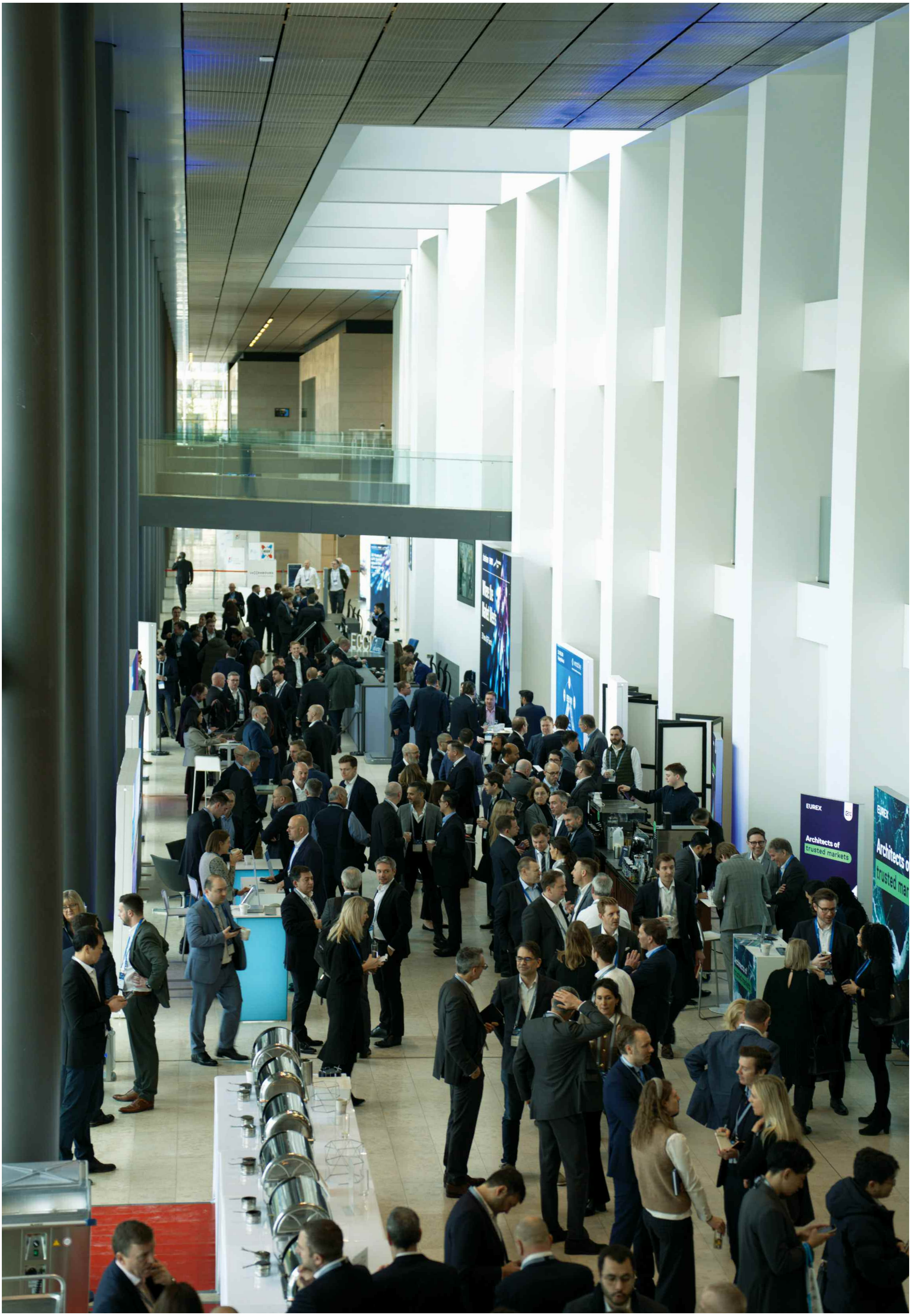
clearstream EUREX DEUTSCHE BÖRSE GROUP

Global Funding and Financing Summit 2026

30 Years of GFF Summit: Where the Market Meets

White Paper
Summary and Key Findings
March 2026


EUREX
Architects of
trusted markets

Preface

For three decades, the GFF Summit has been one of the primary international events for the secured funding and securities financing industry. It is where industry experts come together to navigate change, to establish standards and to build partnerships that drive funding, financing, liquidity, and collateral.

The summit is an example of Deutsche Börse Group's unified approach to secured funding and financing, combining the strengths and specialist expertise of Clearstream and Eurex in the interest of our clients. This is not just about innovation, but also about trust and partnership. These qualities are fundamental to defining our 2026 strategy and are central to discussion at this conference.

Over the past 30 years, we have had many examples of how both cleared and uncleared repo markets have demonstrated a high level of resilience in both stressed and normal market conditions. These offer important benefits to market participants, including strong risk management, operational efficiency, greater transparency and optimization of financial resources. Alongside our securities lending and collateral management solutions, these bring a vital source of liquidity and stability to the market.

Eurex continues to promote policies that encourage the lifting of regulatory barriers and legacy market structures, enabling Europe's repo markets to evolve towards an ecosystem where central clearing has an increasingly prominent role. In doing so, demand for cleared repo has grown from a range of non-bank financial institutions, including pension funds, insurers, public institutions and supranationals, investment managers and corporates.

In its triparty environment, Clearstream continues to experience strong growth in uncleared repo and in central bank pledge – towards Eurosystem central banks, the U.S. Federal Reserve, the Monetary Authority of Singapore and a number of other key central banks globally. In the EU, pledge activity has been driven particularly by the release of the Eurosystem Collateral Management System (ECMS), the ECB platform for managing collateral used in Eurosystem credit operations, where Clearstream is currently the only triparty agent fully connected to ECMS and to the national central banks (NCBs) participating in Target2-Securities (T2S).

Since 1996, conference delegates have witnessed financial innovation in many forms. With the introduction of digital money and the growth of stablecoin, we are witnessing a fundamental shift in the exchange of money and the mobilization of collateral, creating the means to dispatch payments and to move collateral in near real-time. With this, digitalization, tokenization and advances in technology will reshape how firms approach their funding and financing decisions, how they organize their trading and processing schedules, and how they manage workflow and human resources.

Frank Gast
Global Head of Business and Product Development Repo D2D at Eurex

Marton Szigeti
Head of Collateral, Lending and Liquidity Solutions, at Clearstream

1.

Innovation and Transformation to Strengthen European Capital Markets

Stephanie Eckermann
Deutsche Börse Group, Executive Board Member responsible for Post-trade

Looking back to the first summit, this was a small gathering attended by just a few dozen securities finance specialists. This event was hosted by Clearstream not long after it had launched the first multicurrency triparty repo service in 1992. In 2026, the conference was attended by more than 900 delegates from many countries around the world.

Since last year's summit, the pace of change has been enormous, including sustained investment in AI adoption and the growth of crypto assets and stable-coins, with global stablecoin market capitalization now surpassing USD 300 billion.

Since April, sweeping tariffs have been introduced from the U.S. and the hard-won rules-based political order is being called into question. High levels of political uncertainty and a rapid pace of techno-logical innovation have become the daily norm.

What does that mean for Deutsche Börse Group as an integral component of a European financial system within an interconnected world? "In short, this means transformation," explained Stephanie Eckermann, Deutsche Börse Group Executive Board Member responsible for Post-trade, in her opening address. "We are focused on how within Europe we can make our economic ecosystem stronger and more attractive."

> "Our financial ecosystem must provide a secure and efficient mechanism for companies to raise capital, innovate, and drive economic growth. This provides the foundation for a stable, self-reliant, and future-proof economy and thus is essential for strengthening the EU's role as a reliable and confident partner globally."

For Eckermann, the answers need to be bold. Europe requires that its capital markets are more integrated, more efficient and more competitive than ever before. A robust and integrated Savings and Investment Union is important to the policy framework that will realize that objective.

This financial ecosystem must provide a secure and efficient mechanism through which companies can raise capital, innovate and drive economic growth, providing the foundation for a stable, self-reliant and

future-proof economy. This is important to enable the EU to remain a reliable and confident global partner. To this end, it must continue to promote European capital markets as a backbone for strong, yet connected, sovereign economies.

Quantitative normalization

Since mid-2022, the European Central Bank (ECB) has wound down its liquidity support measures and taken progressive steps towards balance sheet normalization. With this shift in monetary direction, the eurozone has moved from a situation of collateral scarcity to one of relative collateral abundance where cash liquidity is fragmented and in limited supply.

As the ECB has moved to quantitative normalization and excess liquidity has contracted – with the Deposit Facility Rate held at 2.0 percent and € (Short-Term Rate STR) spreads narrowing – cleared and uncleared repo markets have played an integral role in enabling cash takers to access liquidity through the market. With a rise in borrowing rates, cash takers are looking to borrow against wider collateral sets and exploring wider use of term agreements.

ECB Executive Board Member Isabel Schnabel has noted that the ECB is shifting its liquidity provision strategy from a supply-driven to a demand-driven model. With a contraction in excess liquidity, banks are moving out of cash into high quality liquid asset (HQLA) debt to manage their liquidity coverage ratio (LCR) requirements. With quantitative normalization, banks should not be looking first to the ECB to access liquidity. Rather, the ECB is expecting banks to look first to the market, with central bank channels being available if and when marginal liquidity is required.

2.

European Repos: Silence Ahead of the Storm

In a keynote presentation to the Global Funding and Financing Working Committee, Christoph Rieger, Head of Rates and Credit Research at Commerzbank, observes that ECB forwards, and his research team's own ECB forecasts, are static as far as the eye can see.

So where do potential surprises lie for the market? "Although we can devise many scenarios in which the ECB would cut rates, there are few in which an earlier hike appears likely," he responds. However, even without a rate hike, repo rates could potentially come under pressure, as they did in the U.S. during 2025. This prompted the Fed to launch larger-scale T-bill purchases earlier than most observers had anticipated.

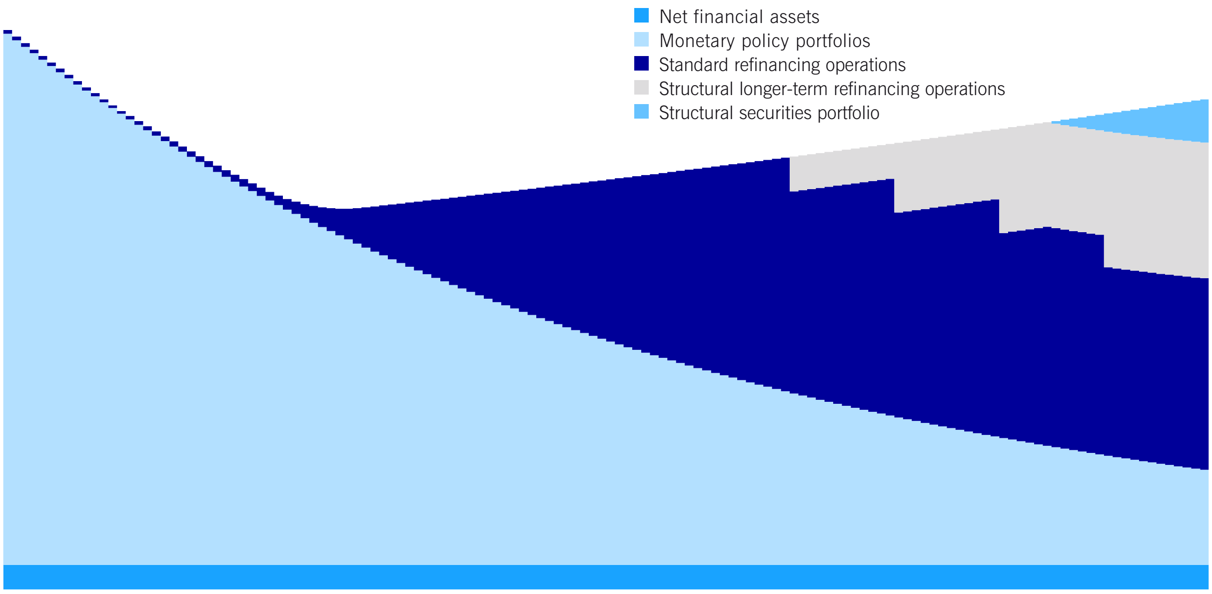
In the euro area, repo markets currently appear calm – much calmer than on many previous occasions when we have met for the GFF Summit. "However, I can assure you that this will change over the next couple of years," says Rieger. "The big question is when!"

Average repo spread of German Government Bonds (Bunds) and French Government Bonds (OATs) over €STR have moved back to the upper end of their range while Italian Government Bond (BTP) spreads are closer to the middle of their range.

"In the euro area, repo markets currently appear calm – much calmer than on many previous occasions when we have met for the GFF conference. However, I can assure you that this will change over the next couple of years. The big question is when!"

Christoph Rieger
Head of Rates and Credit Research at Commerzbank

Stylized evolution of the Eurosystem liquidity supply in the new operational framework:



Source. ECB.

Currently about 40 percent of BTPs are trading above the ECB deposit facility rate (DFR) – and this figure was already close to 60 prior to summer 2025. This indicates that liquidity distribution in the interbank and cross-border repo markets is working smoothly. Excess liquidity at Italian banks has stabilized at just below EUR 100 billion and ECB data indicates that Italian banks have become more active in repo funding without pressuring spreads.

What generally helps, says Rieger, is that more liquidity providers have entered the market. However, the repo situation needs to be monitored closely since cash providers may be unable to keep up with the rising supply of collateral and the ECB's demand-led framework has not been previously tested.

Demand in ECB operations remains subdued, and analysts continue to expect a gradual increase over the coming year. The picture looks similar to 2025, but volumes have not picked up. The risk, therefore, is that ECB liquidity will not 'catch up' smoothly with developments in the UK and could instead be exposed to a 'ketchup' effect.

"All in all we maintain our view that repo tensions and a turnaround in the ECB balance sheet won't take place before next year – similar to the central scenario depicted by Mrs Schnabel," concludes Rieger.

3.

Rethinking Trading Relationships, Optimizing Balance Sheet

Exploring these financing dynamics in more detail at the conference, panelists noted that qualitative tightening (QT) in Europe is draining excess liquidity while persistent fiscal deficits are driving record sovereign issuance, flooding markets and resulting in a cheapening of collateral. EU and UK dealer banks may be constrained in terms of balance sheet and have become more selective in what they can finance.

In reacting to these challenges, the focus has been on balance sheet optimization, netting opportunities and, more generally, on squeezing full value out of the secured financing toolbox.

With this in mind, European banks are becoming more selective about their trading relationships, prioritizing how they can optimize return from each unit of balance sheet. Cross-selling has become increasingly important, prioritizing relationships where a bank is spreading the balance sheet cost across multiple product activities.

In this context, technology investment is not optional – banks need to invest in models that improve collateral mobility and enable faster collateral substitution.

In the recent past, significant investment has been channeled towards improvements in automation and operational efficiency – to extending STP rates, to reducing settlement costs and failure rates. While these priorities remain, banks are targeting technology enhancements that will enable them to deploy balance sheet more efficiently. “Every basis point you can save through having daily real-time monitoring of where your collateral is will translate into capacity that you can deploy for other business uses,” said a panelist.

A parallel focus on balance sheet optimization and technology innovation prevails in North American markets. With the introduction of mandatory clearing in the US, the ability to offer cheap balance sheet will no longer provide the same competitive advantage that it has done previously, observed another panelist. “We need to look towards more holistic and well-rounded product offers.” There will be a strong focus on margin efficiency, on capital cost reduction and on data aggregation – pulling together key information from different business areas across the bank and translating these data insights into performance advances and efficiency savings. Counterparty credit limits will go much further with cross-product netting and comparative advantage will lie with those organizations that can offer these cross-margining benefits.

4.

Liquidity in Motion: Funding and Financing Outlook

We have noted that cleared and uncleared repo has a key role to play in the smooth functioning of financial markets, providing secure and efficient access to market liquidity.

Repo in managing liquidity stress

Central banks have also employed repo facilities to preserve financial stability and to protect market functioning during periods of market stress.

A central bank panelist noted that the central bank's interactions with the market have changed substantially since prior to the Covid-19 pandemic. Shortly before the pandemic, this central bank's equivalent reserve system balances stood at close to USD 19 billion. Two years later, just after Covid, this expanded to a high of USD 275 billion.

"Prior to Covid, we would inject liquidity a handful of times per year," said the panelist. "We made bonds available from our balance sheet through securities lending as a lender of last resort. We only did this periodically and our input and footprint pre-Covid was rare and relatively small."

With the introduction of its asset purchase program, offering liquidity support during the pandemic, the central bank's balance sheet expanded significantly. It operated a securities repo operation (SRO) during Covid to lend government securities back into the market, with primary dealer counterparties borrowing USD 20–30 billion of bonds per day at its height.

On moving into quantitative tightening, this facility has contracted to a recent average of USD 600 million of bond lending per day to the primary dealer community. These daily interventions were integral to maintaining the smooth functioning of the market during this period.

"For liquidity management, our workhorse is the repo," says the panelist. The bank currently operates a repo program that has terms of two weeks, one month and three months for balance sheet management. To counter severe market-wide liquidity stresses, the bank can activate the extended term repo facility (ETRF) with the primary dealers which can be refined as needed, in terms of the size and frequency as well as term and collateral eligibility.

The central bank also operates a standing discretionary facility, the contingent term repo facility (CTRF), which provides liquidity to non-bank financial institutions and primary dealers. "This serves as a form of insurance policy which we can turn on and off in response to severe market-wide liquidity stresses. This is tailored to a subset of market participants, particularly pension funds, insurance funds, and asset managers."

Commenting on the value of these insurance mechanisms, a pension fund delegate at the conference noted that although they have not been widely used in practice by eligible counterparties, their availability was important to bring calm to the market. For a buy-side firm that does not have a large repo footprint in non-stress conditions, for example, the availability of these insurance mechanisms afforded confidence that it could access liquidity without being forced into selling assets in distress market conditions to meet margin calls and other immediate liquidity requirements.

Mandatory clearing

In December 2023, the U.S. approved mandatory clearing of eligible secondary market transactions in U.S. treasuries, with this provision coming into effect for cash-market trades from December 31, 2026 and for eligible repo market transactions from June 30, 2027. With this decision, policymakers and market participants in other jurisdictions are monitoring its implementation to identify potential lessons and implications for clearing practices in other markets.

In summarizing key conclusions, panelists noted that there can be no one-case-fits-all across all markets. While the Fixed Income Clearing Corporation (FICC) represents a centralized clearing location for treasury repo in the U.S., in Europe the CCP landscape is more fragmented with clearing activity being split across a number of EU and UK-based clearing houses.

Eurex notes that central clearing continues to be a core component of Europe's otherwise fragmented repo market, where most interbank activity is already centrally cleared without mandatory clearing. However, some buy-side firms, including money-market funds and UCITS, are currently not permitted to pledge securities to a CCP in Europe and this has constrained their ability to utilize central clearing for repo. While interbank repo is largely cleared, work needs to continue to remove barriers for non-bank financial institutions (NBFIs) and to provide incentives for public sector bodies, such as central banks, to participate in cleared financing markets.

In the U.S., money-market funds have fueled significant demand for sponsored clearing through FICC. An EU-based dealer expressed a desire for similar buy-side participation in Europe. However, panelists noted that unlike the predominantly overnight repo market in the U.S., a higher percentage of activity in Europe and Canada is term-based. This distinction means that MMF demand for clearing is likely to be less pronounced, and any push for more clearing must ensure the central counterparty (CCP) can replicate and facilitate these longer-term trades. The panelist from the EU-based dealer concluded, "On balance, we would like to see more trades being cleared, but not through the introduction of mandatory clearing." The above two paragraphs are redundant.

5.

A View into the Future of Digital Innovation

At the speed of the Internet

During the 30 years of GFF, conference delegates have witnessed financial innovation in many forms. But, with the introduction of digital money and the growth of stablecoin, panelists indicated that we are witnessing a fundamental shift in the exchange of money, creating the means to dispatch payments at the speed of the Internet. The arrival of the World Wide Web has changed our lives, and now digital currencies are changing the way that we pay for goods and exchange money.

Around 7 percent of the world's population is holding digital assets of some kind. In terms of cryptocurrencies, over USD 4 trillion cryptocurrency is being circulated around the system. But it is not just retail investors investing in this space. Around USD 400 billion in bitcoin (BTC) are held by institutional investors.

With the passage of the Genius Act in the U.S., USD-backed stablecoins in circulation are expected to surpass USD 2 trillion by 2028, according to research from Deutsche Bank.

On January 27, 2026, by coincidence the first day of this year's GFF summit, the ECB announced that the Eurosystem will accept marketable assets issued in Central Securities Depositories (CSDs) using DLT as eligible collateral for Eurosystem credit operations from March 30, 2026. This reflects interest across

the Eurosystem to expand the potential collateral pool by mobilizing assets issued using DLT that are not represented in Eurosystem-eligible securities settlement systems.

The ECB's decision to accept DLT-native securities is a leap forward for the securities finance sector. The ability to access central bank liquidity with digital instruments materially strengthens market resilience, accelerates collateral mobility, and reduces systemic risk.

Shortly prior to this, in December 2025, the Depository Trust & Clearing Corporation (DTCC) received a no-action letter from the U.S. Securities and Exchange Commission granting authority for DTCC to tokenize real-world assets held in custody in its depository subsidiary, DTC, in a controlled production environment. This service is scheduled to begin in H2 2026.

But how will banks and digital platforms manage this transition? And what infrastructure changes and resourcing will this require?

Panel discussions indicated this will demand significant reconfiguration of work schedules and human resource allocation to support 24/7 trading and settlement. In practical terms, this requires automated 24/7 workflow but also having staff expertise available around the clock, including weekends. Crypto exchanges now support 24-hour trading, 7 days per week with no operational cutoff. Clients can pay in collateral 24/7, if it is in the form of stablecoin or cryptocurrency, and will receive margin calls 24/7, supporting spot, futures and options via a single margin engine. "Where the challenge occurs is with the off-ramp," said a panelist. "If a client wishes to convert to fiat currency over a weekend, for example, that presents a constraint since this is out of hours for bank settlement rails. However, a number of banks are working with crypto institutions to improve the link to fiat rails. This will reduce some of these points of friction."

Trading is commonly on a pre-funded basis and this, among other factors, will accentuate the importance of intraday liquidity. Some major cryptocurrency exchanges have strong balance sheets that they can deploy into the market for liquidity purposes. However, it can still be expensive for market participants to raise funding independently. This cost of financing is likely to fall as more liquidity providers enter the market, delivering a more competitive environment for intraday digital financing.

In packaging these services, a number of major crypto exchanges offer Crypto-as-a-Service (CaaS) which banks and fintechs can adopt as a white-labelled solution, enabling them to offer crypto services, including financing, staking and securities lending, to their clients.

Digital money

Europe's move to digital asset adoption is a story of small increments. The Markets in Crypto-Assets Regulation (MiCA) offers a solid foundation and starting point for Europe, but regulators need to allow freedom for the market to create new and innovative solutions. We cannot be certain at this stage what the major use cases will be in a few years' time, observed one panelist. The market needs to discover these use cases as adoption increases and it needs the flexibility to create appropriate solutions.

In July 2025, The Guiding and Establishing National Innovation for U.S. Stablecoins (GENIUS) Act was signed into law as the first major crypto legislation in the U.S. This establishes regulatory and licensing obligations for issuers of domestic payment stablecoins and standards for participation for foreign stablecoin issuers, along with safekeeping and custody requirements for stablecoin-related assets.

With 99 percent of the established stablecoin market capitalization pegged to the U.S. dollar and heavily backed by treasuries, panelists noted that growth of USD stablecoin adoption is likely to reinforce dominance of the U.S. dollar. How will other jurisdictions respond?

A representative from a European bank indicated that, as an active participant in the ECB's DLT settlement pilot, his organization has become increasingly convinced by the need for EUR-denominated stablecoin adoption in the EU that mirrors the adoption of USD-backed stablecoin across the Atlantic. This will be important, it notes, as a means of payment to facilitate real-time atomistic settlement and to enable real netting sets across settlement of derivatives, traditional and digital assets. These netting benefits will potentially realize billions of euros in savings in the bank capital requirement.

The conference identified a number of stablecoin use cases that are already well established. One is to provide a fast and efficient mechanism to enter and exit the market. If a trader wishes to temporarily de-risk its trading book – for example when it is taking a work break over a weekend – it can trade out of its positions into stablecoin, before trading back into its risk positions when ready to resume trading.

Second, this may be attractive to corporate treasurers where an intracompany transfer between group entities may previously have taken several days, involving significant FX fees, paperwork and legal costs. In a digital payments environment, a treasurer could make intra-group payments using stablecoin in near real-time. For firms that make regular cross-border payments, this may also erode the need to maintain a correspondent banking network.

Further, it will cater for consumer payments and transaction preferences of future customers, aligning with demand from Gen Z, Gen Alpha and subsequent generations to manage their cashflows from a single digital wallet – enabling users to receive their salary, pay rent and utility bills, pay for goods and services and manage other financial credits and debits through a single digital account.

Central Bank Money (CeBM) and Commercial Bank Money (CoBM) settlement models

Clearstream's Marton Szigeti suggests that existing central bank money and commercial bank money settlement models for institutional securities settlement are unlikely to become redundant as digital money payments grow alongside fiat money. The digital money structures that are emerging will continue to support CeBM and CoBM settlement – whether employing central bank digital currency (CBDC), stablecoins, tokenized deposits or other structures for the payments leg. These are units of digital money that can be used for exactly those purposes.

With this in mind, Deutsche Börse Group is exploring how to support efficient use of stablecoin, but making this more relevant to institutions rather than simply to retail or corporates. "We view this as a natural fit for a clearing environment and a settlement environment that will help to facilitate lower costs and eliminate friction in settlement activity," he says. This digital commercial bank money stablecoin environment would work as a complement to CBDC payments, rather than as a competitor or substitute for it.

Notwithstanding, further amendments to Europe's regulatory framework may be necessary to encourage institutional adoption. Under MiCA's provisions, for example, a 1,250 percent risk-weighted asset (RWA) add-on may be applied if a digital currency fails to meet specific redemption or basis risk tests, or against risks related to the underlying distributed

ledger technology. These capital charges are likely to be prohibitive for institutional firms wishing to increase utilization of stablecoin or other digital money forms as a means of payment.

Managing transition risk

Beyond technology development and testing, the need to manage transition risk is front of mind for large global financial institutions. As a global systemically-important financial institution with several tens of trillion USD in assets under custody, and supporting several hundred billion USD in repo daily average exposure, a global custodian noted that it cannot flick a switch to convert to a digitally native custody service. Financial regulators are watching to ensure that this migration is managed carefully without disruption to key systems and stakeholders.

Some parts of this transition will be potentially developed in house, some will be managed through partnerships with third-party providers. This requires effective third-party risk oversight and vendor management practices that are properly integrated with oversight of internally-managed solutions. "Throughout this process, we must ensure that we have full ownership of our platform and that risk oversight is joined up across asset types and business areas," said the panelist.

For multilateral financial institutions and supranationals, as well as debt management offices and corporate issuers, there is also inevitably a need for safety and certainty in transition. "As momentum builds behind digital bond issuance, we will continue to monitor those developments closely," said a panelist from a supranational issuer. "But given our size as an issuer, the liquidity and volume that we bring to the market, it is hard for our organization to take a lead." Another multilateral lender indicated that while it does have freedom to raise 10–15 percent of funding in a more diverse way, it will not be funding at scale until the ecosystem for digital bonds has had more time to mature and grow.

"Our goal as a firm has been to automate the post-trade process for financial products and to support the tokenization of collateral on a completely programmable basis. To do this on the basis of unstructured and non-standardized foundations is close to impossible. To address this, we have opted to work natively within the common domain model. This operational and legal standardization is a fundamental enabler of the technology and central to achieving many of the digital transformation objectives that we have been discussing at this conference."

Ciarán McGonagle
Chief Legal and Product Officer, Tokenovate

These transition challenges raise important questions regarding standardization of data and legal documentation. We are now moving to a new paradigm where we have the technology that can support digital processes and multilateral processing of these different types of lifecycle events. The fundamental question is how we implement a technology based on having common, shared data sets when, previously, there have not been standardized ways of sharing that data consistently across the industry.

Our goals as a firm, says a panelist, has been to automate the post-trade process for financial products and to support the tokenization of collateral on a completely programmable basis. To do this on the basis of unstructured and non-standardized foundations is close to impossible. To address this, it has opted to work natively within the common domain model – a standardized, machine-readable and machine executable data and process model for how financial instruments are managed across the transaction lifecycle. This operational standardization and legal standardization is a fundamental enabler of the technology and central to achieving many of the digital transformation objectives that we have been discussing at this conference.

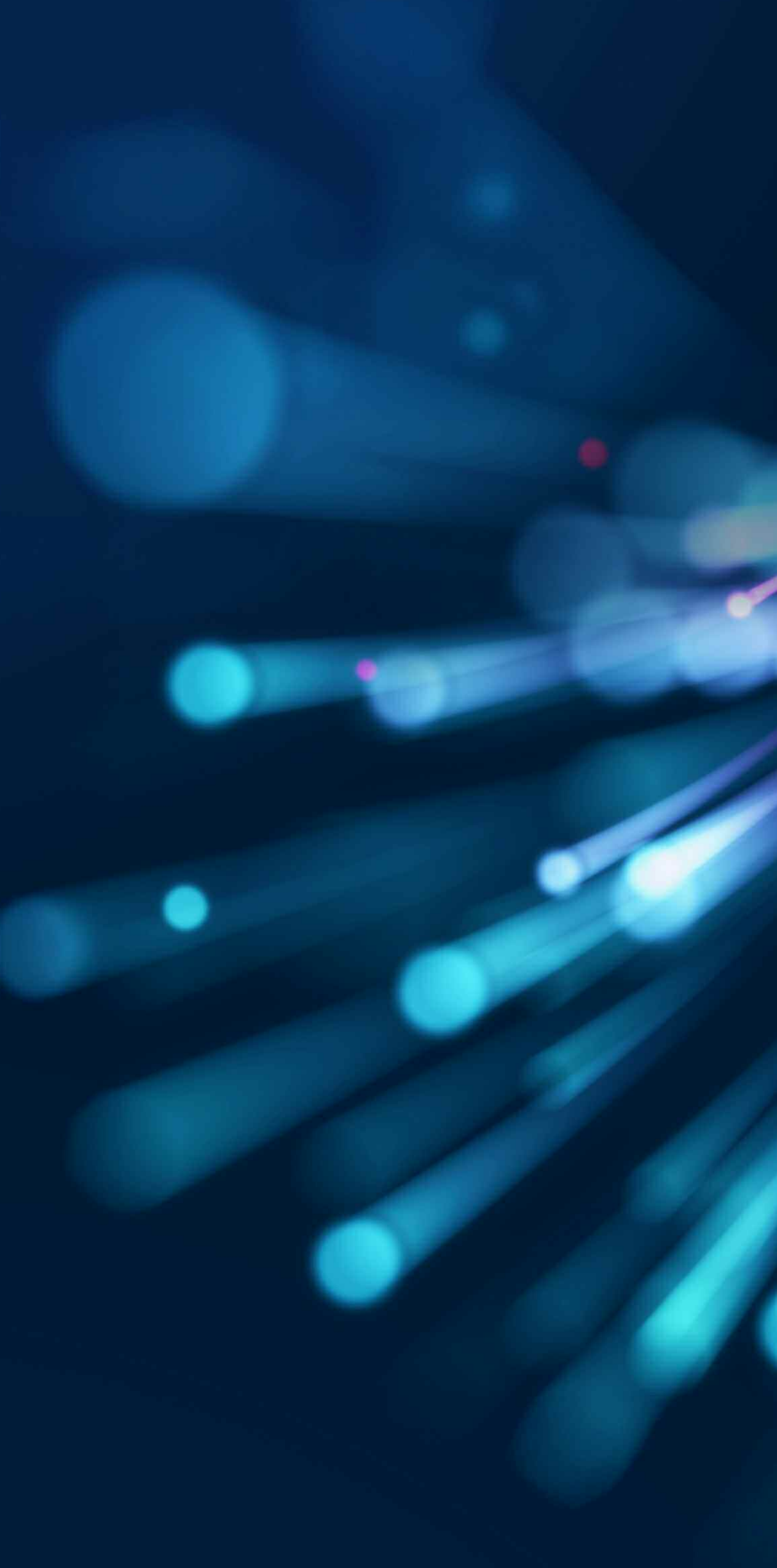
"The idea that President Trump can be disciplined by the markets is, in our analysis, too naive a view. Over time, the response from the markets, when the President has introduced a disruptive action, has grown smaller and smaller. The market already appears to be pricing in his actions – and the President only appears to go back on his position when bond and equities prices fall simultaneously."

Charles Lichfield
Director of Economic Foresight and Analysis,
Atlantic Council

GFF

Global Funding and Financing (GFF) integrates all Deutsche Börse Group's services around securities financing, cash funding and collateral management.

Aligning our activities under GFF allows us to better address your regulatory requirements and to serve your emerging needs in view of trading, clearing, risk and liquidity management more efficiently.



Published by
Deutsche Börse AG
60485 Frankfurt/Main
Germany
www.deutsche-boerse.com

Clearstream Banking S.A.
42 Avenue JF Kennedy
L-1855 Luxembourg
Luxembourg
www.clearstream.com

Eurex Repo GmbH
Mergenthalerallee 61
65760 Eschborn
Germany
www.eurex.com

March 2026

Contact
For any questions, suggestions
or further information, please contact:
gff@deutsche-boerse.com