of OTC Clearing
Credit Suisse

Charlotte Brette
General Counsel
AXA Investment Managers

Biswarup Chatterjee
Managing Director, Head of Innovation, Global Markets
Citigroup

Christine Cremel
Managing Director, Head of Onboarding, Transaction Management & Clearing
Credit Agricole CIB

Tina Hasenpusch
Managing Director, Global Head of Clearing House Operations
CME Group

Amy Hong
Head of Market Structure and Strategic Partnerships
Goldman Sachs & Co. LLC

Sian Hurrell
Head of Markets Europe
RBC Capital Markets

Gesa Johannsen
EMEA Head of CCM and Global Head of Product Strategy - Clearance and Collateral Management (CCM)
BNY Mellon

Jeroen Krens
Managing Director, Credit, Rates & Emerging Markets
HSBC Bank Plc.

Erik Tim Mueller
Chief Executive Officer
Eurex Clearing AG

Andrew Ng
Group Executive & Head of Treasury and Markets
DBS Bank

Shigeru Nonomura
Managing Director, Global Markets Japan
Nomura Securities Co., Ltd.

Scott O'Malia
Chief Executive Officer
ISDA

Emmanuel Ramambason
Financial Markets Global Head of Resources Management and Analytics (RMA)
Standard Chartered Bank

Duncan Rodgers
Managing Director, Head of ALM Strategy
UBS AG

Joanne Rowe
Corporate Risk Officer
Intercontinental Exchange, Inc.

Marc Seidner
Managing Director, Chief Investment Officer
PIMCO

Michael Stanley
Co-head of Global Rates & Counterparty Portfolio Management
Bank of America

Niamh Staunton
SVP Treasury
bp plc

Hideki Ushida
Managing Director, Global Markets Internal Control Office
MUFG Bank, Ltd.

Jacques Vigner
Chief Strategic Oversight Officer for Global Markets
BNP Paribas

Tom Wipf
Vice Chairman
Morgan Stanley

ISDA EXECUTIVES

LEADERSHIP TEAM

Scott O'Malia
Chief Executive Officer

Steven Kennedy
Global Head of Public Policy

Katherine Tew Darras
General Counsel

Tara Kruse
Global Head of Infrastructure, Data and Non-cleared Margin

Huzefa Deesawala
Chief Financial Officer

Nick Sawyer
Global Head of Communications & Strategy

Mark Gheerbrant
Global Head of Risk and Capital

Lorraine Sneddon
Global Head of Human Resources

SENIOR EXECUTIVES

Clive Ansell
Head of Market Infrastructure and Technology

Ann Battle
Senior Counsel, Market Transitions

Amy Caruso
Head of Collateral Initiatives

Monica Chiu
Senior Counsel, Asia Pacific

Roger Cogan
Head of European Public Policy

Panayiotis Dionysopoulos
Head of Capital

Benoît Gourisse
Head of Public Policy, Asia Pacific

Jing Gu
Head of Asia, Legal

Marisa Irurre Bauer
Head of Conferences

Ulrich Karl
Head of Clearing Services

Shafqat Malhi
Senior Controller

Olivier Miart
Head of Analytics

Dillon Miller
Chief Technology Officer

Alan Milligan
Head of Data and Digital Solutions

Tomoko Morita
Senior Director and Head of Tokyo Office

Mark New
Senior Counsel, Americas

Nnamdi Okaeme
Head of SIMM

Olga Roman
Head of Research

Bella Rozenberg
Senior Counsel & Head of Regulatory and Legal Practice Group

Rick Sandilands
Senior Counsel, Europe

Fiona Taylor
Head of UK Public Policy

Peter Werner
Senior Counsel (Legal Infrastructure and Law Reform)

Chris Young
Head of US Public Policy

Liz Zazzera
Head of Membership

ISDA Conferences

@ISDAConferences | linkedin.com/company/isda | @ISDA.org

Education has been part of ISDA's mission since the association's inception. ISDA's highly qualified instructors continue to educate the industry through online conferences and in cities across the globe. Check out a few of our upcoming in-person events below. New events are added weekly – visit isda.org/events for up-to-date listings

ISDA Masterclass Highlight: Derivatives Documentation

Welcome back to the classroom! Kick off 2023 with ISDA's Masterclass on Derivatives Documentation. This small group learning class, led by experienced practitioners, will provide delegates with an in-depth understanding of the ISDA Master Agreement and supporting documents. You will participate in a hands-on negotiation workshop and follow real-world examples of counterparties using derivatives, why they use them and how they need to be documented.

2-Day Course | In-Person | New York, January 31-February 1 | London, February 7-8. Visit isda.org for more info

Visit **isda.org/events** for complete up-to-date conference listings

The ISDA Annual Legal Forum is back in-person in London.
March 2 | Early Registration Price Available!

Explore ESG and sutainable finance from all angles, including voluntary carbon markets, sustainability-linked derivatives and managing climate risk – Q1 in New York

Join us in London on February 21 for an event like no other. ISDA, in cooperation with ICMA and ISLA, will host an interactive showcase, highlighting the benefits of the Common Domain Model and what the future holds for CDM use. Mark your calendar today!

If you have an idea for a topic you would like to sponsor or if you see an event you would like to sponsor please contact Rob Saunders: +44 (0) 20 3808 9727 | rsaunders@isda.org

MISSION STATEMENT

ISDA fosters safe and efficient derivatives markets to facilitate effective risk management for all users of derivative products

STRATEGY STATEMENT

ISDA achieves its mission by representing all market participants globally, promoting high standards of commercial conduct that enhance market integrity, and leading industry action on derivatives issues.

THE PREEMINENT VOICE OF THE GLOBAL DERIVATIVES MARKETPLACE

Representing the industry through public policy engagement, education and communication

AN ADVOCATE FOR EFFECTIVE RISK AND CAPITAL MANAGEMENT

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

THE SOURCE FOR GLOBAL INDUSTRY STANDARDS IN DOCUMENTATION

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

A STRONG PROPONENT FOR A SAFE, EFFICIENT MARKET INFRASTRUCTURE FOR DERIVATIVES TRADING, CLEARING AND REPORTING

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

www.isda.org

*

"Digital regulatory reporting could provide a solution to fix trade reporting and finally deliver on the goal of transparency in the G-20 derivatives reforms"

Caroline D. Pham, Commodity Futures Trading Commission

©2022 International Swaps and Derivatives Association, Inc.