INTERVIEW
The CFTC’s Rostin Behnam on crypto and climate

ESG
Standardising sustainability-linked derivatives

EUROPE
The EBA’s José Manuel Campa on Basel III priorities

FIRM FOUNDATIONS
The growth of crypto derivatives leads to a push for contractual standards and a risk-appropriate capital framework
ISDA SwapsInfo brings greater transparency to the over-the-counter (OTC) derivatives markets. It transforms publicly available data on OTC derivatives trading volumes and exposures into information that is easy to chart, analyze and download. ISDA SwapsInfo covers interest rate derivatives (IRD) and credit derivatives markets.

**Interest Rate Derivatives**

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

**Notional Outstanding**
Notional of all IRD contracts outstanding on the reporting date.

**Credit Derivatives**

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

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

**Notional Outstanding**
Gross and net notional outstanding and trade count for single-name and index CDS.
FOREWORD

Anticipating the AGM

A lot has changed since ISDA last held an in-person Annual General Meeting (AGM). Back in 2019, when we gathered in Hong Kong, a major talking point was the challenges posed by LIBOR transition. Benchmarks will still be a focus at the 2022 AGM in Madrid on May 10-12, but the conversation will be a very different one. With 30 LIBOR settings having already been retired, market participants now have a playbook they can deploy when ditching the remaining five US dollar settings. Challenges remain, but they don’t seem quite as overwhelming as they perhaps did in 2019.

Other big focus areas on the AGM agenda in 2022 – crypto derivatives and environmental, social and governance (ESG) issues – weren’t even touched upon in 2019. Both are now increasingly attracting the attention of derivatives market participants, prompting ISDA to do what it has done in other markets for the past 37 years: develop standards.

In this issue of IQ, we look at the fast-growing crypto derivatives market and explore ISDA’s work to develop contractual standards that reflect the unique aspects of this asset class. The intention is to create a clear, unambiguous contractual framework to support crypto derivatives, which will help ensure greater efficiency, deeper liquidity and reduced risk. Having an appropriate capital framework is equally important, and ISDA submitted a response last year to the Basel Committee on Banking Supervision’s initial proposals for the prudential treatment of crypto assets. A new consultation is expected soon, and ISDA will work with the industry to provide feedback on the revised proposals too.

We also explore developments in the small but growing sustainability-linked derivatives (SLD) market. By incorporating an ESG component into otherwise conventional derivatives, SLDS are intended to incentivise firms to achieve pre-agreed sustainability objectives. However, continued growth of the product will depend entirely on the perceived credibility of the key performance indicators (KPIs) used to determine whether a firm has met its goals. In response, ISDA has published a set of KPI guidelines to contribute to best practices, ensure the integrity of the product and enhance liquidity. This is on top of separate ISDA initiatives to develop standard documentation for emissions and other environmental derivatives.

LIBOR transition, crypto derivatives and ESG are just three topics on the agenda for the 2022 AGM – there are plenty of others. We really hope you will join us for what we think will be a fascinating couple of days in Madrid.

Nick Sawyer
Global Head of Communications & Strategy
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“As crypto develops as an asset class, market participants will need to manage physical delivery obligations, balance sheet exposures and price risks. We know derivatives markets exist to serve that function”

Faryar Shirzad, Coinbase
Meeting in Madrid

The first in-person AGM since 2019 offers the opportunity to explore ISDA’s work to support the growth of crypto assets and sustainable finance, writes Scott O’Malia

ISDA’s 36th Annual General Meeting (AGM) in Madrid is a special event for several reasons. Not only is this the first time we have held an in-person AGM in three years, but the agenda also reflects the new priorities now facing the derivatives market, including crypto assets and sustainable finance.

During the pandemic, we were fortunate to be able to move our events online, bringing thousands of delegates and speakers together from all over the world. Our virtual events continue to attract large audiences, but there is still no substitute for meeting in person.

Despite the disruption caused by the pandemic, ISDA’s agenda has not slowed down. We’ve continued to work with our members on urgent industry priorities, including the retirement of LIBOR, the final phases of initial margin requirements for non-cleared derivatives, and the drive towards digitisation of our documentation.

We have also seen the emergence of a range of new derivatives products linked to fast-growing markets, which presents opportunities for our members. As these new markets grow, ISDA is focusing on getting the foundations right – developing standard documentation and ensuring a risk-appropriate capital treatment.

Crypto assets originated outside traditional financial markets, but the participation of institutional investors has been rising, and this has generated increased demand for a robust derivatives market. Crypto derivatives have developed rapidly since the first exchange-traded contracts were launched, and ISDA is now applying its extensive experience to establish contractual standards for over-the-counter products. While it is possible to adapt existing documentation, specific standards for crypto assets will boost efficiency as this market grows.

Of course, there are certain unique features of the crypto world – for instance, forks and airdrops – and we are working to make sure the standards properly reflect these events. We have been delighted to welcome a number of crypto firms to ISDA’s growing membership as this effort gathers pace.

ISDA is also focused on the evolving prudential framework for crypto exposures. As with any financial product, it is critical the capital treatment reflects the underlying risk because excess conservatism will discourage banks from participating, stifling their ability to meet customer demand for crypto exposures. Unfortunately, our analysis shows the Basel Committee’s proposals for crypto assets could have exactly this effect.

We expect a further Basel Committee consultation in the coming months and will continue to advocate for targeted changes to be made to the proposals to ensure the capital treatment is risk appropriate.

We believe this asset class will benefit from the participation of banks, with their long track record in managing risk and intermediating on behalf of clients.

When it comes to the growing derivatives market referenced to environmental, social and governance (ESG) assets, ISDA’s approach is very much the same. Our role is to develop standards and documentation wherever they are needed, and to make sure the risk and capital framework isn’t unnecessarily conservative.

Within the growing ESG universe, we have focused on two particular markets – sustainability-linked derivatives (SLDs) and voluntary carbon credits. SLDs are still at an early stage of development, with largely bespoke transactions tailored to the needs of individual counterparties. But we have developed guidance to promote the use of robust and transparent key performance indicators, which will be critical to the effectiveness and integrity of this market.

As the urgency of reducing carbon emissions increases, carbon credits will play an important role in allowing reduction targets to be met. However, if carbon credits are to be freely and effectively traded on a voluntary basis, then it is critical the capital treatment isn’t overly punitive. Our analysis has shown the Fundamental Review of the Trading Book would assign a very conservative risk weight to this product and we are advocating for a more risk-appropriate approach.

It has been great to get back on the road to discuss these issues with members and policy-makers around the world. We have a terrific agenda for the AGM, with a great line-up of speakers – I look forward to seeing you in Madrid.

Scott O’Malia
ISDA Chief Executive Officer
RFR Adoption Rises After LIBOR Transition

Derivatives volumes referenced to risk-free rates (RFRs) have continued to rise following the shift from 30 LIBOR settings and the introduction of a no-new-US-dollar-LIBOR policy at the end of last year – events that regulators and industry participants say occurred with minimal market disruption.

The ISDA-Clarus RFR Adoption Indicator, which tracks trading activity (as measured by DV01) in cleared over-the-counter (OTC) and exchange-traded interest rate derivatives referenced to RFRs in six currencies, increased to an all-time high of 40.5% in March. That compares with 31.7% in December 2021 and 8.8% in March 2021.

“I am pleased to say the transition away from new LIBOR use went very smoothly across markets at the end of the year, without any apparent disruptions, and this is really testament to the significant efforts that both market participants and the official sector have made together,” said Nate Wuerffel, senior vice president and head of domestic markets at the Federal Reserve Bank of New York, speaking at the ISDA Benchmark Strategies Forum on March 22.

At the end of 2021, 24 LIBOR settings permanently ceased publication, including all those in euro and Swiss franc, plus four sterling, four yen and two US dollar settings. The remaining six sterling and yen tenors are now only available in non-representative, synthetic form as a solution for tough legacy contracts. Five US dollar LIBOR settings will continue to be published on a representative basis until June 30, 2023, but multiple regulators have made clear that institutions should no longer enter new US dollar LIBOR trades except in limited circumstances.

“From our perspective, year-end actually went really well. It was clear dealers and market participants took it seriously, people prepared and much of the activity moved to SOFR. The real lesson we took away was that the communication and education that took place over an extended period of time leading up to year-end were really the key and I think that, going forward, that momentum cannot be lost,” said Alice Wang, managing director, corporate and investment banking strategy at JP Morgan, speaking at the same event.

For those firms that still had derivatives exposure linked to the 30 discontinued or non-representative LIBOR settings after December 31, the introduction of robust fallbacks helped ensure those contracts were able to switch to alternative reference rates based on RFRs. More than 15,200 entities across the globe have adhered to ISDA’s 2020 LIBOR Fallbacks Protocol, which allows firms to incorporate the fallbacks into existing non-cleared derivatives. The fallbacks also formed the basis for central counterparty conversions of cleared LIBOR derivatives in December 2021.

“The widespread adoption of fallbacks meant viable alternatives based on RFRs automatically took effect for most non-cleared derivatives that continued to reference those 30 LIBOR settings after December 31, significantly reducing the potential for disruption,” says Scott O’Malia, chief executive of ISDA.

Attention now turns to the remaining five US dollar LIBOR settings, but market participants point to good recent progress in the switch to SOFR. Alongside the no-new-US-dollar-LIBOR policy, a ‘SOFR First’ strategy devised by the Commodity Futures Trading Commission’s (CFTC) Market Risk Advisory Committee (MRAC) has helped drive SOFR volumes higher in recent months.

Under this initiative, trading conventions in the US interdealer market changed from LIBOR to SOFR for linear US dollar swaps, non-linear derivatives and cross-currency swaps last year. According to analysis by ISDA and Clarius, 41.1% of total US dollar-denominated cleared OTC and exchange-traded interest rate derivatives DV01 was linked to SOFR in March, up from just 6% in June 2021, before SOFR First was introduced.

“We worked very closely with the CFTC’s MRAC – it was a real coming together of market participants to make that switch. The fact is that, without the ability to trade new LIBOR, people are now looking at SOFR who weren’t looking at it before,” said Tom Wipf, vice chairman of institutional securities at Morgan Stanley and chair of the Alternative Reference Rates Committee, speaking at the Benchmark Strategies Forum.

Combined with the ISDA fallbacks and the passing of new US legislation for tough legacy contracts in March (see page 8), a variety of solutions now exist to help with the transition from US dollar LIBOR, according to the New York Fed’s Wuerffel.

“We’re focused on making the end of US dollar LIBOR in June 2023 effectively a non-event. Ideally, at that point, the outstanding LIBOR exposures are much smaller and the ones that remain are structurally prepared to transition,” he said.
US Legislative Fix for Tough Legacy Welcomed

The Alternative Reference Rates Committee (ARRC) has welcomed the passage of critical legislation that will minimise legal and operational risks and adverse economic impacts associated with the transition of tough legacy contracts referenced to US dollar LIBOR.

On March 15, US president Joe Biden signed the Consolidated Appropriations Act 2022 into law, which includes a targeted solution for certain financial contracts that mature after the cessation of US dollar LIBOR in mid-2023 but have no effective means to replace the discontinued rate. The federal legislation applies to US law contracts and takes a similar approach to legislation initially proposed by the ARRC in 2020 and subsequently passed by New York and several other states.

“This really provides a solution for legacy contracts that have no workable fallbacks. It provides safe harbour for lenders that choose to use SOFR in the relevant contracts and it significantly reduces the risk for market participants around the world. In the US, it covers that toughest of tough legacy, which has always been a big challenge. This legislation was a critical piece for consumers, for businesses, for banks and others, and across the market really provides a solution where there wasn’t one,” said Tom Wipf, chair of the ARRC and vice chairman of institutional securities at Morgan Stanley, speaking at the ISDA Benchmark Strategies Forum on March 22.

A variety of measures have been taken to reduce the reliance on US dollar LIBOR ahead of its cessation in mid-2023, including a call from regulators to halt new LIBOR trades from the end of 2021, the introduction of a ‘SOFR First’ policy to change trading conventions for certain US dollar interest rate derivatives from LIBOR to SOFR, and ISDA’s rollout of robust contractual fallbacks for derivatives. However, a solution was also needed for US tough legacy contracts that can’t practically be amended and do not have viable fallbacks.

“We’ve estimated there is probably around $10 trillion of these tough legacy contracts — that’s not insubstantial and they include instruments like floating rate notes and securitisations. Without legislation, these tough legacy contracts are really headed for legal Armageddon upon LIBOR cessation, so we’re very fortunate that the ARRC began work on legislation to provide a targeted solution,” said Nate Wuerrfel, senior vice president and head of domestic markets at the Federal Reserve Bank of New York, also speaking at the Benchmark Strategies Forum.

ISDA Wins Risk Innovation in Technology Award

The ISDA Standardised Approach (SA) Benchmarking initiative, which has been developed over the past four years to support the consistent and accurate implementation of capital models, has won the Innovation in Technology category in the Risk Awards 2022.

The benchmarking initiative is powered by ISDA’s in-house technology platform Perun™, which enables participating banks to perform automated analysis of complex risk data. As well as rewarding the success of ISDA SA Benchmarking, Risk.net recognised ISDA’s role in solving complex industry challenges with mutualised solutions, such as the Common Risk Interchange Format data standard, the ISDA Standard Initial Margin Model and the Common Domain Model.

“In the past few years, the trade body has quietly assembled an impressive arsenal of technology solutions, without which the derivatives industry would struggle to comply with the increased regulatory demands laid down since the financial crisis. These days, ISDA’s consistent innovation makes it look more like a tech start-up than a trade association,” wrote Risk.net.

ISDA SA Benchmarking started out in 2018 with a pilot group of 15 UK supervised banks and with the support of the Bank of England. Since then, 71 banks around the world have participated, including 23 global systemically important institutions, and 16 regulators have used the data to monitor implementation in their jurisdictions.

The benchmarking initiative starts with a benchmarking report generated, which presents the results and explains any variance. A final report is generated, which presents the results and explains any variance.

Thirteen technology vendors have licensed ISDA’s unit tests, maximising the benefits of standardisation across the industry.

“Benchmarking can be a very powerful tool, but only if it is done properly and the findings are fully explained,” says Mark Gheerbrant, ISDA global head of risk and capital at ISDA.

Read the Risk.net award article: bit.ly/3xdQvoe
New Documentation Aligns Derivatives and SFTs

ISDA has published a new definitional booklet and related set of provisions designed to allow firms to document derivatives and securities financing transactions (SFTs) under a single ISDA Master Agreement.

The launch of the 2022 ISDA Securities Financing Transactions Definitions and SFT Schedule Provisions follows an ISDA whitepaper in October 2020, which highlighted significant opportunities for alignment between the two markets. A single agreement for both derivatives and SFTs will reduce complexity and duplication, create efficiency in documentation negotiation and management, and enable documentation updates to be rolled out consistently for both sets of products.

Using a single agreement will also result in expanded netting sets, helping firms to reduce credit risk and optimise their collateral use. ISDA will shortly commission updated netting opinions covering SFTs, with the first scheduled to be available later this year.

“The new SFT definitions and related provisions capture the unique features of SFT transactions and allow firms to customise their relationship for SFTs, while also enabling derivatives, repos and stock loans to be captured by a single close-out netting arrangement under an ISDA Master Agreement. Our next priority is to amend our netting opinions to cover SFTs, after which firms will be able to enter into new SFT and derivatives transactions with the confidence of enforceable close-out netting,” says Katherine Tew Darras, ISDA’s general counsel.

The 2022 ISDA Securities Financing Transactions Definitions set the standard terms for SFT transactions, as well as amendments to certain provisions under the ISDA Master Agreement to account for the unique features of SFTs. The SFT Schedule Provisions enable counterparties to make certain elections for SFTs documented under an ISDA Master Agreement.

The SFT documentation was developed by an ISDA working group comprising members from both the buy and sell side. Law firm Linklaters worked with ISDA on drafting of the definitional booklet and provisions.

“Publication of the ISDA SFT definitions and provisions is a very welcome step and gives firms the valuable option of documenting both derivatives and SFTs under a single ISDA Master Agreement. This has a number of potential benefits, including increased netting efficiencies for those firms active in both markets,” says John Ho, head of legal, financial markets, at Standard Chartered.

Establishing common legal standards, terms and documentation will also help drive new technology innovations by applying terms consistently and at scale across derivatives and SFT markets.

“At a time when financial institutions are looking at ways to increase efficiency and cut costs, having a single legal agreement for derivatives and SFTs not only reduces duplication but establishes the foundation for greater automation and interoperability across those two markets. Once we amend our netting opinions to cover SFTs, we believe there will be a strong rationale for market participants to enter into SFT transactions under the ISDA Master Agreement,” says Scott O’Malia, chief executive of ISDA.

2021 Definitions Hit Key Adoption Landmark

Six months on from the implementation of the 2021 ISDA Interest Rate Derivatives Definitions in October 2021, the interest rate derivatives market has overwhelmingly transitioned to the new definitions.

All major central counterparties incorporated the new definitions into their rule books in the fourth quarter of 2021, meaning all legacy and new cleared trades reference the 2021 Definitions, accounting for approximately 75% of the total interest rate derivatives market. Figures from OSTRAs MarkitWire service show that 68% of non-cleared interdealer and 65% of non-cleared client interest rate derivatives electronically confirmed on the platform also now reference the new definitions.

“The latest figures show the market has reached a tipping point in the adoption of the 2021 Definitions. This is now the de facto market standard for interest rate derivatives. Given ISDA has now stopped updating the old 2006 Definitions, the 2021 Definitions will be the only ones to fully reflect current market practices and regulatory requirements. We will continue to work with market participants and infrastructure providers to accelerate adoption even more broadly,” says Scott O’Malia, chief executive of ISDA.

The 2021 Definitions represent the first major overhaul of the definitional booklet since 2006 and are the first to be published in natively digital form, creating significant efficiencies in how firms use and interact with the definitions.

The new definitions consolidate the 91 supplements to the 2006 ISDA Definitions into a single electronic booklet, reducing complexity and the potential for error. Each time updates are required, a revised version of the 2021 Definitions is republished in full, eliminating the need for further supplements.

Version five of the 2021 Definitions, published on March 25, was the first update not to be accompanied by a corresponding revision to the 2006 Definitions via a supplement. A further three updates to the 2021 Definitions are planned for this year.
Nearly six years after the largest banks began exchanging initial margin (IM) for non-cleared derivatives in September 2016, the industry is now preparing for the final phase of implementation on September 1, 2022, which is set to pose the biggest challenge yet.

Phase six will bring an estimated 775 entities into scope of the IM requirements, more than double the number caught by phase five in 2021. This translates to roughly 5,400 counterparty relationships, which could put a huge strain on the ability of firms to complete document negotiation and custodian onboarding processes in time for the deadline.

“If there’s one lesson we have learned from previous rounds of IM requirements, it’s that compliance takes much longer than most people anticipate. With phase six now just a few months away, it’s critical this lesson is learned. The reality is there’s very little time left to comply and those firms that wait to start their preparations may well find they face difficulties trading from September 1,” says Scott O’Malia, chief executive of ISDA.

Whether or not an entity falls within scope of the IM requirements depends on its average aggregate notional amount (AANA) of non-cleared derivatives. Entities with an AANA of more than €50 billion were required to begin exchanging IM under phase five on September 1, 2021, and this threshold will fall to €8 billion under phase six.

While phase five was implemented without significant disruption, many entities were unable to complete the relevant credit support documentation and custodial arrangements with all their trading partners prior to the deadline, causing them to focus trading activity with those relationships that were operationally ready or stay within the limits of their €50 million per counterparty group IM thresholds.

Phase six poses an even greater challenge because there are many more in-scope entities with fewer resources available to them than the bigger institutions caught by earlier phases, as well as less extensive automation of margin processes.

An added complication is the fact that many of the pension funds and investment companies caught by phase six have their derivatives portfolios managed by multiple asset managers through separately managed accounts. This means preparations are reliant on each entity calculating its swaps exposures across all its separately managed accounts and disclosing to its asset managers if it expects to breach the threshold for compliance. If these calculations and disclosures are submitted late, the asset managers cannot begin preparations, which could lead to delays.

“One advantage under phase six is that a large share of counterparty relationships is unlikely to breach the €50 million IM threshold – ISDA estimates that proportion could be between 78% and 85%, depending on the methodology used to calculate IM. As well as not having to exchange collateral with those counterparties, regulators have stated that documentation, custodial and operational requirements for each relationship also will not apply until the threshold is breached.

“That doesn’t mean firms can afford to not act. As a first, immediate step, all potentially affected entities must calculate on an indicative basis whether they exceed the €8 billion AANA threshold for compliance and notify their asset managers and counterparties if they may be in scope,” says Tara Kruse, global head of infrastructure, data and non-cleared margin at ISDA.

The official three-month calculation period began on March 1 under most regulatory regimes, meaning in-scope entities will have to notify counterparties of their final status in May. This can be achieved in a variety of ways, including an ISDA initial margin self-disclosure letter that can either be sent to counterparties bilaterally or electronically via the ISDA Amend online tool to other ISDA Amend participants.

Those entities that expect to exceed the €50 million IM threshold with some or all of their counterparties would then need to appoint a custodian to meet IM segregation requirements and begin the onboarding process, which can take several months. They also need to negotiate regulatory-compliant credit support documentation with each counterparty, develop, test and implement a margin calculation model, and establish processes for managing the exchange of collateral.

“If there’s one lesson we have learned from previous rounds of IM requirements, it’s that compliance takes much longer than most people anticipate. With phase six now just a few months away, it’s critical this lesson is learned”

Scott O’Malia, ISDA
INTRODUCTION

Crypto assets have become one of the biggest talking points in the financial world. What started out as a predominantly retail offering has grown rapidly and now extends to wholesale financial markets too. As institutional investors have sought exposure to this asset class, banks have also looked to bring their experience in intermediation and risk management to bear.

Derivatives have a vital role to play in this fast-growing market, enabling participants to effectively manage their risk, as well as broadening market access and facilitating enhanced transparency and price discovery. However, derivatives markets function best when certain foundational structures are in place, including standard contractual terms and a prudential framework that appropriately captures the underlying risk.

ISDA has been closely focused on these two areas in recent months. Last year, it convened the ISDA Digital Assets Legal Group, which has moved at pace to lay the groundwork for the development of contractual standards that recognise the unique features of the market. Following the publication of a paper on the topic in December, ISDA is now developing digital documentation templates for the most widely used products (see pages 12-15).

In parallel, the Basel Committee on Banking Supervision is drawing up a framework for the prudential treatment of bank exposures to crypto assets, but its proposed classification of crypto assets has raised concerns among banks that they may be unable to participate in this market. A further consultation is expected soon, but some jurisdictions are already moving towards an interim approach as international standards are developed (see pages 16-19).

The importance of ISDA’s work to support the development of the crypto derivatives market has been underlined by the wave of native crypto firms that have recently joined ISDA’s membership. This edition of IQ features an interview with Faryar Shirzad, chief policy officer at Coinbase, which joined ISDA in December (see pages 20-23).

“The crypto derivatives market provides a range of benefits, not only to the crypto market itself. It will also provide opportunities to investors, allowing them to hedge their risks and gain exposure without holding the physical asset. This effectively means they can participate in the market without having to navigate wallets and custodians”

Annie Wilson-James, Goldman Sachs
Effective derivatives markets depend on multiple factors, from resilient infrastructure to robust legal documentation. This is just as true for markets referencing the newest crypto currencies as it is for those linked to more conventional asset classes. Without firm foundations, it becomes much more difficult to ensure safety and efficiency.

Digital assets have grown at an extraordinary pace over the past decade, which has increasingly attracted the attention of institutional investors and banks. As participation has grown, so too has demand for a well-functioning derivatives market to enable firms to manage their risks.

In response, ISDA is now working to develop contractual standards to support the crypto derivatives market with input from a range of stakeholders, including those active in the crypto space. The aim is to create strong legal foundations for crypto derivatives that reflect the specific characteristics of this market, which in turn will promote greater efficiency, deeper liquidity and reduced risk.

“Until now, institutions have largely traded digital asset derivatives using amended versions of existing ISDA definitions and templates or using their own bespoke documentation. That not only leads to a lack of standardisation; it may mean that certain unique events that may occur in the crypto assets market are not directly covered by the documentation used for derivatives linked to those assets. We think there is a need for standard derivatives documentation that is tailored to reflect the unique features of this asset class,” says Scott O’Malta, chief executive of ISDA.

Crypto derivatives

The growth of crypto assets has been one of the defining trends in global financial markets in recent years. With total market value estimated at more than $3 trillion, it has evolved very quickly from a fringe technology to a widely held financial product. According to a fact sheet accompanying an executive order signed by US president Joe Biden on digital assets on March 9, about 16% of adult Americans – roughly 40 million people – have invested in or used crypto currencies.

While this growth was initially driven by retail investors, institutional investors and banks have also gravitated to this asset class, drawn by its growing maturity and the potential returns on offer. This increased institutional participation has brought with it demand for the same risk management tools available in other wholesale markets.

“The original native crypto players were certainly more consumer focused, but as the popularity of the market has increased, we have seen growing interest from institutional investors, ranging from hedge funds looking for quick strategies to pension funds and asset managers that are attracted by diversification and returns in this market,” says Annie Wilson-James, executive director and senior counsel at Goldman Sachs.

“The crypto derivatives market provides a range of benefits, not only to the crypto market itself. It will also provide opportunities to investors, allowing them to hedge their risks and gain exposure without holding the physical asset. This effectively means they can participate in the market without having to navigate wallets and custodians. Derivatives will also allow pricing to improve and will generate yield for those holding the native asset,” she adds.
The value of a liquid derivatives market referenced to crypto assets extends to many areas. As in any wholesale market, derivatives have a vital role to play in broadening market access, facilitating risk management and price discovery, deepening liquidity, and providing greater certainty and flexibility to market participants.

Crypto derivatives are now widely available in both exchange-traded and over-the-counter (OTC) format. CME Group moved into this market with the launch of Bitcoin futures in December 2017, and has since expanded its product range to include Bitcoin options and Ether futures. In August 2018, Intercontinental Exchange launched Bakkt, a trading and payments platform that allows consumers and institutions to buy, sell, store and spend digital assets. While the OTC market has developed at a slower pace, it has been bolstered by the popularity of the exchange-traded market.

“As soon as exchanges start clearing futures in a particular product, then parties will start writing OTC contracts linked to them as well. We have been advising on OTC contracts linked to crypto assets for some time, but we recognise that, as the market develops, there is a need for standardisation. As we saw for equity, credit and commodity derivatives in the past, ISDA has a role to play in bringing certainty and standardisation that will allow this market to flourish,” says Michael Voisin, capital markets partner at Linklaters.

Contractual standards
The benefits of standardising contractual terms for crypto derivatives are the same as for other asset classes. Standardisation leads to more efficient negotiation between parties, reducing the time it takes to negotiate a transaction. It limits basis risk between similar products that might otherwise arise due to the use of bespoke documentation, and it optimises risk and capital management by allowing parties to net their exposures across different transactions.

As it stands, institutions trading OTC digital asset derivatives typically use amended versions of existing ISDA definitions and templates (for instance, ISDA’s equity or FX definitions) or entirely bespoke documentation they have developed internally. That results in a lack of standardisation that may ultimately hamper transparency and liquidity and lead to higher levels of risk.

“Using existing templates would require significant customisation to address some of the unique characteristics of crypto assets. That’s not ideal, as you’d end up with lots of different versions of the documentation, which slows everything down and makes the market less efficient. Contractual standards specifically designed for the OTC crypto derivatives market would prevent this,” says O’Malia.

In 2021, ISDA convened a new working group, the
ISDA Digital Assets Legal Group, with the aim of creating robust contractual standards for the crypto derivatives market. The group currently comprises around 170 institutions, including a number of native crypto firms that have joined ISDA in recent months as the push for standardisation gathers momentum. These include FTX, Coinbase and GSR International.

In December, ISDA published a paper that explores the key issues that would need to be addressed in any contractual standards for OTC derivatives and sets out a path towards the development of those standards. The paper is only the first step in the development of contractual standards, but the project has garnered widespread interest from both institutional market participants and native crypto players.

"While the native crypto derivatives market has been developing in a separate silo from traditional finance, there is still a need on both sides to identify consistent standards from a documentation standpoint, as well as best practices from credit and operational standpoints. We're still in the early days, but ISDA's newly formed Digital Assets Legal Group is a prime example of the convergence that's happening between these two worlds. As we work together to solve these challenges, we will, in turn, develop a more robust market," says Joshua Riezman, managing director and head of US legal at GSR.

Disruption events
One of the objectives of the ISDA paper was to identify those novel technology and market-driven events that could disrupt the operation of a digital asset derivatives transaction, so that any standards can provide an appropriate framework for dealing with them. These so-called disruption events are important in any asset class because they may impact the ability of counterparties to value the transaction or make payments or deliveries.

"The elegance of any standard documentation is that it promotes ease of transacting and enhances legal certainty by, among other things, allowing all parties to agree on very precise definitions of disruption events and manage them appropriately. This may need to be tailored for different crypto assets depending on the underlying protocol, but the initial focus should be on those areas where we see the most derivatives activity at the moment," says Yousuf Siddiqui, executive director and assistant general counsel at JP Morgan.

The most common disruption events applicable to crypto trades relate to the underlying technology and might include a fork, when a change is made to the blockchain that may lead to the creation of two distinct crypto assets. A hard fork would result in a new protocol that is incompatible with the original one, whereas a soft fork might lead to a new protocol that is compatible and interoperable with what went before.

The impact of forks is not entirely unprecedented, and certain events included within existing ISDA documentation could potentially be adapted to specifically address them. For example, the concept of a dual exchange rate under the FX Derivatives Definitions, which leads to two distinct values, or a merger event under the ISDA Equity Derivatives Definitions, both contain features that could provide the basis for managing the impact of a fork.

Contractual standards should reflect what actually happens when a blockchain splits, how any newly created asset should be accounted for, and which of the two forked paths should be followed. The need for specific recognition of this type of disruption event is generally well recognised.

In any transaction, it is vital to have the right contract that identifies the different events that could occur and allocates the risks appropriately within the agreement, so
you don’t find yourself faced with an unforeseen disruption event because that would lead to contractual uncertainty and litigation risk. Most of us in wholesale markets have not previously been exposed to forks, stakes and other specificities of crypto assets, so it’s important this is properly addressed in the standards,” says Eric Litvack, ISDA’s chairman.

Other unique disruption events might include airdrops, where new digital assets are issued to the holders of an associated digital asset on a unilateral, unsolicited basis, or interruptions to the underlying technology that may be triggered by cyberattacks or bugs in the protocol. The paper identifies these and other disruption events, and ISDA is now working with members and stakeholders to determine how they should be treated in any contractual standards.

“The substantive resolution of how one would treat specific events relating to crypto assets, such as an airdrop or fork, is obviously very important, but it’s more important the market knows from the outset whether to price an airdrop or a fork into a derivatives contract or not, and the circumstances in which you would price those in. The objective here is to bring the industry together to agree from the outset how we are going to allocate risks in relation to those specific disruption events and characteristics of the market,” says Richard Hay, UK head of fintech at Linklaters.

Digital documentation
The work to develop contractual standards for digital asset derivatives must not only take account of the unique features of the market – it must also reflect the digital nature of this asset class. While ISDA has worked for several years to advance the digitisation of existing documentation that is predominantly paper based, this is still a work in progress. But it is clear any contractual standards for digital asset derivatives would need to be natively digital from the outset.

“The contractual framework needs to be sufficiently flexible that it can adapt to the rapid evolution of this sector, the technology underpinning it and the products that reference digital assets. ISDA is seeking to develop a fully digital contractual framework that enables greater connectivity between operational processes and data. This would be implemented within the operational and technological infrastructure that is being developed for digital asset derivatives and integrated with the digital agreements available on the ISDA Create online negotiation platform.

Developing natively digital documentation is a step change but is seen as a prerequisite for this market, and the ISDA paper sets out the steps that will need to be taken to achieve this. These include identifying the operational aspects of the trade lifecycle that need to be incorporated and using ISDA’s Common Domain Model to create a shared, standardised representation of actions and data for these events, which will allow the standards to be implemented consistently.

“The functionality you introduce when you design standards that are bespoke for something that’s natively digital is capable of being so much more streamlined than when you try to adapt existing infrastructure and that’s where we are heading with contractual standards for digital asset derivatives. The key specificity of digital assets and where we are going to see game-changing positive innovation is when the natively digital characteristics of the asset class are reflected in the documentation,” says Hay.

Given the widespread focus on crypto derivatives among both institutional and native crypto market participants, the work to develop contractual standards is already well under way. The initial priority is to address products that are already actively traded, such as cash-settled forwards and options referencing Bitcoin and Ether. Standards for physically settled trades on digital assets will come later and will depend on demand from market participants. What is clear is that the digital format of the standards is going to be as important as the content itself.

“We want to enable broad-based adoption of these standards, so it is vital they are produced in a form that reflects the unique characteristics of this market. ISDA will therefore create templates and definitions that support the development of on-chain smart contracts for crypto derivatives. These standards will be designed to integrate seamlessly within the infrastructure being developed to support this market, and in a manner that promotes interoperability between different distributed ledgers and platforms,” says O’Malia.

“In any transaction, it is vital to have the right contract that identifies the different events that could occur and allocates the risks appropriately within the agreement”

Eric Litvack, ISDA
The rapid growth of crypto assets and the increased interest from banks and institutional investors has led central bankers and policy-makers around the world to consider the impact the sector might have on financial stability. For the Basel Committee on Banking Supervision, which is developing a framework for the prudential treatment of bank exposures to crypto assets, the nature of this market necessitates what committee chair Pablo Hernández de Cos has described as "a proactive and forward-looking regulatory response".

Having published its proposals last year, the Basel Committee is now preparing a second consultation in the coming months. While concerns have been raised about the conservatism of the initial proposal, which could prevent banks from participating in many crypto markets, some regulators – including those in the US and UK – are actively considering whether interim measures might be needed.

"While crypto originally existed outside of traditional finance, we’re now seeing a huge amount of interest in this space from the buy side, but firms are more comfortable dealing with banks and regulated entities that have robust risk management and prudential requirements. As we wait for global standards, it’s important the industry engages with regulators around the world to create a harmonised interim framework so banks can support the growth of this market," says John Ho, head of legal, financial markets, at Standard Chartered.

Bank participation
Despite heightened institutional focus on crypto assets and the exponential growth of the market in recent years, bank participation remains limited. That’s partly due to the lack of clarity on the prudential framework but, faced with growing client demand to deal in crypto assets, many banks are now calling for greater certainty on the capital treatment as soon as possible.

It is not just client interest that is driving this request. It is now widely understood that distributed ledger technology, which underpins crypto assets, has the potential to deliver financial services more quickly, securely and economically than ever before. This, in turn, could create a more competitive market and bring benefits to the real economy, but banks would need to be able to participate within a prudential framework that does not currently exist.

While the rapidly growing institutional demand for crypto-asset exposure could be met by non-banks or entities operating outside of the regulatory framework, banks argue their long-running experience in intermediation, risk management and regulatory compliance could be beneficial to overall market development.

Prudential supervisors would also get a window into this fast-growing market sector due to regulatory reporting requirements.

"Allowing the crypto market to grow outside of the regulated banking system is undesirable as a long-term approach because supervisors will have very little insight or oversight and cannot therefore determine the point at which it might pose risks to the financial system. It therefore makes sense to develop a framework that will enable prudentially regulated firms to be involved in this market," says Eric Litvack, chairman of ISDA.

Base proposal
For the Basel Committee, the development of prudential standards for crypto exposures is a long-running process that reflects its desire to gather and consider feedback from all stakeholders before finalising its approach. In 2019, the committee published a discussion paper that sought feedback on the features and risk characteristics of crypto assets and the general principles that should guide the development of a prudential framework. In June 2021, the proposed framework was published for
consultation, but the committee recognised that further work may be needed.

The proposed framework divides crypto assets into two groups. Group-one crypto assets are those that meet certain classification conditions – for instance, the asset is either a tokenised traditional asset or has a stabilisation mechanism that is always effective, linking its value to an underlying traditional asset or pool of assets. These assets, which might include stablecoins or tokenised assets, can be capitalised under the existing Basel framework with some modifications.

Group-two assets that do not meet the classification conditions – such as Bitcoin – are perceived to pose additional and higher risks and would therefore be subject to a capital treatment that is deliberately simple and conservative. This would include a risk weight of 1,250%, which is designed to ensure banks hold risk-based capital at least equal in value to their exposures and could therefore absorb a full write-off in a worst-case scenario.

Given the growing significance of crypto assets within the financial system, the Basel Committee proposal attracted widespread interest from banks, market infrastructures, native crypto firms and industry associations. Several respondents raised concerns that the conservative treatment of group-two assets would represent a major barrier to the participation of banks, but the Basel Committee’s overall approach and its intention to further develop and refine the framework was generally welcomed.

“Distinguishing between different types of crypto assets and the risks they represent makes a lot of sense, but the Basel Committee’s approach should be carefully crafted so that the standards lead to commensurate levels of capital that reflect the risks and allow banks to participate in such markets based on risk-assessed business decisions. Otherwise, you will have clients getting those products from the non-bank or non-regulated parts of the financial system,” said Yannick Oberson, head of governmental affairs international at UBS, speaking at ISDA’s Developments in Crypto Derivatives virtual conference on March 10.

Speaking at the same event, David Lynch, deputy assistant director at the Federal Reserve, described two possible approaches to the capitalisation of digital assets: the risks are considered broadly the same as traditional assets and so can be measured and managed using similar tools; or the risks are new and require alternative methods to measure and manage them. While the reality probably lies somewhere in between, he said, the Basel Committee has clearly leaned towards the latter approach in parts of the proposed classification.

“The proposal from the Basel Committee largely took the view that the new risks to crypto assets were the dominant risks and so you saw basically an approach that was different from the way traditional assets were treated for the most part. Following this view, the current risk-based framework would be inadequate. However, it did carve out certain areas where the traditional risks were the more important – namely, the tokenised versions of traditional assets and potentially also the stablecoins that meet certain criteria,” said Lynch.

While the approach of classifying crypto assets into groups depending on their risk makes sense given the wide variety and diverse risk profiles of different assets, it is the way they have been classified and the proposed capital treatment for the riskier group-two assets that have led to the strongest feedback.

“The Basel Committee’s proposal was a good starting point to engage the industry on what the prudential...”

“The proposal from the Basel Committee largely took the view that the new risks to crypto assets were the dominant risks and so you saw basically an approach that was different from the way traditional assets were treated for the most part. Following this view, the current risk-based framework would be inadequate”

David Lynch, Federal Reserve
standards should look like. But, in the next iteration, it will be important to ensure the framework does not create barriers to banks’ participation. We must make sure we get the classification right, because the digital assets universe is very diverse and the capital treatment needs to properly recognise the risk of the asset, as well as the impact of risk mitigation measures such as netting and collateral,” says Ho.

Industry response

In a joint response submitted to the Basel Committee in September 2021, ISDA and several other trade associations set out their recommendations on how the proposed framework could be adapted so it doesn’t preclude bank involvement in the development of safe and efficient crypto-asset markets.

The associations proposed that the classification requirements determining whether a crypto asset qualifies for group one should be less restrictive to enable banks to rely in part on their existing risk management standards. They also suggested that the group-two classification lacks sufficient granularity and should be split into two distinct groups to reflect the different risk profiles of native crypto assets. A first subgroup would include those crypto assets with a liquid two-way market, as well as commonly traded indices that could be capitalised using the existing framework with some modifications. A second subgroup would include all other group-two assets and could be assigned the proposed 1,250% risk weight.

“Our recommendations were made in recognition of the fact that the crypto assets market is here to stay, and we don’t believe it should develop outside of the regulatory perimeter. As with all assets, the prudent approach is to make sure there is a prudential framework that appropriately capitalises the risk of the exposure without being unduly conservative. That may be more challenging in this market given its specific features, but we will continue to work with members and policy-makers to reach an approach that strikes the right balance,” says Panayiotis Dionysopoulos, head of capital at ISDA.

In an update on various strands of work in November 2021, the Basel Committee said it had reviewed the comments that had been made, but “members reiterated the importance of developing a conservative risk-based global minimum standard to mitigate prospective risks from crypto assets to the banking system”. The committee undertook to further specify a proposed prudential treatment, with a second consultation expected by mid-year.

“It is understandable that policy-makers would be cautious in their approach to this market because crypto assets do not typically represent economic activity or store of value in the same way as traditional assets. While the capital framework is designed to ensure banks are prepared for volatility or a breakdown in correlation, that is generally reflective of economic activity. In the absence of a similar dynamic with crypto, it may be harder to determine a risk-appropriate level of capital,” says Litvack.

Interim approach

It remains to be seen whether and to what extent the Basel Committee’s original proposal is adapted following the industry feedback, but the framework will not be finalised until 2023 at the earliest, at which point the standards will need to be transposed into law. This is a process that could take several years but, given the rapid growth of the crypto assets market, neither market participants nor regulators are standing still.

In a joint statement in November 2021, the Federal Reserve, the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation indicated they would evaluate the application of bank capital and liquidity standards to crypto assets for activities involving US banks. On March 9, US president Joe Biden signed an executive order intended to encourage responsible development of digital assets. Among other items, the order called on the Financial Stability Oversight Council to identify and mitigate economy-wide financial risks posed by digital assets and to develop appropriate policy

“The Basel Committee’s proposal was a good starting point to engage the industry on what the prudential standards should look like. But, in the next iteration, it will be important to ensure the framework does not create barriers to banks’ participation”

John Ho, Standard Chartered
“While the capital framework is designed to ensure banks are prepared for volatility or a breakdown in correlation, that is generally reflective of economic activity. In the absence of a similar dynamic with crypto, it may be harder to determine a risk-appropriate level of capital”

Eric Litvack, ISDA

recommendations to address any regulatory gaps.

Following the executive order, US agencies may take further steps towards an interim approach in the coming months, and ISDA and other industry associations have already set out some ideas and concepts that could be used to develop a provisional framework. This could focus initially on the proposed subgroup within group two that would include crypto assets with a liquid two-way market. For these assets, an interim approach could be adopted that would broadly align with existing capital requirements and be sufficiently risk-sensitive and conservative without precluding banks altogether.

As US agencies consider what measures may be appropriate, the UK has taken its own steps towards an interim framework. On March 24, the Bank of England’s Financial Policy Committee presented its assessment of the role of crypto assets and associated markets in the UK and globally. On the same day, Sam Woods, chief executive of the Prudential Regulation Authority (PRA), wrote to the chief executives of banks and investment firms to set out the PRA’s expectations on the management of crypto exposures.

While acknowledging the work of the Basel Committee and other international bodies, the PRA must “ensure firms are appropriately and consistently taking account of the risks in the interim”, said Woods. To that end, the letter suggests that a combination of robust measures including pillar-one and pillar-two capital, risk controls, operational risk assessments, new product approval processes and ongoing monitoring could collectively constitute an appropriate interim framework. The letter sets out detail on all these measures and calls for the submission of information on banks’ existing crypto exposures and future plans by June 3.

“The PRA letter outlines an interim framework, and we would like to see other jurisdictions follow with consistent guidance. Given the pace of evolution and client demand for crypto assets, this will enable banks to participate in the crypto-asset market and ensure their exposures are appropriately capitalised while the Basel standards are further developed,” says Dionysopoulos.

BASEL COMMITTEE PROPOSED CLASSIFICATION

The Basel Committee on Banking Supervision has proposed a prudential framework that would divide crypto assets into two broad groups.

- Group one: These fulfil a set of classification conditions and are eligible for treatment under the existing Basel framework, with some modifications and additional guidance. These include tokenised traditional assets and stablecoins.

- Group two: Those assets, such as Bitcoin, that do not fulfil the classification conditions. Since these pose additional and higher risks, they would be subject to a more conservative prudential treatment.

The proposed classification conditions that need to be met for group-one eligibility are:

- The crypto asset either is a tokenised traditional asset or has a stabilisation mechanism that is effective at all times in linking its value to an underlying traditional asset or a pool of traditional assets;

- All rights, obligations and interests arising from crypto-asset arrangements that meet the condition above are clearly defined and legally enforceable in jurisdictions where the asset is issued and redeemed. In addition, the applicable legal framework(s) ensure(s) settlement finality;

- The functions of the crypto asset and the network on which it operates, including the distributed ledger or similar technology on which it is based, are designed and operated to sufficiently mitigate and manage any material risks;

- Entities that execute redemptions, transfers, or settlement finality of the crypto asset are regulated and supervised.
* Policy Priorities

Crypto exchange Coinbase joined ISDA in December 2021 and is participating in the development of contractual standards for digital asset derivatives. Faryar Shirzad, Coinbase’s chief policy officer, talks to IQ about how he is applying his experience at Goldman Sachs and the White House to the role.

IQ: You joined Coinbase last year after 15 years at Goldman Sachs. What made you make the move?

Faryar Shirzad (FS): I am a policy person at my core, and I have always been intrigued by new innovations and emerging trends, and how public policy interacts with those developments. I had done some work on crypto and digital assets at Goldman Sachs, but when Coinbase approached me, I dug into the issues further and realized we were at one of those inflection points in history where public policy will play a huge role in shaping the future of something that is enormously consequential. It was at that moment I knew I wanted to be part of this.

At Goldman Sachs, I had played a role in helping the firm navigate the regulatory reform agenda that was moving forward all around the world after the financial crisis. Being in the middle of a global reassessment of such a fundamental area of policy was an extraordinary experience. It taught us a lot about how to navigate something so enormous and important.

In a way, crypto and digital asset technology are going through something similar. This is a far-reaching and disruptive technology – policy-makers around the world are trying to figure it out and need all the help they can get, and we in the industry have a real opportunity to be constructive partners with them.

IQ: During your career, you have held several roles in the White House, as well as being co-head of government affairs at Goldman Sachs. How are these experiences helping to shape your role as chief policy officer at Coinbase?

FS: Coinbase is fundamentally a start-up, and its most interesting attribute is its future. It has a strong culture, but the only playbook is to get it done well and to get it done fast. Coming from institutions with established patterns and practices to a start-up has been exhilarating but also a big change.

All that being said, the fundamentals of my job remain the same. First, policy advocacy is about understanding and being attuned to what’s driving policy-makers. You need to listen carefully to officials, even your most dogmatic critics, and then engage in the policy-making process respectfully and strategically in a way that’s responsive to their motivations and, of course, the political context.

Second, you must embrace the obligation you have to explain your side of the argument clearly and compellingly. This means you have to produce detailed analysis and, wherever possible, base your conclusions on data. That takes time and resources, but it’s enormously powerful when you have an empirical foundation to your arguments.

“As crypto develops as an asset class, market participants will need to manage physical delivery obligations, balance sheet exposures and price risks. We know derivatives markets exist to serve that function”
probably did not loom large, but the lack of clarity has certainly become a significant issue in recent years. It’s important to emphasise that the lack of clarity is not a lack of regulation. All of us in this industry are overseen by a multitude of regulators, and we operate subject to a multitude of regulatory frameworks. The issue, instead, is whether we can have a single national set of rules that give all of us – our customers, our investors and the broader public – confidence and predictability on what the rules are. For crypto to meet its full potential, we need to know where the lines are.

The recent executive order from the Biden Administration was a very hopeful first step towards the federal government developing the clarity we need. We’re eager to engage with the relevant agencies in their work

Third, you must be willing to stick your neck out and clearly say what you think is right. For example, we issued our Digital Asset Policy Proposal soon after I joined Coinbase. At the time, there wasn’t a lot of clarity from the industry about what the right model of regulation should look like, and we decided to fill that void with our proposal. We called for a new regulatory framework for digital assets and oversight by a single federal regulator. Most people appreciated what we were proposing, and others were critical, but we were able to shake up the policy debate about crypto and maybe contribute in some way to the progress we have seen on crypto policy in the months since.

These fundamentals of advocacy remain the same for crypto, and we’ve been using them as our playbook in the policy work we have been doing.

IQ: Interest in crypto derivatives has been growing strongly in recent months. How important is it to have a liquid, transparent derivatives market based on crypto assets? In which instruments are you seeing most interest?

FS: Liquid, transparent derivatives markets are critical to many asset classes, and crypto is no exception. We know from physical and financial commodities markets that derivatives play a key role in price discovery and stabilisation of the cash markets. Crypto is still developing as an asset class, but already we have seen rapid growth in interest in crypto derivatives among retail and institutional participants on overseas platforms. We have also seen the development of crypto futures contracts listed on US exchanges.

This growth isn’t surprising. As crypto develops as an asset class, market participants will need to manage physical delivery obligations, balance sheet exposures and price risks. We know derivatives markets exist to serve that function, and markets can only serve that function in a reliable way if they are sufficiently deep, liquid and transparent.

In terms of product appetite, these markets are young and evolving quickly. We have been happy to participate in ISDA’s efforts to develop industry standards for over-the-counter (OTC) crypto derivatives. We look forward to supporting the continued evolution of the OTC markets through our institutional business. In terms of futures contracts, we have watched the market since the 2017 listing of futures contracts on Bitcoin, and subsequently on Ethereum. We have conviction that demand for crypto futures will continue to grow.

IQ: To what extent does lack of legal and regulatory certainty constrain the development of crypto assets?

FS: Early in the development of crypto, regulatory considerations...
“People have long talked about the problems with our fragmented regulatory system in the US, but I’m not sure if that fragmentation has been as big an impediment to sound regulation as it seems to be with digital innovation in the financial sector.”

IQ: How does the US approach to regulating crypto compare to the approach being taken internationally? Is there anything the US could learn from other countries that are grappling with crypto regulatory issues?

FS: There is a lot being done on crypto policy around the world at the moment. Some of it is relatively advanced, while much of it is unfolding as we speak. There are a number of jurisdictions we could talk about, but the EU’s approach is particularly noteworthy.

EU institutions are in the midst of trying to implement a new tailored crypto regulatory regime for stablecoins and certain crypto assets. The Markets in Crypto Assets Regulation (MICA) creates a single rule book for crypto markets across the entire EU. The details are still being worked out, but MICA unquestionably represents a step forward in creating a sensible regulatory framework that is tailored to digital innovation, with a conscious effort to adapt market rules to digital where that makes sense. At one level, this seems to be nothing more than common sense, but it’s also somewhat revolutionary given the reticence that regulators in some markets have about moving away from the legacy market structure. It’s definitely a model worth emulating in other markets.

It would be extraordinary if the US were to adopt a similar approach by regulating crypto under a tailored framework that’s overseen by a single regulator. People have long talked about the problems with our fragmented regulatory system in the US, but I’m not sure if that fragmentation has been as big an impediment to sound regulation as it seems to be with digital innovation in the financial sector. In that respect, MICA is a good model for the US to look at.

IQ: The Basel Committee is developing a framework for the prudential treatment of crypto-asset exposures, but concerns have been raised that the proposed treatment is too conservative for banks to participate in this market. What is your view?

FS: I am not sure that ‘conservative’ is the best adjective here. I think the primary issue is that the proposed framework fails to appropriately differentiate between, and therefore weigh, different types of digital assets. The Basel proposal would create large buckets of digital assets and treat each bucket as internally uniform in terms of risk. The problem with this approach is twofold. First, the risk profile of various crypto assets is more diverse than these broad buckets would suggest. Second, the landscape in this market is evolving rapidly, so while adding more granular categories might be a short-term fix, even that approach would quickly become out of date.

I appreciate the need for a framework for the prudential treatment of crypto, but it needs to fit the reality of these assets or it fails in its essential purpose, which is to aid in ensuring the safety and soundness of the banking sector.

We need to go back to first principles and not only
ask how do we regulate this thing, but why do we regulate it the way we do? When we assign risk to different assets, what characteristics are we looking at and why do those matter? In the case of crypto and prudential regulation, we are essentially looking at how much value a bank can get from an asset at a point in time. This is why we care about volatility, liquidity and other types of risk. Putting assets in buckets looks very tidy, but unless we look under the hood of the assets, we are not going to get the risk assessment right. And without getting that right, we are not doing prudential regulation at all.

IQ: You have proposed that responsibility for digital asset markets in the US should be assigned to a single federal regulator to avoid fragmented and inconsistent oversight. What are the benefits of this? What are the other key components of Coinbase’s proposed approach to supervision of this market?

FS: First, as I mentioned earlier, it’s really important with something as game-changing as digital assets that policymakers and regulators think creatively and innovatively about their impacts. We’re witnessing a two-pronged sea change in markets and they are occurring concurrently: the blockchain-enabled disruption of legacy industries; and the decentralising and disintermediating nature of the crypto economy. If you accept these two things are occurring – and I believe this is inarguable – then you have to be bold.

Our proposal, which is not specific to any regulator, calls for a single regulatory body to oversee digital assets. It calls for clarity, and it makes the case for a change in how we think about regulatory norms in the financial sector. Applying 80-year-old precedents from the analogue era to digital technology doesn’t work. Regulating in a black box through enforcement action, without public engagement or transparency, doesn’t work. We need to evolve our approach and see this as a generational opportunity to modernise our financial system.

Whether it was the community’s rally against the Infrastructure Bill or the huge crowd-sourced crypto funding for Ukraine, the public feels empowered and crypto adoption is growing exponentially. For policymakers and regulators not to embrace these dynamics and keep using public policy to protect the status quo would be a political and strategic error. This is a historic moment, and we need to seize it.

IQ: What similarities exist between crypto market participants and the traditional banking sector when it comes to risk management practices and controls?

FS: In comparing crypto to the traditional banking sector, one of the first questions needs to be: what aspect of each sector are we comparing? When we talk about different parts of the financial system, it is often easy to use shorthand to talk about a whole collection of different activities. One thing crypto does, however, is reconceptualise how these activities occur.

Banking is a shorthand for one of these collections of activities. Banking includes many different activities, such as taking deposits, providing safe custody of those deposits and lending. Each of these activities presents a different set of risks, and the banking sector as a whole, along with the relevant lawmakers and regulators, have developed interdependent frameworks to make the system stable, taking into account the various activities that occur there.

In the crypto markets, there are some of the same activities, but their relationship to one another, and therefore the risks they present, are different. Stablecoins backed by fiat, for example, are often used as a store of value, as a way of providing a theft-resistant place to keep value and as a means of exchange. Stablecoin issuers do not, however, generally use the fiat they hold to make loans for the profit of themselves or their ‘depositors’. So, if we believe we need capital requirements for these issuers, or if we want to consider Federal Deposit Insurance Corporation (FDIC) or FDIC-like insurance for them, we must also take into consideration that they do not operate at all like traditional depository institutions and therefore the risks are very different.

All this brings us back to whether we approach digital asset regulation as an exercise to fit crypto into the legacy rules or whether we are willing to make sensible modifications to accommodate the obvious differences. MICA is a good example of taking the latter approach. We’re hopeful the US will do the same.
A forthcoming paper from ISDA’s Future Leaders in Derivatives programme will explore which parts of the trade lifecycle would benefit most from investment in new technologies.

Participants in ISDA’s Future Leaders in Derivatives (IFLD) programme believe the increasing maturity of distributed ledger technology (DLT) will lead to widespread implementation in financial markets, providing common, consistent data representations and allowing for real-time regulatory oversight of the market.

The deployment of autonomous self-executing code or smart contracts on this data will allow for greater automation of systems and processes. The use of digital or tokenised assets and the potential introduction of central bank digital currencies will also transform the way existing financial markets operate through the introduction of real-time or intraday settlement, lower transaction and maintenance costs, and greater automation throughout the trade lifecycle.

But where should the market invest its time and energy in exploring these opportunities? The IFLD has developed a paper that will answer this question by reimagining a more optimised trade lifecycle and identifying the most promising opportunities for new technology within the derivatives market.

The paper sets out a strategic roadmap for how these use cases can be delivered, identifying associated challenges and exploring ways to overcome them. For example, the use of DLT in the regulatory reporting process will require broader adoption of DLT as an authoritative data store for transaction information and greater regulatory acceptance of DLT usage in trade reporting. The paper calls on market participants to work closely with trade associations such as ISDA to develop common technological standards and to engage with regulators to clarify the legal and regulatory treatment of DLT and digital assets.

More broadly, the paper urges market participants to embrace cultural change and take a long-term strategic view in fostering an environment for technological innovation. The IFLD suggests firms should empower innovation leads who can break down silos within organisations, promote the benefits of technology on a cross-functional basis, and lead execution of ambitious implementation strategies in these areas.

The paper aims to encourage current leaders to embrace transformational change and support the adoption of an ambitious strategy for defining a digital future for financial markets, building a safer, more robust and more innovative global financial system.
Understanding IBOR Benchmark Fallbacks

As the market continues moving away from various IBORs, learn more and stay updated on benchmark reform through an easy-to-use visual resource from ISDA and The Brattle Group.

- Skim a brief history of how the benchmark fallback rates were established
- Use an interactive, updated model to see how these rates relate to several IBORs
- Compare adoption statistics across industries and the world

A Nascent Market

Sustainability-linked derivatives can help firms meet their ESG objectives and support the transition to a green economy. As the market evolves, ISDA is working to enhance the integrity of the product through robust KPIs and clarity on regulatory treatment.

Among the gamut of products in the rapidly growing sustainable finance universe, sustainability-linked derivatives (SLDs) may not be the largest market, but by allowing parties to incorporate an environmental, social and governance (ESG) component into a conventional derivatives structure, they can help firms meet their sustainability goals. While the market remains niche, a variety of SLDs have been executed around the world since the first transaction in 2019.

As with any emerging derivatives market, standardisation is required to attract new market participants, develop liquidity and allow the market to scale safely and efficiently. To that end, ISDA has developed guidelines to promote the effective use of key performance indicators (KPIs), which are a central component of SLDs. ISDA has also explored the regulatory treatment of SLDs in the US, EU and UK and is working with members to determine what further steps may be needed.

“This is still a very nascent market with largely bespoke transactions tailored to the needs of individual counterparties, so standardisation of terms is needed to promote greater trading and liquidity. Developing guidance for KPIs and exploring the key regulatory issues is a first step. We are continuing to work with members to help them realise the potential of SLDs to achieve their ESG goals,” says Scott O’Malia, chief executive of ISDA.

Incentive mechanism

The key objective of any SLD structure is to add an ESG pricing component to a conventional derivative, using KPIs to determine whether the relevant party has met the required sustainability goals. Depending on a firm’s ESG performance over the life of the transaction, it stands to be rewarded or penalised, providing a financial incentive for strong performance – in turn, supporting the green transition.

The first known SLD transaction was executed in August 2019 by ING and SBM Offshore, which supplies floating production solutions to the offshore energy industry. The transaction was conceived to hedge the interest rate risk of SBM’s $1 billion five-year floating rate revolving credit facility. At the start of each year during the life of the swap, ING sets a target ESG score for SBM and, if the target is met, a discount of between five and 10 basis points is applied to the fixed rate paid by SBM. If the target

“SLDs offer all the benefits of traditional derivatives that are part of a constructive capital market ecosystem, such as managing liquidity, price discovery, managing clearing and counterparty risk”

Clive Emery, Invesco
is not met, SBM must pay a penalty of between five and 10 basis points.

Other transactions have followed, with a range of different counterparties and ESG components. In a cross-currency swap linked to a €1.5 billion bond executed by Société Générale in September 2019, Italian power and gas company Enel benefited from a discounted rate based on its commitment to sustainability. The terms dictate that if Enel does not increase its installed renewable electricity generation capacity by a certain amount over a given timeframe, the interest on the bond rises by 25 basis points.

In March 2021, Intesa Sanpaolo executed a circular economy-linked interest rate swap with Italian steel manufacturer Feralpi, following an earlier €40 million loan to the firm to achieve specific sustainability targets. The structure of the swap features a reward mechanism that reduces the fixed rate paid by Feralpi if it achieves the circular economy targets set out in the broader financing process.

“SLDs offer all the benefits of traditional derivatives that are part of a constructive capital market ecosystem, such as managing liquidity, price discovery, managing clearing and counterparty risk. There are quite strong arguments in their favour if they foster greater investment and capital allocation to sustainability or offset ESG risk,” says Clive Emery, multi-asset fund manager of the Invesco Summit Responsible range.

While the early transactions were executed between European counterparties, SLDs have also been transacted more recently in Asia-Pacific and the US. As the drive to meet sustainability targets gathers pace around the world, it is likely this market will continue to attract both banks and corporates.

“More players are becoming active and, slowly but surely, we hope to see a common understanding with regards to structuring SLDs and the standards we should apply,” says Bernard Coopman, global head of the client solutions group at ING.

One of the clear benefits of SLDs is the ability to customise a conventional hedging instrument, such as an interest rate swap or FX forward, to incorporate an ESG component, thereby creating an incentive to meet sustainability objectives. As the number of transactions and participants increases, the market will benefit from standardisation of KPIs and clarity on the regulatory treatment of SLD transactions.

“An SLD is typically tied to an individual company’s performance against specific ESG criteria. By their nature, these products are very bespoke and, at this stage, are usually part of the company’s positioning and communication of its sustainability credentials rather than being core to its strategy. Bringing a bespoke market like this into the mainstream requires verifiable performance indicators and standards, which is where ISDA’s work is focused,” says Eric Litvack, chairman of ISDA.

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The guidance also proposes that KPIs should be quantifiable, objective and within the counterparty’s control to accomplish, to avoid any doubt over whether a KPI has been met. The principle of verifiability is designed to ensure one of the counterparties or an independent third party can properly corroborate whether a KPI has been met over the applicable period.

On transparency, it is recommended that counterparties should establish a process for information to be made available to relevant parties following the execution of an SLD, deciding in advance what information to disclose, which parties should receive it and the frequency at which it should be released. Finally, when it comes to suitability, it is recommended that KPIs should be appropriate for the relevant counterparty and derivatives structure.

“The effectiveness and integrity of SLDs really depends on the credibility of the KPIs, so the guidance aims to promote the use of KPIs that meet the five principles of being specific, measurable, verifiable, transparent and suitable. If adopted, the guidance should allow SLDs to be used as an effective way of meeting ESG goals, supporting the transition to a sustainable economy,” says Bella Rozenberg, senior counsel and head of the regulatory and legal practice group at ISDA.

Regulatory treatment
Beyond the use of robust KPIs, an important consideration for users of SLDs is the regulatory treatment. Given the range of requirements that have been implemented for over-the-counter (OTC) derivatives since the financial crisis, market participants need to understand how SLD contracts fit into existing regulatory regimes and what rules they will be subject to.

In December 2021, ISDA published a paper that analysed SLDs in the context of derivatives regulations in the EU, US and UK. The paper considers whether SLDs could be classified as swaps under US regulations or OTC derivatives under EU and UK regulations and, if so, how they could be treated under the existing regulatory regimes and what exemptions or exclusions might apply.

For example, if classified as swaps or OTC derivatives in these jurisdictions, contracts should be reported to an appropriate entity – a swap data repository in the US or a trade repository in the EU and UK. In the absence of an exemption, further questions would need to be addressed to determine how to report the relatively novel features of an SLD within a framework that was not designed to capture the product’s KPI-linked characteristics.

“We started to receive enquiries from members last year about how SLDs might fit into the post-financial crisis regulatory regime, which is why we developed the second paper. The EU and UK regimes offer a more expansive definition of OTC derivatives, and it seems likely this may capture SLDs. The intention was to provide a perspective on the key regulatory issues, but regulators may further develop their thinking in this area as the SLD market evolves,” says Rozenberg.

Further growth
Following the publication of the two papers last year, ISDA is working with its members to determine what additional steps may be needed to further support the development of the SLD market. To some extent, the speed of evolution will depend on demand for SLDs and the actions individual companies take to develop their own sustainability targets and strategies.

“Once more sustainability frameworks are in place and companies understand KPIs, we believe the derivatives market can grow accordingly. Our base case is that SLDs will grow in step with other markets, such as green loans, bonds and other sustainability-linked products,” says Bernard Coopman, ING’s Coopman.

Following its transaction with Feralpi last year, Intesa Sanpaolo has further SLDs in the pipeline with a range of possible...
structures. The appetite of banks and non-financial corporations to use these structures to meet their ESG objectives, combined with the development of relevant guidance and recommendations, indicates the SLD market is poised for further growth.

“If their ESG strategy involves more diverse and complex financial instruments, companies can send a stronger message and a more powerful signal to the market about their commitment to sustainability,” says Claudia Balsamo, vice president at Intesa Sanpaolo.

UPCOMING PAPER: FUTURE LEADERS’ PERSPECTIVE ON SLDs

The ISDA Future Leaders in Derivatives (IFLD) working group on environmental, social and governance (ESG) issues identified the development and increased use of sustainability-linked derivatives (SLDs) as a key means by which the derivatives market can support the transition to a sustainable economy. The IFLD programme launched in October 2021 with an initial cohort of future leaders from across the industry split into two groups to focus respectively on ESG and technology. The ESG working group has developed a paper, Sustainability-linked Derivatives: Where to Begin?

SLDs, which typically add an ESG overlay to a conventional derivatives instrument such as an interest rate swap, are still relatively new. The IFLD paper summarises and consolidates some of the key issues market participants may need to consider when trading SLDs and describes the relevant stages in the lifecycle of an SLD transaction.

The intention is to build on previous ISDA papers by providing an overview of topics that have previously been identified as relevant to SLDs, as well as highlighting additional issues that market participants may need to contemplate from a commercial, operational, regulatory and legal perspective when trading SLDs.

The key points addressed include regulatory frameworks, risk considerations, documentation, key performance indicator disclosure and the important role that collection, storage and management of data plays in the administration of portfolios containing SLDs. In exploring these subjects, the paper will highlight in which jurisdictions the legal or regulatory framework is more evolved – for example, the EU is at the forefront of developing ESG regulation. The paper also identifies areas that will require further development, such as documentation and standardisation.

Volumes of SLDs are likely to increase globally as the transition to a sustainable economy continues, and the complexity of these transactions may evolve over time. The paper aims to provide a practical overview of the key issues relating to SLDs in an accessible manner for potential market participants. By linking the key topics to the stages of an SLD transaction, it seeks to provide information in an easily digestible form for all relevant stakeholders that may enter SLD trades.
A Digital Approach

As the derivatives market prepares for forthcoming changes to trade reporting rules, starting in the US and Europe, ISDA is working with participants on a digital regulatory reporting initiative. IQ speaks to three industry experts about the benefits of a digital approach.

IQ: Derivatives trade reporting was introduced around the world following the financial crisis to improve transparency and enable supervisors to identify and act on emerging risks. What challenges have arisen that have made it necessary for the rules to be revised?

Valentino Wotton (VW): Over the past decade, individual jurisdictions have fallen short of achieving the standardisation in trade reporting that would enable regulators to reach the level of transparency and global risk monitoring in over-the-counter (OTC) derivatives markets originally envisioned by the Group-of-20 nations at their historic 2009 summit in Pittsburgh.

Since the start of derivatives trade reporting, DTCC has consistently called for the elimination of cross-jurisdictional differences to help boost transparency and the monitoring of global systemic risk. Last year, DTCC voiced concern that the global adoption of new rules aimed at addressing this issue was once again being inconsistently driven at a local jurisdictional level. The effort came at a critical juncture for the industry, as several regulatory bodies have started to adopt critical data elements (CDEs) for derivatives trade reporting, as identified by the Committee on Payments and Market Infrastructures and International Organization of Securities Commissions (IOSCO) working group on harmonisation. As jurisdictions adopt CDEs, unique product identifiers (UPIs), unique transaction identifiers (UTIs) and legal entity identifiers (LEIs) in the coming years, the industry will go through an ongoing cycle of rule updates. Adopting these standards across regulatory reporting regimes is critical to supporting data aggregation and enhancing market transparency and systemic risk monitoring for supervisors.

Miles Barker (MB): I’d give three closely related answers here – clarity, complexity and consistency. Clarity, because the original regulations were produced at pace and with reliance on a
A combination of legal language and language inherited from the securities world. This did not always lead to unambiguous definitions for derivatives market participants, especially across asset classes, where terminology and market practices vary.

Consistency, because unintended divergence between jurisdictions created additional costs for firms and the possibility of cross-border trades being reported slightly differently to different regulators.

Complexity, because translating internal data that was historically risk driven into reported data that is contractual event driven is not always straightforward, particularly for market participants with fewer resources.

The net result was unintended variance between reports within and between jurisdictions, despite efforts and expense on all sides. With regulatory-rewrite initiatives such as IOSCO’s CDEs and the conscious shifting of the reporting burden onto the larger party to the trade, these challenges are being substantially addressed.

IQ: What are the most important changes that should be made to reporting requirements around the world?

Angus Moir (AM): Reform of regulatory reporting is a strategic priority for the Bank of England – we call our work on this topic transforming data collection. The project, which I lead, started with a major review of reporting in 2020. During that review, we talked extensively to firms about what was going wrong and what we needed to do to fix it. At the end of the review, we published our plan of action, known as our transformation plan.

The transformation plan summarised the three long-term reforms we feel need to take place to transform reporting.

First, defining and adopting common data standards that identify and describe data in a consistent way throughout the financial sector. These common standards should be open and accessible for use by all who need them. We think their adoption will bring benefits well beyond reporting.

Second, modernising reporting instructions to improve how they are written, interpreted and implemented. There are a range of steps we think this will involve, from setting up better question-and-answer processes to potentially rewriting our instructions as code.

Finally, integrating reporting to move to a more streamlined, efficient approach to data collection. This reform includes making data collection more consistent across domains, sectors and jurisdictions, and designing each step in the data collection process with the end-to-end process in mind.

MB: The first is consistency and commonality. Continued harmonisation with the IOSCO CDE definitions will bring the cost of reporting for international firms closer to that of supporting a single regulation. In due course, it will also bring economies of scale to reporting solutions more generally. Firms will be able to focus on accuracy rather than variation, and both regulators of a cross-border trade can rely on receiving the same core information.

Second, reduce the transmission of reference data. Once LEIs and UPIs are fully utilised, the need to enrich reference data on reports should be greatly reduced. For example, if we have reported the UPI of a swap on index X, we should not also have to report the features of X.

This will require a journey to turn UPIs and particularly LEIs from simply being identifiers to being a key to public sources of data, but this principle will carry benefits well beyond derivatives reporting – for example, for statistical reporting.

VW: While the industry and regulators have greater insight into local market exposure and risk today than they did in 2008, misaligned reporting requirements could impede the global aggregation and analysis of OTC derivatives transaction data reported to trade repositories. This could reduce market transparency and hinder the ability of regulators to monitor and mitigate systemic risk.

We now have a unique opportunity to improve derivatives trade reporting. We must eliminate cross-jurisdictional differences to reduce the implementation burden. Currently, only 52 of the 110 CDEs are being consistently adopted across the European Securities and Markets Authority (ESMA) and the Commodity Futures Trading Commission (CFTC). A re-evaluation should be conducted by the...
“Reporting today is a complex process. What underpins that process are tens, sometimes hundreds, of people trying to come together to create reports, working with large numbers of interrelated unstructured PDF, excel and email documents. It’s a really tough job when done at scale. Building digital tools and services can make the whole reporting process easier and deliver big benefits to firms and regulators”

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IQ: What benefits can be achieved from taking a digital approach to regulatory reporting?

AM: I tend to think of the benefits in terms of two groups: benefits to firms; and benefits to regulators. Benefits to firms typically boil down to lower cost and higher efficiency. Benefits to regulators generally mean higher quality and more available data. The nice thing about data collection is that those things tend to be mutually reinforcing. If we can deliver higher quality collection processes, then they should both make reporting more efficient for firms and deliver better data to regulators. In short, there are lots of win-wins available.

Digital approaches can add a lot of value to improving reporting. Reporting today is a complex process. What underpins that process are tens, sometimes hundreds, of people trying to come together to create reports, working with large numbers of interrelated unstructured PDF, excel and email documents. It’s a really tough job when done at scale. Building digital tools and services can make the whole reporting process easier and deliver big benefits to firms and regulators.

The term ‘digital’ is critical here. This isn’t just about throwing technology at the problem. It’s about creating technology-enabled tools and services that are easy to use and fit with how people want to do their jobs. In that regard, a lot of people in the reporting transformation space can take inspiration from the digital giants we see in our daily lives. One of the things that makes Google, Apple and Facebook so good is their products are so easy to use. We need to bring that consumer-first mindset to reform back-office business processes like reporting.

VW: Regulators require firms to submit huge volumes of data. When trade reporting rules were first implemented in 2012, firms interpreted the requirements in different ways, as the industry didn’t have a scalable technology solution to support compliance. As a result, the data that regulators receive today is not consistent across the industry.

Digital regulatory reporting (DRR) started out as a joint Financial Conduct Authority and Bank of England initiative, with the vision of making the current regulatory reporting process more accurate, efficient and consistent. Leveraging technology to make submitting data less reliant on human interpretation of rules,
the objective would be to write rules in a machine-readable language that is machine executable. If further changes are required due to regulatory clarifications, then the reporting code can be adjusted centrally and deployed rapidly and consistently by all firms. ISDA has taken this forward and outlined a programme for collecting and reporting regulatory data.

**MB**: Again, the key benefits focus on clarity, but also on cost reduction. Even before we think of regulations as code, DRR gets us closer to regulations as functional specification. By going further and implementing this DRR, each firm will save on internal effort, because DRR syndicates much of the effort of interpretation and implementation that is currently repeated again and again across firms. It also streamlines the feedback loop for industry-wide consultations and clarifications required with regulators.

**IQ**: When taking a digital approach to implementation, how can the Common Domain Model (CDM) be used to transform legal text into code and implement the changes?

**AM**: As part of our work to transform data collection, we have been open advocates for industry-led data standardisation initiatives like the CDM. The way we think about it is, for regulators to easily get hold of firm data, that data needs to exist and be easily accessible. Firms’ data management needs to be in great shape.

If adopted, common data standards like the CDM make the firm’s data management process easier. They help to standardise the raw ingredients of regulatory reporting at the point it gets created. Standardising the raw input data is really powerful in terms of improving the rest of the reporting process. A key part of regulatory reporting is the translation of natural language instructions, often defined in legal text, into executable code. With common data standards, we can be explicit about what data feeds into that code.

**VW**: DTCC is working with ISDA and the industry to model the amended CFTC rules into human-readable, machine-readable code using the CDM. This will help to avoid inconsistencies that arise when a firm interprets a set of rules independently. The outcome will be far more consistent, accurate and reliable data reported to regulators. DTCC is also working to digitise the submission requirements of the European Market Infrastructure Regulation (EMIR) Refit. Since the CFTC and ESMA have both adopted a portion of the CDEs, the expectation is that a large portion of the data elements being coded for the CFTC requirements can be reused for EMIR. As other jurisdictions incorporate the data elements into their reporting rules, the industry will extend DRR to support consistent implementation around the world.

**MB**: The CDM defines current and future products and business events in terms of their constituent parts. Therefore, once the application of a regulation to those fundamentals is understood, it extends to all permutations: economic principles and event clarity – for example, if any business event includes a reduction in notional primitive event, then it is price forming.

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**IQ**: In addition to the reporting rule changes, market participants are going to need to implement the new UPI and the ISO 20022 messaging standard in the next year or so. What will this mean for market participants? How will DRR help with implementation?

**VW**: DRR will significantly help with ISO implementation. If your firm’s data is in an industry standard format, then the community can help accelerate the development of code and the mapping of the CDM elements to the new formats, and facilitate mutualised simulation and testing of the code. Even if you don’t implement DRR, the common mapping will be an accelerator and
checkpoint to your own implementation.

**MB:** The UPI is an intermediate point between Classification of Financial Instruments and the International Securities Identification Number (ISIN) that is familiar to Markets in Financial Infrastructure Regulation (MIFIR) reporters. Non-MIFIR reporters will be faced with creating Association of National Numbering Agencies Derivatives Service Bureau formatting and queries from scratch. Since the UPI is related to the ISDA taxonomy, the ability in the CDM to map any product to the ISDA taxonomy and standardise the key fields simplifies and disambiguates the path to UPIs and ISINs. ISDA’s DRR will include mappings from the CDM to ISO 20022, and so provide an option to map internal data to the CDM only and avoid ISO 20022 mapping work.

**IQ:** What challenges might market participants face if they don’t adopt a digital approach to regulatory reporting, and what benefits can be yielded from taking part in the current efforts to digitise reporting rather than waiting until later?

**AM:** There is a general trend in the financial sector for firms to become more data driven. Financial regulators are not immune from that. So, I don’t see regulatory demands for extensive, high-quality data going away any time soon – but I am not a regulator, just a guy trying to help them get the data they need. So, to me, the question is: how can we get reporting to a more sustainable place? One where firms value the reporting process and regulators value the outputs they get from it. And what do we think needs to occur to make that happen?

In the short to medium term, I think transformation of reporting needs innovation and investment. That means firms getting involved in initiatives like our joint transformation programme or the CDM work.

Firms can, of course, ignore these kinds of initiatives and keep doing what they’re doing in the same ways they have already done. But sitting on their hands means they won’t be part of shaping some of the solutions being developed and, as a result, those solutions may end up not serving their needs. On the benefits side, these initiatives can bring valuable knowledge and experience to the individuals and firms involved.

**VW:** Market participants that don’t adopt a digital approach to regulatory reporting are missing an opportunity to collaborate with their peers to review the rules, model the data fields and agree on best practices. Even if a firm does not intend to leverage the open-source software, it is a huge opportunity to help inform their own internal builds and ensure alignment to the broader industry. We strongly advocate for firms to get involved and actively participate, especially as the work being done for the CFTC rewrite will be the basis for EMIR Refit. There is also increased interest in DRR from global regulators.

**MB:** Adopting DRR and the CDM as the precursor to that is a significant undertaking, but one that will reap benefits down the line. These include rationalising your data and event lineage, reducing the effort required for new or revised regulations, lowering maintenance costs and reaping economies of scale across jurisdictions. It’s key to understand when in your architecture lifecycle is best to make the move and how it interacts with other data-related regulation, such as the Basel Committee on Banking Supervision’s principles for effective risk data aggregation and risk reporting.

The benefits of taking part in the current effort are two-fold: knowledge and strategy.

Knowledge, in that you’ll be participating in and benefitting from the industry consensus on reporting rewrites best practice, whether you implement DRR now or not.

Strategy, because you’ll come to understand the direction of travel for data and event standardisation and be able to begin to combine that with your existing architecture strategies and plans. Getting ready for CDM adoption overlaps with many of the data lineage and provenance capabilities that are in any case needed for the CFTC Part 49 rules and the Basel Committee principles, among other trends. So, in the big picture, this is not an isolated effort.

Read ISDA’s recent paper, Digital Regulatory Reporting: Market and Regulatory Initiatives: bit.ly/3udDcl1
What is the ISDA® CDM™?

The ISDA Common Domain Model (ISDA CDM™) is a blueprint for how derivatives are traded and managed across the trade lifecycle. Having a single, common digital representation of derivatives trade events and actions will enhance consistency and facilitate interoperability across firms and platforms, providing a bedrock upon which new technologies can be applied.

Why the ISDA CDM?

Catalyst

- Over time, each firm has established its own systems and its own unique set of representations for events and processes that occur during the life of a derivatives trade.

- There is no commercial advantage to organizations maintaining their own representations. It results in firms having to continually reconcile their trades to make sure they have the same information – a big drain on resources. It also curtails the potential for greater automation, and results in increased operational risk.

- New technologies offer the potential for greater automation and efficiency, reducing complexity and costs. But effective automation can only be built on standardization.

Opportunity

- Derivatives market participants are looking at ways to reduce costs and improve the efficiency of back-office processes.

- An opportunity exists to create standards that support innovation and promote the adoption of new technologies.

- ISDA has a 30-year track record in developing industry standards.

Benefits of the ISDA CDM

- Enhancing interoperability, reducing reconciliation and promoting straight-through-processing: The ISDA CDM enables a consistent hierarchical representation across trades, portfolios and events, providing enhanced risk management and trade processing capabilities.

- Creating an environment for innovation in financial markets: The ISDA CDM creates a foundation for long-term process transformation using emerging technologies like cloud, distributed ledger and artificial intelligence. The ISDA CDM is available in machine-readable and machine-executable formats and languages that can be consumed by those technologies.

- Delivering better regulatory oversight: The ISDA CDM promotes transparency and alignment between regulators and market participants, ensuring regulatory goals can be met more efficiently.

Want more information? Contact Us: ISDA Market Infrastructure & Technology - MarketInfrastructureandTechnology@isda.org
Implementing Basel III

The EU began the process of transposing the final parts of Basel III into law with the publication of legislative proposals in October 2021. José Manuel Campa, chairperson of the European Banking Authority, explains why timely and accurate implementation of the capital standards is so important.

IQ: In October 2021, the European Commission (EC) published the proposed text of the third Capital Requirements Regulation (CRR III), which will transpose the final Basel III standards into EU rules. Once finalised, the European Banking Authority (EBA) will develop regulatory technical standards (RTS) to implement the rules. Which areas do you think will be most critical and what challenges might arise?

José Manuel Campa (JMC): The publication of the EC’s proposal is a major milestone that allows us to move forward with the adoption and implementation of the final parts of Basel III in the EU. It’s been a long time in the making. By the time it is fully implemented, it will be more than 20 years after the financial crisis, so it’s important we move forward. The critical components of this last part of Basel III are the Fundamental Review of the Trading Book (FRTB) and, more broadly, the risk sensitivity of the capital models that banks use. It is important the framework is risk sensitive, which was achieved through the Basel III agreement, but it’s also important that the use of internal models does not result in unwarranted decreases in capital requirements, which is why the output floor is such a crucial part of the overall package. Following the EC proposal, the process now continues with European co-legislators and it’s important to make sure we stay loyal to the Basel standards with timely implementation of the reforms.

IQ: Will it be possible for banks to secure capital model approval from their supervisors by January 1, 2025, while the RTS are still being finalised?

JMC: We are doing our best to provide banks and supervisors with the framework to secure model approval in a timely way, and this is obviously an area in which supervisors need to work with banks to make sure the process is smooth. We delivered the first phase of the RTS for the internal model approach two years ago and these are still pending approval from the EC, but I think the existence of the RTS should provide a good basis for banks to keep moving forward with implementation of the new internal model approach and start the approval process with their supervisors.

“It is important the framework is risk sensitive, which was achieved through the Basel III agreement, but it’s also important that the use of internal models does not result in unwarranted decreases in capital requirements, which is why the output floor is such a crucial part of the overall package”
In a speech at ISDA’s Annual General Meeting last year, you said it is important to ensure the EU implements Basel III in full and without material deviation from global standards. The EC’s proposal for CRR III deviates from Basel III in some areas, including credit valuation adjustment (CVA) and the standardised approach to counterparty credit risk calculation in the output floor. What is your view on these deviations?

I would say there are two basic principles that should guide this process: the first is to remain faithful to the Basel standards; and the second is that any deviations should be justified by risk-sensitivity issues. In specific areas where there are deviations, the EC has made adjustments to square the difficult equilibrium between having a reform that is loyal to Basel III while, at the same time, not creating a significant increase in overall capital requirements.

The crucial point is that these exemptions or deviations in the proposal must remain temporary, and there should be no opportunity in the process of finalising the legislation to make them permanent. This applies to some of the exemptions and prohibitions in the calculation of the output floor. The EC did not want to open the debate on the CVA exemption again, but we do need clarity on the way the exemption is being applied because we have observed that it may not have been applied consistently across all banks in the EU. We very much welcome the proposed disclosure requirements, which will provide transparency to investors on how the exemption is being used by banks, creating a more level playing field.

Is there a danger that too many deviations, even if they’re linked to risk sensitivity issues, might lead to a very unlevel playing field?

Absolutely, and that’s why it was so important for us that Basel III preserved the risk sensitivity of the models. Basel III makes the standardised models more risk sensitive, and it therefore makes the rationale for keeping those exemptions less valid. But, as a result, it made the quantitative impact of those exemptions less significant because the standardised approach has become more risk sensitive. I hope supervisors. Banks must approach their supervisors well in advance because it takes time for them to grant approval – they need to provide a comprehensive overview of the model, a good indication of where they’re going and time for supervisors to properly assess them.

The EC has proposed that the standards should apply from January 1, 2025, two years later than the Basel Committee on Banking Supervision timeline. Do you think other jurisdictions should adopt the same timeline for Basel III implementation to ensure global consistency?

We have always argued for timely and faithful implementation of Basel III, so the fact this is delayed is not positive, but I think it’s more important that there is clarity and certainty on the process going forward. That’s why I welcome the proposal that was put forward in October. The EU has a democratic decision-making process and it takes time – it would have been better to have implemented sooner rather than later, but it’s also very important that there is consistent implementation globally. The EU has been the first to put forward a proposal, but the UK and the US have a faster rule-making process.

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this will result in a robust, well-calibrated framework that is flexible enough to adapt to the idiosyncrasies of any particular market or jurisdiction, although some local adjustments may be warranted in specific cases.

IQ: Basel III introduces an output floor, which sets a lower limit on capital requirements when banks use internal models. The EC has proposed a ‘single stack’ approach that would apply the output floor at the consolidated group level. However, some member states have suggested the output floor should apply at the level of individual legal entities. What do you think is the best way forward?

JMC: I think the EC deserves a lot of credit for maintaining the single-stack approach, because some of the proposals for a parallel stack approach were not consistent with the letter and philosophy of Basel III. This would have impaired the credibility of Europe’s commitment to faithful implementation of Basel III. The fact the EC chose to apply the output floor to groups at the consolidated level is fully consistent with Basel, so this is a good step forward that will help to foster the single market and the banking union.

IQ: The EBA has been a strong proponent of benchmarking as a means of increasing standardisation and reducing variability of capital requirements across banks. Given all the changes to the capital framework that will now be implemented and the increased role of standardised approaches, how important will benchmarking be in the future?

JMC: Benchmarking is really a critical tool in understanding and reducing unwarranted variability in capital requirements among banks. I think benchmarking will continue to play an important role, particularly in the transition phase as the FRTB standardised approach is implemented. Benchmarking is also a good way to give supervisors early signals of possible outliers, so it will allow banks to have better backtesting and to benchmark themselves relative to other players in the market. For us, benchmarking is one of several important tools that are needed as part of disclosure and transparency requirements. The goal here is not to make all banks identical, but to avoid excessive variability. When you have a lot of variability, you need to identify and understand why this is happening and this is where benchmarking becomes so important.

IQ: Under the CRR III proposal, the EBA has to decide whether environmental, social and governance (ESG) risk should be incorporated into bank pillar-one requirements by 2023, two years earlier than the original 2025 deadline. How will the EBA go about this, and does the earlier deadline create any challenges?

JMC: The new deadline clearly puts additional pressure on us to deliver on time. We’re currently working on a discussion paper so we can get feedback from stakeholders, and we will publish the final report by 2023. The key focus is to be clear on how best to ensure there’s a robust risk-based and evidence-based approach to any kind of prudential recommendations that may affect capital requirements. The focus at this stage will be on environmental risk rather than social risk, which will come later. We put a lot of emphasis on disclosure, risk governance and risk measurement. It could be that environmental risks are already embedded in banks’ risk measurement, but they may not be properly captured in some cases, so this is what we need to identify.

IQ: There has been discussion of a green supporting factor in the regulatory capital framework, which would grant capital relief to incentivise banks to finance projects that support the green transition. In your view, should ESG be incorporated into the prudential capital framework, or is it already sufficiently captured as part of banks’ internal capital adequacy assessment processes?

JMC: I think it’s absolutely right that ESG should be incorporated into the assessment of prudential capital requirements because it’s a salient risk and has characteristics that are likely to be different from the traditional risk factors that have been measured. Banks need to properly measure, account and
provision for those risks to which they are exposed, so we must make sure ESG risks are properly managed across their portfolios.

Using the prudential framework to incentivise certain policy behaviours would, in my view, be a mistake. I’m very keen on facilitating the transition to a more sustainable economy, but we must avoid any situation that could generate financial instability in the interim. For this reason, I don’t think a green supporting factor is a good policy tool – there are other ways that banks and supervisors can actively support the green transition.

For instance, disclosures are very important for enhancing risk measurement, helping the financial sector to be better equipped to assess environmental risks. Disclosures also push counterparties to ask their banks to provide information on how those risks are being measured, managed and mitigated, which will help to facilitate the transition. With enhanced disclosures and better risk management, the financial sector can really be a catalyst in facilitating the transition – but not through the inappropriate measurement of risks.

IQ: Europe has led the way in developing a regulatory framework to incorporate ESG into risk management and business operations. How do you see this agenda evolving, and is it possible to achieve a globally coordinated approach?

JMC: The climate challenge is global and, as a basic policy principle, you need to have policy prescriptions that are adequate to the size of the problem or market that you’re managing. If it’s a global problem, then you need global solutions. So, in that sense, I view the agenda positively because I see the sensitivity towards ESG issues and risks globally. Europe is ahead of other regions in addressing this, but I don’t think that should be used as an argument for us to slow down because the problem itself is not slowing down. We should continue to push this agenda as far and as fast as possible, and this will hopefully also push other jurisdictions forward in the process.

There is a lot of activity going on around the world. While it might seem uncoordinated, it would be much worse if there was no action. Ultimately, this is an area in which we don’t yet have a well-established supervisory toolbox, so we need to develop this. It would be good if we could have a harmonised taxonomy and methodology for measuring risk, clear policy prescriptions and a single global body that can manage this. We’re not there yet, but the International Financial Reporting Standards Foundation has said it will move forward with standards for non-financial disclosures and sustainability, and the Basel Committee is actively working on better assessment of ESG risks. We need to continue pushing as much as possible on this front.

IQ: There is increasing scrutiny of banks’ exposure to crypto assets, both at the regional and Basel Committee levels. What steps are needed to integrate this risk effectively into the prudential framework?

JMC: The EBA has been an early actor in raising concerns about these new instruments and the impact they might have on the financial system. There is a lack of regulation on how crypto assets should be traded and whether they should be considered payment mechanisms or assets that would be subject to the Markets in Financial Instruments Directive. The vast majority fall somewhere in between.

Our first objective is to warn consumers of the risks that are involved in these unregulated assets, whether because of the inherent volatility or the lack of regulation and institutional protection. The second objective is to track the way banks are marketing these assets to their customers and buying them onto their balance sheets. Our assessment is that the risk has increased as the prevalence of these assets has developed. They are unregulated assets, so consumers need to be aware of the risks if they want to engage. The presence of these products on bank balance sheets remains very small and is not really cause for concern at this stage, but it’s an area we need to watch closely.

When it comes to prudential capital treatment, the goal should be that everyone has a real understanding of what the risks are in these types of assets and that banks properly manage their risks. We don’t want a prudential system that penalises banks for participating in crypto just because we don’t want them in this market. We want them to be able to do a proper risk assessment and, for that, we need a proper regulatory regime.

“Benchmarking is really a critical tool in understanding and reducing unwarranted variability in capital requirements among banks. I think benchmarking will continue to play an important role, particularly in the transition phase as the FRTB standardised approach is implemented”
A Full Agenda

The US Commodity Futures Trading Commission has a lot on its plate, with climate change, crypto assets, benchmark reform and swap data reporting requirements among the issues on the to-do list. Chairman Rostin Behnam talks with ISDA about the CFTC’s priorities.

IQ: President Biden recently signed an executive order outlining a cross-agency approach to the development of digital assets. The order highlights several key priorities, including consumer and investor protection and identifying and mitigating potential financial stability risks. But it also recognises the benefits of crypto assets and highlights the opportunity for the US to play a leading role in this space. What role will the Commodity Futures Trading Commission (CFTC) play in implementing this order?

Rostin Behnam (RB): From a CFTC perspective, we have a really unique lens with which to view crypto assets. We’ve been overseeing regulated futures on Bitcoin and Ether for a number of years, going back to 2017, so we have a sense of how the markets function, and we have relationships with market participants. I’m looking forward to bringing that knowledge and expertise to the table and sharing with my colleagues across the US government and the White House what we’ve learned and how we could add value to the larger conversation about where we see digital assets going in the future, and what we need to do from a policy perspective to reach those goals of customer protection, financial stability, resiliency in the markets and developing the technology where we see benefits.

Another point is enforcement and rooting out fraud, manipulation and bad actors. We’ve brought about 50 enforcement cases, going back to 2015. So, this is another lens with which we have experience and expertise — to see what’s going on in the market, to protect customers and to build market resiliency, which is really important.

IQ: Do you think the current US regulatory framework is adequate for digital assets? If not, where are the gaps and what needs to change? Does Congress have a role here?

RB: The current law provides a bit of flexibility for regulators to move a bit around digital assets and the technology and some of the novel issues, but it’s pretty limited. I mentioned the futures contracts, and we have a lot of retail exposure and a lot of institutional exposure. Our existing rules have allowed those products to be listed and have given us the authority to oversee those products and do what we think is right, tailored to the risk profile they have relative to other futures contracts and other commodities. And I think that’s been helpful. It’s allowed the market to develop, and it’s allowed the CFTC to have a role in the development and advancement of the technology.

That’s on the positive side. On the negative side, this technology is so novel — it raises so many legal questions, operational questions, resiliency questions and cyber issues — that there is a role for Congress here.

As market regulators, we need to really flush out the core questions. What’s a security? What’s a commodity? How does it fit within existing definitions? Do we want to redefine them? How would jurisdiction be potentially split in the cash market versus the derivatives market? These are the questions and the issues we’re struggling with, and we could certainly use a bit of a steer from Congress.

IQ: The CFTC recently published a request for comment following an application from crypto firm FTX to permit it to clear non-intermediated, margined products. This would represent a change to established clearing models. Why is this change being considered now? What are the implications?
RB: As chairman of the agency, I view this engagement as my responsibility, and it’s one of my more important responsibilities – to treat market participants fairly and equitably and in a timely manner. In this particular case, FTX has requested an amendment to its existing clearing order. As we would with any registrant or stakeholder, we’re going through the request. We’re doing our due diligence, we’re doing our math and we’re seeing what it is proposing, if it fits within our regulatory structure and what potential risks and opportunities it may create.

You’re right – this is a departure from an established clearing model. I don’t take that lightly and I understand and appreciate the significance of that. Because of that, I made a decision to have a request for information as a first step of several to engage with stakeholders across the board and hear what they think. As we take those in over the next couple of months, we continue to have dialogue and engagement given the nature of this request and hopefully will make a better and more informed decision off of that. I don’t think that’s a novel approach from a process standpoint, but it’s an extremely important one, especially with issues that are as significant as this one.

IQ: Do you have a timeline for this?

RB: I don’t – we’re not going to give ourselves a timeline. What we’re going to do is engage and move this forward, but we’re not going to rush it. We’re going to do everything we need to do to ensure...
IQ: Another focus for the administration has been climate change. Back in September 2020, the Climate-related Market Risk Subcommittee of the Market Risk Advisory Committee (MRAC) – which you sponsor – published a report on managing climate risk in the US financial system. It includes multiple recommendations, including the need to establish a price on carbon and a call for federal financial agencies to incorporate climate-related risks into their mandates. What progress has been made since that report was published?

RB: I’ve been really pleased to see a lot of action out of the Biden administration. As you point out, this is a priority for President Biden – he often says this is an all-of-government approach to climate change. From a financial regulatory perspective, I’m very proud of that September 2020 report. It was very inclusive in the sense of thinking what financial markets can do, what the risks are, what the opportunities are with climate change, and how we collectively as a financial market and financial community can address these issues. A few of the priorities have been addressed. One, the Network for Greening the Financial System – the Federal Reserve has joined it, among other US regulators as well. The Securities and Exchange Commission recently released a proposal on disclosures for public reporting companies. And any number of other regulators are starting to really put their heads together to see what they can do to build more resilience in the system. I know the Fed, under Chair Powell, is also looking at climate scenarios for financial institutions. All these initiatives and projects were outlined in the report. So, from my perspective, to see these recommendations put into action is really satisfying.

From a CFTC perspective, we’ve started to put our heads together. One of the first actions I took as acting chair back in 2021 was to form the Climate Risk Unit, which is a group of market analysts, economists and surveillance specialists, to start thinking about what we can do within the CFTC to support an orderly transition to a net-zero economy, but also blunt the impacts of the physical risk that climate change poses. In many respects, this is what our markets do and have been doing for decades. It’s really leveraging that expertise and experience from a risk management standpoint to see how we can collectively, as an industry, introduce new products and think about new innovative ideas, so manufacturers, farmers, ranchers and commercial end users can start to manage some of these climate-related risks.

IQ: We think the voluntary carbon market can be very useful in helping to price carbon and boost investment in projects that will sequester or minimise carbon emissions. Given there are a growing number of futures contracts on voluntary carbon credits, what legal authority and oversight does the CFTC have over the spot market? How will the CFTC apply these authorities to address greenwashing?

RB: It makes me think about crypto, and I’m going to use crypto as an example to articulate the authority we have. I mentioned we’ve brought 50 enforcement cases in the crypto space, and many of them have been in the cash crypto space, but we don’t have jurisdiction over cash markets – we’re a derivatives regulator. But Congress has provided the CFTC with cash market authority where there’s fraud and manipulation. This fraud and manipulation authority has become our jurisdictional lens into the crypto space because of the relationship between listed derivatives and the cash market. If you have mispricing or issues that are being driven by fraud or manipulation, it’s going to have an effect on our markets.

With the voluntary carbon market, my team has been engaging with the registries, exchanges and corporates, and learning from them and seeing what role, if any, we can play. There seems to be consensus around the credibility issues and having some official sector participation.

“With the voluntary carbon market, my team has been engaging with the registries, exchanges and corporates, and learning from them and seeing what role, if any, we can play. There seems to be consensus around the credibility issues and having some official sector participation.”
what we can do within the space, because there are several listed futures contracts related to carbon offsets that reference individual registries. So, we’re looking into this.

IQ: The CFTC recently announced it will delay implementation of certain amendments to its swap data reporting rules until December 5, which will give the industry vital extra time to make the necessary changes to their reporting systems. This is the first step in a multi-phase revision process and other changes are in the pipeline for 2023, including incorporation of a new global unique product identifier (UPI) into the CFTC rules, along with the ISO 20022 messaging schema. What will those additional amendments involve and when will they be required?

RB: CFTC staff is working super hard to prepare for the implementation of the UPI and ISO 20022 for the fourth quarter of 2023. In addition, we’re coordinating with other authorities, both domestically and internationally, and with market participants, to complete the development of the UPI standard. We’re also overseeing the development and implementation efforts that are currently being undertaken by the Derivatives Service Bureau, which is the entity designated by the Financial Stability Board (FSB) to issue UPIs, and we’re working to harmonise implementation of the UPI standard across FSB jurisdictions.

Going back to the data rule-making in 2020, the Division of Data has been working extremely hard with swap data repositories (SDRs) to finalise the SDR guidebooks and fine-tune the technical specs. We’ve been getting a lot of feedback from the industry, which has been helpful for us because this is a collective effort. We benefit from hearing from you so we know how we can make it seamless for the industry to aggregate and submit this data to us, which ultimately allows us to do our job better. So, a lot going on and all very challenging, probably slower than we’d all like. But it’s extremely important to get this right, to create those efficiencies, lower costs and ultimately allow us to do our job from a market oversight perspective.

IQ: Turning to benchmarks, the CFTC has been instrumental in driving growth in SOFR volumes as part of its SOFR First initiative last year. In addition, US regulators have adopted a ‘no new LIBOR’ policy since the turn of the year. Are you satisfied with progress made on the transition from US dollar LIBOR?

RB: I’m very satisfied. There was a lot of uncertainty over whether we would get to where we needed to at the end of 2021, knowing that the hard stop was being firmly pushed from the official sector, most notably in the UK. To think about what we’ve accomplished in that short amount of time and how we’ve collectively come together across markets has been remarkable. It’s just a sign that things can be accomplished if we put our minds to it and we know we can’t mess around with extensions or kicking cans down the road.

Looking back to summer of 2021, we kicked off the SOFR First initiative within a subcommittee of the MRAC, and that was a critical time because there was so much uncertainty. I had so many phone calls from folks in the interdealer space. How is this going to work? Is this a regulatory requirement? If I don’t do this, am I going to get an enforcement action? All these questions that you would view as critically important from a market participant standpoint.

But it was a very smooth transition. There were certainly bumps on the road, but when you think about what we were trying to accomplish and what we did accomplish – and the statistics speak for themselves – everything moved really quickly.

“It was a very smooth transition. There were certainly bumps on the road, but when you think about what we were trying to accomplish and what we did accomplish – and the statistics speak for themselves – everything moved really quickly”
IQ: The war in Ukraine and the implementation of sanctions against Russia has led to volatility in markets, particularly in the energy sector. How closely is the CFTC monitoring this issue?

RB: This was not a surprise. We were obviously hoping it would not happen, but for several months, from a regulator standpoint, we had to anticipate this as a possible scenario. With that came preparation, both from a market resiliency standpoint and a sanctions standpoint. I had conversations on a frequent basis with my colleagues within the US government, led mostly by the Treasury department, to prepare for this scenario. The orders of action were around potential cyber risks and what we needed to do to communicate with market participants to build resiliency and anticipate and prepare for cyber attacks. The other element was the sanctions and making sure we could identify potential issues that might arise if sanctions were levied by the Treasury department. As we got closer to the invasion and that came to be a reality, I feel like we were as prepared as we could be.

From a market standpoint, the CFTC and the markets we regulate are at the centre of this crisis. We’ve seen huge spikes in the energy complex, the agricultural complex and the metals complex. I’ve thought a lot about 2020 and the systemic shock that markets went through at the onset of the pandemic and the spikes in margin because of that unexpected shock. A lot of that margin has stayed in the system. I think it was in part because of margin calculations and the margin period of risk, but also because of the heightened level of scrutiny given the uncertainties around the pandemic and market participants wanting to be a bit more cautious about market volatility. As we got closer to the invasion, I do feel like that collateral created a buffer for the market shock that we saw. Again, it was more of an expected shock to the market given we anticipated this as a scenario, coupled with the fact that central counterparties and other market participants were preparing for it.

We are on heightened alert at the CFTC because of the invasion and the potential repercussions for markets. And we continue to talk with market participants and hear what they are seeing in the markets and what they are seeing with their clients, and we’ll continue to do so until the war ends.
TUESDAY, MAY 10

10:00 AM ISDA Accounting Meeting
Accounting and Reporting: Including updates on Digital Assets, ESG and RFRs
This event will update derivatives market participants on new issues affecting accounting. Panelists will discuss the accounting treatment of crypto assets and environmental, social and governance (ESG) related transactions, as well as provide updates on the impact of the transition to risk-free rates (RFRs) and changes to hedge accounting rules under US generally accepted accounting principles and International Financial Reporting Standards.
Sponsored by EY

12:30 PM ISDA Symposium: ESG and the Role on Derivatives
Jurisdictions across the globe are putting policies in place to reduce emissions and drive investment to more sustainable businesses and technologies. This event will explore the various regulatory initiatives to support the shift to a green economy and consider the impact on market participants. It will also examine the role of derivatives as a means of helping firms meet their sustainability objectives, the impact of capital requirements, and progress in developing standard documentation.

4:00 PM Early Registration and Arrival Hospitality Lounge
Sponsored by S&P Global Market Intelligence

7:30 PM ISDA AGM Welcome Reception at Casino de Madrid
Sponsored by LCH

WEDNESDAY, MAY 11

8:00 AM Breakfast, Registration, Networking, Exhibition Opens

8:50 AM Opening Remarks
Scott O’Malia, ISDA Chief Executive Officer

9:00 AM Keynote Address and Fireside Chat with:
Rostin Behnam, Chairman, US Commodity Futures Trading Commission (CFTC)

10:05 AM Interview with:
Bill Winters, CEO, Standard Chartered PLC

10:25 AM Networking Break

10:50 AM Keynote Address
Klaas Knot, President, De Nederlandsche Bank; Chair, Financial Stability Board

11:10 AM Meeting Regulatory Priorities
Global regulators have identified a number of key priorities for 2022, including addressing shortcomings exposed by the coronavirus crisis and responding to the growth in crypto assets and sustainable finance. At the same time, several regulatory authorities, including those in the EU and UK, are reviewing and updating their regulatory frameworks. What are regulatory agencies doing to bring these agenda items into concrete initiatives, and how are national regulators approaching these issues on a cross-border basis?

11:55 AM The Path to a Successful DEI Program
Promoting and maintaining diversity, equity and inclusion in the workplace is becoming a risk and compliance priority for financial institutions. What approach are firms taking, what are the benefits, and what are the issues to avoid?

12:40 PM Sanctions Briefing
Derivatives market participants are managing the implications of the sanctions against Russia and Russian entities. While the impact on each firm depends on its individual circumstances, a number of common, industry-wide issues have emerged. This session will describe the effect on interest rate, credit, FX, equity and commodity derivatives markets, and explain the work ISDA has been doing to develop solutions.

1:10 PM Lunch

2:15 PM The Final Part of the Puzzle
The remaining five US dollar LIBOR settings will either cease or become non-representative at the end of June 2023 – although regulators in the US and other key jurisdictions have made clear that new US dollar LIBOR transactions are no longer allowed, except in limited circumstances. How have institutions in both over-the-counter and listed derivatives markets adapted to the new environment? What has this meant for firms with outstanding linear and non-linear US dollar LIBOR exposures, and what is left for the industry to do?

3:00 PM Keynote Address
Gary Gensler, Chair, US Securities and Exchange Commission

3:20 PM Transforming Regulatory Reporting
New technologies and more comprehensive data standards have the potential to automate current regulatory systems, drastically improving data quality and regulatory access to information. This potential exists across the regulatory landscape - from trade reporting to risk, capital, margin, accounting and ESG data collection. ISDA’s digital regulatory reporting initiative is one example of where this is happening, as regulators in the US, Europe and Asia-Pacific review and update their regulatory reporting requirements and CFTC amendments are implemented later this year. What will this mean for market participants and regulators, and which areas could see the greatest improvements in efficiency?

4:05 PM Networking Break

4:30 PM Keynote Address
Verena Ross, Chair, European Securities and Markets Authority
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<th>Time</th>
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<tr>
<td>9:00 AM</td>
<td>Welcoming Remarks</td>
<td>Scott O'Malia, ISDA CEO</td>
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<tr>
<td>9:10 AM</td>
<td>Chairman's Remarks</td>
<td>Eric Litvack, ISDA Chairman, Managing Director, Group Director of Public Affairs, Société Générale</td>
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<td>9:30 AM</td>
<td>Keynote Address</td>
<td>Martin Moloney, Secretary General, IOSCO</td>
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<td>10:00 AM</td>
<td>Implementing Basel III</td>
<td>Regulators and banks around the world are finalising their implementation of Basel III, marking the end of a decade-long process. What issues remain or are emerging? How will the rules handle recent market developments, including the growth in ESG and crypto markets?</td>
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<td>11:30 AM</td>
<td>Crypto in Wholesale Markets</td>
<td>Growing interest in crypto assets and derivatives from banks and institutional investors has prompted market participants to look closely at documentation, regulatory and capital issues associated with these assets. How is the landscape changing, and what strategies are being adopted in response?</td>
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<td>12:00 PM</td>
<td>Tackling Margin Procyclicality in Cleared Derivatives</td>
<td>The coronavirus crisis prompted a sharp rise in initial margin in cleared derivatives markets, prompting global standard setters to explore whether margin requirements are overly procyclical. Are remedial measures, such as additional CCP anti-procyclical tools, necessary? What steps are under consideration?</td>
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<td>1:00 PM</td>
<td>Board of Directors Election/Financial Report</td>
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<td>1:30 PM</td>
<td>Lunch</td>
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<td>2:30 PM</td>
<td>BREAKOUT SESSION A</td>
<td>Regulatory IM: The Final Phase</td>
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<td>2:30 PM</td>
<td>Developing Contractual Standards for Crypto Derivatives</td>
<td>Derivatives will play a crucial role in the ongoing development of the digital assets market by facilitating price discovery, increasing liquidity and allowing firms to hedge risk. ISDA is working with market participants, including those in the crypto space, to develop the legal and contractual standards that will contribute toward development of a safe, efficient crypto derivatives market. This panel will outline the issues that need to be considered and how ISDA intends to address them. Panel sponsor: FalconX</td>
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<td>3:00 PM</td>
<td>Evolution of Collateral Management</td>
<td>Regulation has driven the industry’s need to be more efficient with collateral management processing and more resourceful with collateral inventories. This has resulted in developments including document digitisation, automation, data standards and collateral optimisation. Learn from industry practitioners that have implemented solutions within their firms or with their clients that have reduced operational risks and resources, helped counterparty risk mitigation and improved liquidity management.</td>
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<td>4:00 PM</td>
<td>Documentation for ESG</td>
<td>ISDA has published a variety of templates to support the trading of emissions and some environmental derivatives, including renewable energy certificates. Work has also begun on developing documentation for voluntary carbon markets. How is this work progressing, and how will it deal with the unique characteristics posed by voluntary carbon credits and other ESG markets?</td>
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<td>5:00 PM</td>
<td>Networking Break</td>
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<td>5:30 PM</td>
<td>BREAKOUT SESSION A</td>
<td>A Framework for Emerging Markets Derivatives</td>
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<td>5:30 PM</td>
<td>Perspectives from Future Leaders</td>
<td>ISDA launched the ISDA Future Leaders in Derivatives programme last October to identify and support diverse and emerging leaders in their career progression. ISDA talks with some of those in the first cohort about their perspectives on future derivatives market development, with specific focus on ESG and technological innovation.</td>
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<td>6:00 PM</td>
<td>Day 1 General Sessions Conclude</td>
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<td>7:00 PM</td>
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MISSION STATEMENT

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

STRATEGY STATEMENT

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

THE PREEMINENT VOICE OF THE GLOBAL DERIVATIVES MARKETPLACE
Representing the industry through public policy engagement, education and communication

AN ADVOCATE FOR EFFECTIVE RISK AND CAPITAL MANAGEMENT
Enhancing counterparty and market risk practices and ensuring a prudent and consistent regulatory capital and margin framework

THE SOURCE FOR GLOBAL INDUSTRY STANDARDS IN DOCUMENTATION
Developing standardized documentation globally to promote legal certainty and maximize risk reduction

A STRONG PROponent FOR A SAFE, EFFICIENT MARKET INFRASTRUCTURE FOR DERIVATIVES TRADING, CLEARING AND REPORTING
Advancing practices related to trading, clearing, reporting and processing of transactions in order to enhance the safety, liquidity and transparency of global derivatives markets

www.isda.org
NEW ISDA MEMBERS

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

UK
- Amrus Limited
- B2C2 Ltd.
- GSR International
- Kaizen Reporting Limited
- Legal and General Investment Management (Holdings) Ltd.
- OSTTRA
- Phoenix Group Holdings
- Starling Bank
- Trailstone UK Ltd.

USA
- BlockFi Inc.
- Coinbase
- DRW Holdings, LLC
- FalconX Holdings, Inc.
- FTX US
- Galaxy Digital Trading Cayman LLC
- Saavi Energy Solutions
- SFOX
- Universal DeFi Holding Company (UDHC) LLC

Belgium
- Argenta Spaarbank NV

Switzerland
- Banque Pictet & Cie SA
- Ezpada AG

For additional information on joining ISDA, please visit the ISDA Membership Portal at https://membership.isda.org/
OFFICE LOCATIONS

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Portal at https://membership.isda.org/
ISDA dailyLead is a free daily email newsletter specifically designed for derivatives markets professionals. Over 20,000 of your peers rely on ISDA dailyLead to stay informed.

- Bringing you a quick, two-minute read that will help keep you up to date with the latest news and trends in the industry, key regulatory issues and ISDA news, straight to your inbox.
- A daily snapshot of the global swaps and derivatives industry with news from the Financial Times, Wall Street Journal and other leading sources.

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MEMBERSHIP INFORMATION

ISDA has over 980 member institutions from 78 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers.

MEMBERSHIP BREAKDOWN

<table>
<thead>
<tr>
<th>Types of Members</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>30%</td>
</tr>
<tr>
<td>Law Firms</td>
<td>21%</td>
</tr>
<tr>
<td>Asset Managers</td>
<td>9%</td>
</tr>
<tr>
<td>Government Entities</td>
<td>13%</td>
</tr>
<tr>
<td>Energy/Commodities Firms</td>
<td>7%</td>
</tr>
<tr>
<td>Diversified Financials</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
</tr>
</tbody>
</table>

GEOGRAPHIC COLLATERALISATION

- Europe: 46%
- North America: 30%
- Asia-Pacific: 14%
- Japan: 4%
- Africa/Middle East: 4%
- Latin America: 2%

End users: 47%
Service Providers: 32%
Dealers: 21%

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

## OFFICERS

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

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

**Jack Hattem, Secretary**  
Managing Director, Global Fixed Income  
BlackRock

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

## DIRECTORS

**Thijs Aaten**  
Chief Finance and Risk Officer  
APG Asset Management Asia

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

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

**Charlotte Brette**  
General Counsel  
AXA Investment Managers

**Biswaup Chatterjee**  
Managing Director, Head of Innovation, Global Markets  
Citigroup

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

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

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

**Sian Hurrell**  
Head of Global Sales and Relationship Management & Head of FICC Europe  
RBC Capital Markets

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

**Dixit Joshi**  
Group Treasurer  
Deutsche Bank AG

# ISDA EXECUTIVES

## OFFICE OF THE CEO

**Scott O’Malia**  
Chief Executive Officer

**Katherine Tew Darras**  
General Counsel

**Steven Kennedy**  
Global Head of Public Policy

**Mark Gheerbrant**  
Global Head of Risk and Capital

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

## SENIOR EXECUTIVES

**Clive Ansell**  
Head of Market Infrastructure and Technology

**Ann Battle**  
Assistant General Counsel & Head of Benchmark Reform

**Amy Caruso**  
Head of Collateral Initiatives

**Monica Chiu**  
Senior Counsel

**Roger Cogan**  
Head of European Public Policy

**Huzefa Deesawala**  
Chief Financial Officer

**Panayiotis Dionysopoulos**  
Head of Capital

**Benoit Gourisse**  
Head of Public Policy, Asia Pacific

**Jing Gu**  
Head of Asia, Legal

**Marisa Irurre Bauer**  
Head of Conferences

**Ulrich Karl**  
Head of Clearing Services
Janet Kong  
SVP Market Development and Innovation  
BP Plc, Trading and Shipping

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

Daniel Maguire  
Group Head, Post Trade, LSEG and CEO, LCH Group  
London Stock Exchange Group

Erik Tim Mueller  
Chief Executive Officer  
Eurex Clearing AG

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

Taihei Okabe  
Managing Director, Head of Derivatives Trading  
Mizuho Securities Co., Ltd.

Scott O’Malia  
Chief Executive Officer  
ISDA

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

Duncan Rodgers  
Managing Director, Head of ALM Strategy  
UBS AG

Marc Seidner  
Managing Director, Chief Investment Officer  
PIMCO

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

Nat Tyce  
Managing Director, Head of Macro Trading for Europe, the Middle East and Asia Pacific  
Barclays

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

Jacques Vigner  
Chief Strategic Oversight Officer for Global Markets  
BNP Paribas

Tom Wipf  
Vice Chairman of Institutional Securities  
Morgan Stanley

Shafqat Malhi  
Senior Controller

Olivier Miart  
Head of Analytics

Dillon Miller  
Chief Technology Officer

Alan Milligan  
Head of Data and Digital Solutions

Tomoko Morita  
Senior Director and Head of Tokyo Office

Mark New  
Senior Counsel, Americas

Nnamdi Okaeme  
Head of SIMM

Olga Roman  
Head of Research

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

Rick Sandilands  
Senior Counsel, Europe

Nick Sawyer  
Global Head of Communications & Strategy

Lorraine Sneddon  
Global Head of Human Resources

Fiona Taylor  
Head of UK Public Policy

Peter Werner  
Senior Counsel (Legal Infrastructure and Law Reform)

Chris Young  
Head of US Public Policy

Liz Zazzera  
Head of Membership
“This technology is so novel – it raises so many legal questions, operational questions, resiliency questions and cyber issues – that there is a role for Congress here”

Rostin Behnam, Commodity Futures Trading Commission