Securities Services *Evolution 2025*

Acceleration, Competition and Resilience – Striking the Right Balance

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Contents

Foreword

How and where is our industry transforming in 2025? Since 2021, Citi Investor Services has been providing a unique, global perspective on how and where the post-trade industry is evolving. Our extensive market network gives us a unique perspective on the core trends and decisions that are shaping securities settlements around the world every day. Through this report, our aim is to showcase that perspective, giving you practical context and insights on the myriad of global market developments driving our industry forward, so that we can be a core foundation to your post-trade plans for the year ahead.

This year's whitepaper draws on an ever-growing range of perspectives from the industry's leaders, who have kindly shared their insights with us in the last two months. 537 of these leaders (across the global buy and sell sides) have generously contributed to our industry survey this year, our largest participation to date. Senior managers from more than a dozen market infrastructures and industry bodies have also provided their own views on the trends that are driving unprecedented levels of change in their businesses and across the industry. From settlement acceleration to digital assets and platform transformation, their firsthand experience is invaluable in shaping a common view of post-trade in 2025. We are extremely grateful to all of these experts for their support in making this report a true representation of the global industry's priorities, spanning both market infrastructures and their participants.

As priorities continue to sharpen around the world, this whitepaper leverages five years of data insights to provide a unique view on how core industry initiatives are evolving over time. What trends are people prioritizing around the world – and what is not getting attention? What does the cumulative T+1 workload look like today? Where is DLT actually transforming daily trading and based on what business benefits? And where is Generative Artificial Intelligence starting to take hold as a core operating technology?

This year we continue to expand our coverage of what these trends mean in your own region, providing not only local context but also a clear view of what lies ahead on the horizon.

We are here to help you turn these perspectives into action. Leveraging our global custody and cash platform, we are excited to be working with you to strengthen our partnership and to deliver more business value than ever.

We look forward to discussing these insights with you.

Chris Cox
Head of Investor Services, Citi

Executive Summary

The Securities Services Evolution whitepaper series has been providing industry-led insights on the key themes that underpin our industry's development for the last five years. In this latest edition, we leverage this continued perspective to explore how the trends that shape our industry have evolved – and where they look set to continue in the near future.

This year's paper comes at a unique juncture. The workload behind settlement acceleration is at a historical high. 76% of respondents are working on T+1 in 2025 (Figure 6), with North America's T+1 transitions in the rear-view and Europe's looming. At the same time, digitalized markets that leverage technologies such as Distributed Ledger (DLT) and Generative Artificial Intelligence (GenAI) are on the verge of delivering significant and practical benefits in the coming months, with digital asset turnover expected to reach 10% of global totals by 2030 (Figure 10). After years of groundwork, the global post-trade industry looks set for a period of transformation in speed, cost and resilience on an international scale.

In 2025, we see a sharp and growing focus on a core set of five highly impactful changes across the post-trade landscape. Based on our survey, 85% of respondents across the world see accelerated settlements, digital assets, asset servicing, settlement efficiency and shareholder participation as most impactful (to their business) in 2025 (Figure 1). Over the last five years, these core activities have grown to dominate the operating agenda for firms in every region at the exclusion of regional or less urgent changes (notably including Mandatory Clearing of US Treasuries for now).

Wherever you are located in the world, your post-trade change agenda is now very much aligned with your global peers.

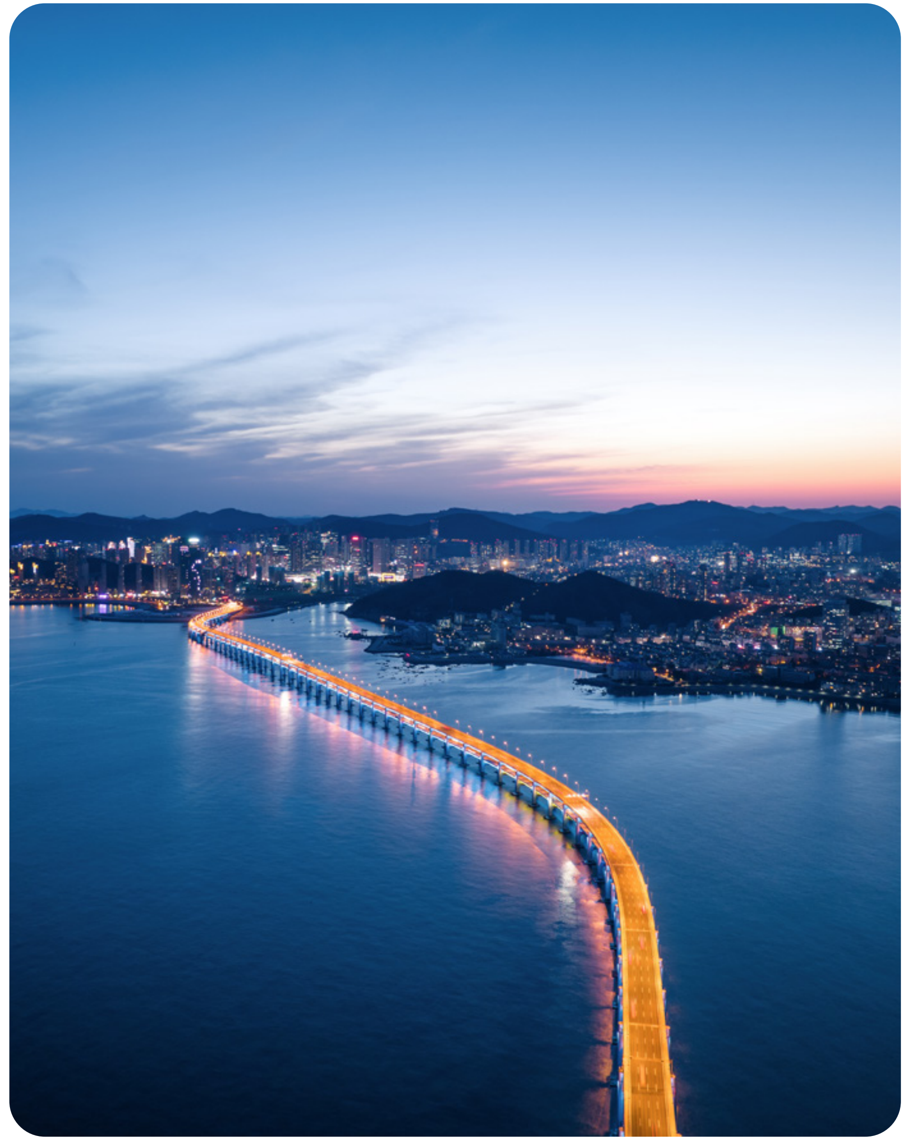
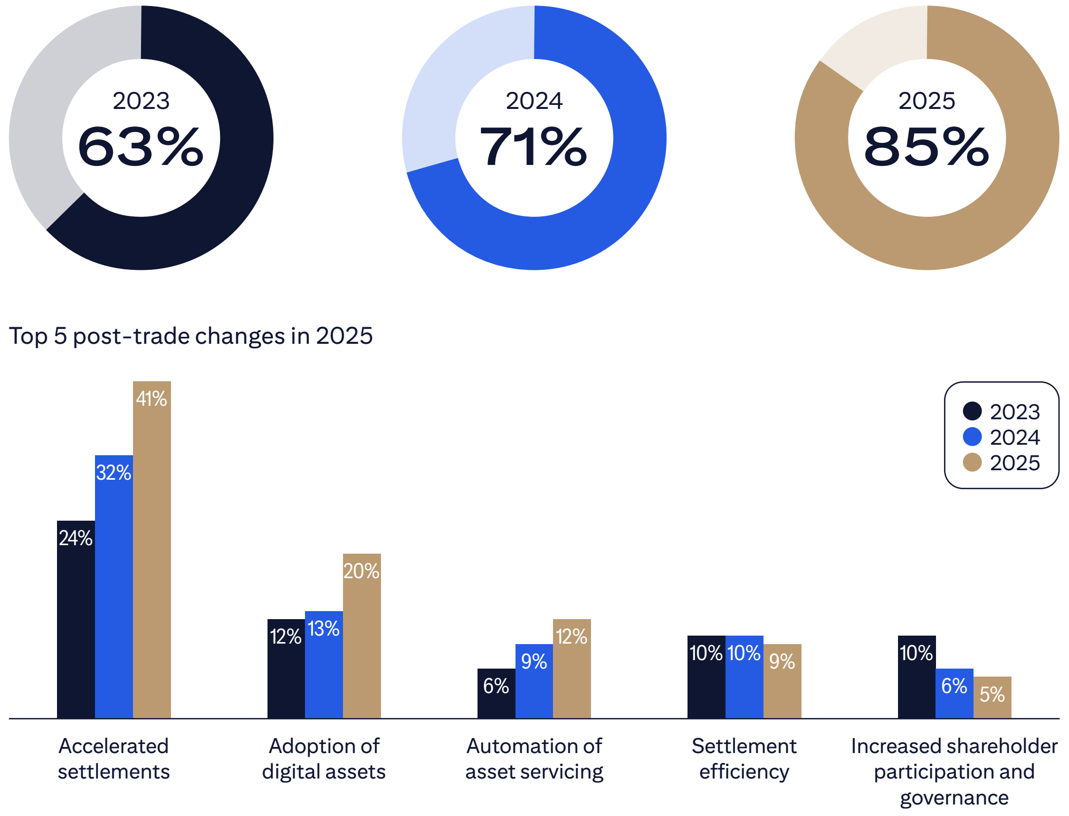


Figure 1: Consensus on the most significant areas of post-trade change

Over 85% of respondents are focused on the same 5 post-trade changes in 2025



Question: What do you consider to be the most significant changes in the post-trade space today – based on impact to your business? Please rank accordingly with 1 being the most impactful.
Expressed as: % of respondents citing the most significant change YoY.

The FMI Agenda

2025 sees FMIs at a critical juncture. During an era where resilience in all forms is of paramount importance, the fact that the FMI platforms that support **40% the world's capitalization are under transition**[1] is a major risk factor for the global industry. For the FMIs handling this change, these much-needed transitions pose new questions on how best to implement and deliver market-wide platform transformations, with new best practices emerging around scope and phasing.

Continuing growth in retail investments around the world are accentuating these transformation pressures, most notably through 'neobrokers' such as Trade Republic and Robinhood. These high-tech, zero-legacy providers are challenging traditional FMI models by demanding round-the-clock, low-cost market access, including access to both cryptocurrencies and traditional securities. In their innovation, these brokers are accelerating FMIs' development plans across the entire trade cycle. Not only are they driving growth in 'digital services' (an expanded definition of DLT-based digitization), they are fueling profound changes that include round-the-clock clearing, ETF management and other key areas. Meanwhile FMIs are also continuing to grow their focus on issuers, as they look to drive innovation across the trade cycle, and secure listing and safe-keeping revenues that offset growing competition in the settlements space (notably in Europe, Latin America and Australia).

How FMIs manage this balance of transition and expansion could not be more important in 2025, as the likelihood of true competition in settlements continues to grow. Moves to encourage multiple depositories continue in some markets (such as Brazil and Australia) to provide participants with a choice of settlement venue whilst, in the European Union, new operating models such as the Investor CSD model are beginning to unleash true competition in settlements and in asset services across the continent. RFPs for CSDs are becoming an increasingly near-term prospect.

Settlement Transformation

T+1's impact is undeniably larger than ever in 2025, as firms contend with multiple phases of T+1 including optimization (for North American markets), preparation (for European and Brazil's markets) and scoping (for Asian markets). With **76% of respondents to this year's survey currently running T+1 projects** (Figure 6), the cumulative global load is significant for firms across every part of our global industry.

One year on, the North American T+1 transitions of May 2024 are still having a notable impact on the industry. 48% of respondents to this year's survey are still running projects (Figure 8) to optimize their internal processes for North American settlements, largely in response to continuing pressures on trade fails (Figure 9) felt across the world. The impact of T+1 clearly extends well past implementation date.

As the baton passes from North and Latin America to Europe, focus in 2025/2026 is growing on T+1 readiness in the 29 markets that span the European Union (EU), UK and Switzerland by October 11th, 2027 - and on potential transitions in Asia Pacific at the end of the decade. Whilst similarities with North America's transitions remain (notably the focus on FMI-driven automation), key differences are also presenting themselves across each jurisdiction (including Europe's CSDR-driven settlement discipline, Asia's no fails regimes and Brazil's highly centralized market structure). Although demands for automation and process transformation are universal, T+1 is different in every local market.

Digital Assets and DLT

Over a decade of experimentation and development is beginning to deliver returns, as the industry's focus has shifted in 2025 from broad development to a clear focus on live use cases such as tokenized collateral, tokenized funds and private markets. But far from triggering the disruption and disintermediation that was so widely anticipated, it is increasingly clear that firms are looking to traditional market infrastructures and custodians to digitize many of their existing securities activities.

With this year's survey respondents indicating that **10% of market turnover is expected to be conducted using tokens and digital assets by 2030** (Figure 10), the expectation for transformation is not only significant but urgent. For those managing the balance sheets of financial institutions, in particular, the rise of tokenization and digital assets offers an immediate and transformative opportunity to overhaul how they manage their capital. Leveraging the mobility and immediacy of blockchain-based transactions, providers such as Broadridge, and HQLAx are moving from manually-driven, overnight funding to a world of automated, intraday capital management (and repos) – with transformational benefits due as a result.

Supporting this increased market liquidity are bank-issued stablecoins and tokenized money market funds, which look set to be the main vehicles for digital money in the near-term. Providing the best balance between automation and regulation, stablecoins look set to continue their growth, enabling real-time mobility to support collateral efficiency, fund tokenization and private market securities as the leading use cases in 2025.

Generative AI

A new theme in this report, the use of GenAI appears to be entering the mainstream of securities operations with **86% of respondents piloting this technology across their firms in 2025**. With 83% of brokers looking to leverage GenAI to transform their client onboarding, the intent to drive automation across new areas of the financial institution is clear – using GenAI to bring new answers to old problems (Figure 17). Although regulatory and people-related challenges still stand in the way of larger-scale adoption in 2025, investors seem especially keen to proceed at pace with GenAI adoption.

40%

of the world's market capitalization is undergoing platform transformation

Expansion, competition and resilience are front and center in the FMI agenda. But as FMIs navigate the continued growth of retail and ETFs, lead on T+1 respond, prepare for 24/7 operations and drive digital assets, how can they continue to deliver for their participants without compromising platform stability and asset safety during periods of critical transition?

76%

of respondents are running T+1 projects in 2025

Efforts to accelerate settlement are no longer limited to one region or market. All markets now require project resources, as firms look to optimize, prepare for and scope out a multitude of T+1 transitions across the globe, starting with Europe in 2027.

10%

of market turnover is expected to be conducted using digital assets and tokenized securities by 2030

Digitalization has been embraced with the Front Office and Operations in the driving seat as firms look to transform both balance sheets and operating budgets by tokenizing collateral, tokenizing funds and digitizing the private markets. Rather than seeing their roles disrupted, the world's FMIs look set to underpin this volume growth.

86%

of firms are running GenAI pilots in 2025 as the technology enters the mainstream

From client onboarding to reconciliations, GenAI is enabling automation across the trade cycle, although regulatory and people challenges continue to slow growth in this evolving technology.

Introduction

In a year that is heavily focused on execution and implementation, this year's whitepaper looks at how FMIs and market participants are directing their resources to deliver resilience, efficiencies and innovation across the post-trade cycle. This includes detailed analysis of workloads and emerging industry blueprints across the following areas:

FMI transformation

How leading market infrastructures are balancing competing pressures of platform transitions, expanded customer bases and digital innovation as part of a prioritized investment agenda for 2025 and beyond.

Digital assets and DLT

What industry blueprint is required to support firms as they seek to realize significant efficiencies in their post-trade activities – who should do what in order to unlock transformational savings in today's markets?

Settlement transformation

The multiple phases of T+1's global evolution are impacting firms' priorities and workloads in 2025 – what are some of their expectations from their providers and peers in the run up to the upcoming transitions?

Generative Artificial Intelligence

Given significant level of industry engagement, how and where is this technology being deployed in 2025 (and beyond) and with what business benefits in mind?

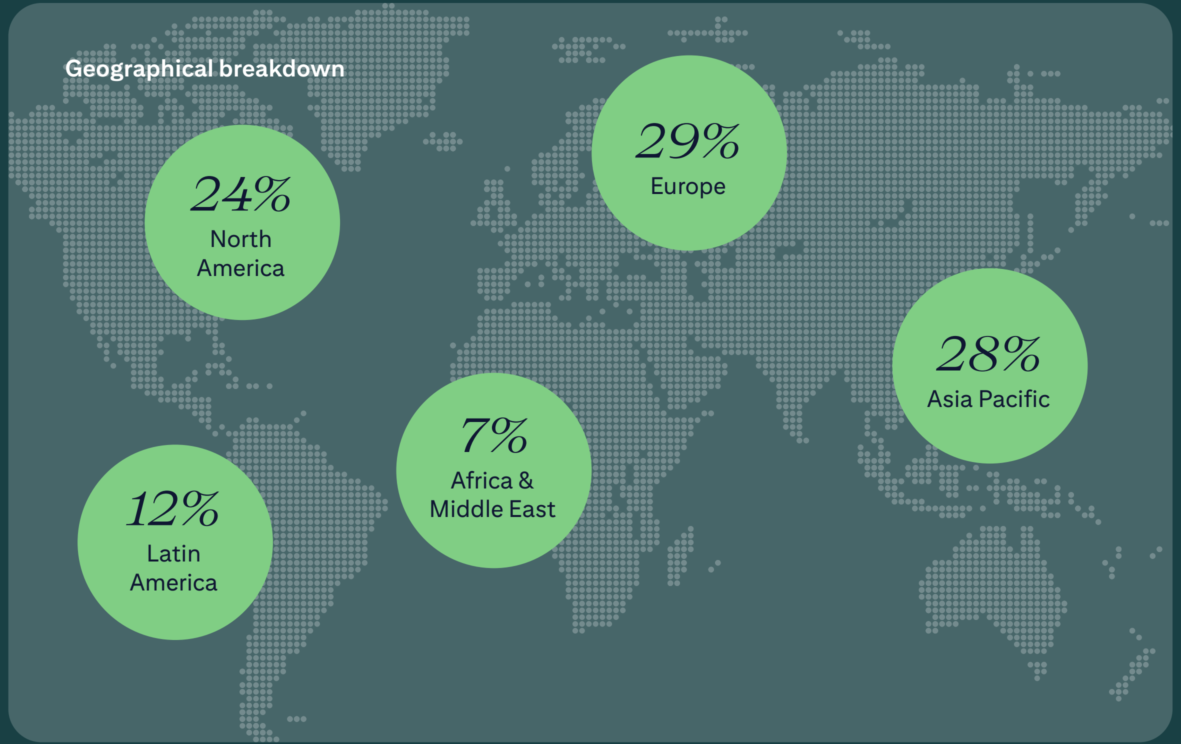
Methodology

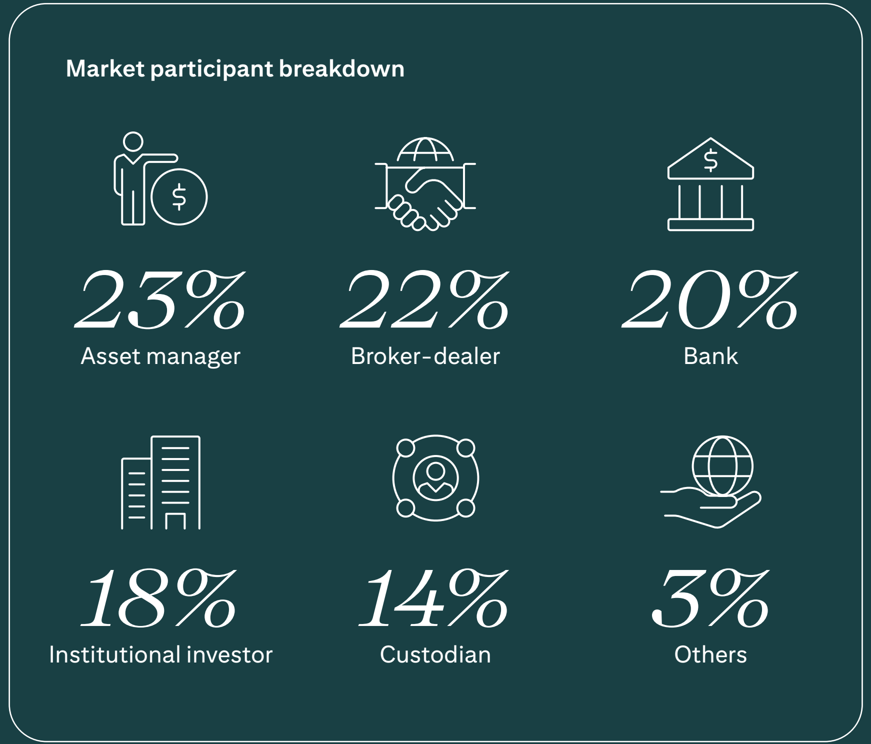
In order to deliver global and highly relevant insights on the future of securities settlement across Asia Pacific, Europe, North America and Latin America, this whitepaper draws on two core sources of qualitative and quantitative expertise.

Quantitative
In June 2025, Citi Investor Services partnered with the ValueExchange to run an online survey of 537 market participants around the globe, including FMIs, custodians, banks, broker-dealers, asset managers and institutional investors (insurance, pension, sovereign funds,etc).

Qualitative
Throughout June and July 2025, 13 FMIs and industry participants (from all regions and profiles) participated in in-depth interviews, to share their specific insights and experiences. FMI representatives included exchange and depository leaders, while industry participants included industry associations and taskforce leadership.

This report has been prepared in partnership with the ValueExchange, based on all of these insights.





What is driving the FMI agenda today?

"Digital assets, resilience and T+1 have all increased the costs and risks of being a CSD today."

Bernard Frenay, Chief Executive Officer, European Markets, Euroclear

Priorities don't change every year in post-trade – and the central themes faced by the world's FMIs have remained broadly consistent over the five years of this report.

However, the manifestation of these pressures is constantly evolving and, in 2025, FMIs face a host of new challenges (in nature and magnitude) that are creating significant strains on industry resources today.

Resilience is non-negotiable . . . but what is it?

"A key priority today has to be avoiding a breach or an outage in all of our services to our participants. Resilience means that we have to be ready to begin at 9am every day and be prepared to resolve any contingency."

Claudio Garin, Chief Commercial Officer, DCV

In our interviews this year, every infrastructure has cited resilience as being at the forefront of their operating agendas. It is sacrosanct and non-negotiable.

Yet the pressures and definitions of resilience continue to evolve, changing the way that FMIs manage their daily operations. This year has highlighted the interdependence of FMIs as they perform their daily functions – reliant on infrastructure such as TARGET2-Securities (T2S) in Europe, software providers, local payment platforms and others. Faced with a growing interdependence in their ability to provide continuing market operations, FMIs are cooperating more than ever to run resilience preparations and BCP planning that span silos across FMIs, central banks and global infrastructure providers.

As new resilience-focused regulations continue to emerge (notably including the Digital Operational Resilience Act (DORA) in the European Union, Prudential Standard CPS230 Operational Risk Management[2] in Australia and others), expectations of FMIs have risen consistently, fueling debate around exactly what levels of performance should realistically be expected. As many FMIs underline, perfect performance is impossible, and the cost of fully resilient, dual processes is significant. Where and how FMIs should be expected to set their thresholds for delivery is an increasing question.

"There is no perfect resilience readiness without an increase in complexity. The challenge the industry faces today is in defining and understanding what resilience means in practice and putting in place the best technology and processes to manage risk".

Clive Triance, Group Executive, Securities & Payments, Australian Stock Exchange

Resilience is also about more than technical performance. In a geopolitical environment where sanctions management forms an increasing part of post-trade workloads, the ability of investors to have ongoing access to their securities and cash is a central theme for many FMIs.

As FMIs continue transitioning their platforms to accelerate settlements, onboard millions of (retail) clients and offer new assets, we anticipate that the discussions around resilience will only increase in the next five years.

"Investors around the world need to know that their assets are safe and accessible whenever they need them. We have to be able to ensure that resilience."

James Fok, Chief Commercial Officer, CMU OmniClear

Growth and Expansion: offering consolidated access

"Neobrokers and B2B2C clients are becoming increasingly relevant in the financial system globally. They have different and far-reaching requirements – looking to be able to use crypto assets, e-money tokens next to fiat, wanting to give their clients the ability to trade 24/7/365 and leverage intraday listings. And they are increasingly turning to us, recognizing financial market infrastructures like Clearstream as the ideal backbone for such frameworks."

Jens Hachmeister, Head of Issuer Services & New Digital Markets, Clearstream Holding AG

Our 2024 whitepaper highlighted the growing importance of retail investors around the world, with millions of new accounts being opened in markets such as Brazil and India in recent years. In 2025, this trend has continued but with a new manifestation, namely the advent of neobrokers.

"Our clients are looking for real-time collateral, and longer trading hours are increasingly a topic of discussion – with demand from the global retail investor community the key to any decision to extending European trading hours further."

Tim Beckwith, Head of Commercial & Business Development, Cboe Clear Europe

High-tech, zero-legacy providers like Trade Republic and Robinhood are revolutionizing retail investment (in leading markets such as the US and Germany, for example) imposing new demands on FMIs. These platforms seek round-the-clock, low-cost access to both traditional and digital assets across global markets – challenging traditional FMIs which are accustomed to dealing with institutional banks and brokers on an overnight basis. The nature of these real-time requirements is potentially transformational – turbocharging expectations for operating models that are able to offer consolidated access to all types of securities (spanning traditional and digital assets) and to all types of market. In order to satisfy these demands, FMIs need to leverage and expand their reach, in order to deliver capital- and cost-efficient gateways to regional markets.

Beyond retail, the theme of consolidated access also extends to fixed income – where many FMIs have continued to expand their capabilities in 2025. Hong Kong's HKMA launched its new Omniclear CSD[3] in September 2024 (with the stated aim of providing global mobility and access for Asian debt), and B3 in Brazil is now seeing more turnover from fixed income than they do from equities. Meanwhile other FMIs are starting to offer services to other regional peers (as DCV is doing in Latin America) in an effort to drive new scale in propositions around proxy voting and securities lending.

Creating competition – interoperability and consolidation

The changing face of FMI competition is accentuating these pressures to serve new customers better in 2025.

In Europe, Euronext's plans to use Europe's T2S to offer settlements on multiple European markets all via a single CSD (in Milan) has dominated industry discussion in 2025. Whilst operational issues ostensibly remain, the beginning of choice in European settlement venues could be on the horizon (through the investor CSD model), allowing investors to settle any European security in one of a host of European CSDs, ideally of their choosing. Whether this development leads to reduced market complexity or to a new wave of consolidation in Europe remains to be seen.

Beyond Europe, Brazil's regulators are evaluating greater competition in the post-trade space, and ASX's post-trade dominance in Australia continues to be challenged. While Cboe Australia competes at the trading level, regulators like ASIC[4] are now actively pushing for greater post-trade competition.

Competition is not only coming from within the traditional FMI community. Crypto-native exchanges, such as Coinbase are now expanding their propositions in order to redefine institutional service expectations. Their 'prime brokerage' model consolidates trading, custody, and financing into a single offering, which traditional providers are racing to replicate. Critically, Coinbase's proactive regulatory compliance, demonstrated by MiCA Qualified Custodian licenses, builds institutional confidence and directly challenges the long-held dominance of established custodians. The existing post-trade order is definitely evolving.

"As the Investor CSD model grows, interoperability is going to be absolutely key. Choice is alive and happening – and we have to promote competition. We can't have more fragmentation."

Tim Beckwith, Head of Commercial & Business Development, Cboe Clear Europe

Issuers: the future of FMIs?

"SIU will open opportunities for the issuers. The key question will be which market do I issue into?"

Isabelle Delorme, Head of Product Strategy & Innovation, Euroclear

Growing competition at the settlement level means that the battle has shifted to the issuer.

Tomorrow, if settlements can truly be managed anywhere, then the issuance location will be a core determinant of asset servicing and registry activities. In Europe today, issuers' choices of listing FMI determine the portability of the security for settlement (based on local rules and regulations) and hence the amount of competition that is possible. Soon, the ability of FMIs to deliver new value in the shareholder chain and to continue to generate margin from asset servicing activities will depend on their issuer relationships.

But who owns that relationship with issuers? Our 2024 report highlighted the parallel ambitions of transfer agents and CSDs in the issuer space. In 2025, increasing competition has renewed CSDs' focus on how they can encourage issuance, driving an expansion of issuer-centric capabilities (including new account structures, shareholder engagement capabilities and operational efficiency). FMIs are increasingly aware that issuers are the key to their future revenue-streams and are acting today to incorporate them into their development agendas.

Accelerating settlements: much more than T+1

"T+1 is not the destination. It is a step on the way to faster and more automated settlements."

Andrew Douglas, UK Accelerated Settlements Taskforce

If there is one certainty in the post-trade industry in 2025, it is that the securities trade cycle is changing beyond recognition.

T+1 (and T+0 in China and India) triggered a new, global discussion on the optimal model for settlement processing. In 2025, the introduction of 24/5 clearing (in the US) has combined with growing adoption of crypto-assets in many of the world's largest economies to drive a more profound reevaluation by many FMIs of how they enable trade settlement today.

Whether driven by a desire to reduce credit and market risk (as we saw in the US), to drive regional standardization and liquidity (as the European Commission's Savings & Investment Union[5] (SIU) aims to do) or by the need to keep step with the real-time availability of crypto-currencies (as we see in Asia), settlement models are changing profoundly. They are rapidly evolving from two-day, batch-based processes that can be managed comfortably anywhere in the world, to real-time based processes that require seamless and frictionless flows of data across the globe. This transformational shift is creating new pressures on FMIs to transform their current process flows and platforms in ways that move well beyond T+1.

"T+1 means that a CSD has to operate 24/7 – or at least 21/5 – to serve global investors."

Carlos Albuquerque, Managing Director, Head of CSD, B3

How FMIs are enabling and supporting these information flows remains both a core challenge and an opportunity. On the one hand, FMIs must ensure that changes to trade flows be managed with no downstream impact on trade fails across the market and with no new pressures on ancillary processes (such as asset servicing). At the same time, the opportunities to add new value (and derive new revenues) from innovative services in middle office matching, funding, securities lending and predictive error handling are growing rapidly.

In 2025, FMIs are under growing pressure to balance these responsibilities and opportunities, not only to ensure market resilience but to make sure that they are ready to win business from their peers as competition grows.

"Follow the sun trading is clearly emerging – but we [the CSD] will follow the market needs for now in making it happen."

Hong Jin Kim, Director, Global Market Department 2, Global Services Division, Korea Securities Depository

Shifting narrative – from digital assets to digital services

"In five years, people won't talk about digital assets – customers will instead be demanding the services that digital can enable."

Marco Kessler, Business Head Digital Assets, SDX

After over a decade, the post-trade industry's conversation has moved from DLT-based "disruption" to a pragmatic embrace of digitalization that extends well beyond any single technology.

Our FMI interviews this year consistently described their client conversations as wide-ranging, business focused discussions that draw on blockchain, GenAI and other technologies to provide new, seamless and low-friction operating models.

Gone are the days of innovation teams exploring how and where to insert a new blockchain platform into existing trade flows. Instead, discussions today are led by business heads (i.e. CEOs and Heads of Trading) who are looking to combine a host of technologies in order to realise immediate P&L benefits. These managers are looking for tangible benefits in asset mobility, settlement efficiency and liquidity with little consideration of the underlying technologies to be used.

The goal is refinement and optimization, not replacement as firms look to restructure collateral management, private banking, wealth management and other high-growth areas – all with immediate, P&L impact in mind.

"What has changed is that today it is the business people coming to talk digital – not the innovation people. It's the P&L that talks."

Marco Kessler, Business Head Digital Assets, SDX

Re-engineering the foundations – platform change is the new normal

"Most CSD infrastructures go back to the 70s, which means no flexibility, lots of work arounds and more complexity. This can't scale."

Alessio Mottola, Chief Executive Officer, Euronext Securities Milan

Resilience, competition, growth, digital services – how do FMIs expect to deliver on all of these when the core foundations of our industry are changing more fundamentally than ever? Based on research[6] from the ValueExchange, FMI platforms supporting 40% of the world's capital are undergoing significant transformation programs in 2025, including many of the world's largest equities markets (Figure 2). The motivation? To deliver the benefits of reduced risk, real-time processing and digital asset compatibility, all within future-ready infrastructures. Platforms from the 1970s simply cannot keep pace.

The question is how can FMI's best realize significant platform changes in a way that minimizes risk and maximizes benefits for participants. Whilst Canada's CSD completed its platform transition in 2025 by taking a "big bang" single phase approach, other FMIs such as DTCC, B3 and the UK CSD are taking a multi-year phased approach instead. Others are opting for continuous update cycles indefinitely, reducing the risk and costs of transition whilst laying the foundation for digital asset compatibility and positioning the platform for future demands. Phased or even continuous transitions look set to be the new norm.

"We plan to upgrade our main systems approximately every 5 years. Over the next few years, we are considering rebuilding the shareholder information management system to further strengthen the personal data protection responding to the increasing number of the shareholders."

Hideki Tomita, Director, Research & Innovation Office, Corporate Strategy Department, JASDEC

As part of these transitions, best practice is increasingly pointing to a fundamental restructuring in platform management – as FMIs such as Japan's CSD JASDEC move away from end-to-end, batch-based processes towards micro-level processes that run in parallel, in real-time. By removing down time and batch processing, FMIs are not only enabling the round-the-clock capabilities that look set to become core in the coming decade, they are looking to remove single-moment transition risk from the industry agenda.

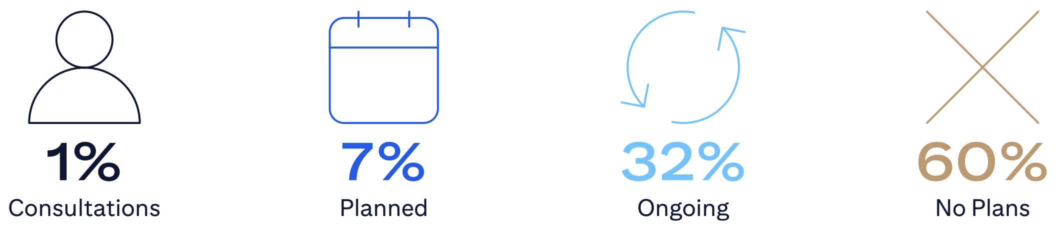
But what does this mean for participants? Prolonged waves of change, and never-ending project teams? Or improved functionality and stability that can drive participants' growth and product innovation? Hopefully both.

"Transition is all about minimizing hurdles to our participants. The core objective is to go batchless – and to move to micro-services, where different services are all happening at the same time".

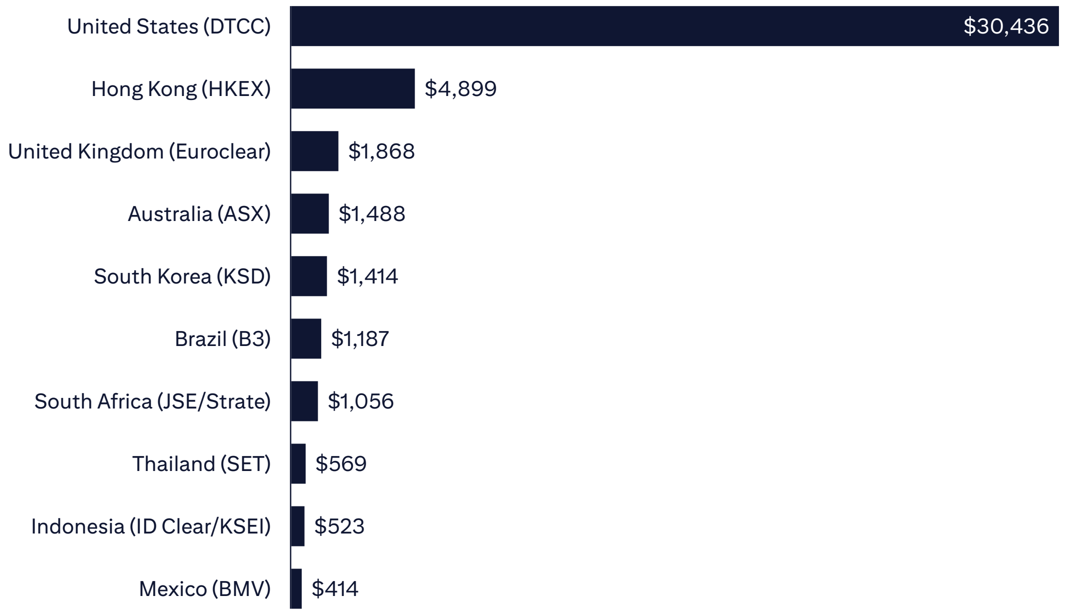
Morena Carvalho, Managing Director, Head of Clearing, B3

Figure 2: FMI Platform Transitions

Market platform transitions as % of global market capitalisation



Top 10 ongoing, major market platform transitions (by market capitalisation, USD billion)



Expressed as: % of global market capitalization, and ranked by market capitalization, USD billion.

Source: the ValueExchange

Inside the firm: the impact of post-trade changes extend well

What do the most significant post-trade changes look like inside an organization in 2025? (Figure 3)

Not surprisingly, T+1 dominates the operating agenda across all departments – extending well beyond operations and settlements. That 44% of front office teams and 47% of treasury see T+1 as the most significant area of post-trade change in their own businesses this year highlights the deep effects of this change on trading, foreign exchange, cash and treasury management. T+1 is about trading and balance sheets first and foremost, whilst operations and IT play an enabling role.

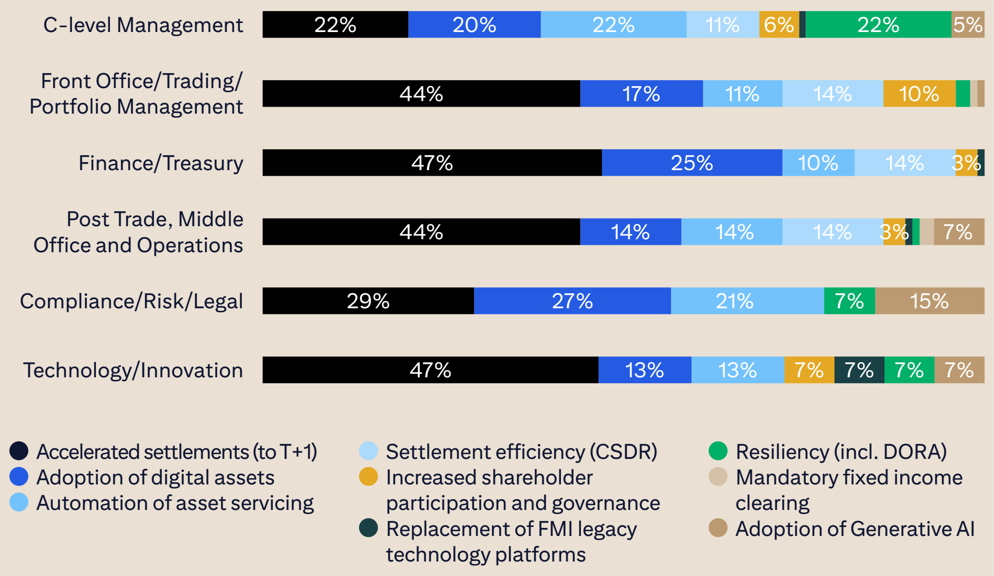
For C-level managers, the challenge is straddling so many change-related themes at once. Without the luxury of being able to focus deeply on any one theme, today's senior managers' attention is spread equally on everything from T+1 to asset servicing. What not to focus on? With resilience crucial in order to protect the firm from financial, reputational, and regulatory harm, C-level managers' ability to divide their attention and oversee every activity is clearly under pressure.

Our survey also underlines the critical, broad-reaching role that compliance teams have in driving change. Above other business functions, compliance is the most significantly impacted by changes in digital assets of any function in our 2025 survey, whilst they are also keenly aware of the impact of asset servicing automation. To avoid impeding innovation, compliance managers now need to be increasingly conversant in issues and solutions across the entire trade cycle, so that they can support digital asset adoption or corporate actions automation in 2025.

By contrast, operations and IT teams appear to be feeling less impact from digital assets and asset servicing this year. Whether this is simply because their focus on T+1 (at 44% and 47% respectively) leaves no space for other major priorities; or whether this is because digital assets and asset servicing automation have yet to enter the mainstream of operations and platforms, there is evidently a gap between business intent (from C-level managers and the front office) and their execution (Figure 3).

Given these differences in focus, how much support and implementation should we realistically expect in 2025 and beyond?

Figure 3: Where are firms' functions feeling the impact of all the market changes?



Question: What do you consider to be the most significant changes in the post-trade space today – based on impact to your business? Please rank accordingly with 1 being the most impactful. **Expressed as:** % of respondents in each function citing each theme as the top change.

Where is the asset servicing challenge?

"The majority of challenges we face in post-trade operations are because of corporate actions. Especially because event creativity makes it very hard for us to standardize."

Carlos Albuquerque, Managing Director, Head of CSD, B3

No report on post trade would be complete without a look at asset servicing, which has increased in significance over our last 3 whitepapers. 12% of this year's survey respondents identified asset servicing automation as today's most impactful change in post-trade, up from 6% in 2023 (Figure 1).

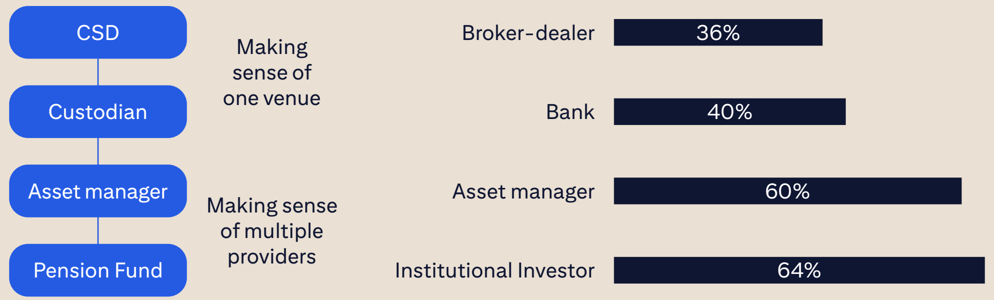
Problems in automation of corporate actions and proxy voting are not new – but they are clearly becoming more urgent and consuming more management time. As our recent report "Asset Servicing: a new dialogue to connect issuers to investors" highlights, automation levels have declined in recent years due to growing levels of innovation in event creation, increases in bespoke processes and greater operational oversight. In 2025, new market developments have further increased pressures on asset servicing teams around the world.

T+1 has created an unexpected drain on corporate action teams, with global investors struggling to manage trading entitlements, tax and static data on North American securities. FMIs across Latin America, in particular, have struggled to accelerate their (largely manual) asset servicing processes to keep step with challenges that arise from their large volumes of dual-listed securities.

In Europe, the implementation of the ECB's SCoRE[7] initiatives for their European Collateral Management System (ECMS) has added a third set of corporate action messaging standards in the European Union. Whilst event standardization has long been cited as the target model for corporate actions, this scenario highlights the cost and complexity that can ensue if not managed properly.

Importantly, the true impacts of these problems are most acutely felt not by custodians and brokers, but by their clients – who receive multitudes of different event descriptions from each counterparty every day. As Figure 4 highlights, 64% of institutional investors consider asset servicing automation to be one of the top 3 post-trade changes to most impact their business, underlining the acute pressures felt by the buy-side to rationalize and make sense of the information they receive and manage every day.

Figure 4: The asset servicing challenge



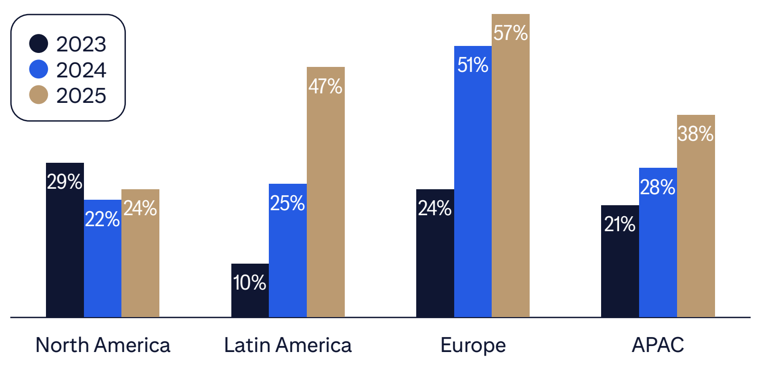
Question: What do you consider to be the most significant changes in the post-trade space today – based on impact to your business? Please rank accordingly with 1 being the most impactful. **Expressed as:** % of respondents in each segment who selected automation of asset servicing as a top 3 change.

T+1 goes global

For the last five years, we have seen a continuing and gradual increase in the significance and impact of T+1 on firms across the world. In 2025, this has reached a historical peak (Figure 5).

Today, T+1 is seen as the most impactful market change for 41% of respondents in our 2025 survey (up from 32% in 2024). As more markets have either confirmed or have indicated a timeframe to move to T+1 in the next 4 to 5 years, buoyed by the success of the 2024 migrations, global workloads are spiraling.

Figure 5: T+1 is dominant in every region



Question: What do you consider to be the most significant changes in the post-trade space today – based on impact to your business? Please rank accordingly with 1 being the most impactful.
Expressed as: % of respondents by region and year selecting accelerated settlements (to T+1) as their top change.

T+1 is bigger than ever in 2025 – across every region

Prepare, migrate, optimize, repeat - the cumulative workload (and cost) of T+1 is significant. Our 2025 survey findings underline the many types of T+1 activity that firms are undertaking today – from optimization of North American processing, to migration preparations for European transitions, to scoping in Asia and Brazil (Figure 6). Put together, these many phases mean that 76% of respondents worldwide are working on some form T+1 in 2025, with asset managers most active today.

As we explain later in the report, 48% of respondents to this year's survey are running T+1 projects in 2025 to accommodate or optimize their North American activities (Figure 8). With levels of activity highest outside of the US, the effects of 2024's transitions are still being managed by global firms across different time-zones and currencies.

Looking ahead, all eyes are fixed on the 11 October 2027, when the EU (and EEA markets), UK and Switzerland will transition to T+1 in a coordinated move. Brazil's decision to move to T+1 in early 2028 will ensure continued focus on transition work, before attention turns to Asian (and possibly African) markets – where transitions are expected to be in 2030 (in Australia and New Zealand, assuming a timely implementation of the CHESS system in Australia beforehand). There is clearly a great deal to prepare for.

The key to UK T+1 success? Automation

"If you're going to take it easy, why not take it easy in 2027? The sooner you get ready for T+1, the longer you will have to recoup the costs."

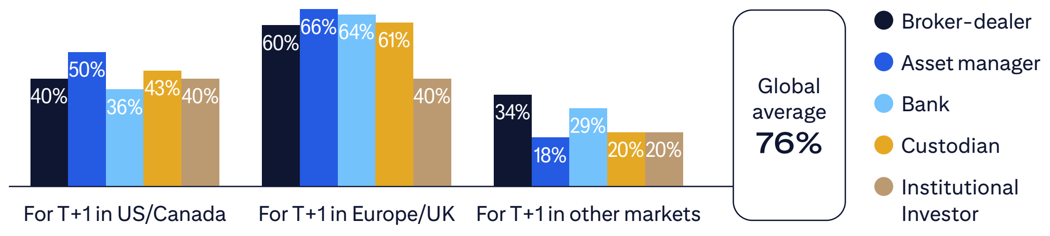
Andrew Douglas, UK Accelerated Settlement Taskforce

Throughout the UK T+1 Implementation Plan,[8] Andrew Douglas has emphasized the need and commitment for automation, a point reiterated by his EU T+1 counterpart Giovanni Sabatini.

This sentiment is not lost on respondents to the 2025 survey as 43% cite the top enabler for T+1 in the UK to be 'improved internal operational processes' alongside the 26% who consider 'upgrading or replatforming legacy technology' to be key. (Figure 7) Whilst the industry's awareness of the need for 'internal enablement' is consistent with what we reported in the run-up to the North American T+1 transitions, it remains to be seen how much of this automation will be undertaken before the October 2027 transition date (and how much work continues afterwards).[9]

In parallel, our findings show that 51% and 55% consider the "FMI team" in the EU and UK respectively to be mission critical to market participants in order for them to ensure a smooth transition to T+1. (Figure 7)

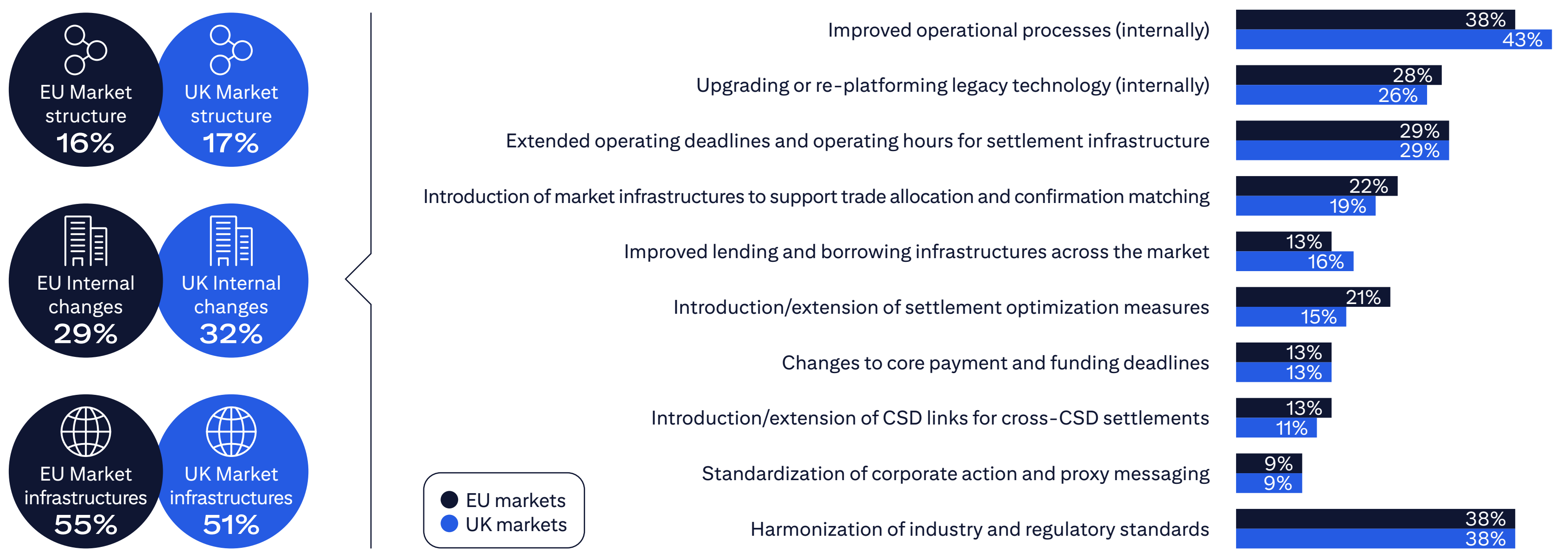
Figure 6: The cumulative T+1 workload is huge
Asset managers are most active with T+1 projects



Question: What types of project activity do you have planned in 2025/2026 to support T+1 processing in different markets? **Expressed as:** % of respondents by segment and T+1 zone with active T+1 projects.

Whilst this team includes CSDs (extended operating deadlines and operating hours for settlement infrastructure lead the FMI priority agenda at 29%), the need for FMI support extends beyond the traditional FMIs – and requires support from providers of allocation and confirmation matching and of securities lending and borrowing most notably. As we saw with the FX Continuous Linked Settlement (CLS) platform in the North American transitions, all profiles of market infrastructure play a foundational role in enabling T+1 and must be an active part of industry preparations.

Figure 7: Key enablers for T+1 in the UK and Europe
Market infrastructure activities are key to a smooth transition



When two become one – EU and UK T+1 is one project

"Global investors only see one European market – and so T+1 is an opportunity to reconnect European and UK communities."

Giovanni Sabatini, EU T+1 Industry Committee

Unsurprisingly, the industry finds minimal variance between project priorities in the UK and Europe.

Both market plans focus heavily on enabling industry automation and settlement efficiency; and both set out plans for greater use of CSD functionalities (including increased standardization of SSIs and settlement instruction formats); and both provide greater clarity on deadlines for stock loan recalls. These factors are increasingly becoming common standards for T+1 plans around the world.

Inevitably slight differences are beginning to present themselves at the market infrastructure level – and need specific attention by firms in and outside of Europe as they prepare for October 2027. T2S and Euroclear's CREST daily settlement timetables differ as do timings of allocation and confirmation deadlines. Europe's report also includes a deeper focus on clearing processes and corporate actions that is not seen in the UK T+1 Code of Conduct, highlighting the value of 'third-mover advantage' (i.e. writing implementation plans after the North American and UK plans have been published).

T+1 in North American one year on

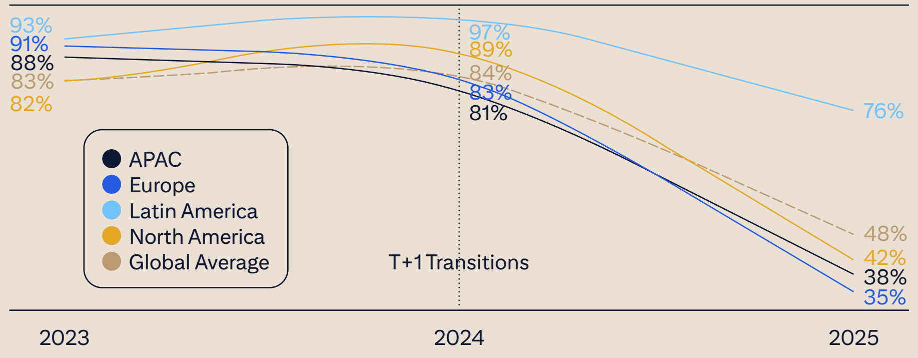
"The world doesn't end on T+1 weekend. The world will continue to evolve – and so this is not just a survival exercise."

Giovanni Sabatini, EU T+1 Industry Committee

After a full year of live T+1 settlements in North America, 48% of respondents are still running projects in 2025 to optimize their operations for North American T+1 (Figure 8). With 27% of respondents (Figure 9) still experiencing significant impacts from the North American migrations (in 2024), the full transition journey to shortened settlement cycles clearly extends well beyond transition date.

Whilst these figures are broadly consistent with industry expectations prior to the T+1 2024 transitions, they clearly underline the multiple phases of T+1 preparation that span a three to four year cycle. Client and counterparty preparations dominate efforts prior to transition, as all client-related risks are scoped and managed. Then comes testing and go live.

Figure 8: US T+1 project activity: one year on



Question: What types of project activity do you have planned in 2025/2026 to support T+1 processing in different markets? **Expressed as:** % of respondents by location indicating active US T+1 projects yoy.

Internal system transitions (particularly for complex areas such as cash management and funding) then come afterwards, once key pressure points have presented themselves and when client activity is stable. This emerging best practice is a key takeaway for all firms looking to prepare for future waves of T+1 transition, wherever they are.

And where does T+1's impact lie?

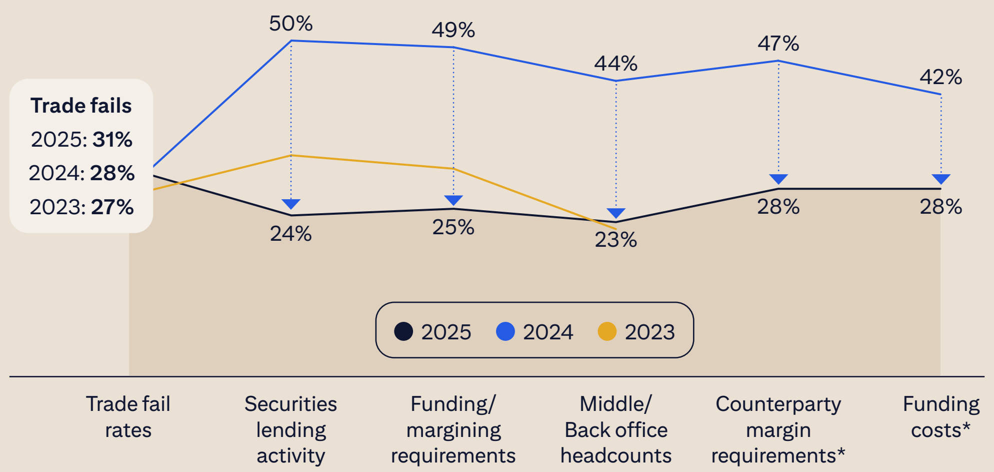
Trade fail rates alongside affirmation rates and margin reduction were the three main 'temperature checks' for the success of T+1 in the US.

One year on from the transition, the impact of T+1 on all of these areas has significantly lightened. Funding and margining requirements have become notably less acute (with 25% significant impact in 2025 vs 49% in 2024), as have counterparty margining costs (from 47% in 2024 to 28% in 2025) (Figure 9).

Similarly, the reduction in the number of people seeing a significant impact of T+1 on middle/back-office headcounts (44% 2024 vs 23% 2025) is also positive – consistent with SIFMA's after-action debrief[10] that reported a decline in headcounts focused on T+1 in the months following the transition.

That does not mean that all pressures have receded. Although volumes of trade fails have either remained consistent or, in some cases, declined following the 2024 transitions, the pressures felt by organizations in managing those fails appears to not to be lessening over time. One year on since T+1 in North America, 31% of respondents to this year's survey feel their organization is strongly impacted by trade fail pressures – indicating a continuing need to manage and support faster settlements across the organization, most acutely by those outside of North America.

Figure 9: Impact of T+1 on key processes
Pressure on trade fail rates has risen



Question: Based on your experience of T+1 being live (in Argentina, Canada, India, Jamaica, Mexico, Peru and the USA), what are the impacts of a shortened settlement cycle on your organization? **Expressed as:** % of respondents citing a significant impact for each activity due to T+1. *Not included in 2023.

Across the world, trade cycle pressures have not yet returned to pre-T+1 levels, as the pressures of settling trades one day faster continue to be felt across trade settlements, lending, funding and treasury management. The case for continued investment in trade flow automation is as clear today as it was during 2024 transitions.

"The old tactics won't work for T+1. We have to be asking – how do I future proof my processes and what level of reengineering is needed?"

Andrew Douglas, UK Accelerated Settlement Taskforce

Accelerating tomorrow: DLT and digital assets

"Our major achievement in the last two years has been to create expertise, knowledge and belief. Now it's time for the big venues to collaborate and to drive scale"

Jorgen Ouakine, Head of Digital Assets, Euroclear

10% of market turnover within five years

Since our first whitepaper in 2021, the path to commercial adoption of DLT and digital assets has had several phases. In 2021, significant initial interest in technology was characterized by high levels of experimentation and discovery as firms grappled with the potentially disruptive implications of blockchain on their business models. The 'crypto winter' of late 2022 then **weeded out the less committed, leaving only the most dedicated firms** to redefine their strategies and avoid rushed launches of crypto-custody and tokenization services. By 2024, those committed firms were growing valuable market share and increasing turnover (notably in fixed income-related activities, under the leadership of several key sovereign issuers), albeit still in comparatively small volumes given continuing challenges in ecosystem development and the legal terms that support them. At the end of 2024, non-cryptocurrency digital asset issuance exceeded USD25 billion,[11] and tokenized funds had gathered around USD2 billion in AUM.[12] Whilst momentum was clear, the industry had still not reached its tipping point. In 2025, that tipping point appears tantalizingly close. Over five years of industry learning and research has helped the industry to sharpen its focus to the point of clarity on several key areas. Today, the vast majority of effort is focused on three core use cases where the business case is clear and compelling: namely **tokenized collateral, stablecoins and fund tokenization**. And in industry meetings, specific operating issues such as legal recourse and token identifiers are now being discussed. The foundations for business-driven problem solving, based on distributed ledger technology, appear to be strengthening.

The market clearly expects this positive momentum to be sustained. In our survey, respondents expect around 10% of market turnover to be conducted using tokenized or natively digital securities within the next five years. Research by the ValueExchange suggests that expectations are highest in the private markets, where approximately USD202 billion of digital or tokenized securities are expected to be held by 2030, 13.9% of total volumes. In the (OTC) collateral space, a further 10.7% of total initial and variation margin is expected to be digitized, as are 10.3% of daily fund subscriptions and redemptions. In practice, the ValueExchange research identifies that around USD2 trillion-worth of non-equity digital assets will be traded daily or held within five years – marking a likely increase in liquidity of around twenty to thirty times versus today.[13]

Importantly, growth expectations are significantly higher in North America than in the rest of the world. Whilst those in the US expect up to 14% of all turnovers to be conducted using digital or tokenized assets by 2030, those in Europe expect only 10% of volumes and those in Asia Pacific expect only 9%. (Figure 10) As we explain in our regional chapters, the sudden transformation in American sentiment in 2025 has been a stand-out development this year with regulatory changes (such as the GENIUS Act of June 2025) adding to existing leadership from Circle[14], Blackrock[15] and other institutions in scaling digital liquidity at pace.

What is going to trigger this adoption?

Last year's whitepaper highlighted the growing importance of liquidity and post-trade cost efficiencies as the drivers of investments into DLT. This year the same two criteria have risen to become the most significant areas of impact for DLT initiatives (with 43% and 51% of respondents citing these areas as being significantly impacted in the next 3 years). More than half of the survey's respondents are clearer than ever that the ability of DLT to increase the velocity of securities around the world's capital markets can have major impacts on their funding costs, financial resource requirements and operating costs before 2028.

The growth of collateral

What does that mean in practice? It means that firms are focusing on mobilizing fixed income securities and cash, largely in the form of collateral as the fastest growing asset class in our survey (Figure11). As several industry initiatives (such as the DTCC's "Great Collateral Experiment" and the ECB's Eurosystem DLT trials) have demonstrated, increased velocity means improved utilization, faster redeployment and a reduced cost of risk. For existing collateral types, this translates to reduced (overnight) funding costs, improved risk weighted asset provisions (RWA) and better liquidity ratios (LCR). It also implies that new assets (such as equities and even crypto-currencies) can be used as collateral, adding further enhancement to balance sheets across the world.

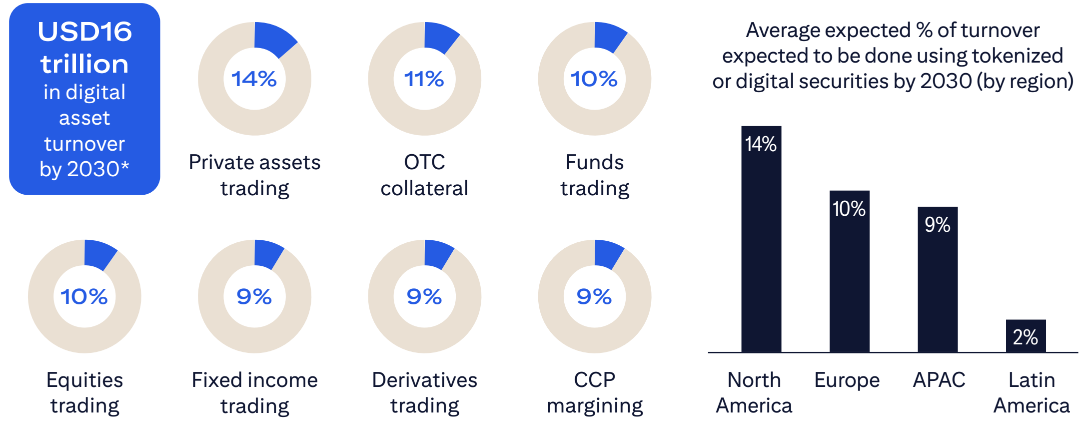
Mobility means money and this is why business heads and market infrastructures (such as Eurex[16], LCH[17], CME[18] and ICE[19]) are now engaging in accelerating the deployment of digital assets as quickly as possible.

Equally in the tokenized funds space (the second fastest-growing asset class in our survey), the same theme applies. Here, velocity means faster subscriptions into funds by investors, reduced error rates and then the ability to mobilize fund units themselves (as pledged or sellable units). Today an investor can wait three days to subscribe into a mutual fund , only to then have to wait a further three days when they want to redeem their cash to fund another investment. Through a growing range of tokenized funds (offered by Blackrock in the US[20], UBS in Singapore[21] or China AMC[22] in Hong Kong, for example) an investor could instantly subscribe to a fund and then pledge or sell that fund unit (as collateral or even as a cash equivalent) – avoiding the cost of funds being tied up and idle for extensive periods.

As market leaders across American, European and Asian fund domiciles continue to evidence these benefits in practice (gathering over USD6 billion in AUM in just over one year[23]), the funding opportunity from tokenized funds is material enough to make it the second fastest growing asset class for respondents, in the run up to 2030 (Figure 11).

This is about much more than an incremental saving in operations – it is about multi-billion-dollar balance sheet transformation.

Figure 10: Anticipated market volumes using tokenized or digital securities by 2030
Approximately 10% of market turnover is expected to be digital in five years



Question: What percentage of market turnover do you expect to be done using tokenized or natively digital securities by 2030? **Expressed as:** % of respondents' market turnover expectations using tokenized or natively digital securities by 2030, by region and category.

Source: the ValueExchange

Figure 11: The fastest growing asset classes
From tokenized equities to private assets to fixed income

2023	
#1 **Tokenization of equities**	**69%**
Crypto-currencies	18%
Tokenization of private/ alternative assets	12%
Tokenization of fixed income	0%
Native issuance of new securities	0%
Tokenization of funds	0%

2024	
#1 **Tokenization of private/ alternative assets**	**33%**
Crypto-currencies	26%
Tokenization of equities	16%
Tokenization of fixed income	14%
Native issuance of new securities	10%
Tokenization of funds	0%

2025	
#1 **Tokenization of fixed income**	**18%**
Crypto-currencies	17%
Tokenization of funds	17%
Tokenization of private/ alternative assets	17%
Native issuance of new securities	16%
Tokenization of equities	16%

Question: Looking at digital assets/tokenization of assets, where do you think the fastest growth is going to be by 2030 – and in which venues? Please select your fastest growing asset types and their venues. **Expressed as:** ranked top choice, YoY.

Where will digital liquidity form?

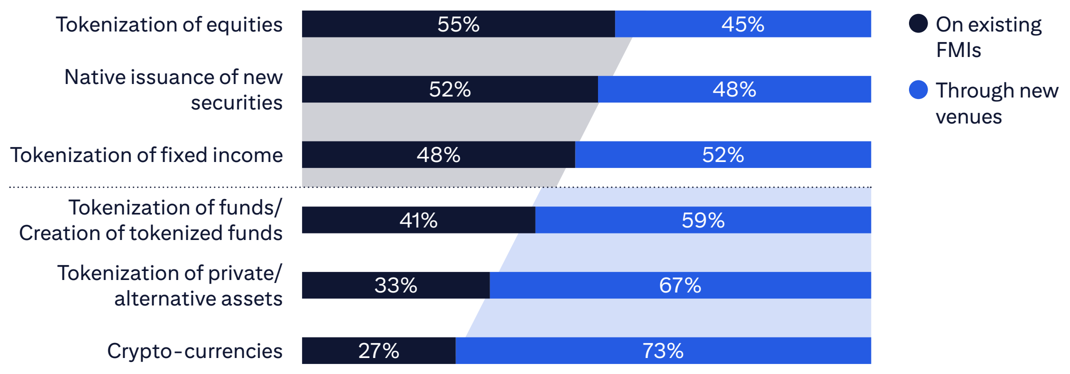
“Clients come mainly for the value of the ecosystem and not only for the quality of the technology”

Jorgen Ouakine, Head of Digital Assets, Euroclear

Back in 2020, DLT looked set to remove the need for bricks-and-mortar infrastructures and to negate the role of custodians. Five years on however, over 52% of our survey respondents expect FMIs to be the core enablers of digital markets (for equities and fixed income); and 29% expect custodians to be the network providers to these markets (Figure 13). The industry now recognizes the crucial role of existing FMIs and custodians as essential enablers and network providers for digital markets. Why this change? A growing body of experience is showing that, while DLT offers efficiency, progress can only be scalable if it is backed by regulated, resilient, trusted infrastructures that have the operational expertise and member networks necessary for the mainstream adoption. These characteristics set a high standard for new entrants and make true disruption a much slower process than many originally anticipated.

Rather than being disrupted or replaced, FMIs are now leveraging DLT to offer functional improvements to their existing members, strengthening their role as central providers of regulated, scalable and resilient infrastructure. Debt issuance and CCP margining are excellent examples, as are the ongoing digital initiatives in collateral tokenization (by the DTCC[24, 25], and Clearstream / HQLAx[26]) and in bond issuance (by Euroclear[27]). By contrast, few new entrants have successfully disrupted the equities or fixed income markets over the last several decades, using any form of technology. Given their highly mature, regulated ecosystems, it is increasingly clear that FMIs will continue their role as the bridge between issuers and investors for years to come.

Figure 12: Fastest growing venues for digital liquidity



Question: Looking at digital assets/tokenization of assets, where do you think the fastest growth is going to be by 2030 - and in which venues? Please select your fastest growing asset types and their venues.

Similarly, custodians look set to maintain their role as global network providers, with 29% of firms (across all profiles) looking to custodians to be the agents of their tokenization. (Figure 13)

Given 63% of survey respondents expect to conduct their daily activities in a multi-chain environment by 2030, the role custodians as providers of regulated, network connectivity looks set to grow. Today, global custodians provide consistent access to hundreds of traditional securities depositories around the world, regardless of where they are issued. Tomorrow, these same custodians will have to provide the same, consistent access to tomorrow’s multiple blockchains as a core part of their role and network providers to the world’s asset owners.

Things look slightly different in the OTC space, however. Absent of any FMIs, these markets present an opportunity for new venues and providers to bring transformational new network benefits. Up to 67% of our survey respondents expect to see new digital venues across the funds and private asset ecosystems, with names such as Ondo, Calastone and FundNode all evidence of progress in this space. (Figure 12) In facilitating the shift from decentralized ecosystems to decentralized networks, these and other providers expect to leverage DLT and digital assets to bring standards and consistency to some of the world’s most esoteric markets – delivering cost efficiency and increased liquidity as a result.

At the nexus of these two (traditional and decentralized worlds, we are even seeing old roles (re)presenting themselves in the crypto-currency space. In a world of real-time, continuous (crypto-currency) transactions, high frequency traders and banks are now rebuilding the role of Central Clearing Counterparties (CCP), as ClearToken[28] is demonstrating in the UK. By applying the benefits of netting and risk management to crypto-currencies, the world’s largest trading organizations are rebuilding the world’s traditional capital market structures, in a digital context.

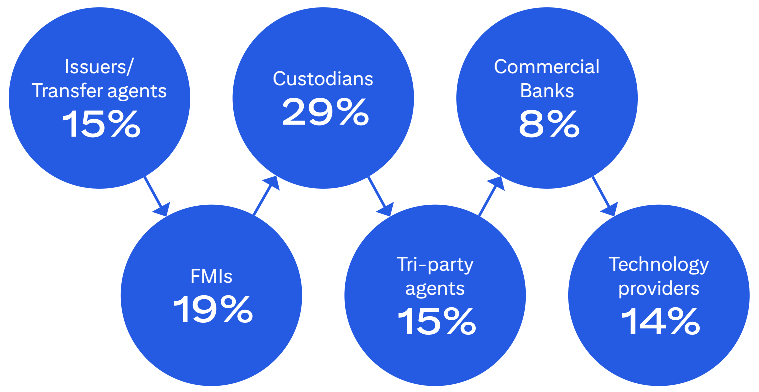
How accessible will this liquidity be?

Based on our survey, firms are 10% more likely to be using private blockchain networks for their regulated activities than they were in 2024.

As we near industry-scale adoption for key activities such as margining and collateral, firms are reducing their execution and ongoing risks by leaning more heavily on their FMIs and their banks (in particular) to provide resilient and secure network connectivity, as they have to date. Now is not the time to be taking (network) risks – even if that means (knowingly) creating more ‘walled gardens’ of isolated liquidity.

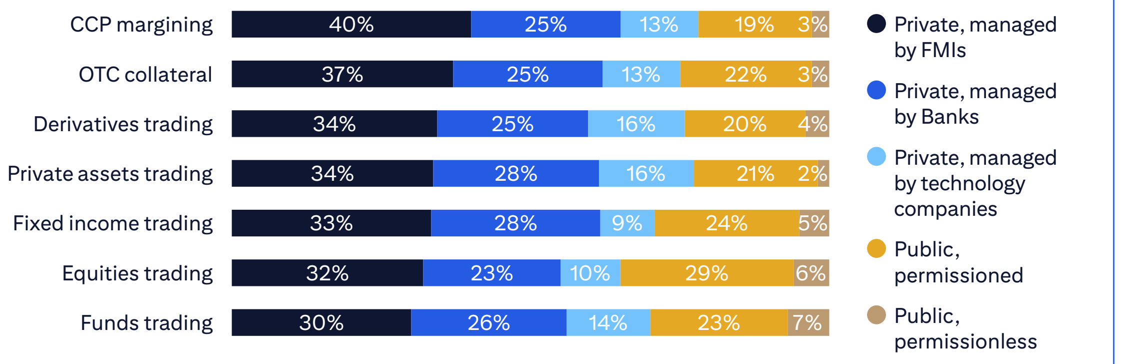
However, that does not mean that networks will remain private forever though. 2025 has also seen significant progress made by networks such as Canton[29] to provide the security and data benefits of private networks, in a permissioned, public network context. By helping firms to conduct their daily activities without divulging positions or trade information unnecessarily to the wrong parties, and without incurring additional cyber-security risks, these networks will be key in striking the right balance between network security and investor reach. Regulatory initiatives such as the MAS’ Global Layer One initiative, and Europe’s Regulated Layer One share this same focus and look set to provide further clarity on the private vs public network debate in 2026.

Figure 13: Expected tokenizers of securities for network use

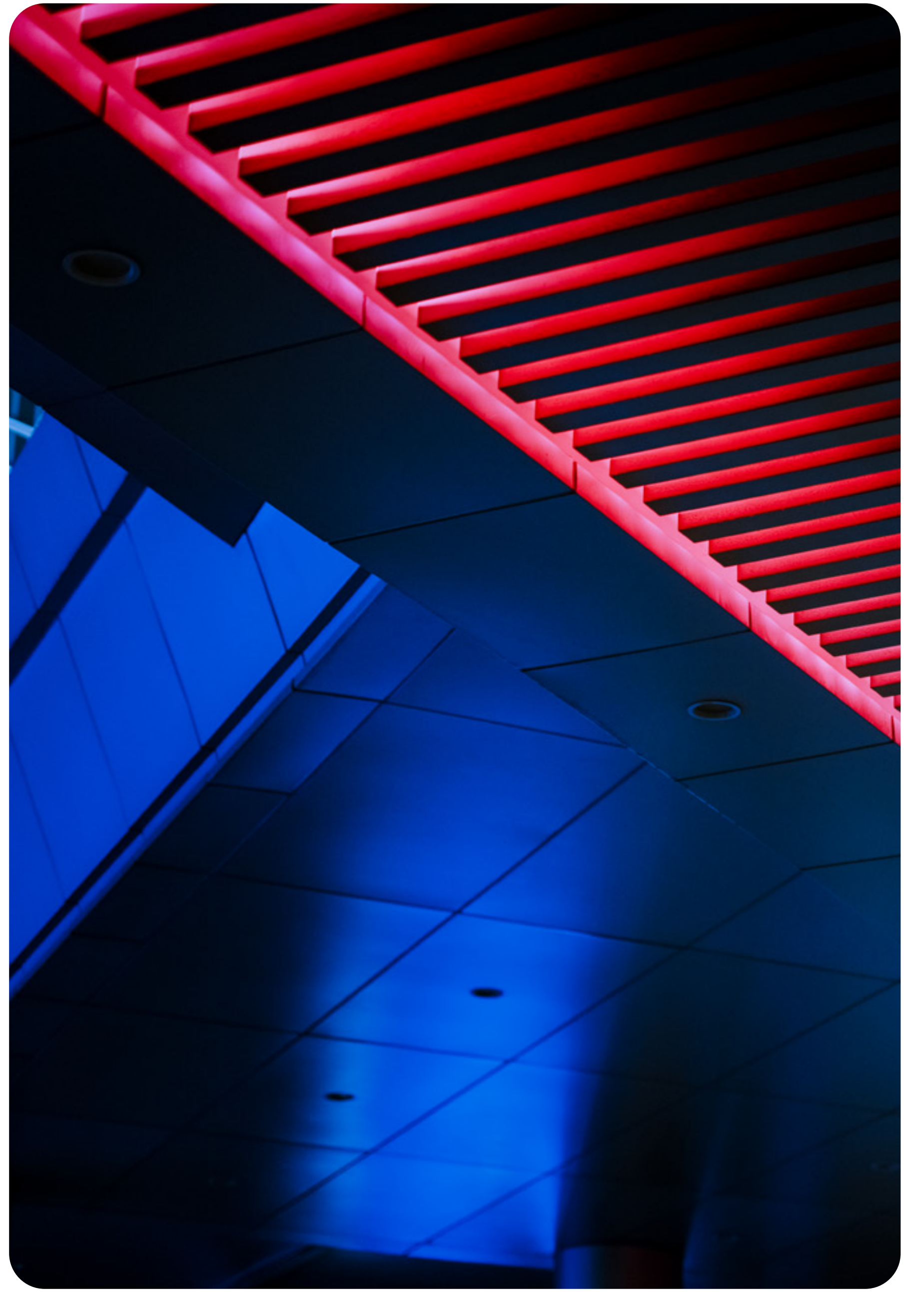


Question: For the following activities, who do you expect to manage the tokenization of underlying securities on the network?

Figure 14: Expected network types by 2030
Private networks lead the way



Question: For the following activities, who do you expect to manage the tokenization of underlying securities on the network? **Expressed as:** % of respondents, per activity.



Digital Money: Automation or Balance Sheet efficiency?

What form of digital money will support this new industry model?

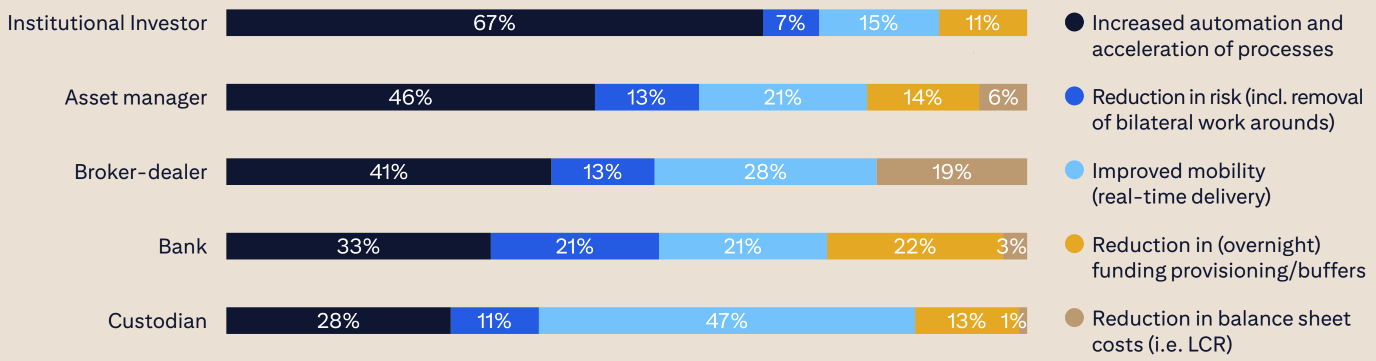
After years of demanding only central bank digital currencies (CBDC), firms have focused strongly on new forms of digital money in 2025 – with bank issued stablecoins, tokenized deposits and digital payment mechanisms (such as Fnality) all becoming operational in the last year. In addition, exploration continues on the use of tokenized money market funds (as a unit of value transfer), driven by strong demand from all profiles of firms.

In this context, whilst CBDC and money market funds are most used today (as indicated by 18% of respondents respectively), our survey results suggest that no single mechanism is set to dominate – particularly given that they all have different uses for different functions. Money market funds are ostensibly preferred for exchange trading (by 19% of respondents), whereas CBDCs are preferred for margining and collateral management, for example.

This continuing use of multiple forms of digital money is underpinned by differences in exactly what firms are looking to use digital money for and the benefits they hope to realize. Whilst 61% of custodian respondents and 46% of banks are looking to use digital money to realize new, balance sheet efficiencies (including increased mobility and reductions in overnight lines, improvements in LCR, etc.), up to 67% of their buy-side clients are looking for automation benefits and operational efficiencies (Figure 15).

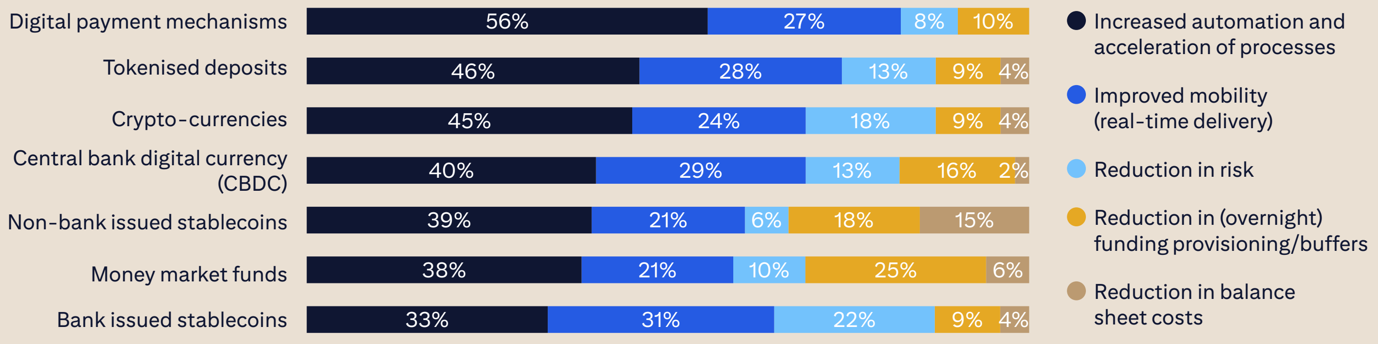
And can one single mechanism deliver against this wide range of requirements? By 2030, bank-issued stablecoins and crypto-currencies look set to be the fastest growing forms of digital money (for on-exchange securities payments), with the former most desirable in North America and the latter most applicable in Asia Pacific. This is largely due to the fact that bank-issued stablecoins offer the most equal range of benefits to the various parties across the trade life cycle – delivering both automation, risk reduction, mobility and balance sheet efficiencies. (Figure 16) Given that the central role of digital cash is to serve both buyers and sellers, this ability to serve both constituencies appears to be a key benefit of stablecoins for the near future.

Figure 15: What is digital money being used for?
Automation vs balance sheet

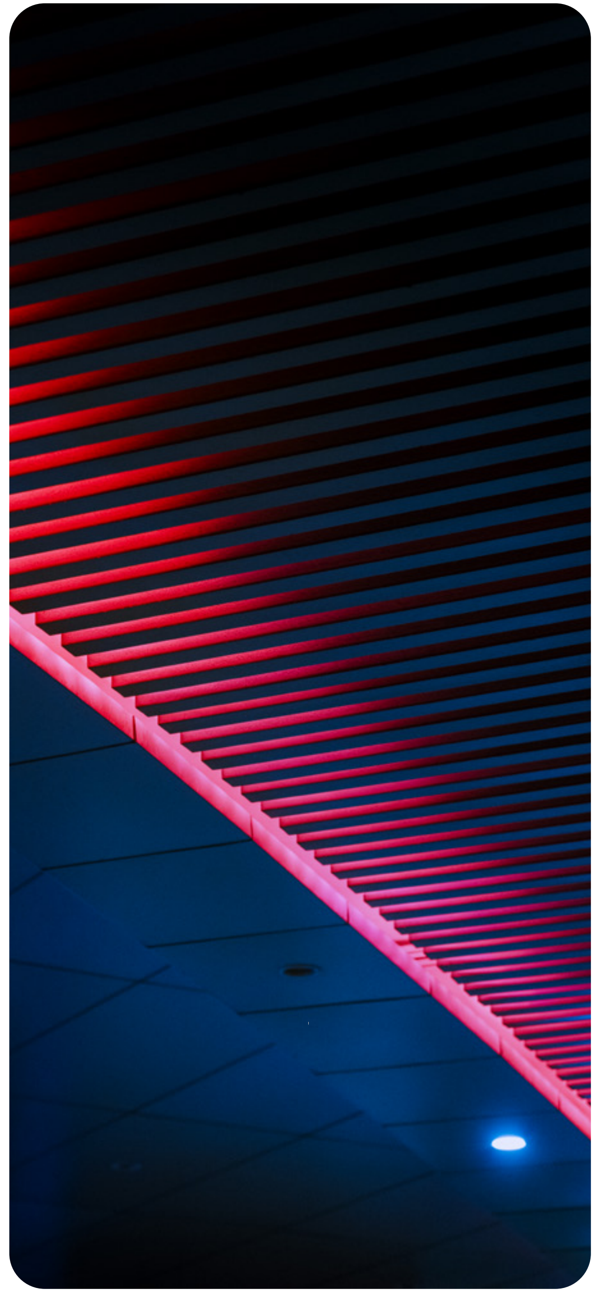


Question: What is the #1 driver for your using these cash mechanisms (versus traditional forms of cash)?
Expressed as: % of respondents citing each driver, by segment.

Figure 16: Drivers of different cash mechanisms
Stablecoins offer the most equal range of benefits



Question: What is the #1 driver for your using these cash mechanisms (versus traditional forms of cash)?
Expressed as: % of respondents citing each benefit, per digital cash mechanism.



Viewpoint: DeFi and Institutional Convergence

What is DeFi?

Decentralized finance (DeFi) uses blockchain technology to recreate and improve traditional financial services, without reliance on traditional intermediaries like banks, brokers, and clearing houses.

DeFi uses smart contracts (self-executing code on blockchains) to allow investors to exchange digital money, trade cryptocurrencies, and access financial products in a peer-to-peer manner.

There are generally two types of DeFi – permissionless (open access for anyone with an internet connection and crypto wallet) and permissioned (controlled access where participants must be vetted – often limited to regulated financial institutions).

Much of the focus of this whitepaper has been on the evolution of the world's "traditional" financial markets. But no report on digital transformation would be complete without the perspective of the growing constituency of investors and service providers in the "DeFi" space.

Whilst their traditional counterparts consider how best to drive incremental improvements from within a closely regulated, institutional ecosystem, those in the DeFi space are driven by a different vision where open, programmable and decentralized markets merge with today's capital market infrastructures. The key question today is when and how these two visions can converge to drive new levels of efficiency and value.

This transformation is happening quickly

In 2025, regulatory developments in the US, in particular, have added significant momentum (and expectations) to an industry already evolving at great speed. Within the past year, executive orders have been issued which embraces public blockchain, crypto and stablecoins. Although DeFi is not being deregulated wholesale, this year has seen a range of nuanced adjustments through pending legislation, court outcomes, and shifts in enforcement philosophy that combine to support innovation and adoption. Legislators are debating frameworks (e.g. CLARITY Act) that balance innovation with oversight. At the SEC, formal rulemaking and public consultations are replacing litigation as key policy instruments. Court rulings have helped clarify the potential boundaries of regulatory authority, providing an indication of how DeFi platforms are likely to be treated under securities laws in the future. Through the efforts of the SEC Crypto Task Force and others, the path and framework that will support the digital transformation of the US capital markets is starting to take shape.

"We are seeing the crypto ecosystem grow at unprecedented speed, with institutions like Citi entering the space and legal clarity emerging through the GENIUS Act and the CLARITY bill. But growth brings risk – AI-driven scams, North Korean hacks, ransomware. That's why compliance teams, law enforcement, and regulators need the right tools and training. Crypto's promise is cross-border value transfer at the speed of the internet, but the same technology lets bad actors move illicit funds just as fast. Meeting that challenge is key to realizing the full potential of DeFi."

Esteban Castaño, CEO, TRM Labs

As we highlighted earlier in the paper, this significant change in regulatory posture in the US is having a real impact and are translating into real volumes. DeFi's total value locked (TVL) reached USD153 billion in July 2025[30], its highest level in three years. Of this, USD7.3 billion is held in tokenized US government debt[31] (a three-fold increase from August 2024) and USD2.3 billion in Blackrock's tokenized money market fund, BUIDL (a 400% increase from January 2025). The walls between the TradFi and DeFi worlds are coming down.

What does convergence look like in practice?

Drawing on a foundational blueprint of digital securities that are entirely mobile, 24/7 hours a day, experimentation with tokenization has highlighted significant benefits across the trade cycle. When a security and cash are tokenized, repos on Saturday mornings can become commonplace, for example, whilst concerns around settlement acceleration (including T+0) could be instantly resolved through the use of blockchain as it is known today.

But this is just the beginning. Digital assets are delivering transformational benefits for institutions in numerous use cases. They are helping private firms to access capital without the complexity of listings by tokenizing private shares and private share derivatives. Stablecoins can potentially help firms to rationalize their cash management and allow instant access to funding.

Each of these use cases stretches well beyond the current boundaries of institutional development – and each has the potential to scale quickly into the world of traditional finance, taking the world's banks into a new era of speed, efficiency and returns.

Creating the crossroads

How then to further enable a bridging of these two worlds of digital liquidity, given competing visions of the foundational architectures that are needed to drive growth?

As we highlighted in Figure 14, the world's (TradFi) institutions have primarily turned to private blockchain networks as they look to upgrade their legacy architectures whilst managing their execution and cyber-security risks. Meanwhile, DeFi providers are using open, permissionless networks to increase access and to democratize markets. How can firms reconcile this desire for incremental operational performance improvements with minimal risk (on the part of TradFi houses) against an ability (by DeFi firms) to deliver transformational benefits, albeit with privacy risks today? Is a bifurcation of liquidity between TradFi and DeFi markets inevitable?

Standing in between these two, seemingly opposing models, are a growing range of hybrid models that can combine key elements of traditional finance with the technology of decentralized finance (DeFi) to meet the needs of regulated financial institutions, and hence help to drive convergence in place of divergence.

In 2025, permissioned blockchains have continued to demonstrate their unique role in providing both access and security to financial institutions. On the one hand, they are distributed and use smart contracts to automate trade cycle activities without the need for a central intermediary – thus providing the efficiency, transparency, and automation that are hallmarks of DeFi. On the other hand, they are permissioned, with only pre-approved participants allowed to transact, based on a whitelist of approved wallet addresses (meaning that regulated institutions are able to manage their Know Your Customer (KYC) and Anti-Money Laundering (AML) requirements, even in a public network context). These networks then offer the control and permissioning that are critical to institutional firms, so that trade order books and positions can be safely managed. To further bridge public and private networks, technology providers have started to innovate and introduce hybrid models that operate in a more decentralized manner, but still retain privacy and whitelisting control that traditional financial institutions desire

"With millions of digital assets spread across thousands of public and private blockchains, interoperability between blockchains is absolutely critical to overcoming fragmentation and building scalable global markets. This mirrors the early Internet, which was once divided into isolated intranets until TCP/IP unified them into a single network. On top of such a unified foundation, DeFi is already demonstrating how blockchain and oracle technology can modernize traditional capital markets and usher in a new era of more efficient, transparent, and programmable financial services. Chainlink seamlessly connects data and value across blockchains and traditional systems, accelerating the inevitable convergence of DeFi and TradFi into a unified global financial system."

Sergey Nazarov, Co-Founder of Chainlink

In the meantime, we've seen significant research and investment being made in Zero-Knowledge Proof (ZKP) technology, which has the potential to enable banks and regulated institutions to participate in public networks without losing control of or disclosing sensitive information. By helping firms to share data without disclosures or security risks (for example in block trading), ZKP is quickly gaining momentum as a new means of bridging the public/private divide.

As this space develops, we continue to see more and more networks and platforms come to market, and as such, financial institutions will need the ability to interact across a variety of different chains. Providers such as Chainlink are also advancing standards enabling interoperability across public and private blockchain networks.

Roles and responsibility

"The future of finance isn't a replacement of one system with another, but a convergence of traditional and decentralized finance. This means that while TradFi firms will remain the trusted institutions for institutional custody and act as the gateway for digital products, DeFi will provide the engine for speed and efficiency."

Kyle J. Baron, Managing Partner, BCW Group

In this context of convergence, what roles could TradFi and DeFi firms play in an integrated future ecosystem?

In providing issuance, trading and lending capabilities, DeFi is already creating markets for a growing array of new investment structures and activities (such as staking). As these mature, these new markets can potentially become an alternative source of liquidity, financing and other needs.

Delivered and serviced across multiple networks and ecosystems, these new investments could trigger a costly increase in complexity for investors. As Figures 12 and 13 highlight, it is highly likely that investors will continue to turn to regulated, traditional financial institutions to be the trusted gateways that they are today – providing standardized, scalable access to an expanded range of traditional and digital assets. Where today an FMI or a custodian can offer access to multiple markets, tomorrow they will offer access to marketplaces of traditional and digital assets, each supported and enabled by DeFi firms, that tensure instant transferability and maximum efficiency.

The challenge for incumbent intermediaries (i.e. FMIs and custodians) then lies in delivering and standardizing the investments within their reach. To fulfill their roles as gateways, FMIs will need to be comfortable managing network and security risks of multiple public and private networks, meaning new competencies in due diligence and risk management. As their relationship with end customers also transform, KYC and AML processes will also need to evolve. And at a transaction level, they will need to ensure core asset standards that can support price discovery and comparability across whole market places.

As (retail) holdings of digital assets continue to grow, the opportunity for this convergence becomes more compelling. In the short term, DeFi aims to deliver the benefits of their decentralized markets to the mainstream investors of the world; whilst TradFi firms want to be able to integrate digital assets into their balance sheets and operational processes. Whilst several challenges lie ahead there is little question that TradFi and DeFi worlds have huge amounts to gain together.

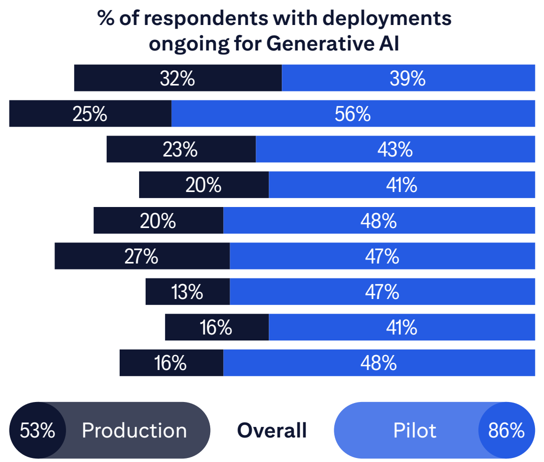
Gen AI: From client onboarding into the back office

“Everyone” is using it – but not in post-trade

Given the significant volumes of industry discussion that has been dedicated to Generative Artificial Intelligence (GenAI) in the last year, it is no surprise to learn that 86% of respondents in our survey this year claim to be running GenAI pilots in their firms, with 53% apparently using GenAI in a live environment. Even allowing for potential hype-driven bias in these numbers (as we have seen with DLT adoption figures for years), there is no doubt that the intent to use GenAI across the financial institution is today real and meaningful. The only thing is that this adoption is taking longer to reach the back office, with only 57% and 24% of respondents piloting and live on GenAI in the post-trade space today.

In 2025, GenAI’s primary use appears to be in bringing new answers to an age-old problem – client onboarding. Across the trade cycle, 83% of brokers, 63% of custodians and 60% of asset managers are using GenAI to make a meaningful impact in an area that has so far defied all attempts at automation (Figure 17). Where previous initiatives have failed to gather momentum, the ability of GenAI to increase processing volumes by helping to manage only inconsistencies is an elementary but essential requirement for today’s regulated institutions. In a world where faster, cleaner onboarding literally means money (in the capacity to trade and to avoid regulatory penalties), this use case appears to be a perfect starting point and an opportunity to bridge the gap between retail and institutional clients (where onboarding speeds vary enormously today).

Figure 17: Gen AI is an opportunity for client onboarding for all segments



	Institutional investors	Asset managers	Custodians	Banks	Broker/ dealers
IT development	58%	25%	32%	50%	50%
Client onboarding (KYC)	50%	60%	63%	29%	83%
Issuance workflows	50%	30%	42%	36%	67%
Product distribution/sales	50%	40%	42%	21%	33%
Portfolio modeling	58%	45%	32%	50%	50%
Surveillance and risk monitoring	58%	50%	37%	36%	50%
Trade lifecycle management	67%	40%	42%	43%	50%
Asset servicing	58%	45%	37%	36%	33%
Post trade reconciliation & reporting	67%	40%	47%	43%	67%

Question: In which areas are you running AI projects today – and at what level? **Expressed as:** % of respondents, per segment and per activity type.

Institutional investors see the potential

Ahead of banks and brokers, it is the buy-side (most of all pension funds, insurers and sovereign funds) that appear to be most attuned to the potential of Gen AI, with 14% of institutional investors surveyed seeing GenAI as the most impactful post-trade change for 2025. Importantly, these firms are looking to take GenAI into their back offices, with up to 67% piloting the use of the technology in trade processing (i.e. clearing and settlement) and in reconciliations. In the face of increasing trade cycle pressures (including T+1, 24/5 clearing, etc.) the world’s institutional investors are clearly looking to GenAI to provide a bridge into a new era of operational efficiency and automation.

And what are the obstacles?

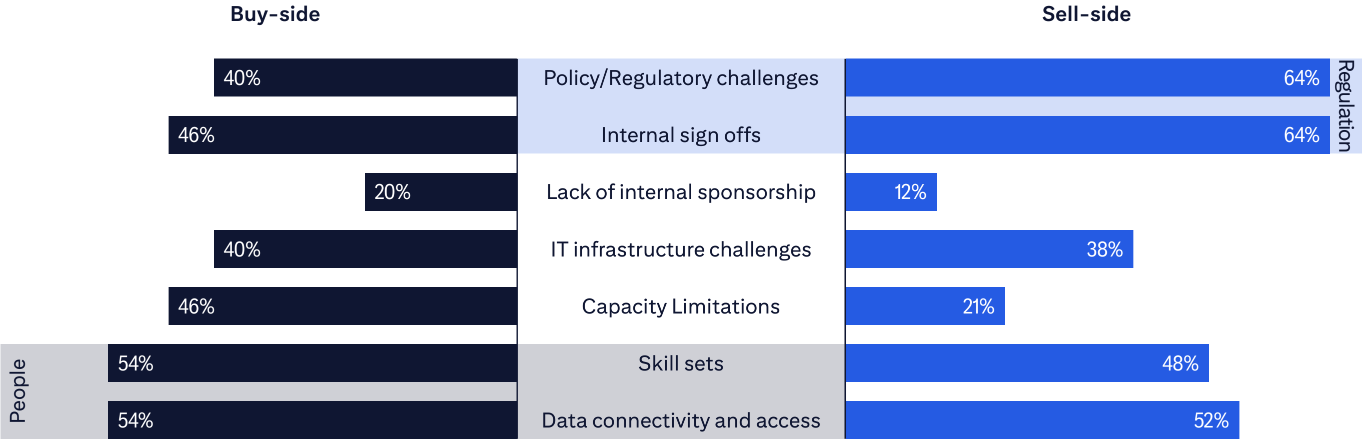
There is a distinct divide between the challenges faced by the sell side and buy sides when it comes to GenAI adoption today, with the former beset by challenges around regulation and the latter struggling more to hire and manage the talent required to scale its usage.

Regulation around Artificial Intelligence (AI) is fragmented and in its infancy still. While the EU has its AI Act, the UK adopts a principles-based method, Singapore has issued strong guidance, and other jurisdictions are in consultation stages. Such a globally diverse regulatory landscape creates complex compliance challenges for all regulated firms, with a lack of underlying consistency that can support advanced levels of adoption. Without this consistency, global firms such as brokers, banks and custodians continue to face hurdles in using GenAI for anything more than heavily supervised, process-level use cases which according to our survey, account for 56% of all GenAI use today.

Meanwhile, resource limitations pose an ongoing challenge for the buy side, primarily due to the scarcity of AI talent. Despite clearly seeing the potential for GenAI, the world’s asset managers and institutional investors are struggling to build the requisite skills sets to be able to use this technology in a live context. With over 70% of the world’s asset owners already undertaking significant transformation projects[32] in the middle and back offices, change-management talent is scarce and thinly spread for most major investors.

Add to those challenges in data access and connectivity, which are felt to be a challenge by more than half the respondents in every segment, and you have a technology that is still constrained by integration, data quality and available skills sets. Indeed, Gen-AI models are models are largely determined by the data they consume, yet financial data is complex, unstructured, inconsistent, and fragmented across different in-house and external systems.

Figure 18: Obstacles to deploying GenAI



Question: What are the top 3 obstacles to deploying Generative AI in your business today?
Expressed as: % of respondents citing each obstacle as a top 3, per segment.

2025 Around the world: what does this all mean for your region?

North America

T+1: the in-between year

A year after accelerating settlements across the region, T+1 is still seen as the most impactful market dynamic for respondents in North America – as the region straddles two key phases of the global project.

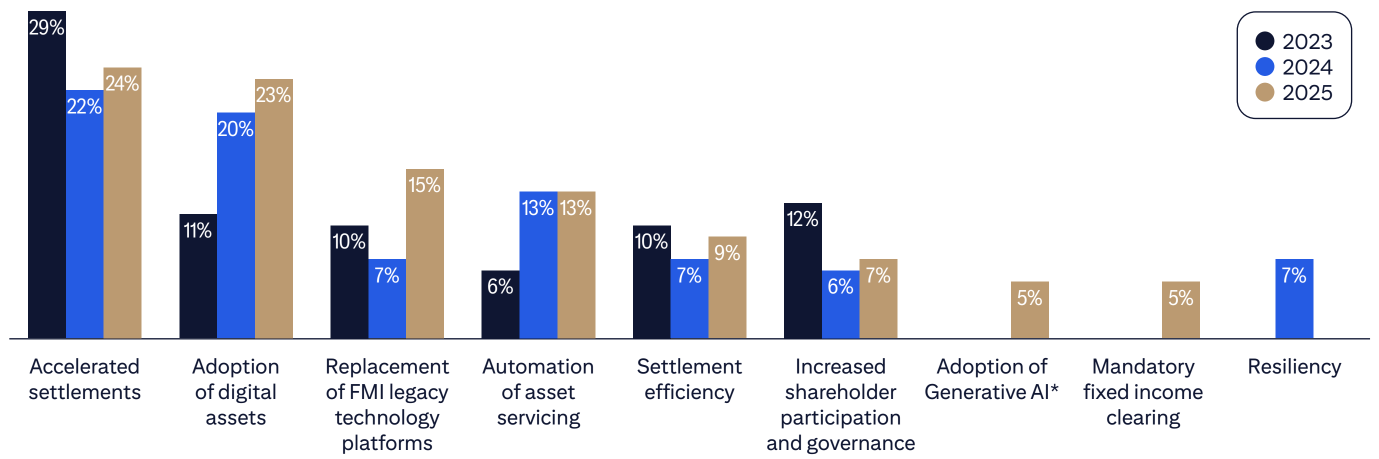
2024's transitions (which were single-currency and single-time zone for most North Americans) look to have been comparatively straight forward. Today only 23% of North American respondents feel 'significantly impacted' by the 2024 T+1 transitions, compared with 28% of respondents in Europe.

But T+1 in UK, Europe and other markets will be a very different experience and preparations are already taking place. At a project level, North American firms continue to optimize their now-accelerated domestic settlements, with a particular focus on internal process automation (36%).

In order to prepare for cross-border, cross-currency, multi-time-zone settlements in 2027, the same number of respondents are now also working on the new funding mechanisms and cash forecasting processes that will underpin their T+1 models for global markets. Faced with the prospect of running T+1 in a region with over 30 CSDs in two years, it is also not surprising that 27% of North American respondents are reviewing their agent bank and CSD relationships specifically in Europe.

Having take their first steps into T+1, North American firms are clearly beginning to prepare for much more market complexity in 2027 and beyond – and we should expect these levels of project activity to rise again in 2026.

Figure 19: Most significant changes in the North American post-trade space today



Expressed as: % of respondents in North America citing each change, excluding others. *New category in 2025.

DLT and digital assets: what a difference a year makes

Alongside T+1, the speed and scale of DLT and digital asset adoption by firms in North America is the major headline for 2025. Digital asset growth in this region outpaces the rest of the world today, thanks largely to the SEC's[33] "Crypto Task Force" (launched in January 2025 to build a rational regulatory framework) and the GENIUS Act[34] (enacted in July 2025 to provide essential regulatory clarity on the status of stablecoins).

Against this backdrop, blockchain initiatives have continued to dominate American headlines throughout 2025 - BlackRock's BUIDL fund and its peers at Fidelity, Wellington, Franklin Templeton and Wisdom Tree are legitimizing real-world asset tokenization by accumulating over USD4 billion in AUM since launch. Meanwhile, Circle's USDC[35] continues to prove itself as a stable, compliant and widely adopted digital currency. And the DTCC's "Great collateral experiment[36]" is providing a clear statement of intent on the future direction of the US markets. With 86% of North American respondents blocked by concerns around regulatory clarity (on digital money especially), this new regulatory momentum is quickly unlocking new flows and helping to solidify the foundations for a new digital asset ecosystem.

Not surprisingly, this momentum is driving expectations ever higher. North American respondents to our survey are now the most bullish of any region on their expectations of tokenization, expecting 14% of turnover to be conducted using tokenized or digital securities (versus a global benchmark of 9%) (Figure 10). Equally, 85% of North American respondents expect DLT to have a notable impact by 2030 (up from 80% in 2024 and 75% in 2023).

Expectations of cryptocurrency growth are also increasingly evident, with 18% of North American respondents expecting cryptocurrencies to be the fastest growing asset class by 2030. As banks and investors (notably high-frequency trading houses) swell their cryptocurrency investments, they are driving a rapid increase in the sophistication of product offerings (to include financing and balance sheet management), well beyond retail custody accounts.

FMI platform transition: all change

With T+1 and the growing use of DLT and digital assets creating pressures across the trade cycle for all levels of participant (not to mention 24/5 clearing and asset servicing pressures), North America's markets are undergoing significant levels of change in 2025. But with many of the FMI platforms that support North America's markets undergoing major transitions in 2025 (including the Canadian Depository for Securities (CDS), DTCC, OCC[37] and others), the market is having to innovate and modernize simultaneously – creating opportunities for growth and for disturbance at the same time.

In Canada, CDS, completed their major Post Trade Modernization[38] (PTM) initiative in May 2025 replacing legacy clearing and settlement systems with a new, more resilient platform. Since then, the platform has begun delivering new benefits in collateral management (notably integrating with the Canadian Collateral Management Service, or CCMS) and in corporate action automation.

Similarly, DTCC[39] is investing heavily in platform modernization to increase resilience (leveraging cloud and AI), to improve process efficiency in settlements[40] and corporate actions; to enable new services such as expanded US Treasury clearing, 24/7 equities clearing; and to build the foundational components for a digital asset ecosystem. Across this huge scope, DTCC is helping to restructure the American financial markets at rapid pace.

Asset servicing: an FMI priority

With all of this transformation, the hope is that these new technologies can also begin to deliver real benefits in corporate actions and proxy voting, given that 13% of respondents in North America consider asset servicing automation to be a significant market change. As our previous reports have highlighted, the significant efforts by buy-side firms to drive automation in corporate actions and the renewed focus by both US and Canadian CSDs in this area is cause for optimism. The DTCC's ongoing Corporate Actions Transformation is accelerating in 2025-2026 and the CDS's corporate actions group is due to publish its position paper in Q4 2025. In addition, both CSDs have continued to support SWIFT and Chainlink's Project CALM[41] ("Corporate Actions Language Model", using GenAI and blockchain) to explore new efficiencies in event validation.

Central Clearing: Not (yet) on the post-trade radar?

What isn't getting attention? Despite its significance and impact, the transition to mandatory clearing of US Treasuries in 2026 appears to be escaping the attention of post-trade teams in 2025.

The SEC's December 2023 rule to centrally clear most US Treasury (UST) cash and repo trades is arguably the most significant post-trade regulatory change since US T+1. A measure to bolster growth, market efficiency and UST market stability, central clearing also directly addresses vulnerabilities exposed in past crises (e.g. March 2020), mitigating risk through netting and mandatory margin, including crucial distinct "house" and "customer" accounts.

Despite the phased deadlines[42] (FICC[43] by Sept 2025, cash trades by end-2026, repo by mid-2027), the significant operational, technological, and legal adjustments required mean timings are tight. The current "under the radar" status, perhaps due to phased implementation and a perceived concentrated impact on large banks, is misleading; its systemic importance ripples across the entire financial ecosystem. All institutional investors will largely clear indirectly, facing new operating models and potential cost shifts. Hedge funds are directly subject to repo clearing requirements, bringing new margin demands. Even smaller banks and broker-dealers will need to adjust their market access models. This broad impact, similar to the initial underestimation of US T+1, demands immediate education and engagement to ensure the industry as a whole is prepared.

Key Dates

	2025	2026	2027	2028+
DTCC Platform Modernization[44]	Q4: Client Interface Connectivity Testing	Q1 Testing Q4: CNS goes live Q4: Current connectivity will be decommissioned	Q3: Current transaction input/output formats will be decommissioned:	
UST Clearing	By Sept: FICC	By year end: cash trades	By end H1: repo	
Digital Assets	Jan: SEC Crypto Task Force[45] created July: GENIUS Act[46] enacted			
Asset Servicing	DTCC Corporate Actions transformations			

Latin America

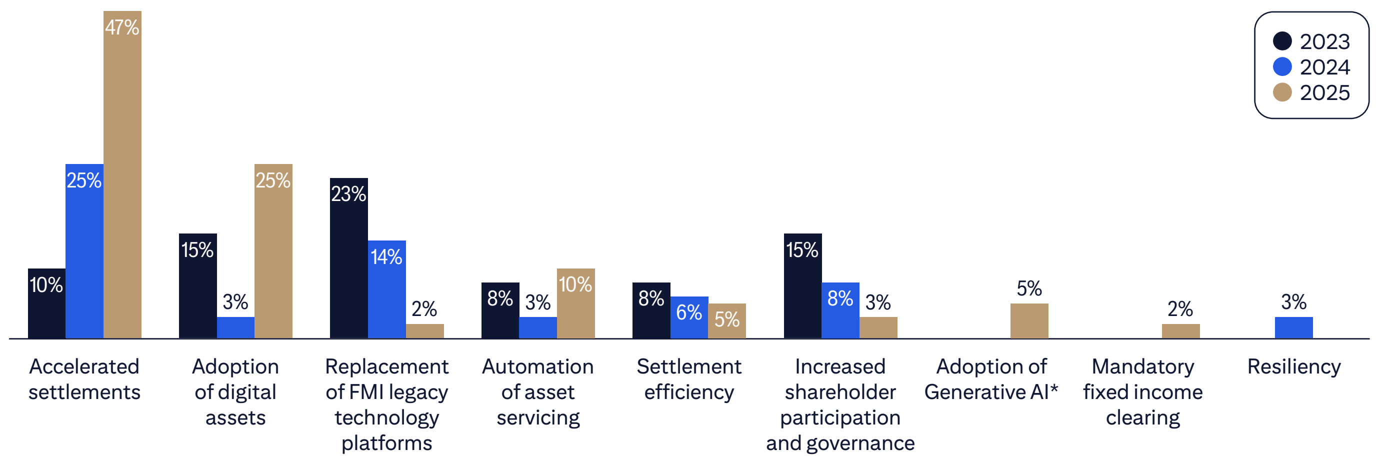
T+1: near and far

The T+1 journey continues to be highly resource-intensive for respondents in Latin America, making it the most impactful market dynamic in 2025 for 47% of respondents in the region. With 76% of respondents across Latin America still running projects to accommodate last year's transitions to T+1 (the highest of any region globally), the impact of cross- and dual-listed securities on Latin American markets has been strong.

And now, following Mexico and Argentina's moves to T+1 in May 2024, Brazil, Chile, Peru and Colombia are starting their own T+1 journeys. Brazil is targeting a February 2028 transition to T+1 settlement,[47] with public consultations and regulatory amendments from the Brazilian Securities and Exchange Commission (CVM) and the Central Bank of Brazil (BCB) starting in late 2025 and continuing into 2026. Given the unique structure of Brazil's markets for foreign investors, this transition is set to be a major point of focus for the coming months – as onshore institutions drive both education and preparation of their own processes.

Equally, nuam[48] has confirmed that equity markets in Chile, Peru, and Colombia will transition to T+1 settlement in the second half of 2027, a revised target from an earlier date. This timeline allows regulators (Chile's CMF, Colombia's SFC, and Peru's SMV) ample time to harmonize regulatory frameworks for cross-border T+1, focusing on critical areas such as pre-matching, failed trades, and liquidity management across diverse jurisdictions and currencies.

Figure 20: Most significant changes in the Latin American post-trade space today



Expressed as: % of respondents in Latin America citing each change, excluding others. *New category in 2025.

Platform changes: a wave of market transformation

The transition to T+1 in Brazil comes at a time of significant transformation in core FMI platforms. B3's clearing modernization project is crucial, aiming for a December 2027 transition to a microservices architecture. This new platform will enable 21-hour, five-day-a-week operations, significantly extending trading hours to support global T+1 cycles across various time zones. Given the role of B3 in providing centralized confirmation and allocation matching to the market (similar to DTCC's CTM), this global connectivity is an essential requirement for T+1.

Meanwhile, on the horizon, the Mexican CSD BMV will also be refreshing its entire post-trade platform (working with Nasdaq[49]), and work will continue in Argentina and Chile's (among others) to drive new levels of automation from their newly refreshed post-trade infrastructures. Despite the heavy change-management load that these transitions are creating, the wave of new technology across the region is creating new opportunities for standardization across all parts of the trade cycle. And with nuam[50] gaining momentum further in 2025 (reporting a 13% revenue growth and a 17% increase in Average Daily Trading Volumes to USD $9.6 Bn in 2024), the regionalization of Latin American trade processing appears to be getting closer.

Digital assets: the next step for FMIs

The adoption of digital assets in Latin America has seen a significant increase in industry focus in 2025 (seen as the highest impact trend by 20% of respondents, up from 3% last year), following the live implementation of several initiatives that we highlighted in our 2024 report.

In Chile, DCV is making significant strides in its digital transformation with their new digital platform now handling issuance and settlement of digital securities, a major step towards a more digitized capital market (now that a legal framework for digital assets has been established). Brazil's "Piloto Drex"[51] project continues, with Drex (Digital Real) being used as the underlying settlement asset in a large number of use cases across the industry. Whilst still largely payments focused, the expectation is clearly that this experimentation scales into the (institutional) securities space. Elsewhere, Argentina is preparing to allow "any technological format" for financial instruments, with the Comision Nacional de Valores (CNV) set to release regulations in 2025 for DLT-based securities and security token offerings; and El Salvador has announced plans to become a tokenization leader with its Ditobanx[52] planning a $300 million issuance this year. Digital assets are leading the regulatory and client agendas across the region, with 34% of respondents expecting a significant impact from these assets by 2030, the highest of any region in the world.

What will the market infrastructure look like that supports this digital asset growth? Contrary to the decentralized focus of 24% of respondents in North America, 71% of Latin American respondents expect to be using traditional FMIs for their digital asset networks. Where FMIs such as Brazil's B3 have provided unique levels of support across the trade cycle to date, the expectation is clearly that they will continue to do so in the world of digital assets.

Asset Servicing: the tail of T+1

The automation of asset servicing saw a notable rise in importance for post-trade in Latin America, with 10% of respondents citing it as the most impactful post-trade change in 2025 jumping from just 3% in 2024. This is most probably a consequence of the transitions to US T+1 in 2024. Given the high volumes of offshore and cross-listed securities held by Latin American CSDs, the T+1 transition has triggered significant issues in managing notifications, instructions and tax processing for US-based or -linked securities. Interviews with B3 suggest that as many as, 60-70% of Brazil's clearing incidents in the past year have been related to corporate actions, highlighting the need for standardization and automation. Manual processes and the customization of corporate events driven by market interpretation have exposed industry inefficiencies and a critical absence of automated systems in many markets, which firms are now urgently looking to correct.

Key Dates

	2025	2026	2027	2028+
T+1			H1: Chile, Peru & Colombia[53]	Feb: Brazil
Platform Modernization	nuam: Nasdaq collaboration commenced[54] Mexico: Nasdaq (TBD)[55] B3 retail proxy voting system (1H 2025) B3 new CSD platform (1H 2026)		Dec (eta): B3 new clearing platform	

Europe

T+1's new global epicenter

Europe is seemingly all-in with T+1. 57% of European respondents to this year's survey cite T+1 as the most impactful change in post trade, the highest single ranking of any region globally.

With 29 markets moving to T+1 on the 11th October 2027 (including the multitude of FMIs spanning 38 CSDs, 14 CCPs, and the common settlement platform T2S), the scale and impact of this transition cannot be under-estimated – as the recent publications by the UK[56] and EU[57] T+1 taskforces of their respective implementation plans this year have made clear. Only Switzerland's plans are now pending finalization, with the Swiss Securities Post Trade Council (swissSPTC) expected to lock down its T+1 implementation plans by September 2025. The alignment of these multiple rule books and implementation plans is seen as a critical first step in the T+1 preparation journey, with 42% of respondents focused on this harmonization as part of their EU transition planning.

Given this plethora of implementation plans and markets, the key question in 2025 is how to ensure that this dominant focus (and spend) can be used to drive and accelerate efficiency and innovation – instead of being a mandatory change requirement that simply has to be survived. Based on our survey, 69% of respondents are focused on driving internal automation as part of their T+1 efforts, with 38% also reviewing their agent and CSD relationships across the continent. These grass-roots initiatives look set to have a lasting impact well beyond October 2027.

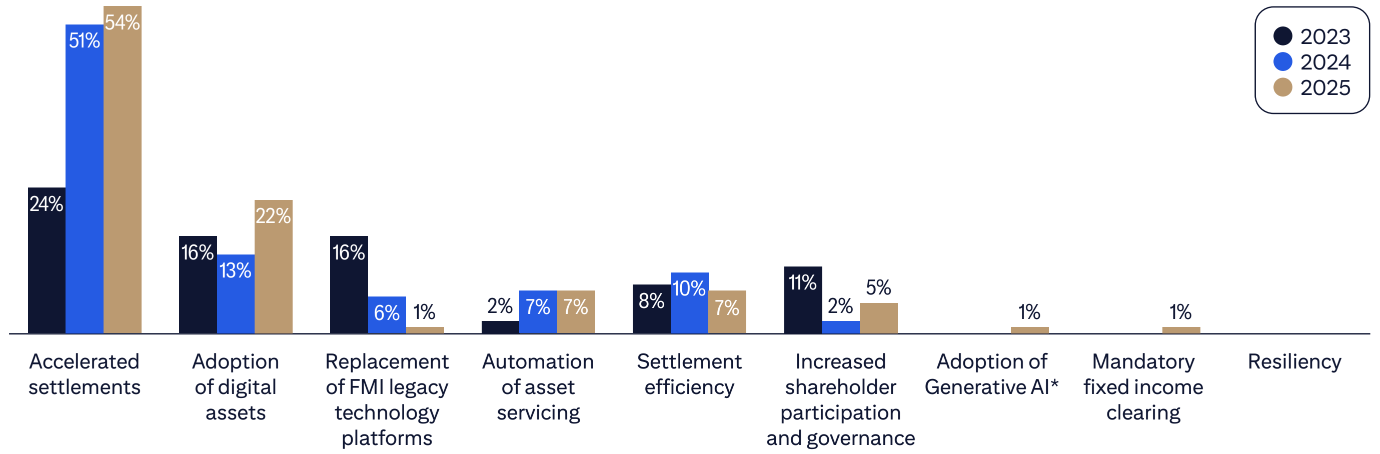
T+1's twist: Settlement discipline

Across all of the respective taskforce reports, the focus on settlement efficiency is clear – and is a notable difference from the North American T+1 plans.

Owing to the CSDR Settlement Discipline Regime, European firms have invested heavily in settlement efficiency since 2014 (in an effort to avoid costly penalties that have become core to European settlements) to the extent that much of the required work in this space is already behind most firms. For this reason, European firms have been acutely aware of the trade fail pressures triggered by T+1 to date, with 38% of European respondents seeing their trade fail rates 'significantly impacted' by the 2024 US transitions (the highest of any region globally).

With ESMA due to respond to the public consultation on the revision of the CSDR regulatory technical standards (RTS) and the European Commission considering ESMA's technical advice[58] on the scope of the Settlement Discipline Regime (published June 2025), we should expect a renewed focus on settlement discipline and an increasing scrutiny on trade fail pressures as a core component of the 2027 T+1 transitions. Perhaps in anticipation of ESMA's technical advice and in response to the UK's T+1 Implementation Plan, 23% of European based respondents are focused on settlement optimization methods such as partial settlement and hold and release and improved lending and borrowing arrangements for the EU and UK (27%).

Figure 21: Most significant changes in the European post-trade space today



Expressed as: % of respondents in Europe citing each change, excluding others. *New category in 2025.

Digital Assets: moving beyond sponsorship

But T+1 is not the only thing on the operating agenda for European firms.

The adoption of digital assets has risen significantly in importance over the last year with 22% of European respondents ranking it as most impactful in 2025, up from 13% in 2024. (Figure 21)

This accelerating momentum is thanks to significant efforts across the public and private sectors in 2025, to turn ambition into reality.

The efforts of the ECB and their Eurosystem DLT trials[59] program (which ran from May to November 2024) has been fundamental. Unique in scale and breadth, these highly successful trials involved 64 participants, over 200 transactions, several sovereign bond issuances and €1.59 billion settled in real cash. Far from being experiments, these trials provided firms with the ability to manage live cash transactions using a variety of mechanisms and helped participant firms to make significant progress in legal and technical readiness for digital assets.

Building on this momentum, the ECB announced a "dual-track" strategy in July 2025.[60] *Pontes*, the short-term solution, will link DLT platforms directly with the Eurosystem's TARGET Services for efficient settlement (using a "trigger mechanism"); whilst Appia, the long-term vision, will support the exploration of on-chain digital money in a DLT-native ecosystem.

Meanwhile, the UK government has launched a pilot program exploring the use of DLT for issuing and transactive sovereign debt (gilts) in a wide range of use cases. Operating within the Bank of England's Digital Securities Sandbox,[61] the Digital Gilt Instrument[62] (DIGIT), will provide the basis for more, industry-led development and adoption, under the essential leadership of the Central Bank.

But there is more than just digital experimentation going on. Fnality is now live as a regulated payments system at the Bank of England; Switzerland's SDX is now tokenizing late-stage pre-IPO equities for institutional and eligible investors (in cooperation with Citi); HQLAx and Eurex have announced their own plans to manage tokenized securities as collateral; and firms such as Calastone and Euroclear's Iznes are tokenizing fund subscriptions and redemptions across the region's leading domiciles.

These combined efforts doubtless explain the growth in perceived impact of DLT and digital assets amongst European respondents. With such strong commercial drivers, it is perhaps not surprising that more Europeans (27%) expect DLT to significantly drive their new product revenues than those in any other region.

Asset Servicing: not all standards drive progress

Driven by discussions around regionalization and consolidation, asset servicing automation and standardization has been an established topic in the region since the inception of T2S and the implementation of SRD II. Whilst this year has seen the live implementation of the European Collateral Management System (in June 2025), the SCoRE standards that support it have been the subject of much discussion – running in parallel as they do with other market standards such as the Corporate Events Joint Working Group (CEJWG) in addition to prescribed ISO 20022 messaging standards in the European Union. With some scope questions still unanswered, the benefits of this development may take several years to become clear pending greater alignment of the multiple standards that are already in place.

In the meantime, the regions FMIs are stepping up to support automation. Euronext through its CA4U[63] (Corporate Actions For You) project, and Euroclear are both seeking to harmonize and consolidate corporate action processes across their CSD networks, aligning with key industry standards, such as the ECB SCoRE standards using ISO20022 messaging. With both operating a number of CSDs across Europe, this development looks set to reduce fragmentation by eliminating country-specific systems – itself a critical step forward for all profiles of market participant.

One European market?

Underpinning all of these developments in Europe is an increasing focus on the creation of a single European infrastructure as a means of delivering new growth and value to Europe's individual investors. Influential studies from Enrico Letta,[64] Mario Draghi[65] and Christian Noyer[66] have highlighted the ongoing cost of European market fragmentation, suggesting national FMI silos contribute to inefficiencies, higher costs and reduce liquidity, thus hindering economic growth. But what is the new path to 'one European market' and what role will post trade play? That destiny could lie in the *European Commission's Savings & Investments Union (SIU)* and its ambition to achieve what the Capital Markets Union (CMU) initiative could not.

The EU's move to T+1 is a critical early step in the European Commission's plan to liberalize securities listing and issuance across the region, and to realizing the SIU. In the near future, the SIU will likely accelerate steps to forge a European capital marketplace by building on T2S and other regional infrastructures. These efforts, coupled with commercial efforts by FMIs such as Euronext to drive a European CSD model across Europe (see the FMI competition section above) could potentially have a transformational effect on European capital flows. For now though, these early test cases and discussions must be operationalized so that they can be proven to alleviate cross-border frictions in settlements and asset servicing.

The purpose of the European "Savings and Investments Union" (SIU) is to break the narrative of an incumbent CSD monopoly

Alessio Mottola, Chief Executive Officer, Euronext Securities Milan

Key Dates

	2025	2026	2027	2028+
T+1 EU / EEA, UK & Switzerland			11th October 2027	
CSDR	June : ESMA Technical Advice on the scope of the Settlement Discipline Regime[67] October : ESMA Technical Advice on Settlement Discipline			
ECB AMI-SeCo Harmonization	June: ECMS went live[68] November: SCORE[69] standards apply (excl. CSD participants use of ISO20022)			By end of 2028: CSD participants to offer ISO 20022 messaging to their clients (capable of using it) is by the end of 2028.
Savings & Investment Union	By end of December: European Commission report on the Savings & Investment Union[70] which could include recommendations for Settlement Finality Directive (amongst others)	Too early to tell but we might expect updates to existing regulations and new regulations		

Asia Pacific

T+1: Asia's own journey

With the world's attention focused strongly on North America's T+1 transitions in 2024, it is easy to overlook the fact that Asia Pacific's path towards accelerated settlements began over a decade ago with China's move to T+0 in 2014 and India's phased transition to T+1 (and then optional T+0) from 2023. With the region's two largest markets now operating on T+0 or T+1 and Asia's largest outbound market (the US) now running on T+1, the impact of accelerated settlements was already being felt strongly by Asian firms, well in advance of this year's announcements in Europe and in Asia. That 38% of Asian respondents are still focused on T+1 in 2025, even with so much of the work behind them, underlines the sheer scale of the multiple T+1 projects on the horizon, each with its own unique local and regional specificities.

As our recent "Accelerated Settlements in Asia" report[71] highlighted, this is a journey with many steps. Beyond the optimization of processing for North American T+1 and preparations for European T+1, the region is also putting its own transition dates in the global calendar. Australia and New Zealand are expected to migrate around 2030 (post the implementation of the ASX CHESS[72] replacement expected to be 2029), and market consultations are now ongoing in Hong Kong, Japan, Malaysia and Singapore (with likely transition dates to be announced over the coming year).

What will be different for these markets – versus what we have already seen? Whilst many of the core requirements will be consistent with experiences to date, a number of differences risk presenting themselves across the 17 markets that make up the region. Chief amongst these are the mandatory buy-in and penalty regimes in a number of Asian markets, which ensure settlement efficiency rates of over 99% in many key markets today. Indeed, 13% of Asian respondents see settlement discipline as the most impactful industry dynamic of all in 2025. These rules risk making T+1 a costly endeavor for any firms that cannot manage same-day settlements. Added to this are the midday settlement cut offs in a number of markets (such as Australia and Singapore), which make any settlement-date activity (and remediation) impossible for global investors that don't have onshore presence in the region; and then a broad lack of automation tools to support confirmation and allocation matching at market level.

Added together, these unique considerations look set to pose significant challenges for those investing into or trading Asia's wide range of markets.

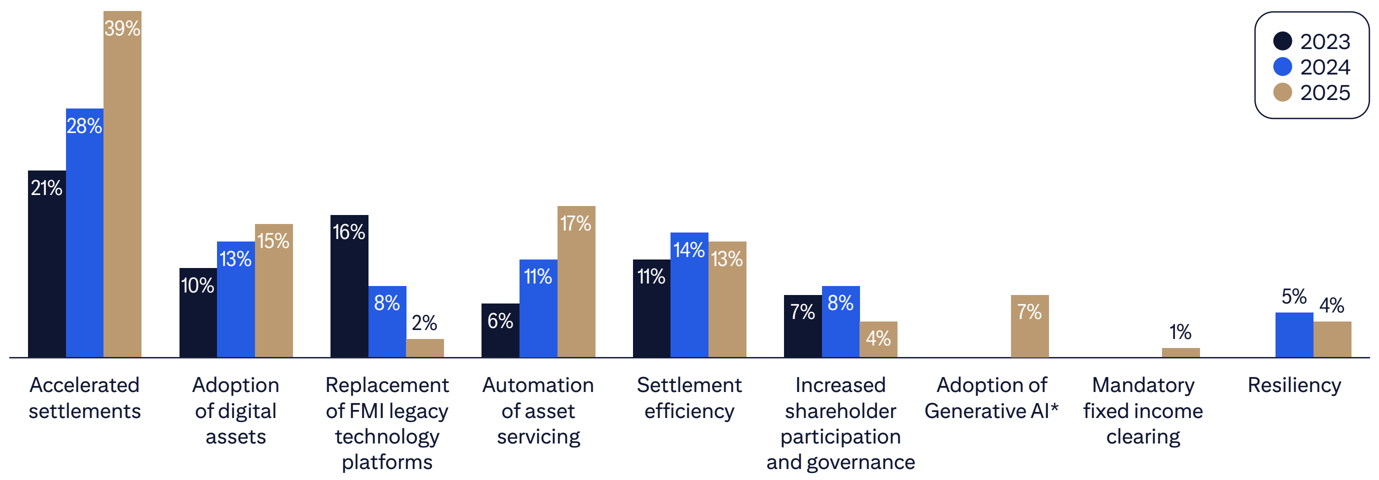
DLT and digital assets:

The first T+1 transitions in 2029 are still several years away – and much progress is being made in other areas today, most of all in the digital asset space (which is seen as most impactful by 15% of respondents in Asia Pacific, growing year on year).

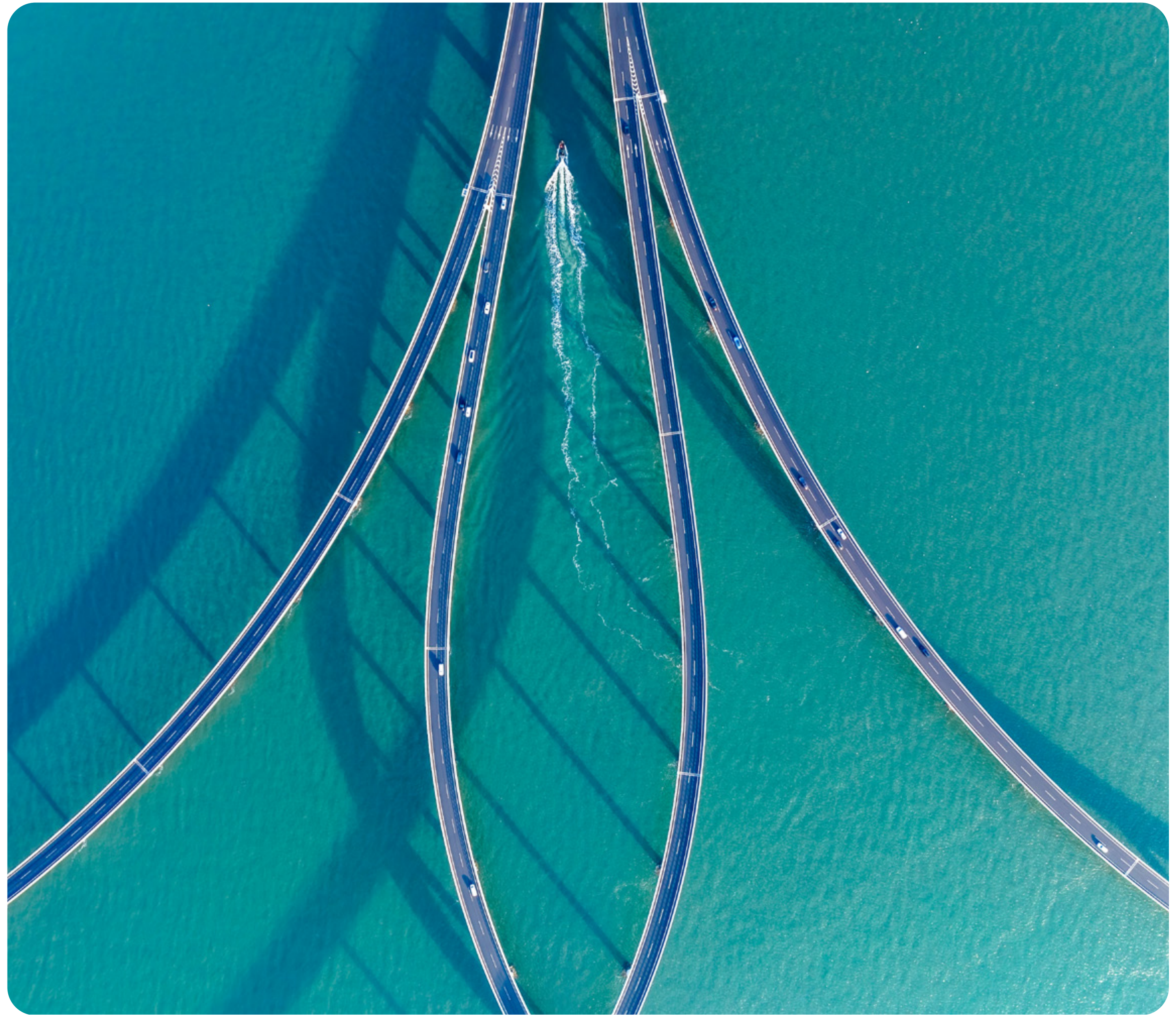
Since the inception of digital assets, Asia Pacific has led the path of adoption thanks to extensive retail take up of cryptocurrencies and to visible leadership by regulators (such as those in Singapore, Hong Kong, Thailand and others). Today, many of these regulatory efforts are paying dividends as live projects move into deployment across the region.

Cryptocurrency markets have continued to grow, with institutional banks now offering digital asset custody for a range of global and Asian assets. Aiming to tap into the digital wallets that hold these digital assets, fund houses such as UBS[73], Wellington[74] and China AMC[75] have all launched tokenized funds and tokenized

Figure 22: Most significant changes in the Asia Pacific post-trade space today



Expressed as: % of respondents in Asia Pacific citing each change, excluding others. *New category in 2025.



fund distribution strategies in the last year. And Singapore's Fundnode[76] is now live (in partnership with Euroclear), offering a gateway for tokenized access to any fund in the world and helping to cement Asia's role at the heart of fund tokenization efforts globally.

Our previous whitepapers have highlighted the growing competitive pressures between traditional securities trading and crypto-currencies in Asia – and we are now seeing that competition turn into convergence. 15% of respondents in the region expect to be able to use cryptocurrencies to fund their exchange-traded activities by 2030 – leveraging the real-time mobility of these assets to provide new funding efficiencies. Of course, the key question (for 55% of Asia based respondents) is whether the region's FMIs can facilitate that connectivity within 5 years.

From a regulatory perspective, the adoption of digital money is advancing in keeping with these expectations. The Hong Kong's Stablecoins Ordinance (effective on August 1, 2025) will introduce licensing and reserve requirements for stablecoin issuers; whilst initiatives such as MAS' Project Guardian, the HKMA's Project Ensemble and the RBA's Project Acacia will provide forums and platforms for firms to continue their blockchain experimentation in the coming year. Asian markets appear as determined as ever to institutionalize all profiles of digital assets – as soon as possible.

Put together, these developments look set to leave Asia with some of the most decentralized digital asset landscapes in the world, with respondents expecting new venues to outgrow traditional ones in the coming years in all assets except for equities, and 50% expecting to conduct their digital asset activities across multiple, interconnected networks, with little or no central players.

Asset servicing: early signs of progress

Back in the world of traditional securities, the automation of asset servicing is a notable priority in Asia Pacific, higher than in other regions. 17% of respondents rate this as the most impactful trend on their own businesses (against the global average of 12%), owing largely to high levels of manual processing and of terminal-based event management across the region.

With markets such as Singapore and Australia now offering higher levels of automation based on ISO 20022 standards (and with Hong Kong and Korea both planning to upgrade their platforms), it is no surprise that growing volumes of firms are prioritizing asset servicing transformation in 2025. Equally, in the proxy voting space, Proxymity's significant progress in driving real-time, automated connectivity in the Australian market looks set to be a stand-out example for other markets across the region.

Key Dates

	2025	2026	2027 – 2028	2029 – 2030
	May 2025: India: Foreign investors able to transact T+0[77] (voluntary)			Australia & New Zealand (post ASX Release 2)
	Consultations in Hong-Kong[78], Japan & Malaysia (expected)		Migrations likely 2028+	
Platform Modernization	Mid 2025 – 2027: HKEX: Orion Cash Platform roll-out[79]	ETA April: Australia ASX Release1 – Clearing Services[80] Q2 2026: HKEX Issuer Access Platform released[81]	End 2027: HKEX Orion Cash Platform roll-out delivered	Australia ASX: Release 2 Settlement & Sub-register services (Date TBD likely April - Dec)
Digital Assets	By 30th June: Singapore: MAS[82] Deadline for Crypto Firms Offering Overseas Digital Token Services MAS licensing for digital token services applies under the FSMA 1st August: Hong Kong: HKMA Stablecoins[83] Ordinance take effect			

Conclusion

If you are working in the post-trade space in 2025, you are most likely feeling more stretched than ever by the volume of mission-critical projects that are on the horizon. With T+1 workloads at a historical high, DLT and digital assets transforming markets such as collateral and funds, stablecoins delivering balance sheet transformation and GenAI offering new answers to a range of old questions, there is much that needs to be done if firms are to keep step with their peers.

2025 is undoubtedly a pivotal year on many fronts, with this year's efforts likely to transform into the following dynamics in the near future:

- **A shift in focus on FMI platform transitions** as part of a new business-as-usual, moving away from once-in-a-generation transitions to ongoing industry change programs
- **New, competitive CSD models** that drive tailored solutions, capable of winning RFPs to service institutional and (neo-)retail investors
- **Investments into trade cycle automation** that move beyond simply removing one day from settlement cycles – enabling round-the-clock trading and the processes necessary to support this (across settlements, funding, asset servicing and elsewhere)
- **Increasing T+1-related workloads** as markets across Europe, Asia Pacific and Africa continue to scope out and plan their own T+1 transitions, including specific nuances in each one
- **New T+1-driven pressures on settlement discipline**, with new solutions being put in place at regulatory and market levels to ensure >99% levels of trade settlement
- **Accelerating adoption of digital money mechanisms** as live payment mechanisms across the securities lifecycle, including the use of money market funds as digital money
- **Widespread, live adoption of DLT and tokenization in the collateral market and in money market funds**, with significant percentages of institutional turnover being managed through FMI-based platforms
- **New forms of asset servicing discussions** that involve a wider range of stakeholders than ever (including investment banks, transfer agents and investors)
- **Advanced deployments of GenAI in core areas** (such as client onboarding), providing continuing insights into the opportunities and challenges of this technology in a live context.

After five years of documenting the evolution of the securities post trade industry around the world, these trends and challenges have never been more equally shared by firms around the globe.

Acknowledgments

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- Euronext Securities
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Endnotes

1 ValueExchange private research
2 https://handbook.apra.gov.au/standard/cps-230
3 CMU OmniCleat
4 ASIC Market Integrity Update Issue 165, March 2025
5 European Commission – Savings and investments union
6 ValueExchange private research
7 Single Collateral Management Rulebook for Europe
8 AST Final Report Feb 2025
9 ValueExchange T+1 Pulse Survey
10 SIFMA T+1 After Action Report
11 ValueExchange private research
12 https://iongroup.com/blog/markets/why-tokenized-funds-are-gaining-momentum/
13 ValueExchange private research
14 https://www.circle.com/blog-all
15 https://cointelegraph.com/explained/blackrocks-buidl-fund-explained-why-it-matters-for-crypto-and-tradfi
16 Ledger Insights – Eurex gets BaFin approval for DLT-based margin collateral via HQLA
17 https://www.lseg.com/en/post-trade/clearing/lch-services/digitalassetclear
18 Ledger Insights: CME to trial tokenization on Google's new Universal Ledger DLT
19 ICE and Circle Sign MOU to Explore Product Innovation Based on Circle's USDC and USYC Digital Assets
20 What is BUIDL? BlackRock's New Tokenised Fund - Zerocap
21 UBS Asset Management launches its first tokenized investment fund
22 ChinaAMC HKD Digital Money Market Fund
23 Ethereum Sees $6 Billion In Tokenized Funds As Big Players Jump In
24 DTCC announces new platform for tokenized real-time collateral management
25 DTCC announces composerx
26 Deutsche Börse Group provides institutional clients access to crypto assets via Clearstream
27 Press Release: Euroclear & Digital Asset to mobilise collateral assets
28 https://cleartoken.io/services/
29 Press Release: Introducing the Canton Network: A blockchain financial institutions can say 'yes' to
30 https://defillama.com/
31 https://app.rwa.xyz/ (as of 20th August 2025)
32 Asset Owner Transformation 2024, the ValueExchange
33 Morgan Lewis: SEC Roundtable on Tokenization - Technology Meets Regulation in the Evolution of Capital Markets
34 The White House Fact Sheet: President Donald J. Trump Signs GENIUS Act into Law
35 USDC | Powering global finance. Issued by Circle
36 Power Collateral Management with Digital Assets | DTCC Digital Assets
37 https://www.theocc.com/occ-transformation
38 https://www.cds.ca/solutions/cds-key-initiatives/post-trade-modernization
39 https://www.dtcc.com/dtcctransformation
40 https://www.dtcc.com/dtcctransformation
41 Modernising corporate actions through technology and collaboration | Swift
42 Press Release: SEC Extends Compliance Dates and Provides Temporary Exemption for Rule Related to Clearing of U.S. Treasury Securities
43 U.S. Treasury Clearing | DTCC
44 DTCC Modernization Initiatives
45 https://www.sec.gov/about/crypto-task-force
46 https://www.congress.gov/bill/119th-congress/senate-bill/1582/text
47 Where Can We Take You? Brazil
48 Migration to T+1 in nuam Equity Markets | nuam
49 Press Release: Grupo BMV Partners with Nasdaq to Enhance Mexican Market Infrastructure
50 Nuam 2024 Corporate Presentation 1745936522 | PDF | Derivative (Finance) | Over The Counter (Finance)
51 https://www.bcb.gov.br/en/financialstability/drex_en
52 DitoBanx and Tokeny Partner to Transform El Salvador into a Tokenization Leader – DitoBanx El Salvador
53 https://www.nuamx.com/en/equity-market-settlement-date-nuam-markets
54 nuam exchange and Nasdaq Form Strategic Technology Partnership to Develop New Marketplace in Latin America | Nasdaq
55 Grupo BMV Partners with Nasdaq to Enhance Mexican Market Infrastructure | Nasdaq
56 AST Final Report 2025
57 High-level_Roadmap_to_T_1_Securities_Settlement_in_the_EU
58 ESMA: Final Report – Technical Advice on the Scope of CSDR Settlement Discipline
59 Exploratory work on new technologies for wholesale central bank money settlement
60 Press Release: ECB commits to distributed ledger technology settlement plans with dual-track strategy
61 Digital Securities Sandbox (DSS) | Bank of England
62 Digital Gilt Instrument (DIGIT) Pilot Update - GOV.UK
63 Corporate Events Service | euronext.com
64 https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf
65 PWC – ETFs 2029: The path to $30 trillion
66 EBF: Developing European Capital Markets to Finance the Future
67 ESMA narrows down the scope of CSDR cash penalties
68 ECMS – Professional use
69 Collateral management harmonisation
70 Savings and investments union – European Commission
71 The Path to T+1: What Accelerated Settlements Mean for Asia-based Firms
72 ASX Response to Chess Replacement Consultation Feedback
73 Ledger Insights: UBS issues tokenized USD money market fund on Ethereum
74 https://www.globaltrading.net/private-market-tokenization-shows-power-of-smart-contracts/
75 https://www.marketsmedia.com/chinaamc-launches-first-tokenized-fund-in-rmb/
76 https://www.marketnode.com/case-studies/fundnode-from-efficiencies-to-new-business-models
77 Navigating India's T+0
78 HKEX Publishes Discussion Paper on Accelerated Settlement for the Hong Kong Cash Market
79 Orion Cash Platform
80 ASX Clearing and Settlement Services
81 HKEX Issuer Access Platform
82 MAS Clarifies Regulatory Regime for Digital Token Service Providers
83 Hong Kong Monetary Authority – Regulatory Regime for Stablecoin Issuers

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