RESEARCH

Insights

# Debrief: Operations Conference & Exhibition

Perspectives & Key Themes from Market Participants

**September 2024**

Recently, SIFMA hosted our Operations Conference & Exhibition. Here we gained insights into top-of-mind topics for market participants from across the financial services industry, including:

- **Setting the Scene**: Based on our conference survey results, the biggest operational risk in the market today is competing regulatory change requirements. What worked well at the industry level to achieve the T+1 transition = tight industry coordination + a public playbook/related documentation.
- **Operations Outlook**: T+1 lessons – Prepare the industry did, making the importance of industry collaboration the top lesson learned. Transformation – A theme of the conference, but there is a balance between transformation and compliance spend; the budget is skewed to compliance at 75%, versus 25% for innovation spend.
- **Economic Landscape**: Strong economy, inflation under control, labor market questions. As such, our speaker discussed the potential for 100 bps in total cuts by year end. Since the conference, the FOMC cut rates by 50 bps, bringing the current target range to 4.75%-5.00% from 5.25%-5.50%.
- **Treasury Market Structure**: How we got here – improving market resiliency. Not a big bang – phase in of activity over the next eighteen months. Amount voluntarily cleared has already more than doubled since the SEC proposal, but much work will need to be done in a very tight timeframe in order to prepare for the much larger volumes expected once the mandates go in to effect. 46% of survey respondents view Treasury clearing as a high level of concern. The logistics – scope, clearing models, margin, and more. How to prepare – identify transactions, chose clearing model, set up margining regime – start yesterday!
- **Equity Market Structure**: When it comes to Rule 605, while applauding the need to change and increasing transparency, market participants had hoped the SEC would begin with this rule to use as baseline to address changes to the other proposals. Since the conference the SEC finalized the Reg NMS rule as well.
- **Regulatory Update**: Multiple regulators weighed in on T+1, Treasury clearing, cyber, operational resiliency, and digital assets.

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# Setting the Scene

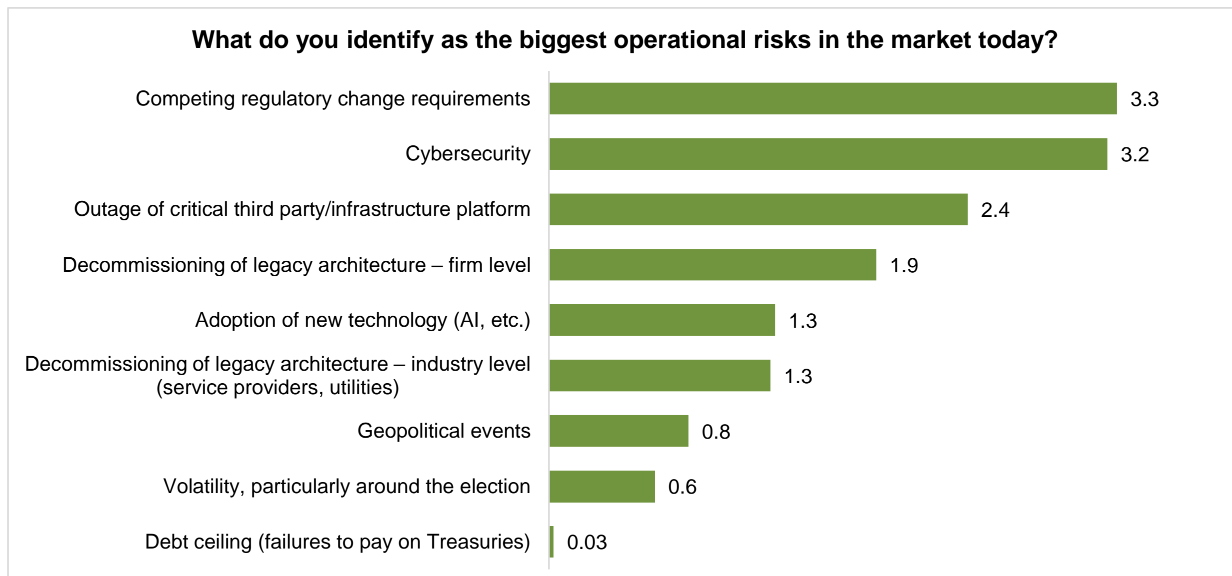
## Survey Says: Industry Topics

To set the scene of the conference, we surveyed attendees and other SIFMA members. For many of the questions, respondents were asked to select five responses out of the list of criteria and then rank them. When calculating average ranks for responses in these questions, we accounted for the number of people selecting the response. The greater the number of people not selecting a criteria pulled down the average rank, even if those limited selections ranked the criteria highly. In other words, a lower average rank – say in the 2 range rather than the 3 range – can indicate fewer people selected the criteria.

### Operational Risks

Our conference survey began by asking respondents to rank the biggest operational risks in the market today. The top responses included: (averages; 5.0 being the highest score)

- Competing regulatory change requirements; 3.3 rank
- Cybersecurity; 3.2 rank
- Outage of critical third party/infrastructure platform; 2.4 rank



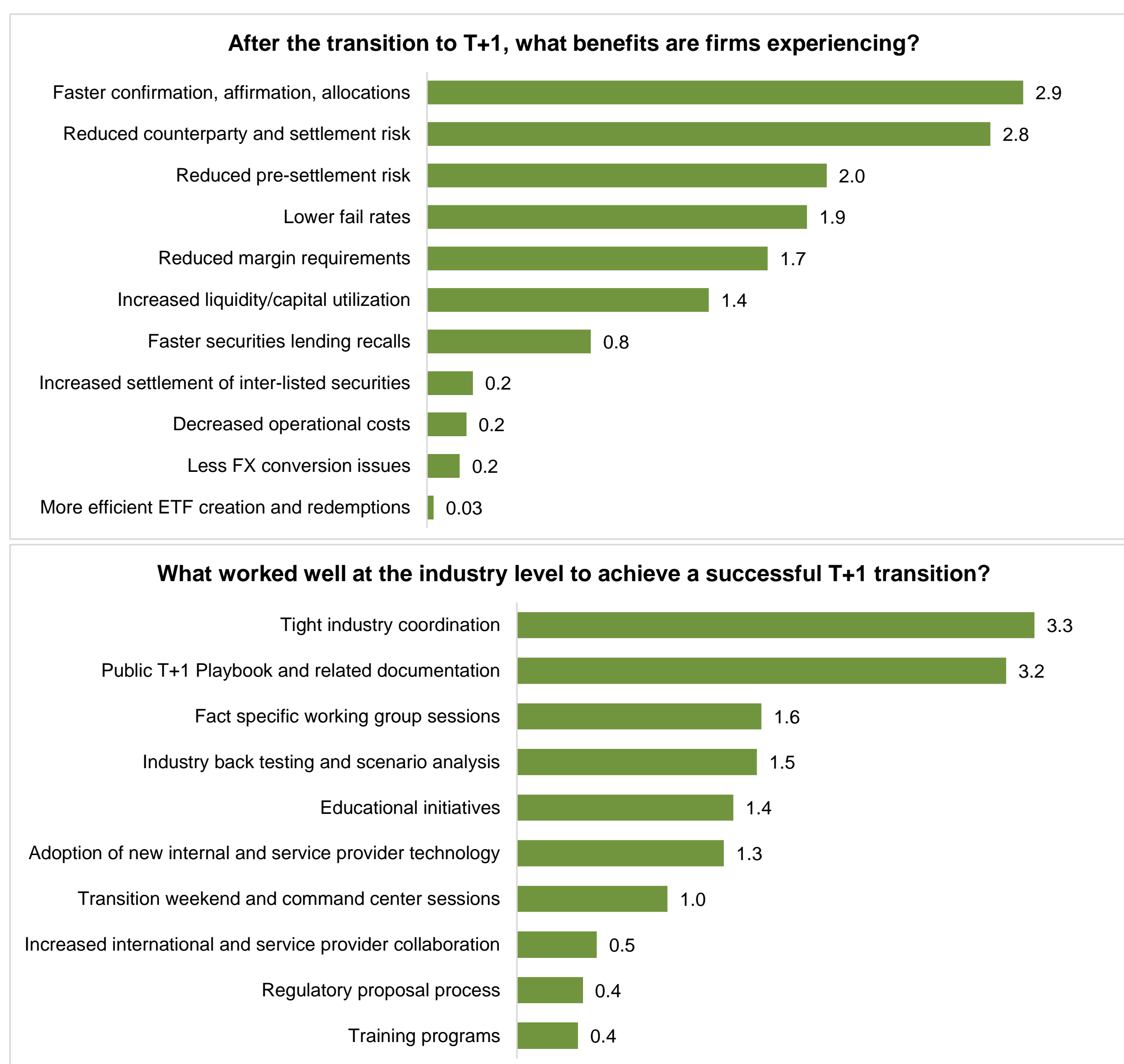

Source: SIFMA Insights conference survey

Note: Respondents were asked to select and rank order their top 5 factors with “5” having the greatest effect and “1” having the smallest effect among the five factors chosen. Other = People - Attracting, training and mentoring young people to become operational professionals.

## T+1 Settlement Transition

The survey then moved on to assess the environment almost four months after the transition to T+1 settlement. Respondents were first asked to rank the benefits firms were experiencing in the T+1 environment. The top response was faster confirmation, affirmation, and allocations at a 2.9 rank, followed by reduced counterparty and settlement risk with a 2.8 rank.

Next, respondents were asked to rank what worked well at the industry level to achieve a successful T+1 transition. The top response was tight industry coordination at a 3.3 rank, followed by a public T+1 playbook and related documentation with a 3.2 rank.

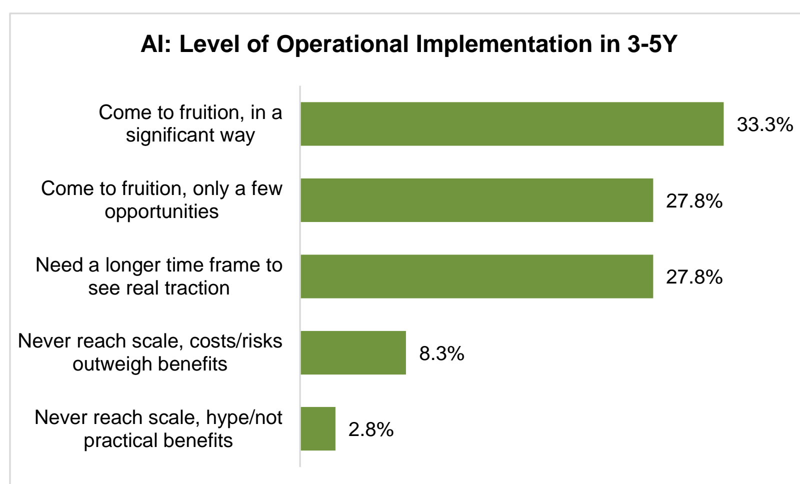


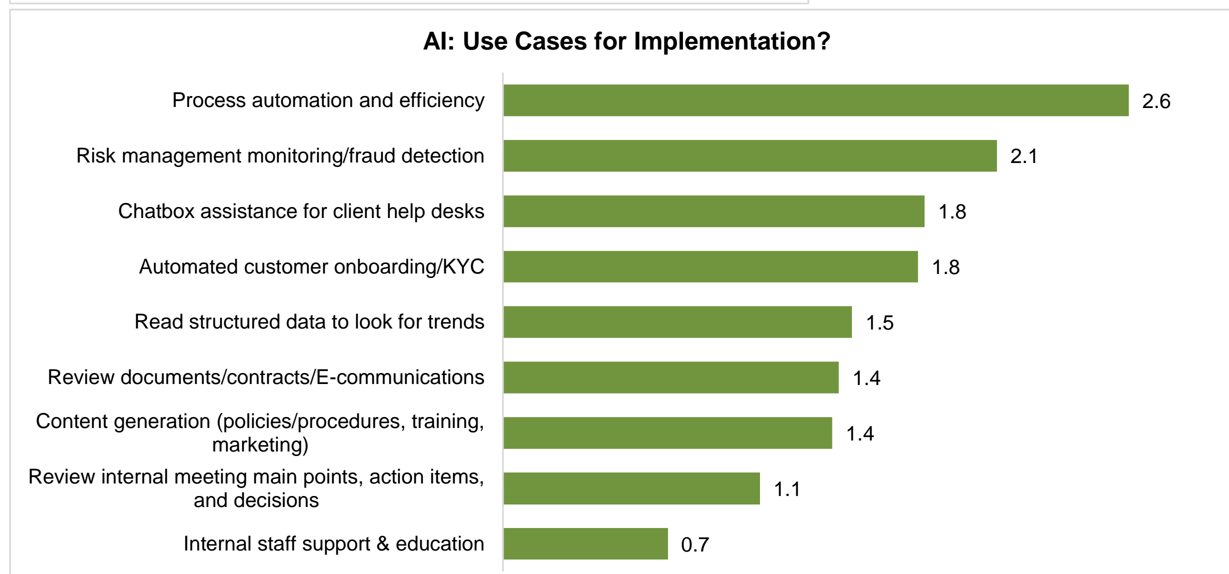

Source: SIFMA Insights conference survey, where a 5.0 would be the highest score. Other, benefits = Higher affirmation rates with custody banks. Other, keys = Previous experience with T3 to T2.

### Technologies: Artificial Intelligence (AI)

Moving on to gauge the view of select technologies, we first looked at AI. Respondents were asked what they believe would be the level of operational implementation for AI in the next 3-5 years. The top response was “come to fruition, in a significant way” at 33.3%, followed by a tie for the second spot, at 27.8%, with “come to fruition, only a few opportunities” and “need a longer time frame to see real traction”.

Next, respondents were asked to rank use cases for AI implementation. The top response was process automation and efficiency at a 2.6 rank, followed by risk management monitoring/fraud detection with a 2.1 rank.



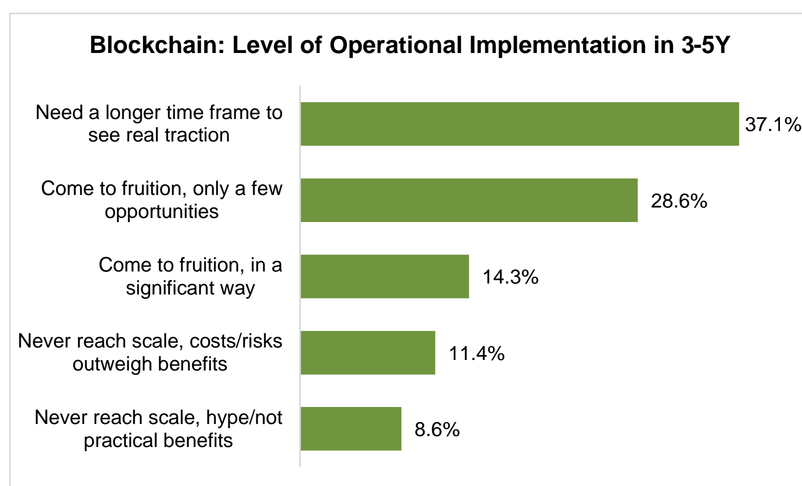



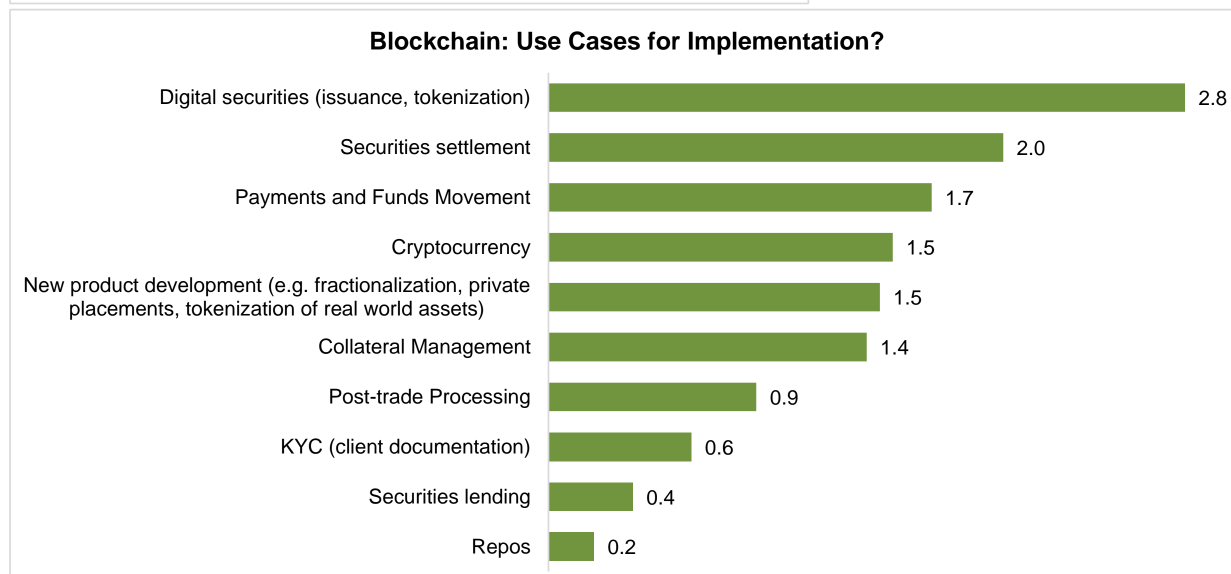

Source: SIFMA Insights conference survey, where a 5.0 would be the highest score. Other, use cases = Data quality; used in combination with workflow tools to automate exception management.

## Technologies: Blockchain

Then, we asked survey respondents their views on blockchain technology. Respondents were asked what they believe would be the level of operational implementation for blockchain in the next 3-5 years. The top response was "need a longer time frame to see real traction" at 37.1%, followed by "come to fruition, only a few opportunities" at 28.6%.

Next, respondents were asked to rank use cases for blockchain implementation. The top response was digital securities (issuance, tokenization) with a 2.8 rank, followed by securities settlement with a 2.0 rank.

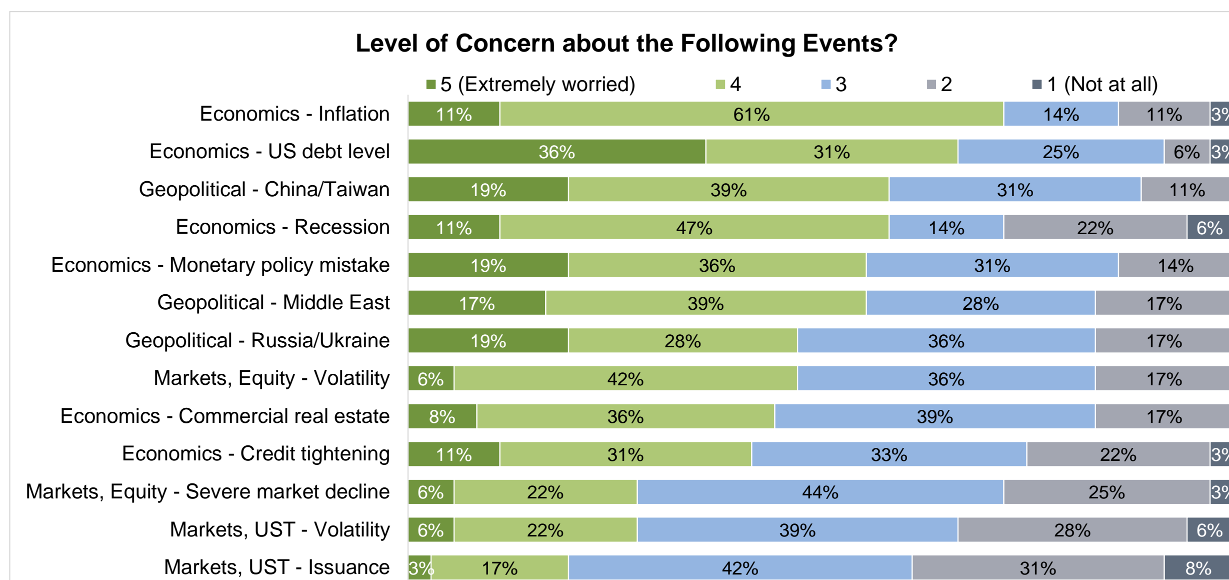


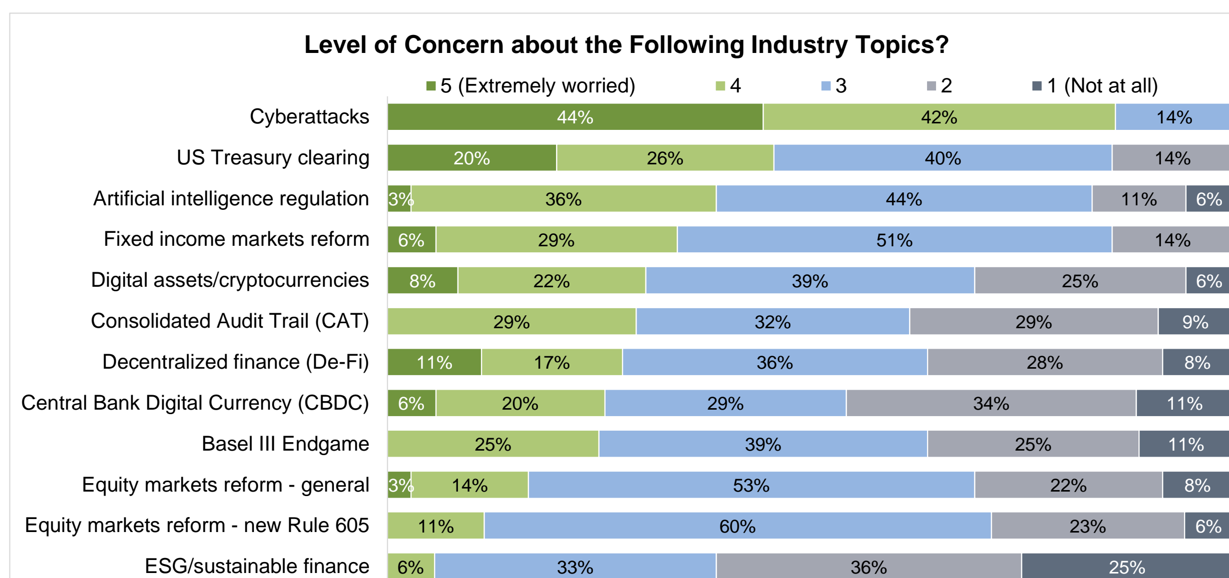




Source: SIFMA Insights conference survey, where a 5.0 would be the highest score. Other, use cases = Bank loans; reconciliation; smart contracts.

## Survey Says: Macro & Market Topics

Our conference survey also sought to gauge respondents' concerns around current geopolitical, economic, and market events and trends. Ranking responses by the aggregate responses categorized as #5 (extremely worried) and #4 (worried), for general macro events it was all about the economy – inflation and the U.S. debt level. As to industry topics, respondents were most concerned about cyberattacks and U.S. Treasury clearing.



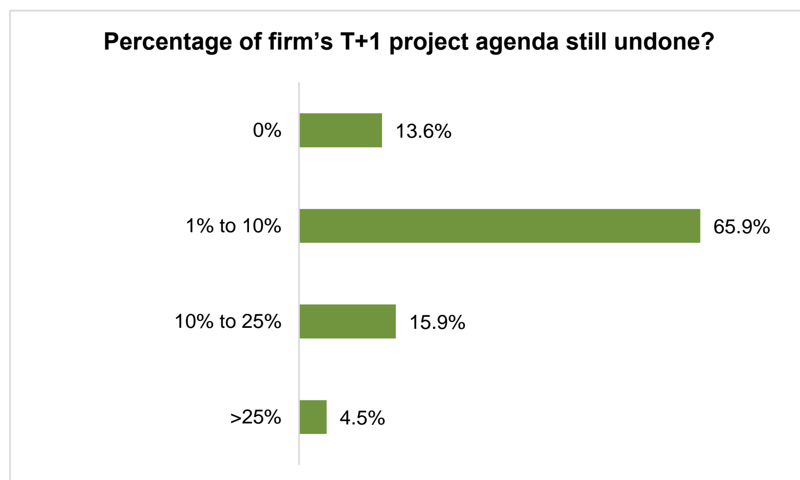

Source: SIFMA Insights conference survey

# Operations Overview

## Lessons Learned from T+1

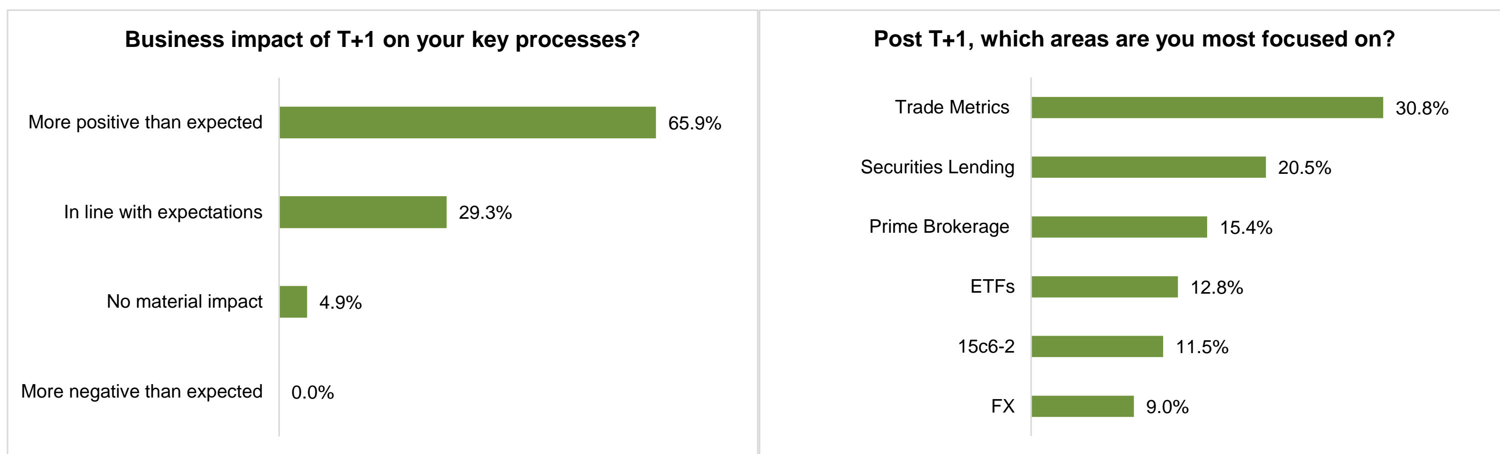
While the industry is still assessing the T+1 transition to identify areas to derive even greater benefits to the industry, focus is also turning to the fast approaching Treasury clearing deadlines. It has been acknowledged that the SEC's Treasury clearing mandate is more complex than the transition to T+1. That said, the industry can take lessons from the T+1 transition to apply to Treasury clearing.

As Benjamin Franklin said, "By failing to prepare, you are preparing to fail". And prepare the industry did, making the importance of industry collaboration the top lesson learned. The industry collaboration – every type of stakeholder was involved on some level, whether it be in calls, meetings, test sessions, etc. – eliminated frictions and enabled true transformation. This was a substantial industry overhaul, and, as shown in the audience polling below, at just shy of four months later almost 80% of respondents indicated that their firm has less than 10% of their T+1 project agenda to finalize. Given the scale of the transformation, this can be viewed as a good result.




Source: Audience polling

Firms are already seeing a business impact. According to audience polling, almost 100% of respondents noted that the business impact on key processes was more positive than or at least in line with expectations – and expectations were high. As to benefits firms are already seeing from the T+1 transition, panelists indicated that the work to upgrade platforms will allow them to handle "bumps" more quickly, enhancing operational resiliency. Firms are developing metrics on straight-through-processing, focusing on bottlenecks in processes. As shown in the audience polling below, almost one third of respondents chose trade metrics as the area they are most focused on after the transition.



Source: Audience polling

On the other side of analyzing the transition – dare we say the downside – firms had to reprioritize other projects and put their three to five year strategic plans on hold to focus resources on the T+1 transition.

A focus ahead of the transition was – and the focus continues to be – on operational resiliency. Panelists went through a check list in this area, noting firms should be prepared by having plans, policies, and procedures that:

- Think end to end – what could go wrong – and out of the box, pointing to the unexpected issues at Delta around the Microsoft system outages caused by a CrowdStrike software upgrade.
- Get better at preventing outages, setting up systems to detect issues more quickly. For example, given the compression of trade processing timelines, delays can become even more problematic. As such the industry created plans should there be a delay in making DTCC's Institutional Trade Processing (ITP; straight through processing for institutional trading activity) 9:00 PM affirmation cutoff or a delay in output from DTCC's night cycle. Firms should think about creating their own playbooks on what steps they would take in this type of scenario.
- Understand the business impact – how to assess issues and calibrate responses. For example, firms underwent dependency mapping, identifying what other processes could get delayed after a delay in one process and how it could impact their firms and clients.
- Plan for a quick, clean recovery, knowing the path to recovery to put your firm back on solid footing – how we initially get back to business as usual, then how get to where we were before the incident. Firms had to redefine contingency. Prior to the T+1 transition, firms had a day between trade date and affirmation. Now there is no cushion – meaning a contingency event occurs on trade day – minimizing response time.

While the transition date is not that far in the review mirror, firms are already thinking about what can be done next to keep garnering efficiencies for the industry. Market participants are focused on initiatives that increase settlement rates, such as increased clearing and trade matching.

## Transformation

Transformation was a theme of the conference. First let us set the scene on why transformation – whether to innovate or simply gain efficiencies – is so important. Whether on the sell side or buy side, firms continue to face cost pressure. Sell side firms face capital constraints due to regulations. As such, these firms are focused on generating capital efficiencies, and, on the revenue side, growing stable, fee-based revenue businesses to balance out cyclical transaction businesses. On the buy side, firms are facing increased competition and profitability pressures. Therefore, these firms are focused on finding ways to expand capabilities to provide a one-stop shop for their clients and grow revenue streams.

Enter transformation. Financial services is already a technology business, but there are opportunities to utilize new technologies to find efficiencies and drive the industry forward. Technology can enable better market connectivity. Automation can drive scale. While data is crucial in today's financial services, it often needs corrected, and it certainly needs to be trusted. Applying technologies to reference data can enable a single source of truth, as well as build data governance into systems and platforms. Additionally, firms need technology infrastructure to protect data given increased cyber threats. While opportunities abound, operational resiliency remains a focus. Platforms need to be up and running, regardless of the technology applied.

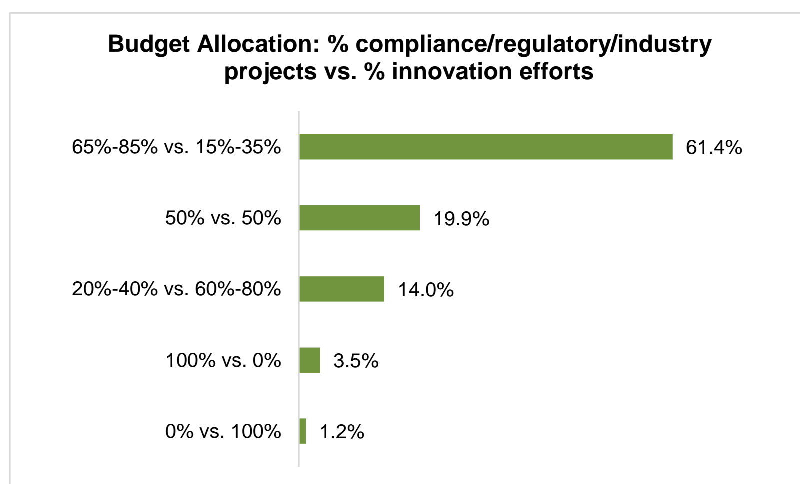
A digital transformation is underway, or at least under assessment depending upon the technology. A 2024 Broadridge survey showed that 75% of C-suite executives and senior leaders surveyed said they were confident about their transformation roadmap, with over two-thirds noting that they have made meaningful progress in modernizing their core IT platforms.[1]

New technologies provide the industry an opportunity to look at businesses and categories in a different way, starting with outcome driven statements. The key to transformation for the industry is getting to the finish line together – sell side firms, buy side firms/clients, and regulators – creating the best outcome for all.

[1] https://www.broadridge.com/_assets/pdf/2024-annual-broadridge-digital-transformation-next-gen-technology-study.pdf

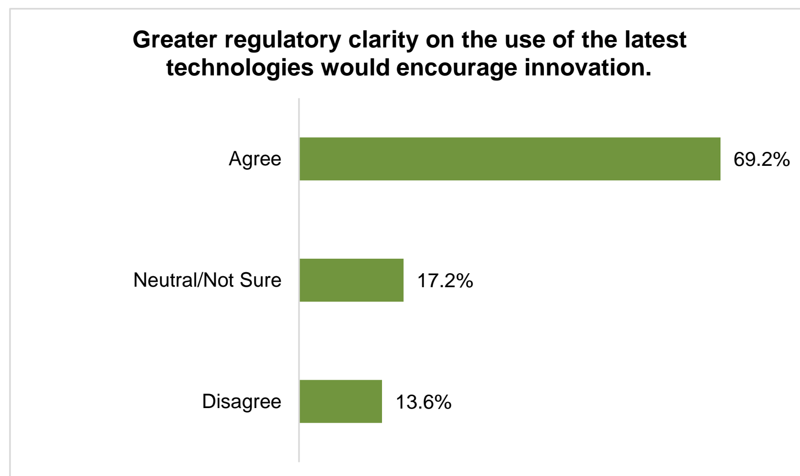
That said, there is a balance between transformation and compliance spend. Panelists noted that ten years ago, the breakout was around 80% of the budget dedicated to strategic initiatives versus 20% on compliance. Today, they indicated the budget breakout is around 75% compliance versus 25% strategic initiatives. Looking at the audience polling below, respondents agreed with panelists, with almost two thirds noting that 65%-85% of budgets are currently spent on compliance, regulatory, and industry projects, leaving only 15%-35% of the budget for innovation efforts. Panelists noted that firms and the industry need to get back to a better balance.

Resource limitations lead firms to question build versus buy. Panelists suggested that if the product or technology provides a competitive advantage, then build. Otherwise, buying becomes a better option for commodity or more mature products, enabling firms to mutualize costs.




Source: Audience Polling

It was also discussed that regulatory clarity can encourage innovation, as it is difficult to make long-term decisions without it. Respondents to audience polling agree with this, with almost 70% responding agreeing with this statement and less than 14% disagreeing. The sentiment was that the industry gets better as a whole when firms lean in on the discussions around new technologies. Regulatory transparency is key.




Source: Audience Polling

### Digital Assets

On one hand, noted a panelist, some of the excitement has slowed – firms are no longer scrambling to deliver products to meet client demands. That said, digital assets as a technology offer opportunities. One speaker noted that in 2023, over 70% of all distributed ledger technology (DLT) projects had less than six participants because the workstreams were so fragmented. The tide has shifted, as firms tightened budgets on projects without proof of concept. The industry has merged around common projects and needs to continue to work together to develop digital asset services.

Digital asset technology can be leveraged to drive changes to infrastructure. There are digital applications to settlement, automating the processes around trade flow. DLT can be used to transfer cash and securities, and smart contracts can be used to monitor margin shifts. Technology can also be used to rectify settlement cycle mismatches, addressing the window of time to transfer cash/securities.

Regardless of the use case, a speaker clarified a key point – backwards compatibility. New technologies must be integrated with other systems, working with existing or legacy technologies.

### Generative Artificial Intelligence (Gen AI)

AI is not new. Gen AI is a subset of AI with the ability to create new content across multiple modalities in response to a prompt. While not new, the pace of adoption of Gen AI has surprised many. ChatGPT reached 100 million users in just two months. To put this in context, TikTok took nine months to reach 100 million, while Instagram took two and a half years.

What is new with Gen AI? The interface itself has been redesigned for simpler use. Rather than being a deterministic model, it is a probabilistic model, incorporating randomness in the model. As such, users may not get the same answer twice. While this is a feature of the model – not an error – it can be confusing or even disturbing to users. This randomness, among other questions, keeps many financial services firms – and regulators – in the exploratory phase for this particular new technology.

Some potential use cases discussed to generally improve productivity included:

- Accelerate data accessibility
- Analyze massive volumes of historical data and patterns
- Build ChatGPT type solutions for risk calculations
- Connect multiuser interfaces
- Query documents and procedures
- Summarize email communications and emails

# Economic Landscape

## Development Since the Conference

Since we discussed the economic landscape at the conference, the Federal Open Market Committee (FOMC) voted to cut the Fed Funds rate by 50 bps, bringing the current target range to 4.75%-5.00% from 5.25%-5.50%. Heading into this meeting, while many economists believed the data – in particular, concerns around signs of cracks in the labor market – warranted a 50 bps move, they did not believe the Fed would follow through with this ahead of the election. Although, markets had grown closer to a 50% probability of a 25 bps or 50 bps cut as announcement day neared.

At this meeting, the Fed also updated its Summary of Economic Projects, which shows individual Fed members' assumptions of economic data points and appropriate monetary policy. This showed GDP growth at 2.0% for 2024 and 2025 (change from the June SEP: -0.1 pps and flat respectively), and the unemployment rate at 4.4% for both years (change from the June SEP: +0.4 pps and +0.2 pps respectively). The September SEP estimated PCE and Core PCE rates of 2.3% and 2.6% for 2024 and then 2.1% and 2.2% for 2025 (change from the June SEP: -0.3 pps/-0.2 pps for 2024 and -0.2 pps/-0.1 pps for 2025). As to the terminal Fed Funds rate, the September SEP estimates this at 4.4% by the end of 2024 and 3.4% by the end of 2025 (change from the June SEP: -0.7 pps each)

It is also interesting to note that one voting member, Michelle Bowman, voted for a 25 bps cut. This was the first dissent by a governor since 2005.

## Commentary from the Conference[2]

Our speaker began by reminding us of Federal Reserve Chair Jay Powell's Jackson Hole speech in back in August when he said, "The time has come for policy to adjust." Powell is concerned with nailing a rare soft landing amidst emerging cracks in the labor market. Our speaker noted that this was 180 degree pivot in tone from the Chair – two years ago at the same event, he was worried he would have to send the US economy into a recession (remember "bring the pain") – hedging further weakening in the labor market and opening the door to more aggressive rate cuts. As such, our speaker discussed the potential for 100 bps in total cuts by the end of the year.

Soft landings – or cooling inflation through higher interest rates without causing a recession – are rare. In the mid-1990s, Fed Chair Alan Greenspan doubled rates from 3% to 6% in a one year span. While almost derailing the economy, he was given a hand in keeping inflation in check through productivity growth and lower prices from abroad. This shows that taming inflation can be about luck. Chair Powell wants to ensure a soft landing, our speaker noted, viewed by some economists as his legacy.

The U.S. economy remains strong, posting 3.1% growth (4Q/4Q) in 2023 and some economists are looking at around 2% for this year and potentially 2025 as well. Ceteris paribus. While consumer spending remained elevated in most of this year, some consumers – particularly in the bottom strata – have dipped into savings to do so.

[2] Speaker: Diane Swonk, Chief Economist KPMG US. This commentary represents SIFMA Insights' interpretation of the speaker's presentation and assessment of Fed and other economic data points.

Additionally home values and rent increases have outpaced wage growth for some. Yet, consumers remain discerning but not defeated.

Turning to the labor market, layoffs have picked up. While there have been around 116 thousand jobs created on average, noted an economist, this is not statistically different than zero. The Job Openings and Labor Turnover Summary (JOLTS) data ended July with job openings continually coming down since the 2022 peak and nearing pre pandemic levels. Job openings to job seekers near 1:1, down from the peaks seen during the pandemic (reached 5:1) and back to pre-COVID levels. With state and local government, healthcare, and leisure and hospitality creating around three-fourths of all job gains in the U.S. since June 2023, a speaker asked, “What happens when these sectors stop adding jobs?”

As much discussed since the events at the start of August, the economy did trigger the Sahm Rule. This rule is a recession indicator and has predicted every recession since 1950 except in 1976. That said, even the creator Claudia Sahm has said, “Rules are meant to be broken.” To get a broad based recession, there needs to be a broad based decline in consumer spending, which we have not seen. Moving forward, the inflation sensitive sectors have already slowed. There are signs of slowing in the least interest rate sectors, and we have the impending election. A speaker noted that over 60% of CEOs often hold off on large investment decisions until after elections to get clarity on policies going forward. This is effectively a tax on the economy heading into the fourth quarter.

Our speaker ended with where the Fed Funds rate could go from here. We have remained higher for longer, with the last rate hike coming in July 2023. Inflation is under control, running around 2.5%. Inflation faces tough comps in the fourth quarter, but the math for a downward path is there. A speaker noted that inflation excluding shelter is running at 1.1%. Shelter is a lagging – not leading – indicator, and even this piece of the inflation equation has shown signs of cooling. Like with Greenspan in the 1990s, we are also getting a helping hand with inflation from a post-COVID productivity boost.

It looks like we should be able to beat the odds of the recession Chair Powell feared, and the recent rate cut should end the discussion of the Fed waiting too long to cut. This led our speaker to estimate 100 bps of total cuts by year end. As to terminal rate, higher productivity growth implies a higher rate, as do higher deficits. And fiscal spending remains a wild card here. The era of 0% is over, as that was an unusual scenario. Looking at the recent dot plot, the longer run Fed Funds rate was estimated at 2.9%, expected to be reached by 2026.

# Treasury Market Structure

Please see the Appendix for the Treasury clearing timeline, background data, and additional information.

The SEC's Treasury clearing mandate is complex, and – given the global nature of the market and interconnectedness of the many market participants transacting in the market – it poses issues similar to recent large scale industry transitions, including the move away from the London Interbank Offered Rate (LIBOR) and the move to T+1 settlement. The industry can take lessons from both of those transitions, such as the need for collaboration across the industry.

## How We Got Here

The Treasury market is undoubtedly the most important market in the world. In addition to funding the U.S. government, the Federal Reserve conducts monetary policy through repo operations and quantitative purchases through Treasuries. Treasuries represent the risk free rate all other financial instruments are based on, acting as the benchmark for rates globally. In short, the Treasury market is vital to not only the U.S. economy but others as well.

The Treasury market is complex, having five main categories of assets – bills, notes, bonds, treasury inflation-protected securities (TIPS), and floating rate notes (FRN) – and then additional subgroups within each group, across tenor (years to maturity), vintage (on or off the run), and trade size. The Treasury market is also quite large, with $901.4 billion average daily trading volume YTD in 2024 (through August).

As such, it is crucial that it remains the safest, most liquid, and most durable market in the world. Unfortunately, we have seen a few temporary dislocations in this market during stress periods. In fact, one panelist noted that there has not been a stress period since the global financial crisis where the Treasury market did not need intervention. Some of the most notable events include:

- **2014 Flash Rally**[3]: On October 15, 2014, between 9:33 a.m. and 9:45 a.m. EST, the benchmark 10-year Treasury yield dropped 16 bps and then rebounded, without a clear cause. This volatility was unprecedented in the recent history of the Treasury market.

- **2019 Repo Spikes**[4]: On September 17, 2019, repo rates spiked dramatically, rising to as high as 10% intraday. Intraday repo rates rose to more than 300 basis points above the upper end of the federal funds target range, 30 times larger than the same spread during the preceding week. The disruption began on September 16, a day of Treasury settlement, which coincided with corporate tax deadlines. The combination resulted in a large transfer of reserves from financial markets to the government. This created a mismatch in the demand for and supply of repos, driving rates higher.

[3] Source: Federal Reserve, Liberty Street Economics: https://libertystreeteconomics.newyorkfed.org/2019/10/from-the-vault-a-look-back-at-the-october-15-2014-flash-rally/
[4] Source: Office of Financial Research: https://www.financialresearch.gov/the-ofr-blog/2023/04/25/ofr-identifies-factors-that-may-have-contributed-to-the-2019-spike-in-repo-rates/#:~:text=A%20convergence%20of%20events%20caused,spread%20during%20the%20preceding%20week

- **2020 Pandemic**[5]: In March 2020, bid-ask spreads widened out sharply. The widening for the thirty year reached levels over six times its post-crisis average, while the ten year doubled and the five year widened 50%. Looking next at depth of book – as measured by the average quantity of securities available for sale or purchase at the best bid and offer prices – depth declined to levels seen during the Global Financial Crisis. The five and ten year depth reached levels as low as 10% of their post-crisis averages, with depth for the thirty year reaching a low 38% of its post-crisis average. Measures of the price impact of trades also suggested a notable deterioration of liquidity. Based on the estimated price impact per $100 million in net order flow – where buyer initiated trading volume was less than seller initiated volume – a larger price impact represents reduced liquidity. Price impacts peaked at levels roughly 5-6 times their post-crisis averages. The Treasury market became temporarily illiquid because people selling the securities outpaced those willing to buy.

The Treasury Market Practices Group (TMPG[6]) has worked for many years to identify market practice changes that would strengthen the foundation of this market and reduce risk in the system under times of stress. The Treasury market has undergone many changes, including the growth in electronic trading and new types of market participants. Additionally, while both velocity and volumes have grown significantly, the market structure has not changed. Expanded central clearing was a focus of the TPMG's five workstreams[7], as central counterparty clearing houses (CCP) take risk out of the system. However, as we will discuss later in this note, these benefits do not come without costs to market participants.

While market participants had been analyzing potential enhancements to market structure, the SEC put the fire under their feet by establishing a firm deadline. On December 13, 2023, the SEC adopted rules to enhance risk management practices for central counterparties in the Treasury market with a view towards facilitating additional clearing of Treasury transactions.

[5] Source: Federal Reserve, Liberty Street Economics: https://libertystreeteconomics.newyorkfed.org/2020/04/treasury-market-liquidity-during-the-covid-19-crisis/

[6] A group of market professionals committed to supporting the integrity and efficiency of the Treasury, agency debt, and agency mortgage-backed securities markets. The TMPG is composed of senior business managers and legal and compliance professionals from a variety of institutions – including securities dealers, banks, buy-side firms, market utilities, and others – and is sponsored by the Federal Reserve Bank of New York.

[7] 1. Improving resilience of market intermediation. 2. Improving data quality and availability. 3. Evaluating expanded central clearing. 4. Enhancing trading venue transparency and oversight. 5. Examining the effects of leverage and fund liquidity risk management practices.

## Not a Big Bang

Before we move into the logistics of what it will take to expand central clearing of the $27 trillion Treasury market (total securities outstanding) and $4.2 trillion repo market (UST only; average daily amount outstanding, primary dealers only), let us review how this could happen. Back in May of this year, the industry transitioned to T+1 settlement. While there was significant testing leading up to the deadline, the settlement change was a coordinated one time, all in event. Unlike T+1, market participants are not expecting a big bang with Treasuries. Rather, they are expecting a phase in of activity over the next eighteen months.

It was noted by a panelist that people are already changing behavior ahead of the 2025/2026 deadlines. According to the Fixed Income Clearing Corporation (FICC, a subsidiary of The Depository Trust and Clearing Corporation/DTCC) – currently the only approved clearing house for clearing Treasuries – when the SEC announced the Treasury clearing proposal in September 2022, they cleared $4.5 trillion in Treasuries on average daily. Once the SEC finalized the rule in December 2023, this number jumped to $7.2 trillion on average (+66.7%). On September 3, 2024, this figure reached a new high of $9.2 trillion (+22.7% since December 2023, +104.4% since September 2022). The amount cleared has already more than doubled since the time of the SEC proposal.

As we think about the mandate for Treasury clearing, we note that this is an expansion of what is already cleared, not an entirely new activity for the market. FICC has been clearing Treasuries for forty years and currently clears an average of over $7.5 trillion a day across all Government Securities Division (GSD) activity. FICC estimates that clearing volumes are expected to rise by more than $4 trillion in daily incremental indirect participant Treasury activity, up from their 2023 estimate of $1.63 trillion given a better understanding by market participants of the full scope of the final rule. This would bring the forecasted aggregate clearing volume – current clearing plus expanded clearing under the SEC mandate – to $11.5 trillion daily, +53.3% to today's daily volume (and +155.6% to the noted 2022 volume). FICC's 2024 survey also indicated that there is potential for an additional increase – on top of the $11.5 trillion – through voluntary clearing, as market participants opt to clear exempted activity based on commercial decisions or to reap benefits from risk offsets with cleared portfolios.[8]

We further note that the rule is directed at the clearinghouses, rather than sell side firms as with many regulations. As the only clearing house currently, FICC is required to submit three sets of proposed rule filings to the SEC:

- Enhancements to access models (sponsored services and agency).
- Implementation of a customer segregation regime in its Government Securities Division (GSD), to segregate house and client collateral, as well as setting up a regime for customers who choose to post margin.
- Implementation of the clearing requirement itself.

FICC noted that its proposals were filed with the SEC, after receiving many industry comments and making some amendments accordingly. The SEC is required to approve these proposals by Thanksgiving. For the third proposal, FICC received and are digesting industry comments. They will need SEC approval by February 2025. FICC noted that the third filing has the most grey areas, as questions remain on what exactly is in scope, for example: tri-party repo, especially if mixed CUSIP[9] (Treasury plus another eligible security); inter affiliate repo; and the scope coverage, such as at bank branches.

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[8] FICC white paper, 2023: https://www.dtcc.com/-/media/Files/Downloads/WhitePapers/Accessing-Potential-Expansion-US-Treasury-Clearing-White-Paper.pdf. FICC white paper, 2024: https://www.dtcc.com/-/media/WhitePapers/Treasury-Clearing-Mandate.pdf
[9] Committee on Uniform Securities Identification Procedures. A nine character alphanumeric code that identifies a financial security in North America.

## The Logistics

The Treasury clearing timeline is very aggressive as compared to other major industry initiatives, and the last yard will be quite challenging. That said, the industry has come together before, and market participants are confident the industry will again collaborate to achieve this goal.

**What's in scope**: There are lingering issues on what exactly will be in scope, including: tri-party repo transactions and inter-affiliate transactions. On the affiliate side, the usability of the inter-affiliate exemption needs to be addressed.

**Access and clearing models**: The choice of access model has been discussed as one of the most important decisions market participants have to make. The questions are centered around how firms will evaluate margin and how trades are given up.

Industry feedback points to a need to develop a commercially reasonable done away clearing model. A panelist indicated that, in addition to allowing for flexibility, the done-away model provides more safety should a counterparty default. Yet, there are issues to sort out with this model. One of which is developing the operational workflow to accommodate the new entrants to the clearing system. For example, firms will have to enable credit checks before novation to FICC. Additionally, on the accounting side, firms need to understand how these structures might impact their balance sheets and how that might impact the viability of the models.

FICC indicated that both of their indirect access models – sponsorship and agency – can facilitate done-away clearing.

**Margin**: While the sponsored model has been around for years, the cost of funding margin will become a significant issue for market participants. In FICC's 2024 survey[10], they estimate the aggregate increase in margin that will need to be posted to the clearing house could be $58.4 billion, of which $27 billion, or 46%, represents segregated indirect participant margin. Panelists noted that clients will need to work with dealers to assess costs, as dealers may include margin costs within the total transaction cost.

It was also noted that as dealers prepare to take on client margin, balance sheet relief from regulators would help them facilitate the expanded Treasury clearing. Otherwise, capacity constraints could cause concentration risk among the remaining firms as others deem it too costly to facilitate client trades.

Capital efficiencies will be key. To that end, FICC expects to expand its cross margining agreement with CME and is working with other clearing houses for cross margining arrangements. FICC has also developed two public calculators to simulate estimated liquidity and margin needs: Capped Contingency Liquidity Facility (CCLF) calculator and Value at Risk (VaR) calculator.[11]

**Other**: Given this was an operations conference, panelists turned the story back to operational efficiencies. Some view Treasury clearing as an opportunity to innovate, for example: using technology to gain capital efficiencies in the sponsor model or using smart contracts to monitor margin changes in the done-away model. Standardization was also noted as key to expanding Treasury clearing, minimizing the differences in models from a technology perspective.

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[10] https://www.dtcc.com/-/media/WhitePapers/Treasury-Clearing-Mandate.pdf
[11] https://www.dtcc.com/managing-risk/stress-testing-and-liquidity-risk-management/ccfl-public-calculator

## How to Prepare

Execution focuses the mind, noted a panelist. As the panel reminded market participants, all issues need to be dealt with starting yesterday. Follow the Boy Scout motto – "Be Prepared" – by:

- Identifying what transactions you conduct today that are eligible by evaluating all of your funds and all of the money you are managing.
- Determining how you are going to get eligible transactions cleared, by understanding the various access models and choosing which model will work best for you and your clients.
- Establishing your margin risk management protocols. On one side, this includes understanding the economics or payment arrangements for transactions, really assessing all costs. It also includes developing operating models to transfer margin.
- Standing up a change management program, including people, processes, and legal staffing.

While some might be tempted to take the "starting yesterday" comment as a joke of sorts, it really is not. The deadlines are not that far away, and hoping for readiness is not a business strategy – preparedness is. One key area of concern when it comes to the tight timeline is around documentation. The documentation process is long and laborious. Some of the necessary documentation – counterparty agreements, margin and payment arrangements – can take six to eight months to negotiate, and there are "thousands and thousands" of bilateral relationships in the Treasury clearing space.

The final advice was to start the conversations early, with customers, counterparties, and internal stakeholders. As the deadlines approach, the capacity to have the conversations shrinks.

### SIFMA Workstreams

In order to help market participants meet the timeline, SIFMA has organized several workstreams, each of these seek to provide clarity and garner efficiencies as firms implement the Treasury clearing rule:

- **Documentation**: A working group has developed standard documentation for "done with" transactions and expects to publish standard documentation for "done away". The "done with" documentation was published September 25, and SIFMA expects the "done away" documentation to be available later in the fall. This will provide market participants with an efficient starting point for the on boarding process of new entrants to the clearing ecosystem.
- **Timeline/Playbook**: SIFMA and its partner, EY, are developing a playbook/timeline – similar to the one produced for T+1 – that market participants can use to benchmark and understand the key operational implementation issues.
- **Interpretive Questions**: SIFMA continues to work with its members and the regulators to provide clarity around outstanding questions/issues in the final Treasury clearing rule, most notably with respect to the inter-affiliate exemption, the treatment of tri-party transactions, and the treatment of margin by investment advisors.

# Equity Market Structure

Please see the Appendix for background information.

## Development Since the Conference

Since we discussed EMS at the conference, the SEC voted on another one of the five equity market structure proposals released in 2022/2023 (the first four in 2022, the fifth in 2023). On September 18, 2024, the SEC adopted amendments to certain rules under Regulation NMS to adopt an additional minimum pricing increment, or tick size, for the quoting of certain NMS stocks, reduce the access fee caps for protected quotations of trading centers, increase the transparency of exchange fees and rebates, and accelerate the implementation of rules that will make information about the market's best priced, smaller-sized orders publicly available. The amendments are designed to reduce transaction costs and improve market quality for all investors and to help ensure that orders placed in the national market system reflect the best prices available for all investors.

- **Rule 612, Minimum Pricing Increments (Tick Sizes)**: This rule establishes a new, additional $0.005 minimum pricing increment for quotations and orders in NMS stocks that are priced at, or greater than, $1.00 per share (formerly a market wide minimum pricing increment of $0.01). The tick size for all NMS stocks will be based on the time weighted average quoted spread for the relevant NMS stock during a specified three month evaluation period and thereafter assigned for a six month period.
- **Rule 610, Exchange Access Fee Caps**: Given the new lower minimum pricing increment, this rule correspondingly reduces the access fee caps for protected quotations in NMS stocks that are priced $1.00 or more to $0.001 per share. For protected quotations in NMS stocks priced less than $1.00 per share, the access fee cap will be 0.1 percent of the quotation price per share. In addition, Rule 610 will now require exchanges to make the amounts of all fees, rebates, and other forms of remuneration determinable at the time of execution.
- **Odd Lots**: To expedite the availability of information about the best prices for smaller orders, accelerates the implementation of previously adopted definitions related to round lots and odd lot information (originally approved in 2020). Also amends the odd lot information definition to require the identification of the best priced odd-lot orders that are available in the market.

For Rule 612, Rule 610, and the round lot definition, the compliance date will be the first business day of November 2025. For odd lot information, the compliance date will be the first business day of May 2026.

### SIFMA's Take on the Final Reg NMS Rule

The final rule had some significant changes from the proposal which were important victories for the industry, both from a market structure as well as a risk/operational resiliency perspective. Highlights include less frequent (bi-annual) changes to determine which stocks are tick constrained (average spread greater than a $.0015 time weighted average price over the preceding three-month period) and in which round lot bucket a security belongs (there will be four). The SEC also agreed with SIFMA and decided against including harmonized trade increments for exchanges and brokers, which could have limited the amount of price improvement an investor could receive. Lastly, the rule will accelerate parts of the market data infrastructure rule, introducing odd lots and an odd lot best bid or offer to the tape.

## Conference Commentary

We begin with a look at Rule 605, which was finalized in March 2024. The market has long agreed with updating the data metrics for this form. Transparency is a positive for markets, and this rule should enhance transparency. In fact, a panelist noted that this rule represented an exception to typical industry issues with rule proposal writing. Panelists view this final rule as a good outcome, noting that the disclosure regime is a powerful and impactful tool in upholding market integrity.

The rule made substantial updates to this reporting regime, improving and expanding the statistics captured. The new summary report – a focus of the SEC – takes a form that had not been readable by humans to around 1,000 rows, from about 1,000,000. However, panelists did warn that no two firms are the same. Firms have different client bases, sometimes with large differentials across average age or size of account balances. No standardized form can normalize these differences. As there are some lingering questions ahead of the December 2025 implementation date, the SEC indicated its intent to give clear guidance via FAQs.

On the downside, market participants had wanted the SEC to begin with Rule 605 and then use it as baseline to address necessary changes to the other rule proposals. As the Roling Stones sang, "You can't always get what you want."

Moving on to the recently finalized revisions to Reg NMS, panelists noted that this was a complicated and broad proposal. Panelists had expected the access fee to be lowered and modifications to tick sizes. For tick sizes, they had expected half and full penny increments, as well as the addition of odd lots. The changes to market structure in this rule holds much greater implications than updating Rule 605. As such, panelists had hoped for a safety first attitude in writing this rule. Regardless, panelists indicated that they would educate their clients on the changes and adapt accordingly.

It is important to note that everything in market structure is intertwined. Additionally, once a rule is implemented, it is difficult to unwind. With three more proposals to be finalized – and lingering disappointment at various aspects of those rules which have been finalized – concerns remain among market participants.

## Regulatory Update

**T+1**: The T+1 implementation went smoothly, largely in part to the collaboration across the industry. That said, firms continue to seek ways to gain more efficiencies. Regulators continue to monitor metrics and activities after the transition, including: fails at the clearing house, creations and redemptions, same day allocations, pattern day trading rules, stock borrowing concerns, and FX settlement for foreign traders.

**Treasury Clearing:** As already discussed, the SEC's Treasury clearing rule represents some of the most significant market structure changes to the world's largest, most liquid, and globally important market. Regulators from various agencies urged market participants to be prepared. Know the requirements and deadlines. The complexity of transactions means coordination will be needed across the industry – buy side, sell side, market infrastructure firms, vendors, and regulators.

On the operational resiliency side, there will be a lot more interconnections as activity increases. Regulators noted that firms should ensure their infrastructure is ready to support the additional activity. As activity increases, risk management frameworks should be in place, and firms should think about their partners in resiliency planning as well. For example, firms should have a playbook for a system outage at a major market participant such as market infrastructures and vendors. Additionally, depending upon how the economics work out for various margin booking models, firms may rethink their activities. This could cause concentration risk.

The challenges were compared to that of T+1 – firms need to be prepared and ensure their clients and their own operations fit within the mandate.

**Cyber**: As the last eighteen months or so have shown us, it is not if but when a cyber event might occur, making it an important component of operational risk management programs. Panelists urged firms to remain vigilant, constantly preparing, scenario planning, and testing. And this applies to internal systems as well as those of other stakeholders, such as vendors – even vendors to these vendors. It was advised to have alternative solutions and pre-established criteria for when disconnect and reconnect to an impacted vendor. Redundancy and backup plans are critical.

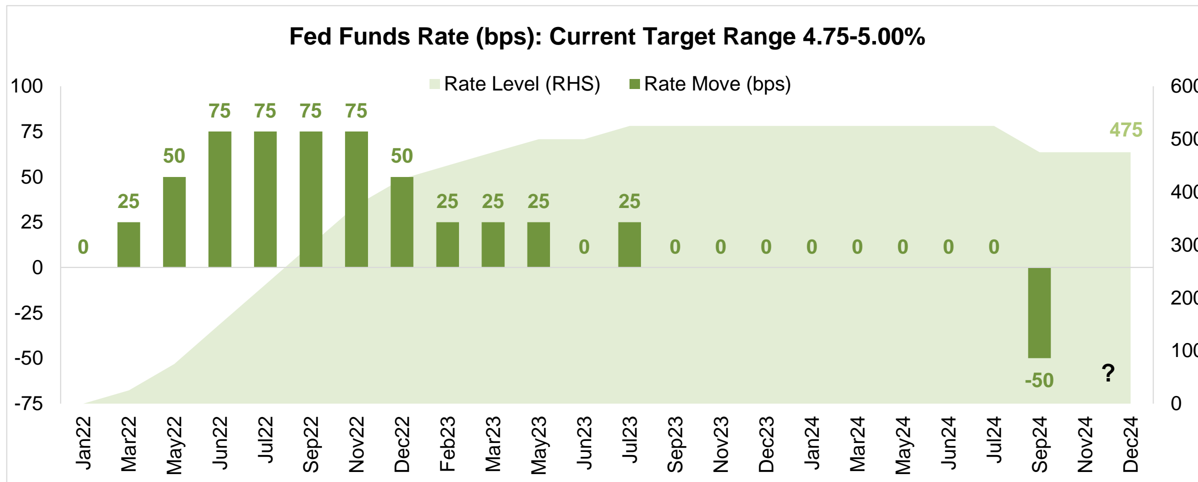
**Operational resiliency**: As to the CFTC's operational resiliency rule for FCMs and swap dealers – meant to address systemic risk – the agency is at the tail end of global regulatory proposals. Bank of England has already developed international standards, and Basel, the Fed, and other U.S. prudential regulators have principles for banks operating in the U.S. The CFTC should do a principles-based rule as a wrapper to other standards, similar to how they handled the Volcker rule for their constituents.

**Digital Assets:** While the MAS in Singapore, Bank of England, and Bank de France had already developed their digital asset regulatory frameworks, they all used different terminology. As such, CFTC Commissioner Pham applauded the GFMA's development of a global taxonomy. Additionally, she noted that public engagement is working – Washington is becoming comfortable with the distinction between tokenization as market infrastructure versus cryptocurrencies. For example, tokenization could help improve the mobility of eligible collateral.

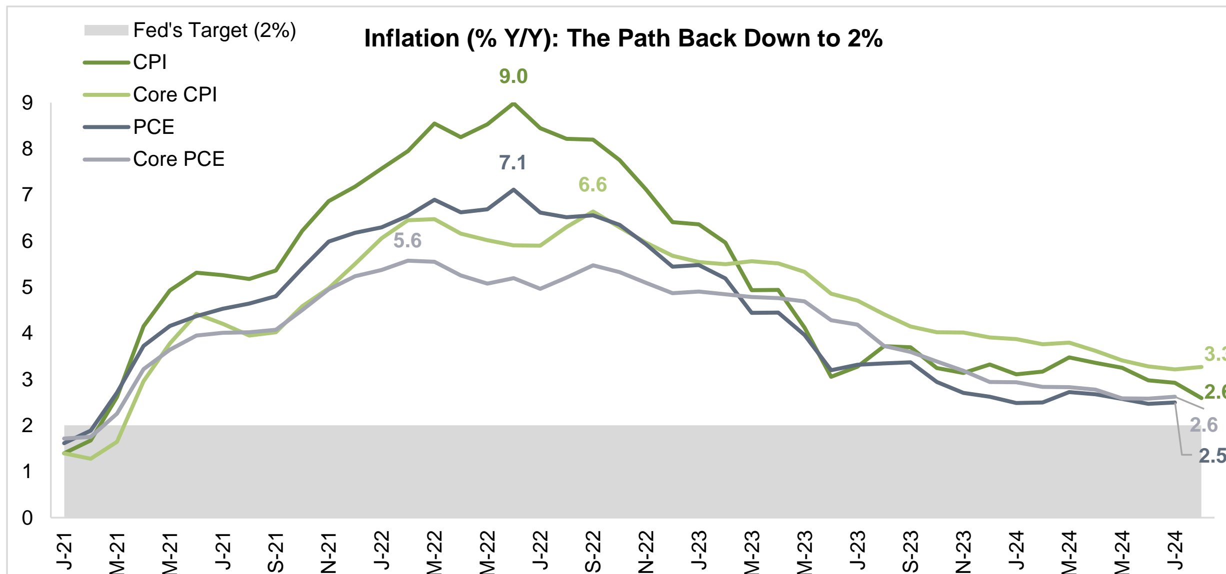
# Appendix: Background Data & Information

## Economic Landscape

### Fed Funds Rate



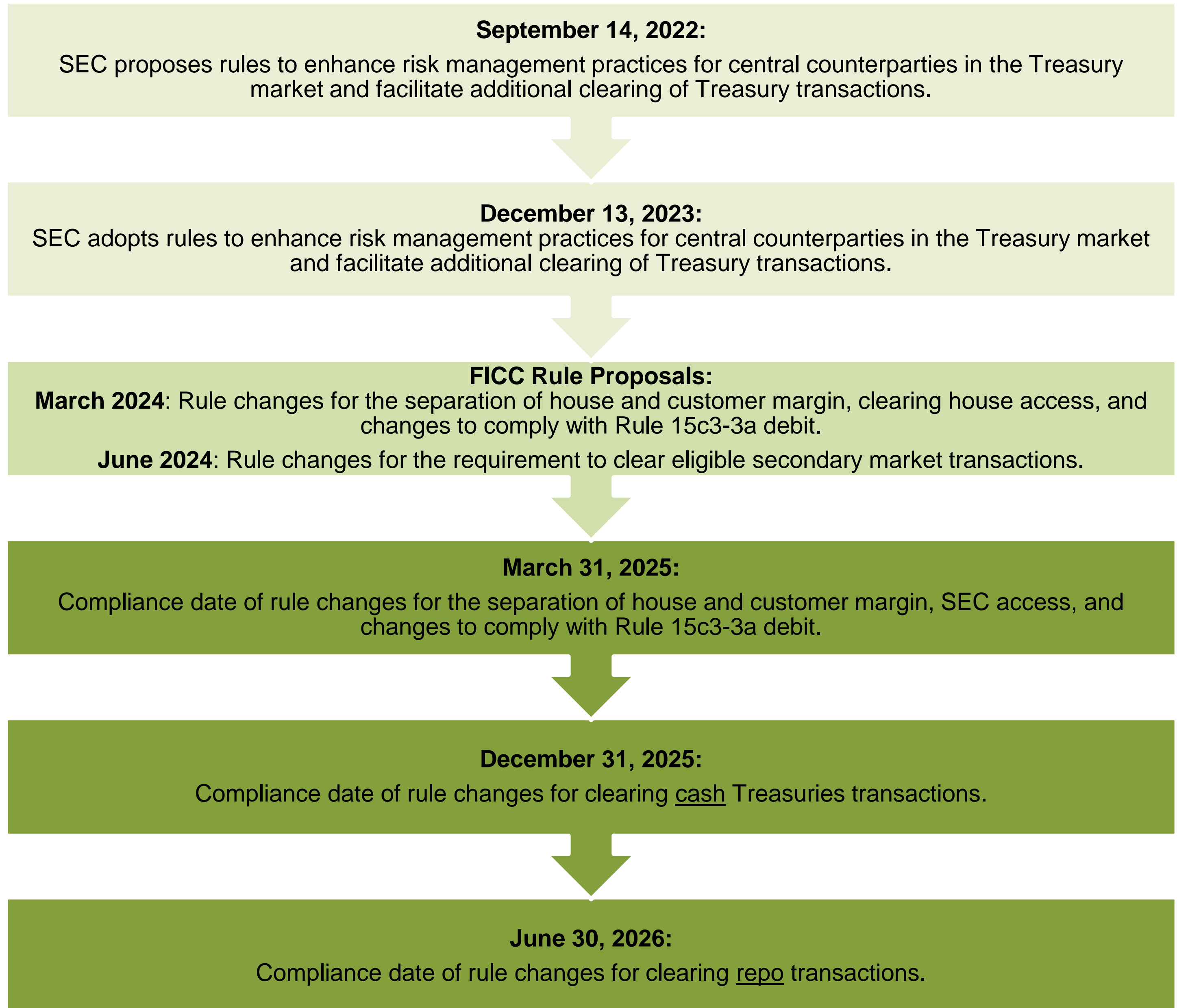

### Inflation




Source: Federal Reserve, FRED, SIFMA estimates
Note: As of September 2024.

## Treasury Market Structure

**Treasury Clearing: Timeline**




Proposal: https://www.sec.gov/newsroom/press-releases/2022-162
Final rule: https://www.sec.gov/newsroom/press-releases/2023-247
Published to Federal Registry, January 16, 2024: https://www.federalregister.gov/documents/2024/01/16/2023-27860/standards-for-covered-clearing-agencies-for-us-treasury-securities-and-application-of-the

### Treasury Clearing: Scope

The rule applies to covered clearing agencies in the U.S. Treasury market. At present, the only clearinghouse to which this rule applies is FICC, a subsidiary of DTCC. The rule requires that covered clearing agencies adopt policies and procedures designed to require their members to submit for clearing certain secondary market transactions, including:

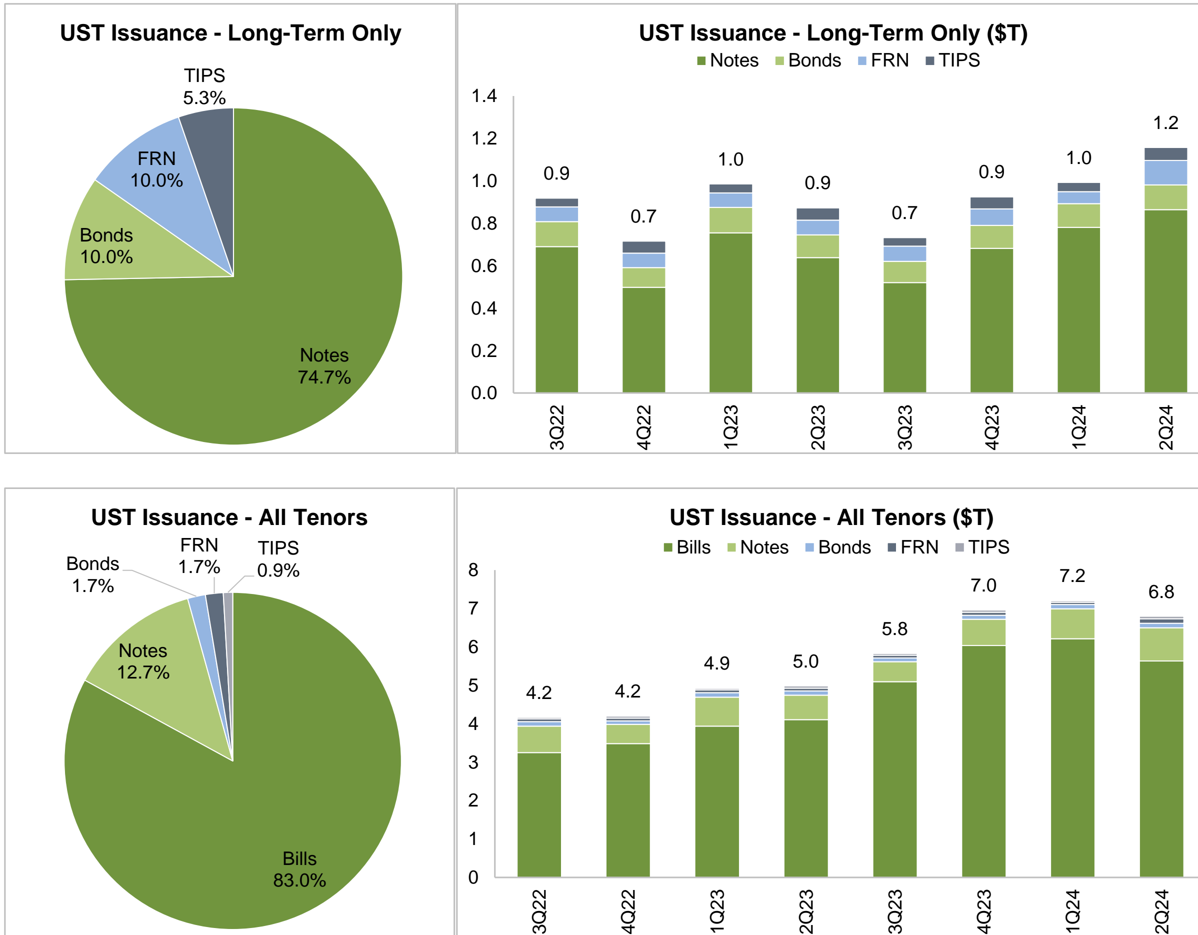
- Repo – All repo and reverse repo collateralized by Treasury securities entered into by a member of the covered clearing agency, unless the counterparty is a state or local government or another clearing organization or the repurchase agreement is an inter-affiliate transaction.
- Cash Treasuries –
  - All purchase and sale transactions entered into by a member of the clearing agency that is an interdealer broker.
  - All purchase and sale transactions entered into between a clearing agency member and a registered broker-dealer, government securities broker, or government securities dealer

### Treasury Clearing: FICC Access & Clearing Models

- Direct versus indirect access
  - Direct: market participants are FICC/GSD members
    - Netting membership
    - Centrally cleared institutional tri-party (CCIT) service membership
  - Indirect: market participants are not FICC/GSD members
    - Sponsored membership requires that a sponsored member access clearing at through at least one sponsoring FICC/GSD member relationship.
    - Under the agency model, market participants clear through an intermediary who participates in either FICC's prime broker clearing or correspondent clearing services.
    - Both indirect access models facilitate futures commission merchant style clearing arrangements between clients and their clearing intermediaries where client activity is given up to the intermediary for clearing or where the client and the clearing intermediary are trading counterparties.
- Done-away versus done-with clearing
  - Done-away: A trade executed between an agent clearing member's executing firm customer and another GSD netting member. Or a trade executed between an agent clearing member's executing firm customer and an executing firm customer of another agent clearing member.
  - Done-with: A trade executed between an agent clearing member and its executing firm customer.

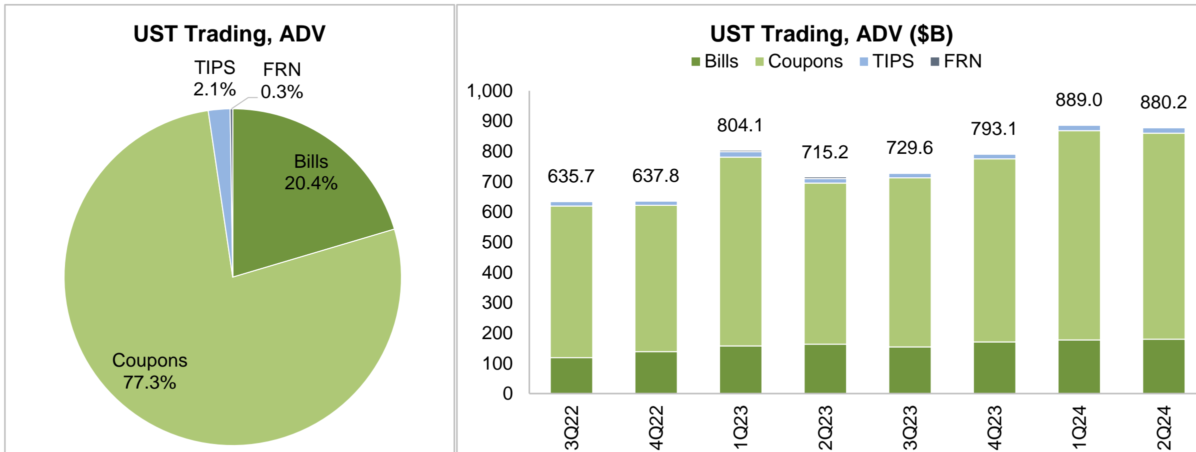
## Market Data

- Issuance
  - Long Term; $1.2T; +16.7% Q/Q, +32.6% Y/Y
  - All: $6.8T; -5.7% Q/Q, +36.4% Y/Y



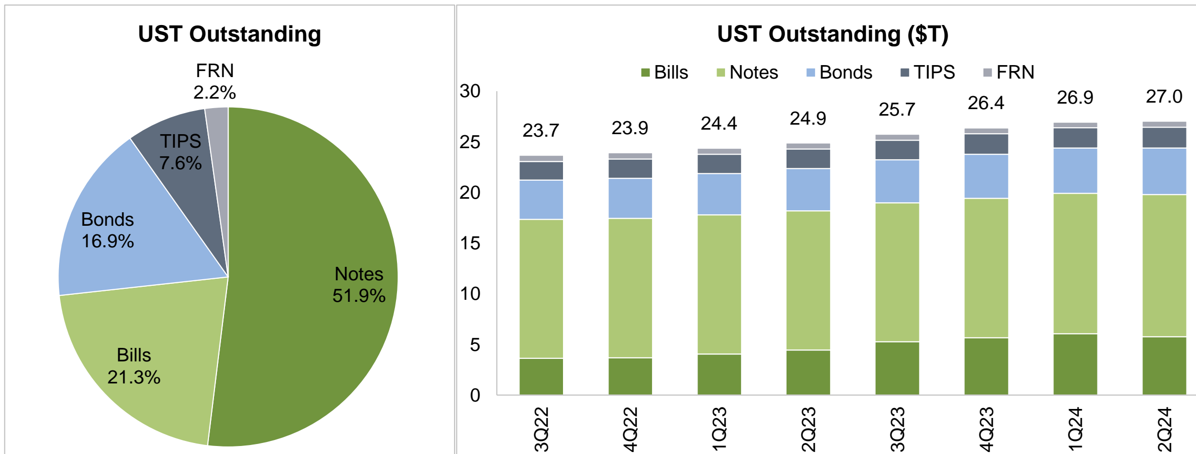

Source: US Treasury, SIFMA estimates
Note: As of 2Q24. FRN = floating rate note, TIPS = Treasury inflation-protected securities

- Trading ADV $880.2B; -1.0% Q/Q, +23.1% Y/Y

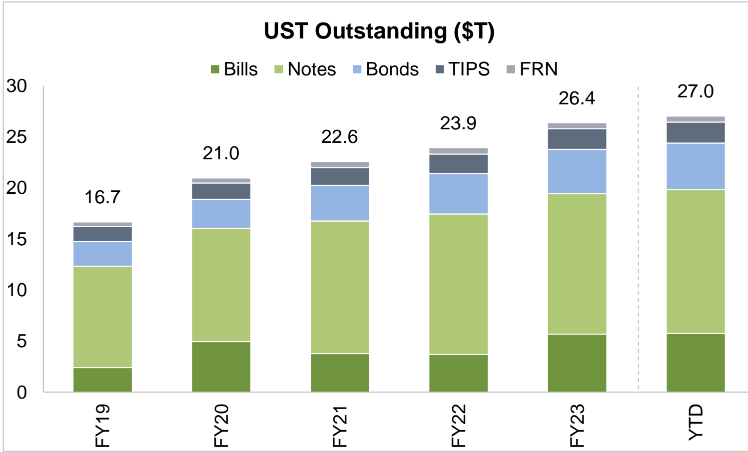


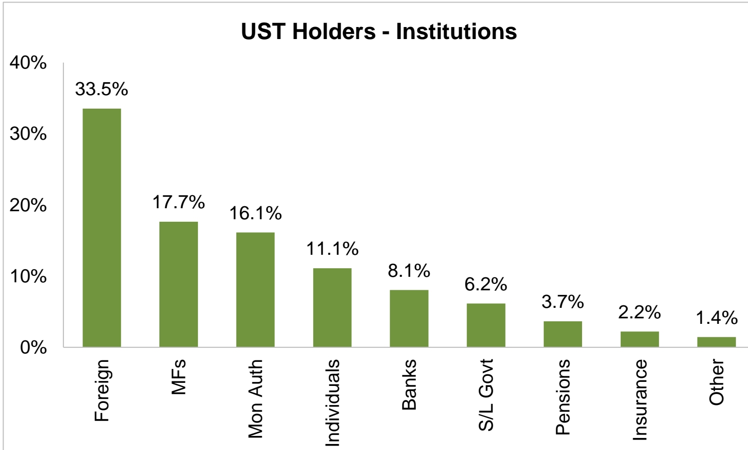

Source: FINRA, SIFMA estimates
Note: As of 2Q24. FRN = floating rate note, TIPS = Treasury inflation-protected securities

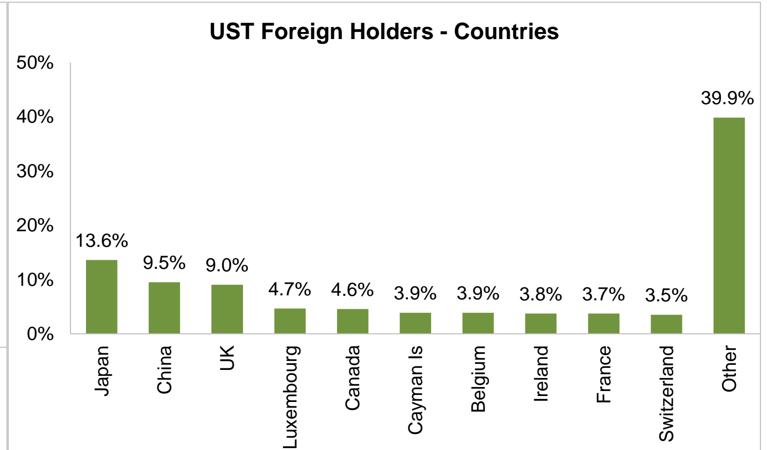
- UST Outstanding: $27.0T; +0.4% Q/Q, +8.7% Y/Y




Source: US Treasury, SIFMA estimates
Note: As of 2Q24. FRN = floating rate note, TIPS = Treasury inflation-protected securities




Source: US Treasury, SIFMA estimates

Note: As of 2Q24. FRN = floating rate note, TIPS = Treasury inflation-protected securities; Holders as of March 2024

## Equity Market Structure

On December 14, 2022, the SEC proposed four equity market structure rulemakings. Then, on October 18, 2023, the SEC proposed a fifth rule. These rules included:
https://www.sec.gov/newsroom/market-structure-proposals-december-2022

1. (Amendments to) Exchange Act **Rule 605** – **adopted on March 6, 2024** – enhancing broker disclosure of order execution information. The new rule expands the scope of entities required to report to include: broker-dealers who introduce or carry 100,000 or more customer accounts; single-dealer platforms; and entities that would operate qualified auctions under the proposed Order Competition Rule. It also revises the scope and content of the information required to be included in the monthly reports, including: broadening the definition of covered order; modifying existing order size categories, basing them on round lots and including other size groups for fractional shares, odd-lots, and larger-sized orders; requiring new statistical measures of execution quality, including a size improvement benchmark calculating execution greater than the displayed size at the quote. The rule further revised report content and requires a summary report to be published. https://www.sec.gov/newsroom/press-releases/2024-32

2. (Amendments to) Exchange Act **Rules 610 and 612** – **adopted on September 18, 2024** – amending minimum pricing increments (tick sizes) and exchange access fee caps and enhancing the transparency of better-priced orders. This proposed rule would eliminate the current one-size-fits-all tick approach for NMS stocks priced at $1.00 or more and establish variable minimum pricing increments according to certain criteria, which would apply to the quoting and trading of NMS stocks on any national securities exchange or alternative trading system as well as over-the-counter. Given changes to tick sizes, the proposed rule also recommends recalibrating access fee caps that limit what a trading center may charge for the execution of orders against a protected quotation. The proposal would also accelerate the modified round lot definition and inclusion of odd-lot information into consolidated market data. This will be the first time the SIP introduces an odd lot NBBO, which could lead to investor confusion since it will not be protected.
https://www.sec.gov/newsroom/press-releases/2024-137

3. (New) **Regulation Best Execution**, establishing a best execution standard to which broker-dealers must achieve the most favorable price for customers under prevailing market conditions. It would also require policies and procedures for certain conflicted transactions with retail customers. To some extent, the proposal mirrored existing rules from FINRA for its broker-dealer members and the Municipal Securities Rulemaking Board (MSRB) for municipal securities dealers. However, it includes a conflicted transactions section which specifically targets payment for order flow (conflicted also includes principal trading and routing customer orders to affiliates), subjecting broker-dealers transacting with retail customers to additional best ex obligations. Further, the proposal requires exchanges disclose the fee for transactions at the time of execution, in contrast to proposal #5 below.

4. (New) **Order Competition Rule**, requiring certain retail orders to be sent to auctions or midpoint ATSs before being internalized. This proposal would require segmented orders of natural persons in Reg NMS stocks to be exposed to competition in fair and open auctions before they could be executed internally by any trading center that restricts order-by-order competition, with certain exemptions. The duration of auctions would be between 100 and 300 milliseconds (an eternity in trading terms).

5. (New) Exchange Act **Rule 6b-1**, addressing volume based exchange transaction pricing for NMS stocks. This proposal would prohibit national securities exchanges from offering volume-based transaction pricing in connection with the execution of agency or riskless principal-related orders in NMS stocks.

In addition to these five proposals/rules, participants in equity markets are dealing with a slew of other SEC proposals and issues, including but not limited to: definitions of exchange and dealer; Regulation Systems Compliance and Integrity (Reg SCI); Consolidated Audit Trail (CAT) funding; amendments to Reg ATS/Definition of an Exchange; and Predictive Data Analytics (PDA).

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- COVID Related Market Turmoil Recaps: Equities; Fixed Income and Structured Products

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- Statistics on volatility and equity and listed options volumes
- Highlights an interesting market trend

Market Structure Primers: www.sifma.org/primers

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- Global Equity Market Comparison
- Capital Formation & Listings Exchanges
- Equities
- Options
- ETFs
- Fixed Income & Electronic Trading

Conference Debriefs

- Insights from market participants into top-of-mind topics
- Conference Survey Comparison, compares survey results across various conferences

Equity Market Structure Analysis

- The ABCs of Equity Market Structure: How US Equity Markets Work and Why
- Analyzing the Meaning Behind the Level of Off-Exchange Trading, Part II
- Analyzing the Meaning Behind the Level of Off-Exchange Trading
- Why Market Structure and Liquidity Matter

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