INTERVIEW
CFTC chair Heath Tarbert on the COVID-19 response

BENCHMARKS
Practitioners give their views on RFR progress

ROUNDTABLE
ISDA board on the transformation of derivatives

IQ

ISDA® Quarterly

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*SEISMIC SHIFT

The rapid escalation in the coronavirus pandemic forces a shift in priorities, with derivatives market participants focusing on business continuity and managing volatility

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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.

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Changing Priorities

The coronavirus pandemic has forced firms to switch their focus to critical priorities like maintaining their operations, managing volatility and servicing customers, all in an environment of social distancing and home working. These exceptional circumstances have posed unique questions and issues, which the industry and ISDA have been responding to.

Recognising that financial institutions are now entirely focused on business continuity and managing risk, regulators have been quick to extend upcoming deadlines and provide temporary relief on existing obligations. Various measures have also been introduced to allow banks to eat into capital and liquidity buffers so they can continue to support the economy. These steps have been important and have enabled firms to better allocate scarce resources, but challenges remain in a variety of areas. ISDA has been busy identifying these problematic issues and proposing solutions to regulators.

Some of the issues have been operational in nature. For example, the closure of offices globally in response to the coronavirus outbreak has highlighted potential difficulties in signing and delivering paper documents and notices, and has prompted greater interest in digital documentation, e-signatures and the enforceability of electronic contracts in various jurisdictions. And, in an environment where some national authorities opted to close certain markets and infrastructures in response to severe volatility, there has also been a need for industry guidance to provide clarification and help ensure the orderly valuation and settlement of derivatives positions.

This edition of **IQ** examines some of the issues raised by the coronavirus crisis, and looks at the measures taken by ISDA and the industry to help ensure markets continue to function efficiently. We also look at the regulatory response, and consider what might come next.

It's not all about coronavirus, though. Progress continues to be made on efforts to adopt alternative risk-free rates ahead of the end of 2021, when the UK Financial Conduct Authority has said it will no longer compel or persuade banks to make LIBOR submissions. Last month, ISDA published preliminary results from its latest consultation on fallbacks, which indicate strong support for including both pre-cessation and permanent cessation fallbacks as standard language in the 2006 ISDA Definitions and in a single protocol. In this issue of **IQ**, we ask a range of market participants for their views on benchmark reform, including the importance of robust fallbacks.

Nick Sawyer
Global Head of Communications & Strategy
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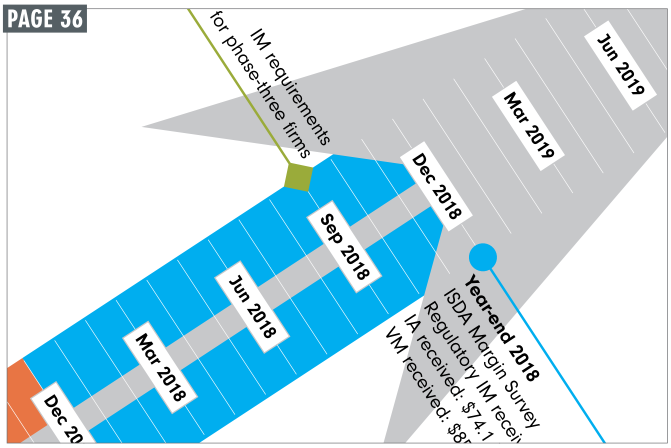

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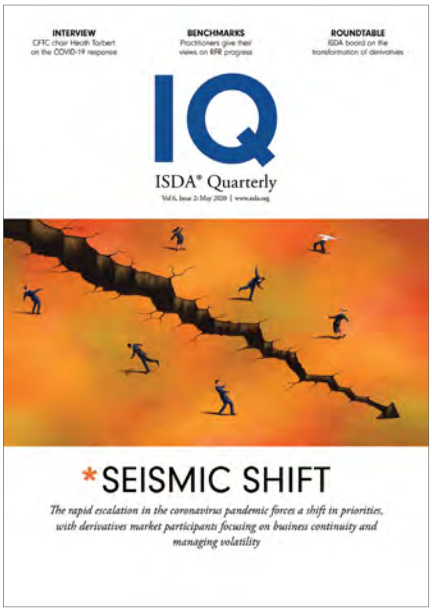

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"The good news is that, so far, the derivatives markets are absorbing the stress. They've been quite resilient – this is not 2008, that much is clear. We're going to be nimble and responsive as this continues to unfold"

Heath Tarbert, Commodity Futures Trading Commission

Responding to Coronavirus

The coronavirus pandemic means central banks, regulators and the industry will need to continue taking unprecedented action to ensure markets continue to function, writes ***Scott O'Malia***

Governments, central banks and regulators have been forced to instigate exceptional measures in response to the economic and financial turmoil caused by the coronavirus pandemic, from rate cuts to regulatory relief. But as this crisis continues, it's important that authorities continue to act as necessary to ensure markets are able to function, sufficient capital and liquidity is available, and regulatory and market impediments are removed.

The first of those is fundamental. For markets to function, they need to remain open wherever possible to ensure critical payments and transactions can be fulfilled and firms are able to manage their exposures – a position we set out in a letter to the Financial Stability Board and International Organization of Securities Commissions in March. Unexpected market closures result in additional stress and uncertainty, affecting liquidity, risk management, transparency and stability.

> "As this crisis continues, it's important that authorities continue to act as necessary to ensure markets are able to function"

This needs to be supported by continued monetary and fiscal action to ensure firms are able to access financing and manage risk. A number of jurisdictions have widened the scope of central bank financing facilities and allowed banks to use excess capital and liquidity buffers so they can continue to provide intermediation services and support the economy. These measures should be continually reviewed to assess if they need to be clarified, extended and/or modified to maximise their impact.

An important aspect to this is the availability of US dollars. Significant steps have been taken by the Federal Reserve to ease the current strain on US dollar funding by opening swap lines with a group of foreign central banks and establishing a temporary repo facility for central banks and international monetary authorities to exchange their US Treasury holdings for dollars. However, there continues to be an acute shortage of US dollars in emerging markets, which could have serious consequences for the financial and economic stability of these countries. In a recent letter sent jointly with the Institute of International Finance to Group-of-20 finance ministers and central bank governors, we set out a number of possible solutions to help address this issue.

Likewise, in a situation where financial institutions are wholly focused on critical priorities, such as ensuring their continued operation, serving customers and supporting the real economy, extending regulatory deadlines and providing relief on new obligations continues to be vital, enabling firms to free up capacity for business continuity and risk management.

In this context, the quick action taken by regulators to delay Basel III by a year and to defer implementation of phases five and six of the initial margin requirements for non-cleared derivatives is important. Providing certainty now has given important reassurance to firms on how to manage scarce resources.

There are other examples of where temporary targeted adjustments to the regulatory framework are necessary to avoid pro-cyclicality and support immediate monetary and fiscal policy goals. ISDA will continue to work with the industry to highlight choke points and to liaise with regulators on potential solutions.

At the same time, we will continue to press forward with existing work to enable greater automation throughout the derivatives lifecycle. The current environment of remote working and social distancing could provide a renewed impetus for the digitisation of legal documents, use of e-signatures, and the online negotiation and execution of agreements. It could also encourage firms to take the plunge and replace legacy infrastructure in order to fully automate post-trade processes. ISDA is already well placed to tackle these issues following our work on the Common Domain Model, ISDA Create, smart derivatives contracts and various standardisation initiatives.

The rapid escalation of the coronavirus outbreak has created unprecedented market challenges, forcing regulators and market participants to think on their feet and act quickly. Fortunately, the financial system is more resilient and more able to withstand stress as a result of the regulatory reforms of the past decade. However, we would urge authorities to continue to act as necessary in response to the crisis. For our part, ISDA will continue to work with the industry and regulators to help keep markets functioning as efficiently as possible.

Scott O'Malia
ISDA Chief Executive Officer

New Supplement Tackles Swaption Change

ISDA has published a new supplement to the 2006 ISDA Definitions to address the impact forthcoming central counterparty (CCP) discounting changes will have on swaptions. The changes came into effect for new swaptions from March 30.

As part of the benchmark reform initiative to adopt alternative risk-free rates, CME Group, Eurex and LCH have announced they plan to switch discounting and price alignment interest (PAI) from EONIA to €STR for euro cleared interest rate swaps from July 27. Meanwhile, CME and LCH plan to move from the effective federal funds rate (EFFR) to SOFR for US cleared interest rate swaps after business close on October 16. In each case, the clearing houses have developed compensation mechanisms for pre-existing cleared swaps to address changes in valuation resulting from the move.

The discounting change may also affect certain swaptions that have an exercise date after the switch, but these won't be covered by clearing house compensation mechanisms because the underlying swaps won't have been cleared by that point. In order to provide clarity to swaption users, the ISDA supplement sets out revised conventions and introduces the concept of an 'agreed discount rate' for new swaptions that specify 'cleared physical settlement' or 'cash settlement' with 'collateralised cash price' as the applicable cash settlement method.

Under the new supplement, in cases where the parties specify both a mutually agreed clearing house and an agreed discount rate in advance for cleared physical settlement swaptions, there is now an obligation to agree a compensation amount if the agreed discount rate differs from the discount rate/PAI set by the clearing house at the time of exercise.

For cash settlement – collateralised cash price swaptions where a mutually agreed clearing house and agreed discount rate have been set out in the confirmation, but the discount rate used by the clearing house differs at the time of exercise, the parties would use the agreed discount rate to calculate the present value of the underlying swap rather than the discount rate applied by the clearing house.

If neither a clearing house nor an agreed discount rate is specified in advance, and the parties to a cleared physical settlement swaption can't agree on a CCP at time of exercise, then cash settlement – collateralised cash price would apply as a fallback, and the net present value would be calculated using the discount rate set out in ISDA's collateral cash price matrix. This has been updated to reflect the upcoming CCP discounting/PAI changes. Specifically, the revised matrix now points to EONIA or EFFR if the swaption expires before the relevant switch and €STR or SOFR if the exercise date occurs after the change.

"The supplement aims to provide clarity to swaption users under a variety of different scenarios. By introducing the concept of an agreed discount rate and establishing an obligation to provide compensation in certain cases, the updated standards take account of the changes in clearing house discounting and PAI later this year," says Jonathan Martin, director in the market infrastructure and technology group at ISDA.

The changes set out in the new supplement will not apply to legacy swaption trades, unless counterparties bilaterally agree to amend their existing contracts to apply the new conventions. IQ

More information on the supplement and revised collateral cash price matrix is available here: bit.ly/2X3UPUP

	Cleared Physical Settlement	Cash Settlement and Collateralised Cash Price
Parties specify both a mutually agreed clearing house and an agreed discount rate	• Parties agree to compensation if the agreed discount rate differs from the discount rate/PAI applied by the mutually agreed clearing house at the time of exercise of the swaption. • If the parties cannot agree a compensation amount by the time the underlying swap will be cleared, the parties cash settle using collateralised cash price and the agreed discount rate.	• If the mutually agreed clearing house applies the same discount rate/PAI as the agreed discount rate at the time of exercise, the parties cash settle using the mutually agreed clearing house discount factors for the purposes of collateralised cash price. • If the mutually agreed clearing house does not apply the same discount rate/PAI as the agreed discount rate at the time of exercise, the parties cash settle using collateralised cash price and the agreed discount rate.
Parties specify an agreed discount rate but not a mutually agreed clearing house	• Parties agree on the clearing house at the time of exercise of the swaption, but there is no obligation to agree compensation, even if the agreed clearing house applies a discount rate/PAI that differs from the agreed discount rate. • If the parties cannot agree on a clearing house, the parties cash settle using collateralised cash price and the agreed discount rate.	• Parties cash settle using collateralised cash price and the agreed discount rate.
Parties specify neither a mutually agreed clearing house nor an agreed discount rate	• Parties agree on the clearing house at the time of exercise of the swaption. • If the parties cannot agree on a clearing house, the parties cash settle using collateralised cash price and the collateral cash price matrix. If the swaption expiration date is on or prior to the relevant CCP transition date: EONIA/EFFR. If the swaption expiration date is after the relevant CCP transition date: €STR/SOFR.	• Parties cash settle using collateralised cash price and the collateral cash price matrix. If the swaption expiration date is on or prior to the relevant CCP transition date: EONIA/EFFR. If the swaption expiration date is after the relevant CCP transition date: €STR/SOFR.
Parties specify a mutually agreed clearing house but not an agreed discount rate	• Parties clear the underlying swap at the mutually agreed clearing house.	• Parties cash settle using the mutually agreed clearing house discount factors for the purposes of collateralised cash price.

ISDA Publishes New Margin Survey

ISDA has published its latest annual margin survey, which shows the amount of initial margin (IM) collected by the 20 largest market participants for their non-cleared derivatives trades continued to rise in 2019.

The new survey finds that the 20 largest market participants (known as phase-one firms) collected approximately $173.2 billion of IM for their non-cleared derivatives transactions at year-end 2019, an increase of 10% versus the end of 2018.

Of this amount, $105.2 billion was collected from counterparties currently subject to regulatory IM requirements, while $68.0 billion of IM was collected from counterparties and/or for transactions that are not in scope of the margin rules, including legacy transactions. In addition to these amounts, phase-one firms reported that they collected $44.0 billion of IM for their inter-affiliate derivatives transactions at year-end 2019.

The ISDA Margin Survey analyses the amount and type of IM and variation margin (VM) posted for non-cleared derivatives, and the IM posted for cleared transactions. The amount of regulatory IM has been increasing since September 2016, when new margin requirements for non-cleared derivatives trades started to phase in, initially for phase-one entities. Additional firms and new transactions have become subject to the requirements over time.

VM collected by phase-one firms for non-cleared derivatives totalled $897.3 billion at year-end 2019, compared with $858.6 billion at the end of 2018. This includes $441.5 billion of regulatory VM and $455.8 billion of discretionary VM. The combined total of IM and VM collected by the 20 phase-one firms for their non-cleared derivatives transactions was $1.07 trillion at the end of 2019.

The amount of IM posted for cleared derivatives has also increased. IM posted by all market participants to major central counterparties (CCPs) for their cleared interest rate derivatives and credit default swap transactions totalled $269.1 billion at the end of 2019, a 20.6% increase versus $223.1 billion at the end of 2018.

To collect this data, ISDA surveyed 27 firms subject to the margin requirements. Responses were received from 20 phase-one firms, four phase-two entities and three phase-three firms. ISDA also used publicly available margin data on cleared derivatives from two US CCPs, four European CCPs and two Asian CCPs. IQ

| For more detail on the survey, see pages 36-39

BCBS/IOSCO Margin Deferral Welcomed

A one-year delay to the implementation of phases five and six of the regulatory initial margin requirements for non-cleared derivatives has provided essential breathing space for firms to focus on business continuity and risk management in response to the coronavirus pandemic, according to Scott O'Malia, ISDA's chief executive.

> "This will enable the hundreds of buy- and sell-side firms that would have come into scope to focus their resources on ensuring business continuity, managing risk and supporting their customers"
> **Scott O'Malia, ISDA**

The Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) announced on April 3 that the phase-five implementation of the initial margin requirements would be deferred until September 2021, while phase six would be delayed until September 2022. The change was made to free up operational capacity for firms to respond to the impact of the coronavirus outbreak and to provide more time to comply with the requirements, the committees said.

"We greatly appreciate the decision by the BCBS/IOSCO to defer implementation of phases five and six of the initial margin requirements. This will enable the hundreds of buy- and sell-side firms that would have come into scope to focus their resources on ensuring business continuity, managing risk and supporting their customers," says O'Malia.

According to ISDA analysis, 314 entities were due to come into scope of the rules in September 2020, equating to 3,616 counterparty relationships. A further 775 were set to become subject to the requirements in September 2021, equal to 5,443 relationships.

The BCBS/IOSCO announcement followed a letter co-signed by ISDA and 20 other trade associations in March, which called for a delay to the phase five and six implementation date. The letter pointed out that in-scope entities have little spare capacity to run average aggregate notional amount calculations, implement and test margin calculation systems, establish custodial relationships and negotiate new documentation.

Following the decision at the BCBS/IOSCO level, a number of national regulators have followed suit, including Canada, Singapore and Switzerland, while others have indicated they will take action shortly. "We will now work with national authorities in order for the revised timetable to be applied in each jurisdiction as soon as possible," adds O'Malia. IQ

SOFR, SONIA Trading See Jump in First Quarter

Trading volumes in interest rate derivatives (IRD) linked to SOFR and SONIA saw a big increase in the first quarter of 2020, indicating the transition to risk-free rates (RFRs) is picking up steam ahead of the end-2021 target date. However, ISDA SwapsInfo analysis of US swap data shows there is still some way to go to wean the market entirely off LIBOR.

SOFR-linked IRD traded notional totalled $280.4 billion in the first quarter of 2020, up 68.9% compared with $166.0 billion in the fourth quarter of 2019, according to data from the Depository Trust & Clearing Corporation's (DTCC) swap data repository (SDR). The number of trades also climbed significantly, from 541 in the last three months of 2019 to 1,366 in the first quarter of 2020.

IRD referenced to SONIA saw an even bigger jump, with traded notional reaching $8.0 trillion in the three months to end-March 2020 – a 237.4% increase versus the $2.4 trillion in the fourth quarter of 2019. Almost half of that – $3.6 trillion – occurred in January alone, attributed to market participants taking positions ahead of a meeting of the central bank. Trade count rose from 3,432 in the final three months of 2019 to 8,385 in the first quarter of 2020.

However, this data only reflects those trades required to be disclosed under US regulations, and therefore does not provide a complete picture of global trading activity. Speaking at the ISDA/SIFMA AMG Benchmark Strategies Forum in London on February 26, Andrew Hauser, executive director for markets at the Bank of England, noted that half of new cleared sterling swaps were referenced to SONIA in 2019, equal to approximately $4 trillion a month. That ratio had jumped to two thirds in January, but Hauser stressed that more progress was needed.

"We need to see another decisive acceleration in effort in 2020 to ensure risk-free rates are adopted across the full range of sterling business, and LIBOR is left behind for good," he said.

Analysis of the US SDR data shows there is some way to go to achieve the objective of reducing the reliance on LIBOR. According to the DTCC SDR, trading volume in the RFRs is mostly short dated: 68.5% of SOFR-linked and 96.5% of SONIA-linked IRD traded notional in the first quarter had a tenor of up to one year. Only a tiny proportion had a tenor beyond five years: 4% for IRD referenced to SOFR and 1.7% for SONIA-linked IRD.

LIBOR also continues to dominate, comprising 54.3% of total IRD traded notional in the first quarter of 2020. That compares with 9.6% of total IRD traded notional referenced to RFRs. The volume of IRD referencing US dollar LIBOR totalled $35.9 trillion in the first quarter, an increase of 61.2% versus the last three months of 2019.

> "Too much trading activity in the swaps market is currently short-dated, and there's little indication that the RFRs are challenging the IBORs in terms of primacy"
> **Scott O'Malia, ISDA**

What's more, LIBOR trades executed in the first quarter continued to have maturities later than end-2021, the date from which the UK Financial Conduct Authority has said it will no longer compel or persuade banks to make LIBOR submissions.

According to DTCC SDR data, $23.7 trillion of IRD traded notional referencing LIBOR had a 2020 maturity, $8.5 trillion had a 2021 maturity, and $15.3 trillion had a maturity after 2021 – nearly a third of the total IRD notional referenced to LIBOR traded in the first quarter of 2020.

Speaking at the ISDA/SIFMA AMG Benchmark Strategies Forum in February, Scott O'Malia, ISDA's chief executive, said more work was needed to expand liquidity and trading activity in RFRs.

"Too much trading activity in the swaps market is currently short-dated, and there's little indication that the RFRs are challenging the IBORs in terms of primacy. We now face some critical questions – on how to improve market liquidity, how best to manage basis risk, and how to prepare for the operational changes necessary to support RFR-based products. None of this can be left to chance. We all have a role to play to ensure a smooth transition," he said. IQ

Pre-cessation Fallbacks Consultation Result Announced

ISDA has announced preliminary results of its consultation on the implementation of pre-cessation fallbacks for derivatives referenced to LIBOR.

The initial results, published on April 15, indicate a significant majority of respondents are in favour of including both pre-cessation and permanent cessation fallbacks as standard language in the amended 2006 ISDA Definitions for LIBOR and in a single protocol for including the updated definitions in legacy trades.

While the results are subject to further analysis, ISDA currently expects to move forward on the basis that pre-cessation fallbacks based on a 'non-representativeness' determination and permanent cessation fallbacks would apply to all new and legacy derivatives referencing LIBOR that incorporate the amended 2006 ISDA Definitions. The updated definitions for other covered interbank offered rates will continue to include permanent cessation fallbacks only. IQ

Information on fallbacks is available here: bit.ly/3f8mzys

THE COVER PACKAGE

Seismic Shift

The coronavirus pandemic has forced firms to focus on critical priorities, like maintaining operations and managing volatility

Within a short period of time this year, the coronavirus pandemic caused a seismic shift in financial markets. As the virus spread around the world and major economies introduced social distancing and lockdown restrictions, the industry suddenly had to adjust to the challenge of remote working at a time of great uncertainty and high volatility.

With entire firms and teams working in physical isolation from one another, the industry focus shifted to ensuring business continuity, managing risk and supporting clients. Recognising this, regulators acted swiftly to provide temporary, targeted relief on key regulatory requirements to help firms free up capacity to manage the crisis.

This issue of **IQ** explores how the escalation of coronavirus into a global pandemic has affected the derivatives market, and how market participants and regulators have responded. Our article on pages 18-23 explores some of the steps governments, regulators and central banks have taken to support financial markets, and considers what might come next. According to Heath Tarbert, chairman of the Commodity Futures Trading Commission, markets have so far proved resilient, but the agency will remain nimble and responsive as the crisis continues to unfold (see pages 24-26).

Meanwhile, derivatives market participants have been navigating the legal, operational and documentation issues posed by radically different market and working practices. Our cover story on pages 12-16 considers the practical difficulties raised by recent market closures, as well as by remote working and social distancing. Given the challenges of managing complex, manual processes, the current crisis could ultimately provide an impetus for the digitisation of legal documents, online negotiation and execution of agreements, and use of e-signatures. IQ

"The challenges we have faced in 2020 as a result of COVID-19 are certainly unprecedented, but we're seeing the benefits of the reforms that have been implemented"

Patrick Pearson, head of financial market infrastructure and derivatives, European Commission

Managing Disruption

The escalation of COVID-19 into a global pandemic during the first quarter led to major disruption and the temporary closure of some markets. Derivatives infrastructure, operations and processes have remained resilient, but the industry is already looking to incorporate lessons learned from the crisis

In late December 2019, as many financial markets practitioners were taking time out with family and friends before embarking on a new year, the first human cases of COVID-19, an infectious disease caused by a new coronavirus, were reported in Wuhan, China. No one could have predicted at that time the enormous impact the disease would have. Within weeks, it had escalated into an international public health emergency that would claim hundreds of thousands of lives, necessitate the lockdown of entire countries and bring the global economy to a virtual standstill.

UPDATES...

...on the coronavirus pandemic, including information on market closures and regulatory relief, are available here: bit.ly/3cWYpEV

Twelve years on from the financial crisis, COVID-19 has presented a fresh test of the derivatives market's resilience in the face of unprecedented disruption. It has shown the value of many of the regulations that have been implemented over the past decade (see pages 18-23), while also highlighting new issues that must now be addressed. The temporary closure of some markets and the move to remote working has certainly presented some challenges, but the market infrastructure and legal framework has remained resilient.

"The huge market moves and monetary and fiscal interventions in March 2020 were unprecedented, as was the move by global institutions to introduce social distancing and remote working. While there are lessons to be learned and further work to be done, the market continued to operate throughout the disruption," says Scott O'Malia, chief executive of ISDA.

Keeping markets open

One of the most fundamental challenges during any crisis is to keep markets open and functioning in order to minimise disruption. Given sudden price movements, rising volumes and irregular liquidity, there were concerns about the potential for widescale closures of markets and infrastructures and the knock-on disruption this could create.

"Capital markets are one of the two primary channels for conveying financing to the economy, the other being banks. One needs to keep banks open so that people can access their savings and funding, and, in the same way, it is important to keep markets open so that participants can continue to access capital, realise their investments and manage their risks. Shutting markets down can add fragilities to the system," says Eric Litvack, chairman of ISDA.

In some cases, short, temporary closures did occur as the coronavirus crisis escalated. On January 27, when the virus was still largely confined to Asia, the Chinese government announced that the Lunar New Year holiday, which had been scheduled to run from January 24 to January 30, would be extended to February 2. The decision, which was taken to contain the spread of the epidemic, prompted the temporary closure of certain markets and systems, including the Shanghai Stock Exchange, the Shenzhen Stock Exchange and the China Financial Futures Exchange.

Illustration: James Fryer

"It is important to keep markets open so that participants can continue to access capital, realise their investments and manage their risks. Shutting markets down can add fragilities to the system"

Eric Litvack, ISDA

As the coronavirus spread beyond China and Asia during the first quarter and triggered unprecedented stock market falls, keeping markets open and functioning became an industry priority. On March 11, the World Health Organization declared that COVID-19 could be characterised as a pandemic, with more than 118,000 cases and 4,291 deaths globally. Markets quickly tumbled in response – by the end of March, the Dow Jones Industrial Average, S&P 500 and the FTSE 100 had recorded huge first-quarter drops of 23%, 20% and 25%, respectively.

As financial markets responded to the escalation of the coronavirus crisis and the move to lockdown in numerous countries, it was announced that certain markets and systems in the Philippines would close on March 17 and 18. In the case of both China and the Philippines, ISDA moved quickly to engage with market participants and issue guidance to promote the orderly and efficient valuation and settlement of derivatives positions. Such action was effective in minimising disruption, but it also underscored the need to avoid further closures and keep markets functioning.

"Typically, the only reason for considering a temporary shutdown of capital markets is if there is a concern about the ability of market infrastructures to continue →

"The objective is always to make the documentation as clear as possible on what steps should be taken in the event of a market closure to minimise confusion and ensure contract continuity"

Rick Sandilands, ISDA

→ to function. If there is fragility in the post-trade structure and concern that the settlement, payment or clearing systems might not cope, a temporary market holiday might allow the infrastructure to catch up. In all other circumstances, we would advocate for keeping markets open," says Litvack.

Following the market closures in China and the Philippines, and in the face of ongoing market volatility, ISDA joined with other industry associations and infrastructure operators to send a letter to US agencies on March 19, making the case for markets to remain open to avoid "a devastating impact on the US economy".

A separate letter from ISDA to the Financial Stability Board (FSB) and International Organization of Securities Commissions (IOSCO) on March 20 reinforced the message that unexpected market closures or the closure of key infrastructures could introduce additional strain in an already difficult environment.

"We believe it is essential that markets remain open wherever possible to ensure critical payments and transactions can be fulfilled and firms are able to manage their exposures – a position we set out in our letter to the

DELIVERING NOTICES UNDER LOCKDOWN

Of all the unique and challenging features of the COVID-19 crisis, the fact that offices have been almost completely closed around the world and entire companies and teams have had to work remotely is perhaps the most unprecedented. While the derivatives market has continued to function, the situation has prompted questions over whether some additional clarification of legal provisions is needed to account for this kind of situation.

In particular, the ISDA Master Agreement sets out the way in which a contract would be closed out in certain scenarios such as default or a failure to pay. The process of calculating a present value for counterparties' obligations would typically be initiated by the sending of a physical notice from one counterparty to the other. This requirement allows both parties to manage the critical close-out process, whether they are initiating or receiving the notice. Each party supplies the address details that must be used to notify them for this purpose. Under the standard ISDA 2002 Master Agreement, parties can send a notice relating to close out by courier, certified mail, fax or telex – but not by email or electronic messaging system.

"Being able to close out transactions if your counterparty defaults is a critical piece of the risk management infrastructure for derivatives trading. With some offices closing and many people working from home, we began considering potential scenarios where sending a written notice could become problematic. For example, printing from home might not be possible due to security systems, and courier and mail services may be unavailable or delayed," says Mark New, senior counsel for the Americas at ISDA.

Recognising the possibility that office closures could impact the delivery of notices as one of several coronavirus-related issues, ISDA convened two market calls on March 4 and March 25. ISDA subsequently commissioned a memorandum from Linklaters to analyse how notices may be given under an ISDA 2002 Master Agreement or a 1992 ISDA Master Agreement governed by either English or New York law, and what the consequences would be if the listed methods could not be used.

The memorandum, which was published on April 9, considered several issues – many of which were based on explicit provisions of the agreements that already deal with issues such as making delivery to an office that is closed. One conclusion of the analysis under both English and New York law was that, in a scenario in which it is impossible to send a notice by any of the methods listed in the 1992 or 2002 agreements, a court is likely to imply a term permitting an alternative method to be used. However, this concession is very unlikely to be made if standard methods are merely inconvenient or impractical.

"It's important to recognise that this analysis addressed hypothetical scenarios. Hopefully, we will not get to the point where it is impossible to use any of the agreed methods for notice. The traditional notice methods appear to be working for now, but ISDA will continue to monitor the situation closely, and will look for ways to assist our members if this scenario becomes a reality," says New.

To access the memorandum on notices, visit: bit.ly/2SilJnC

FSB and IOSCO. Unexpected market closures result in additional stress and uncertainty, affecting liquidity, risk management, transparency and stability," says O'Malia.

The FSB issued a statement on the same day, confirming its commitment to coordinate financial sector work to maintain global stability, keep markets open and functioning and preserve the financial system's capacity to finance growth. While volatility has remained high and participants have grappled with the challenges associated with working in physical isolation, derivatives markets have continued to function as the COVID-19 crisis has developed.

Renewing documentation

In the meantime, work is already under way to address lessons learned from recent market closures. The 2006 ISDA Definitions set out contingencies for such disruption events, including fallbacks. ISDA also typically provides guidance on the impact of specific incidents, based on the provisions within the documentation, with the aim of promoting orderly valuation and settlement of derivatives positions. The fact that the Chinese market closure occurred over a month-end period and was announced after the holiday itself had already begun resulted in certain practical challenges.

"The fallbacks use the concept of a 'modified following business day convention', which originates from the bond market. It means that a payment date that is disrupted by a market closure is moved to the next good business day, unless that day would fall into the next calendar month. In which case, it is moved in the opposite direction instead, to the previously occurring good business day," says Rick Sandilands, senior counsel, Europe at ISDA.

"However, because the Chinese holiday extension was announced during the holiday period, that would have meant going back to a day before the announcement. So, technically, that would have meant people becoming obligated to make payments before they could even be made aware of the obligation," Sandilands adds.

ISDA moved quickly after the Chinese market closure, convening members and publishing guidance that helped market participants to navigate these issues. However, the closure highlighted the need for derivatives documentation to be refined to address the possible occurrence of such issues in future.

The 2020 ISDA Interest Rate Derivatives Definitions, which had already been in development prior to the COVID-19 crisis, will now include an unscheduled holiday clause to address the issues that were highlighted by the China market closure. By their very nature, market closures are unique and it would not be possible to future-proof documentation for every scenario that might arise, but every new episode can be used as a data point to continually build out and strengthen the legal framework, says Sandilands.

"The addition of the unscheduled holiday clause will put what we learned from China into contractual form, and the 2020 Definitions will also be made more robust in other ways. The objective is always to make the documentation as clear as possible on what steps should be taken in the event of a market closure to minimise confusion and ensure contract continuity," he says.

PRESERVING NETTING ENFORCEABILITY

As countries around the world moved into different levels of lockdown to slow the spread of coronavirus, governments took immediate and decisive action to support businesses and manage the economic repercussions. Lockdown measures have inevitably proven very damaging for businesses, and government rescue packages have been put together in haste to provide financial support and reduce insolvencies.

Recognising the potential for this type of emergency legislation, which might include temporary stays on insolvency, to infringe on the enforceability of close-out netting, ISDA has been closely monitoring the situation. A global jurisdiction monitor on emergency legislation and short-selling legislation covers more than 80 countries where a clean netting opinion already exists or is close to fruition.

"We have been using the global monitor to keep members updated on the legislation in these countries and to identify early on any possible impact on derivatives or netting. A netting opinion prevents insolvency related stays from affecting netting enforceability, so we need to make sure this is not compromised and take appropriate action in any countries where we foresee there may be an issue," says Peter Werner, senior counsel at ISDA.

The kind of legislation that is being passed to support struggling businesses is not unprecedented, but the fact that it is happening all around the world at the same time makes the situation more challenging. In the very few cases where a possible issue has been identified that might impact netting enforceability, ISDA has sought to work with legislators to address the concern.

"The legislation is usually aimed at corporate restructuring, but we need to pay close attention as financial contracts entered into by all types of counterparties might be affected by such measures. As with all of our law reform efforts, we have sought to monitor the situation closely and intervene early so that changes are made during the drafting process, before laws are enacted," says Werner.

| To access the global jurisdiction monitor, visit bit.ly/3bLarB9

Towards digitisation

The sudden and widespread move to lockdown and implementation of social distancing measures at a time of severe market stress has created other practical challenges for market participants. In addition to the need to manage systems remotely and connect with colleagues and clients from home, questions have arisen over how to deal with those standard processes that still require physical delivery of signed documents and notices to office addresses (see box, *Delivering Notices Under Lockdown*).

While ISDA has been engaged for several years in work to digitise documentation and promote the electronic →

"Faced with the practical difficulty of signing and delivering physical documents during the coronavirus crisis, it has emphasised the value of automation, and created a strong rationale for digitisation of legal documents, online negotiation and execution of agreements, and use of e-signatures"

Scott O'Malia, ISDA

→ negotiation and execution of legal agreements, the unique circumstances arising from the COVID-19 crisis could serve to add momentum to those efforts.

"The current environment of office closures and home working has highlighted the benefits of reducing the number of physical documents in the system. Faced with the practical difficulty of signing and delivering physical documents during the coronavirus crisis, it has emphasised the value of automation, and created a strong rationale for digitisation of legal documents, online negotiation and execution of agreements, and use of e-signatures," says O'Malia.

Recent initiatives such as the Common Domain Model (CDM), ISDA Create and the ISDA Clause Library are already enabling greater standardisation, automation and digitisation, but the 2020 Definitions will take this work to the next stage. As well as reflecting all of the many changes in market practice during the 14 years since the 2006 Definitions were published, the new framework will also bring the documentation firmly into the digital age.

A powerful web-based versioning platform will enable users to electronically access the most up-to-date version of the definitions without having to manually compile, print and review multiple documents and supplements. The platform will offer the kind of intuitive user experience that would be expected in 2020, with the ability to easily scroll back to access the version of the definitions that prevailed at the time of a particular trade.

"The 2006 ISDA Definitions are widely used and the new framework will not reinvent the wheel entirely, but every user is currently required to go through the definitional booklet and more than 70 supplements that have been added since 2006 to determine their contractual terms, which can be a very painful manual process. All of those supplements will be consolidated into the new definitions, and as the 2020 Definitions themselves are amended over time, the versioning platform will make this a much easier process," says Sandilands.

In the coming weeks, ISDA will move to select a technology provider to develop the versioning platform, and it is anticipated that the 2020 Definitions will launch later this year. The 2020 Definitions have also been structured to facilitate consumption by computers, paving the way towards the digitisation of some parts of the legal framework.

"Its mechanical parts will be made available in code, enabling firms to capture legal data that can be fed through to other trading, operational and risk management systems. Alignment with the CDM will ensure consistency and support greater automation across the trade lifecycle," says Graham Bryant, counsel at ISDA

It may be too early to tell exactly how the future will look when the coronavirus pandemic is eventually suppressed and economies are reopened, but ISDA plans to continue to move forward, working towards greater levels of standardisation and digitisation. The 2020 Definitions will be a critical part of this, addressing areas of the existing framework where there may be imperfect provision and paving the way towards digital transformation.

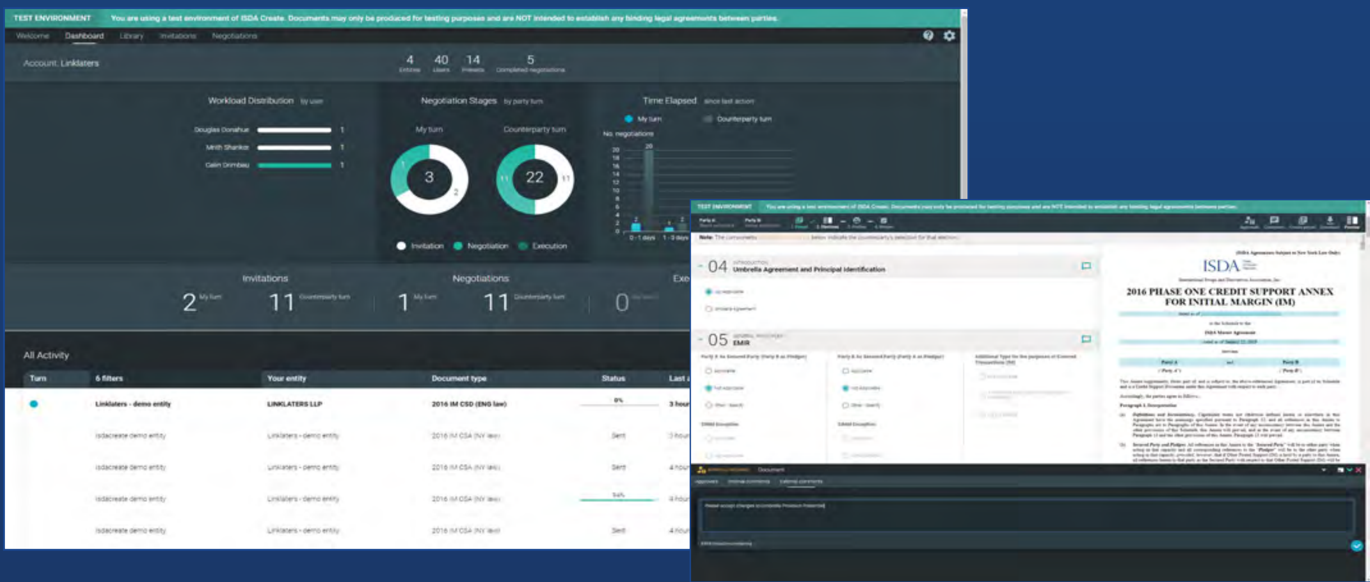
"The remote working and social distancing measures introduced as part of the pandemic response have underscored the difficulties caused by complex, inefficient and highly manually processes. We believe the 2020 Definitions will mark an important step forward in creating more efficiency in derivatives markets. By making these and other changes, we will set the foundations for a more robust, automated and digital post-trade infrastructure," says O'Malia. IQ

ISDA® Safe, Efficient Markets

What is ISDA Create?

ISDA Create is a new platform that allows firms to produce, deliver and negotiate derivatives documentation completely online. The system captures, processes and stores data from these documents, providing users with a complete digital record.

ISDA Create – IM is ISDA's first offering under ISDA Create, and allows firms to electronically negotiate initial margin (IM) documentation. ISDA Create will be extended to other ISDA documents over time.



WHY ISDA CREATE – IM?

- Compliance with the IM regulations requires market participants to put additional IM documentation in place.
- Negotiation of these IM documents takes time and resources, adding an enormous strain on the ability of firms to comply with the rules.
- A wide universe of buy- and sell-side firms will come into scope of the IM regulations in 2021/22, creating the need for an industry tool that will allow market participants to efficiently negotiate IM documentation with large numbers of counterparties.

BENEFITS OF ISDA CREATE – IM

- Provides easy access to ISDA standard forms to produce, deliver and negotiate IM documents with multiple counterparties simultaneously.
- Online functionality makes the negotiation process more efficient and less time consuming from start to finish.
- Allows firms to make standard elections, as well as customise on a party-by-party basis.
- Automatically reconciles both standard elections and bespoke provisions exchanged, and flags differences in an efficient and easy-to-read way.
- Allows firms to digitally capture, process and store the resulting data.
- Flexibility to take one or more steps offline if required.
- Removes the need for a post-execution transfer of data from negotiated documentation into internal systems and eliminates the chance of error during such a data transfer.
- Provides powerful commercial, risk management and resource management functions, data and analytics.
- Offers interactive dashboards, providing business stakeholders with real-time transparency to check which relationships have regulatory compliant documentation in place.

Want more information on ISDA Create or to arrange a platform demonstration?
Contact **ISDACreate@isda.org**

* Targeted Relief

Regulators responded rapidly to the escalation of the coronavirus pandemic by issuing targeted relief for certain requirements, with the aim of freeing up capacity to help financial institutions manage the crisis

When the coronavirus crisis escalated into a global pandemic in March, regulators were quick in their response. One after another, a string of policy announcements emerged, each aimed at allowing firms to focus on business continuity, risk management and supporting the economy. The announcements continued throughout March and April – and with the coronavirus crisis continuing to play out, market participants believe further action will be necessary.

The regulatory response has taken a variety of forms, from relief on existing requirements to the extension of deadlines on new obligations and postponement of open consultations. This has been supported by central bank statements encouraging banks to use capital and liquidity buffers to continue lending, as well as monetary and fiscal support to ensure institutions can access financing. With firms globally shifting to a remote-working environment and implementing social distancing, these measures were much needed, participants say.

"The pandemic has created a situation in which much of the world and many financial institutions have come under acute stress, with staff working under far more challenging circumstances than usual. The industry has rightly focused its critical resources on keeping the economy moving and keeping employees and clients safe. Any obligations, consultation responses or upcoming deadlines that were not immediately necessary for that critical mission have had to take a back seat," says Eric Litvack, chairman of ISDA.

Regulatory action

Policy-makers have looked to pursue this objective in a number of ways, including through measures to relax certain record-keeping requirements to facilitate home working and social distancing, flexibility on existing reporting deadlines, and delays to upcoming data collection exercises. National authorities were also quick to loosen the tap on capital and liquidity in order to maintain the supply of credit to the economy and support financial intermediation – for example, by lowering the countercyclical buffer, which is designed to be used in stress periods, and encouraging use of excess capital and liquidity (see Table).

A key part of the regulatory response has been to free up resources by postponing consultations and delaying implementation of new obligations. A critical component of that was the decision by the Basel Committee on Banking Supervision and International Organization of Securities Commissions (IOSCO) on April 3 to defer the implementation date for phases five and six of the initial margin requirements for non-cleared derivatives by one year.

"The pandemic has created a situation in which much of the world and many financial institutions have come under acute stress, with staff working under far more challenging circumstances than usual"

Eric Litvack, ISDA

This followed a letter sent by ISDA and 20 other trade associations to the Basel Committee and IOSCO on March 25, which highlighted the challenges of complying with the rules in an environment of staff shortages, remote working and extreme market volatility.

According to ISDA analysis, an estimated 3,616 counterparty relationships were scheduled to come into scope as part of the phase-five implementation in September 2020, with a further 5,443 relationships captured under phase six in September 2021. In-scope entities would need to complete much of the compliance work in advance of implementation, including signing documentation with counterparties, entering into custodial agreements, running average aggregate notional amount (AANA) calculations, and establishing margin calculation systems. The letter highlighted the lack of spare capacity within firms to deploy and test new infrastructure in the current environment, and warned that smaller entities could be shut out of the derivatives market without a delay.

In response, the Basel Committee and IOSCO announced a one-year deferral for phases five and six to help provide additional operational capacity for firms to respond to the coronavirus pandemic. Entities with an AANA of non-cleared derivatives greater than €50 billion will now need to implement the requirements by September 1, 2021, while those with an AANA of non-cleared derivatives greater than €8 billion will have until September 1, 2022. Multiple jurisdictions including Australia, the EU, Japan and Singapore have now issued proposed amendments or statements of support indicating they will follow the revised international timeline.

"The delay to the phase five and six implementation dates was an important development, as it provided certainty to firms and enabled them to focus scarce resources on managing the coronavirus pandemic"

Tara Kruse, ISDA

"The delay to the phase five and six implementation dates was an important development, as it provided certainty to firms and enabled them to focus scarce resources on managing the coronavirus pandemic. The quick action by multiple national authorities to adopt the revised timeline has also been very helpful," says Tara Kruse, global head of infrastructure, data and non-cleared margin at ISDA.

Similar certainty was also forthcoming on capital requirements. With multiple new Basel III standards due for implementation by January 1, 2022, this was to have been an important year for finalising rules at the regional and national level, as well as making operational preparations. The Fundamental Review of the Trading Book (FRTB) and the revised credit valuation adjustment framework were among the rules set for rollout, each entailing complex modelling implementation, data collection and testing that needs to be completed well in advance of the start date.

On March 27, the Basel Committee's oversight body, the Group of Central Bank Governors and Heads of Supervision (GHOS), announced a one-year delay in the implementation timeline to January 1, 2023, alongside a 12-month extension to the transitional arrangements for the output floor to January 1, 2028. The GHOS noted that the affected capital measures are meant to complement the initial set of Basel III standards and stressed the revised timeline will not dilute the capital strength of the global banking system. Instead, it will provide banks and supervisors with "additional capacity to respond immediately and effectively to the impact of COVID-19", the GHOS added.

"We welcome the decision to delay implementation of Basel III, including the FRTB, by a year. With most bank staff working from home and focused on maintaining critical bank operations, bandwidth for these implementation initiatives was virtually non-existent," says Panayiotis Dionysopoulos, head of capital at ISDA.

A number of jurisdictions quickly revised their implementation schedules to reflect the one-year delay. On April 22, the European Banking Authority (EBA) also set out its intention to propose a delay to reporting requirements under the FRTB standardised approach, which was already a requirement in the European Union under the Capital Requirements Regulation (CRR). Under the new proposal, the starting date for banks would apply from the third quarter of 2021, six months later than the original implementation date. →

→ Strengthened market

In setting out these changes, authorities have had to balance the need to respond to the immediate challenges created by the coronavirus crisis with the need to ensure continued resilience of banks and financial markets as a whole. Fortunately, the financial system is far stronger and more able to withstand stress than it was a decade ago, thanks to the regulations implemented in response to the 2008 financial crisis.

"The derivatives market is now much more resilient than it was in 2008. The amount of collateral has increased significantly, risk management has improved and transparency is incomparably better. The challenges we have faced in 2020 as a result of COVID-19 are certainly unprecedented, but we're seeing the benefits of the reforms that have been implemented and the power of cooperation and sharing of data and information among regulators and central banks," says Patrick Pearson, head of financial market infrastructure and derivatives at the European Commission.

> "The challenges we have faced in 2020 as a result of COVID-19 are certainly unprecedented, but we're seeing the benefits of the reforms that have been implemented"
>
> **Patrick Pearson, European Commission**

As a result of reforms to the capital rules, internationally active banks have increased their common equity tier-one capital by 85% since 2011 to more than €3.7 trillion, while also increasing their holdings of liquid assets and cutting leverage. In a statement encouraging the use of capital and liquidity buffers on March 15, the Federal Reserve noted that the largest US bank holding companies have $1.3 trillion in common equity and hold $2.9 trillion in high-quality liquid assets.

Financial institutions are also now required to meet margin requirements on their non-cleared derivatives trades. According to the latest ISDA Margin Survey, the 20 largest derivatives dealers had collected a combined total of $1.07 trillion in initial margin and variation margin at the end of 2019.

Meanwhile, the Group-of-20 (G-20) mandate for all standardised over-the-counter (OTC) derivatives to be traded on exchanges or electronic platforms where appropriate and cleared through central counterparties has led to a structural shift in the derivatives market. In the US, cleared interest rate derivatives transactions represented 91.2% of total traded notional during the first quarter of 2020, while interest rate derivatives traded on swap execution facilities represented 52.8% of traded notional, according to data from the Depository Trust & Clearing Corporation and Bloomberg swap data repositories.

"By every account, the clearing mandate has been remarkably successful, with the majority of major swaps asset classes now centrally cleared around the world. Electronic execution has been more challenging, and I believe we need more flexible methods of execution to be permitted. But overall, the reforms have reduced risk and addressed the shortcomings that existed prior to the financial crisis," says J. Christopher Giancarlo, senior counsel at Willkie Farr & Gallagher and former chairman of the Commodity Futures Trading Commission.

The G-20 reforms also set requirements for all OTC derivatives transactions to be reported to trade repositories. According to the Financial Stability Board's (FSB) latest progress report on implementation of derivatives market reforms in October 2019, 23 out of its 24 member jurisdictions now have comprehensive trade reporting requirements in place.

"The mechanisms that were put in place to improve transparency appear to be working and the central bank and supervisory community is now far better equipped to identify where market stress is arising so liquidity can be moved into those marketplaces as early as possible during a crisis. It's still early days in this current crisis, but it has been encouraging to see how quickly the international regulatory community has responded," says Pearson.

Further action

But while the measures adopted so far have largely been successful in ensuring markets are able to continue functioning, further action is likely as the crisis continues to play out. In a report on international cooperation during the coronavirus pandemic on April 15, the FSB noted that it is monitoring a number of key issues critical to financial stability. These include the ability of financial institutions and markets to channel funds to the real economy, the capacity of market participants and financial market infrastructures to manage evolving counterparty risks, and the ability of market participants around the world to obtain

US dollar funding, particularly in emerging markets.

The latter issue has been a concern since the earliest days of the crisis. On April 8, ISDA and the Institute for International Finance wrote to G-20 finance ministers and central bank governors highlighting that many emerging market countries are heavily reliant on US dollars, but have seen an estimated $100 billion in capital outflows since the coronavirus crisis began, rapidly depleting foreign exchange reserves and depreciating local currencies. Unable to easily access dollars to replenish reserves or service outstanding dollar debt, these countries face an economic shock that could reverberate across the globe, the letter stated.

A number of important measures have been taken to ease the strain on US dollar funding, including the opening of swap lines between the Federal Reserve and a group of foreign central banks and the creation of a temporary repo facility by the Fed for central banks and international monetary authorities to exchange their US Treasury holdings for dollars. The International Monetary Fund has also announced a variety of support measures to help emerging markets, including a doubling of its emergency financing facilities to $100 billion and a plan to increase the Catastrophe Containment and Relief Trust, which provides grants for debt relief to low-income countries, to $1.4 trillion.

As well as continuing to monitor and address the shortage of US dollars, further targeted regulatory relief and extensions to deadlines may also be required to ensure firms have the capacity to respond to the ongoing crisis. One area of focus is the pro-cyclical impact of trading book capital requirements.

Under the current regime introduced as part of Basel 2.5, banks are required to add a multiplier to their market risk capital calculations if actual or hypothetical P&L over the course of a single trading day exceeds value-at-risk (VaR) estimates more than four times in a year – with the multiplier increasing as the number of exceptions continues to climb.

However, this measure has proved to be highly pro-cyclical. The multiplier is meant to compensate for model deficiencies, but recent extreme volatility has put VaR models – which are calibrated based on historical data – under pressure, resulting in higher numbers of exceptions. This means banks are having to apply multipliers because of market volatility rather than shortcomings in their models, causing market risk capital requirements to balloon during a period of stress.

Regulators in Canada, Switzerland, the UK and the US have recognised this issue and have taken action to smooth the volatility induced procyclical effect of the multiplier. The European Central Bank has also responded, announcing on April 16 that it would temporarily reduce the the 'qualitative market risk multiplier', a measure set by supervisors that is intended to address weaknesses in a bank's risk management, controls and governance framework. However, the qualitative multiplier isn't directly linked to the number of back-testing exceptions that is causing the problem. It's also individual to each bank, meaning the potential level of relief could differ between firms and be limited in some cases.

"A more effective course of action would be a revision to the CRR to give national authorities the flexibility to take appropriate action when exceptions are not caused by deficiencies in the model. This would bring the CRR in line with Basel Committee standards, and would allow national authorities to intervene when necessary to temporarily suspend the automatic effects of the multiplier," says ISDA's Dionysopoulos.

Market participants, infrastructures and the financial markets have largely continued to function throughout the crisis, helped by large-scale monetary and fiscal support and timely regulatory relief. However, with the ultimate scale and duration of the crisis still uncertain, further action may be a necessity.

"We urge authorities to continue taking whatever steps are appropriate to support financial markets. Throughout this crisis, ISDA will continue to engage actively with policy-makers to request targeted relief where necessary," says Scott O'Malia, ISDA's chief executive. IQ

COVID-19: ISDA RESOURCES

ISDA has been continuously monitoring how the coronavirus pandemic affects its members, and has created a central repository on its website for all COVID-19 updates. This page is updated as relevant information becomes available and can be accessed here: bit.ly/3cWYpEV.

Recordings of three recent ISDA member calls are also available: one on March 4 to consider the impact on derivatives documentation (bit.ly/3fqGKHT); and a legal update call on March 25 (bit.ly/3bdWw5u). A third call on April 16 covered issues related to electronic execution (bit.ly/35IBzP1). ISDA has published various opinions on the enforceability of electronically executed and electronically confirmed contracts under the laws of various jurisdictions. The opinions are available here: bit.ly/2L4Z0sv

In addition, ISDA is surveying the status of emergency insolvency legislation and short-selling regulations in more than 80 jurisdictions worldwide that are covered by ISDA legal opinions and informal country updates. The monitor is updated regularly and can be accessed here: bit.ly/3bLarB9.

Meanwhile, ISDA members have raised questions related to potential scenarios in which office closures might affect the ability to provide notice under the ISDA Master Agreement. In response to these queries, ISDA's counsel considered these scenarios during calls with ISDA members on March 4 and March 25 (see links above). Following the calls, ISDA commissioned a memorandum, available to ISDA members, to assist them in analysing how, under both English and New York law, notices may be given pursuant to the ISDA 2002 Master Agreement or the 1992 ISDA Master Agreement in the context of global office closures related to COVID-19. The memorandum is available here: bit.ly/2SilJnC.

REGULATORY ANNOUNCEMENTS IN RESPONSE TO COVID-19

Date	Summary	Details
May 4	EU: The European supervisory authorities publish draft regulatory technical standards (RTS) to amend the delegated regulation on margin requirements for non-cleared derivatives to incorporate a one-year deferral of phases five and six of the initial margin requirements.	bit.ly/2SG06it
April 28	EU: The European Commission (EC) publishes a proposed 'quick fix' to the Capital Requirements Regulation to maximise the ability of banks to lend and absorb losses related to coronavirus. The measures include adapting the timeline of the application of IFRS 9, postponing the date of application of the leverage ratio buffer by one year to January 1, 2023, and modifying an offsetting mechanism within the leverage ratio that would have applied if competent authorities opt to temporarily exclude central bank reserves from a bank's leverage ratio calculation, among other things. The EC also publishes an interpretative communication on the EU's accounting and prudential frameworks.	bit.ly/2WyJH0i
April 22	Hong Kong: The Hong Kong Monetary Authority (HKMA) announces a delay to the 2020 supervisor-driven stress test to 2021.	bit.ly/2SEXxNz
April 22	EU: The European Banking Authority (EBA) announces its intention to delay the reporting for the first figures under the Fundamental Review of the Trading Book's (FRTB) standardised approach to September 2021. It also sets out amendments to its standards on prudent valuation, proposing to introduce a 66% aggregation factor to be applied until December 31, 2020 under the so-called core approach.	bit.ly/3b40LAv
April 20	UK: The Financial Conduct Authority (FCA) sets out expectations for wet-ink signatures in light of COVID-19.	bit.ly/2WvlxCJ
April 17	Japan: The Japanese Financial Services Agency (JFSA) proposes to exclude the outstanding balance of financial institutions' current accounts at the Bank of Japan from the calculation of the leverage ratio, and to maintain the current minimum leverage ratio requirement (3%) until the end of the 2020 fiscal year.	bit.ly/2L8kC73
April 16	Australia: The Australian Prudential Regulation Authority (APRA) announces new implementation dates for a number of prudential and reporting standards, including the phase-five and phase-six implementation dates for regulatory initial margin requirements.	bit.ly/2xGRAbS
April 16	EU: The European Central Bank (ECB) announces a temporary reduction in the 'qualitative risk multiplier' in an attempt to smooth the pro-cyclical nature of the value-at-risk multiplier. The decision will be reviewed after six months.	bit.ly/2A36pX1
April 15	Japan: The JFSA proposes to delay the phase-five and phase-six implementation of regulatory initial margin requirements.	bit.ly/2SDmhFT
April 15	Global: The Financial Stability Board (FSB) publishes a report on international cooperation and coordination to address the financial stability implications of COVID-19.	bit.ly/3dioNt9
April 14	Switzerland: The Swiss Financial Market Supervisory Authority (FINMA) announces exemptions in the model approach to market risk intended to mitigate volatility induced pro-cyclicality. These exemptions concern the number of back-testing exceptions that are relevant to the calculation of capital adequacy and apply until July 1, 2020. FINMA also extends the implementation date for phases five and six of the regulatory initial margin requirements.	bit.ly/2SDRwRv
April 9	Canada: The Office of the Superintendent of Financial Institutions (OSFI) announces a variety of measures, including a temporary change to the leverage ratio to exclude central bank reserves and sovereign-issued securities that qualify as high-quality liquid assets under the liquidity adequacy requirements guideline, a change to the capital floor that applies to institutions using the internal ratings based approach, and a one-year delay to phases five and six of the regulatory initial margin requirements.	bit.ly/3fo7Bo0
April 9	EU: The European Securities and Markets Authority (ESMA) postpones the publication dates of the annual non-equity transparency calculations and quarterly calculations for the systematic internaliser regime for derivatives, structured finance products and emission allowances under the revised Markets in Financial Instruments Directive (MIFID II).	bit.ly/2zaK1KL
April 9	UK: The Prudential Regulation Authority (PRA) announces it will maintain firms' systematic risk buffer rates at the rate set in December 2019, and will next reassess them in December 2021.	bit.ly/2W6xiC3
April 8	Hong Kong: The HKMA lowers the regulatory reserve requirement on locally incorporated authorised institutions by 50% with immediate effect.	bit.ly/2xGcesC
April 8	UK. The FCA welcomes the one-year delay to phases five and six of the regulatory initial margin requirements announced by the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO), and states it will consider how to implement the changes.	bit.ly/2W5Lxqv
April 8	Global: The BCBS announces it will not collect any Basel III monitoring data for the end-June 2020 reporting date to help increase operational capacity for banks and supervisors.	bit.ly/3c9wK3J
April 7	Singapore: The Monetary Authority of Singapore publishes a number of regulatory and supervisory measures in response to COVID-19, including: adjusting banks' capital and liquidity requirements; deferring implementation of the final set of Basel III reforms and margin requirements for non-cleared derivatives; and providing flexibility on submission timelines for regulatory reports.	bit.ly/2Yx1ZSq
April 3	Hong Kong: The HKMA sets out a number of liquidity measures in response to the COVID-19 outbreak, including supervisory expectations on the use of liquidity buffers under the liquidity coverage ratio.	bit.ly/2YliBqx
April 3	Global: The BCBS and IOSCO announce a one-year delay in the implementation of phases five and six of the regulatory initial margin requirements.	bit.ly/2YDIzeC
April 3	Global: The BCBS publishes technical guidance related to the exceptional measures introduced by governments and banks to alleviate the impact of COVID-19, and on expected credit loss (ECL) accounting. The guidance is aimed at ensuring banks reflect the risk-reducing effects of the exceptional measures when calculating their capital requirements. It also sets out amended transitional arrangements for the regulatory capital treatment of ECL accounting.	bit.ly/2yxB91L
April 2	EU: The EBA publishes guidelines on the treatment of public and private moratoria in light of COVID-19.	bit.ly/2SEAaDO
April 2	UK: The PRA and HM Treasury publish a joint statement supporting the deferral of the Basel III timeline, stating they will work towards a UK implementation timetable that is consistent with the one-year delay announced by the Group of Central Bank Governors and Heads of Supervision.	bit.ly/3cak3Wy
April 1	US: The Federal Reserve announces a temporary change to its supplementary leverage ratio rule to exclude US Treasury securities and deposits at Federal Reserve banks from the calculation of the ratio for holding companies. The change will be in effect until March 31, 2021.	bit.ly/3barJqi
March 31	EU: ESMA clarifies issues regarding the publication by execution venues and firms of the general best execution reports required under RTS 27 and 28 of MIFID II.	bit.ly/2SHuwRA
March 31	EU: The EBA sets out details on its call for competent authorities to offer leeway on reporting dates, urging one-month flexibility for reports with remittance dates between March and the end of May 2020. It also calls for flexibility in assessing deadlines for institutions' pillar-three disclosures. In addition, the quantitative impact study based on June 2020 data is cancelled.	bit.ly/35zovLL

REGULATORY ANNOUNCEMENTS IN RESPONSE TO COVID-19 continued

Date	Summary	Details
March 30	Japan: The JFSA delays implementation of the remaining parts of Basel III following the announcement by the Group of Central Bank Governors and Heads of Supervision.	bit.ly/35Ftnz5
March 30	UK: The PRA allows firms to offset increases due to new value-at-risk back-testing exceptions through a commensurate reduction in risks-not-in-VaR capital requirements. This approach will be reviewed after six months.	bit.ly/3dks3Ei
March 30	Australia: APRA delays the scheduled implementation of Basel III in Australia by one year to January 2023, in line with the announcement by the Group of Central Bank Governors and Heads of Supervision.	bit.ly/2WrCkYA
March 30	Hong Kong: The HKMA defers implementation of Basel III by one year in line with the announcement by the Group of Central Bank Governors and Heads of Supervision.	bit.ly/35y63Dr
March 27	Canada: OSFI announces a number of measures in response to COVID-19. These include: the introduction of transitional arrangements for the capital treatment of expected credit loss provisioning; encouraging deposit-taking institutions to use operating buffers that are held above the authorised leverage ratio of the institution; emphasising that liquid asset pools are designed to be used; and adjusting OSFI's liquidity requirements. OSFI also announces a delay to the implementation of Basel III until the first quarter of 2023. However, implementation of the FRTB and the credit valuation adjustment risk framework will be delayed until the first quarter of 2024.	bit.ly/2W7iGSA
March 27	Global: The Group of Central Bank Governors and Heads of Supervision announces a one-year delay to the remaining elements of Basel III until January 1, 2023. The transitional arrangements for the output floor are extended by one year to January 1, 2028. Implementation of the FRTB is deferred by one year to January 1, 2023. The introduction of revised pillar-three disclosure requirements are also deferred by one year to January 1, 2023.	bit.ly/2L4WaUq
March 27	US: The Federal Reserve brings forward the implementation of the standardised approach for counterparty credit risk in the US. It also provides an optional extension of the regulatory capital transition for the new credit loss accounting standard.	bit.ly/2L28559
March 26	UK: The FCA notes that capital and liquidity buffers are there to be used in times of stress. Firms that have been set buffers can use them to support the continuation of the firm's activities. If a firm is planning to draw down a buffer, it should contact the FCA.	bit.ly/2YBpQQT
March 26	UK: The FCA, PRA and Financial Reporting Council issue a joint statement in response to COVID-19. The measures include an extra two months for listed companies to publish their audited financial reports, among other things.	bit.ly/2SESOLN
March 25	EU: The EBA releases a statement with the aim of ensuring consistency in how the EU banking sector handles measures taken by national governments and EU bodies in response to COVID-19. The release covers issues relating to the classification of loans in default, the identification of forborne exposures, and IFRS 9 considerations.	bit.ly/2KZdJVT
March 23	Australia: APRA suspends the majority of its planned policy and supervision initiatives in response to COVID-19.	bit.ly/2SDHUGe
March 20	EU: ESMA issues a statement to clarify issues regarding the application by firms of the MIFID II requirements on the recording of telephone conversations.	bit.ly/3b9H4Y6
March 20	Global: The FSB encourages local authorities and financial institutions to make use of the flexibility within existing international standards to provide continued access to funding, and to ensure that capital and liquidity resources in the financial system are available where they are needed. The FSB also highlights the importance of keeping markets open.	bit.ly/3c2gTnz
March 20	US: The Commodity Futures Trading Commission (CFTC) issues no-action relief excluding certain commodity swaps from a major swap participant registration threshold calculation of an insured depository institution.	bit.ly/3c2K1em
March 19	Australia: APRA announces temporary changes to its expectations on bank capital ratios. In particular, APRA recognises banks may need to eat into their capital buffers to facilitate lending to the economy.	bit.ly/2YzTlx2
March 17	Japan: The JFSA states that banks can use their capital buffers to enable them to continue to support the economy.	bit.ly/3b7irLM
March 17	US: The CFTC issues no-action relief for certain members of designated contract markets and swap execution facilities to facilitate physical separation of personnel in response to COVID-19.	bit.ly/2WtDK4R
March 17	US: The CFTC issues no-action relief for futures commission merchants and introducing brokers to facilitate physical separation of personnel in response to COVID-19.	bit.ly/35xyilA
March 17	US: The CFTC issues no-action relief for floor brokers to facilitate physical separation of personnel in response to COVID-19.	bit.ly/3fx5UEW
March 17	US: The CFTC issues no-action relief for swap dealers to facilitate physical separation of personnel in response to COVID-19.	bit.ly/2A2kbsV
March 17	US: The CFTC issues no-action relief for swap execution facilities to facilitate physical separation of voice-trading personnel in response to COVID-19.	bit.ly/2W5RweX
March 17	US: The CFTC issues no-action relief for swap execution facilities to extend submission time frames for annual compliance reports and fourth quarter financial reports in response to COVID-19.	bit.ly/2YzPBRs
March 17	US: The CFTC issues no-action relief for designated contract markets to facilitate physical separation of voice-trading personnel in response to COVID-19.	bit.ly/2L55ffT
March 16	Hong Kong: The HKMA reduces the countercyclical buffer from 2% to 1%.	bit.ly/3b7pmon
March 15/17	US: The Federal Reserve issues statements encouraging banks to use their capital and liquidity buffers as they lend to households and businesses affected by the coronavirus outbreak.	bit.ly/3b7t4Os bit.ly/2W57vKa
March 13	Canada: OSFI lowers the domestic stability buffer (DSB) by 1.25% of risk weighted assets. The DSB was set at 2.25% of risk weighted assets, effective as at April 30, 2020. With this announcement, the DSB requirement is now set at 1.00%. The action was taken to support the ability of domestic systemically important banks to supply credit to the economy.	bit.ly/2ywtEln
March 12	EU: The ECB announces that banks can use capital and liquidity buffers, allowing them to operate temporarily below the level of capital defined by the pillar-two guidance, the capital conservation buffer and the liquidity coverage ratio.	bit.ly/2W4lekD
March 11	UK: The Bank of England's Financial Policy Committee reduces the UK countercyclical capital buffer rate to 0% of banks' exposure to UK borrowers.	bit.ly/3dngmNp
March 11	EU: ESMA provides recommendations to financial market participants in the following areas: business continuity planning; market disclosure; financial reporting; and fund management.	bit.ly/3b5EimW

* This table contains a selected number of regulatory updates and is not intended to be comprehensive

* The Work Goes On

The Commodity Futures Trading Commission moved quickly in March to provide regulatory relief in response to the coronavirus outbreak. **IQ** *talks to CFTC chairman* ***Heath Tarbert*** *about the agency's reaction and its broader policy initiatives*

IQ: What is the Commodity Futures Trading Commission (CFTC) doing to address the coronavirus pandemic and respond to its impact on the markets?

Heath Tarbert (HT): The agency has been closely tracking this issue since the beginning of the year. When it became clear we were dealing with something that would be a major disruptor to our markets, I quickly pivoted the agency's resources to take this crisis head on. This new posture focuses on five main objectives: 1) increased monitoring of our derivatives markets and their participants; 2) using our regulatory framework to promote orderly and liquid markets; 3) responding swiftly to changing conditions with practical, targeted relief; 4) communicating consistently and transparently with all stakeholders; and 5) maintaining our commitment to advancing our strategic policy goals. The good news is that, so far, the derivatives markets are absorbing the stress. They've been quite resilient – this is not 2008, that much is clear. We're going to be nimble and responsive as this continues to unfold. Your readers can learn more about what we're doing by visiting: www.cftc.gov/coronavirus.

IQ: How has the coronavirus pandemic affected your policy agenda?

HT: The short answer is, 'the work goes on'. To be sure, responding to market disruptions caused by the coronavirus pandemic is our primary focus. At the same time, we'll continue to advance the CFTC's strategic goals that pre-existed the outbreak. So, in the near term, we'll propose an update to our bankruptcy provisions for the first time in 37 years, as well as enhancements to the quarterly reports filed by commodity focused investment funds. In the medium term, we're aiming to finalise our cross-border proposals for clearing houses and swap dealers, as well as

"The good news is that, so far, the derivatives markets are absorbing the stress. They've been quite resilient – this is not 2008, that much is clear. We're going to be nimble and responsive as this continues to unfold"

our long-awaited capital rule. And by year end, we plan to finalise our recently proposed position limits and swap data reporting rules. We'll also continue negotiations with our European and other foreign counterparts to reduce market fragmentation and enhance international comity.

IQ: How important was it for you to publish a proposal on position limits, and how does the current proposal differ from earlier versions?

HT: This was extremely important. Position limits will help protect the agricultural and energy sectors from excessive speculation in our markets. Corners and squeezes reflect malicious conduct we want to prevent. This is the fifth formal proposal put forward by the commission. The prior iterations failed because they didn't offer enough flexibility for the end users our futures markets are meant to serve. We're avoiding those mistakes by doing two things: 1) ensuring that any market participant with a genuine need to exceed position limits can do so with a workable bona fide hedge exemption; and 2) leveraging the work done by derivatives exchanges over the past three decades administering their own position limits to cut down on red tape.

IQ: You have highlighted the importance of deferring to overseas rules that achieve comparable outcomes, as well as reducing the extraterritorial reach of the CFTC. How does the current cross-border proposal do that?

HT: I've always said that we should afford comity to other regulators that have adopted comparable regulations, just as we expect them to do for us. I believe the proposal advanced by the commission in December finds a middle ground on the question of when foreign transactions should fall within the CFTC's swaps registration and related requirements. Most importantly, we shouldn't try to regulate swaps activities in far-flung lands simply to prevent every risk that might have a nexus to the US. That would be a markedly poor use of American taxpayers' dollars. It'd also divert the CFTC from channelling our resources where they matter the most – to our own markets and participants. The proposal therefore focuses on instances when material risks from abroad are most likely to come back to the US and where no one but the CFTC is responsible for those risks. It's my sincere hope that our domestic and international counterparts will view the proposal the commission advanced in December as a concrete step toward working together to provide sound regulation to the global swaps market.

IQ: Could the level of supervisory cooperation and coordination across jurisdictions be improved? How?

HT: Much progress has been made since the Group-of-20 (G-20) leaders met in Pittsburgh in 2009, but more work needs to be done. That's why the CFTC has been a leader in a range of international standard-setting bodies and workstreams. For example, the CFTC is a leading participant in workstreams and committees at the International Organization of Securities Commissions, as well as other international bodies such as the Financial Stability Board and the Committee on Payments and Market Infrastructures. The CFTC's engagement with our foreign counterparts has furthered the development and implementation of a number of key principles and standards. That's helped to improve supervisory cooperation and coordination across jurisdictions.

IQ: Market participants are working to shift away from LIBOR in favour of alternative risk-free rates. Are you satisfied with the progress that has been made so far, and what role can the CFTC play in encouraging timely transition?

HT: This year is going to be crucial for our collective efforts to transition away from LIBOR. I'm concerned

→ that firms aren't transitioning fast enough. I've warned that failing to do so is a source of risk to both themselves and the global financial system. We also want to avoid what I've dubbed 'zombie LIBOR', where LIBOR is still published for some limited period but isn't representative of a real rate. If that happens, we'd face a situation where swaps would be priced against a seemingly alive rate whose integrity as a benchmark is completely dead. Regulators are also discussing how a period of non-representative LIBOR might work. I certainly don't think that's the ideal outcome, but I appreciate it's necessary to plan for all eventualities. For our part, I'm proud that the CFTC was one of the first agencies out of the gate to provide LIBOR-transition relief. As we move into this critical period, I remain committed to working with market participants and our fellow regulators on this important issue.

"This year is going to be crucial for our collective efforts to transition away from LIBOR. I'm concerned that firms aren't transitioning fast enough"

IQ: Swap data reporting is a critical component of the G-20 reform agenda, but market participants face duplicative and inconsistent rules and reporting requirements across jurisdictions. What more needs to be done to encourage data harmonisation?

HT: Simplicity should be a central goal of our swap data reporting rules. After all, making rules simple and clear facilitates compliance, price discovery and risk monitoring. The commission recently took action on this front, proposing two rules and reopening the comment period for a third. Together, these actions will streamline reporting, enhance transparency, provide relief for end users and foster harmonisation. While we shouldn't harmonise for the sake of harmonising, we can reap real efficiencies by carefully building consistent data reporting frameworks. For instance, our proposed rules would harmonise our swap data reporting timelines with the Securities and Exchange Commission by moving to a T+1 system for swap dealers, major swap participants and derivatives clearing organisations. They would also remove duplicative confirmation data and lift the requirement that end users provide valuation data. As it relates to cross-border harmonisation, we're incorporating many of the critical data elements fields to bring our reporting system more in line with that of the European Securities and Markets Authority.

IQ: How concerned are you about market fragmentation and what do you think can be done to mitigate it?

HT: Perhaps President Eisenhower said it best: "The world must learn to work together, or finally it will not work at all." Fragmentation leads to less liquid and less functional markets – something current events show we can ill afford. My commitment to international regulatory comity and deference, as well as clarity in our supervisory activities, is ironclad. They're essential components of vibrant and resilient global derivatives markets. Clarifying our cross-border regulatory commitments – like we recently did with our 30.10 amendments, for example – is one part of the equation. Another step would be finalising our cross-border rule for swap dealers and major swap participants.

IQ: You've recently led the CFTC through a re-examination of its mission, vision and values. How would you summarise the process and its results? How does this translate into the role you believe the CFTC plays as a market regulator and a prudential supervisor?

HT: This is a process I'm particularly proud of because we got the buy-in of the entire agency. It's also the first time the CFTC has ever adopted a vision statement and a set of core values. We solicited ideas from the staff and put them forward for a vote. It was important to me that the men and women on the front lines of regulating our derivatives markets had a say in what our identity will be going forward. A top-down approach wouldn't have been as effective. Now we as an agency have a better understanding of who we are, what kind of regulator we want to be and what principles we'll use to guide us along the way. When we say 'clarity' is a core value, for instance, that means the culture of the agency must have a bias towards providing transparency to market participants about our rules and processes. Having this degree of focus will make us an even better regulator. IQ

Transformation of Derivatives Markets

*ISDA celebrates its 35-year anniversary this year and to mark the occasion, **IQ** convened a group of board members to discuss the greatest opportunities and challenges facing the derivatives market*

IQ: How is the derivatives market responding to the coronavirus pandemic?

Eric Litvack (EL): It's early days at the time of writing, but the market appears to be responding well to a very challenging environment, both in terms of market conditions and the novel challenge of having such a high proportion of participants working from home. Post-trade infrastructure appears to be holding up well in the face of very high volumes and extremely volatile markets. In the bilateral markets, despite tensions, margin calls are being met, and where late deliveries have been noted, they have been repaired. Overall, it's encouraging and comforting that the market for risk transfer has continued to operate safely and efficiently.

Darcy Bradbury (DB): The disruption caused by the pandemic means that some regulatory projects should be delayed. Most organisations in our industry have been required to work remotely, and will be for some time. For example, it will be next to impossible for market participants to complete the new initial margin regime for non-cleared swaps on the original time frame. Adapting to this regime requires technology system builds, operational changes and numerous new contracts to be negotiated with multiple parties. Global regulatory groups have recognised this and called for a one-year delay. We are optimistic that major market regulators will take action soon to provide the extra time organisations need to comply.

THE PARTICIPANTS

Thijs Aaten
Chief finance and risk officer
APG Asset Management Asia

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DE Shaw Group

Dixit Joshi
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ISDA
Group director of public affairs
Société Générale

Daniel Maguire
Group director, post trade
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IQ: What long-term impact do you think the crisis could have on the derivatives market?

EL: Every crisis is an opportunity to test the systemic plumbing and identify where we should invest further efforts to make it stress-resistant and future-proof. This one will be no different. I suspect we'll pay more attention to the impact of the unexpected scenario of having a third of the world's population subject to confinement measures and an extraordinarily high proportion of participants working in isolation remotely from their habitual place of employment. How should we revisit the delivery of default notices and the close-out process more broadly to account for such a scenario? It's when things that you always took for granted are suddenly different that you see the need for new approaches. Some will be through changes to contractual terms and definitions; others will be through novel technological solutions. I'm looking forward to the proposals.

> "The disruption caused by the pandemic means that some regulatory projects should be delayed. Most organisations in our industry have been required to work remotely, and will be for some time"
>
> **Darcy Bradbury, DE Shaw Group**

IQ: How would you describe the state of the derivatives markets today? What benefit do derivatives bring to the global economy?

DB: Derivatives are an integral part of global markets and help investors like us achieve our investment objectives.

Thijs Aaten (TA): The benefit that derivatives bring to society is that they make it possible to transfer risks to those that are able to bear it. They will earn a fair premium for bearing that risk, and someone not able to bear those risks is more than willing to pay that premium.

Daniel Maguire (DM): Overall, I think the derivatives market is in a very good place. Challenges still remain, but regulatory reforms have been largely positive and more aligned, which is helpful. The non-cleared margin rules are an important final building block in that process. All of this is very positive and shows the industry's ability to manage risk safely and enable more liquid, efficient markets. A robust over-the-counter (OTC) market is especially important to ensure the diverse needs of market participants are met.

IQ: How has the market changed over the past 35 years and what have been the most significant developments?

DM: Put simply, the sheer size and scale of the derivatives market today compared to previous decades. As part of that growth, we've seen a broadening and deepening of market access, through initiatives such as LCH's client clearing and sponsored clearing models. In part, the growth has also been driven by standardisation, enabling more products to be centrally cleared and allowing a broader range of market participants to be able to benefit from the capital and operational efficiencies of clearing. Regulation has played a huge role in shaping the OTC market. While there is always a balance to strike, regulatory change has been overwhelmingly positive, and has improved financial stability.

DB: Over the past decade, legislation drove many changes, such as swap execution facility (SEF) trading. Market participants also took prudent steps to manage risk, including segregation of initial margin. The sum of these changes has generally improved the markets and resulted in enhanced price transparency, lowered trading costs and reduced counterparty credit risk.

TA: In my opinion, the most liquid instruments have not fundamentally changed – an interest rate swap is still an interest rate swap, and fundamentally still does the same thing as decades ago. However, even a plain vanilla interest rate swap has become highly technical. Think of all the XVAs and the valuation of a swap based on collateral agreements with optionality in them. The legal aspects are also becoming more and more important – think of the developments in the credit default swaps market where we've seen a number of manufactured credit events. So we need more and more specialists in dealing with derivatives, but we should not forget about the big picture.

IQ: As an ISDA board member, what do you see as ISDA's value to the market?

DB: ISDA represents the views of market participants from all sectors with →

regulators, providing valuable insights to inform government policies. But ISDA also provides practical tools that enhance efficiency and reduce operational and legal risk. The LIBOR replacement project is a good illustration of both of these roles. By working with regulators, ISDA was able to create a strategy for developing industry consensus on how to replace LIBOR in outstanding contracts. But then ISDA is also working to operationalise that strategy by preparing standard provisions for market participants to use to efficiently update their swap contracts.

DM: ISDA plays an important role in acting as an advocate for the derivatives market. It also helps to convene the market, bringing sell-side and buy-side professionals from across markets and geographies together to discuss key topics for the derivatives industry. Furthermore, ISDA has helped to establish global standards that have helped the derivatives market to grow and thrive, whether that's legal, operational or technological.

TA: Given the importance of risk transfers as described earlier, we need to make sure that markets function optimally. That will happen if the market is constructed in such a way that it serves the greatest common denominator of interests of all market participants. It should not be skewed towards favouring a specific sector or a particular class of investors. ISDA has an important role to play in ensuring that markets are fair to all participants.

IQ: What are the biggest opportunities facing the derivatives market today?

TA: The expansion of the use of derivatives towards economies and regions where derivatives are non-existent, or little used today.

DB: The development of smart contracts and other tools that will enable market participants to use more advanced technology to monitor and update contracts, saving time and allowing them to use valuable legal talent more efficiently.

DM: The cost pressures faced across financial services serve as a catalyst for improved efficiency in the services we provide. Competition is most effective and efficient at a global level, where it does not lead to unnecessary fragmentation. Globally consistent regulation is the best way to enable this.

> "Every crisis is an opportunity to test the systemic plumbing and identify where we should invest further efforts to make it stress-resistant and future-proof. This one will be no different"
>
> **Eric Litvack, ISDA**

IQ: As the last parts of the new regulatory framework are implemented over the coming years and some existing regulations are reviewed, which areas do you expect will have the biggest impact on derivatives markets?

EL: The Fundamental Review of the Trading Book has the potential to drive very significant changes in the derivatives market. The cost and complexity of implementation, and the capital impacts, could have the effect of disincentivising the use of internal models and limiting the ability of banks to offer hedging or investment solutions for bespoke risks. By reducing the ability to outsource the management of such risks to bank trading books where they can benefit from natural offsets, risks would be pushed to the non-bank sector. It's not immediately obvious that this is a desirable trade-off.

Dixit Joshi (DJ): Central clearing of standardised OTC derivatives has been successful in delivering one of the key objectives of the Group-of-20 (G-20) post-crisis reforms. The main benefit of central clearing lies in the considerable reduction in exposures and risks for clearing members through netting effects, reduced internal margining requirements and risk management provided by central counterparties (CCPs).

Guaranteeing long-term equivalence for third-country CCPs between the EU and UK and EU and US is essential to avoid imposing punitive capital penalties on EU firms and triggering financial stability risks. Existing arrangements for third-country CCPs are under threat in the context of Brexit and the revisions of relevant frameworks – through the European Market Infrastructure Regulation 2.2 in the EU, and through proposals from the Commodity Futures Trading Commission in the US. Fragmentation of central clearing markets and loss of access to certain CCPs for clearing members would lead to increased risks to financial stability and poorer outcomes for end investors globally.

In addition, the transition from interbank offered rates to risk-free rates (RFRs) is an unprecedented change in market practice, and public sector support is essential for it to be successful. Continued action by all market participants is required to ensure a smooth transition in derivatives markets and minimise risks for legacy contracts.

Focusing on changes in the prudential framework for risk and capital management, the new framework for market risk needs to be implemented, which we are doing in Europe but not yet in the US. In addition, the Basel Committee is still working to finalise the standard for credit valuation adjustment (CVA), which currently disincentivises prudent hedging, and the standardised approach for counterparty credit risk (SA-CCR). In conjunction with the output floor, SA-CCR will limit the benefits of the use of internal risk models, which may – as a consequence – lead to increases of own funds requirements for banks providing OTC hedging services.

In short, it is essential that policymakers, supervisors and regulators understand there is a multitude of regulations linked to derivatives, most of which have not been properly assessed in terms of individual impact, let alone the cross-regulation impact. ISDA has an essential role to play in education, assessing the impact of the overall framework, and ensuring the market remains functional.

TA: My main worry is about collateralisation. There is a strong push towards high-quality collateral, preferably just cash. But that is a difficult task when you also want to be fully invested. The lack of enough cash or high-quality collateral might actually have a big impact on the derivatives market.

DB: Expanding the requirement to post (and receive) initial margin to thousands of clients over the next two years will not only entail millions of dollars in legal, operational and technology costs, but could change the economic attractiveness of certain swaps. There is a cost when both brokers and clients have to post initial margin, and that will be reflected in swap pricing over time. There has been limited economic or market analysis of that impact, so that bears watching.

DM: The implementation of the non-cleared margin rules continues to have a big impact on the market. For example, in the FX space, we are seeing increasing numbers of firms moving to clear FX products, such as non-deliverable and deliverable forwards, FX options and FX swaps. However, it's important to recognise that clearing is not a panacea. The non-cleared OTC interest rate swaps space, for example, represents 25% of the global OTC interest rate derivatives market. It's therefore important that the industry works together to bring about greater efficiency and standardisation to enable the market to continue to thrive. LCH SwapAgent is helping here, by delivering new products aimed at automating and standardising the margin process for non-cleared derivatives.

IQ: What are the risks posed by regulatory driven market fragmentation and how should they be addressed?

EL: Some fragmentation is inevitable – it's understandable that regulators would want their rules to reflect the idiosyncrasies of local banking and lending markets, and it's reasonable they would require appropriate oversight over investor protection and infrastructures that could affect the functioning of their markets. On the other hand, there's a trade-off: more localisation means more fragmentation, and that in turn means more friction and more cost for end users. ISDA has proposed a risk-based framework for the evaluation and recognition of the comparability of derivatives regulatory regimes in foreign jurisdictions. Ultimately, these are sovereign decisions and there is no one-size-fits-all fix, but a framework could be agreed that would enable national regulators to implement equivalence and substituted compliance determinations where possible in a predictable, consistent and timely manner.

DJ: The global political environment is driving regulatory and market fragmentation. There should be strong political support for further international regulatory cooperation, consistent global rules and active use of equivalence to promote cross-border trade in financial services.

Ring-fencing of risk management (for example, a lack of equivalence for UK CCPs) will drive increased costs for European businesses and investors. Regulatory fragmentation between the EU and third countries will act as a brake on growth and competition.

On the prudential side, we are seeing further examples of divergence. Both →

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>
> **Dixit Joshi, Deutsche Bank**

> "The transition to alternative global reference rates is an existential issue for the market and will continue to be a key focus over the coming years"
>
> **Daniel Maguire, London Stock Exchange Group**

→ Europe and the US have chosen not to fully implement the Basel III standards (CVA for Europe and SA-CCR for the US) to protect corporates from unnecessary costs of hedging. This leads me to believe that we need to rethink the risk approach for corporates, especially at the Basel level. Next to the current revision of CVA, the Basel Committee also needs to review the SA-CCR standard.

DM: The overwhelming feedback we receive from members and clients is that there is no support for a forced fragmentation of global liquidity. Regulation over recent years has sought to prevent the fragmentation of systems designed to make financial markets efficient, stable and safe, and we continue to advocate against changes that would end up increasing costs for end users and impact financial stability.

IQ: How do you expect derivatives markets to develop over the coming years? What are likely to be the most impactful changes?

DM: The transition to alternative global reference rates is an existential issue for the market and will continue to be a key focus over the coming years. Both ISDA and LCH have a major role to play in ensuring a smooth and safe transition to the new RFRs. This is the biggest change to the markets since the regulatory change after 2008 and the move to mandatory clearing, reporting and SEF execution. We need to make sure it's done right.

EL: Increased capital and regulatory requirements will continue to drive resource allocation and bank business models. Scarce resources and the cost of maintaining inefficient legacy systems will push the derivatives market to increasingly shift to new technologies, and ongoing geopolitical tensions will drive a continued shift from global to local.

IQ: How important will technology be in transforming the way derivatives are traded and processed?

TA: Like other markets (equity, FX), we will see a big change in how derivatives are traded. Where some years ago swaps were traded primarily over the phone, we're now moving towards fully automated, real-time trading via order books. That cannot be done without new technologies and further standardisation. ISDA's Common Domain Model can play an important role in this transformation.

DB: Daily valuations and assessment of variation margin and initial margin are now providing investors with much more useful information about their swaps portfolios. Investors that can analyse that data effectively should be able to improve their investment decisions, more easily compare opportunities across derivatives and cash markets, and improve the efficient execution of their investment strategies in the portfolios they manage.

DM: Technology will always have a role to play. However, the focus must be on how technology can improve efficiency and execution rather than change for change's sake. As technology continues to rapidly advance and evolve, it's important that firms adopt a change in mind-set in order to realise the maximum possible opportunity from technology. While technology can boost automation and efficiency, there is potential for many in the industry to be bolder in terms of eliminating some legacy processes to enable smarter and more efficient ways of working.

IQ: Where do you expect to see the greatest opportunities for derivatives market participants?

TA: Talking my own book – but I think a lot of people underestimate the size of the Chinese fixed income market. The use of derivatives currently is very cumbersome, and foreign investors make little use of them. Opening up that market is an immense opportunity.

DM: The non-cleared derivatives market, in particular, has a lot to gain from increased standardisation of both systems and processes. In addition, we've seen regulation consistently generate opportunities for innovation, and I would expect that to continue. As such, innovators in the derivatives markets will need to keep an eye on regulatory change while developing new products and services in order to truly maximise opportunities. There is also a huge opportunity for greater capital, risk and collateral optimisation between cleared and non-cleared derivatives. Increased standardisation and efficiency of the underlying processing of these markets is a vital building block for optimisation in these areas.

IQ: Do you see ISDA's role changing in the coming years?

TA: Nope – ISDA will still be the promoter of fair and efficient markets. Those markets might change dramatically, but ISDA's role as the promoter of fair and efficient markets should remain unchanged.

DM: Since it launched in 1985, ISDA has played a central role in bringing the OTC derivatives market together to debate and align global industry standards. The importance of a central industry body to bring together the interests of all participants across this global marketplace is vital for its continued growth and vibrancy, and ISDA has been key in this.

DB: ISDA should continue to advocate for sensible regulation, promoting the critical improvements from the post-crisis regime like improved price transparency, electronic trading and appropriate margin regimes. But ISDA can also highlight inefficiencies, whether it's from duplicative data collection or fragmented liquidity pools across national boundaries, to promote further evolution towards a more effective regulatory regime. ISDA's motto says it well: 'safe and efficient markets'.

EL: Change is inherent to ISDA's role – its mission is to drive change and standardisation. We try to stay ahead of the curve by looking out for it, and where possible by inventing it. Following the G-20 commitments in 2009, ISDA worked to drive solutions to help the industry adapt to the new environment through revised documentation, various protocols and the ISDA Standard Initial Margin Model, to name just a few. We support that work through our advocacy for appropriate, risk-sensitive rules supported by impact studies; through the development of industry standards that help facilitate automation and interoperability; and through the establishment of new documentation to ensure continuity of trading. Wherever you look, ISDA is creating solutions to allow market participants to adapt to the future. That's not going to change. IQ

"I think a lot of people underestimate the size of the Chinese fixed income market. The use of derivatives currently is very cumbersome, and foreign investors make little use of them. Opening up that market is an immense opportunity"

Thijs Aaten, APG Asset Management Asia

Checking the Guardrails

The US House Committee on Financial Services has overseen the drafting and implementation of numerous regulatory reforms in recent years. Committee member ***Josh Gottheimer****, member of the US House of Representatives for New Jersey's fifth congressional district, discusses the importance of appropriate regulation*

IQ: What do you consider to be the priorities for the House Committee on Financial Services?

Josh Gottheimer (JG): A key priority of the Financial Services Committee is to protect consumers and investors that use financial services at every level, giving confidence to the market – whether someone is hoping to find a suitable lender for a small business loan, comparing property insurance plans, refinancing their home or ensuring their retirement savings are being appropriately managed. I work daily with my colleagues on the committee to ensure financial markets have minimal friction, with appropriate transparency, and everyone – from personal consumers to institutional investors – feels they have suitable information when making financial decisions.

IQ: The committee has jurisdiction over banks and banking. In your view, are these institutions more robust and resilient now as a result of the regulatory reforms that have been put in place?

JG: Absolutely. It's clear that banks and regulators globally were not ready for the 2008 financial crisis. However, much has changed for the industry and in bank regulations since then. The Dodd-Frank Act helped strengthen our banking system, making it safer and more resilient. The amount of capital banks hold is up significantly. Liquidity has doubled. Banks are subject to rigorous stress tests and have created living wills to reduce the adverse effects of any potential failure. This is all good news and gives confidence to consumers and investors alike.

IQ: How important is it to frequently review the regulatory framework to assess whether the rules continue to be appropriate and meet their original objectives?

JG: I pride myself on being a Democrat who supports sensible guardrails where needed, and the reform or repeal of those that are not. A smart approach is needed to let the market innovate and drive our economy. Legislators and regulators in Washington, DC should be protecting the good actors, while punishing the bad.

From my time at the Federal Communications Commission, I've seen first-hand how unnecessary and out-of-date rules can build up on the books over the years. Periodic reviews of regulations – assessing if they are serving the purpose for which they were initially designed – is pragmatic policy that has bipartisan support. To that end, this Congress, I re-introduced the bipartisan Regulatory Improvement Act of 2019, HR 3269, which will create a bipartisan independent commission to review rules that are outdated, duplicative or in conflict with one another. The commission would present its recommendations to Congress for a simple up or down vote, giving ample opportunity to cut red tape at the federal level and eliminate outdated bureaucracy that is holding back American businesses.

IQ: How can Congress and regulators strike a balance between encouraging the emergence of new financial technologies and ensuring they are safe for institutions and consumers?

JG: I believe the new frontiers presented by financial technologies are an opportunity for American leadership, economic growth and job creation. In my district, so many different people work in the financial industry or at the cutting edge of financial technology. It's a tremendous job creator in New Jersey.

I am actively working to provide regulatory clarity for emerging fintech, particularly those firms focusing on digital assets. We need to create an environment that encourages technologies to start here, grow here and create US jobs, rather than setting up shop overseas. I've personally heard from several companies that are being instructed to set up shop in countries like Singapore, Switzerland, Bermuda and beyond to avoid the lack of certainty we have here in the US when it comes to digital assets. That's why I've partnered with Warren Davidson, Republican member of the House

"Periodic reviews of regulations – assessing if they are serving the purpose for which they were initially designed – is pragmatic policy that has bipartisan support"

of Representatives for Ohio, on legislation that would help provide this much-needed clarity, the Token Taxonomy Act of 2019, HR 2144. This bill would provide certainty for businesses, entrepreneurs and regulators in the US blockchain economy by providing necessary blockchain statutory definitions and codifying oversight authority.

IQ: The switch from LIBOR to alternative risk-free rates like SOFR represents a significant challenge right across financial markets. In your view, is Congress appropriately monitoring this issue?

JG: LIBOR could be phased out after the end of 2021, and there is currently momentum in the financial markets for transitioning to a new benchmark system. This system must be independently verifiable, based on real transactions, and not derived from bank polling that may tempt a bad actor. SOFR is the Federal Reserve's preferred alternative to LIBOR, and provides a broad measure of the general cost of financing US Treasury securities overnight. My colleagues and I on the House Financial Services Committee have been closely monitoring this transition, and we recently asked Treasury secretary Steven Mnuchin specifically about it. Secretary Mnuchin confirmed this is something on which he is very focused. I'll be watching the issue closely as it develops, because it's a transition that must work across the entire market, at all levels, to not threaten financial stability.

IQ: In some cases, US prudential regulators have opted to draft rules that are more conservative than global standards. Does this raise concerns about the global competitiveness of US banks? In general, do you agree with the principle of 'gold-plating'?

JG: Continued economic stability and resilience is vital. However, banks headquartered in the US adhere to more rigorous capital standards than required by foreign regulators. I am concerned that these requirements could make it more expensive for consumers and companies to do business with and access credit from our US banks long term. The last thing I want is for qualified small businesses and middle-class Americans to not be able to find credit when they need it most, and I also do not want to scare away responsible and stable financial institutions by over regulation.

IQ: With a divided Congress in an election year, what issues do you think the committee can address? How important is bipartisan cooperation in this space?

JG: We have seen some great bipartisan work done by the House Financial Services Committee this Congress, some of which was included in the 2019 year-end package and signed into law by the president, including the reauthorisation of the Export-Import Bank and the Terrorism Risk Insurance Program. There are numerous issues within the committee's jurisdiction on which both sides of the aisle have agreed work must be done. We're going to continue to work on these issues in 2020, including a long-term reauthorisation of the National Flood Insurance Program, housing finance reform and cyber security. IQ

An Upward Trend

ISDA's latest margin survey shows that initial margin held by the largest 20 dealers continued to climb in 2019, as an increasing number of firms and transactions came into scope of margin requirements

$1.07 trillion

The amount of IM and VM collected by phase-one firms at end-2019

Four of the six implementation phases of the initial margin (IM) requirements for non-cleared derivatives are now complete, bringing the number of firms subject to the rules to over 50. This helped contribute to another rise in IM in 2019, with the top 20 dealers reporting a 10% increase versus the end of 2018.

According to ISDA's latest margin survey, the 20 dealers that came into scope in the first phase of the IM-rule rollout in September 2016 collected $173.2 billion of IM at the end of 2019, up from $157.9 billion a year earlier. Including variation margin (VM), the total margin collected by the phase-one dealers at the end of 2019 was $1.07 trillion.

The reach of the IM requirements for non-cleared derivatives has steadily expanded since September 2016, with the most recent phase in September 2019 bringing approximately 18 additional firms into scope (see Chart 1). The next phases are now due in September 2021 and September 2022, after the Basel Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO) announced a one-year deferral to the phase five and six deadlines on April 3 (see page 8). ISDA estimates a further 1,089 entities will come into scope as part of these phases, meaning the amount of IM posted is likely to continue growing.

IM posted for cleared derivatives also increased last year. Data from the major central counterparties (CCPs) shows market participants posted $269.1 billion of IM for their cleared interest rate derivatives (IRD) and single-name and index credit default swaps (CDS) at the end of 2019, up 20.6% from the year before.

Non-cleared IM

According to the survey, phase-one firms received $105.2 billion and posted about $105.6 billion of regulatory IM for non-cleared derivatives transactions at the end of 2019 (see Table 1). Given the margin rules for non-cleared derivatives require two-way IM exchange between in-scope counterparties, the amounts of IM received and delivered are approximately the same.

The amount of regulatory IM received at year-end 2019 grew by 25% compared with the end of 2018. The amount of regulatory IM posted increased by 27% over the same period. The growth in regulatory IM is likely driven by two main factors: (1) new non-cleared derivatives transactions executed by phase-one, phase-two and phase-three entities; and (2) the extension of the margin requirements to phase-four firms, which became subject to the IM requirements from September 2019.

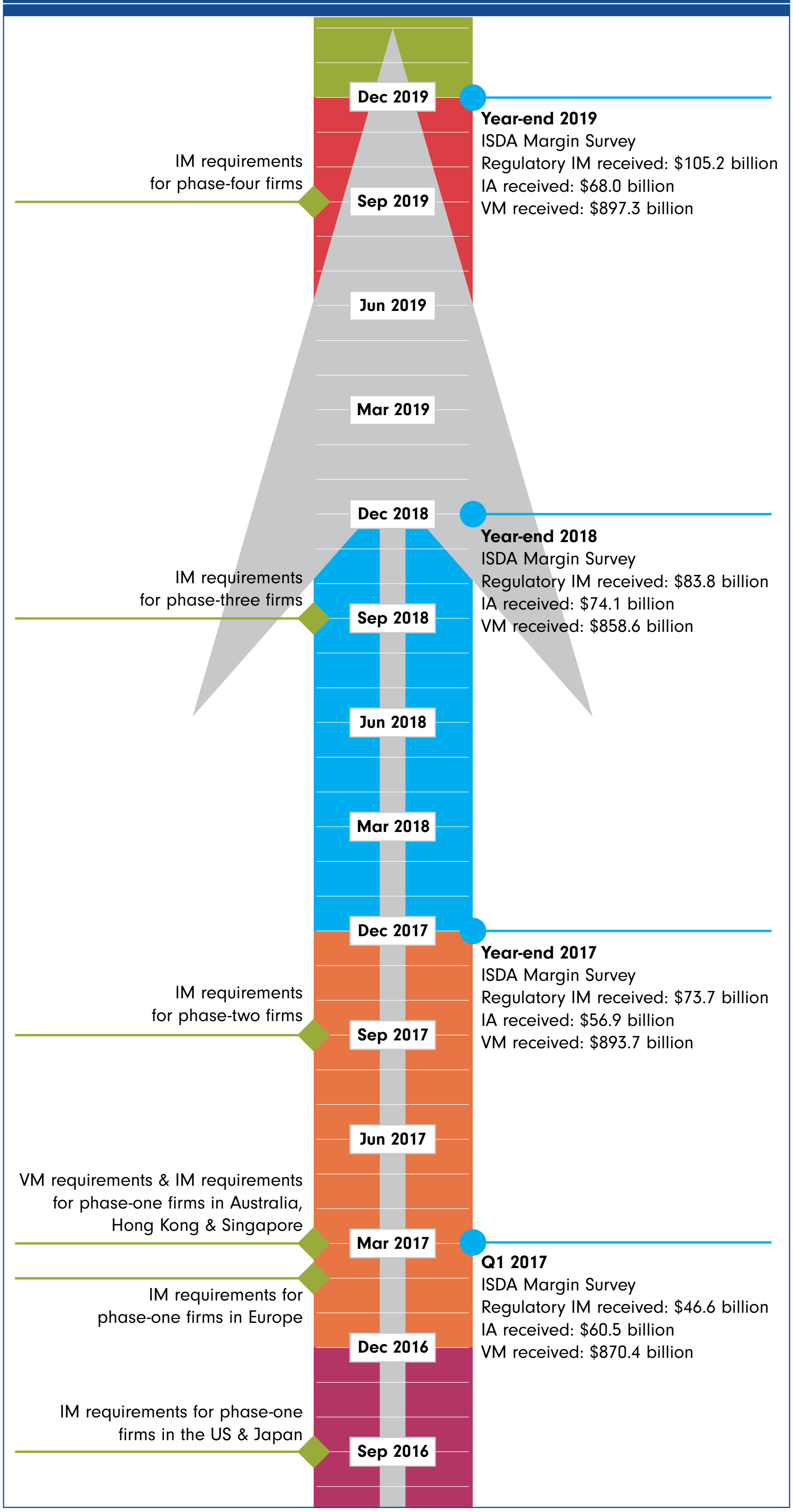
In addition to regulatory IM, phase-one firms collected $68.0 billion of independent amount (IA) for non-cleared derivatives transactions at the end of 2019, and posted $9.5 billion of IA. The amount of IA received declined by 8% compared to the $74.1 billion collected at year-end 2018, and the amount of IA posted decreased by 7% versus the $10.1 billion delivered at the end of 2018.

IA reflects IM posted and collected under collateral agreements with counterparties not currently in-scope of the margin requirements. It also captures IM

TABLE 1: PHASE-ONE FIRMS REGULATORY IM AND IA (US$ BILLIONS)

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
Regulatory IM Received	105.2	83.8	73.7	25%	14%
IA Received	68.0	74.1	56.9	-8%	30%
Total IM Received	173.2	157.9	130.6	10%	21%
Regulatory IM Posted	105.6	83.2	75.2	27%	11%
IA Posted	9.5	10.1	6.4	-7%	57%
Total IM Posted	115.0	93.3	81.7	23%	14%

CHART 1: TIMELINE OF MARGIN RULES FOR NON-CLEARED DERIVATIVES



posted for transactions that are not covered by the rules, including legacy trades.

The difference in IA received and IA posted is likely because collateral agreements that phase-one firms have traditionally had with non-dealer counterparties generally required only those parties to post IM.

In addition to the 20 largest dealers, four phase-two firms and three phase-three entities contributed to the margin survey. Those firms collected $10.5 billion of IM at year-end 2019, including $6.0 billion of regulatory IM and $4.5 billion of IA. In turn, they posted $8.2 billion of IM, including $6.7 billion of regulatory IM and $1.5 billion of IA.

For comparison, four phase-two and three phase-three firms that participated in the previous ISDA Margin Survey received $4.8 billion of IM and posted $4.2 billion of IM at year-end 2018 – although the identity of the firms is not exactly the same.

In total, the 27 firms that contributed to the survey collected about $183.7 billion of IM and $944.7 billion of VM at the end of last year.

Non-cleared VM

VM collected by phase-one firms for non-cleared derivatives totalled $897.3 billion at year-end 2019, a 5% increase compared with the $858.6 billion collected at the end of 2018 (see Table 2).

Of that, $441.5 billion was required under global margin regulations, while $455.8 billion was discretionary VM and was collected from counterparties and/or for transactions that are not covered by the margin rules, including legacy trades.

VM posted by phase-one firms for non-cleared derivatives totalled $690.2 billion at year-end 2019, an 18% increase compared with the $583.9 billion of VM delivered at the end of 2018. The VM posted by phase-one firms included $348.7 billion of regulatory VM and $341.5 billion of discretionary VM.

The four phase-two and three phase-three firms that contributed to the survey collected $47.4 billion of VM at the end of 2019, including $23.8 billion of regulatory VM and $23.6 billion of discretionary VM.

These firms posted $64.5 billion of VM at year-end 2019, including $34.5 billion of regulatory VM and $30.0 billion of discretionary VM. →

TABLE 2: PHASE-ONE FIRMS REGULATORY AND DISCRETIONARY VM (US$ BILLIONS)

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
Regulatory VM Received	441.5	N/A	N/A		
Discretionary VM Received	455.8	N/A	N/A		
Total VM Received	897.3	858.6	893.7	5%	-4%
Regulatory VM Posted	348.7	N/A	N/A		
Discretionary VM Posted	341.5	N/A	N/A		
Total VM Posted	690.2	583.9	631.7	18%	-8%

→ Composition of collateral

Based on the survey results, phase-one entities mostly use government securities for meeting regulatory IM requirements. That is because the margin regulations stipulate that IM has to be bankruptcy remote, which is much easier to implement using securities. Regulatory IM collected by phase-one firms included 83.9% of government securities and 16.1% of other securities at year-end 2019.

For IA and VM, cash is more widely used. IA received by phase-one firms comprised 47.9% cash, 23.2% government securities and 28.9% other securities. Cash contributed 82.6% of regulatory VM margin received, while government securities and other securities contributed 14.3% and 3.1%, respectively. Discretionary VM received by phase-one firms comprised 70.6% cash, 14.1% government securities and 15.3% other securities.

Overall, phase-one firms collected $719.1 billion of cash, $231.1 billion of government securities and $120.4 billion of other securities at year-end 2019. Cash made up 67.2% of total margin received compared to 73.0% of total margin posted at the end of 2019. Government securities and other securities contributed 21.6% and 11.2%, respectively, of total margin received and 22.8% and 4.2%, respectively, of total margin posted at the end of 2019.

Inter-affiliate margin

In addition to the $173.2 billion in regulatory IM and IA, phase-one firms collected $44.0 billion of IM for their inter-affiliate derivatives transactions at year-end 2019, compared with $39.4 billion at the end of 2018.

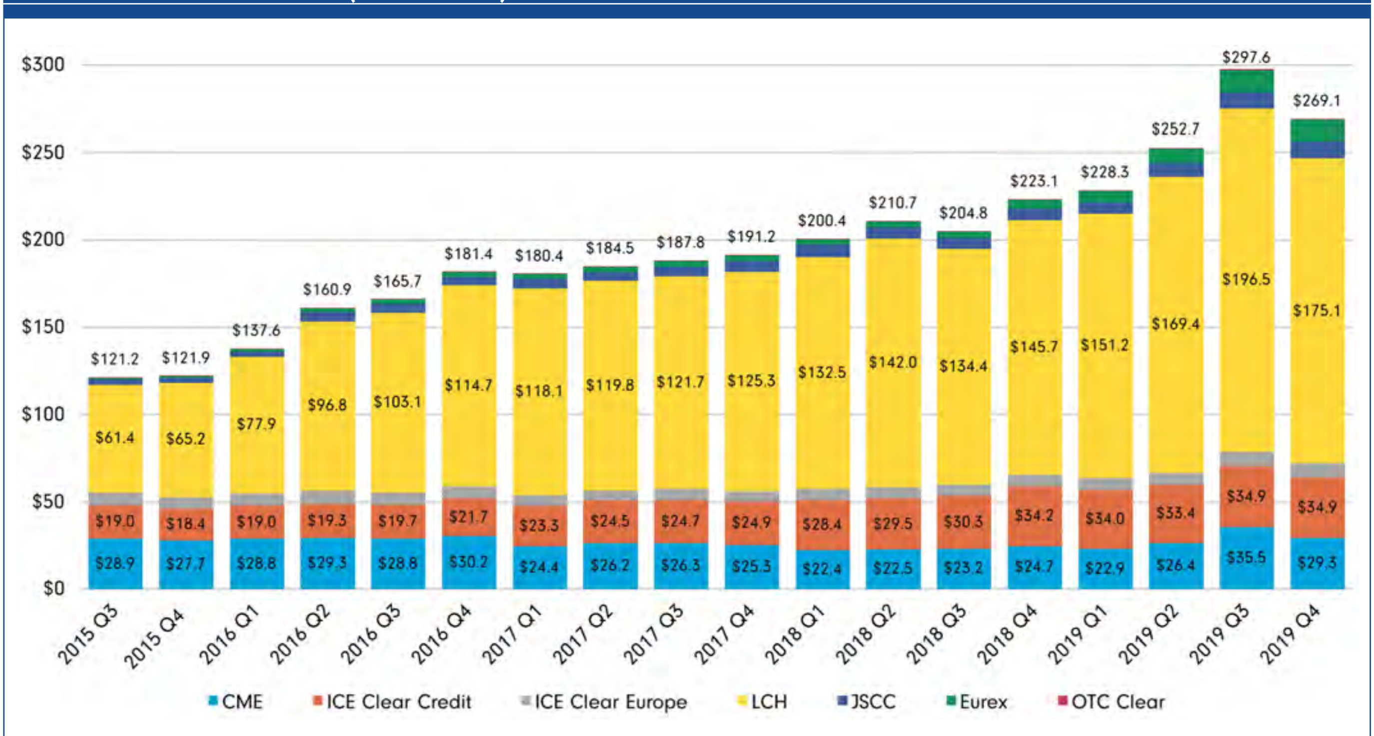
Inter-affiliate swaps are internal risk transfers between two legally separate subsidiaries, and are commonly used by global institutions to net their firm-wide positions and centrally manage their derivatives exposure.

Additionally, phase-one firms collected $134.8 billion of VM for their inter-affiliate derivatives transactions at year-end 2019.

Cleared IM

Based on public quantitative disclosures for CCPs set out by the Committee on Payments and Market Infrastructures and IOSCO, the amount of IM for cleared derivatives, including IRD and CDS, continued to increase in 2019. Total IM for IRD and CDS products reached $269.1 billion at the

CHART 2: IM FOR IRD AND CDS (US$ BILLIONS)



end of the fourth quarter of 2019, compared with $223.1 billion at the end of the fourth quarter of 2018 (see Chart 2).

IM for cleared IRD grew by about 24.3%, from $178.7 billion at the end of the fourth quarter of 2018 to $222.1 billion a year later. This was mainly driven by a 20.6% IM increase at LCH Ltd.

In comparison, IM for cleared CDS rose by 5.9%, from $44.5 billion at the end of 2018 to $47.1 billion a year later.

Client and house IM

At the end of the fourth quarter of 2019, IM posted by clearing members for their own positions (house net) totalled $106.1 billion compared with $163.1 billion of client IM, out of which $151.6 billion was margin calculated on a gross basis and $11.5 billion was calculated on a net basis. Under a net margin structure, a clearing member only passes through to the CCP the net margin across a set of clients, thereby retaining part of the client margin. Under a gross structure, the margin of all clients is posted in full to the CCP.

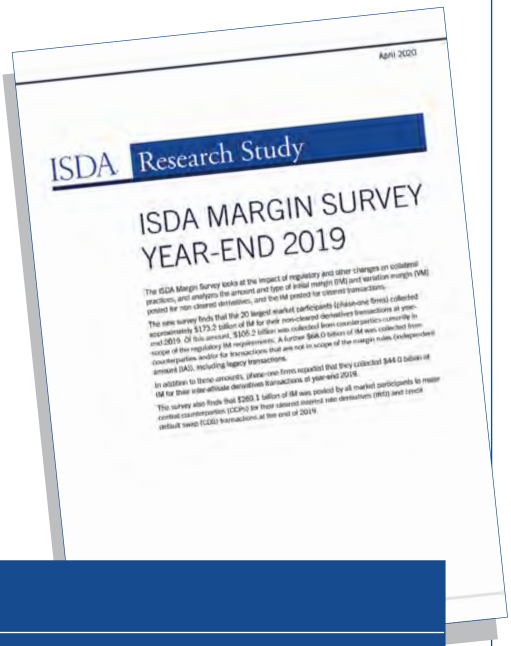
House net margin totalled 39.4% of total IM, while client gross margin and client net margin represented 56.3% and 4.3% of total IM, respectively, at the end of the fourth quarter of 2019.

Open interest

IRD open interest across five major CCPs totalled $357.1 trillion at the end of 2019, while total CDS open interest at four major CCPs was about $2.1 trillion. Against these exposures, CCPs collected $222.1 billion of IM for IRD products and $47.1 billion of IM for CDS products.

In comparison, IRD open interest across five major CCPs totalled $346.0 trillion at year-end 2018, while total CDS open interest at four major CCPs was about $1.9 trillion. Against these exposures, CCPs collected $178.7 billion of IM for IRD products and $44.5 billion of IM for CDS products. IQ

This is an edited version of the ISDA Margin Survey Year-end 2019. Read a full version of the paper here: bit.ly/2Vq1ZSm



SURVEY METHODOLOGY

For non-cleared derivatives, ISDA surveyed 20 firms with the largest derivatives exposures. These firms were subject to the first phase of margin regulations for non-cleared derivatives in the US, Canada and Japan from September 2016, and in Europe from February 2017.

ISDA also surveyed phase-two and phase-three firms that were subject to initial margin (IM) requirements from September 2017 and September 2018, respectively. Responses were received from four phase-two firms (out of the six in scope) and three phase-three firms (out of the eight subject to the margin rules).

For cleared derivatives, the survey used publicly available margin data from two US central counterparties (CCPs) (CME and ICE Clear Credit), four European CCPs (Eurex Clearing, ICE Clear Europe, LCH Ltd and LCH SA) and two Asian CCPs (Japan Securities Clearing Corporation and OTC Clearing Hong Kong Limited). The collected data only reflects IM for interest rate derivatives and credit default swaps. This data is published by CCPs under public quantitative disclosure standards set out by the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions.

SURVEY AT A GLANCE

- Initial margin (IM) collected by phase-one firms for their non-cleared derivatives transactions totalled $173.2 billion at year-end 2019. This represents a 10% increase compared to the $157.9 billion of IM that phase-one firms collected at year-end 2018.
- Approximately $105.2 billion of the IM collected by phase-one firms was required under global margin regulations. This represents an increase of 25% compared to the $83.8 billion of regulatory IM collected at year-end 2018.
- About $68.0 billion of IM collected by phase-one firms was independent amount (IA) received from counterparties not currently in scope and/or for transactions not covered by the margin rules, including legacy trades.
- Seven other firms – four phase-two and three phase-three entities that participated in the survey this year – collected $10.5 billion of IM at year-end 2019, including $6.0 billion of regulatory IM and $4.5 billion of IA.
- Variation margin (VM) collected by phase-one firms for non-cleared derivatives totalled $897.3 billion at year-end 2019 compared with $858.6 billion at year-end 2018. VM collected by the four phase-two and three phase-three firms totalled $47.4 billion at year-end 2019.
- In addition, phase-one firms collected $44.0 billion of IM for their inter-affiliate derivatives transactions at year-end 2019, compared with $39.4 billion at year-end 2018.
- IM posted at major central counterparties by all market participants for cleared interest rate derivatives and single-name and index credit default swaps totalled $269.1 billion at the end of 2019. This represents an increase of 20.6% from the $223.1 billion at the end of 2018.

Viewpoints on RFR Transition

Industry work on benchmark reform continues to progress, with the aim of adopting alternative risk-free rates ahead of end-2021. **IQ** *asked a variety of market participants for their views on progress and challenges*

1: How much liquidity are you seeing in the new risk-free rates (RFRs), and what steps do you think need to be taken to increase liquidity and trading activity?

John Feeney
Partner, Martialis Consulting

Trading in the new RFRs varies considerably across currencies, tenors and products. For example, RFRs are gaining liquidity in the shorter end of the curve (zero to two years), but are still challenged in the longer maturities (greater than two years).

Challenges still remain in transitioning longer-dated cash products such as loans, securitisations and debt from interbank offered rates (IBORs) to RFRs.

SONIA has been referenced for many years, but while there has been growth in derivatives volumes in the shorter maturities, it has struggled to gain momentum in longer maturities where LIBOR still reigns supreme. Meanwhile, loans have struggled to move to SONIA, despite a few well-publicised trades.

SOFR has been published for around two years, but still plays a secondary role to the effective federal funds rate (EFFR) when it comes to trading in derivatives. At last count, SOFR volumes were less than 5% of EFFR volumes and well below LIBOR turnover in longer maturities. A few debt transactions have been completed, but loans referencing SOFR remain a challenge.

Other RFRs like SARON (Switzerland) and TONA (Japan) have little turnover in any product referencing them.

LIBOR will become problematic to reference by 2021, so why are market participants not moving to RFRs? What is missing?

I believe many participants have considerable difficulty adjusting systems and processes to reference a benchmark where the rate is not known until the end of the relevant period. LIBOR sets at the start of the period, and processes such as cashflow management, accounting accrual, prices for debt and unit prices for funds are designed with this in mind.

One possible solution is a term RFR, where the rate reflects LIBOR-like timing: it is set in advance for the relevant period. The Working Group on Sterling Risk-free Reference Rates and the US Alternative Reference Rates Committee (ARRC) have both supported the development of these rates.

Solving the problems for end users by having a benchmark closer in operational aspects to LIBOR but based on the RFRs will, I believe, help many end users make the transition to RFRs much more readily.

Snigdha Singh
Managing director, head of EMEA rates trading, Bank of America Merrill Lynch

January was a record month for RFR volumes globally, but this tells only half the story. While SONIA is now the dominant index for the swap market in the UK, the uptick in SOFR and €STR volumes has been more gradual. A lot of the volume has been focused in short tenors due to hedging around active central bank meetings, but this liquidity has created positive momentum further out the curve as well.

Snigdha Singh, Bank of America Merrill Lynch

We have some significant milestones coming up this year for IBOR transition, and they will be key to increasing activity in the new rates. For SONIA, liquidity is arguably already indistinguishable from LIBOR for end users, and as the dealer market switches its hedging instruments, this will solve a key piece of the puzzle organically without the dependencies that the cash, loan or non-linear markets have been waiting on.

For €STR and SOFR, the discounting changes at clearing houses will be significant. This will create natural demand and supply in these indices as delivered risk needs to get rebalanced going forward. This becomes even more relevant as bilateral credit support annexes start migrating to the new RFRs with a view to minimising any basis.

One other factor that will help curve dynamics is a migration of volumes in futures markets, which have remained predominantly based on LIBOR so far, but will likely start to switch to RFRs later this year as the expected end-2021 cessation date for LIBOR starts to impact liquidity.

2: What do firms need to consider when transitioning their legacy books? What are the challenges and how can they be overcome?

Frances Hinden
Vice president, treasury operations, Shell International Ltd

The first thing to consider is that we enter into derivatives for a reason, which, for non-financial firms, is typically risk management. So, it's vital to consider what that risk is, and ensure that it continues to be managed after transition. That doesn't just mean the fair value and the future cashflows, but also the P&L impact and any consequences for hedge accounting or tax.

The other big consideration is systems and data. Some of the required changes are obvious (although potentially expensive if a system upgrade is needed), but the consequences may not be. How are month-end accruals going to be calculated and transferred to the general ledger? If a SONIA (or SOFR) index is to be used, when will the current data provider provide it or is a new interface required?

Many corporates use LIBOR for their discount curves. Changing to RFRs not only needs another systems project, but may impact valuations with potential P&L and margin consequences. There's also the challenge that market conventions are not yet firm (ie lag or backward shift?). But systems changes can easily take over a year to complete, so firms need to balance paying for extra flexibility or risk getting it wrong.

Finally, I realise this is a swaps and derivatives magazine, but for most corporates, the main legacy book is elsewhere – in debt, but also outside treasury in commercial contracts, intra-group transactions, leases and in other IT systems. The true first priority is to understand where these exposures are, and start the conversation about transition with those who own them. Those with the biggest financial impact get priority for whatever limited resources are available – and these may not be the derivatives book.


Frances Hinden, Shell International

Hee Lee
Partner, financial services office, Ernst & Young, LLP

Trades maturing post-2021 (legacy transactions) are at risk of having fallbacks enacted due to a cessation of an IBOR. Legacy transactions may not have fallback language that addresses a permanent IBOR cessation, or have language that could significantly change the economics of the transaction. Firms should inventory governing documentation and assess →

> "Broad-based adherence to ISDA's IBOR fallback protocol will provide a safety net for legacy swap portfolios in the event of a permanent cessation. But national working groups and international authorities have made clear that fallbacks should not be used as a primary transition mechanism – a big bang conversion would entail significant operational risk."

Edward Ocampo, Quantile Technologies

"While there is a lot of focus right now on derivatives, it should be kept in mind that the speed of transition to SOFR and other RFRs will ultimately depend on the RFR pick-up in cash markets alongside the derivatives market"

Andreas Franke, Eurex Clearing

→ existing fallback language to determine if amendments may be needed that would also be agreeable and fair to customers. Industry groups such as ISDA and the ARRC have been developing proposed fallback language for derivatives and for cash products in the US dollar LIBOR market, respectively. Firms should assess whether the ISDA and ARRC fallback language is sufficient as it is or whether it should be amended for their needs.

As firms analyse their legacy transactions, they can also consider whether they should exit or amend positions before end-2021. Amending transactions before cessation gives firms more predictability over the specific outcomes of transitioning to a new rate, but can involve considerable bilateral effort to negotiate replacement rates, spread adjustments and overall contractual terms with customers. To facilitate this work, firms should consider grouping transactions across businesses and product categories (eg, linked transactions such as cash trades and hedges) by customers, and develop potential remediation solutions by different segments.

Firms need to be operationally ready to transition what may be a large volume of legacy transactions. Technology such as contract digitisation and artificial intelligence can assist in analysing fallback language and in repapering. Contract modification may impact areas including accounting, tax and financial reporting, and firms can manage this by monitoring regulators (eg, non-cleared margin rules) and standard-setters (eg, tax, accounting guidance)[1].

Edward Ocampo
Advisory director, Quantile Technologies

Broad-based adherence to ISDA's IBOR fallback protocol will provide a safety net for legacy swap portfolios in the event of a permanent cessation. But national working groups and international authorities have made clear that fallbacks should not be used as a primary transition mechanism – a big bang conversion would entail significant operational risk.

Instead, market participants are advised to close out LIBOR swaps and replace these with overnight index swaps (OIS) referencing RFRs before a fallback trigger event. There is already significant liquidity in SONIA swap markets, and this has only improved following changes in sterling swap market conventions from LIBOR to SONIA in March. Expect to see a significant uptick in SOFR swap liquidity following the October 2020 shift to SOFR discounting for cleared swaps.

Transition of legacy swap portfolios can be implemented through two key steps: risk transfer from LIBOR to RFRs via traded swap markets; and termination of residual LIBOR cashflows via compression processes.

Market participants will need to transition both cleared and non-cleared portfolios. Moving non-cleared interest rate delta onto central counterparties (CCPs) can materially facilitate transition. That's because cleared positions are easier to trade, easier to compress and easier to transition.

UK-regulated firms now need to quantify and report their LIBOR exposures on an ongoing basis. This should strongly encourage firms to significantly reduce their stock of LIBOR referencing contracts before the first quarter of 2021 target established by the Working Group on Sterling Risk-free Reference Rates.

3: How will the CCP switch to price alignment interest (PAI) and discounting in SOFR accelerate transition to the RFRs, and what other steps can CCPs take to support transition?

Andreas Franke
Head of risk methodology OTC, Eurex Clearing

We expect the discounting switches for SOFR and €STR will have a positive effect on benchmark transition efforts. Successfully transitioning markets from an established benchmark to a new benchmark will depend on factors such as market and infrastructure readiness, as well as liquidity in the two benchmarks. While infrastructure readiness has gradually been established, liquidity and usage have a tendency to shift less continuously. This might pose an obstacle due to the inherent first-mover dilemma, even though it has become apparent that adoption of the new RFRs is less a question of 'if' but more of 'when'.

By design, CCPs are an unbiased part of the over-the-counter derivatives ecosystem and pool significant liquidity in those markets, especially on the rates side. CCPs

[1] The views reflected in this article are those of the author and do not necessarily reflect the views of Ernst & Young LLP or other member firms of the global EY organisation

may therefore facilitate a transition of cleared market liquidity en bloc, which can have a catalytic – ie, accelerating – effect for related derivatives markets as a whole. A key lever in the cleared markets transition is the PAI and discounting regime switch to the new RFRs, because most – if not all – cleared rates derivatives in a currency are directly linked to these rates through discounting. The switch will therefore transition and expose the modelling of the affected cleared derivatives to the new RFRs en bloc. This should spark additional usage and liquidity in the RFRs to manage existing cleared portfolios.

While there is a lot of focus right now on derivatives, it should be kept in mind that the speed of transition to SOFR and other RFRs will ultimately depend on the RFR pick-up in cash markets alongside the derivatives market. From the viewpoint of market infrastructure providers like exchanges or CCPs, creating the opportunity for participants to gain additional exposure to RFRs across multiple markets will further support the transition – be it, for example, through exchange-traded RFR contracts, RFR-linked repos, or services that allow compressing exposures from IBORs to RFRs.

Agha Mirza

Managing director and global head, interest rate products, CME Group

After October 16, 2020, all outstanding and new centrally cleared US dollar swaps will be valued with a SOFR-based OIS discount curve. CME Group has taken great care in creating a plan for discounting and price alignment that seeks to preserve portfolio valuations and risk characteristics through the single-day discounting switch. In addition, we encourage firms to be operationally ready to accommodate EFFR-SOFR basis swaps, which will be booked to preserve portfolio-level discounting exposures.

Agha Mirza, CME Group

We are not able to make any predictions on how the market will evolve. Instead, we have provided clients with a range of short-term interest rate products to hedge their risk and pursue opportunities in the way that best meets their business needs. This includes deep liquidity pools for price discovery in both eurodollar futures and options and SOFR futures and options. In addition, SOFR-indexed swaps referencing SOFR discounting and price alignment were made available for clearing in October 2018, providing a way for firms to get familiar with SOFR-based discounting prior to the cutover this year. And, in the months ahead, we are planning to develop additional SOFR options products, SOFR-based swap futures, and updates to our portfolio margining service for interest rate futures and swaps.

Sonali Theisen

Managing director, head of fixed income market structure & e-trading, Bank of America

The planned CCP switch to SOFR PAI and discounting in October is likely to assist the development of liquidity in SOFR swaps. Reaching this milestone should help build some natural interest out the curve – for example, by creating demand from discounting desks with existing EFFR-LIBOR basis.

The next material catalyst for swaps would be a significant transition of cash products away from LIBOR. Those initiatives are making headway, although progress in certain products such as floating rate notes is occurring faster than the loan market, which continues to grapple with the differences between SOFR and LIBOR.

As we prepare for the October 2020 CCP migration, we commend the diligent efforts to date to identify key issues, engage with the market to devise solutions, and harmonise to the extent possible. We →

"The planned CCP switch to SOFR PAI and discounting in October is likely to assist the development of liquidity in SOFR swaps. Reaching this milestone should help build some natural interest out the curve"

Sonali Theisen, Bank of America

"Having robust fallback arrangements in place is vitally important, because they will help minimise the potential for severe market disruption in the event a key IBOR is no longer available"

Ann Battle, ISDA

→ note that significant thought and input is informing the planned OIS-SOFR basis swap auction, where the microstructure decisions are not trivial. The CCPs will be required to establish many parameters, including number of tenors, timing and sequencing of auctions, types of bids, auction and fill types, and level of information disclosed to auction participants.

Fortunately, the CCPs are well-versed in managing these types of processes, and we have every reason to expect that the CCP transition to SOFR PAI/discounting will be a smooth process for the industry. That is not to say, however, that there may not be intermittent challenges to face and overcome in the meanwhile. With this upcoming change – as with the many changes accompanying LIBOR transition – it is incumbent upon all market participants to participate constructively and act in the best interests of preserving market integrity.

Philip Whitehurst
Head of service development, LCH

We agree with many participants that CCP discounting changes will be a catalyst for increased trading activity in RFR-based swaps. Let's take the US dollar market as an example. If the value of a portfolio of cleared US dollar swaps becomes sensitive to SOFR, which is what happens when we adopt SOFR for PAI and discounting, then our users will have a new, direct and dynamic exposure to SOFR as a risk factor. We will square everyone up on day one by issuing compensating swaps. But, from then on, they'll need to trade SOFR swaps across the maturity spectrum to hedge the risk. That stimulus isn't there now.

CCPs can support the transition in a number of other ways too. Making RFR-based swaps eligible for clearing was an obvious first step, but that's largely behind us, at least for the major markets. Now we're keen to provide certainty for users about the fallback arrangements that will apply to IBOR trades, which should also serve as a stimulus for trading activity. We're building on ISDA's great work here, certainly when it comes to the pricing relationship between equivalent IBOR and RFR swaps. Fallback certainty should narrow the distribution of fallback outcomes, which in turn fosters implicit and then real liquidity improvements in RFR swaps. We're excited about that, because it's the gateway to further margin model harmonisation.

Less critical but still important is closing any gaps between IRS and RFR swap eligibility, and supporting the conventions for RFR-based cash markets where possible. More generally, it's about creating incentives and avoiding disincentives for RFR-based activity where we can.

4: Why are benchmark fallbacks so important, and what do market participants need to consider?

Ann Battle
Assistant general counsel and head of benchmark reform, ISDA

Having robust fallback arrangements in place is vitally important, because they will help minimise the potential for severe market disruption in the event a key IBOR is no longer available. The first step is for market participants to understand what fallbacks are currently in place for their existing financial instruments. For derivatives, current fallbacks under the 2006 ISDA Definitions require the calculation agent to obtain quotes from major dealers in the event the relevant IBOR fails to be published. However, it's highly unlikely that dealers would be willing or able to provide these quotes if that IBOR has been permanently discontinued, meaning those fallbacks are unlikely to be effective.

ISDA has been leading an industry effort since 2016 to develop a methodology for robust fallbacks for key IBORs based on RFRs, and has run a number of market consultations on the approach – most recently, on how to implement pre-cessation fallbacks that would take effect following a regulatory determination that LIBOR is no longer representative of the underlying market, even if it continues to be published in the non-representative form. Prior consultations focused on the adjustments that would apply to the fallback rates to address differences between those rates and the IBORs. We currently expect to publish amendments to the 2006 ISDA Definitions to include the new fallbacks in July, with implementation four months later. An ISDA protocol will be simultaneously published that will allow market participants to include the updated definitions in their legacy trades if they choose to.

Umesh Gajria
Global head of index-linked products, Bloomberg

Robust benchmark fallbacks are an essential 'safety belt' that will allow derivatives contracts to continue to mechanically


Umesh Gajria, Bloomberg

perform in the event of index cessation. Fallback adjustments that are available via a screen will ensure that all counterparties to a derivatives contract will be sure they are referencing the same fallback adjustment. Contracts that have no benchmark fallback or have a non-robust benchmark fallback are much more likely to be the subject of legal disputes and challenges in the event of index cessation.

Whereas robust benchmark fallbacks will allow derivatives contracts to continue to mechanically perform in the event of index cessation, they should not be considered a panacea for handling LIBOR transition across derivatives portfolios. Once robust benchmark fallbacks are in place, this will allow for a meaningful dialogue to take place between counterparties regarding potential valuation impacts and bilateral repapering of contracts where necessary.

Firms should also make sure derivatives prices, order management systems and risk management systems can deal with the relevant benchmark fallback methodology. For example, the ISDA fallback adjustments are based on a compounding in arrears methodology, which means the fallback rates will only be known very close to interest payment dates across most vanilla interest rate swap contracts. This is a fundamental deviation from the world where an IBOR fixing is published in advance and interest payments made several months later.

Emilio Jimenez

Managing director and associate general counsel, JP Morgan

Benchmark fallbacks are supposed to reflect the parties' expectations of what will happen when the primary benchmark can no longer be referenced in the transaction. In that sense, it is important that the relevant fallback is appropriate for the type of primary benchmark suspension, whether permanent or temporary, that will trigger its application. It will also be important for the parties to have a clear understanding of when a particular fallback will become effective, especially if different fallbacks may come into effect upon the occurrence of different events. An effective benchmark fallback will allow parties to properly price the risks associated with the disappearance, whether temporary or permanent, of the primary benchmark and will also help parties to reduce legal, operational and market risks.

When thinking about fallbacks, various factors should be examined. Firstly, market participants should consider similarities and differences between the fallback rate and the primary benchmark to ascertain whether the fallback rate will require adjustments in order for it to function as closely to the primary benchmark as possible. In addition, it will be important to verify whether there will be a public and transparent source that will publish fallback rate levels and any applicable adjustments prior to and after the fallback becomes the referenced rate in the transaction. The ability to be able to point to a public and transparent source for the fallback rate will provide certainty and help minimise operational risk and disputes between parties over the value of the fallback rate. It will also let the parties perform side-by-side comparisons between the primary rate and the fallback rate.

Thirdly, market participants need to consider how the fallback provisions are documented. Transactional documentation should precisely and clearly articulate the what, when, where and by whom of the fallback's applicability. A properly →

"A core principle should be to actively risk manage LIBOR-based contracts now, while the LIBOR markets remain liquid, rather than solely relying on fallback language and waiting for a cessation event. Said simply, active not passive engagement is best"

Jason Granet, Goldman Sachs

"Reference rate reform has long been a New York Fed priority, and 2020 marks a tipping point in moving from preparation to implementation of transition efforts"

Nate Wuerffel, Federal Reserve Bank of New York

articulated fallback provision should provide contractual certainty and mitigate litigation risk.

At the end of the day, market participants should keep in mind that fallbacks are, by definition, remedial in nature. While it is prudent to ensure that financial transactions include clear and robust fallbacks, if market participants are aware that the primary rate may cease to exist or be published, they should consider whether it would be more beneficial to trade out of their primary rate risk prior to its cessation, given that doing so would give them the ability to move out of that risk at a time of their choosing when pricing may be more beneficial.

5: What should firms be doing now to transition to the new rates and what should be the top priorities for the rest of 2020?

Jason Granet
Managing director, corporate treasury/head of LIBOR transition, Goldman Sachs

This is a critical year for the industry transition away from LIBOR. Firms, both buy and sell side, should comprehensively evaluate and inventory all of their LIBOR exposures, thinking beyond just pure economics and including a multitude of factors (eg, economic, conduct and legal, among others).

Capital markets continue to mature and liquefy (led by derivatives) from a standing start at the beginning of 2019, and most segments of the marketplace are actively preparing for a world away from LIBOR. A core principle should be to actively risk manage LIBOR-based contracts now, while the LIBOR markets remain liquid, rather than solely relying on fallback language and waiting for a cessation event. Said simply, active not passive engagement is best.

Additionally, firms should be prioritising operational and infrastructure readiness across the stack, as having an idea and executing that idea can be two different things. This is critical for 2020 as CCPs are changing discounting methodologies, ISDA is amending definitions and many new products are trading in much greater size.


Steven van Rijswijk, ING Bank

Steven van Rijswijk
Chief risk officer, ING Bank NV, and chair of the Working Group on Euro Risk-free Rates

Every benchmark is unique, with a different status and a different transition path. For each benchmark, questions need to be answered on: (1) whether the benchmark is compliant with the EU Benchmarks Regulation or International Organization of Securities Commissions' *Principles for Financial Benchmarks*; (2) if the benchmark will continue to be published; (3) what would be a suitable alternative benchmark; and (4) by when will the alternative benchmark be available.

This makes the benchmark landscape complex, because the various unique benchmarks will likely follow different transition paths with different timings and different solutions. And time is of the essence, because EONIA will certainly cease to exist from January 3, 2022, and the UK Financial Conduct Authority will no longer compel banks to contribute to LIBOR as of January 1, 2022. Therefore, market participants have less than two years left to transition from these critical benchmarks to new RFRs. Ensuring a timely and smooth transition should be the top priority for the rest of 2020 and 2021.

But how? Even though ISDA and various working groups around the globe are working on final recommendations on how to replace EONIA and LIBOR, and how to include fallbacks for EURIBOR, firms can already start now. I encourage everyone to take stock. In which contracts, systems, models and processes do you use these benchmarks? In addition, firms should make a risk assessment on the impact of likely transition scenarios. Once firms know their exposures and have identified the potential impact, they can prioritise what to transition by when and how to engage with their counterparties. It is therefore important that firms stay informed.

Experience within banks shows that IBOR transition is truly a complex programme that impacts the firm from front to back, from commercial products to systems, accounting, risk management, treasury and all other important functions. The programme should not be underestimated, especially since there is no room for failure. Robust benchmarks are the foundation for efficient functioning of the financial markets.

Tom Wipf

Vice chairman of institutional securities, Morgan Stanley, and chair of the ARRC

As we've been saying for several years now, the best way out of a hole is to stop digging. Market participants should examine where they currently have LIBOR exposure in their organisations, and figure out a transition path that allows them to engage in all of those products on an RFR basis.

In all organisations, there are ways to begin using RFRs now. In the US, the ARRC has published an implementation checklist to help market participants understand the recommended programme management strategy. For buy-side firms, we supplemented this with an additional buy side/asset owner checklist.

When you're working through your 2020-2021 budget and strategy, make sure you have appropriately considered the full extent of LIBOR transition-related expenses and investments. If you rely on third-party vendors to operate your business, engage with them to ensure they are appropriately managing and investing in their LIBOR transition efforts too. If you continue to use LIBOR-referencing products, take a deep look at the fallback language in your contracts. Do they deal with LIBOR cessation in a methodical and commercially reasonable way? If not, what strategies are at your disposal to amend the fallback language or change the benchmark rate altogether?

There are certainly elements of the transition that are still unclear – including open questions around term structure and credit sensitivity of the replacement benchmark rates. But my biggest piece of advice is to not confuse this uncertainty about precise outcomes with uncertainty around the transition deadline. We have to assume a year-end 2021 deadline regardless of whatever obstacles prevail in the marketplace.

Nate Wuerffel

Head of domestic markets, markets group, Federal Reserve Bank of New York

This is a critical transition, and the Federal Reserve is focused on helping the financial system smoothly transition off LIBOR and onto robust reference rates. The New York Fed supports these efforts in several ways, including through our roles as co-convener of the ARRC alongside the Federal Reserve Board of Governors, and as administrator of SOFR, which is the ARRC's preferred alternative to US dollar LIBOR. We also engage with market participants, businesses, and consumers to understand their challenges and needs in the transition.

Reference rate reform has long been a New York Fed priority, and 2020 marks a tipping point in moving from preparation to implementation of transition efforts. There are several practical steps that organisations can take now. This includes implementing programmes to prepare for and manage risks, engaging with stakeholders and customers, and writing contracts that reference robust rates like SOFR instead of LIBOR. In taking these steps, I encourage organisations to use the ARRC's many tools, like the practical implementation checklist that outlines measures firms can consider when transitioning, and fallback language to address risks in contract language in the event that LIBOR is no longer usable. Firms can also use the New York Fed's SOFR averages and index, which provide consistently calculated averages that can easily be included in contracts.

The ARRC recently issued 2020 objectives to advance its own work and mission. Keep an eye out for the ARRC's forthcoming recommended best practices, which will complement the 2020 objectives by outlining suggested timelines and intermediate steps that the ARRC recommends market participant adopt for a successful transition.

As we near the year-and-a-half mark until LIBOR's expected expiration date, we will continue to work in conjunction with the ARRC, in our role as reference rate administrator, and alongside our domestic and international partners. We will be persistent about supporting the transition and inclusive in engaging those facing challenges associated with it. IQ

"When you're working through your 2020-2021 budget and strategy, make sure you have appropriately considered the full extent of LIBOR transition-related expenses and investments"

Tom Wipf, Morgan Stanley

Focus on Japan

Responding to the coronavirus pandemic has become a priority in Japan, but policy-makers are continuing to work on a number of other issues, including benchmark reform, writes ***Tomoko Morita***

Authorities across the globe have been working to mitigate the impact of coronavirus on financial markets, and to provide targeted regulatory relief to enable banks to focus their resources on business continuity, risk management and supporting the economy. Japan has been no different – but work continues on other fronts too.

On March 27, the Group of Central Bank Governors and Heads of Supervision announced a one-year delay to the implementation of Basel III in order to help banks and supervisors free up operational capacity to respond to immediate financial stability priorities resulting from the coronavirus pandemic. In response, the Japanese Financial Services Agency (JFSA) announced on March 30 that it would adopt the revised timetable, providing early certainty to Japanese banks.

Other coronavirus-related measures include confirmation by the JFSA that banks can eat into their capital buffers to support the real economy, and a deferral of the implementation date for the net stable funding ratio until April 2021.

While the coronavirus response is an important focus for policy-makers, the effort to transition from LIBOR and other interbank bank offered rates (IBORs) to alternative risk-free rates (RFRs) continues. Japan has opted for a multi-rate approach, in which a reformed TIBOR will exist alongside TONA, and users will be encouraged to use the most appropriate rate. The Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks, a public-/private-sector group overseen by the Bank of Japan, is focused on ensuring a smooth transition from yen LIBOR, and is looking at a variety of issues, including development of a forward-looking term version of TONA.

However, benchmark reform also has a potential impact on other regulations. For example, there is concern that an amendment to existing trades, such as a change in reference rate or inclusion of a fallback, could mean those trades have to meet margin, clearing and other requirements, even if they were previously exempt.

ISDA JAPAN PUBLIC POLICY

Tomoko Morita is senior director and head of ISDA's Tokyo office. The Japan public policy team supports ISDA's strategic priorities, such as benchmark reform, capital, margin requirements and clearing, and represents ISDA's members on Japan regulatory and legislative issues.

There is no clear reference to this in the Japanese rules for the margining of non-cleared derivatives, but the JFSA has indicated that amendments to legacy trades conducted solely as part of benchmark reform initiatives will not be subject to the margin requirements.

Beyond benchmarks, another important focus has been netting. Long-awaited amendments to the Act on Close-Out Netting of Specified Financial Transactions Conducted by Financial Institutions were enacted on June 7, 2019. Crucially, the changes mean security interest collateral arrangements will be recognised as part of the termination and close-out netting provisions for derivatives transactions.

The netting act previously only covered title transfer, but security interest collateral arrangements are typically used by firms outside of Japan to comply with regulatory initial margin requirements. Under Japan's netting regime, there was a risk that initial margin posted under a security interest arrangement would be treated as a 'reorganisation security interest', which would be subject to a moratorium under Japanese corporate reorganisation proceedings. As a result, the Japanese initial margin rules only allowed a title transfer collateral arrangement for domestic transactions.

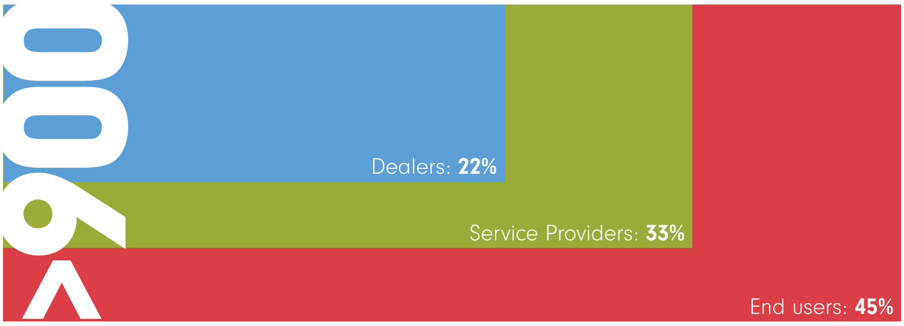
ISDA has been advocating for a change in the netting act since the introduction of the margin requirements in 2016, and has highlighted the issues that could arise when large numbers of smaller entities come into scope of the rules under phases five and six of the rollout schedule. The netting act amendments took effect on May 1, 2020, alongside rules setting out the detail for security interest collateral arrangements.

A Cabinet Office Ordinance amending Japan's margin rules to allow security interest collateral arrangements also took effect on May 1. ISDA will now revise the relevant collateral documentation to reflect the amendments. IQ

MEMBERSHIP INFORMATION

ISDA has more than 900 member institutions from 73 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, clearing houses and repositories, as well as law firms, accounting firms and other service providers.

MEMBERSHIP BREAKDOWN



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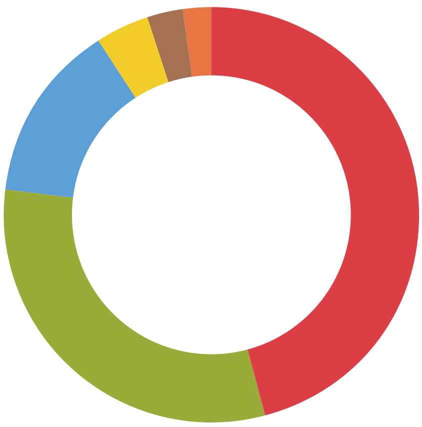

Additional information regarding ISDA's member types and benefits, as well as a complete ISDA membership list, is available on the Association's website:
https://www.isda.org/membership/

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"Responding to market disruptions caused by the coronavirus pandemic is our primary focus. At the same time, we'll continue to advance the CFTC's strategic goals that pre-existed the outbreak"

**Heath Tarbert, chairman,
Commodity Futures Trading Commission**