



Insider Trading & Market Manipulation Literature Watch

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Each quarter, this newsletter summarizes newly published literature in the areas of Insider Trading and Market Manipulation. 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.

Insider Trading

The Gift That Keeps On Giving: Stock Returns Around CEO Stock Gifts to Family Members

We examine an overlooked type of insider transaction—CEOs' stock gifts to family members. CEOs should prefer to make family stock gifts at relative price minima, consistent with an estate and gift tax planning strategy called an estate freeze. We demonstrate that CEO freeze gifts generally follow temporary price suppressions and precede significant price appreciation, leading to substantial estate tax savings. Further, we find positive market returns one- and two-years following disclosure of freeze gifts. However, the market response to disclosure of these gifts is confounded by the delayed reporting regime for gifts. We demonstrate additional strategic behavior based on evidence of backdating, timing around earnings announcements, and subsequent sales of gifted shares preceding diminishing stock performance. Our findings suggest CEO family stock gifts provide a credible signal of future price performance, which market participants would benefit more from if promptly disclosed.

Brown, Jennifer L. and Huston, George Ryan and Wenzel, Brian, The Gift That Keeps On Giving: Stock Returns Around CEO Stock Gifts to Family Members (June 23, 2022). Review of Accounting Studies, Forthcoming, Available at SSRN: <https://ssrn.com/abstract=4144754>

Economic Policy Uncertainty and Insider Trading

This article examines the effects of economic policy uncertainty (EPU) on insider trading. Two hypotheses predict that EPU is positively related to insider trading volume and profitability: 1) the private benefits hypothesis, that insiders exploit their information advantage to realize abnormal profits, and 2) the signaling hypothesis, that insiders trade to signal private information to stock market participants. We find that EPU is significantly positively related to the profitability of insider purchases. We also find that insiders purchase more frequently during high-EPU periods. In

additional analysis, we find strong support for the signaling hypothesis, but no support for the private benefits hypothesis.

El Ghoul, Sadok and Guedhami, Omrane and Nash, Robert C. and Wang, He, Economic Policy Uncertainty and Insider Trading (May 3, 2022). Available at SSRN: <https://ssrn.com/abstract=4099611> or <http://dx.doi.org/10.2139/ssrn.4099611>

Is Insider Trading Evident in the Transactions of Members of the U.S. House of Representatives, in Their Two Most Heavily Traded Stocks: Apple and Microsoft

In 2012 President Obama signed into law the US Stop Trading On Congressional Knowledge (STOCK) Act to prohibit federal politicians from trading stocks, based on private information, for personal gain with an accompanying provision that they make public their transactions within 45 days of execution. Evidence points to this having the desired impact with politicians now doing no better than a portfolio of randomly selected stocks. This research takes a close look at the two most heavily traded stocks, by politicians: Apple and Microsoft. Findings indicate that the timing of trades does not indicate the use of any inside information that would guarantee substantial gain following a purchase or of selling in time to avoid significant losses, whether measured over the following trading day or five trading days after the execution. However, it should be noted that a significant number of politicians have been found to ignore the provision to make public their stock trades within 45 days, which may indicate that those trading on inside information are the same ones not reporting their transactions.

Johnson, Jackie, Is Insider Trading Evident in the Transactions of Members of the U.S. House of Representatives, in Their Two Most Heavily Traded Stocks: Apple and Microsoft (April 12, 2022). Available at SSRN: <https://ssrn.com/abstract=4081632> or <http://dx.doi.org/10.2139/ssrn.4081632>

Grief or Greed: Insider trading around CEO succession

This paper investigates market reaction to, and insiders' trading around, CEO succession events. Investors seem to react negatively to CEO resignation, but not to CEO retirement or death. Further, while investors do not react negatively to CEO turnover in high effective firms, their reaction is significantly negative when a high ability CEO is leaving a low effective firm. To achieve personal gains, insiders aggressively buy (sell) stocks before CEOs' retirement (resignation). More specifically, insiders, on the average firm in our sample, buy a \$1.8 million (sell a \$1.7 million) worth of shares before a CEO retirement (resignation) announcement. Consistent with the opportunism explanation, our results are stronger for firms in low litigation risk industries, firms with low institutional ownership, and firms with all-male executive teams. Our results are robust after the use of a placebo event design and control for CEO ownership, tenure, age, and gender.

Elnahas, Ahmed and Ismail, Ghada and Martin, Thomas M., Grief or Greed: Insider trading around CEO succession (April 16, 2022). Available at SSRN: <https://ssrn.com/abstract=4085141> or <http://dx.doi.org/10.2139/ssrn.4085141>

Excluded at the Top: Racial Differences in Senior Executives' Access to Information

We document that African-American executives, on average, earn zero abnormal profits from insider trades, in contrast to Asian-American and Caucasian executives who earn significantly positive abnormal profits. We also find that these differences cannot be attributed to differences in industry, firm or insider characteristics. These race differences are less profound in firms that emphasize diversity and employee equity. Our results imply that African-American executives are disadvantaged relative to non-African-American executives in access to insider information. Our findings suggest that executives who make corporate decisions based on a subset of all available information are likely to make suboptimal decisions.

Anginer, Deniz and Donmez, Anil and Seyhun, H. Nejat and Zhang, Ray, Excluded at the Top: Racial Differences in Senior Executives' Access to Information (April 14, 2022). Available at SSRN: <https://ssrn.com/abstract=4083642> or <http://dx.doi.org/10.2139/ssrn.4083642>

Holding Foreign Insiders Accountable

While executives at U.S. public companies must disclose trades in their company's stock within two business days, the Securities and Exchange Commission (SEC) has exempted insiders at foreign firms listed on U.S. exchanges from those requirements. Instead, insiders at foreign-domiciled but U.S.-listed firms report their trades on paper forms mail-filed with the SEC, evading market scrutiny that is well-understood to accompany American insiders' transactions.

Using a unique dataset based on digitized versions of thousands of paper filings over a five-year period, we study stock sales by officers and directors of foreign firms listed on U.S. exchanges. We show that insider sales at foreign firms are highly opportunistic—and far more so than those of their American counterparts. After insiders at Russian-domiciled, U.S.-listed firms sell shares, their stock prices decline, on average, by 26%; after insiders at China-domiciled firms trading on U.S. exchanges sell, their stock prices decline by 21%. And insiders at foreign-domiciled firms sell at scale: the average stock sale at the Chinese firms we study is worth more than \$18 million. This aggressive selling prior to large stock-price declines allows insiders at foreign companies listed on U.S. exchanges to avoid considerable losses.

Our findings raise the troubling prospect that insiders at foreign firms listed in the U.S. are shielded from the well-known market discipline that accompanies the timely disclosure of such trading required of their American counterparts. We argue that, if foreign firms are to be permitted to raise capital from American investors, their insiders' trading should be subject to the same level of transparency as insiders at American companies.

Jackson, Jr., Robert J. and Lynch, Bradford and Taylor, Daniel, Holding Foreign Insiders Accountable (April 1, 2022). NYU Law and Economics Research Paper No. 22-16, Available at SSRN: <https://ssrn.com/abstract=4072797> or <http://dx.doi.org/10.2139/ssrn.4072797>

Uncertain times and the insider perspective

This paper examines insiders' informational privilege by studying the nexus between aggregated self-reported insider trades and Economic Policy Uncertainty (EPU). We demonstrate that firm insiders act in response to the first signs of uncertainty as it appears in the media, and high-ranked

managers, such as CEOs and CFOs, react more promptly than other insiders. Our findings further support the idea that insiders' indirect informational advantages allow them to interpret the significance of public information for cash flows more accurately in their own companies. Our study is the first to examine insiders' behavior using pure public information; it is also the first to exclude the influence of private information completely. We also consider various measures of EPU, including global and categorical indices representing economic, political uncertainty, while taking the financial crisis period into account.

Brendan Lambe, Zhiyong Li, Weiping Qin, Uncertain times and the insider perspective, *International Review of Financial Analysis*, Volume 81, 2022, 102138, ISSN 1057-5219, <https://doi.org/10.1016/j.irfa.2022.102138>. (<https://www.sciencedirect.com/science/article/pii/S1057521922001053>)

I only fear when I hear: How media affects insider trading in takeover targets

We study how target firm insiders respond to *Wall Street Journal* articles referring to illegal insider trading in past mergers. Such articles lead to target insider share purchases before bid announcement to drop by 75%. This effect is stronger nearer the bid announcement and increases with article visibility. It remains significant after controlling for public enforcement intensity, but is weakened by the greater potential for profitable trading. Our results suggest insider trading articles temporarily heighten the perception of litigation and reputation risks. Overall, our study indicates that such articles have a meaningful short-term deterrence effect on opportunistic insider trading, and highlights the disciplinary role of the media.

Mark Aleksanyan, Jo Danbolt, Antonios Siganos, Betty (H.T.) Wu, I only fear when I hear: How media affects insider trading in takeover targets, *Journal of Empirical Finance*, Volume 67, 2022, Pages 318-342, ISSN 0927-5398, <https://doi.org/10.1016/j.jempfin.2022.04.004>. (<https://www.sciencedirect.com/science/article/pii/S0927539822000378>)

Filtration enlargement-based time series forecast in view of insider trading

This survey reviews filtration enlargement models in view of insider trading. Although filtration enlargement aptly models insiders' informational advantage, the theoretical results have not attracted the attention of the empiricists, owing mainly to the lack of a bridge transforming the results to testable hypotheses, and/or the absence of econometrics method linking the hypotheses and the data. This survey provides a feasible avenue to estimate insider information and to detect trading from a relatively sophisticated theoretical model, where the dynamics of publicly available data (e.g., stock price) implies insider information before the information is completely digested. We complete the survey with an empirical illustration based on simulated data.

Bennett, L. M., & Hu, W. (2022). Filtration enlargement-based time series forecast in view of insider trading. *Journal of Economic Surveys*, 1– 29. <https://doi.org/10.1111/joes.12503>

Are All Directors Treated Equally? Evidence from Director Turnover Following Opportunistic Insider Selling

This study investigates the likelihood of director turnover following opportunistic insider selling. Given that opportunistic insider selling may be costly to a firm due to potential legal risk and firm

legitimacy concerns, we hypothesize that directors engaging in this type of transactions have a higher likelihood of subsequently leaving the board. Using archival data of 11,409 directors in 2280 US firms from 2005 to 2014, univariate comparisons show that directors engaging in opportunistic insider selling are about 8% more likely to exit their firms' board compared to directors not engaging in this behavior. Furthermore, multivariate results show that the likelihood of director departure following opportunistic insider selling is higher for some directors but not all. Specifically, directors who are especially valuable to the board or costly to replace do not seem to experience elevated levels of turnover. Interestingly, this difference in director turnover is only observed in smaller firms. We find that in larger firms, the likelihood of director turnover following opportunistic insider selling does not depend on director characteristics. As such, results seem to suggest that boards do not homogeneously self-regulate in this context as some directors seem to be shielded from turnover following unethical behavior.

De Groote, S., Bruynseels, L. & Gaeremynck, A. Are All Directors Treated Equally? Evidence from Director Turnover Following Opportunistic Insider Selling. *J Bus Ethics* (2022). <https://doi.org/10.1007/s10551-022-05127-9>

Short sellers and insider trading profitability: A natural experiment

We examine the impact of short sellers on insider trading profitability using a natural experiment of a pilot program which relaxed short-selling constraints for randomly selected pilot stocks. We find that pilot firms experienced a significant decrease in insider trading profitability during the pilot program. The results are more pronounced for the pilot firms with poor information quality, and for the pilot firms without corporate restrictions on insider trading. Our evidence suggests that short sellers serve an important market disciplinary role by reducing insider trading profitability.

Xia Chen, Qiang Cheng, Ting Luo, Heng Yue, Short sellers and insider trading profitability: A natural experiment, *Journal of Accounting and Public Policy*, Volume 41, Issue 3, 2022, 106936, ISSN 0278-4254, <https://doi.org/10.1016/j.jaccpubpol.2021.106936>.
(<https://www.sciencedirect.com/science/article/pii/S0278425421001198>)

Insider trading, overconfidence, and private information flow

In this study, we investigate a dynamic model wherein an overconfident and a risk-neutral informed trader optimally exploit their long-lived private information regarding the value of an asset. We find that when the degree of overconfidence becomes larger, or the intensity of private information flow becomes larger relative to the initial private signal, the market becomes more stable. Additionally, we find that the greater the intensity of private information flow relative to the initial private signal, the more evident the patient transaction and the slower the information is incorporated in the price.

Ying Jiang, Hong Liu, Insider trading, overconfidence, and private information flow, *The North American Journal of Economics and Finance*, Volume 60, 2022, 101664, ISSN 1062-9408, <https://doi.org/10.1016/j.najef.2022.101664>.
(<https://www.sciencedirect.com/science/article/pii/S1062940822000225>)

Market Manipulation

Return prediction or investor manipulation? Recommendations of non-professional analysts and stock price movement

We examine article, author and firm characteristics of investment articles published by non-professional analysts on the social media investment platform Seeking Alpha from 2006 to 2020 leading to visible market value changes. We show that there are differences between articles followed by stock price changes in the short-term and articles predicting the long-term value of companies. Our results suggest that the market does not perfectly process the information provided through these articles and investors are influenced by text characteristics and visual depictions. However, most of these text characteristics are unimportant for articles focusing on long-term market price predictions. Instead, articles predicting long-term performance focus more on content-related characteristics.

Breuer, Wolfgang and Knetsch, Andreas and Sachsenhausen, Eric, Return prediction or investor manipulation? Recommendations of non-professional analysts and stock price movement (May 1, 2022). Available at SSRN: <https://ssrn.com/abstract=4097971> or <http://dx.doi.org/10.2139/ssrn.4097971>

Intended Consequences of More Frequent Portfolio Disclosure

Exploiting the 2004 regulatory change that requires mutual funds to increase disclosure frequency from semiannual to quarterly, we investigate the effects of increased portfolio transparency on the manipulation activities of mutual funds and the capital allocation decisions of investors. A difference-in-differences estimation shows no evidence that portfolio manipulation practices -- portfolio pumping, style drift, and window dressing -- decrease following the rule change. On the other hand, investment efficiency, as measured by the return predictability of fund flows, increases primarily due to institutional investors' improved ability to avoid poorly performing funds. The findings suggest that while increasing portfolio transparency allows sophisticated investors to make more informed asset allocation decisions, it is insufficient to deter fund managers from engaging in opportunistic behavior.

Chung, Ji-Woong and Jo, Koren M. and Kang, Sejin and Kim, Jaeouk, Intended Consequences of More Frequent Portfolio Disclosure (April 17, 2022). Available at SSRN: <https://ssrn.com/abstract=4086186> or <http://dx.doi.org/10.2139/ssrn.4086186>

Market Manipulation and Corporate Culture

We propose that market manipulation, which brings about both managerial short-termism and an opaque environment, has a negative causal impact on the four dimensions of corporate culture: compete, control, create, and collaborate. We test this proposition by matching corporate culture dimensions from textual analysis of 10-K reports to suspected cases of market manipulation using NASD surveillance software for all U.S. publicly traded firms from 2007-2018. The data indicate market manipulation consistently negatively affects each of the corporate culture dimensions in subsequent years, and this effect is not temporary. The weakening of culture arising from market manipulation is most pronounced for compete culture, followed by a similar effect for create and control, and least pronounced for collaborate culture. The effect of manipulation on culture is more

pronounced with repeat manipulations over successive years. The data do not indicate proxies for governance to mitigate the impact of manipulation on culture.

Akter, Maimuna and Cumming, Douglas J. and Ji, Shan and Verdoliva, Vincenzo, Market Manipulation and Corporate Culture (April 10, 2022). Available at SSRN: <https://ssrn.com/abstract=4080428> or <http://dx.doi.org/10.2139/ssrn.4080428>

Competition and manipulation in derivative contract markets

This paper studies manipulation in derivative contract markets. When traders hedge factor risk using derivative contracts, traders can manipulate settlement prices by trading the underlying spot goods. In equilibrium, manipulation can make all agents worse off. The model illustrates how contract market manipulation can be defined in a manner distinct from other forms of strategic trading behavior, and how the structure of contract and spot markets affect the size of manipulation-induced market distortions.

Anthony Lee Zhang, Competition and manipulation in derivative contract markets, *Journal of Financial Economics*, Volume 144, Issue 2, 2022, Pages 396-413, ISSN 0304-405X, <https://doi.org/10.1016/j.jfineco.2022.02.001>.
(<https://www.sciencedirect.com/science/article/pii/S0304405X22000216>)

Impact of False Information from Spoofing Strategies: An ABM Model of Market Dynamics

Spoofing has been identified a form of market manipulation, and it is harmful to the stability of the financial market. However, the effect of spoofing activity is hard to analyze due to its complex interactions within the market and lack of data. This paper presents an agent-based simulation model of the continuous double auction market to replicate and analyze the market dynamics under spoofing conditions. The simulated market consists of fundamentalist, chartist, zero intelligence agents, and spoofing agents where several existing market stylized facts are validated. The results show that in the presence of the spoofing agents and their market manipulation activities, the market volatility would increase, and spoofing activities would exacerbate the price variations. The fundamentalist agents would suffer a loss during the spoofing period but would be able to make profit during the price recovery phase. The chartist agents would suffer a loss when the spoofing agent realized its profit and the price recovery process start, at which they falsely believed the price movement trend would continue. The Sharpe ratio analysis also indicates the market manipulation activities of the spoofing agent would give themselves an unfair advantage resulting in a significantly higher Sharpe ratio than the other agents.

H. Li and S. Y. Yang, "Impact of False Information from Spoofing Strategies: An ABM Model of Market Dynamics," 2022 IEEE Symposium on Computational Intelligence for Financial Engineering and Economics (CIFER), 2022, pp. 1-10, doi: 10.1109/CIFER52523.2022.9776070.
<https://ieeexplore.ieee.org/abstract/document/9776070>

Cross-Market Spoofing

Since 2013, regulatory investigations have revealed widespread manipulation and collusive practices among banks active in over-the-counter (OTC) markets. These discoveries have resulted in fines and settlements amounting to billions of US dollars, criminal proceedings and stricter

regulation worldwide. However, recent legal cases and regulatory reports indicate that authorities have stepped up their efforts to crack down on so-called “cross-market spoofing”. The manipulative tactic involves a combination of a genuine order in one market and a spoof order in another, which is notoriously difficult to detect. In this paper, we use a high-frequency data set of limit order book snapshots from the foreign exchange (FX) spot market to develop and test a methodology to assess the feasibility, and hence potential prevalence, of cross-market spoofing. Our findings show that predictable reactions follow potential single-market spoofs that a market manipulator may exploit. However, we also find that predictability may be observed in closely related markets. In particular, we discover that EUR/JPY offers a reliable pathway for a manipulator to exploit via spoof orders at deeper levels in the EUR/USD or USD/JPY limit order books. Overall, our pilot study lends support to the increasing attention to cross-market manipulation by compliance officers and financial regulators.

Stenfors, A., Doraghi, M., Soviany, C., Susai, M., & Vakili, K. (2022). Cross-Market Spoofing (No. 2022-04). University of Portsmouth, Portsmouth Business School, Economics and Finance Subject Group.
https://repec.port.ac.uk/EconFinance/PBSEconFin_2022_04.pdf

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