Public Statements & Remarks

Statement of Chairman Heath P. Tarbert in Support of the Final Rule on Electronic Trading Risk Principles

December 08, 2020

The mission of the CFTC is to promote the integrity, resilience, and vibrancy of U.S. derivatives markets through sound regulation. We cannot achieve this mission if we rest on our laurels—particularly in relation to the ever-evolving technology that makes U.S. derivatives markets the envy of the world. What is sound regulation today may not be sound regulation tomorrow.

I am reminded of the paradoxical observation of Giuseppe di Lampedusa in his prize-winning novel, *The Leopard*:

> "*If we want things to stay as they are, things will have to change*."[1]

While the novel focuses on the role of the aristocracy amid the social turbulence of 19th century Sicily, its central thesis—that achieving stability in changing times itself requires change—can be applied equally to the regulation of rapidly changing financial markets.

Today we are voting to finalize a rule to address the risk of disruptions to the electronic markets operated by futures exchanges. The risks involved are significant; disruptions to electronic trading systems can prevent market participants from executing trades and managing their risk. But how we address those risks—and the implications for the relationship between the Commission and the exchanges we regulate—is equally significant.

The Evolution of Electronic Trading

A floor trader from the 1980s and even the 1990s would scarcely recognize the typical futures exchange of the 21st Century. The screaming and shouting of buy and sell orders reminiscent of the film *Trading Places* has been replaced with silence, or perhaps the monotonous humming of large data centers. Over the past two decades, our markets have moved from open outcry trading pits to electronic platforms. Today, 96 percent of trading occurs through electronic systems, bringing with it the price discovery and hedging functions foundational to our markets.

By and large, this shift to electronic trading has benefited market participants. Spreads have narrowed,[2] liquidity has improved,[3] and transaction costs have dropped.[4] And the most unexpected benefit is that electronic markets have been able to stay open and function smoothly during the COVID-19 lockdowns. By comparison, traditional open outcry trading floors such as options pits and the floor of the New York Stock Exchange were forced to close for an extended time. Without the innovation of electronic trading, our financial markets would almost certainly have seized up and suffered even greater distress.

But like any technological innovation, electronic trading also creates new and unique risks. Today's final rule is informed by examples of disruptions in electronic markets caused by both human error as well as malfunctions in automated systems—disruptions that would not have occurred in open outcry pits. For instance, "fat finger" orders mistakenly entered by people, or fully automated systems inadvertently flooding matching engines with messages, are two sources of market disruptions unique to electronic markets.

Past CFTC Attempts to Address Electronic Trading Risks

The CFTC has considered the risks associated with electronic trading during much of the last decade. Seven years ago, a different set of Commissioners issued a concept release asking for public comment on what changes should be made to our regulations in light of the novel issues raised by electronic trading. Out of that concept release, the Commission later proposed Regulation AT. For all its faults, Regulation AT drove a very healthy discussion about the risks that should be addressed and the best way to do so.

Regulation AT was based on the assumption that automated trading, a subset of electronic trading, was inherently riskier than other forms of trading. As a result, Regulation AT sought to require certain automated trading firms to register with the Commission notwithstanding that they did not hold customer funds or intermediate customer orders. Most problematically, Regulation AT also would have required those firms to produce their source code to the agency upon request and without subpoena.

Regulation AT also took a prescriptive approach to the types of risk controls that exchanges, clearing members, and trading firms would be required to place on order messages. But this list was set in 2015. In effect, Regulation AT would have frozen in time a set of controls that all levels of market operators and market participants would have been required to place on trading. Since that list was proposed, financial markets have faced their highest volatility on record and futures market volumes have increased by over 50 percent.[5] Improvements in technology and computer power have been profound. Of course, I commend my predecessors for focusing on the risks that electronic trading can bring. But times change, and Regulation AT would not have changed with them. Consequently, our Commission formally withdrew Regulation AT this past summer.[6]

An Evolving CFTC for Evolving Markets

In withdrawing Regulation AT, the CFTC has consciously moved away from registration requirements and source code production. But in voting to finalize the Risk Principles, the CFTC is committing to address risk posed by electronic trading while strengthening our longstanding principles-based approach to overseeing exchanges.

The markets we regulate are changing. To maintain our regulatory functions, the CFTC must either halt that change or change our agency. Swimming against the tide of developments like electronic markets is not an option, nor should it be. The markets exist to serve the needs of market participants, not the regulator. If a technological change improves the functioning of the markets, we should embrace it. In fact, one of this agency's founding principles is that CFTC should "foster responsible innovation."[7] Applying this reasoning alongside the overarching theme of *The Leopard* leads us to a single conclusion: As our markets evolve, the only real course of action is to ensure that the CFTC's regulatory framework evolves with it.

The Need for Principles-Based Regulation

So then how do we as a regulator change with the times while still fulfilling our statutory role overseeing U.S. derivatives markets? I recently published an article setting out a framework for addressing situations such as this.[8] I believe that principles-based regulations can bring simplicity and flexibility while also promoting innovation when applied in the right situations. Such an approach can also create a better supervisory model for interaction between the regulator and its regulated firms—but only so long as that oversight is not toothless.

There are a variety of circumstances in which I believe principles-based regulation would be most effective. Regulations on how exchanges manage the risks of electronic trading are a prime example. This is about risk management practices at sophisticated institutions subject to an established and ongoing supervisory relationship. But it is also an area where regulated entities have a better understanding than the regulator about the risks they face and greater knowledge about how to address those risks. As a result, exchanges need flexibility in how they manage risks as they constantly evolve.

At the same time, principles-based regulation is not "light touch" regulation. Without the ability to monitor compliance and enforce the rules, principles-based regulation would be ineffective. Principles-based regulation of exchanges can work because the CFTC and the exchanges have constant interaction that engenders a degree of mutual trust. The CFTC—as overseen by our five-member Commission—has tools to monitor how the exchanges implement principles-based regulations through reviews of license applications and rule changes, as well as through periodic examinations and rule enforcement reviews.

Monitoring compliance alone is not enough. The regulator also needs the ability to enforce against non-compliance. Principles-based regimes ultimately give discretion to the regulated entity to find the best way to achieve a goal, so long as that method is objectively reasonable. To that end, the CFTC has a suite of tools to require changes through formal action, escalating from denial of rule change requests, to enforcement actions, to license revocations. The CFTC consistently needs to address the effectiveness and appropriateness of these levers to make sure the exchanges are meeting their regulatory objectives. And given that exchanges will be judged on a reasonableness standard, it must be the Commission itself—based on a recommendation from CFTC staff[9]—who ultimately decides whether an exchange has been objectively unreasonable in complying with our principles.

Final Rule on Risk Principles for Electronic Trading

This brings us to today's finalization of the Risk Principles that were proposed in June of this year. The final rule, which we are adopting by-and-large as proposed, centers on a straightforward issue that I think we can all agree is important for our regulations to address. Namely, the Risk Principles require exchanges to take steps to prevent, detect, and mitigate market disruptions and system anomalies associated with electronic trading.

The disruptions we are concerned about can come from any number of causes, including: (i) excessive messages, (ii) fat finger orders, or (iii) the sudden shut off of order flow from a market maker. The key attribute of the disruptions addressed by the Risk Principles is that they arise because of electronic trading.

To be sure, our current regulations do require exchanges to address market disruptions. But the focus of those rules has generally been on disruptions caused by sudden price swings and volatility. In effect, the Risk Principles expand the term "market disruptions" to cover instances where market participants' ability to access the market or manage their risks is negatively impacted by something other than price swings. This could include slowdowns or closures of gateways into the exchange's matching engine caused by excessive messages submitted by a market participant. It could also include instances when a market maker's systems shut down and the market maker stops offering quotes.

As noted in the preamble to the final rule, exchanges have worked diligently to address emerging risks associated with electronic trading. Different exchanges have put in place rules such as messaging limits and penalties when messages exceed filled trades by too large a ratio. Exchanges also may conduct due diligence on participants using certain market access methods and may require systems testing ahead of trading through those methods.

It is not surprising that exchanges have developed rules and risk controls that comport with our Risk Principles. The Commission, exchanges, and market participants have a common interest in ensuring that electronic markets function properly. Moreover, this is an area where exchanges are likely to possess the best understanding of the risks presented and have control over how their own systems operate. As a result, exchanges have the incentive and the ability to address the risks arising from electronic trading. Principles-based regulations in this area will ensure that exchanges have reasonable discretion to adjust their rules and risk controls as the situation dictates, not as the regulator dictates.

The three Risk Principles encapsulate this approach. First, exchanges must have rules to prevent, detect, and mitigate market disruptions and system anomalies associated with electronic trading. In other words, an exchange should take a macro view when assessing potential market disruptions, which can include fashioning rules applicable to all traders governing items such as onboarding, systems testing, and messaging policies. Second, exchanges must have risk controls on all electronic orders to address those same concerns. Third, exchanges must notify the CFTC of any significant market disruptions and give information on mitigation efforts.

Importantly, implementation of the Risk Principles will be subject to a reasonableness standard. The Acceptable Practices accompanying the Risk Principles clarify that an exchange would be in compliance if its rules and its risk controls are reasonably designed to meet the objectives of preventing, detecting, and mitigating market disruptions and system anomalies. The Commission will have the ability to monitor how the exchanges are complying with the Principles, and will have avenues to sanction non-compliance.

Framework for Future Regulation

I hope that the Risk Principles we are adopting today will serve as a framework for future CFTC regulations. Electronic trading presents a prime example of where principles-based regulation—as opposed to prescriptive rule sets—is more likely to result in sound regulation over time. Through thoughtful analysis of the regulatory objective we aim to achieve, the nature of the market and technology we are addressing, the sophistication of the parties involved, and the nature of the CFTC's relationship with the entity being regulated, we can identify what areas are best for a prescriptive regulation or a principles-based regulation. [10] In the present context, a principles-based approach—setting forth concrete objectives while affording reasonable discretion to the exchanges—provides flexibility as electronic trading practices evolve, while maintaining sound regulation. In sum, it recognizes that things will have to change if we want things to stay as they are.[11]

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[1] Giuseppe Tomasi di Lampedusa, *The Leopard* (Everyman's Library Ed. 1991) at p. 22.

[2] Frank, Julieta and Philip Garcia, "Bid-Ask Spreads, Volume, and Volatility: Evidence from Livestock Markets," American Journal of Agricultural Economics, Vol. 93, Issue 1, p. 209 (January 2011).

[3] Terrence Henderschott, Charles M. Jones, and Albert K. Menkveld, "Does Algorithmic Trading Improve Liquidity?" Journal of Finance, Volume 66, Issue 1, p. 1 (February 2011).

[4] Esen Onur and Eleni Gousgounis, "The End of an Era: Who Pays the Price when the Livestock Futures Pits Close?", Working Paper, Commodity Futures Trading Commission Office of the Chief Economist.

[5] Futures Industry Association, "A record year for derivatives" (March 5, 2019), available at https://www.fia.org/articles/record-year-derivatives.

[6] Regulation Automated Trading; Withdrawal, 85 FR 42755 (July 15, 2020).

[7] Commodity Exchange Act, Section 3(b), 7 U.S.C. § 3(b).

[8] Tarbert, Heath P., "Rules for Principles and Principles for Rules: Tools for Crafting Sound Financial Regulation," Harv. Bus. L. Rev., Vol. 10 (June 15, 2020), available at https://www.hblr.org/volume-10-2019-2020/.

[9] CFTC Staff conduct regular examinations and reviews of our registered entities, including exchanges and clearinghouses. As part of those examinations and reviews, Staff may identify issues of material non-compliance with regulations as well as recommendations to bring an entity into compliance. Ultimately, however, the Commission itself must accept an examination report or rule enforcement review report before it can become final, including any findings of non-compliance. Likewise, Staff are asked to make recommendations regarding license applications, reviews of new products and rules, and a variety of other Commission actions, although ultimate authority lies with the Commission.

[10] Tarbert, at 11-17.

[11] Di Lampedusa, at 22.

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