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The future belongs to the innovators

Let us celebrate the past as inspiration for the future

BY WALT LUKKEN

PRESIDENT AND CHIEF EXECUTIVE OFFICER, FIA



We have many reasons to celebrate 2025 as an industry. Both the FIA and its principal US regulator, the Commodity Futures Trading Commission, mark their 70th and 50th anniversaries, respectively. FIA's Asia office and the FIA Hall of Fame celebrate twenty years. Even our beloved Boca Conference observes its golden anniversary in 2025.

We absolutely should take time to reflect on these milestones. We should remember and express gratitude to the innovators and founders of our industry that built these markets through bold ideas and hard work. We stand on the shoulders of these giants.

If you want to know their names, start with the FIA Hall of Fame, including this year's special anniversary class. Reading their biographies will have you in awe of their accomplishments. They come from various backgrounds, disciplines and regions. And they all share one common characteristic: an innovative spirit.

They did not let the past dictate their story or pathway. Many of them were pioneers that bucked the system. Take Margery "Large Marge" Teller, who helped break the glass ceiling in the trading pits by being the best at her craft: trading Eurodollars. Or the legendary founders of our modern industry – like Leo Melamed, Jack Sandner, Richard Sandor, Sir Brian Williamson and Ng Kok Song – who thought outside the box and ignored the naysayers. None of these individuals ever said, "It's always been done this way."

Their passion and drive remind me of one of my favourite movies, *Dead Poet's Society*, starring Robin Williams as the inspirational teacher at an all-boys private school in the US. In one of the movie's penultimate scenes, Williams makes the boys read a poem in front of the school's trophy case that contains pictures of the school's "Hall of Fame" alumni.

The poem's opening stanza begins, "Gather ye rosebuds while ye may..." which Williams notes in Latin is short for *carpe diem* or seize the day. Williams powerfully makes the point that life is short, and one must act boldly to make

one's life extraordinary, because someday we will all "fertilise daffodils."

Stark and powerful, this lesson is one that all Hall of Fame members would tell a young person entering our industry today. Trust your gut. Be bold. Follow your instincts. Don't let the past dictate your path.

Do you think Leo Melamed heard from naysayers that you can't trade futures on a computer? Or Richard Sandor that interest rate futures would fail? Or Kok Song that you can't do cross-border trading electronically? Of course they did. These individuals ignored the naysayers and seized the day. And we are better for it.

THE FUTURE IS BRIGHT

There are certain principles of our markets that are as valid today as when these giants blazed their trails. We should learn from them and allow them to inspire – not dictate – our future.

We support fair competition because competition sharpens the offerings of all participants, benefiting the entirety of the system. We support responsible innovation because innovation lowers costs and improves the customer experience. We support smart regulation because fair rules provide needed certainty for capital investments and make the system safer.

Developing technologies will dramatically impact our markets, from tokenisation to AI to quantum computing. Already, they have caused some doubting whispers among the naysayers who do not want to change. We must not listen!

Yes, these technologies will disrupt our industry. Yes, we will need to adapt. Yes, we have been here before.

Whether electronic trading or financial futures or principles-based regulations, we have faced disruption before. We adapted, we moved forward, and the markets are stronger for it. Remember ... gather ye rosebuds!

But unlike earlier industry developments, the pace of these modern technological breakthroughs will be exponential. I am reminded that iPhones have only existed since 2007. Can we imagine living without smartphones today?

AI and quantum computing likely will revolutionise our lives and our markets

"We must always nurture a mindset and culture of innovation and resilience. We must always consider new approaches."

sooner rather than later. How will our industry deal with it? The answer is, straight on.

FIA stands ready. We will help market participants understand and embrace these developments as they occur. We will highlight these new technologies in our conference programming, webinars and white papers.

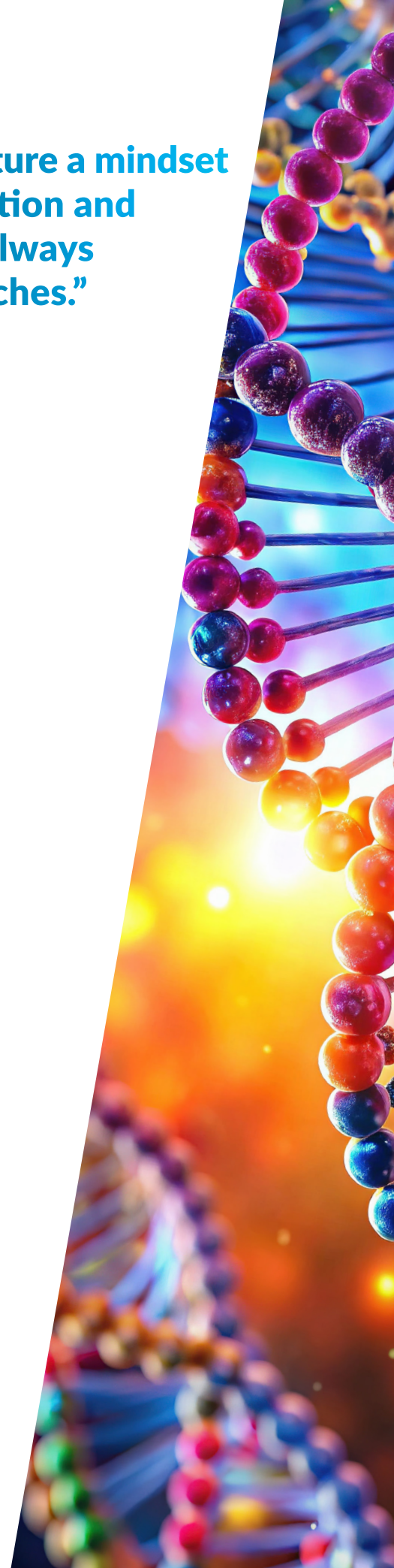
Where needed, we will gather industry experts to explore ways to approach problems, like we did with the founding of the Industry Resilience Committee after a major cyber breach or the founding of the Derivatives Market Institute for Standards (DMIST) to help standardise the trade flow and systems that support our industry's functioning and resilience.

That said, when these new ideas and technologies enter the industry, we should demand they meet the time-tested principles of our markets: same activity, same risk, same rules. Remember, our industry strives for fair competition, which means that all market participants that do the same activity should abide by the same rules. Fairness demands a level playing field for all.

We must always nurture a mindset and culture of innovation and resilience. We must always consider new approaches. We must always look to the next generation to lead the way.

As we reflect on these anniversaries, we recognise and celebrate the amazing leaders that precede us, and we use their example to remind ourselves to "seize the day" in facing the future. ●

Editor's note: To best celebrate these special events, FIA will distribute this publication at Boca, IDX, Expo and Asia. Whether you read this in Boca, London, Chicago or Singapore, we hope you find value in this issue of MarketVoice.





Ensuring stability in a tech dependent world

Regulators are grappling with how best to adapt and provide sound regulations for increasingly sophisticated technological applications in financial markets

BY EMMA DAVEY

Technology has transformed financial markets and services in recent years, much as it has transformed life in general. While this has presented many opportunities – efficiency, speed, cost reductions, etc. – it has also created a dependency that has caused headaches for regulators across the globe. What is the best approach to oversight and regulation of areas such as artificial intelligence (especially generative AI), cloud services and tokenisation?

With a keen eye on operational resilience, regulators globally seek to keep financial markets safe and robust. As the Bank of England sets out, operational resilience means “the ability of firms, and the financial sector as a whole, to absorb and adapt to shocks and disruptions, rather than contribute to them.” The debate continues about the extent to which some of this technology might contribute to these shocks and disruptions.

A read of IOSCO’s 2024 Work Programme illustrates this focus, as it highlighted a plan to address new rules on sustainability and fintech. Having already published recommendations on crypto and digital assets, as well as decentralised finance, IOSCO’s Fintech Task Force turned its attention to monitoring policy implementation and work on artificial intelligence and tokenisation.

Data shows widespread use of AI already in financial markets. A Bank of England survey published in November 2024 found 75% of firms already use AI, with a further 10% planning to in the coming years. Additionally, given the fact respondents reported that 55% of all use cases for AI have some degree of automated decision-making, it should not surprise anyone that regulators will pay close attention to it – even if they have yet to establish exactly how to respond.

While concerns include the impact on data and privacy, the BoE says that “the largest perceived non-regulatory constraint of AI is safety, security and robustness of AI models, followed by insufficient talent and access to skills.”

In November 2024, the BoE also established an Artificial Intelligence Consortium to provide a platform for public-private engagement to gather input from stakeholders on the capabilities, development, deployment and use of AI in UK financial services. This will ultimately inform the Bank’s approach to addressing risks and challenges, and to it promoting the safe adoption of AI.

AMPLIFYING RISK

Despite the perceived benefits of AI providing improved operational efficiency, regulatory compliance and advanced data analytics, many regulators point to concerns about AI amplifying risks. The Financial Stability Board highlighted several AI-related vulnerabilities that could increase systemic risk in financial markets in its

November 2024 report – *The Financial Stability Implications of Artificial Intelligence*.

These include third-party dependencies and service-provider concentration.

The BoE’s 2024 survey found that one third of all AI use cases are third-party implementations, and that the top three third-party providers account for 73%, 44% and 33% of all reported cloud, model and data providers, respectively.

According to the FSB, “The reliance on specialised hardware, cloud services and pre-trained models has increased the potential for AI-related third-party

Regulators across the globe tend to agree that existing financial policy frameworks generally address the vulnerabilities associated with AI.

dependencies. The market for these products and services is also highly concentrated, which could expose [financial intermediaries] to operational vulnerabilities and systemic risk from disruptions affecting key service providers.”

Increased correlations in trading, lending and pricing, driven by widespread use of AI models and data sources, also concerns the FSB. “This could amplify market stress, exacerbate liquidity crunches and increase asset price vulnerabilities. AI-driven market correlations could be exacerbated by increasing automation in financial markets,” its report suggests.

The FSB also fears that AI uptake by malicious actors could increase the frequency and impact of cyber-attacks. “Intense data usage, novel modes of interacting with AI services and greater usage of specialised service providers increase the number of cyber-attack opportunities.”

The Monetary Authority of Singapore also highlighted these increased threats in its information paper – *Cyber Risks Associated with Generative Artificial Intelligence* – published in July 2024. It highlights examples of the risks, such as the use of deepfakes and GenAI-enabled phishing, as well as malware generation and enhancement, while adding potential mitigating steps.

Despite these concerns, regulators across the globe tend to agree that existing financial policy frameworks generally address the vulnerabilities associated with AI. A staff advisory published in December by the Commodity Futures Trading Commission said CFTC-regulated entities are expected to “assess the risks of using AI and update policies, procedures, controls and systems, as appropriate, *under applicable CFTC statutory and regulatory requirements.*” [FIA’s italics]

The CFTC set out a non-exhaustive list of existing statutory and regulatory requirements that may be potentially

implicated by CFTC-regulated entities' use of AI. This list covers order processing and trade matching, market surveillance and system safeguards. It reminds futures commission merchants, for example, that a significant portion of CFTC regulations applicable to FCMs relates to customer protection. FCMs that consider the use of AI to account for segregated funds, "would still be required to ensure that, among other things, all of the requirements of Part 1 of the CFTC's regulations are being met."

In announcing the advisory, then CFTC Chair Rostin Behnam described it as "emblematic of the CFTC's technology-neutral approach, which balances market integrity with responsible innovation in the derivatives markets."

TECHNOLOGY-NEUTRAL

This echoes the industry's stance. FIA has emphasised in letters to the CFTC and the US Treasury Department that regulators should consider existing rules and guidance applicable to financial institutions when deciding whether additional regulation is warranted in this area.

In October 2023, the White House issued an executive order encouraging US agencies – such as the CFTC – to "consider using their full range of authorities to protect American consumers from fraud, discrimination and threats to privacy, and to address other risks that may arise from the use of AI, including risks to financial stability, and to consider rulemaking as well as emphasizing or clarifying where existing regulations and guidance apply to AI."

FIA has also urged regulators to consider the outcomes and use-cases of AI, rather than the technology itself. In its letter to the CFTC, co-signed by CME Group and Intercontinental Exchange, FIA stated: "In many instances, existing CFTC rules and guidance provide the controls and oversight needed for the CFTC to promote and protect the integrity and resilience of our markets. CFTC's risk-based approach means that its rules likely already address perceived risks."

The BoE has largely echoed this approach. While Deputy Governor Sarah Breeden has cautioned that regulators must not be complacent, she added that the

Europe has taken a broad-brush approach to regulation of the technological impact on operational resilience with the European Commission's Digital Operational Resilience Act.

central bank was not ready to change its approach to regulating generative AI. It was more a case of keeping a close eye on it.

For its part, the FSB believes regulatory frameworks need more work before being sufficiently comprehensive. The November 2024 report concludes that the FSB, standard setting bodies and national authorities may wish to:

- Consider ways to address data and information gaps in monitoring developments in AI use in the financial system and assessing their financial stability implications;
- Assess whether current regulatory and supervisory frameworks adequately address the vulnerabilities identified in the report, both domestically and internationally;
- Consider ways to enhance regulatory and supervisory capabilities for overseeing policy frameworks related to the application of AI in finance, for instance, through international and cross-sectoral cooperation and sharing information and good practices.

TOKEN GESTURES?

In another paper, the FSB commented on the financial stability implications of tokenisation. While adoption of tokenisation is still relatively low, the FSB acknowledges it provides a number of potential benefits while identifying several financial stability vulnerabilities associated with DLT-based

tokenisation. These relate to liquidity and maturity mismatch, leverage, asset price and quality, interconnectedness and operational fragilities.

The FSB's report states that, notwithstanding these vulnerabilities, "the use of tokenisation in the financial sector does not currently pose a material risk to financial stability, mostly due to its small scale."

It goes on to highlight three issues for national regulators to consider. First, they should consider ways to address data and information gaps in monitoring tokenisation adoption. Second, they should consider ways to increase understanding of how tokenisation and its related features fit into existing legal and regulatory frameworks and supervisory approaches. And finally, they should continue to facilitate cross-border regulatory and supervisory information sharing on tokenisation.

DORA DEBATE

Europe has taken a broad-brush approach to regulating the technological impact on operational resilience with the European Commission's Digital Operational Resilience Act. The regulation entered into force in January 2023 and applied from January this year. It aims to strengthen the information and communication

technology security of financial entities and make sure the financial sector in Europe stays resilient in the event of a severe operational digital disruption. It requires financial institutions to establish effective governance of risk stemming from outsourcing as well as strengthen frameworks for technology security and cyber resilience – including AI.

Implementation of DORA has presented a number of concerns for financial institutions and third-party ICT providers alike, necessitating significant changes to risk management processes and adjustments to existing frameworks spanning multiple operational and technological domains within a firm.

The recognition of dependencies through outsourcing of key functions is clear. Elsewhere, the European Central Bank requested comments on its own separate *Guide on Outsourcing Cloud Services to Cloud Service Providers*. The guide aims to clarify the ECB's understanding of related legal requirements (such as DORA) and its expectations for the banks it supervises.

As the ECB points out, banks are increasingly using third-party cloud computing services, which are potentially cheaper, more flexible and secure. Such a dependency, however, presents risks. “If a bank cannot easily substitute outsourced services during a failure, its functions may be interrupted,” the ECB said. “In addition, the market for cloud services is highly concentrated, with many banks relying on just a few service providers located in non-European countries. Therefore, the ECB considers it

good practice for banks to explicitly take these risks into consideration.”

Of course, the best-laid plans might not prevent a cyber attack or outage caused by another factor, so it is a question of how trading venues respond. In its *Market Outages* report published last summer, IOSCO proposed several steps to mitigate against the more harmful fallout of an outage.

First, trading venues should establish and publish an ‘outage plan,’ to include, for example, the organisation’s communication plan, reopening strategy, the arrangements for operating a closing auction and the methodology for providing the market with alternative closing prices, if required.

The communication plan itself should establish an appropriate communication channel through which the venue can provide an initial notice of the outage as soon as practicable, and then regular updates to all market participants on the status of the outage and the recovery pathway.

Trading venues should then share the plan for reopening of trading “in a timely and simultaneous manner” to all market participants, providing status updates, processes and steps involved in the reopening. These may well interact with existing operational resilience measures, such as business continuity and disaster recovery plans.

IOSCO also recommends trading venues conduct and share the findings

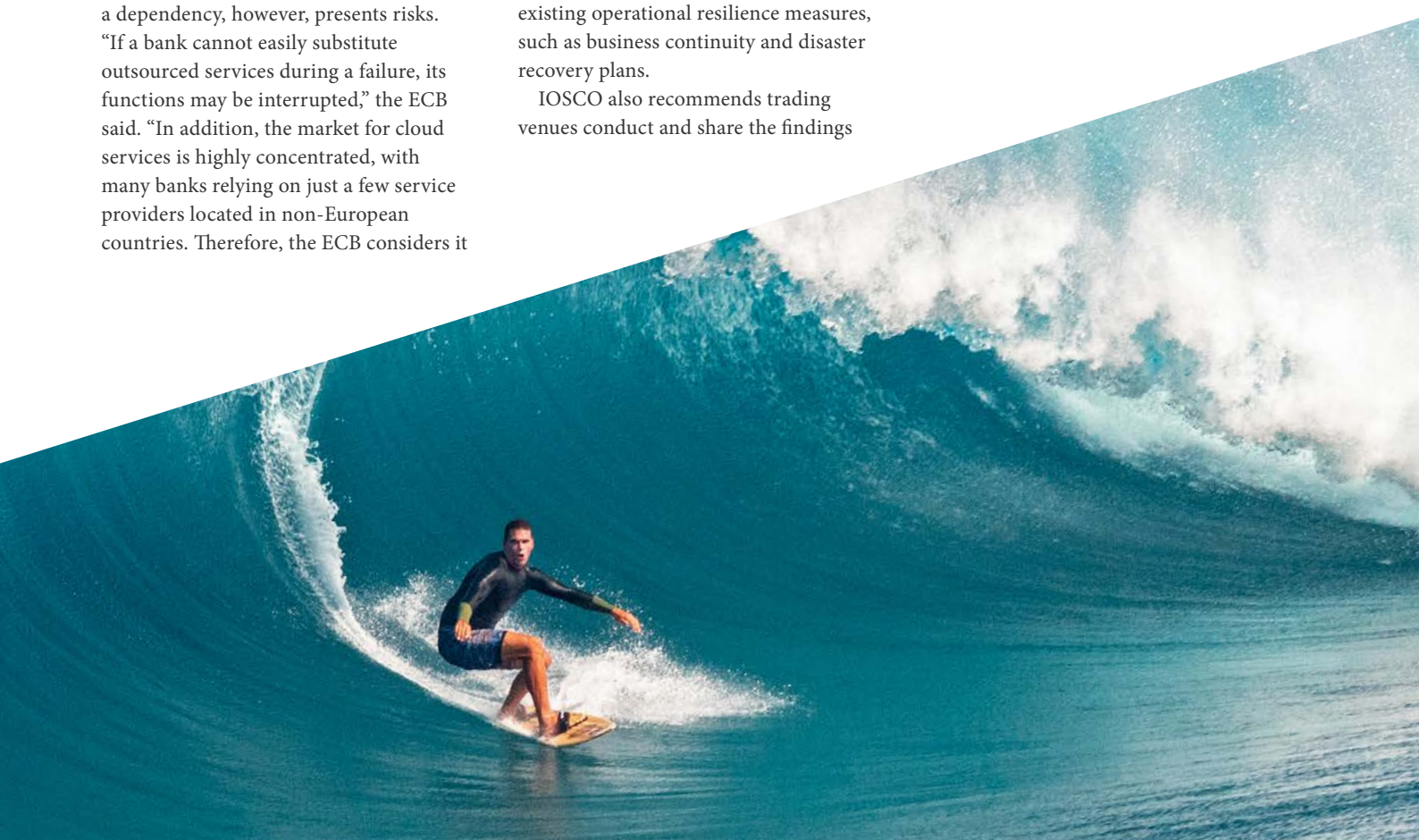
of a ‘lessons-learnt’ exercise with the relevant regulators, in addition to adopting a post-outage plan with clearly defined timelines and allocation of responsibilities to remediation. The lessons-learnt exercise should include both a root cause analysis, with remediation actions for those root causes, as well as the evaluation of the handling of the outage.

It is clear that regulators continue to navigate the best approach to managing the potential risks presented by a growing dependence on technology. Education, dialogue with industry and international consensus will be key in ensuring that markets are as prepared as they can be to mitigate some of the threats that will inevitably arise along the way.

And there will almost certainly be many ‘lessons learnt.’ ●

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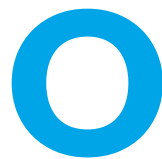
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The challenging path ahead for the European Union's Savings and Investment Union

Can the new Commission push forward with its plans to make this hotly debated project a true success story?

BY MARK HAYES



On 29 January, European Commission President Ursula von der Leyen officially presented the Commission's

Competitiveness Compass, an overarching plan to fix Europe's competitive weaknesses. Key to the plan is the long-discussed but never-completed Capital Markets Union – rebranded last year as the Savings and Investment Union – an initiative that aims to build deeper capital markets offering funding to companies, returns to savers across the European Union and financing for economic growth. The Commission has earmarked the SIU as a key “enabler” of the Competitiveness Compass for ultimately funding the EU economy.

First proposed by former Commission President Jean-Claude Juncker in his 2014 State of the Union address, the Capital Markets Union/SIU initiative has striven to create a single market across the EU.

As Juncker said in his address, “The Capital Markets Union is not just a project; it is a necessity for Europe's future. It is about ensuring that the EU has a deep and integrated financial market that can support investment, innovation and growth.”

Progress has been slow, with member states clashing over issues like single supervision and cross-border taxation. While many have opined on the best path forward to achieve the SIU, two former Italian prime ministers stepped forward with their respective views in 2024. Enrico Letta, having led his home country from 2013 to 2014, presented his view in a high-level report on the future of the EU single market in April 2024.

“The lack of integration in the financial, energy and electronic communications sectors is a primary reason for Europe's declining competitiveness,” Letta noted. “We're in danger of falling out of touch. There is no time to waste. The gap between

the European Union and the US in terms of economic performances is becoming bigger and bigger.”

Perhaps foreshadowing the difficult road ahead, Letta discussed how rail networks work well within national borders, but Europe has “not even managed to connect the three main European capitals of Brussels, Strasbourg and Luxembourg.”

Nevertheless, Letta makes the salient point: “By fully integrating financial services within the Single Market, the Savings and Investments Union aims to not only keep European private savings within the EU but also attract additional resources from abroad.”

Fast forward five months and Mario Draghi, the former European Central Bank President who more recently led his country from 2021 to 2022, released a long-anticipated report on EU competitiveness.

Draghi estimated that Europe must increase green, digital and defence investments by €800 billion per year if its economy is to remain competitive with China and the US. Without extra investment, the EU will have to “scale back some, if not all, of its ambitions” and be left behind, he warned.

At the heart of the report is a demand for building out the EU’s SIU as a major source of funding for the bloc’s political priorities.

On steps to help mobilise private finance, Draghi recommended transitioning the European Securities and Markets Authority from a coordinator of national regulators into a single regulator for all EU securities markets – like the US Securities and Exchange Commission – with the aim of cutting through nation states’ self-interest and pushing an agenda of securities investment across the region.

For this purpose, ESMA should be entrusted with exclusive supervision over nonbanks, including large multinational issuers, major regulated markets with trading platforms in various jurisdictions and central counterparties, the report said.

So far, member states have staunchly resisted proposals to centralise financial market supervision, which some view as a ruse by France, where ESMA is based, to gain greater control over their capital markets.

Draghi also addressed centrally cleared derivatives markets more directly, proposing that the EU should ultimately have a single pan-European clearinghouse and a single central securities depository for all securities trades. Consolidation of clearinghouses and CSDs should start with the largest players, with smaller ones joining afterward, the report said.

These suggestions largely landed with a thud, just as previous proposals for a single clearinghouse have dating back to the early 2000s.

WILL THEY, WON'T THEY?

The reports have defined the challenges and opportunities well. The media coverage has quoted all the key politicians across Europe, and the Commission’s von der Leyen has kept with tradition in labelling the SIU a critical policy priority.

Similar to Juncker, von der Leyen highlighted the SIU and the challenges ahead in her 2024 State of the Union Address. “While it is crucial to Europe’s future, achieving it requires overcoming deep-rooted challenges. The most significant obstacles are the fragmented financial regulations across member states and the resistance to harmonisation of certain financial market practices. It will take time, but we remain committed to making it happen.”

As this publication goes to print, much anticipation rests with the 19 March publication of the Commission’s dedicated SIU Action Plan. This is expected to cover the creation of single and low-cost saving and investment products at the EU level, measures for more unified supervision and recommendations on removing barriers to market-driven consolidation of post-trade infrastructure.

For Europe to secure a sustainable, future-ready financial system, the creation of an SIU must be more than just an incremental change – it must be a transformational leap.

Will nation states relinquish some regulatory sovereignty in the name of streamlining processes that might attract more capital and investment to the broader EU?

Only time will tell. ●



Read FIA’s paper
– Capital Markets Union
at a critical juncture.





The global electoral evolution continues in the US

Insights on what to expect from Washington and the Trump administration

BY KYLE GLENN

Voters in more than 70 countries went to the polls in 2024, in a year that proved difficult for incumbents to hold their offices.

The United States followed that trend, with Republican Donald J. Trump defeating Kamala Harris, the vice president and the Democratic Party's choice to succeed President Joe Biden.

Republicans also narrowly defended their slim lead in the US House of Representatives and wrested control of the US Senate after four years of the Democrats in power. This outcome provided the Republican party with unified control over the legislative branch of government, albeit with razor-thin margins in both chambers of Congress.

With his return to the White House, Trump has brought a more focused

approach and more detailed agenda than his first term. However, Republican control of Congress will not necessarily guarantee unanimous support for his legislative initiatives. Knowing this, expect the Trump administration to use its control over the executive branch of the government as an alternative path for implementing its agenda over the next four years.

EXECUTIVE ORDERS

Acting in his capacity as head of the executive branch of the federal government, the president has the authority to issue executive orders. These orders convey presidential directives to immediately shape policy and have the force and effect of law upon being signed (unless challenged in court). Executive orders offer the most efficient way for an incoming administration to begin implementing its agenda. However, they

can play out as short-term solutions, as the next administration often undoes them on the first day.

Trump took office not worrying about Congressional action on several items. Some of the executive orders signed by Trump highlight a significant shift in US energy policy and a focus on his goal of achieving US "energy dominance." Trump has signed executive orders removing the US from the Paris Agreement on climate change and removing regulations for oil and gas production, among others.

While the end run of executive orders helps implement an administration's policies, they only go as far as the personnel in place to execute them. After all, it takes leadership in the federal agencies to sort out the details and enforce the orders. And again, even with a Republican Senate, confirmation hearings take time.



PERSONNEL IS POLICY

The second most efficient pathway for an incoming administration to enact its policy and regulatory or deregulatory agenda is through the personnel nominated and confirmed by the Senate to lead agencies and departments of the federal government. Trump quickly announced nominees for a number of key roles including Treasury Secretary, Commerce Secretary, Attorney General and Securities and Exchange Commission Chair.

Once through the Senate confirmation process, these nominees can shift the direction of entire departments and agencies within the federal government – and surprisingly quicker than one might think. For example, Trump-appointed financial regulators may take a dramatically different approach to enforcement, the effects of which will be felt for years to come.

One specific example of an important pending regulatory issue is the rewrite of the bank capital frameworks put forward by the prudential regulators in 2023. Late in the Biden administration, the prudential regulators recognised that the rewrite needed a rewrite, and it now hangs in limbo. Michael Barr – the chief architect of the proposed changes to the bank capital frameworks – stepped down from his

position as Federal Reserve Board Vice Chair for Supervision on 28 February, and the Board will not undertake any major rulemakings until confirmation of a successor. As a result, the status of any future bank capital rulemaking is in question.

Knowing the importance of key personnel, it is worth noting the arduous Senate confirmation process. It begins with

Trump-appointed financial regulators may take a dramatically different approach to enforcement, the effects of which will be felt for years to come.

Additionally, during the campaign, President Trump branded himself as the most pro-crypto candidate to run for office. Expect any regulators nominated by Trump to embrace digital assets and to work with the White House, Treasury and Congress to provide the crypto industry with regulatory clarity. For certain, crypto companies welcome legislative and regulatory action that defines and cements the legitimacy of the industry.

private meetings between nominees and Senators, followed by Senate committee hearings, Senate committee votes and ultimately, a formal vote by the entire Senate. Generally cabinet level nominations take precedence. For many decades the Senate has deferred to the president on his nominees, but in recent years the process has become more contentious, and more of those final votes have seen the gap between ayes and nays shrink.



For independent regulatory agencies, like the Commodity Futures Trading Commission, it may take months until it has a nominated and confirmed chair. Until then, Commissioner Caroline Pham will serve as the acting chair of the agency, approved by her peers. While an acting chair of the CFTC holds much of the same authority as a Senate-confirmed permanent chair, acting chairs largely serve as caretakers if the president nominates someone else to chair the commission.

For priorities that cannot be accomplished by executive orders or agency action, the administration will turn to its final and most difficult pathway: the legislative branch of government.

CONGRESSIONAL AGENDA

Given the unified party control of the House, Senate and White House, Trump likely expects his fellow Republicans to follow his lead and approve his priorities. That will lead the administration to turn to Congress for implementing large priorities.

Republicans have been here before. They also enjoyed unified control of government for the first two years of the prior Trump administration. At the time, they used their majorities in Congress to roll back and tailor certain provisions of Dodd-Frank, to implement a sweeping tax cut package, and to expand opportunities for oil and gas exploration and development on public lands.

Congress likely will revisit those same priorities again in the coming months. A large portion of the 2017 tax reform package – a signature achievement of the first Trump administration – will expire at the end of 2025. The administration has outlined extending the tax provisions

as a top priority and will likely tie that extension to a broader budget bill, known as a reconciliation package. This legislative tool allows certain budgetary measures to pass with a simple majority in the Senate – avoiding the 60-vote threshold required to overcome the filibuster. Republican leadership has suggested they might include other items, perhaps immigration and increasing domestic energy production, in that legislation, too.

Just as Trump campaigned as the most pro-crypto candidate, many lawmakers prioritised the issue, too. At a bitcoin conference in July, Trump said, “From now on, rules will be written by people who love your industry, not hate your industry.” While new leadership in key regulatory agencies will reflect the administration’s support for crypto, the industry needs legislation to provide clarity about the federal regulatory framework over digital asset markets.

Last year, the US House passed a bipartisan bill that sought to provide regulatory clarity for the digital asset ecosystem. The bill would have greatly expanded the CFTC’s authority by providing it direct regulatory oversight over spot digital commodities. Without committing to specific language, the new administration and Congressional leaders in the House and Senate have set this type of legislation as a top priority.

Trump also established the US DOGE Service to modernise federal technology and software to maximise governmental efficiency and productivity.

While much remains unclear as this publication goes to print, the administration may have authority via executive order to implement some changes. Other, broader efforts likely would require Congressional action.



Caroline D. Pham was designated CFTC acting chairman on 20 January, 2025. She was sworn in as a CFTC Commissioner in April 2022.

For example, in December the Bloomberg editorial board called for merging the CFTC and SEC, the latest instance of a proposal that has been raised over many decades. Ultimately, this type of recommendation – even if officially endorsed by the USDS – would require congressional action to achieve.

With the aforementioned narrow margins in both chambers of Congress, the president, speaker of the house and senate majority leader will carefully consider each attempt, as passing legislation will require spending political capital in order to implement sweeping policy proposals with narrow margins in Congress.

THE NEW POLITICAL LANDSCAPE

Elections always bring significant changes to Washington, just as they did to many of the more than 70 countries with elections in 2024. Whether it is policy, people or both, it takes time for any incoming administration to adjust from campaigning to governing.

America is experiencing only its second president with non-consecutive terms. This new administration brings with it experiences, hard lessons and unique views on the process of governing.

At the same time, personalities, local politics and outside events always find a way to pose new challenges and disrupt even the best of intentions. Regardless, FIA sits well-positioned to work across party lines to represent the interests of our members and markets. ●

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ENROLL TODAY!

Will 24/7 futures markets become a reality?

Market participants discuss the opportunities and challenges of moving to round-the-clock trading in the cleared derivatives markets

BY KIRSTEN HYDE

Cryptocurrency markets trade 24 hours a day, seven days a week, which has led to discussions on whether other financial markets, including the cleared derivatives markets, will move in the same direction.

Proponents say moving to extended trading hours in the futures and options markets would align with the needs of global, interconnected markets where the news cycle is 24/7 in nature. Continuous trading would allow investors worldwide to manage risk in a real-time manner and engage with the markets at times convenient to them.

Such a move, however, would require significant adjustments in how market infrastructures, such as exchanges and clearinghouses, run their businesses, and even more so for intermediaries like brokers and clearing firms that handle customer orders. Equally important, market regulators are weighing the implications for how they would oversee markets and protect investors.

The Commodity Futures Trading Commission, the main regulator of futures markets in the US, is at the forefront of

this trend. The explosion of interest in futures on bitcoin has put a spotlight on the 24/7 nature of trading in the unregulated offshore cryptocurrency markets. To have a better understanding of this issue, the CFTC's Division of Clearing and Risk held a roundtable on 24/7 trading on 16 October 2024 with a range of market participants.

JB Mackenzie, general manager for futures and international markets at retail broker Robinhood Markets, told the CFTC that he is seeing a clear demand for round-the-clock trading from retail traders.

"Client demand for 24-hour, seven-days-a-week trading is already there – no question. World events don't stop because we're closing our marketplace," Mackenzie said.

"I do think there are questions and concerns around infrastructure getting to the point of being able to support 24-hour trading, but it's something that we're going to have to do. If not, other markets are going to evolve that might be unregulated," he added. "Our markets are going to have to evolve, but they won't get there overnight. It has to be in baby steps. If we don't start moving towards 24/7, other markets are going to get there first."

NOT JUST RETAIL

It is not just retail traders who have an interest in trading during extended hours. Physical hedgers could also benefit, said Dave

Olsen, president and chief investment officer at Jump Trading Group, at the CFTC event.

"Geopolitical events and the price of natural resources is an obvious opportunity for those who are user participants to manage their inventory and their production risk. We've seen hurricanes strengthen from category one to category five in 12 hours. If you have orange groves in Florida, having the ability to hedge your position while that is unfolding over a weekend instead of waiting 72 or 96 hours to go back into the market to hedge your crops could be beneficial to end-user participants," he said.

Speaking on a panel at FIA Expo in November 2024, Jeff Arnold, chief operations officer at ABN AMRO Clearing USA, said the asset classes that are seeing the greatest demand for 24/7 trading include the equities and commodities markets.

"In the equities markets, they are already talking about 22 hours, five-day trading. That's going to happen, and it will be seven-day trading eventually. Also, the oil markets and big commodities, and as these come, the derivative products that are based on these, will start to follow," he said.

"It's not an all or none, however. When we talk about 24/7 trading, we're not just flipping a switch and all markets for all things go live. It will be the highest volume, most liquid markets that will be available to clients, and then client demand will follow. As one product becomes profitable, the next product will come along," he said.

BUT IS IT WORTH IT?

Market participants have highlighted several concerns about a shift to 24/7 markets, citing technological demands, which would be immense, and questioning whether derivatives clearing infrastructure is ready for such a shift.

Those concerns came to the fore during FIA Expo, the futures and options industry's largest annual conference. The programme included a panel discussion dedicated to exploring both the commercial opportunities and the operational challenges inherent in a move to 24/7 trading.

"A big consideration is what do we mean by 24/7 trading?" asked Francesco Margini, chief product officer, cleared derivatives at ION, one of the main technology vendors for trading futures and options. "Do we mean extending trading and clearing to include a weekend, or do we mean having no downtime whatsoever throughout the year? The latter would entail significant technical challenges and the introduction of a new kind of operating model".

For established firms, a shift will require overhauling existing processes and systems, particularly those that rely on downtime to carry out maintenance. Typically, firms use weekends and evenings to perform upgrades to their infrastructure, operating systems and core applications.

"You bring the systems down, make the changes and then you go online again. If you narrow that window, or you remove that window altogether, you will need to implement a new operating model where trading and clearing environments are replicated in real-time to an alternative site.

Then you can flip over seamlessly to do the changes you have to do on the primary site," Margini said.

"Technically, this can be done, but there would be investments and costs associated with the additional infrastructure and environments that you need to operate, which adds to the cost that the industry already bears today for resilience, which is very significant."

Speaking on the same panel, Helen Fermor, the chief operating officer of

Logistics and basic staffing could also prove to be a thorny issue. Firms would need to ensure they have the right coverage in place, and finding suitable risk managers and traders willing to work unsociable hours could take time.

RISKS AND COSTS

Extending trading hours could also bring practical challenges to the post-trade process. Clearinghouses and clearing members have expressed concern about infrastructure readiness, particularly relating to collateral movement and settlement, and the potential for increased market risks.

Market participants have highlighted several concerns about a shift to 24/7 markets... questioning whether derivatives clearing infrastructure is ready for such a shift.

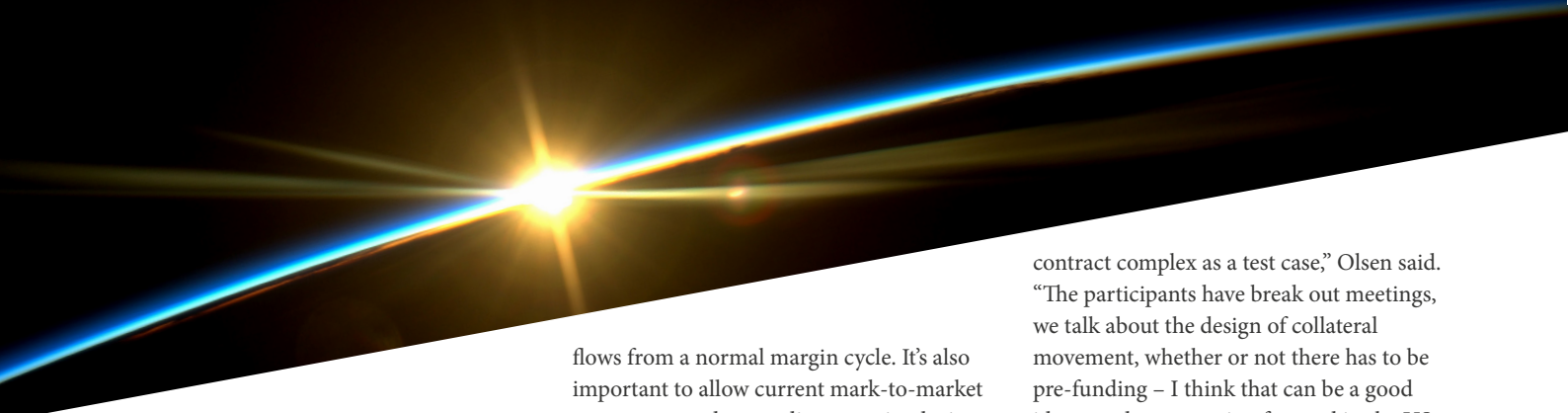
ICE Clear US, said the Intercontinental Exchange group already offers contracts that trade and clear 22 hours a day, but making the jump to 24-hour trading, seven days a week could take some time.

"We have a lot of contracts that are trading and clearing 22 hours a day, five days a week, which means we are already processing a lot of trades outside of standard business hours," Fermor said. "From a technology perspective, going to a Saturday or Sunday might not be a huge concern, but where there would be a technology lift is in that two-hour window when we do all our end-of-day processing and our technology releases. That jump to 24 hours would be quite big."

"There's a disconnect between when you can trade and when you can settle, and it's difficult to fully support 24/7 trading environments when we all know that the collateral cannot move at that speed," said Allison Lurton, FIA's general counsel and chief legal officer, speaking at the CFTC roundtable. "Specifically, it is either the DCOs [derivatives clearing organisations] or the FCMs [futures commission merchants] that are going to bear the risk of that gap."

Joe Guignan, chairman and chief executive of clearing firm Advantage Futures, agreed, adding that there could be considerable additional costs and risks.

"If the trading week increases by 40% there is going to be a significant cost to



every FCM. You are going to need 24/7 risk management people monitoring client positions. The illiquidity in the market will likely be profound at different times in different products, and that can lead to FCMs being forced to try to exit client positions because of a move in an illiquid market,” he said. “It exposes the FCM community to a lot more risks. Sometimes there are liquidity problems in the overnight markets, and those will only increase if you go to 24/7.”

In fact, there are concerns about illiquidity even within the current trading day. In Europe and the UK, some markets have gone as far as to consider reducing trading hours in an effort to concentrate liquidity.

As part of their response to a 2020 LSEG consultation on reducing trading hours, the Investment Association and the Association for Financial Markets in Europe argued that a shorter trading day would actually improve liquidity in Europe. “Rather than being thinly spread over an extended period of time, trades would be more evenly distributed over a shorter trading day,” the two associations argued.

Speaking on the CFTC roundtable discussion, Demetri Karousos, president of Nodal Clear, a clearinghouse in the US electricity markets, said he supports 24/7 trading and clearing but stressed that firms would need to have certain risk management practices in place.

“One of them is a very robust pre-trade risk regime that prevents any addition of risk beyond what the clearing member or the clearinghouse is comfortable with,” he said.

“There should also be the ability to track existing orders that have not yet hit but are still live. The check needs to be a full portfolio check, not just the electronic trading that day, and this would require real-time position monitoring. This is critical for proper risk management during the weekend when you don’t have frequent cash

flows from a normal margin cycle. It’s also important to allow current mark-to-market exposure to reduce trading capacity during a longer period like a weekend.”

On the other hand, moving to 24/7 trading could have some benefits for risk management by allowing market participants to adjust their positions over the weekend, Karousos said.

“You would have the ability to pick up the phone and call your trader, or, in the case of the clearinghouse, call your clearing member and say, ‘Hey, you’re getting a little long here, or you’re getting a little short here. Could you reduce your exposure?’ and you can do that over the weekend in a measured, thoughtful manner, which you can’t do today. Weekend trading would actually allow for risk diminution.”

INCREMENTAL STEPS

Momentum in 24/7 trading is building, but incremental steps must be taken to reach the final destination, market participants say.

“We know the endgame here,” said Jump Trading’s Olsen. “Markets will be trading 24/7 in the not-too-distant future. We are trading 24/7 today. A lot of Middle Eastern markets are open on the weekend. India has Sunday sessions that spring up from time to time. The risks don’t go away on Saturday and Sunday, and those participating in the market are interacting with those today but in other markets that perhaps are less regulated.”

Olsen called for a measured approach from the CFTC in moving forward on the idea of creating a framework in the US to allow round-the-clock trading.

“What I would suggest is that, under the purview of the CFTC, we pick a pilot market so it’s not a big bang, where everybody has to be ready and the entire global infrastructure needs to be set. Instead, you allow trading of one

contract complex as a test case,” Olsen said. “The participants have break out meetings, we talk about the design of collateral movement, whether or not there has to be pre-funding – I think that can be a good idea – and start moving forward in the US to catch up with a lot of where the global market is.”

Another area of focus could be on tokenisation. Speaking at FIA Expo, CFTC acting chair Caroline Pham said a subcommittee of the CFTC’s Global Markets Advisory Committee had reviewed the possibility of extending the use of distributed ledger technology into collateral management. This technology could be used to allow clients and clearing firms to move collateral and meet margin calls 24/7.

“We have been looking at the opportunities that blockchain technology could provide to enable 24/7 trading and instant settlement and clearing,” Pham said. “You need a solution for the cash line as banks don’t work 24/7. Until there is a suitable bearer instrument that can move at that 24/7 pace, it’s going to be very challenging to enable 24/7 trading.”

Moving to continuous trading could be a monumental shift for cleared derivatives markets. However, for now, there are plenty of obstacles to overcome before access to round-the-clock trading becomes a mainstream reality. ●



TAIFEX achieves new heights

In 2024, TAIFEX achieved record-breaking volume and strategic global expansion

The Taiwan Futures Exchange (TAIFEX) delivered outstanding results in 2024, setting a new record for annual trading volume while solidifying its position as one of the leaders in Asia's derivatives markets through innovative products and global strategies. Amid a challenging global environment, TAIFEX remains dedicated to offering a comprehensive suite of risk management tools to meet the evolving needs of both domestic and international market participants.

MARKET RESILIENCE DRIVEN BY TECHNOLOGY

In 2024, Taiwan's economy demonstrated remarkable resilience, driven by the robust performance of its technology sector. Investments in key areas, such as semiconductors, cloud computing and artificial intelligence, underscored Taiwan's essential role in global supply chains and spurred sustained demand for technology-related derivatives.

Against this backdrop, TAIFEX provided essential tools to support market participants in capturing opportunities and managing risks. In 2024, TAIFEX achieved a record-breaking 395 million contracts in annual trading volume. Flagship products, such as TAIEX Futures (TX) and Mini-TAIEX Futures (MTX), delivered a combined average daily volume (ADV) of 475,000 contracts, marking a 23% year-on-year increase.

Single stock futures (SSF) also performed strongly, achieving an ADV of 273,000 contracts, up 26% year-on-year. Meanwhile, TAIEX Options (TXO) maintained its role as a vital hedging tool, achieving an

ADV of 800,000 contracts to support a wide range of portfolio strategies.

INNOVATIVE PRODUCTS EXPANDING MARKET REACH

TAIFEX demonstrated its ability to adapt to market demands with the successful launch of several innovative products in 2024. The Micro TAIEX Futures (TMF), introduced in July 2024, gained significant traction due to its smaller contract size. It achieved an ADV of more than 143,000 contracts, accounting for 8.8% of the exchange's total trading volume.

In December 2024, TAIFEX launched the Taiwan Mid-Cap 100 Futures (M1F), targeting mid-cap companies ranked 51st to 150th by market capitalisation. This product offers market participants exposure to a broader range of industries, helping to mitigate concentration risks in large-cap stocks and supporting portfolio diversification. These initiatives reflect TAIFEX's strategic efforts to expand opportunities for both institutional and retail investors.

STRENGTHENING GLOBAL PRESENCE THROUGH NIGHT TRADING

TAIFEX continued to enhance its night trading offerings, featuring key products such as TOPIX Futures, United Microelectronics Futures and US Treasury Bond ETF Futures. These extended trading hours enable global participants to respond more flexibly to market movements across time zones. Last

year, night trading volumes exceeded 132 million contracts, representing a 35% year-on-year increase.

The growth in night trading has also driven greater international participation, with foreign investors accounting for 34% of total trading volume, up from 29% in 2023. This development underscores TAIFEX's effectiveness in fostering a globally connected marketplace and its status as a trusted hub for international derivatives trading.

POSITIONED FOR SUSTAINABLE GROWTH IN 2025 AND BEYOND

Looking ahead, TAIFEX remains focused on addressing external challenges, such as geopolitical uncertainties and market volatility, through continuous innovation and global integration. Upcoming initiatives include the introduction of Friday-expiring TAIEX Options (TXO) to provide more flexible hedging strategies and the expansion of the SSF lineup. Additionally, TAIFEX plans to enrich its ETF derivatives portfolio with futures on cross-border ETFs, actively managed ETFs, multi-asset ETFs and REITs.

TAIFEX will also broaden its night trading sessions to include more products, further enhancing global price discovery and strengthening Taiwan's integration with international markets.

By aligning its offerings with market trends and focusing on global accessibility, TAIFEX continues to establish itself as a reliable and competitive platform for traders worldwide. TAIFEX's commitment to innovation and market responsiveness position it well to support its trading community in navigating challenges and exploring opportunities in Asia's dynamic derivatives landscape. ●



Will tokenisation move from pilot programmes to prevalent practice?

The promise of faster, safer collateral management continues to beckon

BY MARK HAYES

Despite significant technology advances throughout the settlement cycle, a major pain point continues to challenge the timely resolution of transactions: collateral management and transfer.

While billed as a reliable, secure and transparent solution when introduced in 2017, tokenisation has not materialised on a commercial scale.

However, firms throughout the transaction supply chain continue to invest in and experiment with the technology. And it continues to earn headlines with small wins. Perhaps with some scale, the technology will take off.

TALKING TOKENS

Delivery of mail by post office versus email offers an oversimplified window into the appeal of relying on tokens in the settlement process.

Currently, the settlement process of transferring assets and collateral often takes multiple days to finish, due to the number of “mail carriers” needed to handle the funds.

The tokenisation of assets refers to the process of issuing a digital token

that represents ownership in a real asset. Through digitalisation, it becomes eminently more mobile. Utilising distributed ledger technology, the token is issued on a distributed ledger, and the transfer of ownership is recorded on that ledger.

Once an asset becomes tokenised, “atomic” settlement becomes possible (i.e. simultaneous and instantaneous), akin to clicking send on an email, as opposed to the current multi-day process. This would mean more liquidity due to having less collateral tied up for days. It also likely would reduce or potentially eliminate counterparty risk.

Additionally, one can make tokens “smart,” by programming the logical steps of a process into the code to automate the transfer. This automation option adds to the efficiency with which it could operate.

DLT: THE ULTIMATE VERSION CONTROL

Anyone who has collaborated (or tried to) on a document at the office knows the pains of version control. Perhaps a colleague downloaded a copy to their desktop to work offline. Maybe someone

attached a document instead of linking to it. Reconciling those versions often leads to missed edits or outdated information.

Just as cloud services synch document edits in real time at the office, DLT offers a decentralised environment for recording the transaction of assets.

Often referred to as blockchain technology, the transparent process allows all parties of the transaction to concurrently contribute to and define the parameters of the deal. It also allows all parties involved to see who uses and/or modifies the ledger and ensures each party has access to the current version. Throughout the process, it creates an immutable database – the all-important permanent record.

Each of these characteristics provides a high level of trust among the parties involved and nearly eliminates opportunities for fraudulent activities to occur in the ledger.

“In allowing for the simultaneous exchange of two assets in real-time, and enabling the exchange of information and value to happen in a single step, this can help eliminate settlement risk, duplicative reconciliation, and increase the efficiency of transaction processing,” said Leong Sing Chiong, deputy managing director of markets and development at the Monetary Authority of Singapore, at the Layer One Summit on 4 November 2024. “With a programmable platform that allows for pre-determined conditions to be encoded with the tokenised asset(s), this can also facilitate greater straight-through processing in capital market transactions, and greater efficiency in asset servicing.”

Leong cited a use case that combined tokenising money market funds and foreign exchange. “A solution developed by Citi and Fidelity International combined the properties of two distinct asset classes - tokenised money market funds and FX swaps. This solution seamlessly combined yield generation of tokenised MMF tokens with real-time digital currency risk hedging.”

However, challenges exist related to interoperability. With a lack of standardised protocols, compatibility issues may arise between different DLT platforms.

Simon Millington, head of business development at CloudMargin, a technology vendor that provides collateral management solutions, highlighted this in a discussion at the 2024 FIA forum in Frankfurt.

“We’re looking for a single source of truth and transparency, not just across the industry, but within firms as well,” Millington said. “We all know in financial services that you can have multiple versions of the same thing in multiple different systems. Where it’s difficult is getting a single record, a single truth. Then, fundamentally, you don’t have reconciliation breaks in your own platforms as well.”

STARTING SMALL

As with any new technology projects, sandboxes offer a secure, isolated environment to test and analyse code and applications without affecting the rest of a system.

The tokenisation of assets refers to the process of issuing a digital token that represents ownership in a real asset. Through digitalisation, it becomes eminently more mobile.

The largest post-trade organisation in the world, the Depository Trust & Clearing Corporation, announced its sandbox, DTCC Digital Launchpad, in October 2024.

“We’re launching an industry sandbox to try to get the entire industry to start to collaborate and cooperate, where we can build a common infrastructure so we can accelerate the velocity of adoption in this space,” Nadine Chakar, global head of DTCC Digital Assets, said in November during a panel discussion at FIA Expo. “We’re trying to collapse a lot of the infrastructure that propagated over time. We believe that with common infrastructure, common rules and a

common mission and purpose, we could accelerate the adoption of tokenised assets within the US market.”

JP Morgan has developed its own privately operated blockchain, Onyx. It includes a JP Morgan coin, digital finance and its tokenised collateral network. In comments made at the FIA forum in Frankfurt, Katie Emerson, EMEA head of agency lending and collateral management sales, said the bank has experienced several benefits from the platform.

She explained how the buy side has seen the benefits when the bank went live with tokenised money market funds. There was additional utility for the assets that were otherwise trapped and not really used as collateral.

“The UK LDI (liability-driven investment) crisis and mini budget gave us real focus and emphasis on where clients were struggling to redeem out of money market funds, move the cash, the

settlement timeframes and the cycle around that. So, we felt that money market funds were a good use case as the first asset class to tokenise,” Emerson said.

The next steps for JP Morgan? More buy-in. “As we’ve tokenised and successfully mobilised money market funds as collateral for non-cleared derivatives, we’re looking to grow the network effect. We need to grow the participation on our tokenised collateral network. It only really works if you have more people joining it, on both the collateral provider and collateral receiver side.”

Where they have developed interest on the buy-side, Emerson believes JP Morgan’s efforts to tokenise other asset classes,



particularly US Treasuries, will entice the sell-side.

OPPORTUNITIES

In thinking about it from a client perspective, Christoph Hock, head of tokenisation and digital assets at Union Investment, put it simply during the panel discussion at the FIA forum in Frankfurt, “Looking at tokenisation of traditional assets, it’s about higher speed, it’s about lower cost, it’s about lower risk, and it’s creating more efficiencies.”

“Tokenisation of funds is a key theme in our industry, with tokenised money market funds which might settle in the future. Also, a T+0 basis can be used as collateral in crisis situations,” he added.

Similarly, Chakar laid out three opportunities she sees for tokenisation in the cleared derivatives markets. Notably, she mentioned the velocity of collateral and margin and the ability of expanding that inventory. Related to tokens and smart contracts, fully automating the life cycle of

the trade to encapsulate data compliance in it will make the environment more transparent and less risky, too. As she put it at Expo, “By animating the entire life cycle, you demystify, if you will, the opacity that’s behind derivatives.”

Efthimia Kefalea, senior vice president for clearing design at Eurex Clearing AG, remarked about the efficiencies of tokenisation at the FIA forum in Frankfurt, from operational to cost efficiencies and reduced settlement times. She referenced the significant resources invested in past efforts to reach T+0 overnight and how tokenisation achieves that faster and much cheaper.

Eurex has learned a lot from its various pilot projects and initiatives. Coming out of those experiences, Kefalea noted a few key takeaways. “A major one: counterparty credit risk is not really impacted by the use of different technologies. No matter if it’s a conventional technology or new technology like blockchain, the counterparty credit risk remains.” Additionally, in testing their

▲ Tokenisation panel discussion at FIA Expo 2024: (left to right) Kari Larsen, Willkie Farr & Gallagher; Nadine Chakar, DTCC; Leo Mizuhara, Hashnote; Mike Reed, Franklin Templeton Investments; Tom Sullivan, Société Générale.

clearing and risk models, “We found out that our clearing and risk models were robust. We identified no need to adapt any of them.”

REGULATION REQUIRED?

As with any new technology, questions remain about the industry’s ability to innovate without new regulations. And, if regulators must act, how can the industry help steer that movement toward uniformity and cohesion?

“Tokenisation is just a wrapper. The collateral is the collateral. We should be able to use tokenisation tools – it’s just technology – there should be no need for rule changes [in the US],” Tom Sullivan, managing director and head of business

development for digital assets at Societe Generale, said during the tokenisation discussion at FIA Expo. “Market participants should be able to use existing policies and practices, etc., to identify and assess the risks and manage them with respect to DLT, as they would with any other technology they use within their firms.”

He added, “We expect regulators to be tech neutral, that they should not be regulating technology. They should be regulating the space that they’re in.”

Mike Reed, senior vice president and head of digital asset partnership development at Franklin Templeton Investments, suggests working together toward a shared outcome. Speaking alongside Sullivan and Chakar, he described how his firm has worked with regulators in the US to issue a tokenised money market fund.

“It’s much better to work with the regulators in a collaborative way than it is to battle with them,” he said. “So, we’ve

will be explicit guidance, because today, the CCP regulation does not really mention anything about new technologies. And of course, this has to change,” Kefalea added.

At FIA’s 2024 Asia conference, Tuang Lee Lim, assistant managing director for capital markets at MAS, acknowledged the need for clarity.

“Specifically for tokenisation, we recognise that there needs to be more legal and regulatory certainty on how certain activities are treated in the blockchain and whether they have the force of law. MAS has commenced a review of existing rules and regulations pertaining to the tokenisation of capital markets products, with a view to removing regulatory impediments and providing further guidance to the industry where necessary.”

FUTURE FOCUSED

Optimism reins when speaking with tokenisation advocates. At the same time, they agree more work lies ahead.

1) liquidity, 2) foundational infrastructure, 3) standardised frameworks and protocols, and 4) common settlement assets.”

From a CCP perspective, Kefalea spoke about the challenge of some clients wanting tokenisation and blockchain while others staying on the current path. “As a financial market infrastructure, we have to somehow integrate both worlds. We will have a long period of time where we have to integrate the legacy systems together with the new technology systems, and to do that integration in a seamless way for our clients. This will definitely increase costs, at least for that period of time. And it may take decades.”

Perhaps the clearest outlook comes from Hock, who likened adoption to a marathon. “We are probably at kilometre 10 of the marathon. There’s still a way to go, but I think tokenisation, in the long term, will become the standard.” ●

+ MORE ONLINE

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As with any new technology, questions remain about the industry’s ability to innovate without new regulations. And, if regulators must act, how can the industry help steer that movement toward uniformity and cohesion?

done things like hosted webinars and provided educational material.”

Another advantage of using DLT is that the transactions are visible to regulators in real time – a key theme in Franklin Templeton’s discussions with regulators. “Having collaborative discussion back and forth with [regulators], and then also finding a hook where it’s beneficial for them as well, helps,” Reed added.

Eurex looks to work with regulators on tokenisation. “We need regulation to adapt and allow CCPs also to be an active player in digital ecosystems. We expect that there

“There’s a few challenges that come up when I’m speaking to clients,” Emerson from JP Morgan says. “We need to persist. We’re going to get there, but it’s taking longer than we thought. We have certain clients waiting until they see more critical mass. Legal clarity and legal complexity also comes up.”

To reach the scale needed, Leong laid out the pieces of the puzzle as MAS views it. “We think there are four jigsaw puzzle pieces that need to come together to support industry-wide deployment of tokenised assets:



US Treasury market gears up for central clearing

Market participants wrestle with a complex array of access models

BY WILL ACWORTH

Banks, broker-dealers, asset managers and other participants in the US Treasury market are scrambling to comply with a regulatory mandate to step up their use of central clearing.

Clearing will be mandatory for a broad swathe of market participants in both the cash and the repo markets, and the deadlines are approaching fast – December 2025 for trading in Treasury securities and June 2026 for repurchase transactions. Market participants are urging the Securities and Exchange Commission, the agency that imposed the mandate, to give the industry more time to prepare, but clearing experts warn that even if the deadlines are delayed, work must begin now on this transformational change to market structure.

Today, roughly one fifth of the market’s trading volume is cleared through the Fixed Income Clearing Corporation, the only clearinghouse that currently offers clearing for the US Treasury market. The rest of the market relies on the bilateral model for trading, and many participants have little familiarity with the operational, financial and technological requirements of central clearing.

The adoption of central clearing, therefore, will require market participants to implement a host of changes to their processes, systems

and counterparty relationships. Making matters more complicated, two other clearinghouses – CME Clearing and ICE Clear Credit – are preparing to offer clearing for the Treasury market, and each one of the three clearinghouses intends to offer several access models.

THE ROAD AHEAD

For the regulators, the goal is to make the US Treasury market more resilient in case of a shock. Senior officials at the Federal Reserve and the Treasury Department have been concerned for many years about the fragile nature of liquidity in the Treasury market, and they see central clearing as an important step in addressing that issue.

Michelle Neal, the former head of the markets group at the Federal Reserve Bank of New York, expressed that concern in an October 2024 speech given at a forum on Treasury and repo clearing organised by FIA. She explained that in today’s market, the clearance and settlement of trades is “fragmented” across many counterparties, and she emphasised the benefits from migrating more trades into central clearing. She also stressed the complexity of the transition, and she urged attendees to start taking concrete steps immediately.

“Market participants will need to ensure that they have robust risk management





frameworks, legal agreements and operational infrastructures in place,” Neal said. “As we have observed with other complex industry transitions, such as the reference rate transition and the implementation of swaps central clearing, all of this takes time. Market participants should be taking concrete steps now to prepare for expanded central clearing in the Treasury market, and the New York Fed and others in the official sector will be monitoring this progress.”

The timing may be in flux, however. The election of Donald Trump as US president and the resulting change of administration has brought new leadership to the SEC. Gary Gensler, who pushed the clearing mandate through in December 2023 when he was SEC chairman, stepped down, and industry leaders are optimistic that his replacement will be more receptive to their calls for more time to prepare.

DODD-FRANK REDUX? NOT QUITE

In some respects, the transition to central clearing in the US Treasury market will be similar to what the derivatives markets went through a decade ago. After the financial crisis of 2008, the US Congress passed the Dodd-Frank Act. That law mandated central clearing for interest rate swaps and other over-the-counter derivatives. Implementing that clearing mandate also required a major overhaul of trading infrastructures and post-trade workflows, given that most trades at that time were executed bilaterally between dealers and their clients.

It took time, but the transition to central clearing in the OTC derivatives market was achieved. According to the Bank for International Settlements, the global interest rate swap market moved from roughly one-third cleared in 2010 to roughly two-thirds cleared in 2017. Since then, the ratio has hovered around 80%.

This transition will differ significantly in several ways, however. For starters, there are three clearinghouses competing for a share of the market. Although competition can drive innovation and efficiency, it also makes the transition more complicated because market participants will need to evaluate all of the available choices.

Adding to the complications, the SEC’s rules for Treasury clearing are not as prescriptive as the rules were for OTC derivatives clearing. Legal experts predict that this is likely to lead to more variation among the clearinghouses in how they implement the Treasury clearing mandate, and therefore more complexity for firms navigating the various options.

In addition, the cost of clearing may vary from one clearinghouse to another, which in turn will affect the cost of trading. Some market participants have speculated that could lead to the creation of separate order books, with different sets of prices and differing levels of liquidity depending on where a trade will be cleared.

“DONE-AWAY” TRADING – ESSENTIAL FOR PTFS

Second, there will be more variations in how clients access clearinghouses. In most other markets that have central clearing, the standard model is “agency clearing,” meaning that the clearinghouse member that clears the trade acts as an agent for the client. In the Treasury market, however, the majority of the clearing that happens today is done through “sponsored clearing.” In this type of model, the customer becomes a member of the clearinghouse but relies on one of the full members, typically one of the large dealer banks that it trades with, to sponsor its access.

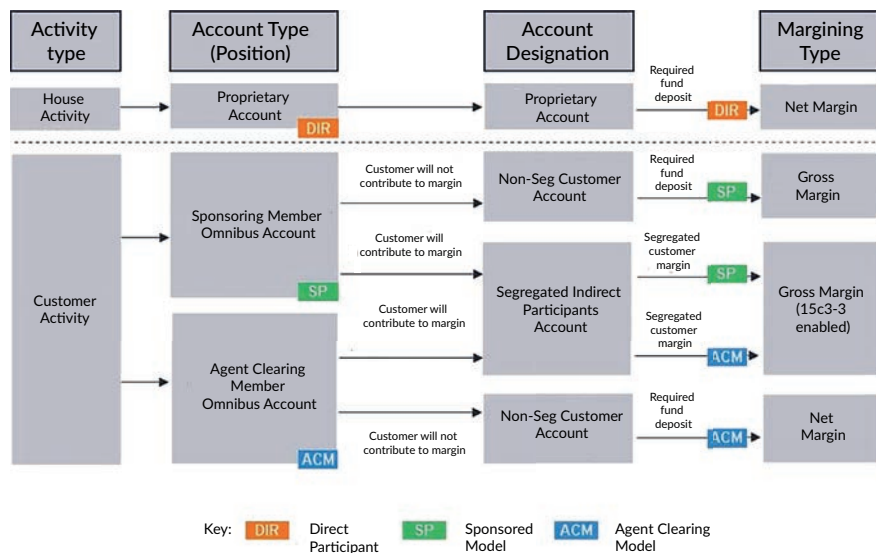
Although the clearinghouses have not yet finalised their offerings, at least two of them – FICC and CME – have said that they plan to offer both access models.

A second important variation in access models relates to the execution of trades. Currently, most trades that are cleared at FICC are “done-with,” meaning that the counterparty to the trade is also the entity that clears the trade. In effect, this bundles clearing with execution, and the cost of clearing is typically embedded in the bid-ask spread.

In contrast, in other markets with central clearing, the market structure allows “done-away” trading. This model allows market participants to execute anonymously with many counterparties and then submit trades to a separate firm for clearing. All three clearinghouses eyeing the Treasury market

Example of account structures available at FICC

FICC account structures by activity and margining types:



Source: U.S. Treasury Central Clearing, Industry Considerations Report, published by SIFMA and Ernst & Young, November 2024

– FICC, CME and ICE – are preparing to support this type of access model. The done-away model will be essential for one particularly important customer segment – the principal trading firms that provide liquidity to the market. These firms account for roughly half of the trading volume in the interdealer segment of the cash Treasury market, which is the source of the liquidity that supports dealer-to-client trading. The PTFs will be required to clear those trades once the deadline arrives, and they say that the done-away model is essential for their continued participation in the market.

Moving to this model will require substantial changes in how the market operates. For example, the market will need new ways to connect customers, executing brokers and clearing firms so that trades can be submitted to clearinghouses no matter whether they are executed electronically or via voice. In addition, the clearing firms will need a way to set limits on the amount of risk they take on board and apply those limits before trades are executed.

A further complexity is that the segregation of customer funds is optional. In today's Treasury market, there is no segregation of customer funds; customer

collateral is mingled with the “house” account of the clearing member. That type of account structure has some advantages, and FICC plans to continue offering it. But it also has some disadvantages, and all three clearinghouses plan to offer various forms of customer fund segregation. The clearinghouse members will need to support both types of account structures, which will increase the operational complexity.

CLEARING CAPACITY

What the clearinghouses offer is only half the story, however. For central clearing to work, the clearinghouses need firms that are willing to enter the business of clearing trades for market participants.

There are more than 50 firms that provide this service in the US derivatives markets. But it is far from certain that these firms will add Treasury and repo transactions to their clearing business. Banks, in particular, are running into limits on the volume of trades they are willing to clear, mainly because the capital requirements put in place after the financial crisis of 2008 have made it more expensive to offer this service.

The swaps clearing landscape shows how the constraints on banks have limited the

capacity for clearing. Only 15 firms are currently clearing swaps for clients in the US, and the top five have 75% of the market.

Clearing firm executives are now trying to determine if the economics of Treasury clearing justify a commitment to the business. Part of the challenge is capital rules include provisions that recognise the risk-reducing effects of netting across derivatives, but not for netting sets that include both cash Treasuries and derivatives. Clearing firm executives have warned that without some relief from the banking regulators, banks will hesitate to make a big commitment to this new line of business.

On the other hand, the adoption of central clearing could pave the way for a significant reduction in margin requirements for customers that trade both futures and cash. CME and FICC have an agreement in place that allows for cross-margining, meaning that Treasury futures cleared at CME can be combined with Treasury securities cleared at FICC for the purpose of calculating margin.

At present, that programme is only available for firms that are members of both clearinghouses, but the changes that FICC is making to its rules – the introduction of customer fund segregation in particular – will make it possible to extend the benefits of cross margining to customers such as hedge funds.

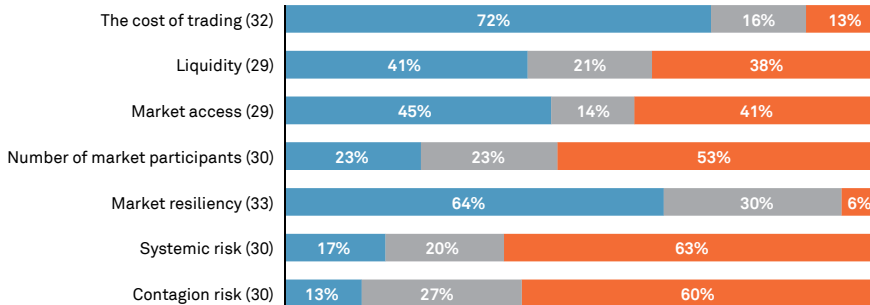
HEAVY LIFT

With the deadlines looming, market participants are scrambling to assess their options and determine what steps they will need to take. Those steps include establishing relationships with clearing members, working out what type of account structures work best for their needs, and setting up the systems necessary to calculate margin requirements and post collateral within the timeframes set by the clearinghouses. Equally important, firms that are planning to offer clearing services need to develop the systems necessary to route trades from execution into clearing, set limits on the amount of risk they are willing to take, collect and post margin at the clearinghouses and manage all the other post-trade processes involved in central clearing.

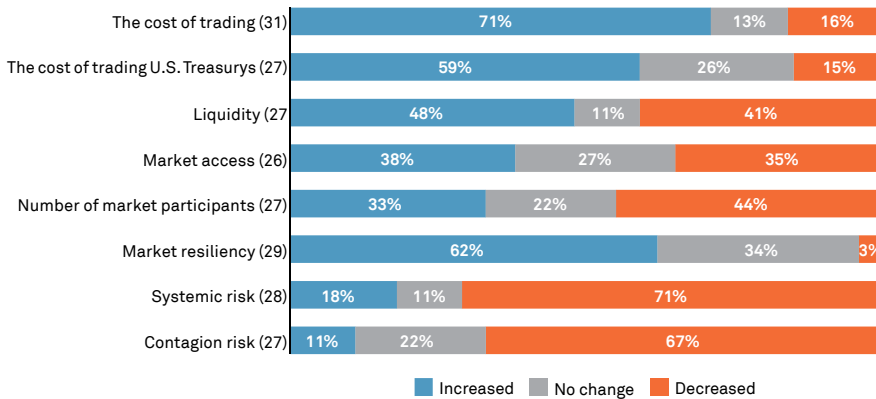
Several industry trade associations have formed working groups to accelerate the preparations. For example, the

Expected impacts of mandatory Treasury/repo clearing two years after implementation

Impact of Treasury clearing mandate



Impact of repo clearing mandate



■ Increased ■ No change ■ Decreased

Note: Numbers in parentheses represent number of respondents. Totals may not equal 100 due to rounding.
Source: Coalition Greenwich 2024 U.S. Treasury Clearing Study

Securities Industry and Financial Markets Association, the main trade association for broker-dealers, has issued a 100-page report on the various considerations and activities that market participants should use as they prepare for Treasury and repo clearing. SIFMA also has drafted model documentation for done-with relationships and is working on similar documentation for the done-away model.

HIGHER COST OF TRADING

What will be the long term impact of the clearing mandate? With so many uncertainties about how the mandate will be implemented, it is difficult to know for certain. At this point, however, the market is expecting the cost of trading to increase.

That was the finding from a 2024 survey conducted by Coalition Greenwich, a

consulting and market intelligence firm. The survey, conducted in the second quarter of 2024, found that 72% of the respondents expected the cost of trading Treasury securities to increase, and 53% expected the number of participants in the market to decrease.

With respect to the purpose of the clearing mandate, a clear majority expected the Treasury market to become more resilient and less prone to systemic risk – the outcome desired by the regulators.

With respect to the impact on liquidity, however, opinions were mixed – 41% expected liquidity to rise, 38% expected it to fall, and 21% expected no change. ●



Power markets come of age

Derivatives markets in power have seen significant expansion in recent years

BY CLIVE FURNESS

In a world where regulation drives and defines all areas of market development, it is something of a surprise to find a traded asset class (or part of one) that has grown up largely through deregulation. Yet, this is the case in the utility markets; particularly electricity.

In the 1980s, significant regulatory changes moved the industry away from the vertically integrated structures that existed to more liberalised markets where producers and consumers had freedom to choose with whom they contracted. The US and Nordics, along with the UK, led the way. And with the deregulation came, quite naturally, the opportunity for exchanges to develop around these nascent markets.

A LOOK AT THE POWER MIX

The chart on the right demonstrates this evolution of generation moving from solely hydrocarbons (natural gas, coal and some oil) to nuclear and hydro. From around 2000, renewables like solar, bioenergy and wind added to the mix. But more than two decades later, they had not shifted the dominance of hydrocarbons as the primary feedstocks for electricity production.

Despite the significant investment in and development of renewable generation, it only accounts for 16% of global generation by type, with hydrocarbons maintaining the lion's share at 60%. And that 60%

stranglehold represents only a 4% reduction since 1985, despite the discussions and action/inaction to address global warming and the much-vaunted energy transition.

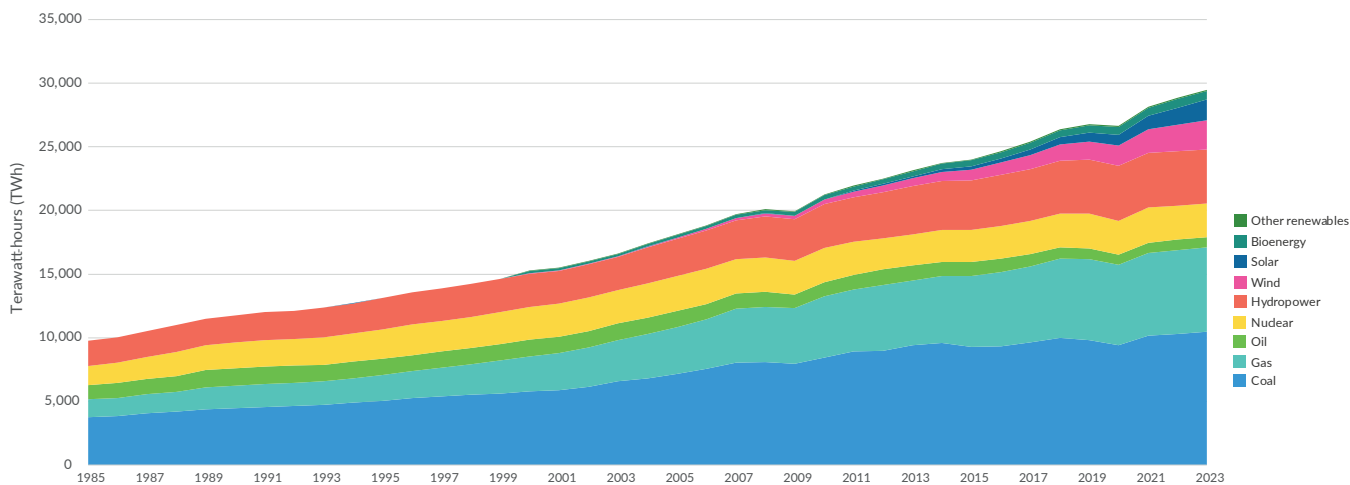
The key change is, of course, demand. Generation volumes have all but tripled between 1985 and the end of 2023. This has created a race to keep the consumption supplied and led to the maintenance and development of hydrocarbon-based generation to accomplish it. In addition to the high-level growth statistics, asymmetric generation types in many countries present opportunities for traders in order to get a true picture of today's diversified electricity landscape, not to mention trying to navigate it and benefit appropriately.

A few geographical examples help explain the 2023 generation figures. Whilst France generates 65% of electricity from nuclear power, 6.5% from hydrocarbons, 11% from hydro-electric and 16% renewables, its neighbour Germany maintains a higher level of hydrocarbon and renewable sources accounting for 41% and 49% respectively with renewables at 15% and hydro-electric at 4%.

In North America, the difference between the US and Canada is equally as marked for the same period, with the US generating a massive 60% of electricity from hydrocarbon sources compared to Canada's 19%. Conversely, Canada's 57% generation from hydroelectric dwarfs the US's 5%.

Electricity production by source, globally

Measured in terawatt-hours¹



Data source: Ember (2024); Energy Institute - Statistical Review of World Energy (2024)

Note: "Other renewables" include waste, geothermal, wave, and tidal.

OurWorldinData.org/energy | CC BY

1. Watt-hour: A watt-hour is the energy delivered by one watt of power for an hour. Since one watt is equivalent to one joule per second, a watt-hour is equivalent to 3600 joules of energy. Metric prefixes are used for multiples of the unit, usually: - kilowatt-hours (kWh), or a thousand watt-hours - megawatt-hours (MWh), or a million watt-hours - gigawatt-hours (GWh), or a billion watt-hours - terawatt-hours (TWh), or a trillion watt-hours

MARKET COMPLEXITIES

Combining the different generation types with the ability to trade across borders, growing availability of battery/storage solutions and the near real-time granularity of delivery to the power grids makes the outcomes look somewhat bewildering. As J.C. Kneale, vice president North American gas and power at Intercontinental Exchange puts it, "the number of potential [price] outcomes in the physical market due to intermittency is significantly greater than it has ever been and has driven volatility to new heights."

There are now 36 power exchanges globally helping market participants manage this volatility, covering spot and derivatives.

Spot markets have developed significantly over the past ten years. The intricacy of the interconnected physical within-day and day-ahead markets has become such that algorithmic trading helps manage it. This algorithmic trading differs from the futures market by utilising algorithms to manage long or short exposures to each window for physical

delivery close to real-time. Companies, such as Germany's EsForIn, have led this innovation, managing multiple algorithms for diverse companies, each of which has (potentially) a 15-minute delivery window for each 24 hours of every day of the year.

Andreas Hoff, Trayport head of product, sums up the impact of algorithmic trading in the spot power markets succinctly. "We are now at a stage where it's really hard to compete in spot power if you don't have

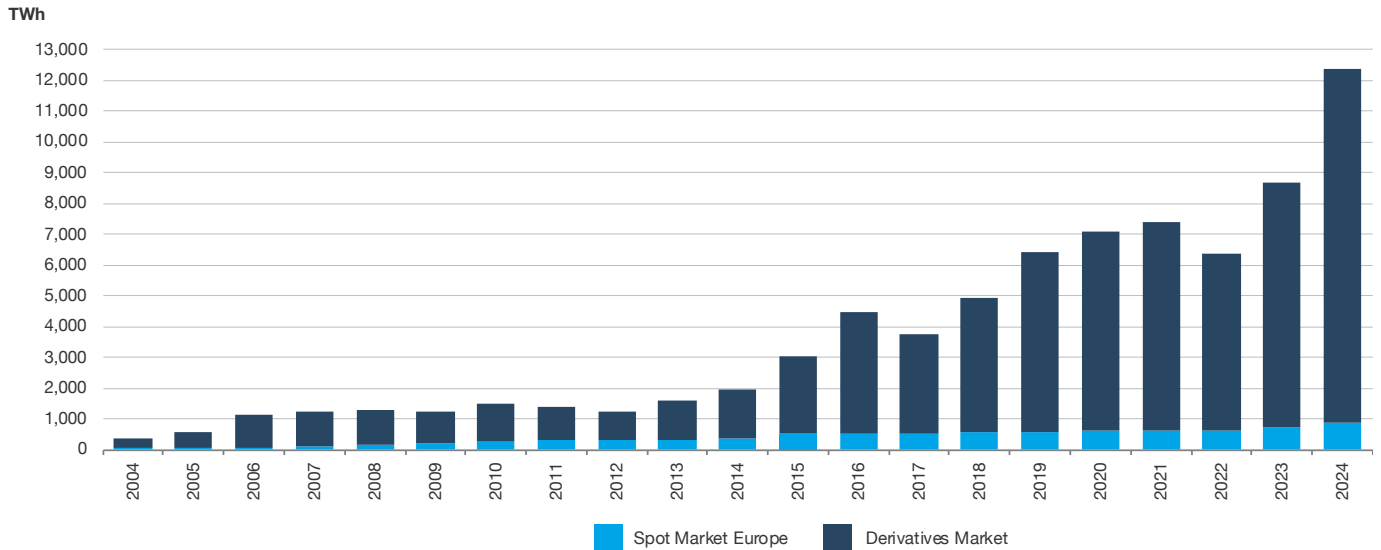
an algo." Market participants estimate around 50% of all intra-day continuous traded power volume across Europe is now executed through algorithms. Some markets, like Germany, report significantly higher percentages, reaching up to 73% algorithmic trading volume on the EPEX Spot platform.

"We have also seen some high frequency traders entering the power market on the derivatives side, having started trading

"The number of potential [price] outcomes in the physical market due to intermittency is significantly greater than it has ever been and has driven volatility to new heights."

J.C. KNEALE, VICE PRESIDENT NORTH AMERICAN GAS AND POWER, INTERCONTINENTAL EXCHANGE

Trading volumes on the power spot and derivatives market



Note: from 2017 onwards includes Nodal US power derivatives market; from 2020 onwards includes Japan derivatives market

in natural gas derivatives markets,” Hoff continues.

From a derivatives perspective, volumes have grown significantly as the chart above from the European Energy Exchange shows.

UNDERSTANDING THE MARKET GROWTH

Peter Reitz, EEX CEO, comments on some of the reasons behind the growth in derivatives. “Clearing and credit risk are

the key. When I took over as EEX CEO 13 years ago, the market was 90% OTC and 10% cleared. Now it is virtually the other way around.”

“The Russia/Ukraine conflict-fuelled energy crisis that started in 2022 saw the percentage of cleared volumes move from 60% to 80% in one year, and this volume has not returned to OTC.” ICE’s Kneale adds to this narrative. “The banks took over a market-making role post the Enron crisis, but with a number of them pulling back from the market following the financial crisis, the large merchant traders are now

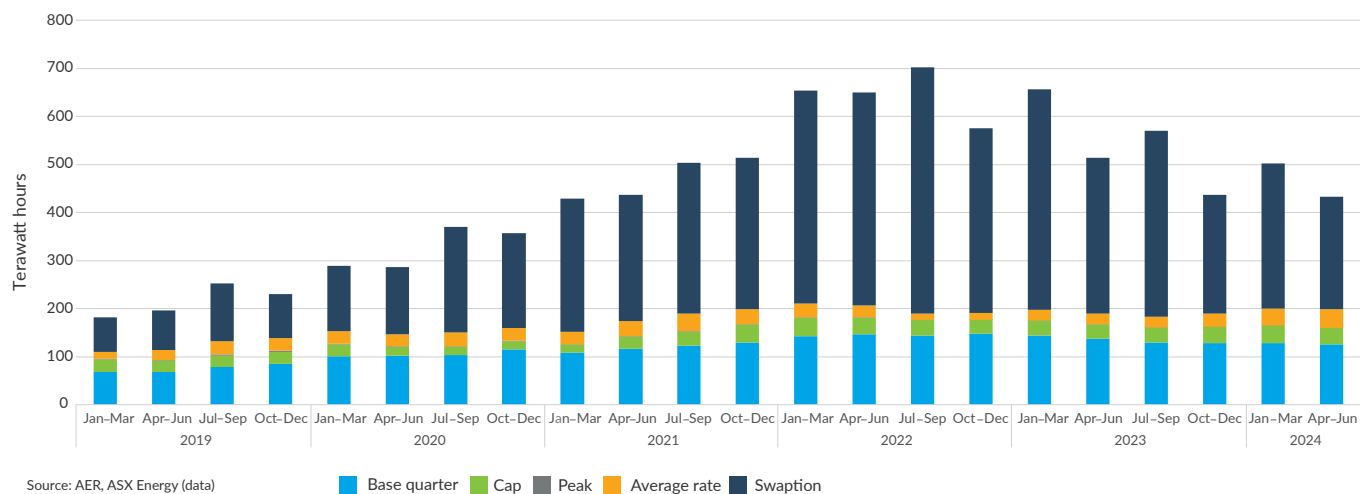
filling some of that risk-warehousing role – across the curve.”

The execution-style of trading has changed, too, as Trayport’s Hoff explains. “These days, the vast majority is OTC-cleared or exchange-traded. Market makers provide liquidity on exchanges and brokers grow their coverage further out on the curve, in spreads and strips, as well as the options market.” These are key roles in a complicated landscape with the convergence of infrastructure development in the physical market and the need to source and lock in pricing for 10 years or more to make projects viable.

As one might expect, existing technology is also being leveraged to provide solutions



ASX open interest volumes



for market participants. Trayport, with its historical strength in physical power markets, offers access to a broader product suite across the curve. Trading Technologies struck a different path by recently announcing NordPool connectivity to sit alongside its EPEX Spot connection that went live in February 2024.

Alun Green, executive vice president futures and options at TT, comments on this move. “We already have a close relationship with EEX, and the product and geographical expansion that our customers are driving made this move into other spot power markets entirely logical. What surprised us was the number of existing customers looking at moving into power or who wanted to consolidate their trading technology across the whole curve. The geographical and venue expansion that market participants are participating in makes the rationalisation of technology essential to drive efficiency”.

As Green alludes to, European competition is beginning to heat up with the recent announcement of the Euronext acquisition of the Nasdaq Nordic power

futures business, but expansion for exchanges such as EEX and ICE is not limited to markets close to home. EEX has expanded its base with the March 2017 acquisition of the Nodal Exchange in the USA and extended its product coverage to Japan some five years ago, as has ICE with the launch of two Japanese power derivatives contracts in December 2024. EEX has also announced a joint venture with Brazil’s B3 to develop and launch a power market in Brazil, whilst Hoff notes “there are hints of things developing in India and Africa”.

Australia, whilst a much smaller market by consumption than either France or Germany, also features on the interest list for both TT and EEX, with the former already present and the latter exploring opportunities. The incumbent in this market, the Australian Securities Exchange, has a successful power derivatives market in operation covering Australia and New Zealand.

Daniel Sinclair, general manager of markets at ASX, says the local market has developed meaningful liquidity. “The Australian market is characterised by a wide mix of market participants, and we have a number of liquidity providers who support the market and ensure the confluence of

asset owners and liquidity. Support from commercial and government-mandated market making schemes has led to derivatives trading 5.5 times the underlying generation in TWh terms.”

The hydrocarbon-dependent Australian market now sees the growth of renewable generation and the intermittency that comes with it. This optionality of generation type provides fertile ground for financial options markets. Per the open interest chart above, ASX has found in developing its options market – a feat that eludes many other derivatives exchanges across many asset classes.

The past 30 years have seen a sea change in utility markets. None more so than power, which has stepped out from the shadow of its heavily-traded cousin – natural gas – and begun taking on a life and profile of its own. Given the recent developments that have led to opportunities in these markets, the future looks bright.

And for good reason. Innovation is a hallmark of the development of power markets. As TT’s Alun Green notes, “We should not underestimate the number of new, young traders entering the market who possess sophisticated technology skills.” These innovators see a market with so many moving parts by which they can apply and develop their skills and to see power markets expanding dramatically as a result. ●

US derivatives exchanges pursue retail traders in Asia

Retail trading of futures and options is booming in Asia – and US exchanges are taking notice

BY BENNETT VOYLES

Senior executives at two of the largest exchanges – CME Group and Cboe Global Markets – told *MarketVoice* that retail traders are a key part of their growth strategy in the Asia-Pacific region.

Julie Winkler, CME's chief commercial officer, said Asian traders now account for more than 30% of CME's global retail business, second only to the retail segment in its home market of North America.

One reason for the growing interest – CME's decision to introduce smaller sized versions of its flagship equity index and commodity futures.

"Smaller-sized contracts are easier to try for traders new to futures, and they also help more established traders to scale in and out of positions with greater ease," Winkler explained.

In October 2024, CME launched micro-sized versions of its Nikkei futures, which are denominated in both Japanese yen and US dollars. So far, more than 40% of the volume in that contract is coming from the APAC region, she said.

Another reason – the global visibility of the US stock market. Cathy Clay, the global head of derivatives at Cboe, said there is a "natural brand recognition" for the major US market indices, and the options that trade on Cboe are an easy way for traders to get exposure.

"Because Cboe is home to the S&P 500, the Russell 2000 and the VIX index options, there is just a natural brand recognition when it comes to those products. And we offer an easy way for those retail clients to access the broad-based exposure that they're looking for in the US," Clay said.

GROWING ENTHUSIASM

From Mumbai to Shanghai, retail investors all over Asia are becoming increasingly active in futures and options.

Retail traders dominate trading on China's commodity futures exchanges, which rank among the largest in the world by volume. Retail trading is also driving the meteoric growth of India's stock index options. India is now home to the largest index options market in the world by number of contracts, with over 500 million traded daily. Roughly 30-40% of that volume comes from retail, estimates Mohit Batra, executive director at Nuvama Investment Advisors, an Indian brokerage firm.

A similar story is playing out in Asia's smaller markets. At the Taiwan Futures Exchange, half of all activity on the exchange

stems from retail investors. In Thailand, retail investors account for about 45% of activity on the exchange.

Hong Kong is another example. David Lutz, a senior vice president in equities product development at Hong Kong Exchanges and Clearing, told *MarketVoice* that the group's equity options market has seen rapid growth of retail trading, especially in short-dated options on index options. In November 2024, the exchange expanded the range of weeklies by launching weekly options on ten stocks with relatively high turnover and volatility, including the Chinese technology giants Alibaba, Baidu and Tencent. The contracts proved to be popular right from the start, and within a few weeks volume in the new options had grown to 13% of the overall market.

"We've been very pleased with the success of weekly stock options," Lutz said, adding that "strong retail participation" is helping to drive that growth.

Of course, futures and options can be exceedingly risky for the uninitiated. Some critics point to the fact that in India it is possible to open an account in seven minutes and start trading futures and options, and warn that market access can be too streamlined for the market's own good.

To protect retail investors, the Securities and Exchange Board of India recently proposed a series of measures to add some guardrails, including raising the minimum contract size for index derivatives and



increasing exposure loss margins on option expiry days.

Could that kill the boom? Although regulators tend to get a bad rap for discouraging business, Hari K., a former executive at the National Stock Exchange of India and now a consultant, argues that the tightening of some trading rules is good for the long-term health of the market. Speaking at the FIA Asia Derivatives conference in Singapore in December 2024, he said rules such as a stricter protocol for pledging securities for collateral have actually served to give investors more faith in India's exchanges.

"I think the SEBI guardrails are not that bad," agreed Manu Dua, managing director for APAC prime services and equities with Citi Global Markets in Singapore, during a panel discussion at the FIA Asia conference. "The SEBI guardrails protect the market structure and create a certain expectation on how the market should work. I think this gives that assurance to investors that there is a regulator who is looking after the market."

DISTINCT MARKETS

For western exchanges, providing access to Asian investors has been a complex task, because every market has a particular regulatory slant and product interests.

"They're all distinct in their own way with their own regulations, and how we need to operate within those regulatory frameworks," Cboe's Clay said. "What we've done is take a country-by-country look at who the players are, what the obstacles are for them to get access to our exchanges, whether they'll be getting the data – and then identifying which products they would be interested in trading," she added.

In South Korea, for example, Clay says, traders who grew up trading the Korea Composite Stock Price Index, or KOSPI, naturally will want to use the same kinds of strategies when trading US indices.

Clay noted that many Asian investors are already quite sophisticated in how they approach the market. "Culturally, in terms of trader sophistication, in terms of interest in trading derivatives and education on how to trade derivatives, many countries in the Asia Pacific region are far along in that journey, just like the US. There are a lot of

and analytics – all of which are helping to empower this segment," she said.

EDUCATION

CME is also reaching out with a variety of educational materials on futures and options, including its CME Institute online platform.

"We offer everything from live instruction to a simulated trading environment to test new skills," Winkler said, adding that retail brokers are invited to embed many of these materials directly in their online platforms. The exchange also works with local partners, such as the Korea Financial Investment Association, to provide educational resources on futures and options.

"Our belief is that the more we educate, the better results the retail trader will have, and that's what we would like to see – a healthy experience and more successful outcomes."

CATHY CLAY, GLOBAL HEAD OF DERIVATIVES, CBOE

similarities between how the retail client thinks and operates in these countries," she said.

In 2025, Cboe will focus on Singapore, Hong Kong, Taiwan, Japan, South Korea and Australia. "We're going to have more employees really getting to know the client base better and see if we can help them solve some of the pathway challenges that they might face coming into the US," she said.

CME's Winkler adds that online platforms geared to retail traders are an important feature of the Asian market. "The advent of new retail-friendly trading platforms has certainly lowered the barrier to entry for these first-time traders, as well as provided greater access to educational resources, data

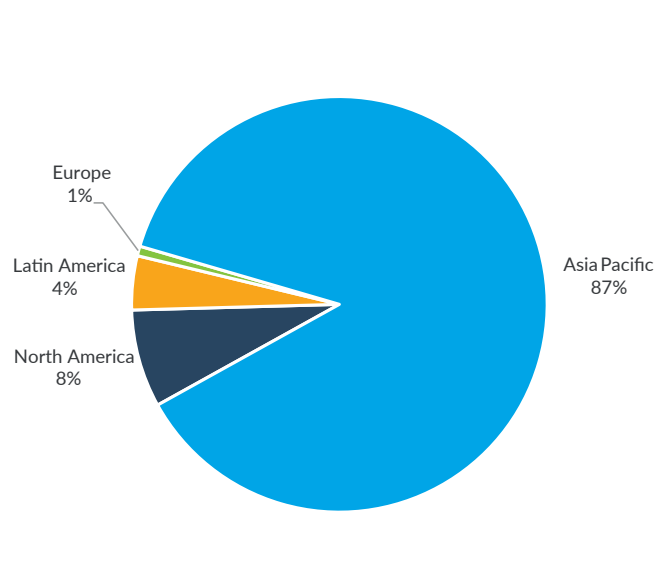
Cboe is making a similar effort to offer educational materials to retail traders in the APAC region. In 2025, Cboe plans to take its Options Institute curriculum to some Asia Pacific markets where they have regulatory approval. "Our belief is that the more we educate, the better results the retail trader will have, and that's what we would like to see – a healthy experience and more successful outcomes," Clay said.

Despite the logistical and educational challenges ahead to growing the retail appetite for futures and options in Asia, the exchanges are generally bullish on the region. "It's pretty widely believed that there is still a ton of opportunity in Asia Pacific that's relatively untapped," Clay said. ●

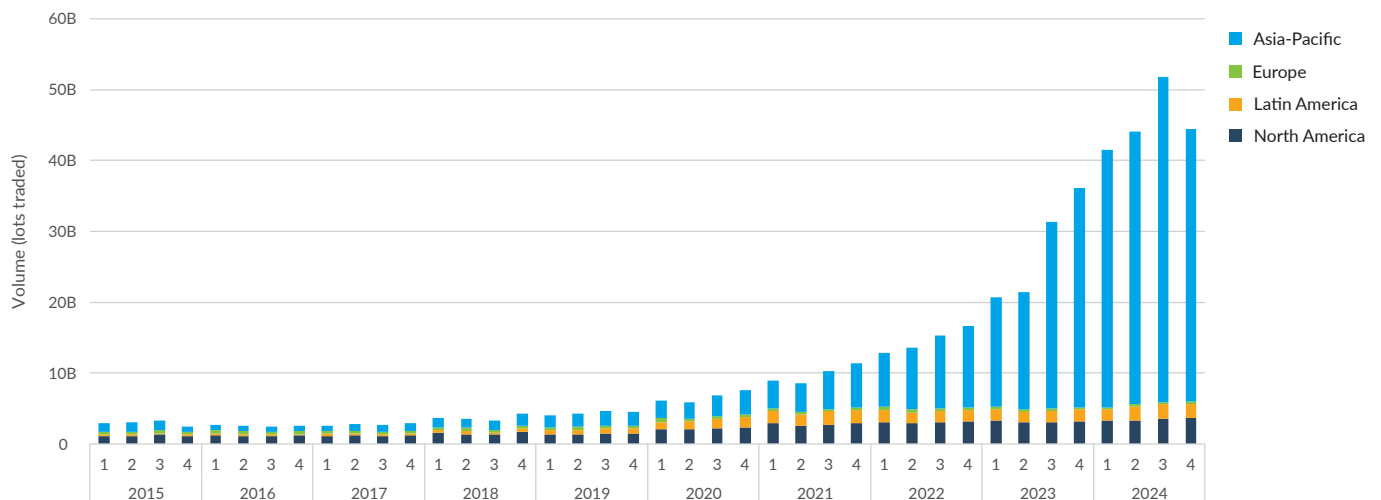
Exchange-traded derivatives trading volume

Worldwide volume of exchange-traded derivatives reached 205.3 billion contracts in 2024, up 51% from 2023. The majority of that increase came from equity options traded on exchanges in India, which have seen an explosive increase in retail participation. Total global options volume for the year was 177.1 billion contracts, up 64% from the previous year. Total futures volume was 28.2 billion contracts in 2024, up 1.2% from 2023.

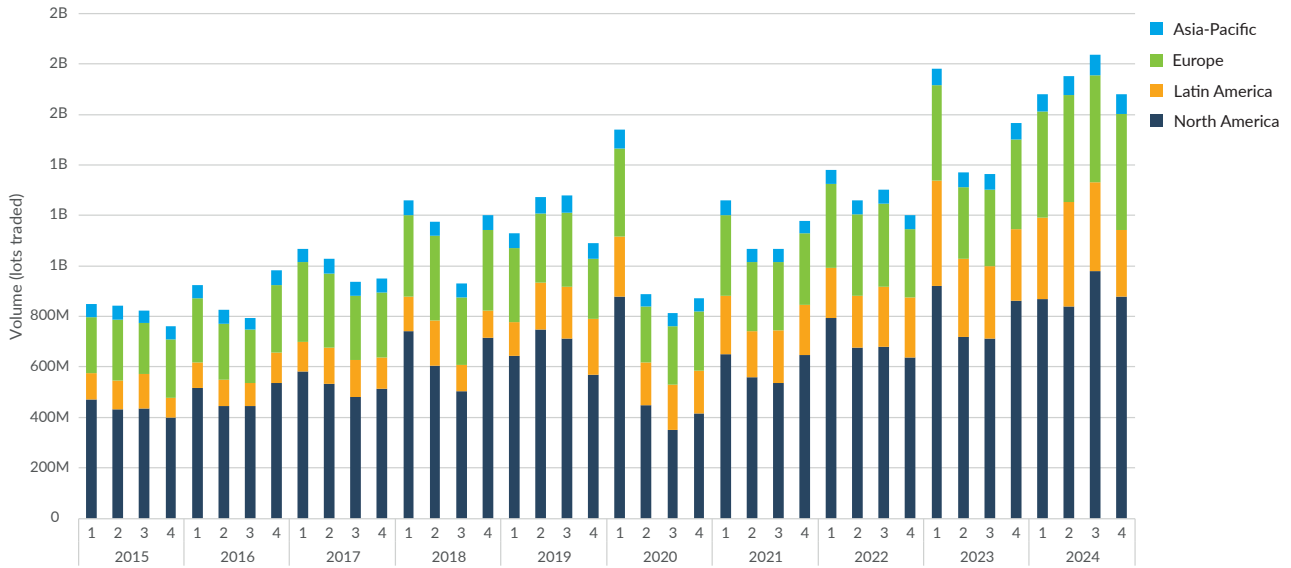
Equity Index Futures and Options Volume in 2024



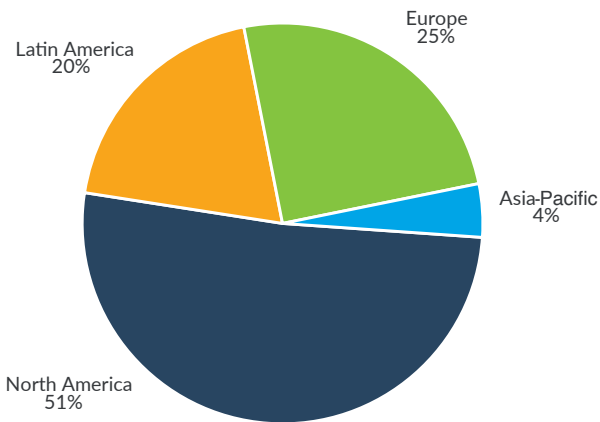
Equity Index Futures and Options Quarterly Volume by Region



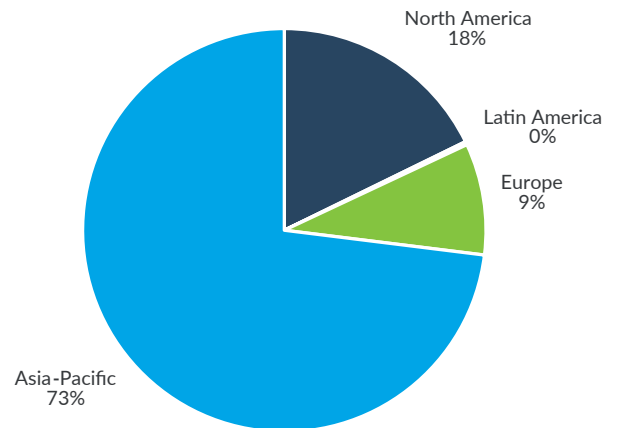
Interest Rate Futures and Options Quarterly Volume by Region



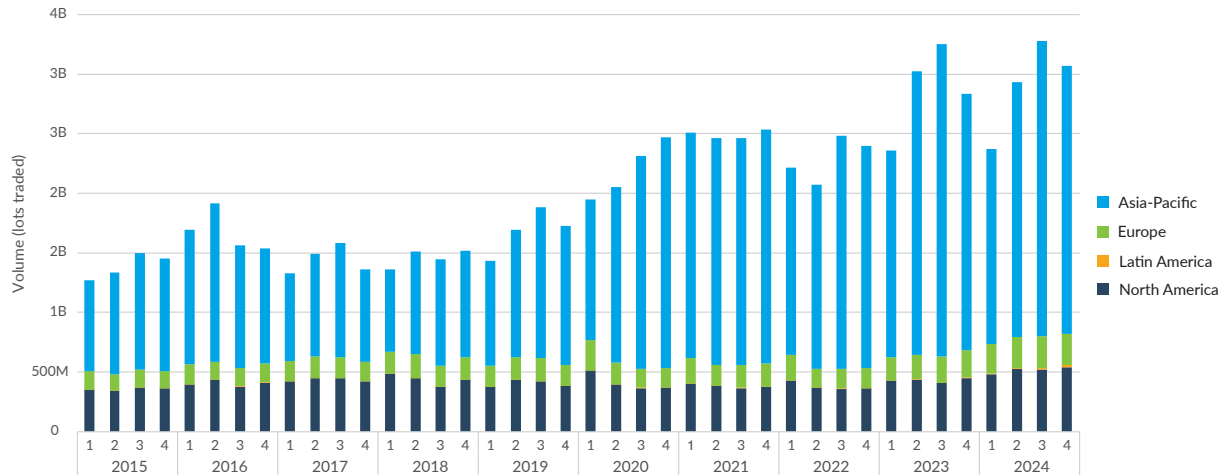
Interest Rate Futures and Options Volume in 2024



Commodity Futures and Options Volume in 2024



Commodity Futures and Options Quarterly Volume by Region



Top 40 Financial Futures and Options

Rank	Contract	Jurisdiction	Category	Trading volume in 2024	YoY Change	Open Interest in Dec 2024	YoY Change
1	Bank Nifty Index Options, National Stock Exchange of India	India	Equity Index	47,483,237,907	21.7%	3,134,139	-36.3%
2	CNX Nifty Index Options, National Stock Exchange of India	India	Equity Index	46,153,557,981	102.9%	8,891,602	76.1%
3	S&P Sensex 30 Index Options, BSE	India	Equity Index	23,341,784,813	351.9%	783,144	2768.2%
4	Nifty Financial Services Index Options, National Stock Exchange of India	India	Equity Index	19,935,435,161	34.4%	29,492	-96.9%
5	Nifty Midcap Select Index Options, National Stock Exchange of India	India	Equity Index	8,170,233,482	268.1%	134,959	-82.3%
6	S&P Bankex Index Options, BSE	India	Equity Index	7,388,489,170	2573.5%	1,926	-98.5%
7	Mini Ibovespa Index (WIN) Futures, B3	Brazil	Equity Index	3,949,016,804	3.0%	1,403,022	49.1%
8	One-Day Interbank Deposit (DI1) Futures, B3	Brazil	Interest Rates	987,007,206	13.9%	32,994,761	-8.1%
9	3 Month Secured Overnight Financing Rate (SOFR) Futures, Chicago Mercantile Exchange	US	Interest Rates	865,354,914	6.9%	9,745,716	-0.7%
10	US Dollar/Indian Rupee Options, National Stock Exchange of India	India	Currencies	829,578,224	-77.1%	31,788	-99.7%
11	S&P 500 Index (SPX) Options, Cboe Options Exchange	US	Equity Index	784,241,115	7.5%	21,059,184	1.1%
12	Mini US Dollar Spot (WDO) Futures, B3	Brazil	Currencies	728,105,136	1.6%	1,790,069	-16.0%
13	10 Year Treasury Note Futures, Chicago Board of Trade	US	Interest Rates	591,711,490	18.8%	4,514,560	-2.1%
14	5 Year Treasury Note Futures, Chicago Board of Trade	US	Interest Rates	437,361,730	12.3%	6,157,082	6.0%
15	E-mini S&P 500 Futures, Chicago Mercantile Exchange	US	Equity Index	410,552,854	-9.3%	2,059,745	-6.8%
16	3 Month Secured Overnight Financing Rate (SOFR) Options, Chicago Mercantile Exchange	US	Interest Rates	398,179,993	-7.7%	29,791,351	-13.5%
17	3 Month Euribor Futures, ICE Futures Europe	UK	Interest Rates	374,509,034	26.0%	4,438,267	-3.1%
18	Kospi 200 Options, Korea Exchange	South Korea	Equity Index	348,526,204	-22.2%	1,018,130	-45.3%
19	Average One-Day Interbank Deposit Rate Index (IDI) Options, B3	Brazil	Interest Rates	341,054,767	16.7%	36,042,428	-47.3%
20	Micro E-mini Nasdaq 100 Index Futures, Chicago Mercantile Exchange	US	Equity Index	339,480,709	24.3%	56,149	-33.4%
21	US Dollar/Indian Rupee Futures, National Stock Exchange of India	India	Currencies	279,203,323	-64.6%	3,170,865	-47.3%
22	Euro-Bund (FGBL) Futures, Eurex	Germany	Interest Rates	271,641,784	22.4%	1,131,945	4.0%
23	2 Year Treasury Note Futures, Chicago Board of Trade	US	Interest Rates	254,692,782	25.1%	4,289,007	13.8%
24	E-mini S&P 500 Options, Chicago Mercantile Exchange	US	Equity Index	254,218,477	17.3%	1,826,444	-19.0%
25	Euro Stoxx 50 Index (OESX) Options, Eurex	Germany	Equity Index	242,187,995	-4.1%	24,300,853	-12.2%
26	Nikkei 225 Mini Futures, Osaka Exchange	Japan	Equity Index	230,289,254	-8.1%	295,807	-24.0%
27	Micro E-mini S&P 500 Index Futures, Chicago Mercantile Exchange	US	Equity Index	229,659,949	-7.5%	103,558	-18.4%
28	10 Year Treasury Note Options, Chicago Board of Trade	US	Interest Rates	226,817,880	28.1%	2,753,566	25.8%
29	CBOE Volatility Index (VIX) Options, Cboe Options Exchange	US	Other	209,247,273	12.7%	10,204,197	-13.7%
30	Euro-Bobl (FGBM) Futures, Eurex	Germany	Interest Rates	205,944,790	15.5%	1,217,312	-0.7%
31	Euro Stoxx 50 Index (FESX) Futures, Eurex	Germany	Equity Index	205,886,194	-16.2%	1,809,613	-29.2%
32	Taiex (TXO) Options, Taiwan Futures Exchange	Taiwan	Equity Index	193,407,488	9.7%	291,683	-31.6%
33	Euro-Schatz (FGBS) Futures, Eurex	Germany	Interest Rates	188,906,348	19.8%	2,068,530	29.2%
34	Kospi 200 Monday Weekly Options, Korea Exchange	South Korea	Equity Index	182,576,775	180.6%	1,652	-98.1%
35	Kospi 200 Weekly Options, Korea Exchange	South Korea	Equity Index	178,292,505	-25.9%	39,761	27.3%
36	Ultra 10 Year Treasury Note Futures, Chicago Board of Trade	US	Interest Rates	168,179,005	33.9%	2,161,249	4.6%
37	E-mini Nasdaq 100 Futures, Chicago Mercantile Exchange	US	Equity Index	157,904,427	-5.4%	252,819	-11.2%
38	3 Month Sterling Overnight Index Average Futures, ICE Futures Europe	UK	Interest Rates	151,889,315	55.1%	2,501,512	49.1%
39	30 Year Treasury Bond Futures, Chicago Board of Trade	US	Interest Rates	134,588,562	20.7%	1,914,855	35.6%
40	US Dollar Futures, Korea Exchange	South Korea	Currencies	131,753,228	22.0%	1,109,486	24.4%

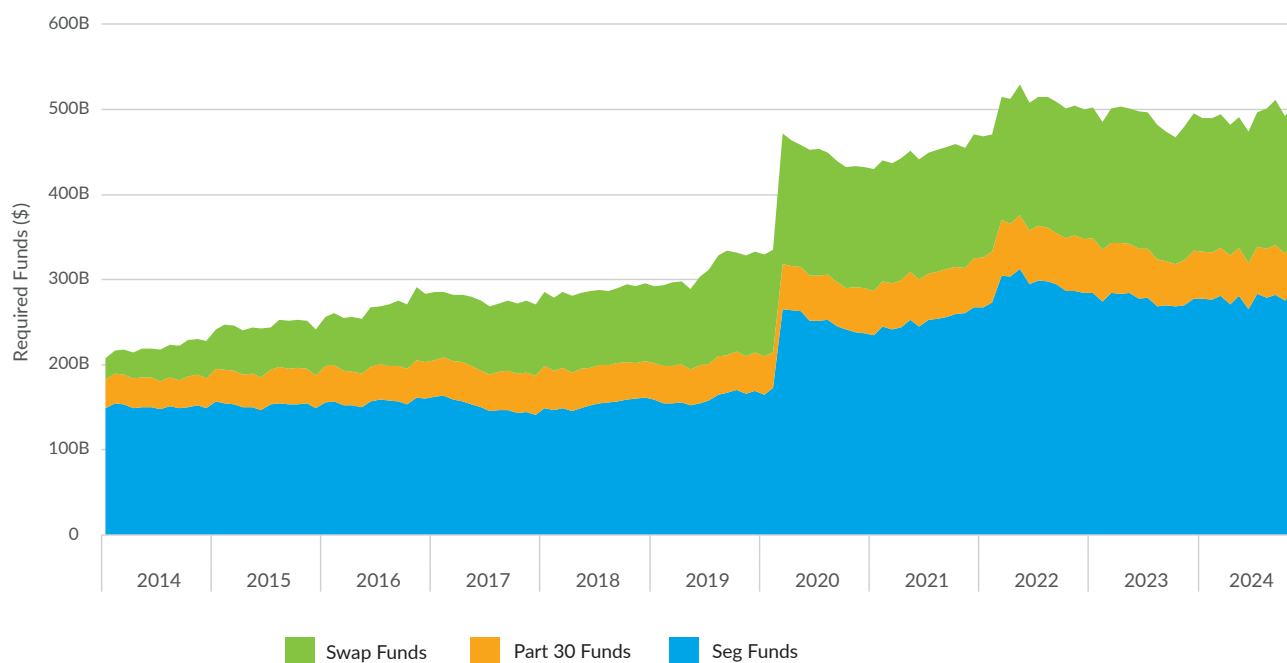
Top 40 Commodity Futures and Options

Rank	Contract	Jurisdiction	Category	Trading volume in 2024	YoY Change	Open Interest in Dec 2024	YoY Change
1	Steel Rebar Futures, Shanghai Futures Exchange	China	Metals	507,131,084	1.0%	2,180,197	-11.9%
2	Crude Oil Options, Multi Commodity Exchange of India	India	Energy	486,099,226	122.8%	176,683	76.1%
3	Soybean Meal Futures, Dalian Commodity Exchange	China	Agriculture	426,398,672	20.3%	4,170,496	59.7%
4	Soda Ash (SA) Futures, Zhengzhou Commodity Exchange	China	Chemicals	379,022,008	-31.9%	1,248,536	94.7%
5	Silver Futures, Shanghai Futures Exchange	China	Metals	358,336,645	49.8%	689,628	-23.2%
6	Flat Glass (FG) Futures, Zhengzhou Commodity Exchange	China	Other	322,320,927	-11.0%	926,094	-23.8%
7	Rapeseed Meal (RM) Futures, Zhengzhou Commodity Exchange	China	Agriculture	314,696,747	36.5%	1,080,322	-2.8%
8	Brent Crude Oil Futures, ICE Futures Europe	UK	Energy	291,954,459	9.0%	2,348,907	15.4%
9	Polyvinyl Chloride (PVC) Futures, Dalian Commodity Exchange	China	Chemicals	256,413,998	-4.7%	1,138,567	-1.9%
10	RBD Palm Olein Futures, Dalian Commodity Exchange	China	Agriculture	228,809,793	6.5%	600,927	10.2%
11	PTA (TA) Futures, Zhengzhou Commodity Exchange	China	Chemicals	221,257,547	-57.5%	1,442,957	-35.7%
12	WTI Light Sweet Crude Oil (CL) Futures, New York Mercantile Exchange	US	Energy	220,153,362	7.7%	1,873,202	18.4%
13	Methanol (MA) Futures, Zhengzhou Commodity Exchange	China	Chemicals	202,648,015	-49.3%	1,167,275	-20.2%
14	Fuel Oil Futures, Shanghai Futures Exchange	China	Energy	181,631,127	-28.2%	453,335	-18.2%
15	Natural Gas Options, Multi Commodity Exchange of India	India	Energy	168,674,825	109.6%	70,525	2.1%
16	Corn Futures, Dalian Commodity Exchange	China	Agriculture	162,126,722	-0.3%	2,028,193	40.8%
17	Hot Rolled Coil Futures, Shanghai Futures Exchange	China	Metals	161,713,668	6.7%	1,292,787	3.0%
18	Rapeseed Oil (OI) Futures, Zhengzhou Commodity Exchange	China	Agriculture	153,223,115	-17.5%	332,954	-37.0%
19	Soybean Oil Futures, Dalian Commodity Exchange	China	Agriculture	148,949,370	-27.0%	817,735	-5.2%
20	Henry Hub Natural Gas (NG) Futures, New York Mercantile Exchange	US	Energy	130,171,279	27.5%	1,500,356	8.0%
21	Iron Ore Futures, Dalian Commodity Exchange	China	Metals	129,371,965	-35.0%	616,311	-33.5%
22	Silicon Manganese (SM) Futures, Zhengzhou Commodity Exchange	China	Metals	110,052,413	85.8%	470,048	-5.2%
23	Natural Rubber Futures, Shanghai Futures Exchange	China	Agriculture	107,683,287	24.1%	237,734	4.3%
24	Ethylbenzene Futures, Dalian Commodity Exchange	China	Chemicals	104,745,007	-14.3%	389,101	-34.4%
25	Corn Futures, Chicago Board of Trade	US	Agriculture	101,428,350	22.1%	1,650,817	26.3%
26	White Sugar (SR) Futures, Zhengzhou Commodity Exchange	China	Agriculture	100,348,529	-46.8%	524,364	-30.8%
27	Cotton No. 1 (CF) Futures, Zhengzhou Commodity Exchange	China	Agriculture	95,990,062	-42.0%	791,150	-26.0%
28	Gas Oil Futures, ICE Futures Europe	UK	Energy	91,591,288	23.7%	834,308	25.3%
29	Industrial Silicon Futures, Guangzhou Futures Exchange	China	Metals	89,633,889	315.4%	334,235	211.0%
30	Soda Ash (SA) Options, Zhengzhou Commodity Exchange	China	Chemicals	88,417,904	565.3%	457,351	70.2%
31	WTI Light Sweet Crude Oil Futures, ICE Futures Europe	UK	Energy	83,927,031	45.4%	865,040	36.3%
32	Silver Options, Shanghai Futures Exchange	China	Metals	83,645,531	210.9%	219,816	47.0%
33	Woodpulp Futures, Shanghai Futures Exchange	China	Agriculture	82,620,497	-34.3%	216,988	-30.6%
34	Polypropylene Futures, Dalian Commodity Exchange	China	Chemicals	82,256,695	-38.8%	525,602	-24.5%
35	Linear Low Density Polyethylene (LLDPE) Futures, Dalian Commodity Exchange	China	Chemicals	81,566,429	-20.3%	637,943	13.6%
36	Aluminum Oxide Futures, Shanghai Futures Exchange	China	Metals	79,148,397	478.6%	366,506	201.1%
37	Ethylene Glycol Futures, Dalian Commodity Exchange	China	Chemicals	78,575,825	-16.3%	355,535	-39.3%
38	PTA (TA) Options, Zhengzhou Commodity Exchange	China	Chemicals	75,643,582	-59.8%	325,343	-25.3%
39	Dutch TTF Gas Futures, ICE Endex	Netherlands	Energy	75,121,228	26.9%	1,969,875	30.7%
40	Gold Futures, Shanghai Futures Exchange	China	Metals	73,805,909	40.0%	337,615	-8.8%

Customer funds

The total amount of customer funds in futures accounts at US futures commission merchants reached \$346.5 billion in November 2024, up 7.5% over the previous 12 months and up 65% over the last five years. Customer funds held in cleared swaps accounts at US FCMs reached \$160.7 billion in the month of November, up 2% over the last 12 months and up 35.6% from five years ago. JP Morgan Securities was the FCM with the most customer funds in November, with a total of \$74.4 billion across swaps, futures and Part 30 accounts. Looking at just the 15 largest FCMs, BNP Paribas Securities was the FCM with the largest increase in customer funds compared to the prior year with a growth of 26.9% to \$11.3 billion.

Customer Funds Held at US FCMs



Top 30 Futures Commission Merchants Ranked by Customer Funds

Funds measured in millions of US dollars

Rank	FCM	Seg Funds	YoY Change	Share	Part 30 Funds	YoY Change	Share	Swap Funds	YoY Change	Share	Total Funds	YoY Change	Share
1	JP MORGAN SECURITIES LLC	45,195	13%	15.6%	7,253	13%	12.9%	21,938	-1%	13.7%	74,386	9%	14.7%
2	GOLDMAN SACHS & CO LLC	37,731	12%	13.0%	9,532	-7%	17.0%	21,999	8%	13.7%	69,263	8%	13.7%
3	MORGAN STANLEY & CO LLC	31,547	22%	10.9%	8,491	1%	15.1%	28,188	2%	17.5%	68,226	10%	13.5%
4	CITIGROUP GLOBAL MARKETS INC	17,290	7%	6.0%	4,140	0%	7.4%	29,874	-12%	18.6%	51,304	-5%	10.1%
5	BOFA SECURITIES INC	26,361	-6%	9.1%	5,025	5%	8.9%	18,455	4%	11.5%	49,841	-2%	9.8%
6	BARCLAYS CAPITAL INC	15,219	-10%	5.2%	5,119	28%	9.1%	16,137	19%	10.0%	36,476	6%	7.2%
7	SG AMERICAS SECURITIES LLC	19,364	9%	6.7%	7,562	-2%	13.5%	1,523	24%	0.9%	28,449	6%	5.6%
8	WELLS FARGO SECURITIES LLC	6,922	19%	2.4%	266	-18%	0.5%	15,093	8%	9.4%	22,281	11%	4.4%
9	BNP PARIBAS SECURITIES CORP	7,355	26%	2.5%	1,196	124%	2.1%	2,730	8%	1.7%	11,281	27%	2.2%
10	UBS SECURITIES LLC	7,955	18%	2.7%	1,798	1%	3.2%	959	-18%	0.6%	10,713	11%	2.1%
11	MIZUHO SECURITIES USA LLC	7,832	-21%	2.7%	1,343	-12%	2.4%				9,175	-19%	1.8%
12	INTERACTIVE BROKERS LLC	7,990	13%	2.8%	678	7%	1.2%	213	*	0.1%	8,881	15%	1.8%
13	MAREX CAPITAL MARKETS INC	8,364	24%	2.9%	194	15%	0.3%	12	*	0.0%	8,570	24%	1.7%
14	ADM INVESTOR SERVICES INC	7,285	2%	2.5%	274	-21%	0.5%				7,559	1%	1.5%
15	STONEX FINANCIAL INC	6,642	14%	2.3%	231	-6%	0.4%				6,874	13%	1.4%
16	HSBC SECURITIES USA INC	4,179	-7%	1.4%	204	22%	0.4%	1,706	-4%	1.1%	6,089	-6%	1.2%
17	RBC CAPITAL MARKETS LLC	3,675	2%	1.3%	407	51%	0.7%	1,775	6%	1.1%	5,858	5%	1.2%
18	RJ OBRIEN ASSOCIATES LLC	5,579	-5%	1.9%	216	-9%	0.4%				5,795	-5%	1.1%
19	MACQUARIE FUTURES USA LLC	3,911	-7%	1.3%	513	68%	0.9%				4,424	-2%	0.9%
20	DEUTSCHE BANK SECURITIES INC	2,928	38%	1.0%	1,342	103%	2.4%				4,271	53%	0.8%
21	ABN AMRO CLEARING USA LLC	4,021	10%	1.4%	211	75%	0.4%				4,232	13%	0.8%
22	WEDBUSH SECURITIES INC	3,203	-4%	1.1%	14	-62%	0.0%				3,218	-4%	0.6%
23	SANTANDER US CAPITAL MARKETS LLC	2,386	12%	0.8%							2,386	12%	0.5%
24	PHILLIP CAPITAL INC	898	12%	0.3%	31	106%	0.1%				929	14%	0.2%
25	TRADESTATION SECURITIES INC	876	-3%	0.3%	14	-20%	0.0%				890	-3%	0.2%
26	CHARLES SCHWAB FUTURES & FOREX LLC	749	23%	0.3%							749	23%	0.1%
27	CLEAR STREET LLC	620	*	0.2%							620	*	0.1%
28	STRAITS FINANCIAL LLC	588	8%	0.2%	18	2%	0.0%				606	8%	0.1%
29	ADVANTAGE FUTURES LLC	501	1%	0.2%	99	79%	0.2%				600	9%	0.1%
30	NANHUA USA LLC	398	11%	0.1%							398	11%	0.1%

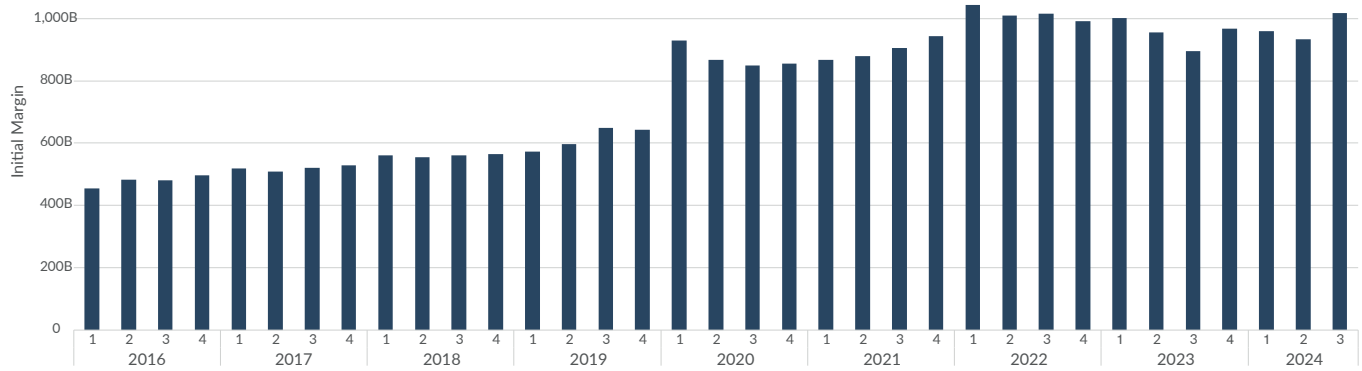
Source: FIA FCM Tracker

Based on November 2024 data published by the Commodity Futures Trading Commission. Market share calculated as a percentage of total customer funds held by all FCMs, excluding residual interest. Seg funds consist of customer funds held for trading on US futures exchanges. Part 30 funds consist of customer funds held for trading on non-US exchanges. Swap funds consist of customer funds held for cleared swaps.

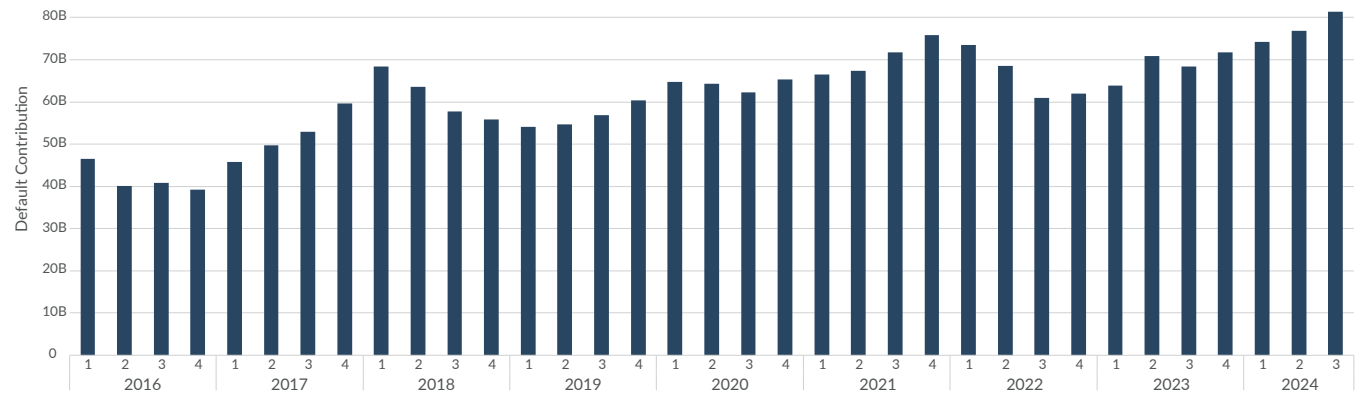
Note: * indicates that the year-ago value was zero

CCP financial resources

Initial Margin at 15 Leading CCPs



Member Default Fund Contributions at 15 Leading CCPs



Select CCP Financial Metrics Q3 2024

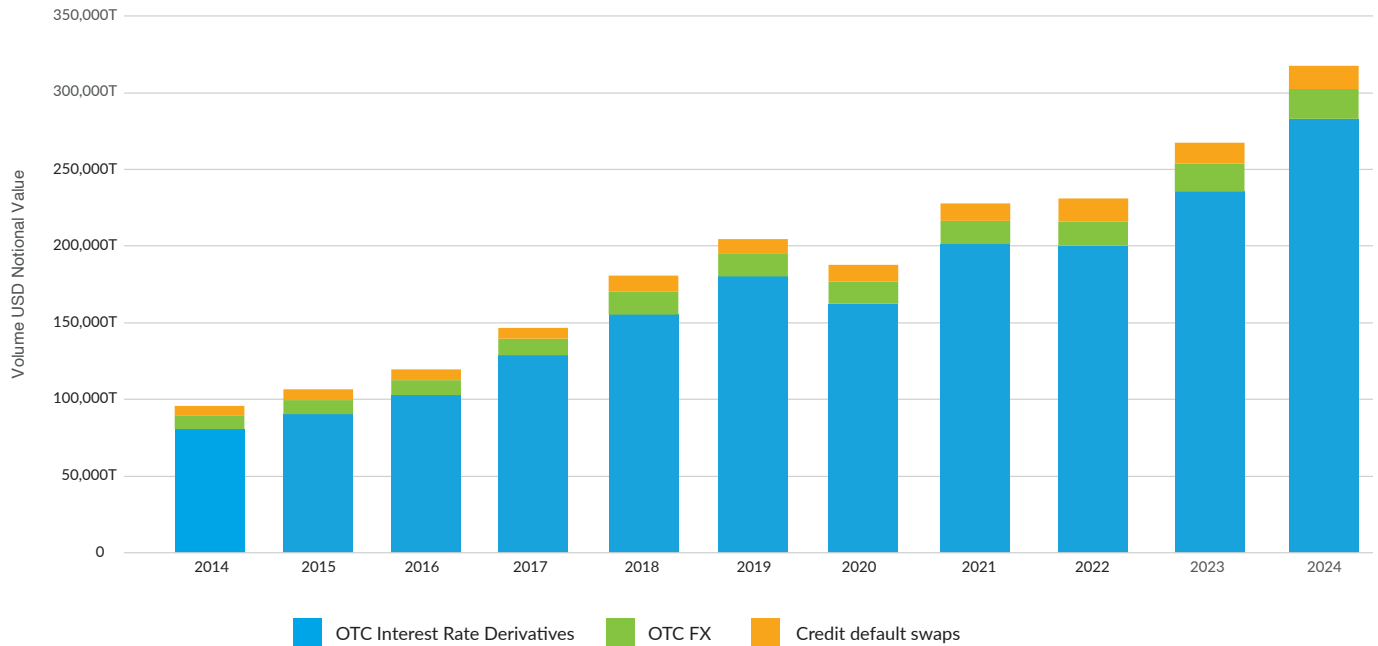
All numbers in millions of US dollars

CCP	Default Fund Resources	Member Contributions	CCP Contributions	Ratio of CCP to Member Contributions	Initial Margin	Ratio of DF to IM
OCC	\$19,480	\$19,340	\$140	0.7%	112,721	17.3%
LCH LTD	\$11,919	\$11,818	\$101	0.9%	271,440	4.4%
CME	\$10,546	\$10,296	\$250	2.4%	257,299	4.1%
Eurex	\$10,239	\$10,079	\$159	1.6%	85,915	11.9%
LCH SA	\$7,044	\$6,995	\$49	0.7%	41,752	16.9%
JSCC	\$6,978	\$6,784	\$194	2.9%	48,272	14.5%
ICE Clear Credit	\$4,160	\$4,110	\$50	1.2%	52,046	8.0%
ICE Clear Europe	\$3,304	\$3,107	\$197	6.3%	77,155	4.3%
TMX	\$2,911	\$2,907	\$4	0.1%	10,268	28.3%
HKEX	\$1,806	\$1,623	\$183	11.3%	9,936	18.2%
LME	\$1,569	\$1,540	\$29	1.9%	9,462	16.6%
Nasdaq	\$1,195	\$1,152	\$43	3.8%	7,395	16.2%
ICE Clear US	\$959	\$884	\$75	8.5%	19,764	4.9%
ASX	\$652	\$395	\$256	64.9%	5,388	12.1%
SGX	\$451	\$387	\$64	16.6%	9,459	4.8%

Source: FIA CCP Tracker

Swap execution facility trading volume

Annual Trading Volume



Swap Execution Facilities Ranked by Notional Volume in 2024

SEF	Parent	Credit Volume	YoY Change	FX Volume	YoY Change	IR Volume	YoY Change	2024 Total Volume	YoY Change
Tradeweb	Tradeweb	3,475,924,401,250	27.8%			152,627,371,401,986	48.4%	156,103,295,803,236	47.9%
tpSEF	Tullett Prebon	747,098,852,521	2.0%	4,960,109,979,792	3.8%	44,902,958,452,664	31.5%	50,610,167,284,977	27.6%
NEX SEF	CME Group			1,686,377,646,935	18.5%	33,934,411,264,713	-17.6%	35,620,788,911,648	-16.4%
Bloomberg SEF	Bloomberg	10,563,120,079,102	8.1%	1,094,372,933,162	24.5%	20,993,609,647,608	10.9%	32,651,102,659,872	10.4%
Tradition SEF	Tradition	19,582,150,000	-47.9%	3,428,677,823,177	8.5%	19,239,106,459,457	3.6%	22,687,366,432,634	4.3%
BGC Derivatives Markets L.P.	BGC Group	216,717,318,562	20.6%	4,183,570,611,209	-16.3%	13,920,987,134,849	2.6%	18,321,275,064,620	-2.3%
GFI SEF	GFI Group	145,309,511,777	-14.0%	2,351,109,103,328	18.2%	2,857,747,064,853	320.3%	5,354,165,679,958	88.7%
ICAP Global Derivatives Limited	Tullett Prebon					4,153,649,343,556	-16.0%	4,153,649,343,556	-16.0%
Dealerweb	Tradeweb					2,058,583,000,000	20.7%	2,058,583,000,000	20.7%
Refinitiv SEF	LSEG			1,325,649,198,363	119.6%			1,325,649,198,363	119.6%
LatAm SEF	Enlace Int SA de CV			31,382,200,000	113.1%	626,096,135,274	31.1%	657,478,335,274	33.5%
Cboe FX SEF	Cboe Global Markets			356,168,222,000	29.3%			356,168,222,000	29.3%
360T	Deutsche Börse			99,940,539,131	21.1%			99,940,539,131	21.1%

Source: FIA SEF Tracker



An interview with...

Robbert Booij, CEO, Eurex Frankfurt AG

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

In recent years, exchanges in India, Brazil and the US have seen record growth and are likely to continue leading. However, Europe has significant upside potential. Amid recent geopolitical dynamics, global investors are increasingly looking for ways to diversify into Europe and the euro. This trend towards “de-dollarisation” may take time, but the demand is growing.

Eurex is ready to lead the way. Our comprehensive product offering across asset classes and attractive services provide significant capital efficiencies. Strategically positioned across time zones, Eurex is an excellent single source of liquidity for clients. We support clients with EMIR 3.0 compliance and offer deep liquidity pools. In 2025, volatility levels and the overall macroeconomic environment is expected to favour risk assets where Eurex’s index and equity derivatives are well positioned to benefit. Eurex is also well-positioned to facilitate institutional access to crypto markets and offers MSCI index futures and options for economic divergence views.

What do you see as the biggest risk to continued growth in trading volume?

At Eurex, we have a responsibility to support the sustainable growth of our clients and the economy. In Europe, we have great challenges in the context of our capital markets environment, which is fragmentation around tax regimes, pension schemes or different regulatory regimes across jurisdictions.

It is our strategic objective to help our clients deal with fragmentation by lowering any connectivity barriers and maximising accessibility to our markets. One recent example is our Home Market Settlement project, which addresses fragmentation of the post-trade landscape by offering clients the ability to settle at their home central securities depository, while trading at Eurex. This new structure reduces manual input, costs and the risk of settlement delays and failures. We have received positive feedback since its launch on 23 September 2004, with trading volumes increasing and more banks onboarding. We are now preparing for further expansion.

Have regulators struck the appropriate balance between addressing risk and promoting innovation?

The development of the regulatory landscape in financial services is a continuous process. Increasing regulation following the financial crisis of 2008 has helped to stabilise markets, enabling them to handle the crises of recent years well. However, there is a possibility that excessive requirements can hinder innovation.

We welcome the fact that the regulatory agenda is evolving and that the EU wants to reduce bureaucracy and inefficiencies to promote its innovative strength and competitiveness. Ensuring a level playing field will be crucial to preventing regulatory arbitrage and maintaining fair competition across markets. I strongly believe that collaboration between regulators and industry participants is key here. Only by working together, can we ensure regulatory frameworks are fit for purpose. That means

robust yet flexible, allowing innovation to thrive while safeguarding financial market integrity.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

As an exchange organisation, our primary objective must be to provide our customers with the most efficient and reliable platform, supported by deep liquidity and competitive prices, ensuring best execution and minimising capital costs. Efficiency plays a crucial role, and that’s where technology comes in.

Our powerful, state-of-the-art trading and clearing technology leverages the immense efficiencies offered by the combination of our trading and clearing capabilities across multiple asset classes through portfolio and cross margining. This is a focus for the benefit of our clients, as it enables efficient trading without compromising on risk management for the clearinghouse and its members. We invest heavily in the latest technologies to continuously innovate and improve the trading and clearing experience.

Looking ahead, we are excited about the potential of artificial intelligence, machine learning and blockchain technology to transform trading strategies, unlock advanced analytics and revolutionise risk management and settlement processes.

What is the biggest challenge ahead for your exchange or for the industry as a whole?

The biggest challenge for our exchange and the financial industry is to strike the right

balance between innovation and ensuring secure, resilient markets. While continuing to innovate, we must ensure that our markets remain safe and robust, providing confidence and stability for all participants.

This includes investing the right amount of resources and skills in maintaining complete cyber resilience. Protecting against operational risk is critical to maintaining the high standards we have established as an industry. I am optimistic about the future because our commitment to excellence and adaptability will drive us to meet these challenges and succeed in an evolving landscape.

Given the rapid pace of new products introduced in 2024, which three excite you most?

Eurex is the single point of entry for the world's most diversified portfolio of equity and index derivatives, which we expanded in 2024. Our dividend segment now includes Mid-Curve Options on Euro STOXX 50 Index Dividend Futures, focusing on the next five years of dividends for better risk management.

We are building out our STOXX Europe 600 ecosystem, listing weekly expiries to meet growing institutional demand. Additionally, we introduced Daily Options on Euro STOXX and DAX already in 2023, the first of their kind in Europe.

Eurex also offers new US dollar credit index futures, becoming the first exchange with a truly global offering of fixed income index futures across currencies and geographies. Our STIR futures bring together the long and short ends of the curve, interest rate swaps and repos in a one-pot margin approach, maximising efficiencies for clients.

What more can the industry do to improve diversity in financial markets?

Eurex is part of Deutsche Börse Group. As a global company, we employ more than 14,000 people with diverse cultural backgrounds. And not just because of the

Eurex Global Derivatives is located in Eschborn, Germany, near Frankfurt am Main.



60 locations around the world. During my first weeks in Germany, I was amazed at the variety of languages you hear across the floors. To be honest, I didn't expect that. Our diversity extends beyond nationality to professional backgrounds and individual personalities. We are committed to recognition, appreciation, fairness, inclusion and openness.

What more can we do? It is key to lead by example and bring out the diversity in our teams. To do this, we must not only promote authenticity but also role model it. If we are honest, it often falls by the wayside in our fast-paced industry and the pressures we face. That's what we can all work on.

What was the most interesting film or play you saw in 2024?

I wish I could say... My time at Eurex since I first joined on 1 May last year has been truly exceptional. Not only did Michael Peters, my esteemed predecessor as CEO of Eurex, put me through an extremely intensive onboarding programme, but it was also important to me to get back in touch with customers as quickly as possible. I visited over 100 customers in person in Europe, Asia and the US to hear their views on how we can make our market even better and help them achieve their goals. As for your question, I watched just as many movies on those countless flights, but to be honest, I can't tell you

what I saw because most of the time I fell asleep right away.

What was the best book you read in 2024?

I just read Alexei Navalny's book "Patriot: A Memoir" over the holidays. His commitment to democracy, free elections, and human rights, and his willingness to make sacrifices, remind us how important it is to stand up for our beliefs and actively participate in shaping our society. He demonstrates the importance of having a clear vision, making bold decisions and motivating your team even in difficult times. Navalny's perseverance and belief in the good can encourage us to be resilient in our own lives and never give up.

Amid all the changes we are experiencing on all levels, I also found Hiro Arikawa's "The Traveling Cat Chronicles" very inspiring. The book emphasises that life is not only about big goals, but also about the small moments and encounters along the way. I think we can all learn from that – also in our industry, sometimes a pause for reflection and appreciation of what we have achieved brings more value than a push to achieve the next objective on the list. ●

MORE ONLINE

Read the interview online at www.FIA.org/marketvoice



An interview with...

Matthew Chamberlain, CEO, London Metal Exchange

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

The metals sector offers a huge range of opportunities for investment. While we have seen fluctuating demand over the last year or two, the long-term trend is clear. Assessments by bodies like the International Energy Agency point to the huge resources that will be necessary if the world is to decarbonise.

In the shorter-term, a whole range of factors can affect demand. In 2024, global demand was impacted by lower industrial production levels in major economies and a slowing in the take-up of electric vehicles. Despite that, the LME saw strong volumes, with average daily volumes up by almost 20% on the 2023 number. Within that figure, there have been some notable trends. Ferrous contracts, in particular, have grown significantly, and we saw daily volumes up by over 50% on 2023 levels, while increases in the volume of steel scrap show that recycling metal is of growing interest to the market.

What do you see as the biggest risk to continued growth in trading volume?

Readers certainly won't need reminding about the fact that we are in an era of great geopolitical uncertainty. Sanctions, tariffs and conflicts all have the potential to impact growth of trading volume.

Part of our role as a global exchange is to navigate a path through these sorts of challenges to ensure that global pricing and orderly trading continue for the benefit

of market participants and the wider economy. And I'd add that the changes we are planning to make to the LME's market structure are designed to make trading more efficient and to increase liquidity for the benefit of all participants.

While we cannot prevent the impact of factors like tariffs, we are doing all that we can to ensure our market provides the most efficient venue for price discovery, hedging and trading despite the wider uncertainties our customers face.

Have regulators struck the appropriate balance between addressing risk and promoting innovation?

Regulators will always have a difficult balancing act to perform. Too much regulation and you simply stifle growth, while the 2007/08 period and its aftermath showed us what happens when risk-taking gets out of control.

I am encouraged by some of the steps being taken in the UK to revisit how this balance can best be maintained. The government has recently written to the Financial Conduct Authority and other regulators to stress the importance of the financial sector in delivering economic growth. This is a welcome signal that the government recognises regulation has to permit firms to take on appropriate levels of risk.

The FCA has started a discussion about simplifying transaction reporting. These sorts of changes have the potential to make the UK an even better place to do business without weakening the standards that are needed to maintain confidence in markets.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

The metals industry will always be confronted with the physical challenge of finding and extracting raw materials. But even here we're seeing mining companies turning to artificial intelligence to help find new sources of materials. And in metals trading, it seems likely that AI will play a growing role as more firms use it for market analysis – or to operate their trading strategies.

The LME already has 'digital passports' for all physical metal that is traded on our market, and their use is being expanded through the voluntary inclusion of information about sustainability. There are various industry initiatives looking at technology solutions for provenance tracking of metal, which presents another interesting opportunity for the future of our metal passporting solution. More broadly, as the tokenisation of financial assets continues to expand, there are some exciting opportunities in the metals sector – so watch this space!

What is the biggest challenge ahead for your exchange or for the industry as a whole?

As I mentioned previously, it is general uncertainty about geopolitical risks such as tariffs and sanctions that will be the hardest for the industry to navigate. We know where the long-term trends for demand are going, but if countries raise barriers to trade then they will undoubtedly have an impact on the industry.

In addition, the industry faces significant challenges in responding to growing demand while trying to minimise the impact on the environment and the communities in which it operates. This is a hugely important area and one where both industry and the policy framework needs to be driving in the same direction.

For our part, we're building greater transparency through LMEpassport. We're seeing more firms make voluntary disclosures about their sustainability credentials that will allow buyers to weigh these when they make decisions about their supplier.

Given the rapid pace of new products introduced in 2024, which three excite you most?

In a sector like industrial metals, new products generally take time to build the necessary market and industry support. That is one of the reasons why we've been so pleased with the progress made by our ferrous contract suite. Our China steel contract was up almost 200% year-on-year at the end of 2024, and steel scrap was up almost 50%. While these start from a smaller base than our non-ferrous contracts, they are developing a

momentum of their own, which indicates the growing appetite for risk management in the steel industry.

It is also fantastic to see the growth of LMEpassport, our digital credentials register for metals. It enables producers to share their sustainability related metrics and certifications. By the end of last year we had seen 267 LME producer brands make disclosures, with the total number of disclosures up by 43% since October 2023.

What more can the industry do to improve diversity in financial markets?

At the LME, we firmly believe that diversity is critical to business success. And to achieve that we, and the wider industry, need to ensure that there is a talent pipeline for groups who are currently under represented in our sector. We are committed to supporting this and have a number of programmes to promote greater diversity.

A good example of our support is the two-year apprenticeship programme that introduces recent graduates to working in our sector. We encourage applications from groups who are under represented in our

industry with the aim of opening the door to opportunities for people for whom they might otherwise have been out of reach.

We also sponsor two Master's programme scholars per year at the Camborne School of Mines to support the sector in attracting a new pipeline of talent.

What was the most interesting film or play you saw in 2024?

"Nye" (National Theatre) – Michael Sheen as Aneurin Bevan, who was responsible for the construction of much of the UK's post-war welfare structure. I always find it reassuring to realise that most of the battle-lines in today's political discourse are really just the continuation of unsolved issues which have been the subject of debate for many years.

What was the best book you read in 2024?

"Working" by Robert Caro. I'm a huge fan of Caro's biographies, and this is a (thankfully much shorter) memoir of how he goes about writing them. It took me a while to fully get into the concept of a book about how other books were written (sort of a literary form of Inception), but definitely worth the time. ●



+ MORE ONLINE

Read the interview online at www.FIA.org/marketvoice

The London Metal Exchange's Ring, its open-outcry trading floor, relocated to the capital's Finsbury Square in 2016.



An interview with...

Bonnie Y Chan, CEO, Hong Kong Exchanges and Clearing Limited

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

China will remain a key centre of focus in 2025 as it plays a more significant role in the increasing significance of Asia as an economic and innovative powerhouse. Global investors are underinvested in China, and we believe there is certainly scope for asset managers to increase their allocations in the world's second-largest economy.

China's economy is going through fundamental structural changes, its capital markets are expanding, domestic investors are looking to diversify their portfolios, and exciting companies are emerging in new sectors, including new energy and environmental protection, electric vehicles, artificial intelligence, biotech, advanced hardware and materials such as those used in semiconductors.

As a core financial market infrastructure in the region, HKEX has a clear role to play in connecting international capital to China and helping Chinese investors diversify their capital allocations internationally. We also provide choice and flexibility for global investors to express their views across asset classes, and in supporting the internationalisation of the renminbi.

What are the biggest trends disrupting traditional finance?

Trading behaviour among investors is constantly evolving, particularly amid the growing popularity of new asset classes in the digital era. There is also rising demand

for faster and more efficient settlement, as well as markets that are open around the clock. This is an especially exciting time for exchanges, which need to balance the need to meet evolving investor and issuer demands with their roles as reliable, critical financial market infrastructure.

At HKEX, we are committed to continuously enhancing our market infrastructure as we anticipate evolving market trends. In 2024, we launched development of our integrated derivatives platform, the Orion Derivatives Platform, to provide modernised and efficient trading and post-trade services, as well as enabling our derivatives market to have the capability to offer round-the-clock trading. Likewise, we are enhancing the post-trade services in our cash equities market to meet the needs of our investors. It is very important for our infrastructure to be future-proofed and ready for new opportunities.

We are also actively exploring adjacent business opportunities in data and analytics, as well as new asset classes such as carbon and digital assets.

Have regulators struck the appropriate balance between addressing risk and promoting innovation?

At HKEX, we have a unique perspective on this, because we are both a listed issuer regulator and a market operator. We recognise that the risk profile of some early-stage innovative companies may be different from that of well-established companies.

In 2018, we enhanced our listing

framework with additional requirements to support the launch of innovative and new economy companies in our markets, addressing their fundraising needs whilst ensuring that a robust level of investor protection is in place.

These reforms transformed Hong Kong's capital markets. We are now one of the world's top listing venues for new economy companies, welcoming over 340 of them since 2018, raising more than HK\$1 trillion (US\$128 billion) and accounting for about 65% of IPO funds over the period.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

Innovation requires capital and funding to support its ongoing research and development, as well as the subsequent commercialisation and application.

At HKEX, we are committed to providing a platform for companies with innovative ideas to raise funds, grow and make a better world for all.

Building on the success of the 2018 listing reforms for biotech and new economy companies, HKEX introduced another new chapter in 2023 to support the listing of specialist technology companies, such as next-generation information technology, advanced hardware, advanced materials, new energy and environmental protection and new food and agriculture technologies. Since then, we have welcomed three new companies under this new chapter.



We are situated at the heart of Asia's capital markets, which puts us close to the incredible innovation happening from China's science and technology clusters and the vibrant start-up culture emerging in Southeast Asia. It is essential we keep enhancing our listing framework to help connect Asia's companies of tomorrow with global capital.

What is the biggest challenge ahead for your exchange or for the industry as a whole?

Whilst the global economy has shown signs of stabilising over the past year, geopolitical risks and economic uncertainty are expected to continue shaping markets around the world in 2025.

Nonetheless, with favourable policy direction and economic stimulus measures from the Mainland Chinese authorities, as well as our efforts to enhance market microstructure and introduce ongoing listing reforms, we are confident that 2025 will bring great opportunities and deeper connectivity for our markets.

Given the rapid pace of new products introduced in 2024, which three excite you most?

In the derivatives market, global demand for short-dated options is on the rise, driven by wider access to trading tools, the rapid delivery of information via social media and elevated market volatility.

In light of this growing trend, I am most excited about the introduction of weekly Hang Seng TECH Index Options and weekly options for 10 single stocks. HKEX is the

first market in Asia to offer stock options that expire on a weekly basis, with these weekly stock options referencing some of the largest stocks listed in Hong Kong.

The weekly stock options proved to be popular right from the start, and within a few weeks the volume of the weekly contracts accounted for about one-fourth of the volume of the corresponding single stock options products. This has been one of the most successful derivatives product launches at HKEX.

What more can the industry do to improve diversity in financial markets?

We believe exchanges like HKEX have a role to play in promoting diversity among listed issuers, as well as more broadly in the communities that we serve.

I am very proud to say that HKEX is the first major exchange in the world to ban single-gender boards, with the deadline for compliance at the end of 2024.

Gender diversity is just one type of diversity, of course. And we believe, as an exchange, our job is not to decide what is right or wrong on behalf of everybody. Instead, we want to create a set of conditions that will enable corporates to make their own discoveries. And we believe that, with our recent rule, companies that previously had single-gender boards will experience the benefits of gender diversity

firsthand and that will open them up to exploring diversity more broadly. Our issuer community has responded in an overwhelmingly positive way to this, with nearly all our companies in compliance, creating hundreds of director positions for women in Hong Kong in the last few years.

What was the most interesting film or play you saw in 2024?

I recently watched a Chinese movie called YOLO (You Only Live Once). It tells the story of a Chinese woman who confronts her own struggles, resolves to take control of her destiny and becomes a professional boxer.

It was very inspiring to me and carries a valuable message for many people facing new challenges – we need to believe in ourselves, make the effort to change and overcome these difficulties. Given that we “only live once,” we should seize every opportunity to live fully and fearlessly, leaving no room for regrets.

We even hosted a special screening of this film for our colleagues last year. ●

+ MORE ONLINE

Read the interview online at www.FIA.org/marketvoice



An interview with...

Terry Duffy, Chairman and CEO, CME Group

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

In my more than 40 years in this industry, the need for risk management has never been more important – in every market and every corner of the world. Geopolitical and economic risks continue to accelerate. And, as a result, clients turned to our futures and options markets in all-time record numbers last year.

Looking ahead, it's hard to speculate about which asset class will lead the most because they are all so interconnected. I believe each and every asset class will be critically important to managing risk. The risk outlook looks particularly acute in interest rates because inflation remains relatively high. The US and other governments are running large deficits, and with new political administrations coming into office here and around the world, we will have to wait and see the impact any potentially changing policies will have on markets. Energy is also a major theme as we see geopolitics affecting demand, supply chains and the differing speed of energy transition in various regions.

Additionally, the rise of self-directed retail traders, our fastest growing client segment, is a trend that is reshaping markets. Retail investors are increasingly sophisticated, with easier access to data and analytics, and a greater willingness to move into new areas of investing.

Smaller contract sizes that make derivatives more accessible to these clients

have led to a higher growth potential within this segment.

What do you see as the biggest risk to continued growth in trading volume?

Markets like certainty. At times, participants can choose to sit on the sidelines to see how a particular issue or regulatory change turns out before they put on new positions. While that “wait and see” behaviour can have an impact on volumes, I think it's more likely true that uncertainty will be a tailwind for volume growth. Our clients have to plan for the unexpected at all times, making risk management an imperative to operating a successful business.

Have regulators struck the appropriate balance between addressing risk and promoting innovation?

I think so. We sometimes see this balance swing back and forth. But, overall, we've always worked to cultivate a constructive partnership with regulators around the world. That approach is important to make sure we can continue to innovate at the same time we work to provide market efficiencies wherever possible.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

Enthusiasm for artificial intelligence may be driving equity market valuations currently and, given the potential, it

should. Likewise, there is still so much opportunity yet to be unlocked from the cloud. CME Group is working with Google Cloud to expand access to our markets through cloud technology, creating efficiencies that will benefit clients and attract new participants.

Most recently, we announced that we are building a new, industry-first specialised platform that will offer ultra-low latency capabilities for our futures and options markets – and we're doing so with minimal disruption to our clients' existing operations. I think that will be truly transformative.

What is the biggest challenge ahead for your exchange or for the industry as a whole?

Every client we work with faces capital constraints. As a regulated marketplace, we strive to enhance the efficiencies we can provide. For example, we offer an average of \$20 billion in average daily margin savings in interest rates alone. Those are huge benefits that market participants around the world depend on to hedge and pursue opportunities.

Given the rapid pace of new products introduced in 2024, which three excite you most?

It's hard to pick just three. Crypto has certainly captured everyone's attention and interest and is worth a mention. And, in my opinion, products and services that create efficiencies should always be at the top of the list.

When we acquired NEX Group in 2018, our focus was to unlock new value by bringing together cash and futures markets. This year, we will launch FXSpot+, an all-to-all spot marketplace connecting cash and futures liquidity – bringing the fragmented FX market together like never before.

Our interest rate products also produce unparalleled margin efficiencies. We've launched new products both on the data side, like Term ESTR, and with listed products such as our ESTR futures and options. These products complement our SOFR, Fed Funds and US Treasury futures and options which, together, create a lot of value for clients all along the yield curve.

I think retail also is a big opportunity for us. We've been focused on introducing smaller-sized products that allow clients to customise their trading strategies with precision. These also make our markets more accessible to the active retail traders who are increasingly adding futures and options to their portfolios, which also brings more new traders into our industry. One ounce gold and micro products – on

everything from WTI to agriculture to bitcoin and ether – are very promising.

What is critically important is that we stay focused on innovation and new products in addition to what I just listed.

What more can the industry do to improve diversity in financial markets?

Our clients are diverse with diverse needs. We know that the more perspectives and experiences we bring to the table, the stronger the company will be. To that end, we have an increasingly qualified, diverse workforce that continues to evolve. We certainly don't look like the same company we were ten years ago. There are more women and employees of colour within our teams. We encourage inclusion and continue to support employee resource groups within the company to provide internal networks for employees with various interests.

We also participate in a number of efforts to broaden the pools of talent we can bring in, including our own CME Group Foundation scholars programme

that provides financial support and professional development opportunities to college students who are historically underrepresented in the fields of finance and technology. The programme also supports the recruitment of these students into internships and full time roles at CME Group.

What was the most interesting film or play you saw in 2024? What was the best book you read in 2024?

In my role, I really don't have a lot of time for movies or books. But I did get the chance to catch a few new TV shows last year. Slow Horses is a favourite. My wife and I loved Vince Vaughn's Bad Monkey and The Perfect Couple featuring Nicole Kidman, who is a close friend of our family. ●



Read the interview online at www.FIA.org/marketvoice



Chicago Mercantile Exchange and Chicago Board of Trade completed their historic merger in July 2007, forming CME Group, then the world's largest exchange.



An interview with...

Dave Howson, EVP, Global President, Cboe Global Markets

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

As the world's largest global exchange operator, Cboe has a unique perspective across multiple markets and regions. From our vantage point, the US continues to offer significant growth potential, especially in equities and derivatives trading. Investors globally are increasingly seeking exposure to the US markets, drawn by the deep liquidity, track record of outperformance and robust regulatory framework that collectively make the US a magnet for global capital.

We saw particularly strong growth in US options trading, which hit record volumes for the fifth straight year in 2024, as both retail and institutional investors tapped into options for hedging and income-generation strategies. In the Asia Pacific region – particularly Korea, Japan, Singapore and Hong Kong – retail investors are demonstrating a strong appetite for equities and options trading in not only

their local markets, but increasingly in the US as well. We expect this engagement will continue, underscoring the US markets' enduring global appeal.

What do you see as the biggest risk to continued growth in trading volume?

Ongoing macroeconomic uncertainty, whether due to fluctuations in interest rates or geopolitical tensions, may heighten market volatility, impacting investor sentiment and market participation. It is critical that the industry provides investors of all wallet sizes with the tools they need to build wealth, manage risk and trade through any market environment.

Equally important is capital efficiency – ensuring investors can flexibly and efficiently allocate capital and resources to market opportunities. When investors have a positive trading experience, it fosters sustained engagement and supports healthy trading volumes over the long term.

At Cboe, we have been innovating and introducing new products with this mission

in mind. Within our S&P 500 Index (SPX) and Cboe Volatility Index (VIX) product suites, each product represents a hedging tool on the underlying S&P 500 Index, offering a slightly different, yet complementary exposure. Each product offers a distinct use case, providing traders the flexibility to engage strategically in various market environments.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

We see exciting new opportunities with the democratization of data, continued adoption of cloud technologies, clearing and data and analytics. Artificial intelligence, in particular, will play a transformative role in both our business and operations.

Cboe successfully introduced many AI-driven initiatives in 2024 and plans to expand these efforts in 2025 under our AI Center of Excellence, which leads the company's efforts in exploring and adopting new technologies like generative AI.

Our leading-edge technology powers every facet of our business – from enhancing our market infrastructure, supporting the seamless roll-out of new products and facilitating greater market access, to ensuring the resiliency of our trading platforms. Technology will remain key to our success, and to mark an exciting new chapter in Cboe's technology evolution, we recently branded our exchange technology platform as Cboe

“It is critical that the industry provides investors of all wallet sizes with the tools they need to build wealth, manage risk and trade through any market environment.”



In 2022, Cboe Global Markets, Inc. opened its new trading floor in Chicago at 141 W. Jackson Boulevard, returning to the same space where it was founded in 1973.

Titanium or Cboe Ti for short – conveying the lightweight strength, durability and resilience of our technology.

What is the biggest challenge ahead for your exchange or for the industry as a whole?

As global markets become increasingly interconnected, Cboe sees significant opportunities to expand market access for investors worldwide – and market data is the foundation of this effort. In many regions, investors increasingly want to participate in US markets, but gaining access to efficient and reliable US market data remains challenging.

Cboe is breaking down barriers by collaborating with industry partners to deliver high-quality market data to their customers, whether through the cloud or other distribution methods. In addition to data, our global footprint allows us to bring tradable products and services to market participants globally, facilitating investment flows back to the US and ultimately shaping a more connected financial ecosystem. Investor education is also key.

Through Cboe’s Options Institute and Cboe’s affiliates, we offer multilingual learning experiences – beginning with Hindi and Spanish – and plan to introduce Russian, Dutch, German and French content throughout 2025, pending regulatory review, to meet global demand.

Given the rapid pace of new products introduced in 2024, which three excite you most?

Cboe was at the forefront of several transformative trends, setting the standard for innovation. First, was the introduction of US spot bitcoin exchange traded fund options. In addition to listing these products, Cboe launched index options based on the Cboe bitcoin US ETF Index. We continue to see strong demand from many issuers that use these index options for defined-outcome ETFs.

Another defining trend was the demand for exchange-listed products, as investors increasingly sought to replicate strategies traditionally handled over-the-counter in a more transparent and capital-efficient, centrally cleared marketplace. In response,

Cboe expanded its product suite with Cboe S&P 500 Variance Futures and Options on VIX Futures.

Finally, we saw a rise in options-based ETFs, which deliver options exposure in a simple, efficient exchange-traded wrapper. From providing the underlying options to developing indices and listing ETFs, Cboe leveraged the full strength of its exchange ecosystem to help issuers bring these products to market. ●

+ MORE ONLINE

Read the interview online at www.FIA.org/marketvoice



An interview with...

Loh Boon Chye, CEO, SGX Group

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

We are always bullish first and foremost on Asia, because it is home to not only the economic powerhouses of China, India and Japan, but also thematic stories such as artificial intelligence technologies in Taiwan and what we call the “hidden gems” of ASEAN – a region that’s almost half the size of the US with twice as many people. ASEAN’s potential is huge: collectively, the ten Southeast Asian countries are on course to become the world’s fourth-largest economy.

In terms of leading asset classes, SGX Group is trusted by global institutions as a multi-asset exchange, so I shall not play favourites! Investors know they can count on us for efficient access as well as round-the-clock liquidity, whether it is in equities, FX or commodities; our record derivatives volumes bear that out. Since our SIMEX days, through the highs of lows of the global economy, we’ve been delivering growth for market participants.

What do you see as the biggest risk to continued growth in trading volume?

In recent years, the world is seeing more policy-driven geoeconomic fragmentation, which can have far-reaching consequences affecting trade, investments and global cooperation in areas such as technology and climate. In the same vein, fragmentation of market structures and regulatory frameworks can also reduce liquidity and

hinder capital efficiencies. While having more trading venues fosters innovation and different opportunities, it also makes the process of price discovery more complex.

Have regulators struck the appropriate balance between addressing risk and promoting innovation?

The idea of an “appropriate balance” is a complex and ongoing challenge for regulators, simply because risk and innovation are not constants. A good example is how technological advancements such as blockchain or AI can sometimes run ahead of regulatory developments. Our traditional regulatory approaches are designed for centralised authorities and transparency, whereas decentralisation is the fundamental value of blockchain technology.

To achieve a balance, market participants should continuously adapt and collaborate with regulators; global coordination among regulators can also help create a more harmonised approach. Ultimately, the goal is to build a regulatory environment that supports sustainable innovation while ensuring the best outcomes in terms of market stability and fair competition. Our goals are the same, so everyone in the ecosystem can play their part.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

Exchanges have been at the forefront of technology – among the first markets to

become fully scrippless and electronic, to adopting emerging technologies. For one, cloud technology offers a lot of promise to our businesses. We have been progressively putting our footprint in the cloud, but we take a cautious approach on what we should put in cloud.

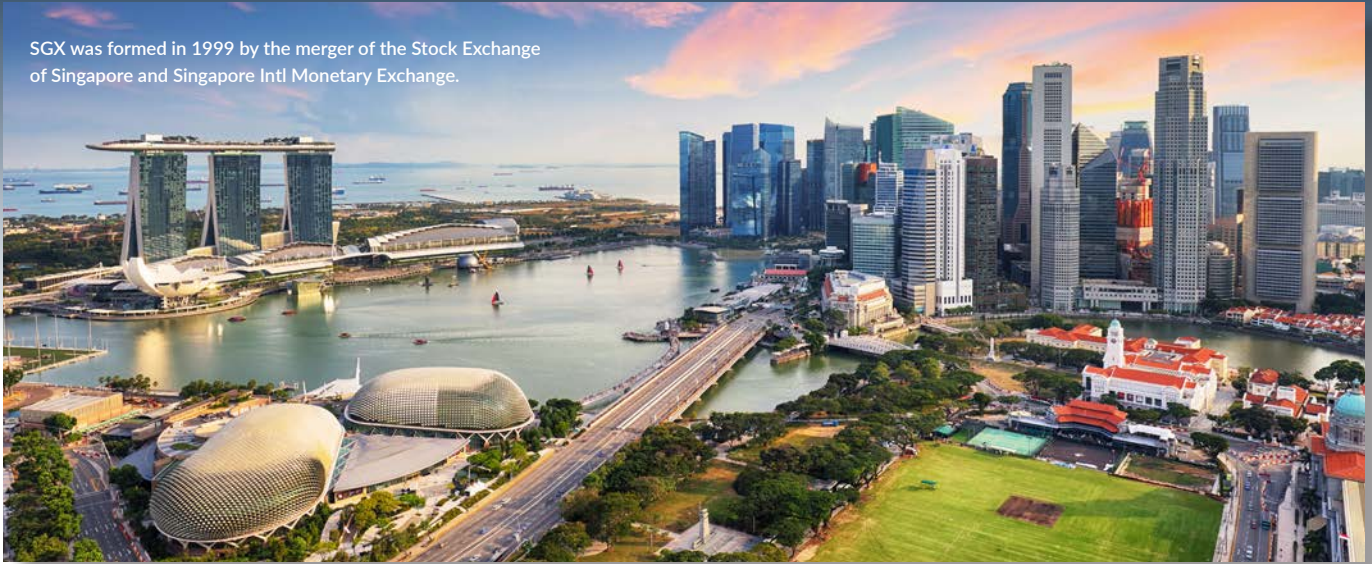
Of course, no conversation about innovation can exclude AI: in the past year, discussions on AI have overshadowed digital assets, and global business leaders are focusing on how to turn early demos into moneymakers. Whether generative AI can be harnessed effectively for use in regulatory activity is a challenge. This is especially given the need for regulatory decisions to be auditable and explainable. Our regulatory arm, SGX RegCo, has been applying AI to its real-time monitoring system to make surveillance and regulation of the securities market more targeted and effective.

What is the biggest challenge ahead for your exchange or for the industry as a whole?

For investors, geopolitical and macroeconomic uncertainties may be considered challenges, but from an exchange point of view, these are par for the course. We exist to enable participants to navigate the market’s complexities. When we talk about “Asia, Simplified,” that’s exactly what we mean – our *raison d’être* is to simplify the region’s dynamics and idiosyncratic risks for global investors.

What concerns me more is the gradual erosion of global trust. An increasingly deglobalised world, one defined by trade restrictions and economic nationalism, can

SGX was formed in 1999 by the merger of the Stock Exchange of Singapore and Singapore Intl Monetary Exchange.



disrupt the free flow of ideas and capital, and reduce efficiency gains all of us in the global community have worked hard to achieve over the years.

Trust is fundamental to the functioning of financial markets. As trust erodes, investors have less confidence in the ability of markets to make sense of uncertainty and form a price, which results in less stability and less growth. In the long run, that will impact every industry stakeholder.

Given the rapid pace of new products introduced in 2024, which three excite you most?

I am excited about the opportunities across our asset classes – commodities, currencies, equities and fixed income – that allow us and our customers to capture the future of capital markets. The convergence of products and platforms presents a unique opportunity to redefine what an exchange can achieve.

Our iron ore derivatives franchise has become Asia's first global commodity. In January, our SGX Iron Ore 62% contract joined the Dow Jones Commodity Index, driven by its reputation as a global barometer of industrialisation. We aim to offer an integrated solution for clients to manage bulk cargo and freight risks on a single, capital-efficient platform.

In FX, we see rising interest in our FX futures from new market participants attracted to the deep liquidity and

capital efficiency of our flagship Asian contracts. We will continue to prioritise connectivity and support to ensure over-the-counter foreign exchange participants benefit from our deep FX futures liquidity pool.

Finally, I'm excited about the steps we are taking to strengthen cross-border partnerships across the region as we aspire to create a more connected and accessible marketplace for investors.

What more can the industry do to improve diversity in financial markets?

Diversity is integral to financial markets and not only for reasons of better representation. When we bring a broader range of perspectives and ideas to the table, we can make more informed decisions, and that has implications for how far we can go in terms of innovation and growth.

Much effort has been made over the years to establish the direct benefits of diversity in business areas like strategy and risk management, and related advantages such as in recruitment and reputation. These are widely acknowledged and accepted. Diversity is progressing.

What is not yet so widespread are the practices that develop diversity into culture. The valuable intangibles like diversity do not just happen – leaders must take steps to encourage diversity throughout the organisation until the culture we have shaped tells us diversity has happened.

What was the most interesting film or play you saw in 2024? What was the best book you read in 2024?

To answer both questions: "Hidden Figures," a 2016 non-fiction book by Margot Lee Shetterly and the film of the same name. The story narrates the incredible contributions of African-American women mathematicians at NASA during the US-Soviet space race of the 1960s. For me, one of the lessons is the importance of sometimes challenging long-held norms and beliefs to break barriers that can make a difference... indeed pave the way... for future generations.

This resonates with the work SGX Group does serving on the Council for Board Diversity, a Singapore government initiative to encourage listed companies and other public institutions to create value through board diversity. Gender diversity is one of the factors considered in environmental, social, and governance discussions, and we have already started to see some institutional investors vote against boards without sufficient diversity. ●

MORE ONLINE

Read the interview online at www.FIA.org/marketvoice



An interview with...

Daniel Maguire, Group Head, LSEG Markets and CEO, LCH Group

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

We expect to see further innovation and increased competition across a number of asset classes into 2025. For example, through our partnership with FMX, LCH will begin clearing US Treasury futures, bringing a compelling market solution that includes portfolio margining through SwapClear. We also expect to see continued growth in credit default swaps clearing as we expand our service to offer greater choice to US members and customers.

Due to the changing economics of FX trading through uncleared margin requirements and increased capital, we expect to see continued increases in clearing activity which reduces costs through netting and reduces the risk weighting relative to bilateral trades.

Have regulators struck the appropriate balance between addressing risk and promoting innovation?

Regulators have done a lot to make markets safer and more resilient, particularly through CCP clearing, risk management and collateral workflows. These measures have been critical in enhancing stability and protecting markets during times of stress. That said, achieving the right balance remains a work in progress.

Some regulations, especially around capital requirements, have led to increased costs and additional complexity. In

response to these changes, we have been working closely with our customers to bring innovative solutions that help them to fully optimise their over-the-counter portfolios and reduce the consumption of scarce financial resources.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

Innovation in artificial intelligence, automation and digitisation are offering some of the most exciting technological opportunities to transform our industry. AI-driven tools are transforming decision-making and risk management, helping firms act more efficiently with better insights.

LSEG's focus on robust data systems and the responsible use of AI ensures these AI models are not just smart but accurate, compliant and actionable. On top of that, automation, particularly in collateral workflows, is driving down costs and simplifying processes across the trade lifecycle. Together, these advances are helping the industry become faster, smarter and more connected.

What is the biggest challenge ahead for your exchange or for the industry as a whole?

Regulatory fragmentation and geopolitical uncertainty continue to pose challenges for the industry. Divergent clearing mandates, capital requirements and equivalency rules create complexity for firms trying to operate globally. Add to that market volatility, geopolitical risks and liquidity constraints and the challenge becomes even greater.

The key will be to balance these pressures, ensuring markets remain accessible, efficient and trusted by participants. For LSEG, that means continuing to invest in infrastructure, technology and strong partnerships to deliver value in an increasingly complex environment.

Given the rapid pace of new products introduced in 2024, which three excite you most?

Several exciting developments are underway, and three stand out for me.

The introduction of SOFR futures clearing through our partnership with FMX marks a significant milestone in enhancing efficiency and competition.

“The industry must focus on creating inclusive recruitment practices and offering mentoring programmes that support underrepresented talent.”

Looking ahead – the launch of US Treasury futures on FMX in 2025, combined with portfolio margining via SwapClear, will bring innovation, competition and choice to interest rate risk management in the US.

Additionally, we see growing demand for greater capital and operational efficiencies in managing uncleared portfolios. Through Post Trade Solutions, LSEG Markets aims to deliver many of the benefits of clearing to uncleared trades, ensuring consistent processing across asset classes and efficiency of financial resources.

Following the announcement of the US Treasury clearing mandate for cash and repo transactions, there has been increased market engagement in direct, sponsored and guaranteed models for UK and European cash and repo markets, driving demand at LCH. And we remain customer-focused, working with participants to identify opportunities and add value.

What more can the industry do to improve diversity in financial markets?

To improve diversity, the industry must focus on creating inclusive recruitment practices and offering mentoring programmes that support underrepresented talent. Transparency is vital and sharing diversity metrics openly can help hold organisations accountable for progress.

Equally important is fostering workplace cultures where diverse perspectives are encouraged and valued, as this drives innovation and stronger decision-making. A commitment to these efforts will ensure the industry reflects the diversity of the global community it serves.

What was the most interesting film or play you saw in 2024?

A standout play I saw this year was *The Buddha of Suburbia* at the Royal Shakespeare Company in Stratford-upon-Avon. It was an unforgettable production, and I would

highly recommend it. More recently, I also watched *MJ the Musical* at the Prince Edward Theatre in London with my wife and kids during our annual Christmas theatre trip. The performance, especially by the lead actor, was absolutely breathtaking – a true feast for the senses. Both productions are exceptional and come highly recommended.

What was the best book you read in 2024?

The best book I read this year was *Fake History* by Otto English. It's a thought-provoking read that challenges more 'orthodox' historical narratives. Just as Otto English challenges readers to question accepted stories, in financial markets we must also challenge assumptions, adapt quickly to evolving realities, and constantly be thinking beyond and outside of what we are traditionally trained to think. ●

+ MORE ONLINE

Read the interview online at www.FIA.org/marketvoice



Paternoster Square, home to the London Stock Exchange.



An interview with...

Jeff Sprecher, Chair and CEO, Intercontinental Exchange

Given the record growth in our industry, which regions and asset classes will lead in 2025 and beyond?

The new US administration has pledged to increase US energy production, which could change the supply chain dynamics of the world's energy supply – and, hence, the global risk that will need management. Energy demand growth, particularly in Asia, coupled with power deregulation trends in Japan, increased US energy exports, and the multi-decade non-linear energy transition all point to a growing use of market-based pricing and risk management tools. Global natural gas markets continue to benefit from natural gas being both mobile (in the form of LNG) and cleaner than other fossil fuels.

With new governments in the US, UK and EU Commission, we expect new policy decisions that will impact inflation and employment, which could drive continued demand for interest rate risk management in 2025.

And, when thinking about the current robust artificial intelligence investment environment, access to low-interest costs of capital and abundant, low-cost energy could further play into global risk management needs, as well as stimulate the US equity markets forward relative to other regions.

What do you see as the biggest risk to continued growth in trading volume?

Unfortunately, this is an easy answer – government action and regulation. Poorly

constructed regulations and misguided government actions have had some of the most lasting impacts on global economies. Whether they are already highly developed, or still on their way, one of the biggest growth inhibitors is poorly conceived government policy.

As a result, we work very closely with regulators and other government officials to encourage clear, principles-based regulations, aligned with international best practices. Markets, by nature, span geographic borders – so consistent standards alongside regulatory deference are important to the health of global markets.

Have regulators struck the appropriate balance between addressing risk and promoting innovation?

Since the financial crisis, the trend has been for regulators to move away from principles-based regulations and rely more on rules-based regulations. The problem is that prescriptive rules, by definition, only work for a prescribed set of circumstances and can become a point of friction any time circumstances change.

Principles-based regulations are, by design, more flexible, which is important for both innovation and managing risk – as there is flexibility for a reasonable regulator to apply principles that best mitigate risk when circumstances change, without having to write more rules. It is not a linear tradeoff between innovation and risk management in the sense that simple but well-conceived principles-based regulations better support

both innovation and risk management. Overly complex and prescriptive rules-based regulations do neither well, creating a “tick box” environment with compliance burdens that divert attention from making markets work better.

And thinking about innovation, which technology advances offer the most opportunity looking forward?

We are likely going to see hardware play a larger role in leading and enabling product development than we've seen in the recent past. We have found that whenever you add computing capacity, which is clearly happening in the race to AI, the market finds a way to use it. So, with all the capacity that is being rolled out right now, whether it is for AI models or other needs, the market will be innovating around the big increase in compute. Those massive upgrades in hardware will lead to innovations in software.

We are also seeing real advances in material science driven by advances in AI, paving the way for further innovation in compute, networking, power generation and storage.

What is the biggest challenge ahead for your exchange or the industry as a whole?

One obvious area regulators need to get right is cryptocurrency regulation. As regulations continue to evolve around the world, we need to make sure that crypto operates in a manner consistent with

Atlanta, Georgia, home to the ICE headquarters.



proven market protections, and that new regulation does not introduce new risks into the markets.

More than any other asset class, crypto trading has shown the risk of having different regulations in different countries. And, tested, smart rules and infrastructure can encourage innovation and efficient access to capital while mitigating risk.

Given the rapid pace of new products introduced in 2024, which three excite you most?

ICE's recent launch of EU bond index futures will be interesting. It's not often that you get to see a new rates market created by government fiat.

We are continuing to see several products mature from existing over-the-counter structures, such as US Treasury clearing and total return swaps converting into total return futures.

Energy markets may also continue to be full of interest, as we witness potential shifts in energy production and delivery.

ICE has built a robust US home mortgage platform, covering the lifecycle of a loan from origination through to servicing and the capital markets. With each step in that process, data collection may offer more intelligence and transparency to other markets that we serve. We are already using such data in new indices that benchmark investments and ETFs.

We are also working on several new services that will leverage our deep experience in mortgages and financial markets in ways that can create excitement.

What more can the industry do to improve diversity in financial markets?

I think one of the more interesting things we are seeing in the US is a shift away from Northeast colleges, including the Ivy League. We see a cascade of students applying to state schools, where they are choosing strong academics coupled with a laid-back lifestyle that attracts diversity, particularly at many southern and midwestern schools. This trend is good for recruiting at our Atlanta headquarters. It's one reason why we are expanding in Jacksonville, Florida, surrounded by one of the best state university systems in the country.

What was the most interesting film or play you saw in 2024?

That's not the way I spend my free time. Nada.

What was the best book you read in 2024?

Paper Soldiers, by Saleha Mohsin, about the global growth of the US dollar and the role that Treasury has played in that evolution. ●

“As regulations continue to evolve around the world, we need to make sure that crypto operates in a manner consistent with proven market protections.”

MORE ONLINE

Read the interview online at www.FIA.org/marketvoice

Gateway to Indian Financial Market



One Stop Shop for all asset classes



National Stock Exchange of India Ltd. (NSE) is the world's largest derivative exchange* for fifth consecutive Year by number of contracts traded and 3rd largest globally in equity segment[#] by number of trades in calendar year 2023.

*As per the statistics published by Futures Industry Association (FIA), a derivatives trade body.

[#]As per the statistics maintained by World Federation of Exchanges (WFE).



30 years of NSE's operations

NSE is pioneering India's financial revolution through digitalisation

The National Stock Exchange of India (NSE) marks three decades of transforming India's financial landscape, evolving from a pioneering digital infrastructure project to the world's largest stock exchange in terms of trading activity. Processing a phenomenal number of nearly 20 billion orders and 300 million transactions on peak days, NSE's journey reflects India's emergence as a global financial powerhouse.

NSE was the first-of-its-kind fully automated stock exchange and has been setting global benchmarks for technological innovation. Remarkably, NSE's automated trading system preceded similar implementations at major global exchanges.

Since its inception in 1994, NSE's market capitalisation has surged over a hundred times to an impressive USD4.8 trillion (₹415 lakh crore). Today, NSE directly serves over 110 million unique registered investors with over 210 million accounts, reaching an unprecedented 99.8% of India's PIN codes. Only 30 PIN codes in India do not have a registered investor. This market is larger than the population of some countries put together.

The equity derivatives segment, launched in the early 2000s, has witnessed extraordinary growth. NSE's global market share in traded contracts has skyrocketed from 14.1% in 2014 to an impressive 81.8% in 2024, with 12,397 crore contracts traded (data until November 2024). Within India, NSE dominates the equity derivatives segment with a commanding market share.

Several pivotal milestones mark NSE's journey. The introduction of screen-based trading in 1994 revolutionised market operations, replacing the traditional open-outcry system. The establishment of NSE Clearing Limited (earlier NSCCL)

in 1996 strengthened risk management and settlement services. The same year saw the launch of the NIFTY 50 Index, conceptualised by current MD and CEO Mr. Ashishkumar Chauhan, which has become a vital benchmark for the Indian economy.

The exchange played a crucial role in modernising India's financial infrastructure by co-promoting the National Securities Depository Limited (NSDL) in 1996, facilitating the transition to paperless trading. NSE's product portfolio has expanded beyond equities to include derivatives, exchange-traded funds, currency derivatives, interest rate futures and commodities.

NSE's technological prowess extends beyond trading. As India's first Digital Public Infrastructure project, it set the stage for India's IT revolution and subsequent initiatives like Aadhaar, UPI, GEM, and Cowin. The exchange holds the distinction of being India's largest fintech to date, consistently deploying cutting-edge trading algorithms and real-time data analytics to enhance market efficiency.

NSE's three-decade legacy represents more than just financial success; it symbolises India's technological capabilities and economic

transformation. As it celebrates three decades of excellence, the NSE not only symbolises the progress of India's financial markets but also serves as a beacon of innovation and resilience. NSE has become India's hub for capital raising, for capital formation, for wealth creation and for job creation.

As it enters its fourth decade, the exchange continues to shape India's financial future through mobilising growth capital and enabling deeper market penetration, while maintaining its position as a global leader in financial markets. Looking ahead, NSE is positioned to play a pivotal role in India's journey towards becoming a Viksit Bharat i.e., a developed India. The exchange's commitment to innovation, fairness, efficiency, transparency and investor protection remains unwavering.

Entering the fourth decade, NSE carries forward a legacy of breaking barriers and setting global benchmarks. Its journey from a bold experiment in market modernisation to being a cornerstone of India's financial landscape demonstrates how vision, technology and commitment to public service can transform not just markets, but the entire nation. ●



DMIST – a progress report

The listed derivatives market is seeing improvements in the performance of post-trade operations since the adoption of new processes developed by FIA's standards body

BY EMMA DAVEY

Much progress has been made in improving the efficient functioning of operations for the listed derivatives space since the market volatility of March 2020. That, combined with a workforce largely relocated to their homes under Covid pandemic restrictions, led to a near crisis in the processing of trades.

Five years ago, the market focused on the processing of give-ups and the need for an industry-wide approach to addressing the problems. This resulted in the creation of DMIST by FIA, formally launched in March 2022 with a mission to develop

standards around behaviours, workflows and processes for exchange-traded and cleared derivatives.

Those involved in the initiative began by developing a standard on which all parties in a trade – the client and the broker – could agree and adhere to in order to improve the timing of trade allocations and give-ups. The result was the publication, in June 2023, of the standard, also known as the 30/30/30 Standard, thanks to the 30 minute windows in which a) the executing broker executes the order; b) the client provides allocation instructions to the executing broker upon completion of an order; c) the executing broker processes the allocation instruction; and d) the allocation is accepted by the clearing broker and booked into the client end account from the time of the instruction being received from the CCP.

Of course, publication of the standard is itself not a guarantee of improvement. The target has been to ensure widespread adoption and monitoring of the impact on efficiency. The benefit of having vendors on board means that they have been instrumental in driving this forward. Among them are initiatives by FIA Tech, OSTTRA and FIS.

OSTTRA announced a strategic collaboration with FIS in November 2024

Dialogue with industry has resulted in DMIST expanding its focus on all parts of the cleared derivatives market

designed to bring greater transparency to the post-trade lifecycle in ETD markets. This will allow OSTTRA's investment management clients to receive a real-time clearing status from over 70 CCPs around the globe via FIS Connections. The collaboration will allow market participants to meet the DMIST 30/30/30 Standard.

Similarly, FIA Tech has embedded the FIX protocol and the 30/30/30 Standard into its Trade Data Network to standardise and drive interoperability with existing execution, clearing and post-trade platforms.

DMIST has published an Implementation Guide that offers practical information and guidelines on implementing 30/30/30. According to Staci Parrish, business analyst and program manager for DMIST, "numerous market participants have spoken about the improvements they have experienced" since the standard was published. "Things like being able to handle the big increases much better, and give-up trades taking longer than T+1 becoming much rarer, even in periods of high volumes. Some have told us their daily excess margin paid on outstanding give-ups has been reduced by more than 80%, translating to an improvement of eight times in the past year."

There is also evidence that the market is better equipped to weather periods of high volatility. The US banking crisis in early 2023 generated volumes around three times higher than that experienced three years earlier.

DMIST has developed a template for CCPs to provide their clearing members with metrics about the acceptance rates relating to the second and third block of 30 minutes.

Having published its second standard – the Average Pricing Standard – in June 2024, DMIST published a consultation paper on Position Transfers at the beginning of 2025, with a further three standards in progress on the following: Self-Match Prevention, Execution Source Code and Persistent Client Tracer ID. The focus on these areas is based on discussion with DMIST members and a survey of participants in early 2024. A Planning and Strategy Committee meets periodically

to ensure the priorities reflect current industry developments.

Such dialogue with industry has resulted in DMIST expanding its focus on all parts of the cleared derivatives market from front-to-back, and not just the operations space. "This has allowed us to focus on multiple efforts at once, while not over-taxing our members on whom we rely for input and direction," says Parrish.

According to a survey published in March 2024 by Acuiti in association with OSTTRA – titled *Futureproofing Derivatives Post Trade* – while there has been significant progress in increasing operational resilience in listed derivatives markets since March 2020, 60% of respondents also believed that major risks are still present, with allocations and give-ups still the main area of risk in the system.

The survey found that over half of the sell-side respondents felt that the DMIST 30/30/30 standard "goes a long way" to solving the issues of trade allocations and give-ups. It also found that 95% of

respondents were planning to invest to meet the standard's requirements, with a fifth planning significant investments.

The momentum and desire to address shortfalls in the operation of exchange-traded derivatives markets is clear – and the results are beginning to show. ●

MORE ONLINE

Read more about DMIST at www.dmist-standards.org

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70 years of futures

We look back at the history of futures since the birth of FIA in 1955. 70 years ago there were 15 futures exchanges active in the US, all trading futures based on physical commodities, such as potatoes, onions, wool, burlap and silk. Total annual volume stood at 4.1 million contracts and more than half that activity came from the Chicago Board of Trade.

1955

The Association of Commodity Exchange Firms, the organisation that would later become FIA, is established following a meeting of a small group of leading figures in New York's futures business. The association's objectives are: to work with exchanges, represent the public customer, study ways to reduce costs, eliminate the abuse of credit and cooperate on educational efforts. Sydney Tessler is elected chairman; John Pepion is hired as executive vice president, and Julius Baer is named general counsel. Annual dues are set at \$50 per exchange membership.

1957

ACEF spearheads effort to amend the Commodity Exchange Act so the purchase of futures in anticipation of need for the underlying is classified as hedging, and not subject to speculative limits.

1958

US Congress prohibits futures trading in onions in response to pressure from onion growers who complain that onion futures on the Chicago Mercantile Exchange are subject to excessive speculation.

1960

The Greasy Wool Futures Exchange, the predecessor of Sydney Futures Exchange, opens in Sydney, Australia.

1963

Fraudulent activity in soybean oil and cottonseed oil futures by 'salad oil swindler' Anthony DeAngelis leads to the collapse of two brokerage firms. ACEF spearheads a campaign by the futures industry to demonstrate that commodity exchanges are properly executing their responsibilities to fend off onerous regulations.

Trading in silver futures resumes on COMEX after a 29-year hiatus following the nationalisation of silver in 1934.

1966

New York Cotton Exchange introduces futures on frozen concentrated orange juice, its first non-traditional agricultural product.

1967

The Chicago Board of Trade installs new electronic price display boards, cutting price reporting time to seconds

1969

CBOT allows the first two women to become members.

1971

The Bretton Woods agreement collapses as the US government abandons the gold standard. The move ends the fixed exchange rates in effect since the end of World War II, paving the way for the introduction of financial futures.

ACEF forms the Operations Division, its first division. The division's activities include consolidating exchange clearing functions, streamlining audits and achieving uniformity in margin rules.



1973: Traders hard at work at CBOT, Chicago, Illinois.

1973

Members of CBOT establish Chicago Board Options Exchange. That same year, Fischer Black and Myron Scholes publish their model for pricing options.

Fred Uhlmann of Drexel Burnham & Co. and chairman of CBOT, becomes ACEF's first non-New York director and invites Chicago firms to join the association.

1974

Congress establishes the Commodity Futures Trading Commission to oversee the trading of futures. The CFTC replaces the Commodity Exchange Authority, a bureau within the Department of Agriculture. Congress gives the new agency exclusive jurisdiction over "commodities," a term which includes "all goods and articles" as well as "all services, rights and interests."

ACEF creates its Law and Compliance Division, with its first task to help with the formation of the CFTC.

The US government lifts restrictions on gold ownership. Four exchanges list gold futures for trading on 31 December. Mid-America Commodity Exchange holds a special session at 12:01 a.m. in order to be the first exchange to trade gold.

1974-75

ACEF changes its name – first to Commodities Industry Association and shortly thereafter to Futures Industry Association.

1975

CBOT launches Ginnie Mae futures, the industry's first interest rate contract.

Options Clearing Corporation is formed as a clearinghouse for five US markets for equity options.

1976

FIA holds its first futures industry conference in Florida, paving the way for the prestigious Boca conference.

Hong Kong Futures Exchange is established.

1977

CBOT introduces 30-year T-bond futures.

**1978**

On 1 June, CFTC suspends virtually all options sales in the US as a result of "fraudulent and deceptive selling tactics" in the commodity options market, particularly in connection with the so-called "London options" market. The Futures Trading Act of 1978 subsequently bans most commodity options transactions except for trade options and, under certain circumstances, dealer options on physical commodities.

NYMEX introduces heating oil futures, the first successful energy futures contract.

1979

New York Coffee and Sugar Exchange merges with New York Cocoa Exchange to form the Coffee, Sugar & Cocoa Exchange.

New York Stock Exchange founds New York Futures Exchange.

1979-80

The Hunt brothers of Texas attempt to corner the silver market. Eventually, the CFTC charges them in 1985 with manipulation of silver prices. FIA works to build the industry's image in Washington in response to the political fallout. In one sign of FIA's growing stature in Washington, FIA Chairman Howard Stotler meets with President Jimmy Carter and Federal Reserve Chairman Paul Volcker.

1980

US embargoes 17 million tonnes of grain in response to the Soviet invasion of Afghanistan. CFTC meets in an emergency weekend session and votes to suspend trading for two days in wheat, corn, oats and soybean oil on CBOT, MidAm, KCBT and MGE.

SFE introduces its first cash-settled contract: US dollar futures.

Swiss Commodities Industry Association holds the first Bürgenstock meeting.



1981

CFTC adopts regulations allowing the trading of some options through futures exchanges. The agency also begins requiring exchanges to establish limits on the number of contracts a speculative trader or group of traders can hold. A year later, CFTC authorises CSCE to trade options on sugar futures and COMEX to trade options on gold futures.

Congress simplifies the tax treatment on futures, treating gains and losses on futures as 60% long-term and 40% short-term.

CME introduces Eurodollar futures, the first US futures contract to be cash-settled.

Federal Reserve Board allows JP Morgan to set up JP Morgan Futures Corp., making it the first commercial bank authorised as a futures commission merchant.

1982

London International Financial Futures Exchange (LIFFE) begins trading.

Shad-Johnson Accord gives SEC jurisdiction over equity options and allows CFTC to move ahead on the authorisation of stock index futures. In response, the Kansas City Board of Trade, the Chicago Mercantile Exchange, and the New York Futures Exchange launch stock index futures.

John Damgard replaces John Clagett as President of FIA.

The National Futures Association begins its regulatory operations.

1983

NYMEX launches crude oil futures.

CFTC adopts bankruptcy rules, establishing customer priority in the event of a default of an FCM or clearing organisation.

1984

An inter-agency study by US Treasury, Federal Reserve, CFTC and SEC on the potential economic impact of the burgeoning treasury futures market concludes that financial futures serve a viable economic purpose by providing a means of reducing exposure to economic risks.

CME and Singapore Mercantile Exchange establish first international exchange linkage with a mutual offset system.

Tokyo Gold Futures Exchange merges with Rubber Exchange and Textile Exchange to form Tokyo Commodity Exchange.

SEC and CFTC permit US trading of the first foreign stock index futures contract, the Toronto Futures Exchange's TSE "300" composite index futures.

Olof Stenhammar founds OM to introduce derivatives in Sweden. The exchange becomes a pioneer in electronic trading and one of the first European exchanges to go public.

Association of Futures Brokers and Dealers, the first British self-regulatory organisation for the listed derivatives industry, is incorporated.

1985

FIA holds the first futures industry trade show on the floor of CME as a showcase for technological innovation. Nearly 90 companies exhibit their products at Futures Expo.

Volume Investors is forced into bankruptcy, the first default of a clearing FCM, which resulted in a shortfall in the non-defaulting customer funds. All defaulting customers are eventually made whole.

Tokyo Stock Exchange introduces futures on 10-year Japanese government bonds, Japan's first futures based on securities.

1986

London Metal Exchange introduces clearing to its market for the first time.

MATIF launches in Paris with the listing of French Notional government bond futures.

1987

The stock market crash on 19 October, known as “Black Monday,” results in worldwide losses of an estimated US\$1.17 trillion. The media initially blames the futures markets. A committee, led by investment banker Nicholas Brady, assesses the causes of the crash and considers recommendations including the abolition of stock index futures. Testimony by FIA explains the utility of index derivatives and suggests, instead, the adoption of circuit breakers that are subsequently adopted. In 1988, the Brady Commission exonerates futures markets, and by May of that year, Federal Reserve Board Chairman Alan Greenspan contends that “stock index arbitrage was more often a force for stability rather than a disruptive influence.”

CFTC implements Part 30 rules that govern the offer and sale of foreign futures and options contracts in the US. The rules, effective in 1988, require foreign brokers to register in order to solicit US clients unless subject to a comparable regulatory scheme in their home country. The first exchange to seek and gain comparability for its members is SFE, followed by SIMEX and Montreal Exchange.

The Japanese government permits Japanese financial institutions to trade in overseas financial futures markets for their own accounts for the first time.

FIA holds its first international conference in London, with Futures and Options World (FOW) as co-sponsor.

1988

Japan’s Ministry of Finance reforms allow the formation of a financial futures exchange for the trading of currency and interest rate futures. Non-Japanese FCMs are allowed to conduct business on both types of exchanges. The reforms also permit cash settlement of futures, paving the way for the Nikkei 225 index contract on the Osaka Securities Exchange and the Topix index on the Tokyo Stock Exchange. FIA announces the formation of FIA Japan to represent the interests of the domestic futures industry.

CME develops SPAN, the Standard Portfolio Analysis of Risk system, which will later become the industry’s standard risk evaluation tool adopted by dozens of exchanges and clearing organisations worldwide.

CFTC approves the offer and sale of the first foreign options contracts in US.

LIFFE becomes the first exchange to launch a futures contract on the German bund.

1989

FIA launches the Institute for Financial Markets (IFM) as a non-profit educational foundation.

A sting by four undercover FBI agents posing as traders in Chicago’s futures markets leads to indictments of 45 traders and one clerk, 22 guilty pleas and 13 convictions. CFTC follows up by proposing restrictions on dual trading, and in 1992 Congress enacts a number of customer protections, including tougher audit trails standards, dual trading prohibitions, exchange governance and ethics training requirements.

Japanese banks form Tokyo International Financial Futures Exchange. Trading begins in June on Euroyen, Eurodollar and yen/dollar futures.

1990

Deutsche Terminbörse, which eventually became Eurex, the largest derivatives exchange in Europe, launches as a computerised financial futures and options market.



1987: “Black Monday,” the stock market crash on 19 October, results in worldwide losses of an estimated US\$1.17 trillion.

1991

CFTC permits CME-OCC cross margining for certain industry participants.

1992

Futures Trading Practices Act provides CFTC with the authority to exempt swaps from the exchange trading requirement of the Commodity Exchange Act, reducing the legal uncertainty of swaps contracts.

A massive flood by the Chicago River in the city's ancient tunnel system shuts down trading at Chicago's futures exchanges.

CME and Reuters launch Globex, a global, after-hours electronic trading system. Prior to launch, CFTC publishes exchange rules governing the system. FIA comments extensively and meets with Reuters and CME on the serious liability and contractual issues raised by the system. Many provisions are changed to the satisfaction of the industry.

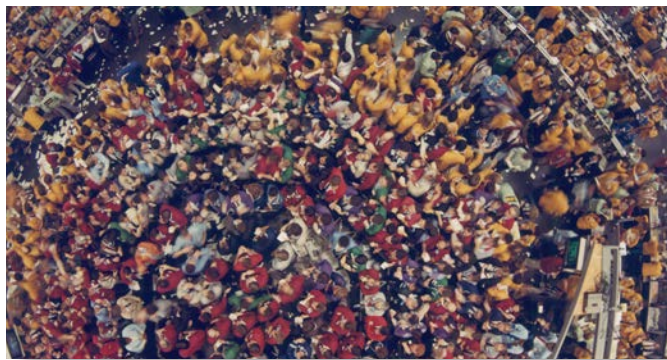
CBOT launches Project A, its electronic trading system.

1993

World Trade Center is bombed, forcing the closing of the New York futures exchanges.

UK exchanges and brokers form the Futures and Options Association (FOA), led by Anthony Belchambers.

CFTC and the French futures authority agree to allow CME and MATIF to trade products side-by-side on Globex screens for after-hours trading.



1980s: Overhead view of the CME trading floor.

Worldwide futures and options volume exceeds one billion contracts for the first time. Non-US volume in futures and options exceeds US volume for the first time.

1994

NYMEX and COMEX agree to merge, the largest such merger to date in the US.

Derivatives scandals at Procter & Gamble, Gibson Greetings and Orange County raise concerns about dealing practices in over-the-counter derivatives markets. CFTC and SEC take joint action against Bankers Trust. The General Accounting Office, responding to more than \$7 billion in losses on OTC derivatives in the preceding year, calls for legislation to regulate derivatives. The report leads to a wave of bills calling for SEC oversight of this market. FIA and other financial trade associations testify before Congress that such regulation would harm markets. In response to a Congressional request, CFTC releases a comprehensive report on the OTC markets and their regulation.

FIA Law & Compliance Division develops a model give-up agreement for use by members, helping them avoid time-consuming reviews of various versions. CFTC and FIA Law & Compliance Division agree on a two-page "generic" risk disclosure for customers trading in both US and foreign markets.

1995

Barings collapses following substantial trading losses incurred by Nick Leeson, head of the futures subsidiary in Singapore. The losses, accumulated over three years and totaling more than \$1 billion, are largely attributable to a lack of appropriate internal controls at the bank. In March, FIA forms a Global Task Force on Financial Integrity composed of representatives from exchanges, clearinghouses, brokers/intermediaries and customers from 17 jurisdictions. In June, the Global Task Force releases 60 recommendations that exchanges, clearinghouses, FCMs and customers should adopt to ensure the protection of customer funds and the integrity of the marketplace.

Sumitomo Corp. fires head copper trader who reportedly caused the company to lose approximately \$2.6 billion in copper trading. Concerns over copper pricing result in formal, multi-jurisdictional investigation including UK and US regulators.

1996

At FIA's Boca conference, 14 international futures regulators sign CFTC/UK Securities and Investments Board "Declaration in Cooperation and Supervision of International Futures Exchanges and Clearing Organizations," clearing the way for more than 49 exchanges and clearinghouses from 18 countries to sign a landmark memorandum of understanding governing the international exchange of information.

London Commodity Exchange merges with LIFFE.

Korea Stock Exchange introduces futures on the Kospi stock index. A year later the exchange adds options on the index. Within a few years the Kospi options become the most heavily traded listed derivatives in the world.

1997

The UK consolidates banking supervision and investment services regulation into a single agency, the Financial Services Authority, the forerunner to today's Financial Conduct Authority.

CFTC announces several regulatory streamlining initiatives, including changes to allocation procedures for bunched orders and the elimination of some mandatory risk disclosure requirements for sophisticated customers. The agency also implements fast-track review of exchange contracts and rules.

Myron Scholes and Robert Merton receive the Nobel Prize in Economics for their development, in collaboration with the late Fischer Black, of the Black-Scholes model for the valuation of stock options.

DTB overtakes LIFFE in the trading of bund futures, a watershed moment in the battle between electronic trading and open outcry.

SFE announces plans to shut down open outcry trading and move entirely electronic. The transition is completed two years later.

1998

CBOT establishes side-by-side open outcry and electronic trading, allowing Project A trading during regular trading hours.

MATIF introduces its new NSC electronic trading system with plans to run it in parallel with open outcry. Within days, floor trading falls to 30% of total volume. By September, the exchange is fully electronic.



1999: LIFFE goes electronic with the introduction of LIFFE Connect.

The Federal Reserve Board engineers a rescue of Long-Term Capital Management, a hedge fund with \$4.8 billion in equity that borrowed more than \$125 billion from banks and securities firms and entered into derivatives contracts totaling approximately \$1.25 trillion in notional value.

DTB merges with the Swiss Options and Financial Futures Exchange to form Eurex.

CBOT and CME sign letter of intent on common clearing with FIA at the Boca conference in March. In September, however, CBOT board votes against common clearing. FIA expresses "extreme disappointment" with the failure of the two sides to come to agreement and cites "exchange politics" as the main obstacle to this "customer-driven initiative."

FIA UK Chapter takes lead role in sharing information and coordinating conversion of exchange-traded derivatives to a single currency in the run up to the introduction of the euro in 1999.

1999

Eurex becomes the world's largest derivatives exchange by volume, the first non-US exchange to hold the position.

LIFFE goes electronic in November with the introduction of LIFFE Connect. The system is the first to provide an open application programming interface through which independent software vendors can design their own front ends and market them to traders. The exchange ultimately closes its trading floor in November 2000.



2001: Enron collapses, forcing energy market participants to reconsider their credit risk exposures.

SIMEX merges with the Stock Exchange of Singapore to create Singapore Exchange Limited (SGX).

Osaka Securities Exchange completes the transition from floor trading to electronic trading.

2000

Commodity Futures Modernization Act modernises the existing regulatory framework for exchange-traded and OTC derivatives, authorises futures trading on single stocks and narrow-based stock indexes, provides legal certainty for swaps and hybrid instruments, and closes a regulatory gap by giving CFTC limited jurisdiction over retail OTC foreign currency transactions.

International Securities Exchange is formed on 26 May as the first fully electronic US options exchange. ISE's formation prompts the multiple listing of the most liquid options classes and brings new competition and lower fees to the industry.

CBOT launches the *a/c/e* electronic trading platform using Eurex technology.

Exchanges in Amsterdam, Brussels and Paris merge to create Euronext N.V., the first cross-border merger of exchanges.

FIA's five-year commitment to easing restrictions on investment of customer funds pays off as CFTC adopts rule amendments expanding the range of instruments in which firms and clearing organisations may invest customer funds.

The National Stock Exchange of India enters the equity derivatives markets, listing futures and options on both single stocks and equity

indices. Within a few years, futures on the Nifty 50 index rapidly become one of the most heavily traded equity index futures in the world.

2001

The terrorist attacks of 11 September cause death and destruction in New York, Washington and Pennsylvania and halt trading in all US financial markets. The next day, FIA begins hosting conference calls for the industry, including exchanges, clearing organisations and firms. More than 25 calls take place over the subsequent six days including the weekend. FIA tracks contacts at member firms as they relocate to disaster recovery facilities and work from hotels and homes, and maintains dialogue with CFTC and other associations. NYMEX is the first New York exchange to re-open on 14 September when it launches Access trading on the Internet. New York Board of Trade, which had resided at the World Trade Center, resumes open outcry trading on 17 September from its back-up facility.

Intercontinental Exchange (ICE), an online marketplace for over-the-counter trading in energy products, expands into futures by acquiring the International Petroleum Exchange, a London-based futures exchange and the home of Brent crude oil futures.

The collapse of Enron, the largest bankruptcy in US history at that point, forces energy market participants to reconsider their credit risk exposures. The following year, ICE and NYMEX begin offering clearing of OTC transactions in energy products.

2002

CME lists shares in its holding company on the New York Stock Exchange on 6 December, making it the first US financial exchange to be publicly traded.

Euronext completes its acquisition of LIFFE and begins integrating Dutch, Belgian, French and Portuguese derivatives markets onto the Connect platform.

Single stock futures begin trading in the US with the launch of OneChicago and NQLX.

2003

CME and CBOT sign a historic agreement for CME's clearinghouse to provide all clearing services for CBOT products. The two exchanges estimate that the common clearing link, which begins operating in January 2004, will generate \$1.8 billion in cost savings for member firms and customers.

CBOT decides to use LIFFE Connect technology to replace a/c/e as its electronic trading platform, severing its partnership with Eurex and setting the stage for direct competition with Eurex the following year.

London Clearing House merges with Paris-based Clearnet and forms LCH.Clearnet Group, with ownership split between clearing members and exchanges.

CFTC adopts minimum capital rules for FCMs that incorporate “risk-based” calculations based on the margin levels of positions carried by the FCM.

2004

European exchanges go head-to-head with their Chicago counterparts in the interest rate futures area. Eurex US is designated as a US contract market and launches with a range of Treasury futures products, and Euronext.liffe reintroduces Eurodollar futures on its electronic trading platform.

Trading Technologies International receives two patents related to its MD Trader system, then files a lawsuit charging eSpeed with patent infringement and reaches settlements with two trading firms that agree to pay a licence fee for use of TT’s technology.

2005

To celebrate its 50th anniversary, FIA creates its Hall of Fame recognising leaders who have made exceptional contributions to the growth and development of the listed and cleared derivatives industry.

FIA establishes its Asia office in Singapore.

2006

CME and CBOT sign landmark agreement to merge and begin laying the groundwork for the transaction.

2007

In January, ICE completes merger transaction with NYBOT, which becomes a wholly owned subsidiary of ICE, soon to be known as ICE Futures US.

ICE stuns the industry at FIA Boca with an announcement of a competing bid for CBOT. The move leads to a months-long battle that CME ultimately wins, with CBOT fetching a higher price as a result of the competition. CME and CBOT complete the historic merger in July, forming CME Group, then the world’s largest exchange.

FIA launches FIA Tech to help solve long-standing industry challenges.

In August, ICE acquires the Winnipeg Commodity Exchange, then Canada’s leading agricultural futures exchange, which becomes ICE Futures Canada the following year.

The Markets in Financial Instruments Directive (MiFID), introduced in 2004, becomes effective across the European Union on 1 November as a tool to help create unified, cross-border, fair financial markets across the EU.

2008

CME Group acquires NYMEX Holdings in August, diversifying into energy and metals products with NYMEX and COMEX.

Brazil’s Bovespa, the country’s main stock exchange, merges with BM&F, the largest derivatives exchange in Latin America, to form BM&FBovespa. BM&F, which had gone public the previous year, originated as a commodity futures exchange but over time it added highly successful interest rate and currency futures.

The global financial crisis, triggered by a collapse in the US housing market partially due to widespread risky subprime mortgage lending, leads to major losses at financial institutions, a liquidity freeze and extensive bank failures. The crisis leads to the bankruptcy of Lehman Brothers in September and plunges economies across the globe into a recession. The industry and regulators conduct extensive analyses to prevent such an occurrence in the future.



2005: FIA creates its Hall Of Fame, recognising exceptional leaders in the industry, including John Damgard, who became FIA president in 1982.



2010: President Barack Obama signs the Dodd-Frank Wall Street Reform and Consumer Protection Act.

2009

The G20 Declaration is issued at the G20 London Summit, committing to strengthening financial supervision and regulation and establishing the Financial Stability Board, an international body that monitors and makes recommendations about the global financial system.

2010

US Congress passes the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, in response to the 2008 financial crisis, and President Barack Obama signs it into law in July. The law is designed to hold Wall Street accountable, end bailouts, separate proprietary trading from banking, lower risk to the American public and end the practice of “too big to fail.” Dodd-Frank authorises CFTC to oversee the \$400 trillion swaps market by regulating swap dealers, increasing transparency and improving pricing in derivatives with the introduction of swap execution facilities. It also encourages swap clearing.

2011

MF Global, a major derivatives and commodities broker, is declared bankrupt following liquidity pressures. The aftermath reveals the improper transfer of over \$875 million of customer funds to attempt to cover trading losses.

2012

Walt Lukken, who served as Acting Chairman of CFTC from 2007-2009 during the financial crisis, joins FIA to lead the organisation. The transition follows the retirement of FIA President John Damgard, who served for three decades in that role.

European Market Infrastructure Regulation (EMIR) is adopted to address risks associated with derivatives following the 2008 financial crisis.

2013

FIA, FIA Asia and FOA agree to combine organisations under one global structure and brand as FIA Global, including FOA rebranding as FIA Europe.

On 13 November, ICE completes its acquisition of NYSE Euronext, the parent company of the NYSE, in a stock-and-cash transaction valued at around \$11 billion. ICE subsequently spins off the stock and derivatives markets in Amsterdam, Brussels, Lisbon and Paris into a separate company under the name Euronext. ICE retains the financial derivatives business formerly known as LIFFE and renames it ICE Futures Europe.

2014

R.J. O’Brien & Associates celebrates its centennial as the industry’s oldest FCM.

2015

FIA introduces the Innovators Pavilion at FIA Expo and begins an annual process of honouring innovative start-up companies and providing space for them to showcase their technology at Expo.

2016

On 23 June, the UK votes to leave the EU. The British exit, dubbed

Brexit, prompts regulators and financial institutions to lay the groundwork for separate regulatory oversight and rules for EU and UK financial markets and services. Brexit officially takes effect in January 2020.

2017

By February, all the misappropriated MF Global funds are restored to customers and creditors from liquidated bankruptcy assets.

Cboe Global Markets and CME Group each launch bitcoin futures within one week of each other in December.

2018

MiFID II, a sweeping overhaul of Europe's Markets in Financial Instruments Directive, comes into force in January. The legislation, which was adopted by the European Commission in 2012 as part of the European Union's response to the financial crisis, broadens the scope of securities regulation, regulates off-exchange trading, increases transparency and expands reporting requirements.

China begins opening its commodity futures markets to the outside world, starting in March with the listing of a yuan-denominated crude oil futures contract on the newly established Shanghai International Energy Exchange, and continuing later that year with allowing foreign investors to access iron ore futures listed on the Dalian Commodity Exchange.

2019

National Stock Exchange of India's Bank Nifty options contract becomes the most heavily traded contract in the world, followed by Brazilian exchange B3's Bovespa mini index futures contract.

2020

The Covid pandemic leads to widespread shift in working practices for the industry. The Boca conference is called off at less than two weeks' notice. Markets experience significant volatility with unprecedented increases in margin requirements and strains on operations functions. FIA begins to deliver events virtually.

2021

In June, FIA announces that 10 leading clearing firms have invested \$44 million in FIA Tech.

2022

Russia invades Ukraine and triggers massive disruptions in global commodity markets. European power and gas markets are particularly

hard hit, with margin requirements rising so high that some public utilities are forced to seek government support to maintain their hedges.

FIA announces the formation of the Derivatives Market Institute for Standards (DMIST) as an independent body to facilitate the development of standards for the exchange-traded and clearing derivatives markets to make them more efficient, resilient and competitive.

FTX, then the third largest crypto exchange in the world, experiences a rapid demise in early November on the eve of FIA Expo, following revelations of questionable financial practices and a surge of customer withdrawals. The US government brings civil and criminal charges against founder Sam Bankman-Fried and other executives in December for misappropriating over \$8 billion in customer deposits. Bankman-Fried is convicted in November 2023 and sentenced to 25 years in prison.

2023

ION Group, a provider of trading technology widely used in the futures industry, experiences a ransomware attack by Lockbit in late January. The attack disrupts customers at many of the industry's leading banks, brokerages and hedge funds. FIA works with member firms to help them reconnect to the impacted platforms and publishes recommendations for strengthening cyber resilience, including the formation of an industry resilience committee.

FIA establishes the President's Award, a new annual honour recognising outstanding individuals for their contributions to the global cleared derivatives industry over the past year.

2024

FIA announces a sixth consecutive year of record-setting activity in global listed derivatives markets, with 2023 volumes reaching 137.3 billion contracts, up 64% on the previous year.

The Securities and Investment Board of India, alarmed by huge increases in retail trading of equity options, imposes several restrictions aimed at curbing speculative excess, including the removal of most weekly expirations, an increase in margin requirements and an increase in the minimum size of contracts.

2025

FIA marks the 50th Boca conference and the association's 70th anniversary. CFTC also marks its 50th anniversary. ●

50 years of Boca

This year, FIA celebrates its 50th International Industry Conference – now simply known as Boca. Here we walk down memory lane to look at how things have changed over the past five decades – from networking to panel staging – and how some things remain the same!



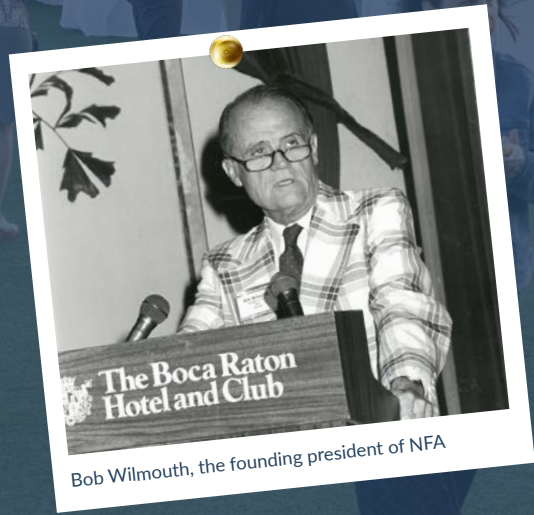
The famous FIA ice sculpture in the early days



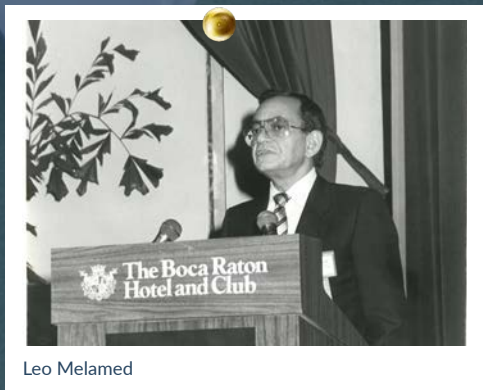
The pool and poolside bar, host of many 'meetings'



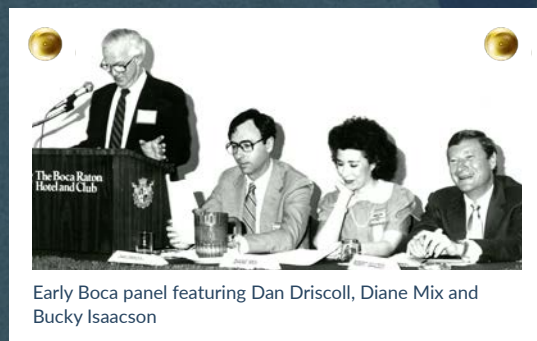
Merrill Lynch's John Conheeny, among the first inductees to the Hall of Fame, holding court



Bob Wilmouth, the founding president of NFA



Leo Melamed



Early Boca panel featuring Dan Driscoll, Diane Mix and Bucky Isaacson



Former FIA general counsel, Barbara Wierzynski, former president, John Damgard, and former chair Laurence Mollner



Long-time president of Cargill Investor Services, Hal Hansen, launching World Trading Day



FIA's roundtable for the signing of the post-Barings MOU among global exchanges in 1996



Former SEC and CFTC chair Mary Schapiro with Ken Raisler



Entertainment in 2015



Baseball star Alex Rodriguez



Former Governor of the Bank of England, Mark Carney providing the keynote address in 2022



Exchange leaders, 2023



Kids in Kathmandu Nepal (KIKN) was set up to provide help and support to orphans and disadvantaged children and young people, mainly living in and around the Kalimati area.

Opportunity knocks

Supporting disadvantaged young people by providing access to training and education lies at the heart of FIA’s philanthropic activities

BY EMMA DAVEY

“**T**here is no lack of talent, just a lack of opportunity.”
So says Kwesi Smith, CEO of

Greenwood Project, an organisation that introduces Black and Latino students to opportunities in the financial services industry in the US.

Supported by many organisations in the listed derivatives industry, including Cboe, CME Group, DRW, Eurex and FIA, Greenwood Project “envisions a finance industry without barriers to entry and advancement for Black and Latino people.”

Greenwood Project addresses this issue by equipping young people with the technical and soft skills needed to survive in finance, then placing them in summer internships with its approximately 60 corporate partners. To date, over 200 students have participated, with more than 70% going on to enter the financial services sector.

INEQUALITY SPANS THE GLOBE

Across the Atlantic, FIA supports another organisation focused on opportunity. The Black Talent Charter in the UK seeks to build race equity for Black talent into the

DNA of British businesses. “We bring British businesses together to inspire a movement for change, and we do this by changing perceptions and challenging the structures that perpetuate inequities for Black talent,” BTC says.

A stark racial inequality exists in the business world, including in finance and others that offer higher-paying positions. And progress to course-correct remains slow. At current rates, BTC suggests it will take nearly 70 years until Black talent achieves proportional representation in UK businesses and professions.

The organisation shines a light on this issue and works with signatories to identify trends and discuss solutions to common issues. That mission has resonated with many of FIA’s law firm, consultant and bank members who have signed BTC’s charter.

FOCUSING ON THE FUTURE

The futures industry established Futures for Kids in 2008 with a goal to improve opportunity and inclusion for disadvantaged and under-represented communities. Since its founding, FFK has focused on its mission to improve the prospects for children and young people around the world. This collective effort has resulted in the long-term support of charities offering training and education services to provide more opportunity and positive outcomes for these young people. The charities currently supported by FFK include:

EducAid (www.educaid.org.uk)

EducAid runs an educational network of free schools and school improvement projects in Sierra Leone, working on gender equality and improving community resilience. It works to provide a different kind of aid, strengthening education for all children in the country, as opposed to creating or expanding a parallel system of education.

EducAid’s impact is both large and small – felt at the individual level of its students

and the local communities it serves, and through sustainable school improvement projects, influencing policy and sharing best practices and lessons learned.

Kids in Kathmandu (www.kidsinkathmandu.com)

Founded in 2011, Kids in Kathmandu Nepal lives its motto of “A better life through education” every day by helping socially disadvantaged children and young adults in Kathmandu access education. It sponsors children through education, including university, and improves basic facilities and infrastructure in seven schools in the Kathmandu Valley, benefitting more than 3,500 pupils.

Leadership Through Sport and Business (www.ltsb.charity)

Leadership Through Sport and Business is a UK-based social mobility charity that prepares and supports young people from disadvantaged backgrounds into meaningful roles with major firms. It ensures those at risk of under-employment find careers equal to their ambition and ability, and that they have the skills to contribute from their first day on the job.

Since 2012, LTSB has worked with nearly 2,000 young people, providing them with personal and professional development to prepare them for the

world of work. It then works to place them in roles across accountancy and finance, digital technology, customer service, law, marketing and insurance.

Passerelles Numeriques (www.passerellesnumeriques.org)

A French-based charity, Passerelles Numeriques has a mission to unlock the potential of disadvantaged youth in Cambodia, Vietnam, Philippines and Madagascar. It accomplishes this by giving them access to education and the means to acquire key skills in the digital sector.

With a belief that education helps fight poverty, it aims to help each student secure “quality employment” aligned with the local tech market, enabling their families to escape poverty sustainably. Passerelles Numeriques also promotes gender equality, with females comprising at least 50% of its students.

WeSeeHope (www.weseehope.org.uk)

WeSeeHope provides children in Sub-Saharan Africa vulnerable to isolation, exploitation and lack of opportunity with access to community-led education, child rights and economic empowerment programmes. Developed and delivered in partnership with a network of local NGOs, these comprehensive programmes teach children skills to change their own futures.

SUPPORT FROM THE FUTURES INDUSTRY

FIA has supported FFK from the start by providing administrative support and hosting events throughout the year to benefit the charity. These include golf tournaments at Boca and FIA Asia in Singapore, as well as the annual IDX Gala Dinner in London.

Several FIA executives also have participated in the now-famous Kilt Challenge, raising substantial amounts of money for FFK. Recent years have seen impressive success from the then FIA European Regional Advisory Board Chair, Robbert Booji (now at Eurex), and SGX’s Rama Pillai. In 2025, the challenge has been accepted by two industry stalwarts – Goldman Sach’s Alicia Crighton and ICE’s Chris Edmonds. Their efforts will ensure continued support for the life-changing projects offered by the charities supported by FFK and FIA. ●

+ MORE ONLINE

Read more about some of the organisations that FIA supports at www.fia.org/fia/diversity-inclusion-initiative



WeSeeHope provides vulnerable children in Sub-Saharan Africa with access to community-led education, child rights and economic empowerment programmes.

Innovators Pavilion – where are they now?

INNOVATORS PAVILION

In 2015, FIA launched the Innovators Pavilion at its Futures and Options Expo. The pavilion provides a unique opportunity for a select group of capital markets fintech startups to showcase their solutions for the derivatives industry.

As the leading trade association for the listed and cleared derivatives markets, FIA has worked for decades to promote advances in the trading and clearing of derivatives. The annual Innovators Pavilion has become a core element of FIA's commitment to accelerate the adoption of fintech solutions in these markets.

More than 130 startups have participated and demonstrated exciting new applications in areas such as artificial intelligence, climate risk, cryptocurrencies, commodity hedging, ultra low-latency

trading, collateral management, data analytics and the introduction of entirely new asset classes to the derivatives markets.

SELECTING THE START-UPS

FIA relies on experts from its membership and venture capital firms in the selection process and for judging live at Expo.

Over the years the judges have hailed from ABN AMRO Clearing Bank, Akuna Capital, Barclays, Broadhaven Capital Partners, Chicago Trading Company, Citadel Securities, CME Ventures, DRW Venture Capital, GH Financials, Goldman Sachs, IMC Financial Markets, Jump Capital, Optiver, Two Sigma, UBS and many more.

Each year, a select group of these experts choose the cohort. They review the applications and choose the finalists based

on the innovativeness of their products and services and their relevance to firms active in the global futures, options and swaps markets.

The finalists then participate in a “Meet the Innovators” pitch contest at Expo. They compete for the title of “FIA Innovator of the Year” and a prize package that includes advertising opportunities and booth space at future FIA shows. FIA also recognises the runner-up and the People's Choice Award winner, as voted on by the attendees at Expo.

During the live pitch session on the trade show floor, the judges evaluate the startups based on the degree of innovation, the relevance to derivatives markets and the potential impact on the industry.

The participants also receive a free booth on the trade show floor and the opportunity to demonstrate their innovations to conference attendees. ●

10
COHORTS

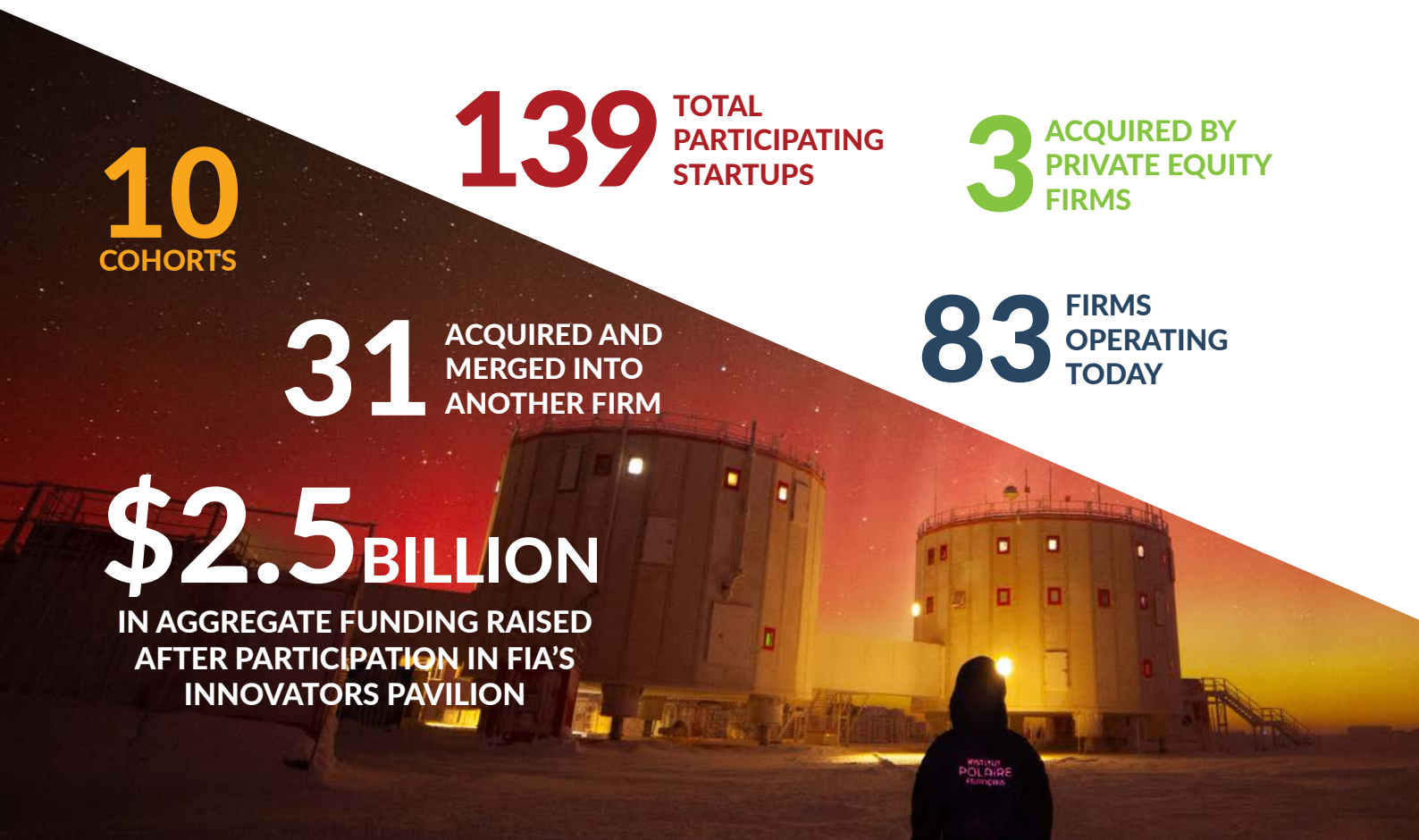
139 TOTAL
PARTICIPATING
STARTUPS

3 ACQUIRED BY
PRIVATE EQUITY
FIRMS

31 ACQUIRED AND
MERGED INTO
ANOTHER FIRM

83 FIRMS
OPERATING
TODAY

\$2.5 BILLION
IN AGGREGATE FUNDING RAISED
AFTER PARTICIPATION IN FIA'S
INNOVATORS PAVILION



COMPANY	COHORT	CATEGORY
24 EXCHANGE	2019	G
ABAXX	2024	G
ADROIT TRADING TECHNOLOGIES	2018	A
AESTHETIC INTEGRATION *1	2015	F
AMERICAN FINANCIAL EXCHANGE *2	2019	G
ANTHOLOGYAI	2024	F
ARCUS PARTNERS	2019	C
ASCENT REGTECH *3	2015	D
ARTERIA AI	2021	F
AUTOMATED DATA	2023	F
BEZERO CARBON	2022	E
BLUEFIREAI	2019	C
BMLL	2019	F
BOND	2023	C
CAPITALISE.AI	2020	A
CASSINI SYSTEMS	2015	C
CHAINANALYSIS	2018	D
CHATA.AI	2023	F
CLEARDOX	2023	F
CLEARTOKEN	2024	G
CLOUDMARGIN	2015	C
CODECOMPLETE AI	2023	F
CROSSOVER MARKETS	2023	G
CUMULUS9	2023	C
DATABENTO	2021	F
DATADOCK SOLUTIONS	2019	F
DISENT	2020	F
DUCO*4	2015	F
EMMI	2022	E
ENTELEGENT	2023	E
EXPONENTIAL EXCHANGE	2022	G
FARMERS RISK *5	2021	C
FNA	2017	D
FORWARDLANE	2017	C
FREIGHTWAVES	2018	F
GENESIS GLOBAL	2018	B
GMEX GROUP	2015	G
GRAO DIRECTO	2024	A
HALO INVESTMENTS	2017	G
HXRO	2022	B
HYANNIS PORT RESEARCH	2016	B
ICOMPLY INVESTOR SERVICES	2018	D

COMPANY	COHORT	CATEGORY
IMX HEALTH	2024	G
INCA DIGITAL SECURITIES	2019	D
IPUSHPULL	2018	F
KAIZEN REPORTING	2018	D
KEMET TRADING	2022	A
LOGICGATE	2017	D
MEMBRANE LABS	2024	C
OPTIONS AI	2020	A
ORBIT MARKETS	2022	A
PARADIGM	2021	G
PERCENT	2024	A
QUANTCONNECT	2016	A
QUANTIACS	2017	A
RAFT TECHNOLOGIES	2019	B
RISKFUEL ANALYTICS	2020	C
SAMURAI	2016	A
SEMANTIC EVOLUTION	2016	F
SIGMA FINANCIAL AI	2023	A
SOLIDUS LABS	2019	D
STABLE	2021	G
STX	2021	G
SUDRANIA *6	2018	C
SYLVERA	2020	E
TALLARIUM	2022	A
TALOS	2021	A
THEIA ANALYTICS	2024	C
TICKSMITH *7	2015	F
TOPSTEP TRADER	2016	A
TRADEFEEEDR	2023	F
TRADELEGS	2015	A
TRADEWELL	2024	A
TRADEX *8	2020	F
TRANSFICC	2017	B
TZERO *9	2016	G
UBIXI *10	2016	C
VIRTUAL COVE *11	2017	F
VOLAR DYNAMICS *12	2016	A
VORTICITY	2024	C
WEMATCH	2020	A
X-MARGIN *13	2021	C
ZEROBETA	2022	C



AI



CRYPTO



COMMODITIES

CATEGORIES

A: Trading Tools and Services

B: Technology Infrastructure for Capital Markets

C: Risk and Operations

D: Regulatory and Supervisory Technology

E: ClimateTech

F: Data & AI Analytics

G: Trading Venues, Exchanges and Clearinghouses

Innovator of the Year winners in **bold**

Information dates as of January 2025

*1 Renamed Imandra • *2 Now owned by private equity firm 7Ridge • *3 Renamed Ascent Technologies, now owned by private equity firm Edgewater Equity Partners
 *4 Majority owned by private equity firm Nordic Capital • *5 renamed HarvestIQ • *6 renamed Formidium • *7 Renamed Revelate • *8 Renamed Tractiv
 *9 Majority owned by Overstock.com • *10 Renamed Baton • *11 Renamed Immersion Analytics • *12 Renamed Vola Dynamics • *13 Renamed Credora



PRIMARY MEMBERS

FIA primary members are clearing members that hold customer funds and, thus, contribute substantially to the safety and soundness of the market infrastructure.

ABN AMRO Clearing
ADM Investor Services
Amalgamated Metal Trading
Bank of America Securities
Banco Santander
Barclays
BNP Paribas
BOCI Global Commodities
CCBI Global Markets (UK) Limited
Charles Schwab Futures and Forex
CHS Hedging
CIBC
Citigroup Global Markets
Clear Street
Commerzbank
Commonwealth Bank of Australia
Daiwa Capital Markets America
Danske Bank
DBS Bank
Deutsche Bank Securities
G.H. Financials
GF Financial Markets UK
Goldman Sachs & Co.

Guotai Junan Futures
HSBC Securities
ICBC Standard Bank
Intesa Sanpaolo
J.P. Morgan Securities
Kenanga Futures Sdn Bhd
Koch Supply & Trading Company
Lloyds Banking Group
Macquarie
Marex Spectron
MUFG Securities EMEA
Mitsui Bussan Commodities
Mizuho Securities USA
Morgan Stanley
Natixis SA (London Branch)
Nomura International
Plus500US Financial Services
Orient Futures
R.J. O'Brien & Associates
RBC Capital Markets
SEB
Societe Generale International
Standard Chartered Bank
StoneX
Straits Financial
Sucden Financial
Toyota Tsusho Metals
TradeStation Securities
Triland Metals
UBS

Wedbush Securities
Wells Fargo Securities

ASSOCIATE MEMBERS

Associate members of FIA support the overall ecosystem of the cleared derivatives markets, including clearing organizations, exchanges, global and regional executing brokers, principal trading firms, commodity firms, technology vendors, legal services and other professional service providers.

3Red Partners
A&O Shearman
Abaxx Exchange and Clearing
Abu Dhabi Securities Exchange
ACT Financial Solutions
Akuna Capital
Algo-Logic Systems
All Options International
Amazon Web Services
AMT Futures
ARB Trading Group
Arden & Bassam Partners
Arnold & Porter Kaye Scholer
AsiaNext
ASX Group
Atlantic Trading

B2C2
 B3
 Baker Botts
 Baker McKenzie
 Balyasny Asset Management
 Barchart
 Barnes & Thornburg
 Beeks Group
 BGC Partners
 Bitnomial Exchange
 BlackRock
 BlockFills
 Bloomberg Tradebook
 Bluefin Partners
 BMLL
 BMO Capital Markets
 BornTec
 BP Corporation North America
 Bracewell
 Bridgewater Associates
 Britannia Global Markets
 Broadridge Financial Solutions
 Brown Brothers Harriman & Co.
 Bryan Cave Leighton Paisner
 BSE
 Bunge Chicago
 Bursa Malaysia Berhad
 Cadwalder, Wickersham & Taft
 Calpine
 Capitol Counsel
 Cargill
 Cassini Systems
 Castleton Commodities International
 Cboe Global Markets
 Centrica Energy
 Charles Law
 Charles Schwab Futures and Forex
 China Financial Futures Exchange
 Citadel
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April 23-25, 2025 | National Harbor, MD



IDX

International Derivatives Expo

June 16-18, 2025 | London



Commodities Derivatives Conference

October 6-8, 2025 | Houston, TX



EXPO

Futures & Options Expo

November 17-18, 2025 | Chicago, IL



ASIA

Asia Derivatives Conference

December 2-4, 2025 | Singapore



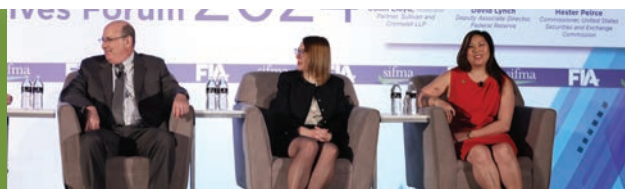
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Asset Management Derivatives Forum

February 9-11, 2026 | Austin, TX



BOCA

International Futures Industry Conference

March 9-11, 2026 | Boca Raton, FL



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