Insider Trading & Marketing Manipulation Literature Watch

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Each quarter, this newsletter summarizes newly published literature in the areas of Insider Trading and Market Manipulation, as well as one or more papers highlighted by CRA for additional discussion. The authors' own abstracts are included below and are unedited. Links to the full paper are provided. The inclusion of an article in this newsletter does not signify that CRA or any of its experts agree or disagree with the content or conclusions therein.

Quarterly Literature Watch Highlight

"Tipped Off: Information Leakage in the Municipal Securities Market" investigates whether there is potential leakage of credit-related information by examining trading before the announcement of credit rating downgrades. The study finds an increase in selling activity in the weeks leading up to a public downgrade announcement. The pattern is strongest before severe downgrades.

The study finds that pre-announcement selling rises more sharply for institutions rather than retail investors. The pre-announcement trading is more pronounced for issuers that access primary markets more frequently, have larger institutional investor bases, or conduct larger issuances. The study also tests whether issuer disclosures or other public signals could make downgrades predictable, finding pre-announcement selling activity increases even in the absence of such public disclosures.

Tipped Off: Information Leakage in the Municipal Securities Market

Regulators have long been concerned about the leakage of credit-relevant information in the U.S. municipal securities market. To assess how widespread information leakage is in this market, we examine trading before the announcement of credit rating downgrades. Our findings reveal a marked increase in selling activity in the weeks leading up to a public downgrade announcement, particularly in the week before. This pattern is stronger before severe downgrades, when private information is more valuable. These information transfers likely happen through formal networks; institutional investors are more likely to initiate these sales and selling pressure is stronger when issuers have greater incentives to share information with institutional investors. These patterns persist in the

absence of pre-period EMMA disclosures and other observable indicators that could predict downgrades, consistent with the leakage of nonpublic information.

Nakhmurina, Anya and Li, Ken and Cuny, Christine and Watts, Edward and Duguay, Raphael, Tipped Off: Information Leakage in the Municipal Securities Market (September 29, 2026). Available at SSRN: https://ssrn.com/abstract=7541603 or http://dx.doi.org/10.2139/ssrn.7541603

Insider Trading

Financial Market Spillovers of Consumer Data Privacy Regulation: Evidence from Insider Trading

As consumer digital data become increasingly central to business operations, concerns over data privacy have prompted jurisdictions worldwide to enact data privacy legislation. This paper investigates whether such regulations create spillover effects in financial markets, particularly through their impact on insider trading activities. Using China's Personal Information Protection Law (PIPL) of 2021-which limits businesses' ability to access, process, and utilize customer digital data-as an empirical setting, we show that opportunistic insider selling drops sharply at firms that rely heavily on digital data after the implementation of PIPL. This effect emerges in the number, value, and profitability of insider sales. The deterrent effects of data privacy regulation are more pronounced in settings where outside investors were at a greater informational disadvantage, existing governance structures are weaker, and the firms face concurrent litigation events. Collectively, our findings reveal a perhaps unintended, but not inconsequential, externality of data privacy regulation: enhancing the fairness and integrity of financial markets.

Li, Zhang, Jingyu and Li, Conggang and Shi, Haotian and Wang, Wei and Xu, Yize, Financial Market Spillovers of Consumer Data Privacy Regulation: Evidence from Insider Trading (June 25, 2026). Available at SSRN: https://ssrn.com/abstract=7091238 or http://dx.doi.org/10.2139/ssrn.7091238

The Impact of Committee Jurisdiction on Sell-Side Information Asymmetry

This paper examines whether committee jurisdiction generates a detectable informational advantage in the sell-side trading behavior of members of the United States Congress following the passage of the Stop Trading on Congressional Knowledge Act of 2012. Using a rule-based committee-industry crosswalk with dynamic session level assignment, congressional stock sales are classified as jurisdictional or nonjurisdictional and evaluated through calendar-time portfolios estimated with a Carhart four-factor model. The central finding is a statistically significant short-horizon sell spread of 7.23 percent over 20 trading days, indicating that jurisdictionally relevant sales are followed by systematically more negative abnormal returns than non-jurisdictional sales. This effect is more clearly differentiated in the House of Representatives, consistent with the narrower and more specialized committee structure of that chamber. Committee-level evidence is more exploratory and should be interpreted with caution. The results do not constitute evidence of unlawful insider trading but suggest that the deterrent effect of the STOCK Act may be incomplete and localized, concentrated within specific institutional channels rather than distributed across the legislative branch as a whole.

Peez, Leonard, The Impact of Committee Jurisdiction on Sell-Side Information Asymmetry (July 01, 2026). Available at SSRN: https://ssrn.com/abstract=7034420 or http://dx.doi.org/10.2139/ssrn.7034420

Optimal Insider Trading in Prediction Markets

Prediction markets provide an informational public good but are prone to abuse in the form of insider trading and related market manipulation. The recent and rapid expansion of these markets, fueled by high-profile instances of allegedly illegal trades, has resulted in calls for widespread regulation. This article surveys existing public and private law tools available to prohibit insider trading on prediction markets. Our analysis finds that, despite the novelty of prediction markets and their expanding scope, there are ample legal mechanisms for restricting undesirable trades. From a policy perspective, this Article argues for a balanced approach that seeks to leverage the forecasting power of prediction markets, while restricting certain categories of trades that distort market pricing or rely on illegal sources of information acquisition. The policy goal is therefore not to limit all uses of inside information in such markets. Rather, prediction markets function best if there is some room for prices to indirectly incorporate inside information or otherwise include high-information traders.

Turk, Matthew C. and Holden, John and Haugh, Todd, Optimal Insider Trading in Prediction Markets (August 10, 2026). Available at SSRN: https://ssrn.com/abstract=7259584 or http://dx.doi.org/10.2139/ssrn.7259584

Mitigating Opportunistic Insider Trading: The Role of Dual Ownership in Corporate Governance

We examine whether dual ownership—when institutional investors hold both equity and debt claims in the same firm—reduces opportunistic insider trading profitability. Dual holders have incentives to monitor managerial actions that affect both shareholder value and credit risk, but their access to borrower information may also allow them to compete with insiders for trading gains. Using U.S. public firms from 1995 to 2016, we find that dual ownership is negatively associated with opportunistic insider profitability, especially among highly informed insiders, while routine trades are unaffected. Entropy-balanced tests show that the results are not driven by observable differences between dual-held and non-dual-held firms. Further entropy-balanced comparisons indicate that dual holders reduce short-run insider profitability relative to debt-only firms and long-run profitability relative to blockholder-only firms. We identify capital covenants as an important governance channel. To distinguish monitoring from information competition, we show that the effect persists after controlling for dual holders' own trading activity, remains significant around quarterly earnings announcements where dual holders lack competitive information advantages, and is concentrated in insider purchases. The evidence suggests that dual ownership strengthens monitoring interpretation in which dual ownership limits insiders' ability to profit from private information.

Joo, Sunghoon and Kim, Dong and Lee, Seungwon and Song, HakJoon, Mitigating Opportunistic Insider Trading: The Role of Dual Ownership in Corporate Governance. Available at SSRN: https://ssrn.com/abstract=7154261 or http://dx.doi.org/10.2139/ssrn.7154261

The Reasonable Market Analyst: Assessing Materiality in Shadow Trading

Shadow trading refers to the practice of investors trading based on material nonpublic information ("MNPI") in the securities of market-connected firms. In 2021, the Securities and Exchange Commission brought and ultimately prevailed in its first civil action on a theory of shadow trading against Matthew Panuwat for trading on MNPI in a competitor firm. An analysis of the current materiality standard demonstrates that the reasonable investor test is wholly insufficient to provide factfinders with the structure necessary to render an intelligible decision about which firms are economically linked or connected in the market. Accordingly, the application of the totality of the

circumstances reasonable investor standard should be rejected in the shadow trading context. To address the market-connection problem, this Essay proposes a new two-pronged analysis for district courts to determine whether nonpublic information about a source firm is material to the security purchased. At the summary judgment stage, the government would bear the burden of demonstrating, by a preponderance of the evidence, that the security purchased has a moderate or strong ex ante correlation with a competitor or supplier. A finding of materiality by the judge would be rebuttable by the defense at summary judgment before the parties go to trial. This two-pronged test would enable regulators to prevent a pocket of immunity for trading in linked firms, while providing the financial industry with sufficient guidance on materiality in transaction planning.

Montano, Thomas, The Reasonable Market Analyst: Assessing Materiality in Shadow Trading (April 07, 2026). Available at SSRN: https://ssrn.com/abstract=7450404 or http://dx.doi.org/10.2139/ssrn.7450404

When are Insider Purchases Credible Signals of Private Information? Evidence from Acquisitions

We examine the market reaction to insider purchases in the post-acquisition period where there is high information asymmetry leading to investors' information demand but also insiders with incentives to manage market expectations. Prior research generally finds insider purchases unambiguously signal favorable private information and are more informative when information asymmetry is higher. However, prior research also finds that acquirer insiders have incentives to manage post-acquisition expectations and are more likely to be overconfident, which can lead investors to perceive insiders as attempting to bias market expectations. We find the general positive market reaction to insider purchases in non-acquisition periods is significantly lower in post-acquisition periods, consistent with investors discounting the signal. Among acquisitions, acquirers that are more likely to have overpaid have a higher likelihood of insiders making postacquisition purchases. Consistent with investors perceiving post-acquisition insider purchases as less credibly reflecting favorable private information because insiders have incentives to manage market expectations, we find that investors downwardly reassess prior guidance news after observing post-acquisition purchases. Overall, our results suggest that insider purchases, while generally signals of favorable private information, have a diminished effect after acquisitions, where they can trigger investor skepticism.

Kravet, Todd and Lee, Minah, When are Insider Purchases Credible Signals of Private Information? Evidence from Acquisitions (August 18, 2026). Available at SSRN: https://ssrn.com/abstract=7320700 or http://dx.doi.org/10.2139/ssrn.7320700

Skill Driven Information Discovery: Evidence from Earnings Prediction Markets

We examine how information is incorporated into corporate earnings prediction markets and whether their predictive accuracy reflects insider trading or skilled information aggregation. Using 853 Polymarket markets on quarterly earnings outcomes between September 2025 and May 2026, we document that prediction market prices drift toward the realized earnings outcome before the announcement. We find little evidence supporting the insider trading hypothesis: discretionary insider trading disclosed in SEC Form 4 filings does not predict the drift, the drift is present in firms with no insider trading activity, and the drift did not decline after a February 2026 CFTC enforcement advisory raised the expected cost of insider trading. Importantly, we further show that the drift is driven by a small group of skilled traders. These accounts trade many firms rather than specializing

in one, their directional accuracy persists strongly across sample periods while their profits persist far less, and prices move toward their positions after entry. The drift concentrates in firms with low institutional ownership, where public information processing is thinnest. Consistent with the notion that prediction market accuracy reflects forecasting skill rather than information leakage, our findings suggest that these markets can serve as a reliable measure of earnings expectations.

Diaz, Zachary and You, Leyuan, Skill Driven Information Discovery: Evidence from Earnings Prediction Markets (August 04, 2026). Available at SSRN: https://ssrn.com/abstract=7279999 or http://dx.doi.org/10.2139/ssrn.7279999

Can Language Models Identify Shadow Trading Targets? An NLP Evaluation of SEC Enforcement Theory

Shadow trading – trading in a peer firm's securities on the basis of material nonpublic information (MNPI) about an "economically linked" company – is a novel and contested theory of insider trading liability, first prosecuted in SEC v. Panuwat (2023). Enforcing it requires identifying economically linked firms ex ante, a determination the SEC makes only after the fact using mass market surveillance infrastructure. We ask whether NLP can do what the SEC's theory presumes insiders already know: identify peer firms ex ante from publicly mandated disclosures. Using a two-stage LLM pipeline applied to Item 7 (Management's Discussion and Analysis) sections of SEC 10-K filings, we score semantic similarity across 30 M&A events spanning five industries and relate similarity to announcement-day abnormal stock returns. On the Panuwat fact pattern itself the pipeline recovers Incyte among the closest peers, a sanity check on the one case with a known outcome. Across the full dataset, however, we find no association: pooling 217 peer observations, the within-event rank correlation between similarity and abnormal return is +0.07 (permutation p = 0.37), and the mean per-event Spearman correlation is +0.05 with a 95% confidence interval of [-0.08, +0.18] -- narrow enough to exclude any moderate relationship rather than merely failing to detect one. A case-level reading agrees: 14 of 30 events support the hypothesis, 12 contradict it, and 4 are ambiguous. We also find that Incyte fell outside the standard $2B-$10B mid-cap band on the day before the announcement, complicating the "mid-cap oncology" category the SEC invoked. These results are exploratory and bound to this pipeline, corpus, and return measure, but they put pressure on the empirical premise of shadow trading enforcement and bear on constitutional questions surrounding the SEC's financial surveillance infrastructure.

Wilson, Sarah and MacKay, Michael and Marello, Anthony and Bhattacharyya, Trinav, Can Language Models Identify Shadow Trading Targets? An NLP Evaluation of SEC Enforcement Theory (August 02, 2026). Available at SSRN: https://ssrn.com/abstract=7220978 or http://dx.doi.org/10.2139/ssrn.7220978

Market Manipulation

Trust-Aware Cooperative Multi-Agent Trading with Dynamic Risk Propagation under Market Manipulation

Automated trading systems in cryptocurrency markets remain vulnerable to market manipulation, abnormal price distortions, and coordinated trading anomalies that invalidate the reliability assumptions underlying conventional reinforcement learning and predictive modeling approaches. This paper proposes a trust-aware cooperative multi-agent trading framework that unifies market representation, trading execution, risk propagation, and real-time anomaly detection within a single

end-to-end architecture. A dynamic reliability estimation mechanism computes time-varying anomaly scores by combining Z-score-normalized price deviations with proportional volume variation, transforming these through a sigmoid-bounded suspicion function with exponential smoothing to derive a continuous market reliability measure. This reliability score directly gates trading decisions via a threshold-conditioned action selection policy by suppressing execution under suspicious market conditions and defaulting to conservative hold positions to minimize manipulation-induced losses. A Proximal Policy Optimization (PPO)-based trading agent processes multivariate sliding-window market sequences through a shared latent representation, coordinated with a Variational Autoencoder (VAE)-driven anomaly detection agent that models distributional deviations in price-volume dynamics. The reward function jointly optimizes portfolio return, transaction cost penalization, and a manipulation-aware suspicion penalty, guiding the policy toward stable, risk-adjusted behavior. Evaluated on large-scale Binance cryptocurrency data, the framework achieves a cumulative return of 0.21, Sharpe ratio of 1.18, and maximum drawdown of 0.16, outperforming all baselines including DRL, LSTM-Attention, CNN-LSTM, and MARL approaches. Ablation studies confirm that the security agent, anomaly detection module, and multi-agent coordination each contribute independently to system robustness, validating reliability-aware decision integration as a critical design principle for manipulation-resilient algorithmic trading.

Khanvilkar, Kunal and Parekh, Gaurav, Trust-Aware Cooperative Multi-Agent Trading with Dynamic Risk Propagation under Market Manipulation. Available at SSRN: https://ssrn.com/abstract=7270348

Passive Liquidity Relocation and the Boundaries of Market Abuse Law An Evidentiary Framework for Regulating Spoof-Like Conduct in Cryptoasset Perpetual Futures

Market surveillance technologies increasingly identify recurring order-book patterns in leveraged cryptocurrency derivatives markets in which substantial passive liquidity is displayed near the prevailing price, persists as price approaches the displayed level, and is subsequently withdrawn or relocated before substantial execution. Such conduct may be consistent with spoofing or layering, but the observable pattern does not, without more, establish market manipulation. This paper examines the evidentiary problem created by the distinction between observable order-book behaviour and legally provable manipulation, and develops a four-level evidentiary framework-visual observation, event-level quantitative measurement, statistical inference, and legal inference-for moving from surveillance evidence to a legally sustainable finding concerning the statutory elements of market abuse. The analysis is timely given the UK's forthcoming Market Abuse Regime for Cryptoassets (MARC), which becomes operative alongside the wider cryptoasset regulatory regime from 25 October 2027. Drawing on UK MAR, United States v Coscia, comparative Hong Kong practice, and the CFTC's cross-border framework, the paper argues for a proportionate principle: statistical evidence should identify where regulators should look, while documentary, algorithmic, transactional, and contextual evidence should determine what the conduct legally means.

Rehan, Faizan, Passive Liquidity Relocation and the Boundaries of Market Abuse Law An Evidentiary Framework for Regulating Spoof-Like Conduct in Cryptoasset Perpetual Futures (August 31, 2026). Available at SSRN: https://ssrn.com/abstract=7465562 or http://dx.doi.org/10.2139/ssrn.7465562

Chaos Contracts: Outcome Manipulation in Prediction Markets, and How to Regulate It

Prediction markets are ordinarily defended for their ability to aggregate dispersed information into a price that tracks an event's probability. This defense assumes act-state independence: that trading a contract does not influence the probability of its outcome. Where this assumption doesn't hold, contracts are act-sensitive, and the price of an event contract is not a forecast but an incentive. We call such instruments "chaos contracts" because they incentivize traders to disrupt settled institutions. The incentive created by such contracts is especially high when the act of influencing the outcome is otherwise innocent.

We argue that three common regulatory strategies are insufficient to deal with chaos contracts: classifying contracts by subject matter, policing the conduct of traders, and excluding parties from trading them on the basis of their ex ante identifiable roles and relationships. Attempts to classify subject matter miss the long tail of chaos contracts that do not obviously involve problematic activities. Policing the conduct of traders either misses innocent acts of influence, or is overbroad and prohibits useful activities and contracts. Unlike insider trading law, it is difficult to identify ex ante who will be in a position to influence an outcome.

We propose instead that regulators aim to constrain act-sensitive contracts using principles of contract design inspired by the history of insurance law. While event contracts lack the equivalent of an insurable interest, we suggest tools for increasing the costs and decreasing the payoffs of influencing outcomes, ranging from hardening resolution bases to position limits and ultimately nonlisting. This approach fits comfortably within the existing commodities regulatory framework, and requires only being explicit about this novel threat and the tools available to contain it.

Jonker, Julian and Victoria, Violet, Chaos Contracts: Outcome Manipulation in Prediction Markets, and How to Regulate It (August 25, 2026). Available at SSRN: https://ssrn.com/abstract=7355302 or http://dx.doi.org/10.2139/ssrn.7355302

When Regulators Knock: SEC Investigations and Corporate Financing

This study examines how confidential SEC investigations affect firms' financing decisions. Using a stacked difference-in-differences design, we show that non-public SEC investigations significantly reduce equity issuance during the investigation period. Event-study estimates indicate that this effect emerges only after investigation onset, strengthens over time, and is not driven by pre-treatment trends. Firms do not substitute toward debt financing, suggesting that regulatory scrutiny reduces reliance on external capital rather than simply altering its composition. The decline in equity issuance is concentrated in financial reporting and disclosure investigations and does not vary with investigation outcomes. SEC investigations also reduce stock market liquidity and increase firms' implied cost of equity. In response, firms adopt more conservative financial policies, including greater precautionary cash holdings, longer debt maturities, and less aggressive tax behavior, while maintaining dividend commitments. Despite tighter financing conditions, firms maintain capital expenditures and R&D investment but reduce hiring and overhead expenditures. Overall, the findings show that confidential regulatory scrutiny constitutes an important financing friction with broad implications for firms' financing and real decisions.

Attig, Najah and Brockman, Paul, When Regulators Knock: SEC Investigations and Corporate Financing. Available at SSRN: https://ssrn.com/abstract=7532171 or http://dx.doi.org/10.2139/ssrn.7532171

Different Markets, Different Regulatory Priorities: Insider Trading, Manipulation, and Corruption-Prone Event Contracts in Prediction Markets

Securities markets and prediction markets are fundamentally different. Securities markets allocate capital, finance productive enterprise, and provide the infrastructure through which households save for retirement. Prediction markets do none of those things. Their principal social product is the information contained in their prices: a continuously updated estimate of the probability that a specified event will occur. While prediction markets could, in theory, be used to manage risk by allowing traders to hedge, thus far liquidity constraints have meant that traditional derivatives contracts (options and futures) rather than prediction market contracts are used.

Those differences have important regulatory implications, suggesting little or no regulation of informed trading as such on prediction markets and significant regulation of manipulation on these markets. The institutional features of securities markets indicate the opposite: strict regulatory attention to insider trading, which can undermine valuable property rights in information, but comparatively little concern for manipulation, which is rare and largely self-correcting. In securities markets, unauthorized insider trading may appropriate valuable corporate information, generate agency costs, widen spreads, and impair markets that allocate society's capital. In prediction markets, trading based on superior information usually improves the only product the market creates. Empirical surveillance can identify anomalous trading and even informational advantage, but trading data alone cannot establish whether the advantage was obtained or used in breach of a duty. A general prohibition on trading while possessing nonpublic information would likely suppress, rather than protect, the market's informational function.

Manipulation presents a different problem. Some event contracts motivate participants to influence the occurrence, description, or settlement of the event on which payment depends. This Article dubs these instruments corruption-prone event contracts: contracts whose payoff depends on events that one or more market participants can materially influence through their own conduct or through the conduct of persons subject to their influence.

The appropriate model is the insurable-interest doctrine. Life insurance is socially useful when the beneficiary would suffer a genuine loss from the insured's death. A wager policy on the life of a stranger creates a different incentive, and the law responds ex ante by refusing to recognize the contract rather than relying exclusively on prosecution after the harm occurs. Prediction-market regulation should use the same institutional logic.

Existing misappropriation, agency, ethics, and classified-information rules should govern genuine breaches of confidence. Lawfully informed traders should remain free to trade. Exchanges and the Commodity Futures Trading Commission should, however, exclude corruption-prone event contracts at the listing stage, particularly contracts on granular outcomes that market participants can influence or control, and events whose listing creates severe incentives to engage in socially harmful conduct or to disclose confidential information.

Macey, Jonathan R. and Enriques, Luca, Different Markets, Different Regulatory Priorities: Insider Trading, Manipulation, and Corruption-Prone Event Contracts in Prediction Markets (August 15, 2026). European Corporate Governance Institute - Law Working Paper No. 955/2026, Available at SSRN: https://ssrn.com/abstract=7323118 or http://dx.doi.org/10.2139/ssrn.7323118

Selling Speed, Not Secrets: Why Truth Social's Premium Post-Access Service Breaches No U.S. Manipulation, Insider-Trading, or Fraud Rule

Trump Media & Technology Group (TMTG) has announced a paid, business-to-business data service that would deliver posts from Truth Social's highest-ranking accounts to institutional subscribers milliseconds ahead of the general public. Because President Trump is the platform's most-followed account and, through a revocable trust, its controlling shareholder; and because his posts have moved equity, commodity, and rate markets, commentators in the media have characterized the service as a violation of the securities laws. This Article argues that it is not. It assesses the arrangement against the full range of applicable theories and situates each within the economic purposes the antifraud laws serve. Those laws protect two goods, the accuracy of the price signal and the liquidity of the market, by prohibiting the injection of falsity into price formation and the exploitation of information obtained in breach of a duty of trust and confidence. The service does neither. It offends neither the manipulation prohibitions of Sections 9(a) and 10(b) of the Securities Exchange Act of 1934, nor the insider-trading doctrine of Rule 10b-5, nor the parallel anti-manipulation and anti-fraud regime of the Commodity Exchange Act, nor the adjacent theories of scheme liability and Section 17(a). A licensed feed of genuine, ultimately public statements, sold with the source's consent to buyers who owe no relevant duty, advances price discovery and imposes none of the adverse-selection cost that duty-breaching insider trading imposes on liquidity. Any genuine exposure lies outside the securities laws: in federal government-ethics statutes and the Constitution's Emoluments Clauses, where the President is unusually insulated and the governing law remains unsettled. The concern the arrangement raises is one of public ethics and appearance, not of securities-fraud law.

Pezzulli, Bepi, Selling Speed, Not Secrets: Why Truth Social's Premium Post-Access Service Breaches No U.S. Manipulation, Insider-Trading, or Fraud Rule (July 20, 2026). Available at SSRN: https://ssrn.com/abstract=7152798 or http://dx.doi.org/10.2139/ssrn.7152798

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