

Vital Briefing

How the CFTC is overseeing AI risks

By [Lene Powell, J.D.](#)

With recent astonishing leaps in artificial intelligence (AI) capabilities, financial firms are increasingly using AI in a variety of functions. A [2023 survey](#) by Ernst & Young found that 99 percent of financial services leaders said their organizations are using AI in some operations.

But AI can turbocharge risks as well as benefits. [Consumer groups warn](#) that without safeguards, ungoverned AI systems could exacerbate market volatility, distort commodity prices, and facilitate potential fraud and market manipulation. “Black box” systems that do not explain their processes make it hard for regulators to oversee the technology.

Key takeaways

- The use of AI in financial markets raises concerns about opaque “black box” technology and potential market volatility, fraud and manipulation.
- Consumer groups call for regulatory action, while industry groups urge caution on overregulation.
- In contrast to the SEC and CFPB, the CFTC has not yet proposed rules or guidance.
- As next steps, the CFTC will likely conduct outreach, assess regulatory gaps, and consult with other regulators.

While the [SEC](#) and [CFPB](#) have proposed rules and guidance relating to specific AI uses by financial market participants, the Commodity Futures Trading Commission (CFTC) has so far focused on gathering input and has not yet proposed rules or guidance.

A big question for the CFTC is whether—and to what extent—firms should incorporate an AI-specific risk management function into existing risk management structures.

According to a [new report by the CFTC’s Technology Advisory Committee](#) (TAC), the existing regulatory framework for CFTC registrants is broad and many AI-related risks are likely already addressed. Major industry groups have urged caution on adopting new AI-specific rules, especially ones that focus on AI as a whole rather than on specific use cases.

Yet the advisory committee also believes that AI technology is a “novel and unique” source of risk that may warrant more intensive risk management efforts and CFTC staff guidance or rulemaking. Consumer groups like Public Citizen also have advocated for a more aggressive CFTC approach to AI oversight.

AI use in financial markets

Generally, AI took off in financial markets in the 2000s as machine learning began to use more and cheaper power and data to facilitate high-frequency trading and risk modeling. Usage spread to other areas like fraud detection, consumer credit scoring

and customer service. The 2010s also saw robo-advisory platforms transforming personal finance.

But a lack of transparency makes it hard for the CFTC to know how market participants are using AI.

“Part of the challenge in crafting this report was the lack of direct knowledge about the CFTC-registered entities currently leveraging AI, and the level of transparency and explainability among these firms for regulators and customers about AI’s use, particularly as it pertains to trading strategies and risk management,” the TAC said.

Even where firms disclose their use of AI technology, it is not always clear what type of AI they are using (e.g., predictive, algorithmic, generative, or other frontier models) and for what use cases, the committee said.

Looking forward, the TAC sees potential for generative AI to create new products by analyzing “vast amounts” of previously untapped unstructured textual data. The combination of AI, programmable digital assets, and smart contracts could create a financial system able to efficiently run complex tasks and enforce financial agreements with limited or no human intervention.

For example, AI algorithms can trigger smart contracts to buy and sell assets when market conditions are met. AI processes could also freeze transfers when

fraudulent activities are detected. These actions could be recorded for audit and training purposes.

AI risks

Powerful AI-driven financial systems running complex tasks with limited human intervention raises the specter of things going very wrong, very quickly.

Public interest group [Public Citizen](#) warns that sophisticated automated systems ungoverned by human intervention can cause severe market volatility. In response to a CFTC [request for comment](#), they noted that in the Flash Crash of 2010, the Dow Jones Industrial Average fell 600 points, only to recover the loss within 20 minutes. Even now, 14 years later, there is no authoritative, unquestioned explanation of this market crash or the possible role of high frequency trading, the group said.

AI's "black box" nature—a lack of explainability—would compound the problem, said Public Citizen. The group also warned of other risks including market concentration.

[Better Markets](#) similarly warned of AI-related systemic risks to market integrity, including manipulation and distortion of commodity pricing.

Additional risks flagged by the TAC include mishandling of sensitive data, "poisoning" of real-world data, biases and fairness, concentration due to reliance on a small number of deep learning architectures, and false or invalid outputs.

Federal AI framework

To address AI-related risks, the White House's [Executive Order 14110 encourages](#)

independent federal agencies like the SEC and CFTC to consider using their "full range of authorities." The order also urges regulators to clarify how existing rules apply to AI, including responsible use of third-party AI services and expectations for transparency.

Several financial regulators have proposed AI-related rules or guidance. The SEC has proposed new requirements for firms to disclose conflicts of interest relating to "predictive data analytics," a type of AI that firms use to understand and direct individual investor behavior. And the CFPB issued guidance that lenders may not use boilerplate language when [using AI to notify customers of adverse actions](#).

CFTC's AI approach

Beginning in 2019, the CFTC has taken formal steps to assess AI usage and risks and lay a foundation for AI governance.



CFTC actions on AI

- Released [A Primer on Artificial Intelligence in Financial Markets](#) (October 2019)
- Issued [Request for Comment on the Use of Artificial Intelligence in CFTC-regulated Markets](#) (January 2024)
- Released [Customer Advisory: AI Won't Turn Trading Bots into Money Machines](#) (January 2024)
- Designated [CFTC's first Chief AI Officer](#) (May 2024)
- Technology Advisory Committee released [Responsible Artificial Intelligence in Financial Markets: Opportunities, Risks & Recommendations](#) (May 2024)

Industry views

In response to the CFTC's request for comment, the industry group FIA and exchanges [CME Group and ICE](#) recently urged the CFTC to take a "technology neutral" approach and focus on particular use cases, rather than AI technology as a whole.

For example, the CFTC should consider its recordkeeping rules in the context of particular AI use cases, such as using AI to transcribe audio, the groups said.

FIA commenters also believe the CFTC should avoid defining AI. They point to a previous rulemaking on automated trading in which the CFTC ultimately abandoned a proposed definition in favor of a principles-based approach focused on key risks. The original "[Regulation Automated Trading \(Reg AT\)](#)" proposal, which would have imposed rigorous new requirements related to automated trading, ran into vigorous industry resistance and was withdrawn and replaced.

Similarly, the [U.S. Chamber of Commerce](#) recommended that the CFTC avoid defining AI, believing that a broad definition would sweep in technologies with lower risks and a narrow definition would likely become obsolete.

[SIFMA](#) suggested that if the CFTC does consider defining AI, it should follow a broadly accepted definition of AI developed by a standard-setting body, rather than create its own definition.

TAC recommendations

The TAC report outlined five recommendations for the CFTC:

1. **Outreach.** The CFTC should host a public roundtable discussion and CFTC staff

should directly engage in outreach with CFTC-registered entities to gather information about business functions and AI usage.

2. Adoption of risk framework. The CFTC should consider adopting an AI Risk Management Framework (RMF) in accordance with NIST guidelines and governance aspects to assess the efficiency of AI models and potential consumer harms as they apply to CFTC-registered entities.

3. Gap analysis. The CFTC should inventory existing regulations and analyze gaps for opportunities for dialogue and potential guidance or rulemaking.

4. Regulatory alignment. The CFTC should establish a process to gain alignment of its AI policies and practices with other federal agencies, including the SEC, Treasury, and other agencies interested in the financial stability of markets.

5. Build expertise. The CFTC should engage staff in domestic and international dialogues around AI and establish budgets if possible to build technical expertise of agency professionals.

Looking ahead

As a traditionally principles-based regulator, the CFTC appears likely to continue a more deliberative approach to

AI oversight than the SEC or CFPB, gathering extensive input and assessing its current regulatory framework before considering rulemaking or guidance.

In particular, the CFTC is likely to seek more granular detail about AI usage by CFTC registrants and other market participants, including through a public roundtable and direct outreach by CFTC staff.

In the meantime, CFTC registrants have to comply with current risk management requirements, which the CFTC could assert cover AI-related risks. If an AI-driven market disaster occurred, it is unlikely that registrants could successfully argue, “But you didn’t tell us not to.”