THE REVIEW OF
SECURITIES & COMMODITIES REGULATION
AN ANALYSIS OF CURRENT LAWS AND REGULATIONS AFFECTING THE SECURITIES AND FUTURES INDUSTRIES

Vol. 59 No. 15 September 9, 2026

SUPERVISION IN THE AGE OF AI: OPPORTUNITIES AND CHALLENGES IN THE COMING ERA OF AI-DRIVEN SURVEILLANCE

The rapid incorporation of artificial intelligence into financial surveillance represents one of the most significant shifts in compliance infrastructure, moving firms from largely reactive, lexicon-based monitoring toward predictive surveillance capable of identifying complex patterns across massive datasets. AI offers immense potential to reduce false positives, detect previously unobservable misconduct, and strengthen the integrity of both traditional financial markets and emerging prediction markets. However, these advances carry corresponding risks — particularly around supervisory obligations, model risk management, and human oversight as firms grow increasingly reliant on autonomous AI systems, and in particular, agentic AI. This article examines AI-driven surveillance for traditional financial products; the enforcement landscape, including recent FINRA and SEC actions signaling heightened scrutiny of AI governance; and the unique challenges of prediction markets, where a broad universe of potential insiders and real-time event resolution demand novel compliance solutions.

By Amy Jane Longo, Cole A. Goodman, and Rebekah Kim *

The rapid incorporation of artificial intelligence ("AI") into financial surveillance programs and AI's ever-expanding role in that context has created one of the most significant shifts in compliance infrastructure. Buoyed by advancements in AI, surveillance routines are continuing to move from reactive, primarily lexicon-based monitoring to predictive and proactive, aided by AI's ability to trend-spot across massive data sets.

AI offers immense potential benefits both with respect to traditional financial products and markets, as well as novel ones, such as prediction markets. AI-driven surveillance has the potential to reduce false positives while surfacing previously unobservable patterns by gleaning trends from large data sets, inclusive of communications, and trading and market data. AI-driven surveillance is also uniquely situated to strengthen the integrity of prediction markets, where insider participation in event contracts threatens to undermine trust in the exchanges.

As firms move further along the spectrum from AI-assisted to AI-driven surveillance, certain risks increase, particularly with respect to the ability of firms to satisfy

* *AMY JANE LONGO is a partner of Ropes & Gray LLP and is the managing partner of the Los Angeles office. COLE A. GOODMAN is counsel of Ropes & Gray LLP and is based in the Boston office. REBEKAH KIM is a Ropes & Gray LLP associate based in the New York office. Their e-mail addresses are amy.longo@ropesgray.com, cole.goodman@ropesgray.com, and rebekah.kim@ropesgray.com.*

IN THIS ISSUE