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December 15, 2025

The Honorable Paul S. Atkins
Chairman, Securities and Exchange Commission
100 F Street NE
Washington DC 20549-1090

Re: Roundtable on Trade-Through Prohibitions (File No. 4-862)

Dear Chairman Atkins,

Cboe Global Market ("Cboe") submits these comments in connection with the Roundtable on Trade-Through Prohibitions held by the Securities and Exchange Commission ("Commission") on September 18, 2025 ("September Roundtable") as well as the upcoming roundtable on Rule 611 of Regulation National Market System ("Regulation NMS"). These comments are intended to complement our previous letter submitted on September 15, 2025,[1] continuing the conversation on trade-through prohibition reform and its potential implications on the functioning of the overall market.

Cboe operates four U.S. equities exchanges, four U.S. options exchanges, and an ATS. It is this experience that provides Cboe with a unique perspective on the interconnectedness of today's market structure. Our recommendations are grounded in this operational experience to help the Commission identify and avoid any adverse, unintended impacts that could result from changes to one component of the trading ecosystem. In this letter, we address concerns expressed at the September Roundtable and in the roundtable comment file and offer additional views on related topics.

We believe wholesale elimination of trade-through prohibitions should be avoided, and any modifications to Rule 611 should be carefully calibrated to enhance competition and efficiency without undermining the price discovery process or the integrity of the national best bid and offer ("NBBO"). This is especially critical at a time when over 50% of equity volume executes off-exchange, making it essential to strengthen the competitive capability of exchanges to preserve robust public price formation. While we recognize the potential benefits of certain reforms to Regulation NMS, any changes must be evaluated holistically for their broader market structure implications and, critically, should prioritize simplicity over added complexity. Further, we emphasize that any reforms to Rule 611 should be tailored specifically to equities and not be

[1] *See* Letter from Patrick Sexton, General Counsel and Corporate Secretary, Cboe Global Markets, Inc., to Paul S. Atkins, Chairman, Securities and Exchange Commission (Sept. 15, 2025), *available at* https://cdn.cboe.com/resources/government_relations/Cboe-Global-Markets-Trade-Throughs-Roundtable-September-2025-.pdf.

extended to options given the distinct differences in how the options market functions and the separate regulatory framework that governs them.

Exchange Proliferation

Of the topics echoed among various commenters, the issue of exchange proliferation in the equities market has been a prominent theme. While the growth of venues is notable, we question whether the issue of exchange proliferation is as consequential as certain narratives would suggest. The Commission's Trade-Through Roundtable Supporting Data[2] suggests that claims about the high costs of exchange proliferation on market participants may be overstated, as only 22 of the 223 broker-dealers (approximately 10%) that executed trades on exchange in Q2 2025 traded on all sixteen exchanges, with the vast majority accessing on-exchange liquidity in NMS stocks via other broker-dealers.[3] This demonstrates that broker-dealers have successfully navigated the current rules to obtain best execution without incurring unnecessary costs associated with connectivity. Broker-dealers route through intermediaries based on cost-benefit analysis, not because Rule 611 compels them to do so. Regardless of whether a broker-dealer executes orders through another broker-dealer or not, we do not believe that eliminating Rule 611 will have an impact on the number of brokers who choose to do so.

Furthermore, as the data above proves, firms are not required to connect to venues. They choose to connect to venues, and the costs of connectivity are minimal[4] compared to firms' overall operating costs. While reasonable steps to comply with best execution are required of broker-dealers, the fact that a majority of broker-dealers are not connected to all exchanges evidences their ability to compete and comply effectively without connectivity to exchanges that add little value to the national market system. Simply put, broker-dealers incur connectivity costs only when there are trading opportunities available that make it cost-effective to do so. These opportunities are provided by established exchanges with proven value that also provide essential market infrastructure for public price formation through investment in critical functions such as maintaining operational resilience, supporting backup systems, and upholding market oversight capabilities. Crucially, trade-through protections should be maintained for these venues so that a meaningful, reliable, and accessible national best bid and offer ("NBBO") can be maintained. The NBBO serves as the backbone to investor confidence – and protecting its integrity should remain at the core of any regulatory initiative to alter market structure.[5]

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[2] See Trade-Through Roundtable Supporting Data, *available at* https://www.sec.gov/files/trade-through-roundtable-supporting-data.pdf.

[3] *Id*. at 8.

[4] For example, connectivity fees on Cboe's equity exchanges are between $2500-$8500 per month. A firm could connect to one exchange and leverage Cboe's routing technology – all while allowing Cboe to comply with Rule 611.

[5] Cboe Comment Letter, *supra* note 1. "In our view, any reforms must be assessed based on their potential impact to the national best bid or offer ("NBBO"). A meaningful, reliable, and accessible NBBO must be maintained. The NBBO is a reference price that permeates every aspect of our national market system and is relied on by the entire market. Investors rely on the NBBO when placing limit orders and stop loss orders or assessing execution quality; automated auction mechanisms rely on the NBBO when facilitating price improvement; and off-exchange platforms rely on the NBBO as a reference price when executing orders. The existence of a reliable NBBO reference price is one of the greatest contributors to the increased retail participation in both U.S. equities and options. The NBBO provides a common language around measuring execution quality and is the backbone for investor confidence. Without a reliable, consensus NBBO, execution quality becomes opaque, reducing trust and participation in the U.S. markets."

Importantly, the root cause of exchange proliferation is not trade-through protections themselves – nor the generation of trading fees – but other market forces, such as the economic incentives embedded in the current Securities Information Processor ("SIP") revenue allocation framework. The SIP revenue allocation framework merits review independent of any trade-through reforms, and exchange proliferation does not need to be the driving concern. Competitive quoting contributes to price discovery and market liquidity, however, exchange venues that increase the number of quotes without maintaining a reasonable quote-to-trade ratio erode the quality of the marketplace. This does not mean that quote credits are inherently bad or should be misconstrued as "subsidies"[6]; quote credits help ensure that exchanges are appropriately compensated for the value they provide in facilitating public price formation and maintaining market infrastructure. It is appropriate to reward exchanges for quotes that reflect real trading interest and which lead to executions (measured through metrics such as minimum traded volume, quote-to-trade ratios, and minimum number of direct trading participants) – not for flooding the SIP with quote spam.

Rather than dismantle the trade-through protections upholding the NBBO to address exchange proliferation, the Commission could consider reforms to ensure that the quotes which meaningfully contribute to price formation are those being rightfully protected. By retooling the SIP allocation methodology, SIP quote revenues can better align incentives with genuine market contribution. Any such reforms should prioritize simplicity and avoid layering additional complexity onto an already intricate regulatory framework.

Off-Exchange Trading

While much attention has been given to the issue of venue proliferation, the more fundamental challenge to a vibrant NBBO is the continued migration of sizable trading volume to off-exchange venues. Off-exchange trading now accounts for over 50% of all equity volume, and it is evident that under the current regulatory framework the market is unlikely to find a natural equilibrium that guarantees the continued strength and reliability of the NBBO. This shift toward off-exchange trading is not without consequence; off-exchange venues rely on the NBBO generated by lit exchanges and generally cater to non-displayed liquidity. We are supportive of choice in execution and non-display liquidity as it allows firms to minimize market impact, but as more volume migrates off-exchange at the expense of the lit market, the quality of the NBBO is at risk.

Analysis on straddle states provides some evidence of this deterioration.[7] Stock turbulence is increasing for a portion of the market when those stocks have a higher off-exchange share compared to on-exchange share. A straddle state occurs under the Limit Up-Limit Down (LULD) mechanism, a safeguard that sets upper and lower price limits for each stock to prevent extreme price movements during volatile trading. When the NBBO moves outside these price limits, the stock enters a straddle state. This signals a breakdown in orderly price discovery, and suggests that when trading moves away from transparent exchanges, the visible liquidity that supports stable pricing weakens, making stocks more vulnerable to price disruptions during volatile periods.

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[6] *See* Letter from FIA PTG (Sept. 23, 2025), *available at* https://www.sec.gov/comments/4-862/4862-659167-1967494.pdf.

[7] *See* Appendix A: Report on Straddle States and Market Share Trends, by Selina Han (Aug. 29, 2025).

The Commission has demonstrated a clear understanding of the competitive challenges facing lit markets, having acknowledged in the past both the significant growth of off-exchange trading and the regulatory asymmetries that create structural advantages for off-exchange platforms over regulated exchanges.[8] For many years, exchanges have simply not been afforded the flexibility to compete with off-exchange venues that can offer capital commitment, better order segmentation, targeted indications of interest, enhanced anonymity, and faster innovation cycles. Encouragingly, the Commission has signaled their recognition that exchanges need greater operational latitude to compete effectively in today's market ecosystem. Providing exchanges with the flexibility to compete on a more level playing field with off-exchange venues is essential. By continuing to reduce regulatory asymmetries, the Commission can ensure that lit markets remain the cornerstone of fair and efficient price discovery.

<u>Exchange Market Data</u>

The September Roundtable involved several panelists advancing a narrative that government price controls should be imposed on exchange market data fees. We believe this is a self-serving narrative that does not involve an actual problem. Even as trading volumes and market complexity have increased significantly, market data fees charged by exchanges have held steady. Similar to the above discussion on exchange connectivity, there is no requirement for firms to purchase an exchange's proprietary market data. Rather, broker-dealers subscribe to proprietary feeds because they provide information that may inform their strategies and enhance profitability. Exchange market data is not a readily distributable resource, but a packaged product with significant costs to produce. Exchanges must invest in the infrastructure necessary to capture, process, normalize, and disseminate trade and quote information. These technological investments include high-performance computing systems, data centers, and continuous system upgrades to meet Regulation SCI standards. All require substantial ongoing capital expenditures that market data fees help offset.

When compared to other industry costs – such as technology and infrastructure – market data fees represent a minimal expense. Importantly, exchange market data is typically accessed by large financial institutions for whom market data fees represent a nominal cost relative to their overall operating costs and trading revenues. The voluntary nature of these subscriptions, along with their modest cost relative to the profits they enable, and the fact that market participants willingly pay for this highlights that proprietary data products deliver genuine value. Exchanges should rightfully retain the ability to price their proprietary data products to reflect this value and costs incurred, without the interference of government price controls.

<u>Definition of National Best Bid or Offer</u>

As stated in our first letter, we strongly believe that any reforms should be evaluated for their impact on the NBBO. The NBBO serves as a critical, accessible reference price throughout our market system. Investors use it to place orders and evaluate execution quality, while both automated auctions and off-exchange platforms rely on it for price improvement and order execution. A trustworthy NBBO has driven greater retail participation in U.S. equities by providing a consistent benchmark for execution quality and supporting investor confidence. If the NBBO's

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[8] *See* Hester M. Peirce, Commissioner, SEC, Horses and Bourses: Remarks at the 12th Annual Conference on Financial Market Regulation (May 16, 2025), *available at* https://www.sec.gov/newsroom/speeches-statements/peirce-remarks-financial-market-regulation-051625.

reliability declines, market transparency and participation could suffer. If the SEC is determined to rescind Rule 611, it is absolutely essential to affirmatively articulate all of the reasons why eliminating Rule 611 will not indirectly degrade the NBBO over time.

In order to prevent a direct, immediate degradation of the NBBO in the event that Rule 611 is eliminated, we believe the definition of the national best bid or offer should remain intact. The current definition of the National Best Bid or Offer, as established under Rule 600, is grounded in the use of automated quotations displayed by automated trading centers and disseminated through the SIP. These definitions would remain fit for purpose if Rule 611 were eliminated. This would ensure that only lit, accessible quotes are included in the NBBO calculation, thereby helping to preserve the transparency and integrity of public price formation. Expanding the NBBO to include non-displayed or inaccessible quotes would undermine its reliability and its role as a benchmark for fair and orderly markets.

If the SEC is open to a more targeted approach than wholesale elimination of Rule 611, we believe the prudent approach would be to refine the definition of “protected bid” or “protected offer” in a focused manner. Specifically, the Commission could amend the definition so that only quotes from automated trading centers that meet a minimum threshold of contribution to price formation are considered protected quotes (i.e., quotes from exchanges that have a minimum traded volume, adequate quote-to-trade ratios, and/or minimum number of direct trading participants). This targeted amendment would address concerns related to exchange proliferation by ensuring that only meaningful, liquid venues contribute to the protected quote. It would also enable the Commission to monitor and evaluate the effects on the national market system incrementally, rather than implementing sweeping changes that could introduce unforeseen risks or consequences to the marketplace.

<u>Rule 610</u>
Access Fees: The SEC should eliminate access fee caps. Access fee caps represent an unnecessary form of governmental price control that is neither justified by current market dynamics nor required to protect investors. Any concerns about predatory exchange pricing when accessing protected quotations can be better addressed through the existing fee filing process. There is no need for a separate SEC rule imposing access fee caps; in fact, reducing these caps undermines exchanges’ ability to incentivize displayed liquidity, encourages migration to off-exchange venues, and ultimately results in wider spreads. Should Rule 611 be rescinded or modified, access fee caps should be eliminated without question, as their original justification is inseparable from the requirement to access protected quotes. If any issues with excessive fees arise, they can be effectively managed through the established fee filing process, making rigid fee caps redundant and counterproductive.

Protecting displayed liquidity while maintaining simplicity requires that the Commission avoid compressing the access fee cap. To do so would undermine rebates that amplify and solidify liquidity provision, which would ultimately degrade the quality of the NBBO. Rebates incentivize market participants to post displayed orders that contribute to transparent price discovery and create the competitive quoting necessary for a robust NBBO – any changes that undermine this process would erode liquidity.

Locked Markets: The SEC should eliminate the prohibition on locked markets. The current prohibition on locked markets artificially widens spreads, creating an opportunity for off-exchange venues to execute orders at better prices between an artificially wide spread that would otherwise not exist. Locked markets occur naturally when quoting is competitive; this is representative of fair, efficient markets which provide optimal pricing for investors. If locked markets were allowed, spreads would narrow, delivering substantial cost savings to investors. As detailed in our previous comment letter, even a modest 5% reduction in average effective spread from allowing locked markets could save investors in a TSLA over $115 million annually, with savings multiplying significantly when applied market-wide. Beyond direct cost savings, allowing locked markets would reduce operational complexity and the regulatory burden associated with monitoring and preventing locked markets.

The original rationale for prohibiting locked markets is no longer applicable in the modern marketplace where investor sophistication alleviates any potential confusion. We urge the Commission to examine this issue and its potential to both improve the quality of the equity market and encourage on-exchange liquidity. More broadly, we recommend the Commission consider how the current trajectory of off-exchange growth may undermine the long-term viability of lit markets and erode the price discovery process.

Fair Access: The SEC should revisit the concept of fair access to help level the playing field between exchanges and off-exchange platforms. As previously noted, off-exchange volumes continue to rise because these venues can offer services that exchanges currently cannot – capital commitment, better order segmentation, targeted indications of interest, greater anonymity, and faster innovation due to less restrictive product approval regulations. We must acknowledge that this situation presents a real problem for the integrity and effectiveness of the multilateral price formation process. Importantly, exchanges can play a significant role in addressing these challenges if they are given the flexibility and regulatory support to do so. By empowering exchanges, the SEC can facilitate solutions that strengthen market structure and ensure fairer competition across all trading venues.

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We appreciate the Commission's leadership in initiating this important dialogue and convening stakeholders to gather industry perspectives before advancing potential reforms. As the Commission considers reforms to Rule 611 and related market structure issues, we urge a measured approach that prioritizes simplicity, protects the integrity of the NBBO, and addresses the structural advantages that off-exchange venues currently possess over transparent exchanges. This is particularly important for market structure changes that could have far-reaching and interconnected effects. We welcome the opportunity to contribute further to this discussion.

Sincerely,

/s/ Patrick Sexton

Patrick Sexton
EVP, General Counsel, and Corporate Secretary
Cboe Global Markets, Inc.

APPENDIX A

Report on Straddle States and Market Share Trends

By Selina Han

August 29, 2025

This report summarizes evidence on straddle states under the Limit Up–Limit Down (LULD) mechanism and their relationship with declining lit market share.

In the context of LULD, "a **Straddle** State occurs when the National Best Bid (Offer) is below (above) the Lower (Upper) Price Band and the NMS Stock is not in a Limit State."[1]

Four charts were created to illustrate straddle state frequency from October 2019 to July 2025, distribution across LULD groups, stock coverage, and market share outcomes. Together, they provide insight into how market liquidity interacts with lit market share.

1. Monthly Straddle Frequency

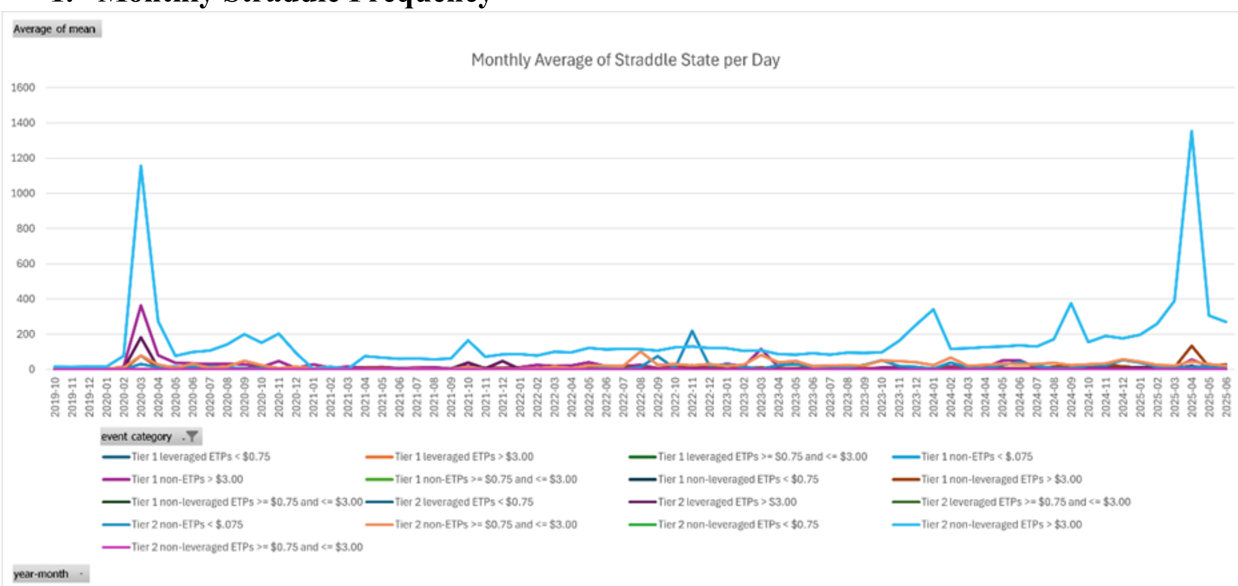


Figure 1: Monthly Straddle State per Day

Figure 1shows the average number of daily straddle states over time. Several features stand out:

- **Recurring baseline.** Even in calm markets, dozens of straddles occur each day. Straddles are not rare anomalies but a regular feature of the LULD regime.
- **Volatility spikes.** Straddle frequency rises sharply during periods of market stress. This pro-cyclical pattern demonstrates that straddles are most prevalent when volatility is high—precisely when orderly trading mechanisms are most critical.

- **Tier 2 non-leveraged ETPs above $3 dominate.** This group consistently accounts for a large share of straddles, reflecting their heightened sensitivity to band constraints.

Taken together, the monthly trend highlights that straddle states are structural features of the LULD mechanism, with intensity that increases during turbulent periods.

2. Symbol Distribution across Groups

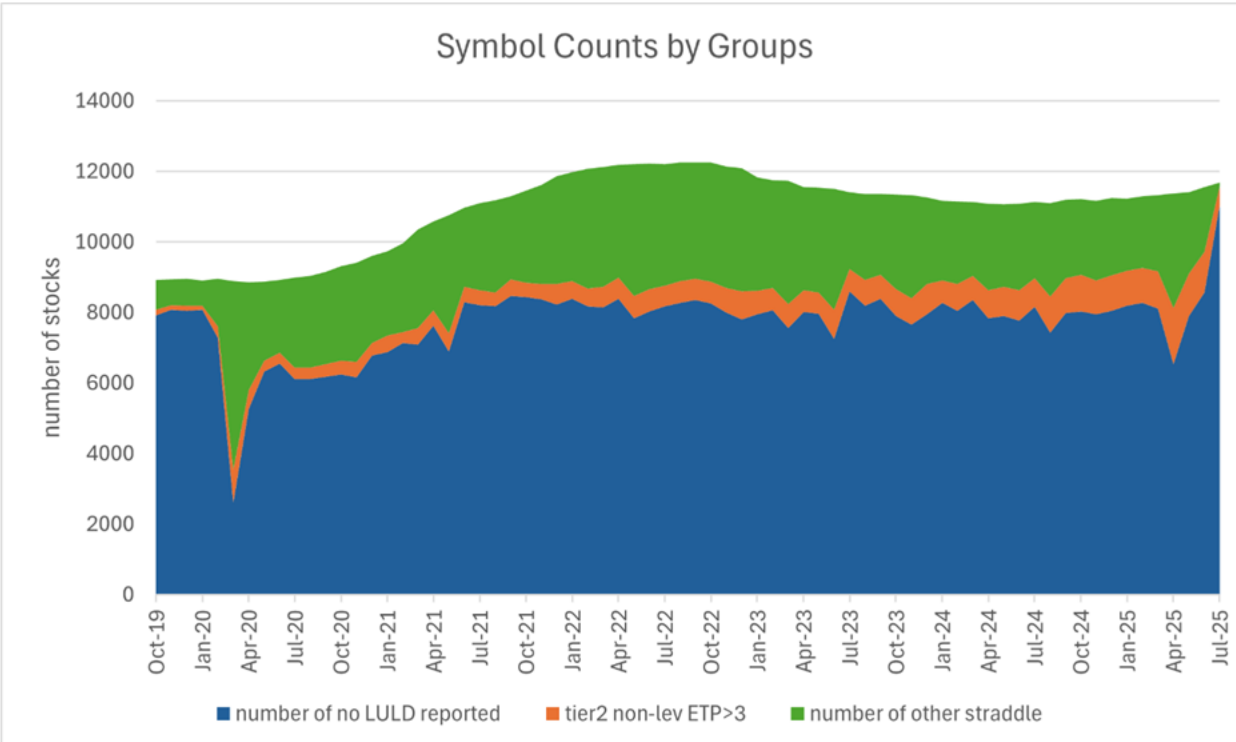
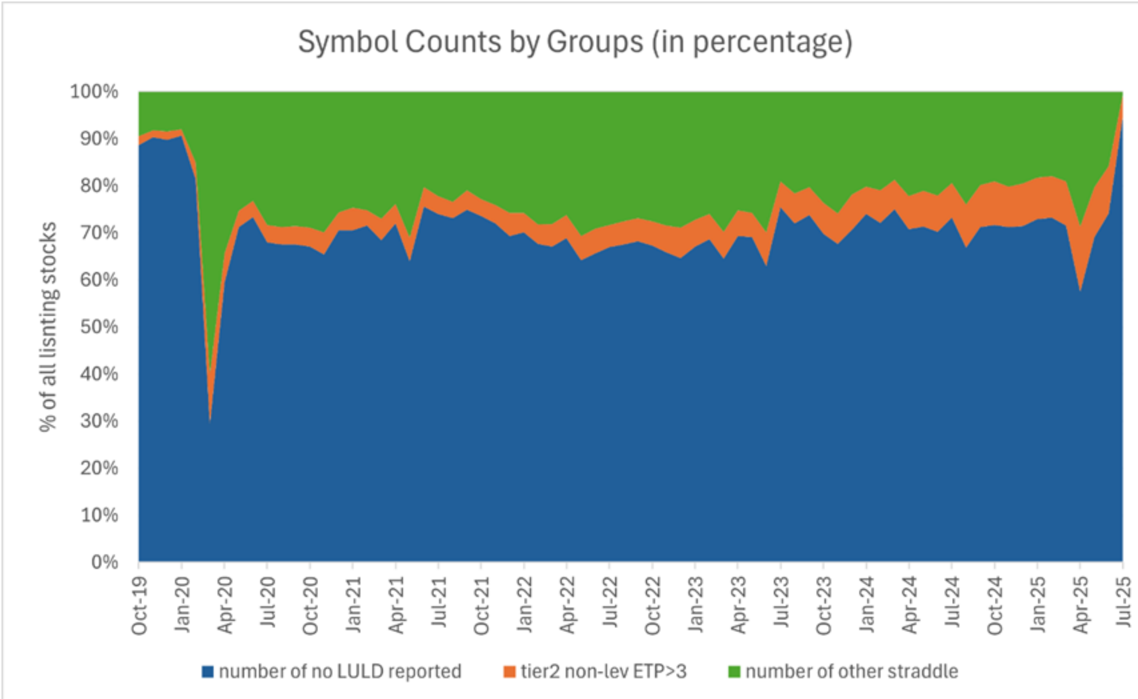


Figure 2: Symbol Count by Groups

Figures 2 and 3 (Symbol Counts by Groups, Raw and Percentage) present both absolute and normalized views of securities experiencing straddle states. To highlight the distribution, all listed stocks are separated based on whether they reported straddle states and whether they belong to the 'Tier 2 non-leveraged ETPs above $3' group, which accounts for the most frequent straddle states.

- **Tier 2 non-leveraged ETPs above $3**[2] account for only a small fraction of all listed stocks, yet the number of symbols in this group reporting straddles has risen substantially over time. The orange band in Figures 2 and 3 widens from around **1% of all symbols to nearly 10% in recent months.**
- The total number of stocks reporting LULD[3] incidents increased significantly after 2020 compared with before. This timing coincides with notable changes in U.S. equity market structure, particularly the steady decline in lit market share (discussed later).
- The concentration of straddles in this group suggests the need for further study of **Tier 2 non-leveraged ETPs above $3**, given their growing contribution to reported straddle states.



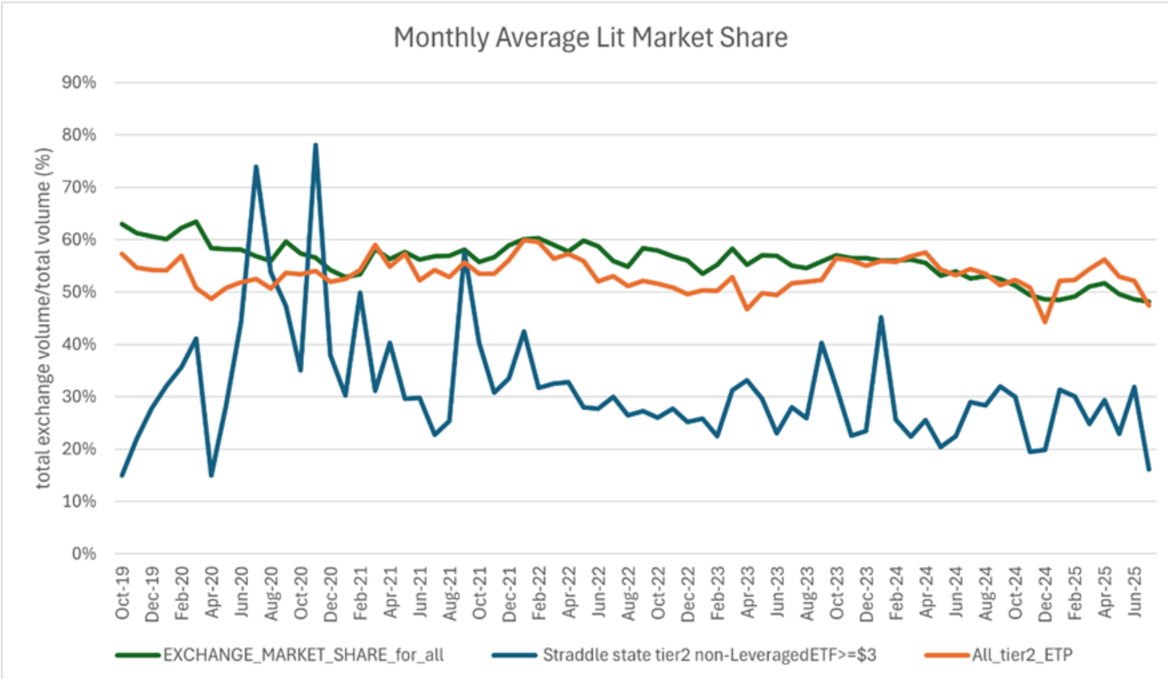
3. Lit Market Share Trends

Figure 4: Lit Market Share by Group plots the lit market share of three categories:

- Tier 2 non-leveraged ETPs above $3 (the group most prone to straddles)[4],
- All Tier 2 ETPs, and
- All listed symbols (baseline).

Observations:

- Overall decline. Lit market share for all listed symbols has fallen from above 60% to around 50%, dipping below 50% at times. Tier 2 ETPs follow a similar trend at slightly lower levels.
- Lower transparency for straddle-prone group. Tier 2 non-leveraged ETPs above $3 exhibit materially lower lit share compared with both baselines.
- Link between straddles and lit share. The group most constrained by LULD bands is also the one losing the most transparency. This erosion reduces visible quotes and may weaken price discovery, especially when band constraints already limit flexibility.



4. Observations and Conclusion

Bringing the evidence together, several themes emerge:

1. **Tier 2 non-leveraged ETPs above $3 are the primary drivers of straddles.** They report more straddles per day than other groups, with sharp spikes during stress events such as **March 2020 (COVID outbreak)** and **April 2025 (tariff announcement).**
2. **Rising concentration.** Although this group represents a small portion of the market, its share of symbols reporting straddle states has grown from **~1% to ~10%.**
3. **Market structure link.** The frequency of straddles has risen in parallel with a significant decline in lit market share, suggesting that weaker lit liquidity may contribute to more frequent straddles.
4. **Transparency concerns.** The same groups most prone to straddles are also those with the steepest erosion in lit share, raising concerns about price discovery and execution quality during volatile periods.

In summary: Straddle states are a persistent and growing feature of the LULD mechanism, with disproportionate impact on Tier 2 non-leveraged ETPs above $3. Their rising frequency and overlap with declining lit market share highlight the interaction between volatility controls and liquidity fragmentation, pointing to important implications for overall market transparency.

[1] Refer to https://www.luldplan.com/. For example, assume the Lower Price Band for an NMS Stock is $9.50 and the Upper Price Band is $10.50, such NMS stock would be in a Straddle State if the National Best Bid were below $9.50, and therefore non-executable, and the National Best Offer were above $9.50 (including a National Best Offer that could be above $10.50). If an NMS Stock is in a Straddle State and trading in that stock deviates from normal trading characteristics, the primary listing exchange may declare a Trading Pause for that NMS Stock.

[2] This group represents stocks that reported a straddle state in a given month and belong to the ‘Tier 2 non-leveraged ETPs above $3’ LULD category. Combined with the ‘other straddle’ group, they make up the full set of stocks reporting straddle states in that month.
[3] This chart reflects the total of ‘Tier 2 non-leveraged ETPs above $3’ and other stocks reporting straddle states. While LULD reports also include ‘Limit State’ and ‘Halt,’ these occur only rarely and are therefore excluded from the chart.
[4] We calculate the lit market share only for stocks in this LULD group that reported a straddle state on a given day, and then average the ratios by month.