ARTICLE

SECURITIES FRAUD AND THE MARKET FOR INDIVIDUAL STOCKS

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As long as stock markets have existed, so too have those who invest for idiosyncratic reasons unrelated to achieving financial returns. Some investors may be motivated by personal utility, others seek to signal loyalty to corporations, some might see their investments as an expression of their faith, others chase the latest fads, and still others simply make uninformed investment choices. Yet until relatively recently, these forms of demand-driven investing have received little attention. Most commentary has either dismissed the phenomenon as noise or attempted to absorb it into existing models of fundamental value-based investing.

This Article counters that understanding. It argues that demand-driven investing can create a market for individual stocks that is distinct from noisy trading as well as from fundamental-value-driven trading. This is especially so as the voices of retail investors, social media influencers ("finfluencers"), and other non-traditional, values-driven

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investors in today's capital markets have grown in volume and strength. It is increasingly difficult to ignore the investors who systematically choose companies to invest in based on demand-driven factors such as alignment on environmental, social and governance (ESG) issues, an influential investor's commentary on a security, and preferences between cultural and political values—in addition to seeking financial returns.

Understanding the demand-driven component of investor decision-making as creating a market for individual stocks yields fresh insights for today's stock market information ecosystem and the securities laws' ability to respond to misinformation within that ecosystem. Specifically, this Article offers a framework to explain how demand-driven investing motivates investors and affects price discovery. This then challenges the limits of existing defenses against misinformation in the securities markets, in particular the scope of Rule 10b-5. Solely protecting financial information results in an incomplete understanding of investor motivations. On the other hand, the idiosyncratic nature of demand-driven investing can make determinations of liability inconsistent and unpredictable. This Article explores the complex doctrinal and policy questions that are implicated.

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INTRODUCTION

Since their enactment nearly a century ago, securities fraud laws have provided a primary defense against misinformation in the stock markets. And for nearly a century, these laws have adapted to emerging technologies and iterative developments in financial crime.[1] Yet for all their expansiveness, the securities fraud laws do not protect against any and all statements. Section 10(b) of the Securities Exchange Act and its accompanying Rule 10b-5,[2] under which

[1] *See generally* A.C. PRITCHARD & ROBERT B. THOMPSON, A HISTORY OF SECURITIES LAW IN THE SUPREME COURT (2023) (providing a history of the development of federal securities laws).

[2] Securities Exchange Act of 1934, 15 U.S.C., § 78j(b). Rule 10b-5 makes it illegal: (a) To employ any device, scheme, or artifice to defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not

the majority of securities fraud lawsuits are brought by private plaintiffs, protect against statements that are false, material, and made in connection with the purchase or sale of a security (among other requirements).[3] But what are the boundaries around actionable misinformation?

As the voices of retail investors, social media influencers ("finfluencers"), and other non-traditional, values-driven investors in today's capital markets have grown in volume and strength, the answer to this question has become increasingly fraught. Do certain forms of non-traditional, non-financial information move markets and cause the same sort of harms that false financial information does? And, how well equipped are the securities fraud laws to respond? While these questions are not new, recent trends in stock market trading, especially with respect to retail investors, make them more salient than ever before.

This is because today's stock market information ecosystem is changing. Different stocks experience different demand across investors—as a result of non-financial characteristics. Investors increasingly choose companies to invest in based on demand-driven factors such as alignment on environmental, social and governance (ESG) issues, an influential investor's commentary on a security, and preferences between cultural and political values—in addition to seeking financial returns. These demand-driven factors differ from the kinds of information traditionally believed to move stock prices—primarily financial information related to an issuer's cash flows. Traditional corporate finance theory

misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person. Employment of Manipulative and Deceptive Devices, 17 C.F.R. § 240.10b-5 (2023).

[3] A private claim under Section 10(b) must show: a materially manipulative or deceptive misstatement; made with scienter; in connection with a securities transaction; that the plaintiff relied on the statement; economic losses; and loss causation. *See* Ann M. Lipton, *Fact or Fiction: Flawed Approaches to Evaluating Market Behavior in Securities Litigation*, 20 TENN. J. BUS. L. 741 (2019) (citing Dura Pharm. v. Broudo, 544 U.S. 336, 341–42 (2005)). Government-based actions do not require a showing of reliance. *See* Adam C. Pritchard & Robert B. Thompson, *Texas Gulf Sulphur and the Genesis of Corporate Liability Under Rule 10b-5*, 71 SMU L. REV. 927, 939–42 (2018).

indicates that investors should be indifferent between individual stocks due to their high substitutability and should accordingly make investment decisions to achieve a portfolio with specific financial characteristics.

This Article counters that understanding. It argues that demand-driven investing can create a market for individual stocks and offers a framework to explain how demand-driven investing motivates investors and affects price discovery. While demand-driven investing has long been understood to exist, most commentary has either dismissed the phenomenon as noise or attempted to absorb it into existing models of fundamental value-based investing. This Article argues instead that demand-driven investing can create a market for individual stocks that is distinct from noisy trading as well as from fundamental value-driven trading.

Understanding the market as encompassing demand for individual stocks yields important insights for the reach and limits of securities fraud laws. In a world where stocks and investors respond primarily to financial information, securities fraud laws are sensibly designed to protect the informational integrity of stock prices and investors' reliance thereon. Securities fraud laws prohibit materially misleading information, which is typically information about an issuer's financials. The final inquiry has always been somewhat fact-specific, but the underlying theory reflects a relatively linear relationship between stock price, investor demand, and financial information. In other words, securities fraud laws generally assume no market for individual stocks.

Shifting the assumption around the existence of a market for individual stocks challenges the limits of existing defenses against misinformation in the securities markets by raising both doctrinal and policy questions. This Article explores the doctrinal questions by considering the elements of a securities fraud action in cases where investing is driven by demand-related factors either in addition to or in place of traditional financial factors. In a world where there is a market for individual stocks, and demand-driven factors drive stock price movements and investor behavior, traditional elements of securities fraud fit rather awkwardly. For example, while

demand-driven investing may expand the boundaries of material information, idiosyncratic investment reasons may make class-wide reliance more difficult to prove.

The policy questions are also complex. Should the securities laws protect investors who make decisions based on demand or non-traditional types of information? Solely protecting financial information results in an incomplete understanding of investor motivations. An obvious risk is the actor who intentionally posts communications that contain non-financial and non-falsifiable information. Under most interpretations of the securities laws, those harmed by such behavior (those who traded and lost money as a result of such behavior) would likely not be protected. Such trading would most likely be chalked up to noise and imprudence, neither of which is, by itself, actionable under the securities laws. On the other hand, the idiosyncratic nature of demand-driven investing can make determinations of liability inconsistent, unpredictable, and perhaps too fact-bound. After all, the stock market is *not* the traditional market for consumer goods and services, even if the market for individual stocks shares some common characteristics.

The remainder of this Article proceeds as follows. Section I identifies four areas where evidence supports the existence of a market for individual stocks: (a) ESG factors, (b) political issues, (c) retail trading, (d) and finfluencers. Section II summarizes traditional finance theory. Section III situates the market for individual stocks against the traditional theory. Section IV applies existing securities fraud doctrine to a market for individual stocks. Section V considers implications for securities fraud doctrine and policy. A brief conclusion follows.

I. A "GENERATION OF STOCK PICKERS"

On February 8, 2021, shortly after investors on the Reddit.com /wallstreetbets forum coordinated to drive up the share price of GameStop from around $4 per share to $483 per

share at one point,[4] Forbes ran a story titled *Millennials Will Propel Stocks Higher For Years*.[5] The author argued that younger investors have been and will continue to enter the stock market, and that they "want to own companies changing the world."[6] According to the author, "[t]his is a generation of stock pickers."[7]

A "stock picker," or someone who selects individual stocks for any number of particular reasons, differs from the traditional picture of an investor. The traditional picture of an investor is of a person who invests in the stock market largely to achieve a particular financial profile.[8] That person invests to grow their wealth or to manage their money and is typically indifferent between individual stocks given their high substitutability in a portfolio targeted at a particular risk and return profile.[9] This person's portfolio might consist mostly of broad index funds, rather than individually selected stocks.

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[4] *See* Nathaniel Popper & Kellen Browning, *The 'Roaring Kitty' Rally: How a Reddit User and His Friends Roiled the Markets*, N.Y. TIMES (Jan. 29, 2021), https://www.nytimes.com/2021/01/29/technology/roaring-kitty-reddit-gamestop-markets.html; Nicolas Vega, *Here's How Much Money You'd Have if You Invested $1,000 in GameStop During Last Year's Rally*, CNBC (Jan. 19, 2022), https://www.cnbc.com/2022/01/19/how-much-money-youd-have-if-you-invested-1000-dollars-in-gamestop-in-2021.html [https://perma.cc/TH7L-A35S].

[5] Stephen McBride, *Millennials Will Propel Stocks Higher for Years*, FORBES (Feb. 8, 2021, 9:33 AM), https://www.forbes.com/sites/stephenmcbride1/2021/02/08/millennials-will-propel-stocks-higher-for-years/ [https://perma.cc/CNH4-ZK3A].

[6] *Id.*

[7] *Id.*

[8] *See infra* Section II.A.

[9] *See* Lynn A. Stout, *Inefficient Markets and the New Finance*, J. FIN. TRANSFORMATION, May 2005, at 5, https://ssrn.com/abstract=729224 (explaining that the standard Capital Asset Pricing Model combined with the Efficient Capital Markets Hypothesis predicts that securities are all accurately priced, which means that all securities should be perfect substitutes for one another, and accordingly, "[t]he demand for any particular stock accordingly should be perfectly flat. Raising price above the level set by an efficient market causes investors to refuse to purchase any shares, while lowering price below market creates infinite demand."); Caleb N. Griffin, *Extrinsic Value*, 75 ALA. L. REV. 423, 430 (2023) ("Since there are several thousand stocks that can be combined in nearly infinite ways to provide an investor's desired risk and return characteristics, no one stock is essential.").

By contrast, a stock picker shares some characteristics with a consumer in the traditional market for goods and services. The traditional picture of a consumer in the market for goods and services is of a person who makes consumption choices for a host of idiosyncratic reasons driven by personal utility: personal preferences, brand awareness, signaling, and so on.[10] Consumer demand varies widely across individual, product, and industry—and companies compete fiercely to capture consumer demand.[11]

Increasing evidence demonstrates that at least some investors today behave like stock pickers.[12] Specifically, investors increasingly trade based on demand-related factors, in addition to seeking financial returns.[13] Like they would with traditional consumer goods, investors expect—at least to some degree—that their financial investments also reflect their preferences and values.[14] Some of those preferences and values may be financial, and indeed may be primarily financial.[15] But at least some, some of the time, are not.[16]

When strong enough, individual investor demand can affect stock prices and behave like traditional forms of market-moving information.[17] In doing so, demand can shape a market for individual stocks, where stocks can trade at a sustained premium (or discount) to the price that would otherwise be dictated by their fundamental value.[18] This Section identifies four areas where evidence supports the

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[10] *See infra* Section III.C-D.

[11] *See* MERRITT B. FOX ET AL., THE NEW STOCK MARKET: LAW, ECONOMICS, AND POLICY 1 (2019) ("Whereas many market transactions involve the consumption of goods that provide personal utility, transactions in financial markets involve the pursuit of claims on future cash flows and control rights."); Alexandra Roberts, *False Influencing*, 109 GEO. L. J. 81, 82–85 (2020) (describing myriad ways in which companies market and advertise products, especially through the use of influencers).

[12] *See infra* Section II.A-E.

[13] *See infra* Section II.A-E.

[14] *See infra* Section II.A-E.

[15] *See infra* Section II.A-E.

[16] *See infra* Section II.A-E.

[17] *See infra* Section III.B-C.

[18] *See infra* Section III.B-C.

existence of a market for individual stocks. Part A describes environmental, social, and governance ("ESG") factors, Part B discusses political values, Part C evaluates the retail premium, and Part D looks at finfluencers. Part E then provides overarching observations.

A. Environmental, Social, and Governance ("ESG") Issues

In recent years, stocks associated with environmental, social, and governance ("ESG") factors have tended to exhibit sustained, abnormally high returns.[19] Bloomberg has forecast that global ESG assets will reach $40 trillion by 2030,[20] and a Morgan Stanley report in January 2024 found that more than 50% of individuals surveyed planned to increase allocations to sustainable investments over the next year.[21] A multitude of

[19] *See* Griffin, *supra* note 9 at 443; TENSIE WHELAN, ET AL., NYU STERN CTR. FOR SUSTAINABLE BUS., ESG AND FINANCIAL PERFORMANCE: UNCOVERING THE RELATIONSHIP BY AGGREGATING EVIDENCE FROM 1,000 PLUS STUDIES PUBLISHED BETWEEN 2015 – 2020 (2021), https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021%20Rev_0.pdf [https://perma.cc/43CA-2WX7] (finding positive returns associated with ESG strategies based on evidence from 1,000 studies); MARK FULTON ET AL., DEUTSCHE BANK GRP., SUSTAINABLE INVESTING: ESTABLISHING LONG-TERM VALUE AND PERFORMANCE 8 (2012) (surveying over 100 academic studies and concluding that superior risk-adjusted returns are correlated with Corporate Social Responsibility (CSR) and ESG factors).

[20] *Global ESG Assets Predicted to Hit $40 Trillion by 2030, Despite Challenging Environment, Forecasts Bloomberg Intelligence*, BLOOMBERG (Feb. 8, 2024), https://www.bloomberg.com/company/press/global-esg-assets-predicted-to-hit-40-trillion-by-2030-despite-challenging-environment-forecasts-bloomberg-intelligence/ [https://perma.cc/GY8V-3YVD].

[21] *Individual Investors' Interest in Sustainability is on the Rise*, MORGAN STANLEY (Jan. 26, 2024), https://www.morganstanley.com/ideas/sustainable-investing-on-the-rise [https://perma.cc/6LHC-GQ4D]. *See also* MORGAN STANLEY INST. SUSTAINABLE INV. & MORGAN STANLEY WEALTH MGMT., SUSTAINABLE SIGNALS UNDERSTANDING INDIVIDUAL INVESTORS' INTERESTS AND PRIORITIES 5 (2022), https://www.morganstanley.com/content/dam/msdotcom/en/assets/pdfs/MSInstituteforSustainableInvesting-SustainableSignals-Individuals-2024.pdf [https://perma.cc/49A8-CJXZ] (finding that "77% of surveyed individual investors globally are interested in sustainable investing").

ESG-targeted ETFs and funds have cropped up in response.[22] Other examples abound.[23]

Traditional theories of corporate law do not cleanly explain the rise of ESG. ESG factors do not necessarily convey financial information related to an issuer's fundamental value—the traditional category of market-moving information that primarily determines share prices and drives investor decision-making.[24] A number of viewpoints have been offered in response: those who seek to explain ESG via traditional shareholder primacy theories, those who believe that ESG will promote long term value, and those who believe ESG and stakeholderism will lead to further managerial entrenchment.[25] Professors Michal Barzuza, Quinn Curtis, and David Webber have identified a key drawback of these theories; namely, "they do not fully account for the rising social pressure on firms to act responsibly."[26] That is, there is a demand element to the rise of ESG for which current theories fail to account. Professors Barzuza, Curtis, and Webber show that growing demand for socially responsible corporate behavior has generated strong incentives for

[22] *See* Jill Fisch & Robert Eccles, *The Politics of Values-Based Investing*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Sep. 7, 2022) https://corpgov.law.harvard.edu/2022/09/07/the-politics-of-values-based-investing/ [https://perma.cc/2R7M-J4AD].

[23] One noteworthy example involved a small hedge fund called Engine No. 1 successfully installing three directors on Exxon's board in a push for Exxon to reduce its carbon footprint after BlackRock, Vanguard and State Street supported Engine No. 1. *See* Matt Phillips, *Exxon's Board Defeat Signals the Rise of Social-Good Activists*, N.Y. TIMES (June 9, 2021), https://www.nytimes.com/2021/06/09/business/exxon-mobil-engine-no1-activist.html.

[24] *See infra* Section II.A. *See also, e.g.*, Kevin S. Haeberle, *Fraud-On-The-Market Liability in the ESG Era*, 98 TUL. L. REV. 641, 651 (2024) (arguing that "ESG disclosure represents a significant new type of public-company disclosure" and explaining that "[i]n the ESG area we thus find a notable movement motivated by broad social concerns intersecting with what has been to date a very cash-flow-oriented, specialized area of law").

[25] *See* Michal Barzuza et al., *The Millennial Corporation: Strong Stakeholders, Weak Managers*, 28 STAN. J.L. BUS. & FIN. 257, 268–69 (2023) (surveying various theories that seek to explain the rise of ESG).

[26] *Id.* at 270.

managers to prioritize ESG goals.[27] It can also shape the behavior of index funds, who should be indifferent to the performance of individual firms yet aggressively vote against boards with poor ESG records.[28]

This demand element can also shape investors' desired stock portfolios, and it does not necessarily reflect the desire to achieve a particular risk and return profile. It turns out that investors can have significant prosocial goals, and evidence accordingly reflects the non-insignificant role played by rising investor demand for ESG in its anomalous historical outperformance of the broader stock market.

B. Political Values

While corporations have long been involved in politics,[29] in recent years, the line between business and politics has blurred significantly. For example, firms withdrew from Russia following its 2022 invasion of Ukraine.[30] In response to the 2020 murder of George Floyd, firms dramatically increased the number of directors from underrepresented groups.[31] In 2023, the state government of Florida retaliated against Disney after Disney denounced Florida's anti-

[27] *Id.* at 255 (identifying five channels of social demand: markets (investors, consumers, employees); risk averse CEOs seeking to reduce personal risk from events such as boycotts; index fund managers seeking to attract ESG-focused investors; activist hedge funds; and regulatory pressures).

[28] *Id.* at 271.

[29] Jill Fisch & Jeff Schwartz, *How Did Corporations Get Stuck in Politics and Can They Escape?*, 3 U. CHI. BUS. L. REV. 325, 332–38 (2024) (describing the rise of political posturing by corporations). Political spending has also long been a part of corporate behavior. *See, e.g.*, Jill E. Fisch, *Frankenstein's Monster Hits the Campaign Trail: An Approach to Regulation of Corporate Political Expenditures*, 32 WM. & MARY L. REV. 587 (1991); Dorothy S. Lund & Leo E. Strine, Jr., *Corporate Political Spending Is Bad Business*, HARV. BUS. REV. (2022).

[30] *See* Peter Stiff, *From Apple to McDonald's, What Companies Have Pulled Back from Russia?*, WALL ST. J. (Mar. 4, 2022), https://www.wsj.com/articles/what-companies-have-pulled-back-from- russia-11646425481.

[31] *See* Barzuza et al., *supra* note 25, at 258.

LGBTQ+ laws.[32] And the overturning of *Roe v. Wade* spurred many businesses to offer employees financial support for reproductive care access.[33] Terming this the "new corporate social and political activism," Professor Tom Lin explains that consumers, employees, and various stakeholders "now expect and demand that businesses express their social values as they relate to critical issues of the times."[34] Professors Jill Fisch and Jeff Schwartz term this "corporate political posturing" and argue that corporations are responding to competitive pressure and demand from customers, employees, and investors.[35] ESG itself has been politicized.[36]

And similarly to ESG, a firm's political actions do not obviously convey financial information related to the firm's fundamental value. Yet investors can also seek to align their portfolios along political values, and these values may themselves reflect ESG factors. Professors Robert Eccles and Jill Fisch have pointed out the degree to which both conservatives and liberals utilize "values-based strategies—that is, investing according to a set of principles irrespective of any link between those principles and economic value."[37] One example is the S&P 500 Catholic Values ETF (ticker symbol CATH), which "is designed to provide exposure to U.S.

[32] *See* Jesus Jiménez & Brooks Barnes, *What We Know About the DeSantis-Disney Dispute*, N.Y. TIMES (May 19, 2023), https://www.nytimes.com/article/disney-florida-desantis.html.

[33] *See* Emma Goldberg, *These Companies Will Cover Travel Expenses for Employee Abortions*, N.Y. TIMES (Aug. 19, 2022), https://www.nytimes.com/article/abortion-companies-travel-expenses.html; Anna Toniolo, *Corporate Participation in Social Debates*, 3 U. CHI. BUS. L. REV. (2024) (examining public companies' responses to the reversal of *Roe v. Wade* and finding that corporations speak for strategic reasons and may do so inconsistently, such that "corporate statements on social and political issues do not represent a meaningful signal of companies' values").

[34] Tom C.W. Lin, *The New Corporate Political Governance*, 65 B.C. L. REV. 833, 843 (2024).

[35] Fisch & Schwartz, *supra* note 29, at 325 (arguing that "corporations themselves are ambivalent about taking policy positions but are caught in a feedback loop in which customers, employees, and investors demand political involvement").

[36] *See* Lin, *supra* note 34, at 850–52 (describing the politicization of ESG).

[37] Fisch & Eccles, *supra* note 22.

equity securities included in the S&P 500® Index while maintaining alignment with the moral and social teachings of the Catholic Church."[38] Another is the Point Bridge America First ETF (ticker symbol MAGA), which advertises for investors to "[b]ring Republican [i]nvestment [v]alues to [l]ife by [i]nvesting in the MAGA ETF."[39] Professor Amelia Miazad has explored what she terms "faith investors," or investors who understand their investments to be direct expressions of their faith.[40]

C. The Retail Premium

One subset of investors—retail investors—seems to especially care about the companies they are invested in. One dramatic example involved retail investors coordinating in January 2021 to drive up the share price of GameStop, seeking to "punish" Wall Street institutions. Another saw retail investors coming together to "save" AMC from bankruptcy for nostalgia-related reasons in 2020.[41]

One result of the rise in retail trading has been the apparent stickiness of a retail premium. As one commentator observed, "if there is one single most important lesson from

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[38] *Global X S&P 500® Catholic Values ETF 2024 Summary Prospectus*, GLOBAL X (Mar. 1, 2024), https://www.globalxetfs.com/prospectus-regulatory/?id=547 [https://perma.cc/6PUG-DAQL] ("[A]s of September 18th, 2023, the activities screened for constituents' exclusion by the S&P 500® Catholic Values Index included Abortion, Contraceptives, Human Embryonic Stem Cells, Adult Entertainment, Controversial Weapons, Military Contracting, Gambling, Tobacco, Cannabis, and Child Labor").

[39] INVEST POLITICALLY, https://www.investpolitically.com [https://perma.cc/N4WD-Y9UP] (last visited Mar. 4, 2025).

[40] *See* Amelia Miazad, *Faith Investors* (Nov. 1, 2024) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5152567 [https://perma.cc/KSM3-UMWL].

[41] *See, e.g.*, Matt Turner, *A Meme Stock Is Born: How to Spot the Next Reddit Favorite*, BLOOMBERG (June 13, 2021), https://www.bloomberg.com/news/articles/2021-06-13/a-meme-stock-is-born-how-to-spot-the-next-reddit-favorite [https://perma.cc/S5LT-EQLW]; Erin Griffith, *No End to Whiplash in Meme Stocks, Crypto and More*, N.Y. TIMES (Nov. 8, 2021), https://www.nytimes.com/2021/06/23/technology/no-end-to-whiplash-in-meme-stocks-crypto-and-more.html.

the last few years in financial markets, it is that stocks with large retail followings on social media can sustainably trade at a large premium to their intrinsic value."[42] In previous work, I have explored the mechanisms by which retail investors, when trading in coordinated fashion, can predictably and sustainably move stock prices.[43] To the extent that retail traders are motivated by cultural values or other non-financial reasons, the resulting price movements will reflect those non-financial values—i.e., non-fundamental value.[44] In other words, the resulting price movements will reflect retail traders' demand premium.

Firm behavior also implicitly acknowledges the retail demand premium. As firms have responded to investors' ESG and political demands, they have also responded to the rise in retail investing. Issuers are increasingly reaching out to retail investors through social media and responding to concerns raised by retail investors.[45] Certain firms offer promotions and inducements to their shareholders, which should not affect demand for the firms' stock (since such promotions and inducements have nothing to do with the firm's fundamental value)—yet they seem to.[46] If such inducements increase demand

[42] Matt Levine, *Bill Ackman Can Tweet His New Fund*, BLOOMBERG (July 16, 2024), https://www.bloomberg.com/opinion/articles/2024-07-16/bill-ackman-can-tweet-his-new-fund [https://perma.cc/8XS9-G47U].

[43] *See* Sue S. Guan, *Meme Investors and Retail Risk*, 63 B.C. L. REV. 2051 (2022); *see also* Dhruv Aggarwal et al., *The Meme Stock Frenzy: Origins and Implications*, 96 S. CAL. L. REV. 1387 (2024) (arguing that "the emergence of meme stocks is part of longer-running digital transformations in trading, investing, and governance").

[44] *See id.*

[45] *See, e.g.*, Nina Trentmann, *Connecting with Small Shareholders Remains a Challenge for Companies*, WALL ST. J. (Feb. 7, 2022), https://www.wsj.com/articles/connecting-with-small-shareholders-remains-a-challenge-for-companies-11644229801 ("Executives are turning to new methods, such as tools that analyze reams of data and social-media platforms, to determine just who their small investors are and how to reach them, while also using traditional approaches like shareholder letters and meetings.").

[46] *See* Griffin, *supra* note 9, at 26–27. These promotions range from discounts on new cars for Ford shareholders to collectible shareholder certificates that only Disney shareholders can purchase. *Id.*

for a firm's stock, and that demand can affect the firm's share price, offering such inducements makes perfect sense. And other firms deliberately gear corporate decisions and communications to retail investors. In November 2024, Palantir Technologies announced a move from the NYSE to the Nasdaq, which led to a more than 10% jump in stock price.[47] In a later-deleted tweet, a board member said, "We are moving @PalantirTech to Nasdaq because it will force billions in ETF buying and deliver 'tendies' to our retail investors. Player haters be aware that we've been hated for decades (plural). Everything we do is to reward and support our retail diamondhands following."[48] As a "retail darling," the tweet and its use of language such as "tendies" and "diamondhands" suggests that Palantir made the listing decision specifically to cater to retail investors and to tap into the retail premium.[49]

D. Finfluencers

[47] *See* Ari Levy, *Palantir Jumps 11% to a Record after Announcing Move to Nasdaq*, CNBC (Nov. 15, 2024), https://www.cnbc.com/2024/11/15/palantir-jumps-9percent-to-a-record-after-announcing-move-to-nasdaq.html [https://perma.cc/6ZHP-Z6U2].

[48] *See* Luke Kawa, *Tweet from Palantir Board Member's Account Says Move to Nasdaq "To Force Billions in ETF Buying" and Reward Investors*, SHERWOOD (Nov. 15, 2024), https://sherwood.news/markets/palantir-board-member-tweet-nasdaq-etf-buying-move/ [https://perma.cc/8C9T-2UTX].

[49] *Id.* (calling Palantir a "retail darling" and describing "tendies" as "Chicken tenders, the treat an overgrown man-child receives for being a 'Good Boy.' Figuratively speaking, tendies are the financial rewards that follow from a successful bold wager"). "Diamond hands" refers to retail investors who hold stock persistently despite high volatility or other rational reasons to sell. *See* Lyle Daly, *What Does Diamond Hands Mean?*, THE MOTLEY FOOL (June 18, 2024), https://www.fool.com/terms/d/diamond-hands/. Other examples of corporations deliberately leaning into the retail premium include Adam Aron, the CEO of AMCs purchasing a gold mine, conducting interviews without wearing pants, and giving out free popcorn to shareholders. *See* Matt Levine, *Palantir Delivers the Tendies*, BLOOMBERG (Nov. 18, 2024), https://www.bloomberg.com/opinion/articles/2024-11-18/palantir-delivers-the-tendies.

Powerful voices can directly shape investor demand. Related to the rise of retail trading is the significant influence exerted by certain persons on social media who can help create markets for individual stocks—because they can drum up demand. In previous work, I have called these persons "finfluencers," social media influencers who disseminate financial information, and I have offered a framework to explain their impact on price discovery and stock markets.[50] Three examples of the interaction between finfluencer-driven demand and stock prices are described below:

1. Ryan Cohen. Ryan Cohen, chair of GameStop's board and founder of Chewy.com, is a powerful finfluencer. Cohen's followers call him "Papa Cohen,"[51] he has been referred to as a "meme stock king,"[52] and his nearly 400,000 followers seek to mine hidden information from his social media activity regarding stock price movements and future corporate decisions.[53] On August 12, 2022, after CNBC tweeted a story

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[50] For a framework to explain finfluencers' impact on price discovery and stock markets, see Sue S. Guan, *The Rise of the Finfluencer*, 19 N.Y.U. J.L. & BUS. 489 (2023). Various types of finfluencers pervade today's markets, including celebrities (e.g., Kim Kardashian), corporate personalities (e.g., Elon Musk or Ryan Cohen), and ordinary investors who cultivate social media followings on YouTube, TikTok, and other platforms. *See id.* at 497–508.

[51] Caitlin McCabe, *The Meme Lords Who Are Taking over the C-Suite*, WALL ST. J. (Aug. 27, 2021, 5:30 AM), https://www.wsj.com/articles/the-meme-lords-who-are-taking-over-the-c-suite-11630056603 [https://perma.cc/C95E-9RC9].

[52] *See* Miriam Gottfried & Caitlin McCabe, *GameStop's Ryan Cohen Wants to Be More Than a Meme-Stock King*, WALL ST. J. (Nov. 19, 2022, 12:00 AM), https://www.wsj.com/articles/gamestops-ryan-cohen-wants-to-be-more-than-a-meme-stock-king-11668834015 [https://perma.cc/6M2R-GRJQ]; Amanda Winograd, *How GameStop's Ryan Cohen Became the 'Meme King'*, CNBC (Sep. 28, 2023), https://www.cnbc.com/2023/06/07/how-gamestops-ryan-cohen-became-the-meme-king.html [https://perma.cc/6M8X-HYNJ].

[53] *See* McCabe, *supra* note 51; Gottfried & McCabe, *supra* note 52 (noting many investors search for clues in Cohen's social media posts for future stock price indications); Joe Fonicello, *Ryan Cohen Splits Chopsticks 2:1; PG-13*, GME'dd (July 20, 2021), https://www.gmedd.com/tw/ryan-cohen-splits-chopsticks-21-pg-13/ [https://perma.cc/X6FJ-8GAU] ("Speculative investors were quick to draw assumptions as to what a deeper meaning of the tweet could entail, largely rooted in the odd text and the split chopsticks.").

about Bed Bath & Beyond's poor financial prospects,[54] including a photograph of a woman with a shopping cart at Bed Bath & Beyond, Cohen tweeted the following statement, which included a smiling moon emoji:[55]

On August 16, 2022, four days later, Cohen filed a Schedule 13D with the SEC reiterating his holdings in Bed Bath & Beyond, including a roughly 10% stake.[56] Cohen had previously reported essentially this same position in March 2022.[57] Nevertheless, in response, retail investors immediately bought around $73 million in Bed Bath & Beyond, causing its share price to rise nearly 70%.[58] That same day, Cohen sold his entire stake in Bed Bath & Beyond,

[54] CNBC (@CNBC), Twitter (Aug. 12, 2022, 7:04 AM), https://twitter.com/CNBC/status/1558046723053953025 [https://perma.cc/Y26B-WJ6H].

[55] Ryan Cohen (@ryancohen), TWITTER (Aug. 12, 2022 10:42 AM), https://twitter.com/ryancohen/status/1558101541453795329 [https://perma.cc/CAE6-YLAM].

[56] *In re* Bed Bath & Beyond Corp. Sec. Litig., No. 1:22-cv-2541, 2023 WL 4824734, at *1–2 (D.C.C. July 27, 2023). An investor who acquires more than five percent of a company's stock must file a Schedule 13D. *See* 17 C.F.R. § 240.13d-1.

[57] Caitlin McCabe, *Bed Bath & Beyond Stock Price Soars More than 60% on Ryan Cohen's Stake*, WALL ST. J. (Mar. 7, 2022, 4:31 PM), https://www.wsj.com/articles/bed-bath-beyond-stock-price-soars-premarket-on-ryan-cohens-stake-11646652094?mod=article_inline [https://perma.cc/H9UP-HFBY].

[58] *See* Yun Li & Lauren Thomas, *Bed Bath & Beyond Soars as Much as 70% as Meme Traders Talk up Ryan Cohen's Call Options Purchase*, CNBC (Aug. 16, 2022, 12:16 PM), https://www.cnbc.com/2022/08/16/bed-bath-beyond-soars-70percent-as-meme-traders-bet-on-ryan-cohen.html [https://perma.cc/HCK7-F76A] (discussing how information about Cohen's call options generated a surge in Bed Bath & Beyond's stock's trading volume).

reaping profits of about $68 million.[59] The share price of Bed Bath & Beyond nosedived once Cohen disclosed his sale.[60]

2. Bill Ackman. In early 2024, billionaire hedge fund manager Bill Ackman announced plans for a new fund called Pershing Square USA targeted at retail investors.[61] The fund would trade on the New York Stock Exchange (NYSE).[62] According to the prospectus, Ackman's investment firm, Pershing Square Capital Management (the "Adviser") "believes that the Fund has the potential to be one of the largest, if not the largest, listed closed-end funds and expects that the Adviser's brand-name profile and broad retail following will drive substantial investor interest and liquidity in the secondary market."[63] In addition, Ackman reportedly intended to discuss the retail fund's investments on X, once the fund was approved.[64]

One commentator noted the "meme-stock element" to Ackman's proposal: investors would be "betting on Ackman's ability to raise money by tweeting and going on television, to build his public profile by doing controversial stuff on social

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[59] *See In re Bed Bath & Beyond*, 2023 WL 4824734, at *8.

[60] *Id.*

[61] Annie Massa, *Bill Ackman's Pershing Square Targets US Retail Investors in New Fund*, BLOOMBERG, (Fed. 7, 2024), https://www.bloomberg.com/news/articles/2024-02-07/ackman-s-pershing-square-targets-us-retail-investors-in-new-fund?cmpid=BBD020824_MONEYSTUFF&utm_medium=email&utm_source=newsletter&utm_term=240208&utm_campaign=moneystuff [https://perma.cc/V6V5-UDD7]. The fund initially set a goal of raising $25 billion, which was then revised down to under $10 billion. Ackman has since withdrawn the fund's IPO, saying that they will "report back once we are ready to launch a revised transaction." *Pershing Square USA, Ltd. Withdraws IPO*, BUSINESSWIRE (July 31, 2024), https://www.businesswire.com/news/home/20240731346413/en/Pershing-Square-USA-Ltd.-Withdraws-IPO.

[62] *See* Massa, *supra* note 61.

[63] Pershing Square USA, Ltd., Registration Statement (Form N-2), at 28 (Feb. 7, 2024), https://www.sec.gov/Archives/edgar/data/2002660/000119312524026301/d623781dn2.htm.

[64] *Id.*

media and to convert that profile into investor interest."[65] Indeed, Ackman evidently claimed that his "prolific social media presence" would allow the fund to trade at a premium.[66] As one investor stated, "This isn't a closed-end fund, this is Bill Ackman Incorporated."[67]

That the fund would trade at a premium does not necessarily follow from its financial characteristics. The fund's holdings would be disclosed, and Ackman also plans on tweeting about the holdings.[68] This means that investors could purchase the holdings themselves rather than purchase the fund at a premium. Yet it is not out of the question that the fund would nevertheless trade at a premium, due in particular to Ackman's popularity with retail investors. As one commentator put it:

> Ackman is good at social media and has a large retail following, and if there is one single most important lesson from the last few years in financial markets, it is that stocks with large retail followings on social media can sustainably trade at a large premium to their intrinsic value.[69]

Ackman himself has stated, "I have built up a large base of institutional and retail followers that follow our every move .

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[65] Matt Levine, *Bill Ackman Wants a Lot of Your Money,* BLOOMBERG (June 6, 2024), https://www.bloomberg.com/opinion/articles/2024-06-06/bill-ackman-wants-a-lot-of-your-money [https://perma.cc/R3BK-4R79].

[66] *Bill Ackman Tells Investors His 'Notoriety' Will Boost New Fund*, FIN. TIMES, https://www.ft.com/content/13277e79-3f89-4294-aee1-f1c2a40afbfb [https://perma.cc/P42G-4EFW]. *See also* Juliet Chung & Peter Rudegeair, *Bill Ackman Eyes IPO of Pershing Square*, WALL ST. J. (May 31, 2024), https://www.wsj.com/finance/investing/bill-ackman-pershing-square-ipo-0c34b44f [https://perma.cc/ADX7-PV84] (Ackman has "supercharged his profile with social crusades on X, formerly known as Twitter").

[67] *See* Levine, *supra* note 65.

[68] *See* Matt Levine, *Bill Ackman Can Tweet His New Fund*, BLOOMBERG (July 16, 2024), https://www.bloomberg.com/opinion/articles/2024-07-16/bill-ackman-can-tweet-his-new-fund [https://perma.cc/YF65-H42D].

[69] *Id.*

. . Media interest is valuable in attracting investor interest and also in creating liquidity for our shareholders."[70]

3. Andrew Left. On July 26, 2024, the SEC and DOJ announced securities fraud charges against Andrew Left, an activist short seller who published investment reports and recommendations as Citron Research.[71] According to the charges, Left used his social media presence and his Citron Research website to recommend that his followers take certain positions in various companies.[72] Although Left apparently held out that the recommendations were consistent with his own trading positions, Left and Citron Capital would reverse their positions after stock prices moved in response to Left's recommendations—on average, moving

[70] *Bill Ackman Tells Investors His 'Notoriety' Will Boost New Fund*, FIN. TIMES (July 15, 2024), https://www.ft.com/content/13277e79-3f89-4294-aee1-f1c2a40afbfb [https://perma.cc/DY7J-GMAC]. In a letter Ackman sent, he also discussed retail interest and aftermarket demand. PERSHING SQUARE USA, LTD., ISSUER FREE WRITING PROSPECTUS (2024), https://www.sec.gov/Archives/edgar/data/2002660/000119312524184256/d813540dfwp.htm ("[W]e believe that U.S. retail will be huge source of aftermarket demand."). Presumably this is due to the fact that most retail investors will likely not get shares in the IPO; instead, they will buy shares in the aftermarket, which will drive demand and therefore the share price up. *See* Matt Levine, *Bill Ackman Wants Less Money*, BLOOMBERG (July 25, 2024), https://www.bloomberg.com/opinion/articles/2024-07-25/bill-ackman-wants-less-money [https://perma.cc/2T84-8VNC].

[71] Press Release, SEC, SEC Charges Andrew Left and Citron Capital for $20 Million Fraud Scheme (July 26, 2024), https://www.sec.gov/newsroom/press-releases/2024-89; Press Release, Dep't of Just., Activist Short Seller Charged for $16M Stock Market Manipulation Scheme (July 26, 2024), https://www.justice.gov/opa/pr/activist-short-seller-charged-16m-stock-market-manipulation-scheme [https://perma.cc/URH7-UYHZ].

[72] Press Release, SEC, SEC Charges Andrew Left and Citron Capital for $20 Million Fraud Scheme (July 26, 2024), https://www.sec.gov/newsroom/press-releases/2024-89.

more than 12%.[73] Left allegedly generated approximately $20 million in profits as a result.[74]

Left was active on social media, news programs, podcasts, and other outlets, on which he cultivated a public persona.[75] As a result, Left was allegedly able to influence his followers' trading behavior. This then allowed Left to profit off of their trades in a predictable manner—especially as his social media activity and investment reports would often be reposted and disseminated by other news media.[76] According to the DOJ, Left "routinely included sensationalized headlines and exaggerated language to maximize the reaction it would get

[73] *Id.* (alleging that Left "bought back stock immediately after telling his readers to sell, and he sold stock immediately after telling his readers to buy"). One representative example involves Cronos Group, a Canadian cannabis company with the ticker CRON. Complaint, SEC v. Left, No. 24-cv-06311, at 20–21 (C.D. Cal. July 27, 2024). Left published a report on Cronos Group and tweeted: "$CRON tgt price $3.5. Everything that is contaminated about the Cannabis space. ALL HYPE with possible securities fraud." *Id.* at 21. Then, on CNBC's Fast Money, Left was asked whether he was "just as short the stock right now as you were at the beginning of the day," and Left said that he "took a small size position off today but I am still extremely short the stock." *Id.* He also restated that he believed that CRON would fall to $3.50. *Id.* However, Left had in fact already exited more than 75% of his exposure at prices significantly higher than $3.50. *Id.* Left apparently then said to a portfolio manager that "could write a tweet about a part 2 and get another $1." *Id.*

In another example involving Invitae Corporation (NVTA), Left told a colleague that Left hoped to "get stock to 30" and asked "[w]hat can I put in a tweet to juice it[?]" *Id.* at 18. Left later tweeted that he was "certain that Invitae is on its way to $100" and "will continue to stay long until the stock hits at least $65 as we believe it is on its way to $100." *Id.* He nevertheless sold NVTA that same day at prices ranging from $27 to $28. *Id.*

[74] Complaint, SEC v. Left, No. 24-cv-06311, at 2 (C.D. Cal. July 27, 2024).

[75] Press Release, Dep't of Just., Activist Short Seller Charged for $16M Stock Market Manipulation Scheme (July 26, 2024), https://www.justice.gov/opa/pr/activist-short-seller-charged-16m-stock-market-manipulation-scheme [https://perma.cc/URH7-UYHZ]. The SEC Complaint mentions that Left had more than 100,000 followers on Twitter. Complaint, SEC v. Left, No. 24-cv-06311, at 2 (July 27, 2024).

[76] Complaint, SEC v. Left, No. 24-cv-06311, at 12 (C.D. Cal. July 27, 2024) ("When paired with the inflammatory language in the Citron Research publications, the target prices captured the immediate attention of the press, which led to further dissemination of the reports and tweets.").

from the stock market."[77] The SEC described Left's publications as having a "sensationalist exposé style."[78] Further, Left "knowingly exploited his ability to move stock prices by targeting stocks popular with retail investors and posting recommendations on social media to manipulate the market and make fast, easy money."[79]

E. A Demand-Driven Market

In the scenarios described above, investors—and stock prices—respond to financial information—but not *solely* to financial information. Demand plays a role as well. As they would with traditional consumer goods, investors expect that at least some of their financial investments also reflect their personal, non-financial values.

The larger the role of demand, the more the stock market behaves as one with individual stocks. And in the market for individual stocks, the *values*—not simply the financial interests—of investors play a role.[80] Of course, investor

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[77] Press Release, Dep't of Just., Activist Short Seller Charged for $16M Stock Market Manipulation Scheme (July 26, 2024), https://www.justice.gov/opa/pr/activist-short-seller-charged-16m-stock-market-manipulation-scheme [https://perma.cc/URH7-UYHZ].

[78] Complaint, SEC v. Left, No. 24-cv-06311, at 27 (C.D. Cal. July 27, 2024).

[79] Press Release, Dep't of Just., Activist Short Seller Charged for $16M Stock Market Manipulation Scheme (July 26, 2024), https://www.justice.gov/opa/pr/activist-short-seller-charged-16m-stock-market-manipulation-scheme [https://perma.cc/URH7-UYHZ]. The SEC also faulted Left for changing the price targets in his reports: "Left's actions of internally changing the amounts of the target price from $60 to $100, at a time when he was privately discussing his hope to move the stock to $30, demonstrates that his selection of a target price was not tied to any specific analysis but rather was used to manipulate and influence a target company's stock price in a way that benefitted Defendants." Complaint, SEC v. Left, No. 24-cv-06311, at 19 (C.D. Cal. July 27, 2024).

[80] Of course, the debate over values-based vs. value-based investing is a longstanding one. *See, e.g.*, Barzuza et al., *supra* note 25; Aneil Kovvali & Yair Listokin, *Valuing ESG*, 49 BYU L. REV. 705 (2024); Fisch & Eccles, *supra* note 22; Lauren Mason, *Sustainable investing 101: What Is Values-based Investing?*, JPMORGAN (Apr. 19, 2024), https://www.chase.com/personal/investments/learning-and-insights/article/what-is-values-based-investing (describing various types of

demand is not uniform. Investor demand might be stronger for some stocks over others, and it can change over time.

Recognizing the role of investor demand helps explain the behavior of firms, institutions, and finfluencers. When stocks act solely to compose a certain financial risk and return profile, the ESG premium, investor inducements, and the retail premium are all difficult to explain. When demand is factored in, however, these features are not so surprising—just as they would not be surprising if they existed in the market for traditional goods and services. There, consumers are expected to make choices based on personal utility and individual values, and companies are expected to compete fiercely to maximize consumer demand.[81]

Investor demand should also be contextualized. In some ways, that investment decisions might be driven by investor values reflects an outpost of the larger stakeholder governance conversation. If stakeholders express preferences via shareholder proposals[82] and personal consumption choices, why should they also not express preferences via their investment choices as well? Professor Lynn Stout argued nearly two decades ago that shareholders are not monolithic, and instead that they have widely varying values, ranging from wealth maximization to prosocial goals.[83] In addition,

sustainable investing and defining values-based investing as "Reflecting your values through an investment strategy that avoids or increases exposures to specific companies, sectors or business practices").

[81] *See, e.g.*, Jill Fisch, *GameStop and the Reemergence of the Retail Investor*, 102 B.U. L. REV. 1799, 1855 (2022) (pointing out that "credit card companies encourage their customers to borrow, even to the point of incurring excessive debt, so they can make money from the high interest rates they charge on that debt," and "pharmaceutical companies hope that people will demand costly prescription drugs from their doctors based on what they see on television").

[82] *See id.* at 1849 (studying the role of shareholders as stakeholders who have brought shareholder proposals on social policy issues and explaining that "[s]hareholders can choose which companies to invest in. They can avoid companies whose policies they disagree with, or they can invest in those companies and push their fellow shareholders to support change").

[83] Stout, *supra* note 9, at 5 (pointing out that the "prediction of perfectly flat demand ultimately is an artifact of its investor homogeneity assumption"). *See also* Caleb N. Griffin, *Humanizing Corporate Governance,* 75 FLA. L. REV. 689 (2023).

Professors Sergio Alberto Gramitto Ricci and Christina M. Sautter have written extensively on the growing power of retail shareholder governance.[84] And in 2017, Professor Ann Lipton observed that the role of disclosures was shifting to enable investors to participate in shareholder governance and influence managers' behavior, while historically, disclosures were designed to help investors and the market set appropriate prices for publicly traded stock.[85] That is, investment choices may simply reflect an additional avenue through which investors can express their values. If so, it is only natural for firms, institutions and other market players to respond.[86]

The growing importance of investor demand should not be overstated. It does not completely decouple the link between stock price and fundamental value. Nor is it completely new. Rather, recent events have sharpened and systematized demand-driven investing, making it not only more visible, but more powerful. It thus can play a role in driving stock price that is important both for theoretical and practical reasons, as discussed in the next sections.

II. THE TRADITIONAL STOCK MARKET

[84] *See* Sergio Alberto Gramitto Ricci & Christina M. Sautter, *Corporate Governance Gaming: The Collective Power of Retail Investors*, 22 NEV. L.J. 51, 53–54 (2021) (analyzing the growing involvement of retail shareholders in shareholder governance, driven in part by new technology that facilitates coordination and communication).

[85] Ann Lipton, *Reviving Reliance*, 86 FORDHAM L. REV. 91, 91 (2017) ("Historically, federally mandated disclosures were designed to allow investors to set an appropriate price for publicly traded securities. Today's disclosures, however, also enable stockholders to participate in corporate governance and act as a check on managerial behavior").

[86] *See* Barzuza et al., *supra* note 25, at 295–98 (analyzing corporate incentives to promote ESG as a product of social demand). Others have pointed out more broadly how investor demand can shape market development. *See, e.g.*, Kathryn Judge, *Investor-Driven Innovation*, 8 HARV. BUS. L. REV. 291, 319–20 (2018) (analyzing how investor demand generates financial innovation and explaining that the "rapid rise of funds catering to investors' interests in integrating [environmental or social] values into their investment strategies is a prime example of an investor-driven innovation.").

These next two Sections situate the evidence of demand-driven trading and a market for individual stocks against a primary theory of information and price discovery in stock markets. This Section draws on results in corporate finance as well as market microstructure and financial economics to highlight the prevailing understanding that both stock prices and investors respond primarily to financial information in objective, measurable ways. Part A lays out the traditional assumptions, while Part B summarizes several longstanding criticisms of the traditional assumptions. The following Section then shows how growing evidence of demand-driven trading and a market for individual stocks complicates this understanding.

A. Foundational Finance and No Individual Demand for Stocks

Foundational financial theory teaches that that stock prices should be affected only by information relating to an issuer's future cash flows that is not yet reflected in its stock price.[87] That is, *financial* information affects stock prices. Investors invest to achieve an allocation of financial risk and return, and investors should accordingly be indifferent between individual stocks given their high substitutability.[88]

[87] *See* NEW STOCK MARKET, *supra* note 11, at 1, 34 (explaining that "[w]hereas many market transactions involve the consumption of goods that provide personal utility, transactions in financial markets involve the pursuit of claims on future cash flows and control rights" and defining price accuracy as the accuracy with which stock price predicts the future cash flows of the issuer); *see also* Myron Scholes, *The Market for Securities: Substitution Versus Price Pressure and the Effects of Information on Share Prices*, 45 J. BUS. 179, 183 (1972) (explaining that expected rates of return and risk determine stock prices).

[88] *See* Griffin, *supra* note 9, at 430 ("Individuals have no particular attachment to their individual stocks, and there are other stocks that would, in the right combination, provide their desired level of risk and return"); Richard A. Booth, *Discounts and Other Mysteries of Corporate Finance*, 79 CALIF. L. REV. 1053, 1059 (1991) ("It is generally assumed within the academic community that a well-diversified investor who follows the dictates of the efficient market theory will be indifferent among various stocks.").

As a result, stocks exhibit a horizontal demand curve and no market for individual stocks should exist.[89]

The primary microstructure-driven understanding of price discovery in stock markets also reflects this linear relationship between financial, material information and investor behavior. As a starting point, the primary economic and social goals motivating stock market regulation are:

> (1) promoting the efficient allocation of capital to the best new investment projects in the economy; (2) promoting the efficient operation of the economy's existing productive capacity; (3) promoting the efficient allocation of resources between current and future periods so as to best satisfy the needs of firms seeking financing for real investments [trading the promise of future dollars to obtain current dollars], and the needs of savers seeking to forgo current consumption in order to enjoy future consumption [trading current dollars to obtain the promise of future dollars]; (4) promoting the efficient allocation among investors of the risks associated with holding securities so that risk-averse investors bear their volatility with minimal disutility; and (5) operating fairly and fostering an overall sense of fairness.[90]

Greater share price accuracy furthers these goals, as does greater liquidity.[91] Price accuracy contemplates how accurately the stock price estimates the future cash

[89] *See* Stout, *supra* note 9, at 5 (explaining that all securities should be perfect substitutes for one another and demand for any stock should be flat).

[90] Merritt B. Fox et al., *Informed Trading and Its Regulation*, 43 J. CORP. L. 817, 833 (2018).

[91] *See id.* (citing THIERRY FOUCAULT ET AL., MARKET LIQUIDITY: THEORY, EVIDENCE, AND POLICY 31 (2013)).

flows of the issuer.[92] Liquidity generally refers to transaction costs and the ease with which trades occur.[93]

Price discovery in the stock market is largely a product of information asymmetries between informed traders and the liquidity suppliers with whom they interact.[94] With information about the underlying company, informed traders identify under- or overvalued stocks and trade to make profits based on their information.[95] Prices move to a more accurate value by impounding this information.[96] By contrast, uninformed traders trade for reasons unrelated to information about an issuer.[97] Retail investors are typically categorized as uninformed traders.[98] Because their reasons for trading are idiosyncratic, theory assumes uninformed purchase orders will approximately net out against uninformed sell orders in aggregate.[99] Further, more sophisticated

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92 *Id.* at 833–34 (noting that greater stock price accuracy also improves management decisions as well as investors' sense of fairness). *See also* Merritt B. Fox et al., *Stock Market Manipulation and Its Regulation*, 35 YALE J. ON REGUL. 67, 83 (2018) (explaining that higher stock price accuracy helps funnel capital toward more socially beneficial investment projects).

93 NEW STOCK MARKET, *supra* note 11, at 34.

94 *Id.* at 65–66.

95 *Id.* at 60.

96 *See id.* at 70 (showing how informed trading increases price accuracy).

97 *Id.* at 80.

98 *See id.* at 62–63. This Article generally uses the term retail investors or retail traders to reference those who trade in stock for individual accounts, as distinguished from institutional investors. *See* Adam Hayes, *Retail Investor: Definition, What They Do, and Market Impact*, INVESTOPEDIA (updated Feb. 17, 2021), https://www.investopedia.com/terms/r/retailinvestor.asp [https://perma.cc/A8K5-EUCL] (defining retail investors as "non-professional market participants who generally invest smaller amounts than larger, institutional investors"); Donald C. Langevoort, *The SEC, Retail Investors, and the Institutionalization of the Securities Markets,* 95 VA. L. REV. 1025, 1025 (2009) (differentiating retail investors (individuals and households) from institutional investors).

99 NEW STOCK MARKET, *supra* note 11, at 62, 67.

traders can arbitrage away any price movement caused by uninformed traders.[100]

The foregoing is a simplified explanation of complex economic principles. However, one key implication is that stock prices serve as "information transmission mechanism[s],"[101] and investors treat them as such. Investors respond to information about an issuer, trade accordingly, and the resulting price movement makes stock prices (hopefully) more accurate. The more accurate stock prices are, the more informative they will be, and the more efficiently stock markets can promote efficient capital allocation across the economy.[102] Individual demand factors do not play a role in this story.

B. Limitations of the Theory

The preceding section paints a fairly linear picture of stock price movements. New information about an issuer becomes public, which leads to a corresponding change in the issuer's stock price. Both stock prices and investors respond to financial information in primarily objective, measurable ways.

However, much commentary has pointed out the limits of objectivity and rationality in the behavior of stock prices and investors. At its core, the objective theory teaches that stock prices behave rationally, and investors process information rationally. The criticism can be similarly catalogued: the market has only a limited ability to behave rationally, and investors have only a limited ability to process information rationally. Three common criticisms are catalogued below.

First, trading is noisy, and noise is sticky. Substantial literature has explored the difficulty of eradicating noise from

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[100] *Id.* at 63 (discussing mistake traders and anti-mistake traders).

[101] Menesh Patel, *Fraud on the Crypto Market*, 36 HARV. J. L. & TECH. 171, 208 (2022).

[102] FOX ET AL., *supra* note 11, at 33–34.

the stock market.[103] For example, Professors Brad De Long and others have shown that arbitrageurs are limited in their ability to bet against noise traders, because noise is unpredictable and potentially long-lasting, both of which create risk for arbitrageurs.[104] Professors Grossman and Stiglitz pointed out decades ago that markets do not exhibit perfect competitive equilibrium—rather, they described "an equilibrium degree of disequilibrium," where prices reflect the information of informed individuals (arbitrageurs) only partially, as those individuals would otherwise make no profits.[105] Relatedly, Professor Lynn Stout has pointed out that beating the market in some situations is possible,

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[103] *See, e.g.*, Donald C. Langevoort, Basic *at Twenty: Rethinking Fraud-on-the-Market* 24 (Oct. 2007), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1026316 (gathering sources and pointing out that "the contemporary literature suggests that even for widely-traded stocks, significant deviations from the efficiency ideal are quite possible," including evidence of persistent abnormal returns even for bigger issuers, evidence of fundamental and informational inefficiency resulting from noise and sentiment, and evidence that even professional market actors pay insufficient attention to less salient facts).

[104] *See, e.g.*, J. Bradford De Long et al., *Noise Trader Risk in Financial Markets*, 98 J. POL. ECON. 703, 705 (1990). Arbitrageurs' short time horizons and risk aversion reduce their ability to bet against noise traders. Noise traders are unpredictable, they may act irrationally for longer than the arbitrageur can maintain their position, and fear of any resulting loss will rationally limit the arbitrageur's activity. This can allow prices to shift substantially away from fundamental values (without fundamental risk). Thus, "arbitrage does not eliminate the effects of noise because noise itself creates risk." *Id.* (first citing Oliver D. Hart & David M. Kreps, *Price Destabilizing Speculation*, 94 J. POL. ECON. 927 (1986); then citing Beth Fisher Ingram, *Equilibrium Modeling of Asset Prices; Rationality Versus Rules of Thumb*, 8 J. BUS. & ECON. STAT. 115 (1990); then citing Jeremy C. Stein, *Information Externalities and Welfare-Reducing Speculation*, 95 J. POL. ECON. 1123 (1987); then citing John C. Haltiwanger & Michael Waldman, *Rational Expectations and the Limits of Rationality: An Analysis of Heterogeneity*, 75 AM. ECON. REV. 326 (1985); and then citing Thomas Russell & Richard H. Thaler, *The Relevance of Quasi Rationality in Competitive Markets*, 75 AM. ECON. REV. 1071 (1985)).

[105] Sanford J. Grossman and Joseph E. Stiglitz, *On the Impossibility of Informationally Efficient Markets*, AM. ECON. REV. 393, 393 (1980).

whereas it should be impossible to do so if profits are immediately arbitraged away.[106] And more recently, I have explored how retail trading, when coordinated—even when trading purely on noise—can lead to sustained deviations in stock prices.[107] These are just a few examples.[108]

Relatedly, corporate finance teaches that stocks should experience a perfectly horizontal demand curve, because investors are indifferent between stocks given their high substitutability.[109] But as Professor Stout has pointed out, this assumes a certain degree of homogeneity in investor assessment of stock risk and return, which is not realistic.[110] Investors certainly disagree about stock valuations—that is the entire basis of the securities trading industry. Some have even argued that the optimal strategy in a speculative market is to treat the market like a Keynesian beauty contest: choose the stocks that others will choose, the stocks that those others believe still others will choose, and so on.[111] More recently, a

[106] *See, e.g.*, Stout, *supra* note 9, at 9–10.

[107] *See* Guan, *supra* note 43, at 2073–89.

[108] *See, e.g.*, Griffin, *supra* note 9, at 455–56 (describing the problem as one of requiring a "numerosity of consensus," where arbitrageurs require some level of consensus in order to successfully benefit from arbitrage; otherwise, their arbitrage attempts will fail); Clifford Asness, *The Less Efficient Market Hypothesis*, J. PORTFOLIO MGMT. (forthcoming) (arguing that markets have become less efficient, in large part due to the rise of social media); Valentin Haddad et al., *How Competitive is the Stock Market? Theory, Evidence from Portfolios, and Implications for the Rise of Passive Investing*, AMER. ECON. REV. 6–7 (forthcoming 2025) (gathering sources).

[109] *See* Stout, *supra* note 9, at 5.

[110] *See id.*

[111] *See, e.g.*, Robert J. Shiller, *The Beauty Contest That's Shaking Wall St.*, N.Y. TIMES (Sept. 3, 2011), https://www.nytimes.com/2011/09/04/business/economy/on-wall-st-a-keynesian-beauty-contest.html; Maryam Farboodi and Laura Veldkamp, *Long Run Growth of Financial Data Technology*, 110 AMER. ECON. REV. (2020) ("Structural change in the financial sector arises because improvements in data processing trigger a shift in the type of data investors process. Instead of processing data about firm fundamentals, firms choose to processing more and more data about other investors' demand. Each data choice gives rise to an optimal trading strategy. The resulting shift in strategies resembles an abandonment of value investing and a rise in a

paper by Professors Xavier Gabaix and Ralph Koijen argues that markets are inelastic and that prices are affected by flows as well as demand shocks.[112] They construct a model showing that "determinants of asset prices can be traced back to measurable demand shocks and flows of concrete investors."[113] In another recent paper, Professor Caleb Griffin has explored the role of what he terms "extrinsic value," or the demand premium more broadly, in determining share value.[114] There, Professor Griffin sets forth the "share value triad," in which share value is determined by intrinsic value (fundamental value), control, and extrinsic value (demand-driven factors).[115]

Finally, the assumption of investor rationality has experienced robust attack. Stock market bubbles present dramatic evidence of this.[116] Ample evidence exists

strategy that is part statistical arbitrage, part retail market making, and part strategies designed to extract what others know.").

[112] Xavier Gabaix & Ralph S. J. Koijen, *In Search of the Origins of Financial Fluctuations: The Inelastic Markets Hypothesis* 1, 3 (Dec. 23, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3686935 [https://perma.cc/KE5N-7DM4]. Others have recently argued that the demand for individual stocks has become 11% more inelastic due to the rise in passive investing, which would likely lead to "less informative and more volatile prices." Haddad et al., *supra* note 108, at 5; Justina Lee, *'Magical' Efficient-Market Theory Rebuked in Era of Passive Investing*, BLOOMBERG (Jan. 31, 2025), https://www.bloomberg.com/news/articles/2025-01-31/-magical-efficient-market-theory-rebuked-in-era-of-big-passive (discussing the Haddad et al. article and quoting Haddad explaining that "If the price drops for non-fundamental reason, somebody's going to come in and buy and that's going to stabilize prices – that's the basic idea of how prices stay stable and close to fundamentals in finance . . . The less of this elasticity you have, the less the market is going to absorb this because passive don't react to anything").

[113] Gabaix & Koijen, *supra* note 112.

[114] Griffin, *supra* note 9, at 441 (arguing that "different stocks have different elasticities, with some stocks having far higher multipliers than others").

[115] *Id.* at 448–49.

[116] *See, e.g.*, Ryan Bubb & Prasad Krishnamurthy, *Regulating Against Bubbles: How Mortgage Regulation Can Keep Main Street and Wall Street Safe—From Themselves*, 163 U. PA. L. REV. 1539, 1545–48 (2015) (discussing the limits of rational behavior during bubbles); Stefan Nagel & Markus Konrad Brunnermeier, Hedge Funds and the Technology Bubble (June 2003) (unpublished manuscript), https://ssrn.com/abstract=423940 [https://perma.cc/3U39-2F4N] (showing that

demonstrating that investors do not process information rationally.[117] More often than not, investors are (understandably) overloaded with huge amounts of information that is presented in obtuse, complex ways, written about ever-more complicated financial products and risks.[118] Investors experience loss aversion, the representation effect, reluctance to shift beliefs in face of persuasive evidence, and overconfidence, among many other cognitive and behavioral biases.[119] They exhibit hindsight bias, are susceptible to draw different conclusions based on the same evidence that is framed differently, and are overloaded with vast amounts of information, leading to an even greater likelihood that investors rely on heuristics to make decisions.[120] Social biases are also pervasive, including herding and related behavior, such as attention-driven trading or feedback trading.[121] These biases are exhibited by all investors—both sophisticated and unsophisticated.[122]

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investors may rationally choose to ride bubbles because of predictable investor sentiment and limits to arbitrage).

[117] *See* Tom C.W. Lin, *Reasonable Investor(s)*, 95 B.U. L. REV. 461, 468–71 (2015) (describing the "irrational investor" as one who is "predictably flawed and cognitively bounded, as an alternative profile to the rational actor profile of the conventional reasonable investor paradigm" and collecting sources).

[118] *See id.* at 509–11 (describing the complexity and information overload of modern-day corporate disclosures). *See also id.* at 489 (noting that "between 1950 and 2004, annual reports of Fortune 500 companies increased in length from approximately 16 pages per firm to over 165 pages per firm").

[119] *See, e.g.*, Donald Langevoort, *Taming the Animal Spirits of the Stock Market: A Behavioral Approach to Securities Regulation,* 97 NW. U. L. REV. 135, 143–48 (2002).

[120] David A. Hoffman, *The "Duty" to be a Rational Shareholder*, 90 MINN. L. REV. 537, 549–60 (2006) (describing ways in which behavioral law and economics undermines the market's rationality premise).

[121] *See generally* Sushil Bikhchandani & Sunil Sharma, *Herd Behavior in Financial Markets*, 47 IMF STAFF PAPERS 279 (2001) (discussing herd behavior in the market); Donald C. Langevoort, *Behavioral Approaches to Corporate Law*, *in* RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW 442 (Claire A. Hill & Brett H. McDonell eds., 2012) (discussing behavioral biases in corporate law).

[122] *See, e.g.*, Bikhchandani & Sharma*, supra* note 121, at 290–300 (examining how and why investment managers herd); Nerissa C. Brown et al., *Analyst Recommendations, Mutual Fund Herding, and Overreaction in Stock Prices*, 60 MGMT.

III. THE MARKET FOR INDIVIDUAL STOCKS

Understanding the demand-driven component of investor decision-making yields fresh insights when considering the criticisms discussed in the previous Section. Demand may be unrelated to an issuer's financials, which makes it difficult and potentially impossible to arbitrage away. Demand is heterogeneous and idiosyncratic between individual investors and individual stocks. And finally, what is perceived as "cognitive error" may simply reflect deliberately non-"rational" decision-making due to individual investor preferences.

While demand-driven investing has long been understood to exist, most commentary has either dismissed the phenomenon as noise or attempted to absorb it into existing models of traditional, fundamental value-based investing. This Section challenges that understanding and argues that demand-driven investing can create a market for individual stocks that is distinct from noisy trading as well as from fundamental value-driven trading. When strong enough, individual investor demand can shape a market for individual stocks. Demand may cause stocks to trade at a premium (or discount) to the price that would otherwise be dictated by their fundamental value or otherwise lead to deviations from fundamental value. Demand can also shift the behavior of corporations by incentivizing them to try and galvanize investor demand through perks in the same way a clothing brand might hire a celebrity endorser, and it can pressure institutional investors to divest from socially problematic regions or companies.

This Section offers a theoretical framework for how demand-driven investing creates a market for individual stocks. Part A discusses the increasing heterogeneity of information production in today's stock markets. Part B shows

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SCI. 1, 4 (2014) (showing price-destabilizing effect of fund managers that herd in response to analyst revisions due to reputational concerns).

how demand-driven factors can drive stock price movements. Part C argues that individual investor demand helps create a market for individual stocks. Part D explores firm responses and competition in this market. Part E connects the market for individual stocks to the heterogeneity of individual investors.

A. The New Information Marketplace

Information generation in today's stock markets is increasingly decentralized and multidirectional. To the extent "democratization" of information is occurring, it can be thought of as "decentralization" of information production.

As summarized above, stock market trading is commonly divided into two categories: informed and uninformed. Informed trading is based on information relating to a company's fundamentals, economic data, and so forth, all of which make stock prices more accurate.[123] Uninformed trading is not driven by information.[124] In this framework, information is most commonly produced by the company itself (through disclosure) and by sophisticated market participants, often professionals who seek out publicly available information about an issuer. In other words, information largely flows in one direction: from corporations, analysts, and institutions to the rest of the market. Other market participants—other investors, institutions and observers—act as largely passive consumers of information, treating some as informative and some as noisy, with varying degrees of accuracy.

Today, this unidirectional framework fails to tell the whole story. Certainly, platforms to disseminate information still include traditional vehicles such as earnings calls, disclosure documents, analyst reports, and analyst interviews.[125] Yet the Internet and social media have vastly expanded sources and

[123] *See* NEW STOCK MARKET, *supra* note 11, at 60.

[124] *Id.* at 62.

[125] *See* Christine Hurt, *Socially Acceptable Securities Fraud*, 49 J. CORP. L. 785, 786–87 (2024) (describing various ways issuers can disseminate information).

accessibility of information.[126] For example, retail traders commonly look to peer-to-peer online social platforms for investing information, including social media, discussion fora, other retail traders, and finfluencers—social media influencers who disseminate financial information.[127] Social media platforms such as Reddit, YouTube, and TikTok and websites such as Seeking Alpha mediate information for retail investors,[128] increasingly replacing traditional sources like sell-side equity analysts.[129] One study found that a majority of Gen Z and millennials say they receive financial advice from sites such as TikTok and Instagram, many of whom also depend on finfluencers for financial advice.[130]

As a result, information is increasingly produced in *multidirectional* ways. Consumers of information can also

[126] *See id.*; Guan, *supra* note 43, at 2060–72; Guan, *supra* note 50, at 497–508.

[127] *See* Guan, *supra* note 50, at 497–508.

[128] *See* Hailiang Chen et al., *Wisdom of Crowds: The Value of Stock Opinions Transmitted Through Social Media*, 27 REV. FIN. STUD. 1367, 1386 (2014) (considering social media investing sources).

[129] *See* Michael S. Drake et al., *Social Media Analysts and Sell-Side Analyst Research*, 27 REV. ACCT. STUD. (manuscript at 1, 7) http://www.utah-wac.org/2020/Papers/moon_UWAC.pdf [https://perma.cc/2682-MLWQ] (examining social media's "evolving role" in markets and social media equity research's impact on sell-side equity research); *see also* Theresa Kuchler & Johannes Stroebel, *Social Finance*, 13 ANN. REV. FIN. ECON. 37, 45 (2021) (considering the interaction between social interactions and financial decisions); Eric Chartier et al., Behavioral Finance: The Impact of Artificial Intelligence and Social Media Analytics 2–3 (Feb. 27, 2021) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3794039 [https://perma.cc/F8PE-HL3E] (evaluating social media influencers in the stock market).

[130] *Gen Z Turns to TikTok and Instagram for Financial Advice and Actually Takes It, Study Finds*, CREDIT KARMA (July 13, 2021), https://www.creditkarma.com/about/commentary/gen-z-turns-to-tiktok-and-instagram-for-financial-advice-and-actually-takes-it-study-finds [https://perma.cc/T6PS-WTRB]; *see also* Hurt, *supra* note 125, at 802 n.119 ("81% of investors surveyed stated that they have made a recommendation or decision after initially sourcing information on digital or social media . . . [and] 88% have investigated a company based on information posted on digital or social media") (citing 2023 *Digital Investor Survey: The Age of Information Without Limitation,* BRUNSWICK GRP., https://www.brunswickgroup.com/media/10867/brunswick-digital-investor-survey-2023-summary.pdf [https://perma.cc/4AYE-SS75]).

become producers of information for others. Trading platforms like Commonstock, Public, and Zulutrade encourage this as well. By allowing retail investors to form communities, they encourage social trading and the mimicking of others' trades, typically through seamless "copy trading" or "mirror trading."[131] Unlike traditional investment platforms, these trading platforms foster direct information exchange and feedback, allowing millions of retail investors to connect with each other and with finfluencers.[132] Trading platforms also encourage retail information production in more subtle ways. For example, retail investors often buy stocks based on Robinhood's list of its one hundred most popular stocks, in essence copying other Robinhood users' trades.[133]

This highlights an important point: market participants previously deemed passive information recipients increasingly and persistently produce information.[134] As I have developed in other work, finfluencers present a stark example of this.[135] Various types of finfluencers pervade today's markets, including celebrities (e.g., Kim Kardashian),

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131 *See* Dirk A. Zetzsche et al., *From FinTech to TechFin: The Regulatory Challenges of Data-Driven Finance*, 14 N.Y.U. J.L. & BUS. 393, 417 (2018) (evaluating customer engagement opportunities on newer financial platforms); Jiaying Deng et al., *Social Trading, Communication, and Networks* 1–2 (Paderborn Univ. Ctr. for Tax & Acct. Rsch., Taxation, Acct. & Fin. Working Paper, Paper No. 74, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3802038 [https://perma.cc/K6C5-5W2E] (discussing "copy trading" and "mirror trading," where investors to link their accounts to other investors).

132 Deng, *supra* note 131, at 2.

133 Robinhood users have been shown to be five to seven times more likely to buy stocks just added to Robinhood's "Top 100" list. *See* Roberto Stein, The Top 5 Predictable Effects of New Entries in Robinhood's '100 Most Popular' List 1 (Sept. 17, 2020) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3694588 [https://perma.cc/ZU3U-37L2].

134 *See* Guan, *supra* note 50, at 497–530 (demonstrating how finfluencers produce information and impact price discovery as a result); Hurt, *supra* note 125, at 803 (explaining that today, "marketplace speech, which takes place outside of traditional SEC filings and press releases, can be interactive, community-based, and produced by anyone, from professional investment advisors to anonymous agents of chaos").

135 Guan, *supra* note 50, at 497–530.

corporate personalities (e.g., Elon Musk or Ryan Cohen), and ordinary investors who cultivate social media followings on YouTube, TikTok, and other platforms.[136] These finfluencers differ from traditional financial professionals and analysts. Instead, retail investors comprise the majority of their audience, and their message, if they have one, often seeks to "democratize" finance or equalize access to financial information. And, due to their social media influence, finfluencers post (not necessarily about financials), their followers trade, and stock prices move.

In doing so, these market participants-turned-information producers can shape individual investors' demand for stocks in ways unrelated to seeking out particular financial risk and return characteristics. They can shape and influence personal utility for stocks along non-financial characteristics, from cultural preferences to simple hype—as one might see more commonly in the market for consumer goods and services.

B. Demand-Driven Price Discovery

Demand-driven factors can be important determinants of stock price movements. To understand this, consider the following example:

Imagine a hypothetical company that manufactures sustainable clothing. The company is fictionally called Nostalgiable (a combination of the word "nostalgia" and the suffix "-able"). The company's founder and CEO is a former YouTube sensation who became famous for her videos of homemade hand-sewn clothes on YouTube. The clothing is marketed as "nostalgic, sustainable creations made from organic, recycled materials that celebrate our shared love of the planet." Nostalgiable is publicly-traded and its share price is currently $15. A conventional discounted cash flow analysis prices the stock at $13 per share, indicating that the stock is overvalued based on traditional metrics.

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[136] *Id.* at 497–508.

Now imagine that a well-known ESG-focused index announces that Nostalgiable will be added to the index at the end of the month. ESG-focused investors respond and purchase the stock. The resulting buying pressure moves the share price up to $17 from $15. This is not unrealistic. Evidence has repeatedly demonstrated outsize positive returns when a company is added to an index, and conversely, outsize negative impact when a company is removed from an index.[137]

Imagine further that an influential celebrity like Taylor Swift is seen wearing Nostalgiable's clothing. Swift's influence might have two effects. First, it may drive up the demand for the clothing product. Second, it may drive up demand for the clothing brand's stock. The first effect (demand for the product) is clearly relevant to the company's fundamental financial value. More consumer demand will increase revenue. The second effect is more complex. Some portion of increased demand for the stock may derive from the rosier picture of future cash flows indicated by increased demand for the product. The other portion may derive from simple increase in demand for owning the stock merely because of its association with Swift. Imagine that as a result, the stock price increases from $17 to $20 per share. What portion of this increase is due to a change in fundamentals, and what portion is due to demand-driven factors? The effect is even murkier when factoring in an ESG-related premium.

In addition, the greater the demand-driven portion of a stock price's movement, the less "rational" it may become for the informed traders of the classic narrative to attempt to arbitrage the price deviation away. In the story above, Nostalgiable's stock is now trading at $20 per share. Assume that the increased consumer demand for the clothing itself (originating with Swift wearing the clothing) led to a revision upward of the stock's fundamental value, which is now $15 per share based on a conventional cash flow analysis. But $15

[137] This has been found to be true for a number of indices, both domestically and abroad. *See* Griffin, *supra* note 9, at 14–15.

is still well below the current trading level of $20 per share. Informed traders might attempt to arbitrage this deviation. On the other hand, evidence on ESG, retail trading, and the index premia, combined with longstanding caution around betting against (perceived) noise traders, may deter any such arbitrageur.[138] This significantly limits the countering effects of arbitrage and increases the likelihood that the premium will persist and grow.

To conclude that Nostalgiable's share price fluctuations reflect only new information related to the company's financials would be to ignore the role of investor demand—an important part of the story. Demand can lead to share price movements that reflect personal investor preferences that are unrelated to an issuer's financials. Demand can also shift the so-called informed trader's "rational" response to demand-driven investing.

C. Demand and the Market for Individual Stocks

As investors trade for reasons that reflect individual demand, they can drive stock price movements and help create a market for individual stocks. In that market, demand for different stocks can exist on a continuum and vary based on a number of factors, from expressions of identity to cultural

[138] As discussed *supra* Section II.B., other factors can also limit the arbitrage response of informed traders, including the costs of searching for new information as well as investment or contractual limitations in setting trading strategies. *See, e.g.*, Sanford J. Grossman and Joseph E. Stiglitz, *On the Impossibility of Informationally Efficient Markets*, 70 AMER. ECON. REV. (1980); Judith Chevalier and Glenn Ellison, *Risk Taking by Mutual Funds as a Response to Incentives*, 105 J. POL. ECON. 1167 (1997); Haddad et al., *supra* note 108, at 6–7 (gathering sources). Relatedly, Haddad et al. highlight the importance of strategic interactions among investors and demonstrate the limitations of the conventional view of trader competition, which is that passive investing should have no impact on equilibrium prices, because other active traders will fully compensate with aggressive trading that pushes prices back to their equilibrium value. *Id.* at 1–2. Instead, their study shows that the compensating aggressive behavior only reduces the effect of increased passive investing by two thirds, leading to an 11% increase in demand inelasticity. *Id.* This "is a sizable change: in the context of many models, it would lead to less informative and more volatile prices, as well as more price impact." *Id.* at 5.

preferences to association with preferred influencers—in addition to or in place of traditional financial characteristics.[139]

Further, demand varies across investor and across stock—reflecting values as diverse as board diversity preferences to association with the Olympic champion gymnast Simone Biles. Stocks are not perfect substitutes for each other because investors value stocks across a host of characteristics, only some of which are financial and easily substitutable. On this issue, Professor Griffin has theorized that stocks "exist along an elasticity spectrum, with high-demand stocks (e.g., meme

[139] While the focus of this Article is stocks, it is worth mentioning that other non-traditional assets such as non-fungible tokens (NFTs), cryptocurrency, and memecoins might be thought of as extensions of this demand continuum. Memecoins occupy one extreme of this continuum, where traditional financial assets like stocks and bonds are at the other extreme. At one end, assets (like traditional stocks and bonds) reflect significant financial information and very little expressive, non-financial, or meme-value. At the other end, assets like memecoins reflect very little (perhaps no) financial information and a huge amount of expressive, non-financial, and meme-value. As one commentator has expressed when describing Dave Portnoy's (Portnoy is the founder of Barstool Sports) memecoin activity, "COME ON, WHY ARE YOU BUYING MEMECOINS? What on earth do you think is happening here? Is Dave Portnoy going to go activist on the Josh Allen MVP coin and turn around its business? Did he talk to the CEO of Josh Allen MVP coin and learn that Josh Allen MVP coin has struck a deal to build artificial intelligence products for Apple? There is nothing here! This is a purely social trading token, a pure game of hot potato; the only thing that could happen with it is pumping and dumping." Matt Levine, *Memecoin Pumps Are Just for Fun*, BLOOMBERG (Feb. 10, 2025), https://www.bloomberg.com/opinion/articles/2025-02-10/memecoin-pumps-are-just-for-fun. In contrasting memecoins to traditional stocks that might reflect value changes experienced by the underlying issuer (in his example, due to activist investing or the revelation of new information regarding a company's use of AI), Levine points out that "The point of memecoins is for people to go on social media and say 'I'm buying this coin' so it goes up so they can sell it at profit. Portnoy used the memecoins for exactly their intended purpose." *Id.* Another memecoin referencing Portnoy's pump and dump, Jailstool (Portnoy is founder of Barstool Sports), was then created. *See A Memecoin Named for Jailing Barstool's Dave Portnoy Surges, then Falters*, YAHOO! FINANCE (Feb. 10, 2025), https://finance.yahoo.com/news/memecoin-named-jailing-barstools-dave-130301813.html ("Jailstool, a memecoin created in reference to memecoin traders calling for Barstool founder and President Dave Portnoy to be jailed for pumping another memecoin, has skyrocketed over the weekend after Portnoy got behind the coin and promoted it to his social media followers.").

stocks) at one end and low-demand stocks at the other."[140] Further, demand inelasticity allows relatively small groups of investors to generate outsize price impacts.[141]

In a market for individual stocks, these non-financial, demand-driven characteristics can generate persistent stock price movements, just as changes to fundamentals can. This increasingly blurs the line between demand-driven trading and (traditional) information-driven trading. Nonfinancial demand premia can be thought of as informative, just as consumer demand would be. Imagine that Nostalgiable, the hypothetical sustainable clothing company previously discussed, is able to fund greater value-generating projects as a result of raising capital at its higher $20 share price. This then raises Nostalgiable's fundamental value based on its cash flows. As its fundamental value rises, $20 per share may no longer seem inflated. Instead, it may be informative.

That the stock market can behave like one for individual stocks does not pose an existential threat to its operational efficiency. Financial, fundamental value likely remains the primary driver of stock price movements. But demand-driven factors are important and can be informative as well.[142] Recognizing the market's capacity to price in demand can be more realistic and useful both theoretically and practically.

D. Competition, Firm Incentives, and the Market for Individual Stocks

In the traditional consumer market, goods and services provide personal utility and reflect personal consumption

[140] Griffin, *supra* note 9, at 34–35.

[141] *See id.* at 35.

[142] Indeed, tools such as SNTMNT offer financial sentiment analysis for social media. *See SNTMNT*, https://www.crunchbase.com/organization/sntmnt ("SNTMNT is developing online sentiment analysis and prediction tools that make financial sentiment in word-of-mouth surrounding stocks tangible. This way it helps investors make better investment decisions.").

values and preferences.[143] While prices presumably reflect some "fundamental" value of any given good or service, the wide variations in prices reflect deeper, hard-to-value differences in consumer demand. As a result, sellers naturally focus on maximizing consumer demand. Marketing is a multibillion-dollar industry, and the traditional consumer market prominently features competition. Industry participants compete against each other across almost every possible dimension, from quality, brand name recognition and endorsements, to distribution speed and shipping costs. Consumer demand is notoriously complex, often subjective, and sometimes unpredictable.[144]

By contrast, the stock market as traditionally conceived should not feature issuers directly competing to sell their stock or to attract investors[145] because stocks' valuations reflect fundamental, intrinsic value that is determined by the underlying issuer's behavior in a separate market—in a typical example, the consumer goods and services market. Yet as investor demand becomes a factor in the stock market, so too will competition between issuers—and between anyone who can profit off of increased demand for any given stock—wrongdoers and fraudsters as well.

Competition across issuers and funds for investors along demand-driven factors is already occurring—implicitly acknowledging the existence of a market for individual stocks. For example, Professors Barzuza, Curtis and Webber have documented the degree to which index funds compete on ESG in seeking to attract younger investors.[146] This can speed up

[143] *See* Griffin, *supra* note 9, at 7–13 (2023) (describing classical finance theory's position on the differences between the stock market and markets for other goods and services, including that no market for individual stocks exists, stocks exhibit a horizontal demand curve, stock prices reflect only fundamentals and control premiums, and sophisticated investors largely determine stock prices).

[144] *See* Roberts, *supra* note 11, at 101.

[145] In a limited sense, one might characterize the IPO process as a competitive one in which companies compete for investor demand for their stocks. Yet the formalized and restrictive nature of the process differs significantly from competition in markets for traditional goods and services.

[146] *See* Barzuza et al., *supra* note 25.

the pipeline to effecting change at the management level—and Professors Barzuza, Curtis and Webber have identified the power of external, social ESG pressures to significantly shift the incentives of managers toward prosocial goals.[147] The more that investors treat the market as one for individual stocks, the more opportunities there will be for issuers and institutions to compete along various dimensions such as ESG, politics, and other cultural and nonfinancial factors. There will also be opportunity for issuers to compete to maximize investor engagement through investor inducements and promotions, which seem to affect demand for firms' stock even though they should not (since such promotions and inducements have nothing to do with the firm's fundamental value).[148]

As issuers and institutions change their behavior to respond to demand-driven investing, the role played by demand-driven factors will expand, in turn leading to further changes in the behavior of other market participants. That is, if investors continue to demand stocks that reflect their personal utility and personal value, firms and funds will continue to respond, driving the portion of stock price that reflects demand utility still higher.

E. Human Investors

In some ways, understanding the stock market to encompass individual investors interested in individual stocks reflects a rather unremarkable reality: investors are human, with individual human preferences.[149] Moreover, it is

[147] *Id.* at 7.

[148] *See id.* at 26–27. These promotions range from discounts on new cars for Ford shareholders to collectible shareholder certificates that only Disney shareholders can purchase. *Id.*

[149] *See* Lin, *Reasonable Investor(s)*, *supra* note 117, at 462 ("Investors exist everywhere, in every form. They reside in big cities and small towns, in magnificent mansions and modest apartments. They are famous as well as anonymous. They are financiers and farmers, old retirees and new workers, homemakers and fund managers,

reasonable to assume that those preferences are not static and may change over time.[150] It is also sensible to imagine that different kinds of information may ebb and flow in their importance to investors. Thus, if stakeholders express preferences along shareholder proposals[151] and personal consumption choices, why should they also not express preferences along their investment choices as well? Others have argued that investors exhibit a mix of "rationally self-interested" and altruistic attributes,[152] reminded us that shareholders are "human beings living in a society and on a shared planet,"[153] and pointed out the vast heterogeneity of investors, who have widely varying values, ranging from wealth maximization to prosocial goals.[154]

A market for individual stocks may also be particularly observable among younger generations. For example, a FINRA Investor Education Foundation report found that younger investors "are more likely than older investors to be

public employees and private entrepreneurs, sole proprietorships and partnerships, people and corporations").

[150] *See* Joan MacLeod Heminway, *ESG and Insider Trading*, 26 U. PENN. J. BUS. L. 1058, 1074 (2024); Ismail Bel-Bachir et al., *Performance edge: Investors Hone their Strategies for a New Era*, MCKINSEY & CO. (July 10, 2023), https://www.mckinsey.com/~/media/mckinsey/industries/private%20equity%20and%20prin cipal%20investors/our%20insights/performance%20edge%20investors%20hone%20t heir% 20strategies%20for%20a%20new%20era/performance-edge-investors-f.pdf (discussing investment concerns and responses to recent events including a pandemic, war, inflation, and social divisions).

[151] *See* Fisch, *supra* note 81, at 1849 (studying the role of shareholders as stakeholders who have brought shareholder proposals on social policy issues and explaining that "[s]hareholders can choose which companies to invest in. They can avoid companies whose policies they disagree with, or they can invest in those companies and push their fellow shareholders to support change"); *see also* Dhruv Aggarwal et al., *Meme Corporate Governance* (European Corp. Governance Inst., Working Paper No. 681, 2023) (studying the impact of retail investors on shareholder governance).

[152] Griffin, *supra* note 83, at 19.

[153] Gramitto Ricci & Sautter, *supra* note 84, at 84–86.

[154] *See* Stout, *supra* note 9, at 5 (pointing out that the "prediction of perfectly flat demand ultimately is an artifact of its investor homogeneity assumption").

investing for reasons other than long-term gains, such as social responsibility, entertainment, or social activity."[155] Studies have also shown that these investors are willing to sacrifice returns for investments that align with their values.[156]

Nevertheless, acknowledging the existence of a market for individual stocks complicates traditional understandings of investor motivation and price discovery. As the next Sections will show, it also complicates the prevailing reach of securities fraud laws.

IV. SECURITIES FRAUD AND THE MARKET FOR INDIVIDUAL STOCKS

Securities fraud laws—like the underlying economic theory—are premised on a relatively linear relationship between stock price, investor demand, and financial information. In other words, securities fraud laws largely assume no market for individual stocks.

This assumption creates a convenient foundation for securities fraud laws: investors rely on stock prices as information transmission mechanisms and do so in objective, measurable ways. Securities fraud laws protect against false, material information – and in doing so, effectively protect

[155] Judy T. Lin et al., *The Changing Landscape of Investors in the United States: A Report of the National Financial Capability Study*, FINRA FOUNDATION, 26 (Dec. 2022), https://www.finrafoundation.org/sites/finrafoundation/files/NFCS-Investor-Report-Changing-Landscape.pdf [https://perma.cc/TLU8-TWK4]. *See id.* at 16 ("Roughly two in five investors under 35 considered ESG important in investment decisions, compared to one in five investors ages 35 to 54, and one in 10 investors 55 and older.").

[156] Maitane Sardon, *A Guarded Generation: How Millennials View Money and Investing*, WALL ST. J. (Mar. 13, 2020), https://www.wsj.com/articles/the-recession-left-millennials- loaded-with-debtand-cynical-11583956727 (finding that "almost 70% of millennials would choose to invest in companies with positive sustainability elements even if that meant a 5% lower return on investment"); Jack Caporal, *Study: What Are Gen Z and Millennial Investors Buying in 2024?*, MOTLEY FOOL (Jan. 29. 2024), https://www.fool.com/research/what-are-gen-z-millennial-investors-buying/ ("Other surveys show that younger investors are more likely to align investments with their values, even if it comes at the expense of returns.").

investors' reliance in securities transactions. However, if demand-driven factors also drive stock price movements in systematic or predictable ways, should the securities laws also protect reliance on such factors? This question is particularly salient to the extent that demand-driven factors simply reflect non-traditional forms of non-financial information.

This Section shows that acknowledging the existence of a market for individual stocks complicates the elements of a Rule 10b-5 securities fraud action. Fraud or wrongdoing targeted at the demand aspect of investing in particular is worrisome, because the traditional securities fraud elements map rather awkwardly onto fraud in this gray area. Part A summarizes the relevant securities fraud laws and shows significant overlap between the information protected under the securities laws and information traditionally understood to move stock prices. Parts B through E demonstrate how demand-driven factors complicate four particularly relevant elements of a Rule 10b-5 action: falsity, materiality, nexus, and reliance. Part F evaluates overarching concerns.

A. *What Do the Securities Fraud Laws Protect?*

The majority of securities fraud lawsuits brought by private plaintiffs are brought pursuant to Section 10(b) of the Securities Exchange Act and its accompanying Rule 10b-5.[157] Section 10(b) of the Securities Exchange Act renders it illegal to use "any manipulative or deceptive device" in connection with trading a security in violation of a Securities and Exchange Commission rule.[158] Rule 10b-5 makes it illegal:

> (a) To employ any device, scheme, or artifice to defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact

[157] *See* Hurt, *supra* note 125, at 106 (citing CORNERSTONE RSCH., SECURITIES CLASS ACTION FILINGS: 2022 YEAR IN REVIEW 18 (2023) https://www.cornerstone.com/wp-content/uploads/2023/05/Securities-Class-Action-Filings-2022-Year-in-Review.pdf [https://perma.cc/7QSM-9HTJ] (finding that 83% of class action complaints in 2022 alleged a violation of Rule 10b-5).

[158] Securities Exchange Act of 1934, 15 U.S.C. § 78j(b).

> necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person[.][159]

Securities fraud laws do not protect against any and all statements. They protect against statements that are false, material, and made in connection with the purchase or sale of a security (among other requirements).[160] These requirements implicitly assume no demand for individual stocks. Instead, they are premised on the theory that stock prices (generally) behave rationally, and investors (generally) process information rationally. Thus, a stock's price reflects a known set of material information (typically, financial information), investors rationally discount information outside the bounds of this set, and wrongdoers who intentionally manipulate or make misrepresentations about the set of material information are punished.[161] In this way, securities laws protect what courts have frequently articulated as "the integrity of market prices."[162] Throughout court opinions,

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[159] Employment of Manipulative and Deceptive Devices, 17 C.F.R. § 240.10b-5.

[160] *See* Hurt, *supra* note 125. A private claim under Section 10(b) must show: a materially manipulative or deceptive misstatement; made with scienter; in connection with a securities transaction; that the plaintiff relied on the statement; economic losses; and loss causation. *See* Ann M. Lipton, *Fact or Fiction: Flawed Approaches to Evaluating Market Behavior in Securities Litigation*, 20 TENN. J. BUS. L. 741 (2019) (citing Dura Pharm. v. Broudo, 544 U.S. 336, 341–42 (2005)). Government-based actions do not require a showing of reliance. *See* Adam C. Pritchard & Robert B. Thompson, *Texas Gulf Sulphur and the Genesis of Corporate Liability Under Rule 10b-5*, 71 SMU L. REV. 927, 939–42 (2018).

[161] Prices are generally understood to reflect a certain subset of material information relevant to predicting an issuer's future cash flows. Anything else is noise. Certainly, noise can move stock prices, but relying on noise or making decisions due to noise is generally not protected by the securities fraud laws. *See infra* Section IV.A. *See also* Lin, *Reasonable Investor(s)*, *supra* note 117, at 508 ("Investor protection for a mythical population of reasonable investors is fairly straightforward: equip them with the requisite information, and they will perfectly process that information and make utility-maximizing investment decisions.").

[162] Patel, *supra* note 101, at 204–08; *see also* Fox et al., *supra* note 92, at 114–22 (surveying cases).

"integrity" is typically used to mean informational integrity, or the understanding of a stock's market price as an "information transmission mechanism."[163] The "information" referred to is typically financial information relevant to an issuer's future cash flows.

Unsurprisingly then, there is significant overlap between the information protected under the securities laws and information traditionally understood to move stock prices. The below table provides a useful (simplified) comparison:

Type of Information	**Moves Stock Prices?**	**Protected by Securities Laws?**
Information related to future cash flows (e.g., information in SEC filings, press releases, earnings announcements, etc.)	Yes	Yes
ESG issues	Maybe	Maybe
Cultural values	Maybe	Maybe / likely not
Other non-financial information or demand-driven factors	Maybe	Maybe / likely not

Actionable statements map on fairly well to the kinds of information that moves stock prices. Information related to future cash flows (the first row in the chart) undeniably affects stock prices. For example, an issuer's SEC filing containing quarterly profits will move stock prices.[164] Similarly, misstating those profits is clearly actionable under the

[163] Patel, *supra* note 101, at 208.

[164] *See, e.g.*, Aisha I. Saad & Diane Strauss, *The New "Reasonable Investor" and Changing Frontiers of Materiality: Increasing Investor Reliance on ESG Disclosures and Implications for Securities Litigation*, 17 BERKELEY BUS. L.J. 391, 412 (2020) (noting the "traditional approach to corporate disclosure" that "narrowly construes the domain of materiality to include only statements that directly relate to a company's financial performance").

securities laws. Assuming any misstatement in the first category satisfies the legal requirements that it be false, material, and knowingly made in connection with the purchase or sale of a security, that misstatement will also be actionable under the securities laws.

However, non-financial information and demand-driven factors—which could be anything in the other categories—will likely struggle to meet requirements such as materiality (e.g., is it material that the board is diverse?) and nexus (e.g., is a statement about board diversity made in connection with the purchase and sale of securities?). Nevertheless, non-financial information and demand-driven factors can also affect investor decisions and move stock prices. What should the securities laws do about those? The next Parts explore this inquiry.

B. Falsity

Actionable false statements include those that are false on their face or misleading due to the omission of a relevant fact.[165] Other statements, such as opinions or forward-looking statements, may be actionable in certain contexts.[166] Typically, puffery—general or vague statements that are not easily falsifiable—is not actionable.[167]

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[165] *See* Hurt, *supra* note 125, at 792–98 (cataloguing the different types of falsity).

[166] *See id*; *see also* Lipton, *supra* note 160, at 746 ("For example, courts frequently declare that certain vague, hyperbolic, or generic statements amount to puffery, such that they contain no useful information upon which a reasonable investor would base a decision to invest. Courts are not only famously inconsistent in how the puffery doctrine is applied, but they also tend to assume a level of rationality in market functioning that is rarely in evidence.").

[167] *See id.*; *see also* Ann Lipton, *NVIDIA*, BUS. L. PROF BLOG (Aug. 16, 2024), https://www.businesslawprofessors.com/2024/08/nvidia/ [https://perma.cc/NK8S-W46G] (citing Steven M. Bainbridge & Mitu Gulati, *How Do Judges Maximize? (The Same Way Everybody Else Does – Boundedly): Rules of Thumb in Securities Fraud Opinions*, 51 EMORY L.J. 83 (2002) (explaining that judges deciding motions to dismiss use rules of thumb to determine whether pleading requirements have been met and identifying a number of these rules, including the puffery doctrine, the

Demand-driven aspects and beliefs could certainly make statements or omissions more misleading. To understand the complexity of a falsity inquiry when faced with demand-driven investing, recall the example of Ryan Cohen's moon emoji tweet. After CNBC tweeted an article about Bed Bath & Beyond's financial difficulties, which included a picture of a woman with a shopping cart at a Bed Bath & Beyond store, Cohen tweeted the following response:[168]

Cohen filed a Schedule 13D with the SEC four days later listing his holdings in Bed Bath & Beyond (including an approximately 10% equity stake in the company).[169] This position was essentially the same as the position Cohen had previously disclosed earlier that year.[170] Nevertheless, retail investors purchased around $73 million in Bed Bath & Beyond in response, sending its share price up nearly 70%.[171] That same day, Cohen unloaded his

bespeaks caution doctrine, among others)); Hillary A. Sale, *Judging Heuristics*, 35 U.C. DAVIS L. REV. 903, 906 (2002).

[168] CNBC (@CNBC), TWITTER (Aug. 12, 2022, 7:04 AM), https://twitter.com/CNBC/status/1558046723053953025 [https://perma.cc/Y26B-WJ6H]; Ryan Cohen (@ryancohen), TWITTER (Aug. 12, 2022 10:42 AM), https://twitter.com/ryancohen/status/1558101541453795329 [https://perma.cc/CAE6-YLAM].

[169] *In re* Bed Bath & Beyond Corp. Sec. Litig., No. 1:22-cv-2541, 2023 WL 4824734, at *1–2, *6–7 (D.C.C. July 27, 2023). A Schedule 13D filing is triggered when an investor acquires more than five percent of a company's stock. *See* 17 C.F.R. § 240.13d-1.

[170] McCabe, *supra* note 57.

[171] *See* Li & Thomas, *supra* note 58 (explaining how Cohen's call options led to a surge in trading volume of Bed Bath & Beyond Stock).

entire stake in Bed Bath & Beyond, making around $68 million.[172] Bed Bath & Beyond's share price plummeted as soon as Cohen disclosed the sale.[173] Cohen, along with others, was subsequently sued, and the meaning of his August 12, 2022 tweet containing the moon emoji was a central issue in the case. Yet what, if anything, was the actionable lie stated by Ryan Cohen in his tweet?

The falsity of something like the moon emoji tweet depends on its interpretation, which in turn depends on its audience, context, and community. A professional securities analyst may see the moon emoji and dismiss it as nonsense. However, a retail investor who follows Ryan Cohen closely and pays attention to investing trends on Reddit may interpret the tweet as the following statement: "Cohen was confident in Bed Bath and . . . he was encouraging them to act."[174] It is this interpretation that is arguably "false" and therefore arguably a statement that creates liability, or so the District Court concluded.[175]

Consider again the example of Nostalgiable, the sustainable clothing company discussed previously in Section III. Recall that the clothing is marketed as "nostalgic, sustainable creations made from organic, recycled materials that celebrate our shared love of the planet." Imagine that the CEO announces on Instagram that Nostalgiable plans to introduce a new line of "sustainable" jewelry. In response, Nostalgia's stock price rises from $20 to $22 per share, buoyed in large part by retail investors who prefer to purchase products from and invest in companies with sustainable corporate missions. Later, an SEC filing discloses that the jewelry is not made from recycled materials. However, the jewelry is made from otherwise eco-friendly materials in a carbon-neutral production process—just not recycled

[172] *See In re Bed Bath & Beyond*, 2023 WL 4824734, at *1–2, *6–8 (noting how Cohen's actions increased the stock price just before he sold his stake).

[173] *Id.*

[174] *Id.* at *6.

[175] *Id.*

materials. The stock price drops back to $20 per share, and investors accuse Nostalgiable of lying about its jewelry's sustainability—due to the lack of recycled materials. But was the "sustainable" claim false? Merriam-Webster defines sustainable as "of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged."[176] "Sustainable" is not synonymous with "recycled."[177] Does it matter that a large portion of investors believed that "sustainable" indicated recycled materials? The falsity inquiry is not so simple. It is also intertwined with the materiality inquiry, discussed next.

C. Materiality

Materiality creates some of the most complex issues when considering demand-driven factors. In a market for individual stocks, the universe of potentially material information is vastly expanded.

An actionable statement is one that contains a "material fact" or omits a "material fact" necessary to make statements not misleading.[178] The widely accepted test for materiality depends on whether there is "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available."[179] This test purports to be an objective inquiry that is also context-dependent and fact-

[176] Sustainable, MERRIAM-WEBSTER (last visited Mar. 5, 2025), https://www.merriam-webster.com/dictionary/sustainable [https://perma.cc/BJT8-6GFB].

[177] Recycle, MERRIAM-WEBSTER (last visited Mar. 5, 2025), https://www.merriam-webster.com/dictionary/recycle [https://perma.cc/4WUE-K56H].

[178] Employment of Manipulative and Deceptive Devices, 17 C.F.R. § 240.10b-5(b).

[179] TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976).

specific.[180] In determining whether a statement is material,[181] courts consider a variety of factors, including whether a statement led to a significant price change, whether the statement implicates some "significant" aspect of the business, whether the statement constitutes puffery or was accompanied by cautionary language, and what other publicly available facts existed at the time.[182]

Implicit in the materiality doctrine is an assumption that stock prices and markets behave relatively rationally.[183] This is especially true when courts rely on factors such as price impact to determine the materiality of a statement or omission. That is, if there is no price change, courts may

[180] *Id.* at 445 ("The question of materiality, it is universally agreed, is an objective one, involving the significance of an omitted or misrepresented fact to a reasonable investor."). The Supreme Court has highlighted the fact-specific nature of the inquiry, noting the need to consider the "full context" and factors such as "customs and practices of the relevant industry . . . surrounding text, including hedges, disclaimers, and apparently conflicting information." Omnicare, Inc., v. Laborers Dist. Council Constr. Indus. Pension Fund, 575 U.S. 175, 190 (2015). The Court has also explained that "[t]he determination requires delicate assessments of the inferences a 'reasonable shareholder' would draw from a given set of facts and the significance of those inferences to him." *TSC Indus.*, 426 U.S. at 450.

[181] Adjudications of materiality are notoriously inconsistent. *See* Lipton, *supra* note 160, at 748 ("[C]ourts often declare that some matters are too inconsequential to concern reasonable investors. As with puffery, these judgments may be made despite explicit market evidence to the contrary, and more generally, are difficult to reconcile with findings that such banal matters as a CFO's golfing habits or a CEO's use of the company jet are relevant to assessing a corporation's financial condition.").

[182] *See* Hurt, *supra* note 125, at 798–800 (describing factors that courts use in considering materiality and gathering sources); Hoffman, *supra* note 120, at 573–81. The SEC has also provided factors to consider, including whether the misstatement hides trends or earnings shifts, whether the misstatement departs from analyst expectations, whether the misstatement involves a significant part of the issuer's operations, and whether there is an effect on management compensation. *See* SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45150 (Aug. 19, 1999).

[183] This has been criticized elsewhere. *See* Lipton, *supra* note 160, at 746 (in discussing puffery, gathering cases and explaining that "[c]ourts are not only famously inconsistent in how the puffery doctrine is applied, but they also tend to assume a level of rationality in market functioning that is rarely in evidence"). Lipton also criticizes the truth-on-the-market doctrine, which invites "courts to make heroic assumptions about how quickly markets can interpret and digest obscure or disaggregated information." *Id.*

presume that a reasonable investor found the disclosure to be immaterial as a matter of law.[184] Yet even under tests other than price change, the underlying assumption is one that presumes that stock prices react to certain kinds of information and dismiss other kinds of information—in other words, that which types of information are "important" to stock prices can be determined in some objective way, typically by assessing the import of the piece of information in the context of language, circumstances, and other information.

A second assumption implicit in the materiality doctrine is one of rational investor behavior. Specifically, courts tend to assume a relatively high level of economic rationality on the part of the "reasonable investor" even as the reasonable investor figure has eluded clear judicial consensus.[185] As Professor David Hoffman has demonstrated, in order to assess materiality in an objective manner, courts must make an "ideological choice" to "implicitly equate investors' 'reasonableness' with economic rationality, and irrationality with unreasonableness."[186] Professor Tom Lin argues that

[184] *See id.* at 745–46; Hoffman, *supra* note 120, at 578–79.

[185] *See* Amanda M. Rose, *The 'Reasonable Investor' of Federal Securities Law*, 43 J. CORP. L. 1, 88–90 (2017) ("Notwithstanding the important role the reasonable investor plays in federal securities regulation, 'courts have not spoken with one clear voice on its identity,' leaving the figure 'anonymous, elusive, and the subject of much inquiry.'"). *See also* Hurt, *supra* note 125, at 800 ("[J]ust as the reasonable person is not average and is probably more careful than the average person, the reasonable investor is probably not the average retail investor and may be an aspirational model of a rational investor"); Rose, *supra* note 185, at 89–90 (gathering sources and explaining that the reasonable investor is frequently understood to be a rational actor who "grasps market fundamentals—for example, the time value of money, the peril of trusting assumptions, and the potential for unpredictable difficulties to derail new products"); Lin, *supra* note 117, at 466–67 (2015) (explaining that while disagreement persists regarding the reasonable investor's characteristics, the "leading paradigm" defines the reasonable investor as "the idealized, perfectly rational actor of neoclassical economics"); Joan MacLeod Heminway, *Female Investors and Securities Fraud: Is the Reasonable Investor a Woman?*, 15 WM. & MARY J. WOMEN & L. 291, 297–98 (2009) ("Decisional law and the related literature support the view that the reasonable investor is a rational investor . . . .").

[186] Hoffman, *supra* note 120, at 542–43.

regulations for the idealized, reasonable investor focus on disclosure of relevant information so that investors can "maximize their utility from a stable set of preferences" and protect themselves against corporate misbehavior.[187] Moreover, courts generally presume that the reasonable investor is motivated primarily (or even solely) by the maximization of *financial returns*, which can serve to further narrow the universe of information material to such an investor.[188] In other words, courts assume that investors can rationally distinguish, in an objective manner, fact from puffery, separate out the impact of cautionary statements, compare the statement to the universe of existing facts at the time, and make an informed decision to buy or sell the stock accordingly.[189]

Introducing the market for individual stocks complicates an already complicated inquiry. The universe of potential demand-driven, non-financial factors is vast. If such factors are important to investors and drive investing behavior and stock price movements in a sustained, predictable way, should they be considered material as well (even when those factors say nothing about an issuer's financials or fundamental value)?

[187] Lin, *Reasonable Investor(s)*, *supra* note 117, at 477–78. Thus, he argues, regulation has championed more and more corporate disclosure. *See also id.* at 508 ("Investor protection for a mythical population of reasonable investors is fairly straightforward: equip them with the requisite information, and they will perfectly process that information and make utility-maximizing investment decisions.").

[188] *See id.* at 467 ("The reasonable investor is presumed to operate rationally to maximize returns in the marketplace); Saad & Strauss, *supra* note 164, at 399–400 (explaining that the reasonable investor "archetype" understands the investor as an "economically rational actor who relies solely on financial disclosures in making decisions about the purchase and sale of securities").

[189] Lin, *Reasonable Investor(s)*, *supra* note 117, at 467 (explaining that the reasonable investor is generally believed to be "capable of reading and comprehending all the noise and signals in the marketplace that encapsulate formal disclosures, economic data, market trends, senseless speculation, and irresponsible rumors. As such, when given the requisite information, reasonable investors are able to properly price the risks and rewards of an investment.").

Consider an activist short seller who takes a large short position in a company. Imagine that this short seller publishes a report on a company, raising questions around the company's commitment to diversity. This short seller has amassed a substantial following on social media for their past reports uncovering companies with poor diversity track records. Imagine, additionally, that at the time this report is published, other publicly available information indicates that the company has met and exceeded industry-wide diversity metrics. Yet the short seller's influence is great enough that their report leads to a small depression in the company's stock price. Due to the short seller's social media influence, investors ignore other publicly available information indicating that the company has met and exceeded industry-wide diversity metrics. Depending on the particular application of the materiality doctrine, a court might rule the statement immaterial due to triviality or due to the existence of other publicly available facts at the time. However, doing so would deny recovery to investors who, arguably, reasonably believed the short seller's report to have "altered the total mix of information."[190] Given the short seller's social media presence, such investors might also be more likely to be retail investors.

Other examples abound. Recall the hypothetical company of Nostalgiable. Is the portion of recycled content in the company's products material to the reasonable investor? Consider another example where a prominent celebrity says "I like Costco and I like Costco's stock" on his social media. Assume that the celebrity is telling the truth—he does like Costco's stock. Is this material? Material only to a subset of investors who follow the celebrity? Imagine a finfluencer who tells a lie, stating that a company's CEO is dating Taylor Swift. For various reasons, the lie appears plausible. Taylor Swift's many fans rush to buy the stock, inflating its price. Evidence emerges that Swift is in fact not dating the CEO, and the stock price plummets. Yet despite the statement being

[190] TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976).

objectively false, the question of materiality remains: is the CEO's (fabricated) relationship with Swift material? If not, there would presumably be no recourse for Swift's fans who bought the stock, even though they suffered financial harm. As one commentator has stated, "[i]s the test for materiality satisfied in cases where market participants seemingly respond in a heuristic fashion to a falsehood by defendants? If not, a powerful defense is created. If something is immaterial, people are free to lie about it without any liability at all."[191]

Finally, recall the example of Ryan Cohen and his moon emoji tweet. In other work, I have analyzed Cohen's tweet vis-à-vis the materiality doctrine more fully.[192] There, I argued that the materiality of Cohen's tweet from the perspective of a reasonable *rational* investor might yield a very different result from the perspective of a reasonable investor who invests based on personal utility as well as Cohen's identity—what I have called a reasonable *retail* investor.[193] The reasonable rational investor might easily dismiss the significance of Cohen's tweet; the reasonable retail investor is far less likely to do so. The court in *In re Bed Bath and Beyond* effectively acknowledged this by highlighting Cohen's particular relationship with his followers. The court stated, "[i]nvestors may have reasonably seen Cohen as an insider sympathetic to the little guy's cause: he interacted with his followers on Twitter. He appeared to speak truth to power,

[191] Langevoort, *supra* note 119, at 184. Back in 2000, the SEC settled a market manipulation case with 15-year old Jonathan Lebed after he promoted thinly-traded microcap stocks on Yahoo! Finance message boards (and sold those stocks at a profit). Lebed was able to generate more interest by using exclamation marks and all capital letters. Significant questions about the scope of the market manipulation prohibitions were raised as a result. *See* Press Release, SEC, SEC Brings Fraud Charges in Internet Manipulation Scheme (Sept. 20, 2000), https://www.sec.gov/news/press/2000-135.txt [https://perma.cc/F4T4-ZM8G]; Michael Lewis, *Jonathan Lebed's Extracurricular Activities,* N.Y. TIMES (Feb. 25, 2001), https://www.nytimes.com/2001/02/25/magazine/jonathan-lebed-s-extracurricular-activities.html.

[192] *See* Sue S. Guan, *Finfluencers and the Reasonable Retail Investor*, 172 U. PENN. L. REV. ONLINE 43, 57 (2024).

[193] *See id.*

criticizing 'compensation for the Corporate Power Brokers[;]'" as a result, "it was not crazy for retail investors to follow his lead."[194] The court acknowledged "the meme stock subculture"[195] that "understand[s] the smiley moon emoji to mean 'to the moon' or 'take it to the moon,'"[196] and "perceiv[es] [it] 'as a rallying cry to buy Bed Bath's stock,' even though Cohen had soured on Bed Bath."[197] Thus, the Court determined that the meaning was plausibly material, because there was a "substantial likelihood that a reasonable investor would consider it important."[198]

One area of demand-driven investing is already understood, at least in some scenarios, to be material—even without financial impact: ESG-related information. As Professor Joan Heminway has pointed out, "ESG information may be substantially likely to be important to the reasonable investor or be substantially likely to be viewed by the reasonable investor as a significant alteration of the total mix of available information."[199] In 2024, the SEC's climate disclosure rules and guidance reaffirmed the fact-specific nature of the materiality requirement, noting that it requires "both quantitative and qualitative considerations."[200] Specifically, "[i]n applying the concept of materiality, auditors should remain alert for misstatements that could be material

[194] *In re* Bed Bath & Beyond Corp. Sec. Litig., No. 1:22-cv-2541, 2023 WL 4824734, at *12 (D.D.C. July 27, 2023).

[195] *Id.* at *11.

[196] *Id.* at *7.

[197] *Id.* at *11. For support, the court cited to another opinion in which the Southern District of New York interpreted rocket ship emojis the same way. *Id*. at *11–12 ("In the meme stock 'subculture,' moon emojis are associated with the phrase 'to the moon,' which investors use to indicate 'that a stock will rise.'") (citing Friel v. Dapper Labs, Inc., No. 21-cv-5837, 2023 WL 2162747, at *17 (S.D.N.Y. Feb. 22, 2023)).

[198] *Id*. at *11.

[199] Joan MacLeod Heminway, *ESG and Insider Trading*, 26 U. PENN. J. BUS. L. 1058, 1060 (2024); *see also* Joan MacLeod Heminway, *The Materiality of ESG Information: Why It May Matter*, 84 LA. L. REV. 1365 (2024).

[200] The Enhancement and Standardization of Climate-Related Disclosures for Investors, Exchange Act Release Nos. 33,11275; 34,99678, at 105 (May 28, 2024), https://www.sec.gov/files/rules/final/2024/33-11275.pdf.

due to quantitative or qualitative factors and lesser amounts of misstatement could influence the judgment of a reasonable investor because of qualitative factors."[201] Professor Heminway has argued that this "clearly signal[s] a view that materiality is not merely a matter of statistical, financial importance."[202] And so she considers the scope of the "reasonable ESG investor," who may be more likely to view ESG information as material.[203] Similarly, others have argued that growing interest in ESG data expands the universe of information on which investors rely when making decisions, which counsels in favor of broadening the information considered material for purposes of securities disclosure.[204]

D. "In Connection With"

An actionable statement must also have been made "in connection with" the purchase or sale of a security.[205] Courts have interpreted the "in connection with" requirement expansively to include any statement that is "reasonably calculated to influence the investing public."[206] In a market for individual stocks, will even more statements be deemed to have been "reasonably calculated to influence the investing public?"[207]

Recall the hypothetical sustainable clothing company, Nostalgiable, and imagine that its CEO makes numerous statements on her social media about the company's sustainability. Intuitively, an investing public that prioritizes companies with environmentally conscious missions might naturally consider these statements important. Yet were the

[201] *Id.* at 544.

[202] Heminway, *ESG and Insider Trading*, *supra* note 199, at 1073.

[203] *Id.* at 1074–79.

[204] Saad & Strauss, *supra* note 164, at 399.

[205] 17 C.F.R. § 240.10b-5.

[206] SEC v. Tex. Gulf Sulphur Co., 401 F.2d 833, 859–62 (2d Cir. 1968); *see also* Merritt B. Fox, Lawrence R. Glosten & Sue S. Guan, *Spoofing and Its Regulation*, 2021 COLUM. BUS. L. REV. 1243, 1314 (2022).

[207] *Tex. Gulf Sulphur Co.*, 401 F.2d at 859–62.

statements directed at the investing public, or were they directed at the company's potential customers? Consider an example where a professional video game player states on social media that they believe a company's AI chip performs poorly—that they tested the chip and found the results disappointing. It turns out that they are lying and did not actually test the chip at all. Consider another example where a finfluencer who purports to work at Walmart claims that—based on his personal experience—Walmart treats its employees exceptionally well, that it prioritizes diversity candidates for management positions, and so forth. Some investors pay attention, and those who invest in companies for prosocial reasons choose to invest in Walmart. Imagine that the finfluencer in fact does not work at Walmart. Regardless of the truth or falsity of his statements, were they made "in connection with" Walmart's securities?

The question is not merely hypothetical. In 2022, Trevor Milton, the CEO of Nikola, a battery-electric truck company, was convicted of securities fraud for various statements made on social media and other media outlets.[208] One of Milton's arguments was that his "tweets, social media posts, podcasts, and television or print interviews" were not made "in connection with" Nikola's securities.[209] Milton claimed that those statements implicated Nikola's products rather than Nikola's securities.[210]

In a market for individual stocks, investors may be more likely to purchase or sell stocks as a result of statements that

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[208] Jack Ewing, *Founder of Electric Truck Maker is Convicted of Fraud*, N.Y. TIMES (Oct. 14, 2022), https://www.nytimes.com/2022/10/14/business/trevor-milton-nikola-fraud.html.

[209] Memorandum of Law in Support of Defendant's Motion to Dismiss Counts One and Two of the Indictment for Failure to Allege the Requisite Connection with a Security, United States v. Milton, No. 21-cr-00478, 2021 WL 9508232 (S.D.N.Y. Dec. 15, 2021) (arguing that "unlike the typical securities fraud case that focuses on alleged misstatements made in offering documents, filings with the [SEC], financial statements, and earnings reports—communications targeted to investors using media typically relied upon by investors . . . [Milton's case] focuses on Mr. Milton's tweets, social media posts, podcasts, and television or print interviews").

[210] *See id.*

do not directly implicate securities—because those statements might implicate demand-driven, nonfinancial factors. In other words, investors may be less likely to differentiate between a company's product and a company's stock, and may treat a company's stock as simply another kind of product that they select for its various characteristics, including financial or fundamental value, but also including other non-financial, demand-driven characteristics. If that is the case, then more statements are likely to be deemed to have been made "in connection with" a security (just as more statements will likely be material). This will also increasingly be true of statements made on nontraditional platforms such as social media.[211]

E. Reliance

In a private securities fraud action, plaintiffs must show reliance on the misstatement.[212] Because reliance is typically an individual, fact-specific inquiry, individual questions of reliance would otherwise preclude class certification.[213] In class actions then, plaintiffs rely on the fraud on the market doctrine to show reliance. Under the fraud on the market theory, which says that stocks trade in an efficient market where public information about an issuer affects its stock price,[214] courts may assume that a purchaser of the stock

[211] *See* Hurt, *supra* note 125, at 881–83 (considering whether statements made by certain persons on certain social media platforms should be excluded from liability).

[212] Government actions do not need to show reliance. *See* Pritchard & Thompson, *supra* note 160, at 939–42.

[213] *See* Lipton, *supra* note 160, at 743–44 (comparing traditional fraud cases to modern marketplace transactions in which fraudsters are many steps removed from an investor's ultimate losses).

[214] *See* Patel, *supra* note 101, at 208 (explaining that "investors can be said to rely on the integrity of market prices if they transact on the belief that market prices incorporate public information within a reasonable period"); Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 272, 277 (2014) [hereinafter *Halliburton II*]. The Supreme Court in *Halliburton II* explained that fraud on the market efficiency is one of "general efficiency," or the "modest premise" that "public information *generally affects* stock prices." *Halliburton II*, 573 U.S. at 277. *See also* Ann M. Lipton, Halliburton II,

relied on "market price as an unbiased evaluation of information about that stock."[215] That is, investors' reliance on market prices acts as a proxy for their reliance on the misstatement. As the Supreme Court has said:

> The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business. Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements. The causal connection between the defendants' fraud and the plaintiffs' purchase of stock in such a case is no less significant than in a case of direct reliance on misrepresentations.[216]

Professor Menesh Patel has reminded us that the fraud on the market theory is "based on the supposition that the transactions at issue occurred in a market with an informationally valuable price, in that the asset's price sufficiently reflects material, public information, as well as the supposition that traders rely on the integrity of market prices."[217] And Professor Don Langevoort explains that the

An Unexpected Gift to Plaintiffs, BUS. L. PROF BLOG (June 28, 2014), https://lawprofessors.typepad.com/business_law/2014/06/halliburton-ii-an-unexpected-gift-to-plaintiffs.html ("[T]he Supreme Court's language in Halliburton II opens a path to a looser definition of efficiency that more closely comports with the relevant legal question, i.e., whether the market has characteristics that make it reasonable to assume that false statements affect stock prices in some way.").

[215] Lipton, *supra* note 160, at 744 ("These plaintiffs are granted the benefit of two rebuttable evidentiary presumptions: first that any public, material statements will have impacted the price of the subject stock, and second, that investors transacting in such a market rely on market price as an unbiased evaluation of information about that stock. The two presumptions, together, create a syllogism: the price is influenced by defendants' statements, and investors rely on that price, therefore, investors rely on the defendants' statements."). *See also* Lucian A. Bebchuk & Allen Ferrell, *Rethinking* Basic, 69 BUS. LAW. 671, 672 (2014).

[216] Basic Inc. v. Levinson, 485 U.S. 224, 241–42 (1988).

[217] Patel, *supra* note 101, at 208. *See also Basic*, 485 U.S. at 247 ("An investor who buys or sells stock at the price set by the market does so in reliance on the integrity of that price. Because most publicly available information is reflected in market price, an

Court's opinion in *Basic* "allows recovery without a showing of actual reliance on the fraud that is justifiable so long as the market is sufficiently well-organized that we have reason to believe that fraud is likely to distort the price."[218]

However, a market for individual stocks poses difficulties for the neat relationship between information, market prices, and reliance that the fraud on the market theory reflects. On the one hand, as the universe of information that affects market price expands, so does the universe of statements that plaintiffs can and do rely upon. On the other hand, if investors purchase stocks for heterogeneous, demand-driven reasons, it is not clear that those investors actually did rely on the *market price* to convey or reflect that information. For example, Professor Aneil Kovvali has observed that certain factors are unlikely to be adequately reflected in market prices, for example ESG considerations.[219] The issue may also be more nuanced: if investors purchase stocks partially for demand-driven reasons and partially for those stocks' financial profiles, does that mean that an investor partially relied on the market price in making their purchase?

Taken to the extreme, one could argue that demand-driven factors weaken any presumption of investor reliance on market efficiency so much as to remove the possibility of class certification. That is, if sufficient numbers of investors trade for demand-driven reasons unrelated to traditional understandings of "information," their trading may be seen to so distort the price that the market for that security is no

investor's reliance on any public material misrepresentations, therefore, may be presumed for purposes of a Rule 10b-5 action.").

[218] Langevoort, Basic *at Twenty*, *supra* note 103, at 27.

[219] Aneil Kovvali, *ESG and Securities Litigation: A* Basic *Contradiction*, 73 DUKE L.J. 1229–94 (2024) (explaining that it may be unreasonable for an investor to expect that market prices reflect ESG considerations because information may be insufficient, profitable opportunities may be scarce, and translating knowledge into a trading strategy is theoretically and practically challenging). *See also* Christine Hurt & Paul Stancil, *Short Sellers, Short Squeezes, and Securities Fraud*, 47 J. CORP. L. 105 (2021) (arguing that short sellers and other atypical investors should be excluded from securities fraud class actions because, among other reasons, they should not be entitled to the *Basic* assumption of reliance).

longer deemed efficient. If that is the case, the fraud-on-the-market presumption may no longer be available to those investors.[220]

To see how this might work, return again to the example of Ryan Cohen and his moon emoji tweet in *In re Bed Bath and Beyond*. On September 27, 2024, the District Court for the District of Columbia denied plaintiffs' motion for class certification, finding that plaintiffs failed to show that the market for Bed Bath and Beyond's stock was efficient during the class period.[221] Because of evidence demonstrating a short squeeze occurring during the class period, which, according to defendants' expert, "so distorted the stock's price that it no longer efficiently reflected 'value-relevant' information," the Court was persuaded that the market for Bed Bath and Beyond's stock was inefficient during the relevant period.[222] The Court also pointed out that Cohen successfully rebutted any presumption of reliance by showing lack of price impact resulting from his alleged misstatements.[223]

The Court's reasoning seemingly relies on a highly demanding definition of market efficiency.[224] Nevertheless,

[220] *See, e.g.*, Langevoort, Basic *at Twenty*, *supra* note 103, at 20 (examining the reasoning in *Basic v. Levinson* and noting one idea that may have motivated one court's decision: "there are limits to how far we would want to go in creating an entitlement to rely on price in settings of palpable inefficiency").

[221] SPRL v. Bed Bath & Beyond Corp., No. 1:22-cv-02541 (TNM), LEXIS 175313 (D.D.C. 2024).

[222] *Id*. at *35–36, 43 (noting that "[c]onstraints on short selling undermine market efficiency by disrupting the ability of arbitrageurs from trading on their negative views of the company").

[223] *Id*. at *62–63.

[224] For much of its discussion of efficiency, the court relies on *In re PolyMedica Corp. Sec. Litig*., 432 F.3d 1, 14 (1st Cir. 2005). *See* SPRL, 22-cv-02541 at *27 (defining informational efficiency to mean where "prices respond so quickly to new information that it is impossible for traders to make trading profits on the basis of that information" (citing *In re Polymedica*)). Yet *In re Polymedica* imposes a more demanding standard of efficiency than the Supreme Court articulated more recently, in *Halliburton II*. *See* Halliburton II, 573 U.S. at 277 (explaining that fraud on the market efficiency is one of "general efficiency," based on the "modest premise" that "public information generally affects stock prices"); Patel, *supra* note 101, at 200–04 (explaining that "The *Halliburton II* Court made clear that fraud on the market is not

this raises broader questions around the availability of class certification for demand-driven investors.[225] First, if certain demand factors are seen as uninformative and noisy, they may make it easier for defendants to make a similar argument: that demand investors distorted the market for a given security, rendering it inefficient and making the *Basic* presumption of reliance unavailable.[226] Second, even if the presumption is preserved, demand-driven trading might be invoked to rebut the presumption, as a potential "showing that severs the link between the alleged misrepresentation and either the price received (or paid) by the plaintiff," at least as interpreted by the District Court in *In re Bed Bath and Beyond*.[227]

F. The Limits of Securities Fraud Doctrine

The market for individual stocks tends to narrow the gap between a company's products and a company's stock. Investors may treat a company's stock as simply another kind of product that they select for its various characteristics.

predicated on the semi-strong version of the Efficient Capital Markets Hypothesis and is instead grounded on only a generalized notion of market efficiency"); Lipton, *supra* note 214 ("[T]he Supreme Court's language in Halliburton II opens a path to a looser definition of efficiency that more closely comports with the relevant legal question, i.e., whether the market has characteristics that make it reasonable to assume that false statements affect stock prices in some way."); Donald C. Langevoort, Halliburton II *and Market Efficiency* (July 10, 2014), https://clsbluesky.law.columbia.edu/2014/07/10/halliburton-ii-and-market-efficiency/ (noting that *In re PolyMedica* "seems to insist on proof of immediate price reaction to all material information in order to justify a finding of sufficient efficiency" and hoping that "*Halliburton II* will take much of the steam out of this effort by its emphasis on 'general' market efficiency rather than hyper-efficiency").

[225] *See* Christine Hurt & Paul Stancil, *Short Sellers, Short Squeezes, and Securities Fraud*, 47 J. CORP. L. 105 (2021) (arguing that short sellers and other atypical investors should be excluded from securities fraud class actions because, among other reasons, they should not be entitled to the *Basic* assumption of reliance).

[226] This may nonetheless be difficult to show under *Halliburton II*, as only a "generalized" showing of market efficiency is necessary. *See Halliburton II*, 573 U.S. at 268–69 (2014).

[227] *Halliburton II*, 573 U.S. at 268–69 (2014).

Those characteristics certainly may include financial risk and return or fundamental value, but they may also include other non-financial, demand-driven characteristics.

Just as demand-driven investing is testing the boundaries of theory and doctrine that largely assume a rational, objective relationship between information, prices, and investors, complexities emerge when applying securities fraud laws that are built on those same assumptions.[228] Even if, hypothetically, 95% of cases involve a largely linear relationship between falsehoods, price impact, and investor losses, ignoring the other 5% (and likely growing) gray area cases may systematically underserve investors and neglect the demand-driven reality of at least a portion of today's stock market. In addition, while existing laws may be able to reach some harmful behavior, they risk inconsistent application that can harm market functioning and chill legitimate market speech. The next Section shows how.

V. HOW SHOULD THE SECURITIES LAWS RESPOND?

The securities fraud laws—like the financial theory underpinning them—largely assume no market for individual stocks. Yet increasing evidence demonstrates that in addition to financial factors, investors trade as a result of demand-driven, non-financial factors such as ESG issues, cultural and political values, self-expression, and community enjoyment. As the stock market information ecosystem absorbs this reality, shifts are occurring in price and market behavior.

This raises a critical tension. Much of the securities laws seek to promote market integrity and protect market participants by regulating against fraud and manipulation. If recent events demand a broader understanding of information and factors that move stock prices, it will become increasingly

[228] As others have observed, "[f]raud can operate powerfully in less-than-fully efficient markets and have pernicious effects that are hard to isolate even in those that are efficient." Langevoort, Basic *at Twenty*, *supra* note 103, at 41.

difficult to distinguish between fraudulent and expressive speech, straining the reach of these laws. It also may become more difficult, or even less desirable, to regulate those who generate information (as that category expands).

A number of questions follow. Should this gray-area behavior be regulated by securities laws, or should it not, for fear of chilling legitimate speech or information generation? Even if the answer is yes, is such regulation feasible? And, who is the investor that regulation does or should seek to protect? Part A identifies and examines the gray area of demand-driven investing vis-à-vis securities laws application. Part B makes the argument that securities laws should factor in demand-driven investing and the existence of a market for individual stocks. Part C explores potential responses and further implications.

A. A Demand-Driven Gray Area

Demand-driven investing lowers the barriers to fraud and manipulation by increasing the informational levers that a wrongdoer can pull. If stock prices are not solely driven by fundamentals, but instead also respond to investor demand and exhibit characteristics of an individual market for stocks, wrongdoers can exploit a much wider range of investor sentiment and preference in order to generate stock price movements. Wrongdoers need not say anything directly related to a stock's fundamentals in order to generate movement. This may allow them to steer clear of securities laws that traditionally target speech or behaviors directly related to a stock's core price drivers: fundamental information.

One clear risk is a person who intentionally posts communications that target demand factors, knowing that investors will respond in a predictable way. These communications may contain non-financial—and even non-falsifiable—information. The securities fraud laws do not clearly protect those harmed by such behavior (those who traded and lost money as a result of such behavior) because

those communications may not be deemed sufficiently material under existing doctrine, for example. Such trading would most likely be chalked up to noise and imprudence, neither of which is, by itself, actionable under the securities laws.

Recall the example of Andrew Left, the activist short seller who was charged with securities fraud in July 2024.[229] According to the allegations, Left leveraged his social media presence, using "sensationalized headlines and exaggerated language"[230] to "knowingly exploit[] his ability to move stock prices by targeting stocks popular with retail investors and posting recommendations on social media to manipulate the market and make fast, easy money."[231] One illustrative instance involved Cronos Group, a Canadian cannabis company (ticker CRON).[232] Left published a report on Cronos and tweeted, "$CRON tgt price $3.5. Everything that is contaminated about the Cannabis space. ALL HYPE with possible securities fraud."[233] Later, Left made an appearance on CNBC's *Fast Money,* where he was asked if he was "just as

[229] Press Release, SEC, SEC Charges Andrew Left and Citron Capital for $20 Million Fraud Scheme (July 26, 2024), https://www.sec.gov/newsroom/press-releases/2024-89; Press Release, Dep't of Just., Activist Short Seller Charged for $16M Stock Market Manipulation Scheme (July 26, 2024), https://www.justice.gov/opa/pr/activist-short-seller-charged-16m-stock-market-manipulation-scheme [https://perma.cc/URH7-UYHZ].

[230] Press Release, Dep't of Just., Activist Short Seller Charged for $16M Stock Market Manipulation Scheme (July 26, 2024), https://www.justice.gov/opa/pr/activist-short-seller-charged-16m-stock-market-manipulation-scheme [https://perma.cc/URH7-UYHZ].

[231] *Id.* The SEC also faulted Left for changing the price targets in his reports: "Left's actions of internally changing the amounts of the target price from $60 to $100, at a time when he was privately discussing his hope to move the stock to $30, demonstrates that his selection of a target price was not tied to any specific analysis but rather was used to manipulate and influence a target company's stock price in a way that benefitted Defendants." Complaint, SEC v. Left, 24-cv-06311, at 19 (C.D. Cal. July 27, 2024).

[232] Complaint, SEC v. Left, 24-cv-06311, at 20 (C.D. Cal. July 27, 2024).

[233] *Id.* at 21.

short the stock right now as you were at the beginning of the day."[234] Left said that he "took a small size position off today but I am still extremely short the stock," and repeated his stances that CRON's share price would fall to $3.50.[235] However, by this time, Left already exited more than 75% of his exposure to Cronos and sold at prices significantly higher than $3.50.[236] The SEC and the DOJ allege that this was materially misleading to investors.[237]

The inquiry is not so simple. Left's identity and social media presence position him well to leverage demand-driven factors among his followers—especially among retail investors. Left evidently made statements claiming that he "could write a tweet about a part 2 and get another $1," and wondered "[w]hat can I put in a tweet to juice" a stock's price up.[238] Left's identity presumably *does* matter—and what Left actually does in his trades may matter more than the contents of his research report—even if the reasonable (rational) investor figure in securities laws would presumably care more about the contents of Left's report than they would about Left's trading positions.[239]

Ryan Cohen and his moon emoji tweet can be similarly analyzed. The emoji is, by itself, seemingly non-factual (and therefore non-falsifiable), and non-informative. But it nevertheless tapped into strong demand factors among retail investors—Cohen's "meme stock king" identity and the cultural relevance of Bed Bath & Beyond, for example.[240]

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[234] *Id.*

[235] *Id.*

[236] *Id.*

[237] Left's actions might be interpreted as innocuous, such that he believed his recommendations and was merely covering his shorts earlier as a risk-averse trading strategy. *See* Matt Levine, *Andrew Left Wasn't Short for Long*, BLOOMBERG (July 26, 2024), https://www.bloomberg.com/opinion/articles/2024-07-26/andrew-left-wasn-t-short-for-long [https://perma.cc/TK3Y-ZZFX].

[238] Complaint, SEC v. Left, at 18, 21 (C.D. Cal. July 27, 2024).

[239] *See* Levine, *supra* note 237 (posing the question: "I am not sure how material this was to investors—surely the contents of the report should matter more than his trading positions?").

[240] *See* Gottfried & McCabe, *supra* note 52.

Resulting harms can be significant. In the moon emoji example, once Ryan Cohen disclosed his sale of Bed Bath and Beyond shares, the share price nosedived, leading to hundreds of millions of dollars in losses for retail investors who had purchased Bed Bath and Beyond shares.[241] In such situations, because demand-driven traders often buy or sell in a single direction, their losses can be dramatically amplified. Diversification provides only limited protection against such losses. Indeed, as Professor Alicia Davis has demonstrated, while all traders in the secondary markets will in aggregate have an expected net gain (or loss) of zero dollars due to fraud, specific types of traders and individual traders (even those who are diversified) can suffer significant losses or reap significant gains as a result of fraud.[242] Among other reasons, this is because of a wide variation in the amount of fraud-related losses and gains, such that investors can suffer large losses (or enjoy large gains) overall even though the proportion of their losses and wins approaches 50 percent with more trades.[243] These variations are likely to be just as or even more dramatic in the case of demand-driven retail investing, where investors tend to buy or sell unidirectionally in response to a wrongdoer's communication—resulting in large, undiversified losses.

[241] *See* Bailey Lipschultz and Divya Balji*, Ryan Cohen's Fans Lose Millions as Bed Bath and Beyond Bubble Pops*, BLOOMBERG (Aug. 19, 2022), https://www.bloomberg.com/news/articles/2022-08-19/ryan-cohen-s-fans-lose-millions-as-bed-bath-beyond-bubble-pops ("Individual investors who flocked into Bed Bath & Beyond Inc. over the past week, trying to squeeze short sellers and make a killing backed in part by the belief a Ryan Cohen-led shakeup was well underway, are now sitting on $205 million in losses -- at the very least.").

[242] Alicia J. Davis, *Are Investors' Gains and Losses from Securities Fraud Equal Over Time? Theory and Evidence* (2015) 3rd Annual Conference on Empirical Legal Studies Papers; CLEA 2008 Meetings Paper; U of Michigan Law & Economics, Olin Working Paper No. 09-002. Available at SSRN: https://ssrn.com/abstract=1121198 or http://dx.doi.org/10.2139/ssrn.1121198 (running simulations that counter the argument that diversified investors' gains and losses due to secondary market fraud are equal).

[243] *Id.* (showing that even though the proportion of losses and wins approaches 50 percent with more trades, an increase in trades actually lowers the probability of a trader actually breaking even, eventually reaching a probability of zero).

Investors' reliance on demand-driven factors is not clearly protected by the securities laws. If wrongdoers can systematically target the demand-driven gray area, investors will systematically lose. Yet, a traditional interpretation of Rule 10b-5 will likely exclude demand-driven trading as a basis for recovery and fail to account for the market for individual stocks.

B. Demand as Information

One argument for deliberately considering demand-driven factors and the market for individual stocks is that if the stock market is able to price in demand or otherwise treat it as informative (and if similar harm can result), so should the securities laws.

This is not an outrageous proposition. Investors increasingly make decisions for non-traditional, non-financial reasons, and as they do so, the market ecosystem can treat those motivations as informative. In a market for individual stocks, these non-financial, demand-driven characteristics can generate persistent stock price movements, just as changes to fundamentals can. This increasingly blurs the line between demand-driven trading and (traditional) information-driven trading: these nonfinancial demand premia can be thought of as informative, just as consumer demand might be.[244]

One other reason for deliberately considering demand-driven factors is that the harm caused by fraud in the market for individual stocks may be slightly broader than the harm caused by securities fraud, traditionally defined. Securities fraud causes harms to investors through financial losses and reduced faith in the stock market, but it also harms the

[244] Recall the example of Nostalgiable, the hypothetical sustainable clothing company previously discussed in Section III *supra*. Imagine that Nostalgiable is able to fund greater value-generating projects as a result of its higher $20 share price (a share price reached through demand-driven trading). This then raises Nostalgiable's fundamental value based on its cash flows. As its fundamental value rises, $20 per share may no longer seem inflated. Instead, it may appear informative.

integrity and role of stock prices as information transmission mechanisms. Fraud in the market for individual stocks causes these same harms, but it can also cause broader harms akin to fraud in the market for consumer goods and services where "[f]alse claims harm consumers by deceiving them, hampering their autonomy, eroding their trust, improperly influencing their purchasing decisions, and providing unreliable information about goods and services that they nonetheless rely on."[245]

Overall, the argument would be that just as the categories of information that affect stock prices (and systematically cause harm) are growing to encompass demand-driven factors, so should the categories of actionable statements under the securities laws also encompass demand-driven types of information. Of course, uncertainty persists: this has only shifted the inquiry, not removed it. What are the boundaries around actionable, demand-driven information?

C. Possible Responses

Heterogeneous demand factors are occupying a larger role in stock price movement and investor behavior. While this Article does not aim to provide a full prescriptive solution, it explores a number of possible responses by the securities laws.

One possibility is to revisit the scope of materiality under Rule 10b-5. The materiality inquiry could provide a natural place for courts to consider non-traditional demand factors: the relationship between the information consumer and the information provider, the extent to which non-financial considerations drive decision-making, and the role played by the market for individual stocks and heterogeneous demand for individual stocks. One potential conception of the materiality test could be whether there is "a substantial

[245] Roberts, *supra* note 11, at 98. This is not necessarily to equate harms with those caused by traditional consumer fraud leads, where for example, false claims on drug effects can lead to catastrophic consequences. It is merely to point out potential overlap in the ways that consumers respond to claims in both the market for individual stocks as well as claims in the market for traditional goods and services.

likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor in the given market as having significantly altered the 'total mix' of information made available." This would be driven by the acknowledgment that the marketplace for stocks is not always rational or driven solely by financial risk and return, as well as the possibility that different parts of the stock market behave differently.[246] Of course, large caveats remain with respect to operationalizing such a test. In particular, defining any given market may prove too onerous, or be mired in fact-bound inquiries that render the doctrine toothless.[247]

Here, it is also worth considering whether the concept of a "reasonable investor" itself is due for a change.[248] In addition

[246] Relatedly, see Lipton, *supra* note 160, at 761 (identifying variations between markets and kinds of fraud and explaining that efficiency is "a matter of degree; securities may trade in robust or thin markets, and respond with more or less alacrity to new information. Exceptionally well-developed markets may respond to (relative) minutiae, while even highly inefficient markets may nonetheless respond to especially significant corporate events").

[247] While a full treatment of this possibility is beyond the scope of this Article, a few preliminary considerations are worth noting. Most obviously, the "given market" could be conceptualized in any number of ways, by size, by market capitalization, by industry, by investment community, and so forth. Line-drawing challenges will abound. Relatedly, on whom would the burden rest to prove the scope of the relevant market, and what might be reasonable to believe within that market? And, would this showing unnecessarily burden litigants and courts? On the other hand, courts engage in line-drawing all the time. *See, e.g.*, Hoffman, *supra* note 120, at 538 ("Courts require investors to investigate their purchases, to coldly process risk, to disregard oral statements of optimism, and in general to be economically rational. If investors fail to meet these expectations, judges deny them the protection of the securities laws. In this way, courts impose on public securities investors a special kind of legal duty.").

[248] Despite ample evidence of investor behavior that is not fully rational, the myth of the idealized, rational reasonable investor persists. *See, e.g.*, Michael J. Kaufman, *Foreword: Behavioral Economics and Investor Protection*, 44 LOY. U. CHI. L.J. 1323, 1325 (2013) ("Despite [Daniel] Kahneman's transformative research, however, the presumption that individuals are rational utility-maximizers still permeates the law and policy governing the protection of investors from securities fraud."); Cynthia A. Williams, The Securities and Exchange Commission and Corporate Social Transparency, 112 HARV. L. REV. 1197, 1251 (1999) (explaining that in the 1970s, the SEC "concluded that because the primary reason for investing is to receive an economic return, investors were primarily concerned with economic, not social, issues in making

to being an elusive and controversial figure, the concept of the reasonable investor may also be an evolving one.[249] Traditionally expressed as a relatively financially sophisticated and generally rational investor who primarily invests to achieve a specific financial risk and return profile,[250] today's reasonable investor may expressly consider social and environmental concerns, cultural or entertainment value, political relevance, or the expressive nature of their investment decisions—in lieu of or in addition to seeking financial returns.[251] In considering the relevance of ESG disclosure, for example, others have argued that a "widening rift between this reasonable investor archetype and contemporary investors who make demands for and rely on nonfinancial information, including corporate ESG performance, challenges doctrinal precedent that deems non-financial ESG disclosures to be immaterial."[252]

As investors increasingly make decisions based on individual demand factors, those demand factors will increasingly be important to an updated, contemporary

investment decisions. As a result, the SEC determined that it would continue to rely upon an economic understanding of materiality in weighing disclosure proposals.").

[249] *See* Heminway, *ESG and Insider Trading*, *supra* note 199, at 1074–76; Heminway, *The Materiality of ESG Information: Why It May Matter, supra* note 199 at 1394 ("Investor profiles are not static.").

[250] *See, e.g.*, Lin, *Reasonable Investor(s)*, *supra* note 117, at 467 (describing the attributes of the paradigmatic reasonable investor, who "is generally understood to be the idealized, perfectly rational actor of neoclassical economics. The reasonable investor is presumed to operate rationally to maximize returns in the marketplace. Prior to making investment decisions, the reasonable investor is capable of reading and comprehending all the noise and signals in the marketplace that encapsulate formal disclosures, economic data, market trends, senseless speculation, and irresponsible rumors.").

[251] *See supra* Section I.

[252] Saad & Strauss, *supra* note 164, at 400. *See also* Stefan J. Padfield, *Is Puffery Material to Investors? Maybe We Should Ask Them*, 10 U. PA. J. BUS. & EMP. L. 339 (2008) (reporting that when asked about statements that courts had determined to be immaterial puffery, between 33% and 84% of surveyed investors believed the statements to be material).

version of the "reasonable investor."[253] As such, non-financial, demand-driven factors may be contemplated to fall reasonably within the context-dependent, fact-specific nature of the materiality inquiry,[254] which involves "delicate assessments" of how information would be interpreted by a reasonable investor.[255]

Thus, rather than hewing to the idea of a homogenous, rational investor, separating out different types of investors may be worthwhile. For example, I have proposed the idea of the "reasonable retail investor" elsewhere, which accounts for a contemporary retail investor's greater likelihood of relying on social media and heuristics to make investment decisions.[256] The reasonable demand-driven investor could represent another slice of the investing community—one who invests for individual, demand-driven reasons and makes

[253] *See* Guan, *supra* note 192 (discussing the concept of the reasonable retail investor). *See also* Saad & Strauss, *supra* note 164, at 412 (in considering the materiality of ESG information, explaining that the "changing attributes of a reasonable investor usher in an expanded view of the type and content of disclosures that such investors deem material to their decisions to invest in, engage with, or divest from particular companies," and noting that it "material information is that which is important to a reasonable investor, then the observed trends, which depart from shareholder demographics and behavior of the past decades, suggest a corresponding need to change the scope of disclosures considered legally material").

[254] *See, e.g.*, Heminway, *The Materiality of ESG Information*, *supra* note 199, at 1397 (arguing that "a unitary focus on pecuniary importance or significance in evaluating materiality, if applied in the federal securities regulation context, ignores the overall breadth and flexibility of the materiality standard articulated in *TSC* and runs counter to guidance offered in SAB No. 99, which expressly advises the use of both quantitative and qualitative materiality assessments. In addition, many firms and investors individually recognize the importance of ESG to their businesses in nonpecuniary contexts").

[255] *TSC Indus.*, 426 U.S. at 450 (explaining that "[t]he determination requires delicate assessments of the inferences a 'reasonable shareholder' would draw from a given set of facts and the significance of those inferences to him."); *see also* Omnicare, Inc., v. Laborers Dist. Council Constr. Indus. Pension Fund, 575 U.S. 175, 190 (2015) (explaining the need to consider the "full context" and naming factors such as "customs and practices of the relevant industry," "surrounding text, including hedges, disclaimers, and apparently conflicting information").

[256] *See* Guan, *supra* note 192 (discussing the concept of the reasonable retail investor).

decisions to maximize a varying set of utilities that are not necessarily financial. The point is that "[w]hile all investors should receive high-quality, mandated information, information that is profoundly insightful for one type of investor may be prosaically uninformative to another type of investor."[257] Rather than dismissing such behavior as irrational (and likely undeserving of protection by the securities laws), embracing the diversity of investors could lead to more sensible outcomes in securities litigation and extend protections to those who are harmed by the gray area behavior discussed above.[258]

Another possibility is to consider removing the requirement of materiality, or alternatively, the requirement of reliance. Professor Ann Lipton has previously suggested doing just this. Arguing that courts "should be relieved from the burden of assessing market evidence or—as much as possible—determining the hypothetical significance of corporate information to investors," she considers eliminating either the materiality element or the reliance element of a Rule 10b-5 action (but not both elements).[259] With respect to eliminating a showing of reliance, this would bring a Rule 10b-5 action closer to claims under Section 11 of the Securities Act,

[257] *See* Lin, *supra* note 117, at 515 (arguing that "[i]nstead of comparing the effects of a disclosure or an omission on an amorphous, idealized investor, the recognition of diverse investors would better recognize conflicts among investors and allow for more honest and dynamic comparisons based on shared characteristics and shared interests of comparable investors."). Professor Lin has proposed a typology with heterogeneous, diverse investors rather than a singular, homogeneous reasonable investor. *Id.* at 513–16. Lin also examines the mismatches that have resulted as a result of regulation for a homogeneous reasonable investor and the reality of heterogeneous investors. Specifically, Lin argues that regulating for the idealized, reasonable investor focuses on disclosure of relevant information so that investors can "maximize their utility from a stable set of preferences" and protect themselves against corporate misbehavior. *Id.* at 477–78. Moreover, he explains that real investors "do not have perfect rationality and cannot process all disclosed information properly to make optimal investment decisions." *Id.* at 480. Rather, "[m]any real investors price an investment on factors unrelated to the fundamental value of the company or the macroeconomic realities of the marketplace." *Id.*

[258] *See supra* Section V.A.

[259] Lipton, *supra* note 160, at 773.

under which misleading registration statements are assumed to affect the issuer's stock prices.[260] Professor Lipton raises the possibility of similarly assuming that public statements affect stock prices and imposing statutory fines paid to investors who have lost money during the relevant period.[261] With respect to eliminating materiality, she explains that a light burden of showing reliance (investors who can show that they factored the misstatement, however minimally, into their decision) might be more realistic without overly expanding the universe of potential claimants.[262] She also explores the merits of a hybrid system, where investors who show reliance are entitled to a larger statutory award.[263]

Relatedly, a heightened pleading standard for materiality—similar to the PSLRA's heightened pleading standard for scienter—while reducing burdens on showing market efficiency might be worth considering. Demonstrating loss causation would be sufficient. In a slightly different context, Professor Don Langevoort suggested a similar path forward in considering courts' confusion following the Supreme Court's decision in Basic.[264] Requiring plaintiffs to plead a strong inference of materiality could then allow courts to focus on the fraudulent or manipulative conduct – i.e., that

[260] *See id.* at 774.

[261] *Id.* (also noting drawbacks of this proposal, including that courts would still need to determine what a hypothetical investor would care about and that investors might be overcompensated with payments for losses unrelated to the wrongdoing).

[262] *Id.* at 774–75 (explaining that one problem here is that huge number of investors will not be able to recover if they cannot demonstrate reliance).

[263] *Id.* (suggesting that investors who demonstrate reliance be entitled to a larger award than those who rely solely on the materiality of the misstatement).

[264] Langevoort, Basic *at Twenty*, *supra* note 103, at 46–47 (suggesting the extension of the heightened pleading standard for scienter to materiality and duty to speak, and explaining that "[o]nce a case survives this early-stage merits test, however -- and many will -- there is no need for the overly harsh second round of pre- discovery defenses on matters such as market impact or loss causation . . . . Nor for obsession in class certification with distractions such as measures of market efficiency"). Langevoort argues that "[t]his approach -- tough on the merits at an early stage of the lawsuit, but more forgiving once there is a strong inference of fraud -- balances the competing interests of deterrence, compensation and cost-minimization." *Id.*

there was a knowing misrepresentation that, if, material to plaintiffs, reasonably meant that those plaintiffs relied on such.

It may also be worth considering limiting some of the means by which courts can declare statements immaterial as a matter of law simply on the pleadings. For example, courts have ruled that a reasonable investor would dismiss various kinds of information as too trivial or too inconsequential.[265] Courts have also determined that a statement is immaterial because other truthful, publicly available information was already known to the market—sometimes called the "truth-on-the-market" doctrine.[266] Such doctrines have been criticized for their inconsistent application as well as the unrealistic nature of their inquiry, for example for "falsely imbu[ing] markets with near mystical perfection" and "invit[ing] courts to make heroic assumptions about how quickly markets can interpret and digest obscure or disaggregated information."[267] A market for individual stocks diminishes the reliability of such doctrines further: demand-driven factors may not easily be categorized as "truthful" or not, and it is unclear what other information would "contradict" demand-based information. And, the idiosyncratic nature of demand makes it harder to categorically declare a statement immaterial for triviality.

Another possibility is to reduce these burdens for stocks that are more thinly traded. These stocks are already more likely to be the subject of fraud, especially fraud that targets demand-driven factors.[268] This is not least because their prices are often volatile and highly responsive to trading. Of course,

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[265] *See e.g.*, *id.*, at 747–48; Bainbridge & Gulati, *supra* note 167, at 125–26; Hoffman, *supra* note 120, at 573.

[266] *See* Lipton, *supra* note 160, at 748; Hurt, *supra* note 125, at 800.

[267] Lipton, *supra* note 160, at 749.

[268] Many pump-and-dump schemes occur in stocks that are thinly traded, which are particularly susceptible to price manipulation due to lower liquidity and lack of information about the stocks. *See Microcap Fraud*, SEC, https://www.investor.gov/additional-resources/spotlight/microcap-fraud [https://perma.cc/6F4A-MJSV].

this runs into previously-identified problems of definition (e.g., what does "thinly-traded" mean?) and application.

The above responses implicitly assume that demand-driven factors (and investors who trade accordingly) deserve serious consideration under the securities fraud laws. Another set of responses might be motivated by the opposite view: that demand-driven trading is noisy and therefore undesirable. There, the logical response would be to strengthen the market's anti-demand forces. That is, if one believes that social media and individual investor demand reduce the market's ability to accurately price stocks and therefore its efficient operation, then it becomes more difficult and riskier to bet against these factors, as they by definition are idiosyncratic and irrational.[269] Social media and individual demand factors only exacerbate this phenomenon. One counter to this would be to reduce costs for those betting against demand-driven investing.[270]

Underlying the discussion of doctrine are important policy considerations. Most of these are not new. They involve judgments as to the purpose of the securities fraud laws, debate as to the appropriate burdens placed on litigants and courts, the identity of the investor protected by the securities laws, and what kind of marketplace the laws intend to promote.[271]

Acknowledging the existence of a market for individual stocks reanimates a number of these debates. First, is the purpose of the securities fraud laws to protect individual investor reliance, or to protect and facilitate market integrity? Facilitating market integrity might naturally foster reliance;

[269] *See* Asness, *supra* note 108.

[270] One might, for example, seek to lower costs for short sellers, if we believe that demand-driven investing tends to inflate stock prices above their rational level.

[271] Lipton, *supra* note 160, at 772 (noting that "it has long been understood that any judicial assessment of markets will necessarily offer only a rough justice," and that "standards of greater or lesser stringency may not be attributable to judicial misapprehension so much as a calculated preference as to where to allocate the burden of uncertainty for an inquiry—the market effects of a fraud—that is inherently uncertain").

investors more securely rely on information in a market that promotes public dissemination of truthful information. Yet as the previous sections show, the overlap is not perfect, and many securities fraud doctrines may focus on protecting informational integrity without fully considering the reality and complexity of the individual investor.[272] As Professor Lipton has reminded us, "[o]nce, Section 10(b) lawsuits were rooted in interference with the plaintiff's decisional autonomy; today, they proscribe what can best be described as the wrongful causation of economic harm."[273]

In addition, the possibility of capturing all statements targeted at demand-driven investing implicates particularly thorny questions regarding speech in the stock markets. In particular, any expansion of the boundaries on actionable statements risks chilling legitimate speech.[274] This is one reason to cabin securities fraud liability to speech that is clearly problematic through its interference with market and price integrity. Doing so promotes a participatory trading environment and encourages taking a stake in the stock

[272] Consider the analogy between investor fraud and consumer fraud. Protecting reliance on demand-driven factors is sensible if the goal is to protect investor autonomy and decision-making. Under the Lanham Act, a plaintiff must show that the advertisement was "material," defined as "likely to affect the purchasing decisions of a substantial portion of the relevant audience." Roberts, *supra* note 11, at 125. Courts look at evidence and consider the interaction with falsity, "inherent" characteristics of the goods or services, and so on.

[273] Lipton, *supra* note 160, at 741–42.

[274] While a full treatment of the issue is beyond the scope of this Article, for a more in-depth treatment of First Amendment applicability to securities disclosure rules, *see, e.g.*, Frederick Schauer, *The Boundaries of the First Amendment: A Preliminary Exploration of Constitutional Salience*, 117 HARV. L. REV. 1765, 1778–80 (2004) (pointing out that "the SEC engages in a pervasive process of controlling speech on the basis of its content" and describing securities regulation as a "prime example of the speech that is relatively invisibly outside the First Amendment's boundaries"); Helen Norton, *What Twenty-First-Century Free Speech Law Means for Securities Regulation*, 99 NOTRE DAME L. REV. 97 (2023); Helen Norton, *Manipulation and the First Amendment*, 30 WM. & MARY BILL RTS. J. 221, 233 (2021) (exploring the interaction between First Amendment protections and manipulation and arguing that the Supreme Court's doctrine on commercial speech should be extended to include "manipulative" commercial speech).

market without fear of inadvertent liability.[275] Professor Christine Hurt, in considering whether the securities laws should distinguish between a company's formal corporate statements and those it makes on social media, argues that the categories of speech that would give rise to securities fraud liability under Rule 10b-5 should be limited in light of the vast and varying platforms on which speech occurs, from social media to news conferences to formal filings.[276] On the other hand, limiting liability could foster fraud and potentially leave a growing swath of investors without recourse under the securities laws.

Over the years, much debate has considered the proper scope of Section 10(b) and Rule 10b-5, including the social benefit (and cost) of securities actions, their purpose, which actors are best positioned to bring such suits, and the merits of the assumptions underlying the increasingly complex regime.[277] A full treatment of the arguments is beyond the scope of this Article. Nor do I advocate overhauling the

[275] *See* Fisch, *supra* note 81, at 1836–43 (discussing how direct stock ownership can promote citizen capitalism); Jack M. Balkin, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1 (2004) (exploring how digital technologies alter the social conditions of speech and arguing that free speech theory should promote a participatory, democratic culture).

[276] Hurt, *supra* note 125, at 789 (explaining that "there may be a level of socially acceptable securities fraud that must be tolerated in an information society"). This also raises very difficult questions in light of First Amendment implications. *See e.g.*, Helen Norton, *Manipulation and the First Amendment*, 30 WM. & MARY BILL RTS. J. 221 (2021) (exploring the interaction between First Amendment protections and regulating manipulation).

[277] *See, e.g.*, Zohar Goshen & Gideon Parchomovsky, *The Essential Role of Securities Regulation*, 55 DUKE L.J. 711, 711 (2006) (arguing that securities regulation is and should be designed to protect and promote information traders' work); James J. Park, *Rules, Principles, and the Competition to Enforce the Securities Laws*, 100 CALIF. L. REV. 115, 143–62 (2012) (evaluating the costs and benefits of decentralized and centralized securities enforcement systems); William B. Rubenstein, *On What a "Private Attorney General" Is—And Why It Matters*, 57 VAND L. REV. 2129, 2151 (2004); Lipton, *supra* note 160, at 773 ("[I]t has long been recognized that securities class actions minimally, if at all, compensate defrauded investors; their chief value lies in their capacity to deter misconduct and thus inspire confidence in securities markets generally."); FOX ET AL., *supra* note 11.

securities litigation system. Nevertheless, it is worth evaluating the implications—both new and familiar—of a market for individual stocks to determine the proper scope of Section 10(b) and Rule 10b-5. Doing so can inform future research and any policy responses.

CONCLUSION

This Article has made the argument for the existence of a market for individual stocks, offered a framework under which demand-driven investing moves stock prices, and explored the resulting implications. Investors may invest to construct a portfolio with particular risk and return characteristics, but they may also invest for demand-driven, non-financial reasons. Acknowledging this shift complicates the traditional understanding of a relatively linear relationship between information, investor behavior, and stock price movements. Drawing the boundaries around actionable statements for purposes of securities fraud recovery also becomes more complicated. Ultimately, just as the categories of information that affect stock prices—and can systematically cause harm—are growing to encompass demand-driven factors, so too should the categories of actionable statements under the securities laws.