Meme Corporate Governance

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Abstract

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Keywords: Meme Stock, Retail Investors, Corporate Governance, Shareholder Voting, ESG

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MEME CORPORATE GOVERNANCE

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In 2021, several publicly traded companies, such as GameStop and AMC, experienced a dramatic influx of retail investors in their shareholder base. This Article analyzes the impact of the "meme stock surge" phenomenon on the companies, particularly with respect to their governance outcomes and structures. The paper presents three principal findings. First, as a preliminary matter, we show how the "meme stock" frenzy was affected by the introduction of the commission-free trading platform, such as Robinhood, in 2019. We show empirically that the meme stock companies experienced a larger trading volume when commission-free trading was widely introduced. Second, we examine how the influx of retail shareholders has directly affected the governance outcomes at the meme stock companies. The main finding is that, notwithstanding the promise of more active shareholder base, meme stock companies have experienced a significant decrease in participation by their shareholders with respect to voting, and shareholder proposals under Rule 14a-8 have also been extremely limited (non-existent in most meme stock companies). Third, we examine other popular governance metrics—such as ESG and board diversity indices—and show that while the diversity index has not improved, the ESG measure has gotten worse for the meme stock companies. While limited to meme stock companies, our findings show that the sudden influx of retail shareholders at these companies have not translated into more "democratic" governance regimes.

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I. INTRODUCTION

In January 2021, the U.S. stock market was hit by a "meme stock" storm. Fueled by the rise of zero-commission trading (popularized by Robinhood[1]) and online coordination through social media sites—such as Reddit—retail investors engaged in an active "buy" campaign to dramatically push up the GameStop stock price to the stratospheric level of over $80 per share from less than $4 per share. GameStop, a gaming merchandise retailer, had been losing money and was facing a liquidity crisis.[2] The market had been predicting (as evidenced by the low stock price) that the company would likely file for bankruptcy (and possibly be liquidated) in the near future. In accordance, a number of hedge funds—most prominently Melvin Capital—had taken a large short position against its stock, betting that the price would drop even further. Retail investors' influx seems to have been driven in part to create a "short squeeze" against the hedge funds.[3] The end result was a large loss on—as well as ultimate retreat by—the hedge funds.[4] Taking advantage of the elevated stock price, GameStop unsurprisingly engaged in a large capital raising through a couple of stock sales,[5] thereby eliminating, at least temporarily, its previous dire liquidity condition.

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[1] Robinhood heavily utilizes the payment for order flow (PFOF) business model, under which the company receives payment from market makers in return for delivering a large order flow. For more detailed information, see Siqi Wang, *Consumers Beware: How Are Your Favorite "Free" Investment Apps Regulated?*, 19 DUKE L. & TECH. REV. 43 (2020-2021), Robert H. Battalio & Tim Loughran, *Does Payment For Order Flow To Your Broker Help Or Hurt You?*, 80 J. BUS. ETHICS 37 (2008), and Kate Rooney & Maggie Fitzgerald, *Here's How Robinhood Is Raking in Record Cash on Customer Trades — Despite Making It Free*, CNBC (Aug. 14 2020), www.cnbc.com/2020/08/13/how-robinhood-makes-money-on-customer-trades-despite-making-it-free.html.

[2] *See, e.g.*, GameStop Forms S-3, 10-Q, and 10-K from 2020, 2021, and 2022.

[3] Tim Hasso et al, "Who Participated in the GameStop Frenzy?: Evidence from Brokerage Accounts," working paper, Center for Tax and Accounting Research (May 2021), *available at* https://en.wiwi.uni-paderborn.de/fileadmin/cetar/TAF_Working_Paper_Series/TAF_WP_058_HassoMuellerPelsterWarkulat2021_rev.pdf ("In January 2021, the GameStop stock was the epicenter of the first case of predatory trading initiated by retail investors.").

[4] *See, e.g.*, Toby Mathis, *How Much did Hedge Funds Lose on GameStop?*, INFINITY INVESTING (Sept. 27, 2001), https://infinityinvesting.com/gamestop-hedge-fund/. Eventually, Melvin Capital would shut down a little more than year later. *See Melvin Capital to Shut After Heavy Losses on Meme Stocks, Market Slump*, CNN.COM (May 19, 2022), https://www.cnn.com/2022/05/19/investing/melvin-capital-hedge-fund-closes/index.html. For a detailed exposition of how the GameStop saga unfolded in January of 2021, see, e.g., Jill E. Fisch, *GameStop and the Reemergence of the Retail Investors*, 102 B.U. L. REV. 102 (2022).

[5] *See, e.g.*, GameStop, Prospectus Supplement 2 (Apr. 5, 2021), *available at* https://www.sec.gov/Archives/edgar/data/1326380/000119312521186796/d192873d424b5.htm ("We have previously

This historical phenomenon was met with both enthusiasm and cynicism. Some scholars, concerned with the implication for the market's efficiency, called for regulation of zero-commission trading and, more broadly, retail investing.[6] Others, on the other hand, viewed the meme stock frenzy as signaling a new era of empowered retailed investors.[7] Those with a more optimistic outlook on the meme stock frenzy have argued that coordinated retail investor movement can further lead to coordinated shareholder movement, empowering retail shareholders to bring about significant changes in corporate governance.[8] Given that the current shareholder landscape at most public companies is dominated by a small number of large institutional investors, such as BlackRock, State Street and Vanguard, the emergence of a large retail bloc would no doubt significantly alter the governance landscape of public companies. But did the influx of retail investors indeed affect the governance structure at the meme stock companies? This Article seeks to provide an assessment of the factors that created the meme phenomenon and its consequences for corporate governance.

We start by analyzing the backgrounds of meme trading. The existing scholarship has exclusively associated meme stocks with the surge in social media interest (such as Reddit boards) in these companies starting in 2021.[9] While pandemic-era Reddit boards surely played a key role in popularizing these stocks, we trace the origins of meme trading further back, to the pre-pandemic era.

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sold an aggregate of 3,500,000 shares of our common stock for aggregate gross proceeds of approximately $556,691,221 pursuant to the Sales Agreement and the prospectus supplement filed by us on April 5, 2021."). While it is reasonable to expect most meme stock companies to raise capital during moments of meme surges, our EDGAR search shows that only two companies—GameStop and AMC Entertainment, Inc.— took advantage of meme surges and made offerings. Other meme stock companies may have chosen not to take advantage of meme surges out of the concern that they may be blamed for knowingly selling shares at an inflated price. *See, e.g.*, Matt Levine, *Money Stuff: Meme Stocks Will Come With a Warning*, BLOOMBERG.COM (Feb. 9, 2021), https://www.bloomberg.com/news/newsletters/2021-02-09/the-sec-wants-reddit-meme-stocks-to-admit-they-re-dangerous-kky96vuo. After the capital raising, AMC Entertainment, Inc. attempted to increase the authorized number of common shares to engage in further equity issuance but the amendment proposal was resisted by the stockholders and was later dropped. More recently, AMC Entertainment issued AMC Preferred Equity Units ("APEs"), with same economic rights as common stock, using the board's authority to issue preferred stock so as to get around the charter amendment issue. *See, e.g.*, Matt Levine, *Money Stuff: AMC Has Some Clever APEs*, BLOOMBERG.COM (Feb. 1, 2023), https://www.bloomberg.com/opinion/articles/2023-02-01/amc-has-some-clever-apes.

[6] *See infra* Part II.

[7] *See id.*

[8] *See id.*

[9] *See* sources listed *infra* note 12.

Using an event study methodology, we find that meme stocks exhibited abnormal returns in October 2019, when major online brokerages abolished commissions for trading. This suggests that meme companies were uniquely positioned to benefit from the surge in retail investor interest. Furthermore, the emergence and the significance of zero-commission trading on the meme stock phenomenon implies more fundamental changes that can happen at other public companies.

After documenting the importance of zero-commission trading on meme stocks, we proceed to examine the consequences of meme trading for corporate governance at meme stock companies. Did the retail investors actually change the substance of the manager-shareholder relationship, or corporations' policies toward society? We begin with corporate law's paradigmatic framework for shareholder influence in widely held public corporations: voting and shareholder proposals.[10] Foremost, we find that non-voting—i.e., the share of votes that were not cast for or against a proposal (or marked as abstentions)—in fact *increased* during and after the meme surge period for meme companies, as compared to other firms in the sample. Although we do not have a direct measure on what fraction of the non-votes came from retail shareholders, since non-voting is usually associated with retail investors (as shown in the existing literature), the finding suggests that meme traders were apathetic in their role as stockholders and did not exercise their franchise.

Turning to shareholder proposals, we find no evidence that shareholders at meme stock companies are more likely to participate in governance activities by submitting shareholder proposals, either before or after the meme surge. Between 2015 and 2022, only one meme stock company—Bed Bath & Beyond—had any shareholder proposal included in the company's definitive proxy statements at all (three all in a single year). There was also no record of any shareholder proposal being excluded via the SEC's no-action letter process, with the exception of GameStop, which successfully excluded

[10] *See* Frank H. Easterbrook & Daniel R. Fischel, *Voting in Corporate Law*, 26 J.L. & ECON. 395 (1983); Marcel Kahan & Edward B. Rock, *The Hanging Chads of Corporate Voting*, 96 GEO. L.J. 1227 (2008).

three shareholder proposals submitted in 2022. The evidence supports the hypothesis that the retail investors brought in by the meme phenomenon were hence either uninterested in voting or making proposals, or unable to do so effectively.

We then examine whether retail investors have had an indirect effect on meme stock companies, beyond traditional voting or making proposals. One of the most visible ways contemporary insurgent shareholders can affect company policy is to alter its orientation toward environmental, social, and governance (ESG) goals. Applying a difference-in-difference approach to data from the standard MSCI ESG Indexes, we find that meme stock companies surprisingly *deteriorated* in terms of prosocial performance after the meme surge of 2021. As a final empirical exercise, we look at whether meme companies performed better in terms of board gender diversity—another salient issue in the corporate governance sphere. We find no evidence that meme companies performed better (or worse) on this metric. Meme retail investors do not seem to have made their companies' governance and performance more prosocial. In fact, if anything, the ESG result suggests that these firms' orientation toward social causes may have *worsened* in recent years.

Viewing these results collectively, we conclude that to date there is little evidence to support the belief that corporate governance is being "democratized" in the way the investing public has been. The organized movement among retail investors seems to be limited to the investing public's trading behavior and has not otherwise affected retail shareholders' engagement with corporations in a noticeable way. In addition, recent regulatory changes—such as the raised thresholds for submitting shareholder proposals under Rule 14a-8—may have made effective retail shareholder participation more difficult. For these reasons, we believe that meme traders may very well remain passive as shareholders, even as they remain active as investors, at least for the foreseeable future. To a certain extent, they can be seen as mirror images of institutional investors, who are often passive as investors, while remaining active as shareholders.

The rest of this Article is organized as follows. Part II surveys the literature on retail investors, retail shareholders, and meme traders and summarizes the somewhat lofty expectations some commentators have expressed for the potential impact of retail investors on corporate governance. Part III explains our data sources and presents summary statistics. Part IV examines the origins of meme trading and explains the importance of the 2019 abolition of commissions by online brokerages, including Robinhood. Part V shows that, despite the surge of retail investor interest in meme companies, shareholder non-voting at meme stock companies increased in recent years, and retail investors failed to make much of an impact using the shareholder proposal process. Part VI asks whether retail investors could have changed their firms' ESG performance or board gender diversity. We find that these companies have not become more prosocial recently but meme firms' ESG scores have decreased. Part VII concludes the Article and offers some possible directions for a future meme stock research agenda.

II. RETAIL INVESTORS, RETAIL SHAREHOLDERS, AND MEME TRADERS

Although there is a natural connection between retail investors and retail shareholders, their bona fide activities are quite different. As an investor, an individual is concerned about profitable transactions—short run or long run. Her job includes studying market information and diversifying her portfolios. As a shareholder, an individual is concerned about capital gains, dividend payments, and her control rights. Her job includes shareholder voting, nominating director candidates, submitting proposals, or running proxy contests. Thus, one faces different vulnerabilities depending on whether she is acting as an investor or as a shareholder. As Professor James Park explains, "when purchasing or selling a stock, a trading investor is vulnerable to transacting at an unfair price," while "during the period [he] owns a stock, he is vulnerable to new corporate misconduct that reduces the value of the company."[11] Park uses this insight to explain the enduring distinction between securities regulation and corporate law.[12]

One take-away is that a sudden burst of enthusiasm for one type of activities may not instantly translate to one for the other type of activities. Nevertheless, the GameStop saga and the meme stock frenzy of 2021 demonstrated the power of technology to coalesce dispersed individuals who can unite to bring about an impact and put checks on the forces of institutional players. These events at least hinted at a future in which technology can further enable and empower dispersed individuals to overcome the cost of collective action and promote people's agenda.

Such empowerment, of course, does not come without a cost. The sudden influx of retail investors—coupled with a platform that facilitates costless transactions and an internet forum that enables communication—indicates trading markets that look very different. Previously, retail trading was thought to have little effect on market efficiency because they tend to "engag[e] in idiosyncratic trades that cancel each other out in aggregate."[13] With meme stock surges, however, Professor Sue S. Guan argues that "retail trades are increasingly sticky and may predict future stock price movements."[14] Because their trades can be emotionally driven based on the underlying companies' cultural relevance, there is no indication that meme stocks prices reflect information about the companies' underlying fundamentals.

A point worth highlighting is that it would not be accurate to group all retail investors together. The sudden influx is limited to a new generation of particular types of retail investors, that are now

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[11] James J. Park, *Reassessing the Distinction Between Corporate and Securities Law*, 64 UCLA L. REV. 116, 116 (2017).
[12] *Id.*
[13] *See, e.g.*, Sue S. Guan, *Meme Investors and Retail Risk*, 63 B.C. L. REV. 2053, 2053 (2022)("Traditional models of price discovery deem retail investors largely unable to affect price.").
[14] *Id.*

known by different names, such as "meme investors,"[15] "meme traders,"[16] "wireless investors,"[17] or "ultra-retail investors."[18] In our view, the term "meme traders" most aptly that captures the pattern of transactions observed. In executing transactions motivated by Reddit discussion threads and triggering "short squeeze" attacks, these individuals cannot be said to be investing in any traditional sense. Although these traders only represent a subset of retail investors. they exist in sufficient numbers to affect price movements in the market for meme stocks.

Professor Abraham Cable argues "there are reasons to be concerned for ultra-investors and the market more generally" because they "appear to herd and speculate to their detriment even more than other retail investors."[19] Similarly, Professor James Tierney notes that zero-commission stock trading apps tend to "encourage people to trade habitually and unreflectively, and more than they might want," which "can lead to undesirable market-wide effects, like distorting the process by which markets allocate investment capital to firms and projects that will grow the real economy, as well as socially wasteful (and individually harmful) excess trading."[20]

In addition to highlighting a potential need for regulation, these observations also suggest that the key distinction previously highlighted between retail investors and retail shareholders may not even be the salient point of inflection—insofar as meme traders are not primarily concerned about informed trading. At the same time, the distinction between traditional retail investors and meme traders may also be why one might expect changes in retail shareholder participation in corporate governance

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[15] *Id.* at 2081.
[16] *See* Emily Stewart, *GameStop. Dogecoin. Now AMC. Do Meme Traders Need To Be Protected From Themselves? "If You're Trading Like It's a Game, You're Probably Going To Lose.,"* VOX (June 16, 2021), https://www.vox.com/policy-and-politics/22528238/gme-amc-robinhood-stock-market-reddit.
[17] *See* Ricci & Sautter (2021), *supra* note 3, at 51.
[18] *See* Abraham J.B. Cable, *Regulating Democratized Investing*, __ OHIO STATE L.J. (forthcoming 2023), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4136828.
[19] *Id.* at 4.
[20] Tierney (2022), *supra* note 3, at 353; *see also* Guan, *supra* note 13, at 2069 (providing examples of how Robinhood's "gamification and fun user interface" promote inefficient trading by retail investors).

matters—insofar as meme traders are also shareholders, the traits that set apart meme traders from traditional retail investors may also predict preferences for greater engagements with corporations.

One optimistic view is that increased retail access to capital markets will "democratize" finance and such retail shareholders will embed their social, cultural, and distributional preferences on corporate policies.[21] For example, Professors Sergio Alberto Gramitto Ricci and Christina Sautter observe that millennials—an important subset of retail investors far more likely to compose "wireless investors"—in general "bring distinctive values to investing" and are "more apt to invest pursuant to their ESG values than to make a profit."[22] In addition, they predict that "[w]ireless investors will evolve from trading to engaging in corporate governance by way of exercising their governance rights deriving from the shares they hold."[23] Ultimately, all of these, the authors suggest, may lead to a new paradigm for corporate governance.

A similar view was echoed by Professor Jill Fisch who "defends the reemergence of the retail investors and its potential promise in enabling citizen capitalism."[24] Fisch advances a different argument to support increased engagement by retail investors: "[r]etail investing offers a valuable counterpoint to the increased concentration and herding by institutional investors," and thus "has the potential to increase the involvement of ordinary citizens in the country's economic development."[25] While focusing mostly on citizen capitalism's benefits to economic development, Fisch also notes that "[c]itizen capitalism may also enhance the voice of ordinary citizens in corporate decisions" and argues that "retail investors can also play a critical role" in shaping shareholder power.[26] She acknowledges

[21] *See* Fisch (2021), *supra* note 4, at 1841-42 & 1846-47; Ricci & Sautter, *supra* note 3, at 90-95; Sergio Alberto Gramitto Ricci & Christina M. Sautter, *The Wireless Investors Movement*, U. CHI. BUS. L. REV. BLOG (Jan. 28, 2022), https://businesslawreview.uchicago.edu/2022/01/28/the-wireless-investors-movement%EF%BF%BC (contending that retail trading "will naturally expand into corporate-governance-based initiatives").
[22] Ricci & Sautter, *supra* note 3, at 77.
[23] *Id.* at 78.
[24] Fisch (2022), *supra* note 4, at 102.
[25] *Id.* at 1805.
[26] *Id.* at 1840.

that while governance measures must "must ultimately command the support of institutions as well[,] in issuers with significant retail ownership, the retail vote can influence the outcome of critical shareholder votes."[27]

Of relevance, the collective voting power of retail investors was analyzed by Alon Brav, Matthew Cain, and Jonathon Zytnick.[28] Using "a nearly comprehensive sample of U.S. ownership and voting records,"[29] the authors "ask whether retail shareholder participation and voting preferences are important determinants of voting outcomes."[30] By engaging in a counterfactual analysis, the authors conclude that "the effect on outcomes from shocks to retail voting is as large as that of other voting groups that [they] consider."[31] Their analysis illustrates "that the consequences of altering retail shareholder voting preferences are of the same magnitude as altering Big Three voting preferences."[32] This suggests that, to the extent meme stock surges can motivate greater retail shareholder participation, there is a realistic possibility of a paradigm shift in corporate governance.

Meanwhile, not all scholars are convinced that the retail investment surge will lead to significant changes in corporate governance.[33] Some even believe that the increase in retail investment

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[27] *Id.*

[28] Alon Brav et al., *Retail Shareholder Participation in the Proxy Process: Monitoring, Engagement, and Voting*, 144 J. FIN. ECON. 492 (2022).

[29] *Id.* at 494.

[30] *Id.* at 502.

[31] *Id.*

[32] *Id.* at 504.

[33] *See* Kastiel & Nili (2022), *supra* note 3, at 809, 814 (finding that retail investors "tend not to participate in the [corporate] voting process"); Tierney (2022), *supra* note 3, at 409–11; Brav et al., *supra* note 28, at 493 (finding that "[r]etail shareholders do not support environmental, social, and governance (ESG) proposals to the same degree that institutional investors do");

Matthew Fox, *Retail Investors' Influence Over The Stock Market Is In Decline As High-Growth Names Tumble And Meme-Stock Mania Fades, Jpmorgan Says*, MARKETS INSIDER (Feb. 10, 2022, 9:48 AM), https://markets.businessinsider.com/news/stocks/retail-investors-influence-over-stock-market-declining-meme-stock-mania-2022-2 (noting that retail investors are divesting from individual company stocks and reinvesting in traditional pooled investment vehicles, such as ETFs and mutual funds).

was merely a fluke—a temporary spike resulting from retail investors' increased free time and savings from the COVID-19 lockdowns.[34]

Equally important to note is that meme surges to date have been limited to a small set of companies that are not randomly selected. In discussing some common denominators among meme stock companies, one Guardian reporter notes that "their stock prices were low, so they were easily accessible to the average person, and they were culturally popular."[35] Indeed, all eight meme stock companies we analyze are mid to small-cap companies, valued under $10 billion in market capitalization (and some with a much smaller market capitalization).[36] Their sizes, on the one hand, imply that even trades by a subset of retail investors can affect their stock prices—as such, they can be targets of predatory trading. On the other hand, small companies are also more likely to suffer from a lack of significant corporate governance activities. As Professors Kobi Kastiel and Yaron Nili document, in small-cap corporations, "the adoption of governance arrangements is less organized and systematic, often representing a significant departure from the norms set by larger companies."[37] They are less likely to be targets of engagements by institutional shareholders.[38] As the authors document elsewhere, they are also less likely to attract shareholder proposals.[39] Consequently, meme surges and their impacts may potentially be confined to the trading markets and remain divorced from meaningful shareholder activities in corporate America. For this reason, two years on from the GameStop saga,

[34] *See* Jennifer J. Schulp, *GameStop and the Rise of Retail Trading*, 41 CATO J. 511, 514–15 (2021); Tierney (2022), *supra* note 3, at 377 & n.86 (noting that the retail investor engagement started subsiding in mid-2021 and that the increase was a result of the unique COVID-19 circumstances).
[35] Naaman Zhou, *What Is GameStop, Where Do the Memes Come in, and Who Is Winning or Losing?*, THE GUARDIAN (Jan. 28, 2021, 1:46 AM), https://www.theguardian.com/culture/2021/jan/28/what-is-gamestop-where-do-the-memes-come-in-and-who-is-winning-or-losing.
[36] The market capitalizations of meme stock companies we examine range from about $56.2 million to $9.2 billion. Their respective market capitalizations, as of January 2023, are: $9.2 billion for Robinhood, $7 billion for GameStop, $2.8 billion for AMC, $2.5 billion for BlackBerry, $300 million for Bed Bath & Beyond, $150 million for Vinco, $77 million for Express, and $56 million for Koss. By comparison, the smallest company in S&P 500 index has a market capitalization of $14.6 billion.
[37] Kastiel & Nili (2022), *supra* note 3.
[38] *Id.*
[39] Kobi Kastiel & Yaron Nili, *In Search of the "Absent" Shareholders: A New Solution to Retail Investors' Apathy*, 41 DEL. J. CORP. L. 55 (2016).

this Article seeks to examine what changes, if any, have taken place in the governance of the companies subject to meme surges.

III. DATA AND SUMMARY STATISTICS

We use a variety of sources to collect information about meme stocks. Our first step is to identify which companies qualify as meme stock companies. We use Factiva searches and Internet queries with appropriate keywords ("meme," "retail investors," "Reddit" in conjunction with "stock" and so on), modeling our approach on the nascent financial economics literature studying the meme trading phenomenon.[40] We identify the following eight companies as meme stock companies: Gamestop,[41] AMC Entertainment,[42] Bed Bath & Beyond,[43] Blackberry,[44] Express Inc.,[45] Koss,[46] Robinhood,[47] and Vinco.[48] For each (meme and non-meme) stock, we collect an array of financial and non-financial information for the time period of 2015 to 2022. First, stock price information comes from the Center for Research in Stock Prices (CRSP). Firm financials (size as proxied by assets, performance (return on assets), debt ratio, and cash ratio) are collected from Compustat. Finally, we get data on shareholder voting at all companies for which we could find data from Institutional

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[40] *See* Michele Costola et al., *On the "Mementum" of Meme Stocks*, 207 ECON. LETTERS 110021 (2021).
[41] *See* Yun Li, *The $300 Billion Meme Stock That Makes GameStop Look Like Child's Play*, CNBC (Aug. 3, 2022), https://www.cnbc.com/2022/08/03/the-300-billion-meme-stock-that-makes-gamestop-look-like-childs-play.html.
[42] *See* Paul R. La Monica, *Meme Stock Mania May Finally Be Over*, CNN (Dec. 6, 2022), https://www.cnn.com/2022/12/06/investing/meme-stocks-gamestop-amc/index.html.
[43] *See id.*
[44] *See* Bernard Zambonin, *BlackBerry (BB): Why Jim Cramer Is Warning Investors to Avoid This Stock*, THE STREET (Oct. 12, 2022), https://www.thestreet.com/memestocks/other-memes/blackberry-bb-why-jim-cramer-is-warning-investors-to-avoid-this-stock.
[45] *See* Express, Inc., *Express, Inc.: A Former Meme Stock Could Be Headed Into Serious Trouble In A Recession*, SEEKING ALPHA (July 19, 2022), https://seekingalpha.com/article/4524180-express-inc-a-former-meme-stock-could-be-headed-into-serious-trouble-in-a-recession.
[46] *See* Samuel O'Brient, *Why Is Meme Favorite KOSS Stock Soaring 40% Today?*, INVESTOR PLACE (July 25, 2022), https://investorplace.com/2022/07/why-is-meme-favorite-koss-stock-soaring-40-today/.
[47] *See* Maggie Fitzgerald, *Robinhood is Not a Meme Stock and Doesn't Plan to Sell Shares to Raise Funds, CFO Says*, CNBC (Aug. 19, 2021), https://www.cnbc.com/2021/08/19/robinhood-is-not-a-meme-stock-and-doesnt-plan-to-sell-shares-to-raise-funds-cfo-says.html.
[48] *See* Clark Schultz, *Vinco Ventures Skyrockets on Big Day for Meme Stocks*, SEEKING ALPHA (Aug. 16, 2022), https://seekingalpha.com/news/3873788-vinco-ventures-skyrockets-on-big-day-for-meme-stocks.

Shareholder Services (ISS) (formerly known as Riskmetrics). Table 1 presents the summary statistics for our dataset, organized at the shareholder proposal level.[49] Panel A displays the overall descriptive statistics, while Panel B presents t-tests between meme and non-meme stocks.

Panel A

	N	Mean	SD
Percent Votes for Proposal	238543	70.24	19.71
Percent Votes against Proposal	238543	4.43	8.76
Percent Non-Votes	238543	25.04	17.84
Return on Assets	231238	-.05	.27
Cash Ratio	226935	.14	.19
Debt Ratio	199101	.28	.24
Ln(Assets)	231319	7.56	2.34

Panel B

	Non-Meme Firms (1)	Meme Firms (2)	t-statistic (1)–(2)
Percent Non-Votes	25.04	28.75	–3.94***
Return on Assets	–0.05	–0.098	3.17***
Cash Ratio	.14	.13	1.3
Debt Ratio	.28	.32	–3.05***
Ln(Assets)	7.56	7.37	1.54

Table 1. Summary Statistics. Panel A presents information on the shareholder voting results and financial variables for the meme stocks identified in Section III.A., for the period 2015-22. All financial variables are winsorized at the 1% level. Panel B presents t-tests for some of these variables between meme and non-meme stocks. The ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Following the accounting literature, we define shareholder non-participation as the percentage of outstanding shares that were not voted "for," "against," or "abstention" with respect to proposals

[49] Although we have also collected institutional ownership data, based on 13F filings, from Thompson-Reuters, so as to indirectly back out the fraction of retail ownership, because the 13F reporting is done on a quarterly basis and there was a large turnover at the meme stock companies during the "meme surge," the data turned out to be unreliable. For instance, when the institutional ownerships were aggregated, for some companies, the fractions exceeded one.

at a meeting. Between 2015 and 2022, the average yearly non-participation rate for meme stocks was 28.75%. This is higher than the 25.04% average for all firms recorded. Another notable aspect of the data is that the mean (median) return on assets for meme stocks is –0.098 (–0.02), significantly smaller than –0.05 (0.02) for the overall sample. Finally, meme stocks have significantly higher debt ratios than other firms. This indicates that meme companies are on average unprofitable or poor performers and heavily leveraged, consistent with media reports.[50]

IV. THE TWIN SHOCKS TO MEME STOCKS

In the popular imagination, social media usage during the coronavirus pandemic has been singled out as the main driver of the emergence of meme stocks. The *New York Times* has characterized meme stock investments as being "propelled by a social media frenzy and a bit of boredom" during pandemic-related social distancing.[51] The Wikipedia entry for "meme stock" defines it as "a stock that gains popularity among retail investors through social media."[52] However, for our set of meme stocks, we identify an association with retail investors that (1) predates the pandemic and (2) does not relate to social media platforms, such as Reddit or Twitter. More specifically, we look at the meme stocks' response to the abolition of commissions by major brokerage platforms in late 2019.

On October 1, 2019, the major online brokerages Charles Schwab and TD Ameritrade eliminated commissions for all their customers. These platforms, which had dominated the online brokerage business, were responding to stiff competition from a new rival, Robinhood, which had pioneered the zero-commission trading model.[53] The advent of zero-commission trading has been

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[50] *See* James Mackintosh, *AMC's Meme-Stock Traders Mess with Corporate Theory*, WALL ST. J. (Jun. 8, 2021), https://www.wsj.com/articles/amcs-meme-stock-traders-mess-with-corporate-theory-11623107259.

[51] *See* Erin Griffith, *No End to Whiplash in Meme Stocks, Crypto and More*, N.Y. TIMES (Jun. 23, 2021), https://www.nytimes.com/2021/06/23/technology/no-end-to-whiplash-in-meme-stocks-crypto-and-more.html.

[52] *See Meme Stock*, WIKIPEDIA, https://en.wikipedia.org/wiki/Meme_stock.

[53] *See* Paul R. La Monica, *E-Trade Cuts Commissions to Zero Along with Rest of Brokerage Industry*, CNN (Oct. 3, 2019), https://www.cnn.com/2019/10/02/investing/etrade-zero-commissions/index.html. Experts termed this move "inevitable" after Charles Schwab and TD Ameritrade's decision on October 1. *See id. See also CFO Commentary*, CHARLES

widely acknowledged as a root cause of the explosion in retail investing activity. One of the leading explanations for why individuals do not participate in the stock market has been that there is a fixed cost of investing that proves potentially insurmountable for the less wealthy.[54] It is unsurprising that, by reducing the entry cost of trading (i.e., commissions), the 2019 decision by major brokerages increased retail investor activity.[55]

How did the abolition of trading commissions affect meme stocks? The relatively unexpected and sudden decision of the major brokerage platforms to introduce commission-free trading allows us to use the event study methodology to assess its impact. Given that this was prior to the meme stock surge of 2021, to the extent that the market was relatively, informationally "efficient," the stock prices around October 1, 2019 would reflect the impact of the abolition of commissions on meme stocks.[56] First, we identify what the expected return for each stock would have been during the event period if the event had not occurred (i.e., if the commissions had not been dropped). Using the standard Fama-French three-factor model, this may be written as:[57]

$$R_{it} = a_{it} + \beta_{mt}R_{mt} + \beta_{SMB}R_{SMB} + \beta_{HML}R_{HML} + \varepsilon_{it}$$

Here, R_{it} is the return on stock i on date t minus the risk free rate; R_{mt} is the market return on date t minus the risk free rate; R_{SMB} is the return on a portfolio of small companies; and R_{HML} is the book

SCHWAB (October 1, 2019), www.aboutschwab.com/cfo-commentary/oct-2019. Share prices of Charles Schwab, TD Ameritrade, and E-Trade experienced a significant loss in response to Charles Schwab's zero commission announcement. *See* Lisa Beilfuss & Alexander Osipovich, *The Race to Zero Commissions*, WALL ST. J. (Oct. 5, 2019), www.wsj.com/articles/the-race-to-zero-commissions-11570267802.

[54] *See* Joseph Briggs et al., *Windfall Gains and Stock Market Participation*, 139 J. FIN. ECON. 57 (2021); Annette Vissing-Jorgensen, *Towards an Explanation of Household Portfolio Choice Heterogeneity: Nonfinancial Income and Participation Cost Structures* (Apr. 11, 2002), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=307121.

[55] *See* Maggie Fitzgerald, *Retail Investors Continue to Jump Into The Stock Market After GameStop Mania*, CNBC (Mar. 10, 2021), https://www.cnbc.com/2021/03/10/retail-investor-ranks-in-the-stock-market-continue-to-surge.html ("[r]etail trading has been accelerating since the industrywide decision to drop commissions in the fall of 2019").

[56] *See generally* Sanjai Bhagat & Roberta Romano, *Event Studies and the Law: Part I: Technique and Corporate Litigation*, 4 AM. L. & ECON. REV. 141 (2002); Sanjai Bhagat & Roberta Romano, *Event Studies and the Law: Part II: Empirical Studies of Corporate Law*, 4 AM. L. & ECON. REV. 380 (2002); A. Craig MacKinlay, *Event Studies in Economics and Finance*, 35 J. ECON. LIT. 13 (1997).

[57] *See* S.P. Kothari & Jerold B. Warner, *Econometrics of Event Studies*, *in* 1 HANDBOOK OF CORPORATE FINANCE 3 (Bjørn Espen Eckbo & B. Espen Eckbo eds., 2008).

to market factor which is the portfolio of firms with high book value to market value ratio. The abnormal return that can be traced to the event (i.e., the associated stock price movement) is the actual return minus the expected return:

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_{Mt}R_{Mt} - \hat{\beta}_{HML}R_{HML} - \hat{\beta}_{HML}R_{HML}.$$

	(1) OLS	(2) OLS	(3) Entropy Balanced
Meme Stock	2.252***	2.238***	2.230***
	(0.645)	(0.655)	(0.614)
Constant	-0.127***	-0.269	0.300
	(0.0269)	(0.246)	(0.768)
Observations	7,110	3,531	3,531
R-squared	0.001	0.010	0.208
Firm Financials	No	Yes	Yes

Table 2. Event Study Results. This table presents results from an event study using the Fama-French three-factor model. The dependent variable in this linear regression model is the abnormal stock return on October 1, 2019. Columns (1) and (2) use ordinary least squares regression and column (3) balances covariates for meme and non-meme companies using the entropy-balancing technique. Columns (2) and (3) add controls for firm size (proxied by the natural logarithm of assets), cash ratio, debt ratio, and return on assets. All financial variables are winsorized at the 1% level. The ***, **, and * denote significance at the 1%, 5%, and 10% levels.

We calculate the abnormal returns on October 1, 2019 for all companies in the Compustat database, and regress them against an indicator for whether the company is one of our eight meme stocks. Table 2 presents the results from the event study. Column (1) shows that meme stocks had abnormal returns that were 2.25 percentage points higher than the market, and the coefficient on the indicator variable is highly statistically significant. Column (2) reruns the regression in model (1) adding controls for firm financials (size as proxied by the natural logarithm of assets, cash ratio, debt ratio, and return on assets) and the results remain largely unchanged. One concern with our results could be that meme stocks are categorically different from non-meme companies. As a final robustness check, we control for the possibility that the financials of meme and non-meme companies may be different. Using the entropy-balancing technique invented in the social science literature, we balance the means of the covariates for meme and non-meme companies.[58] As shown in column (3), our result for meme stocks remains robust to the entropy-balancing method.

Figure 1 graphs the mean cumulative abnormal returns of meme stocks. The mean abnormal returns are represented by the solid line in the middle, while the dotted lines enclose the 95% confidence interval. Day "0" in this figure refers to October 1, 2019. The figure shows an economically and statistically significant gain for meme stocks around the time the major brokerages dropped trading commissions. In unreported results, we find that meme stocks had significant abnormal returns on October 1, 2019 when we use alternative asset pricing models such as the capital asset pricing model (CAPM) or Carhart four-factor model.[59]

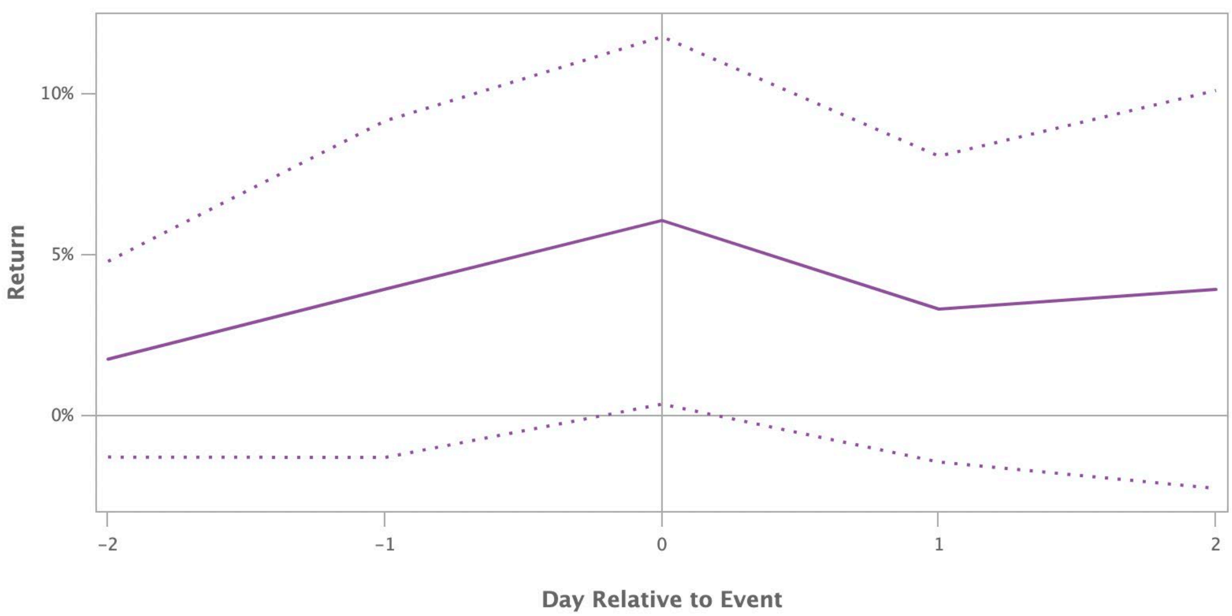

Figure 1. Summary Statistics. This figure graphs the mean cumulative abnormal returns for meme stocks around October 1, 2019, when major brokerages abolished trading commissions (denoted as day 0). The dotted lines represent the 95% confidence interval for cumulative abnormal returns.

[58] *See* Jens Hainmueller, *Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies*, 20 POL. ANALYSIS 25 (2012).
[59] These asset pricing models are described in detail in MacKinlay, *supra* note 56, and Kothari & Warner, *supra* note 57.

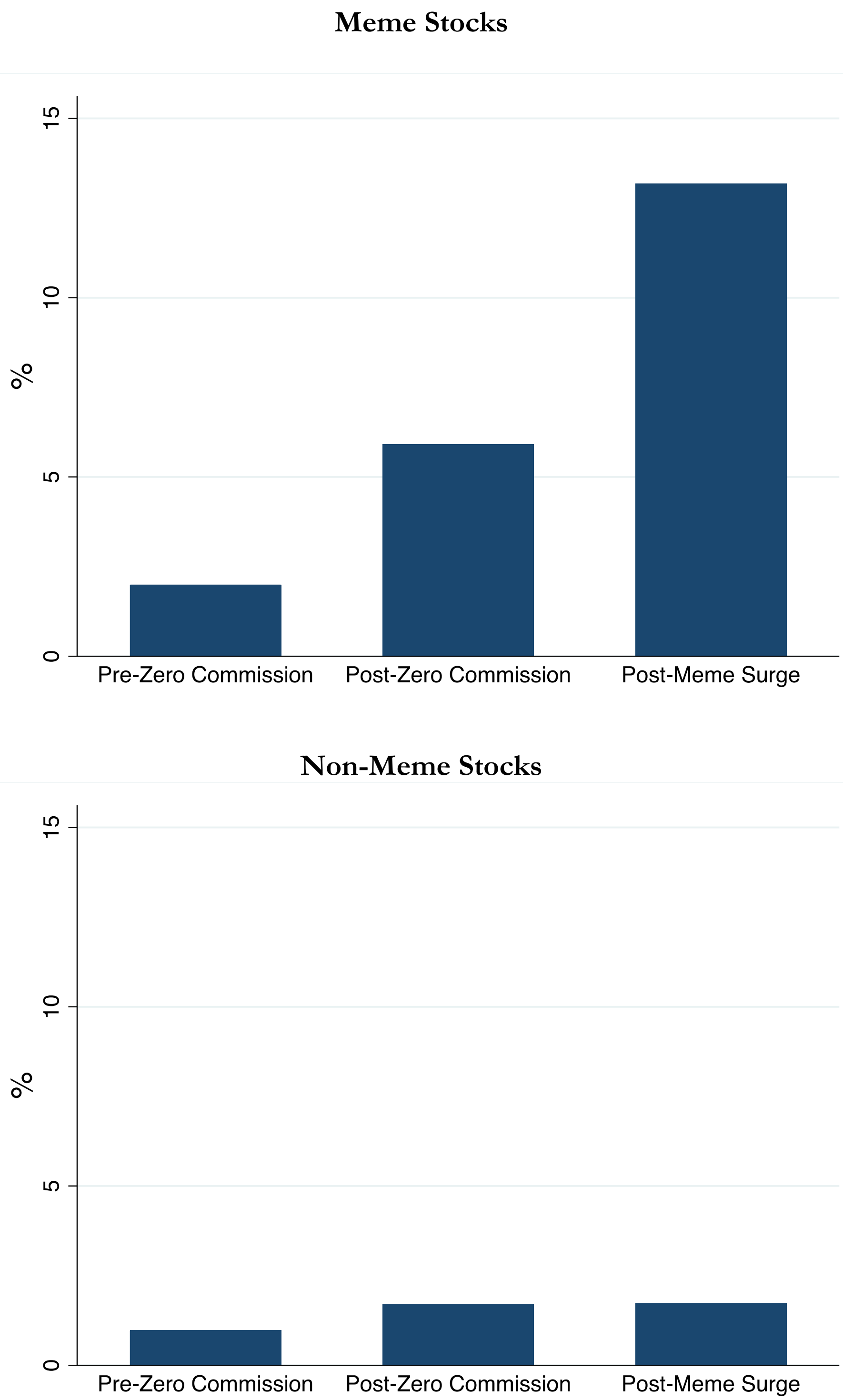

Figure 2. Average Turnover for Meme Stocks and Other Firms. This figure graphs the mean share turnover (shares traded each day as a percentage of total outstanding common stock) according to CRSP data. The data is presented separately for meme and non-meme stocks. "Pre-Zero Commission" refers to the period from 2015 to September 2019, "Post-Zero Commission" to 10/1/19-12/31/20, and "Post-Meme Surge" to 2021-22.

In addition to the abnormal returns, we also examine the magnitude of share turnover. Figure 2 presents data on the share turnover for meme stocks and other companies between 2015 and 2022. We define turnover as the daily average of the number of stocks of the firm traded as a percentage of total outstanding common stock, using data from CRSP. Meme stocks saw an increase in trading volume both after the abolition of commissions on October 1, 2019, and a further increase in 2021-22 after the explosion of social media interest in these firms. Two points are notable. First, meme stocks had a higher turnover compared to non-meme stocks even in the first period, i.e., before the abolition of commissions. Second, both meme and non-meme stocks saw an increase in trading volumes after the abolition of commissions.

Post-Zero Commission	0.664***
	(0.0714)
Post-Zero Commission x Meme	3.252*
	(1.874)
Post-Meme Surge	0.517***
	(0.0822)
Post-Meme Surge x Meme	12.23***
	(3.634)
Constant	1.080***
	(0.0402)
Observations	20,764
R-squared	0.875
Firm Fixed Effects	Yes

Table 3. Meme Stocks and Trading Volume. This table presents the results of a linear regression model where the dependent variable is the daily percentage of outstanding shares that are traded. "Post-Zero Commission" refers to the time period 10/1/19-12/31/20, and "Post-Meme Surge" to 2021-22. The regression model includes firm fixed effects, and all standard errors are clustered at the firm level. The ***, **, and * denote significance at the 1%, 5%, and 10% levels.

We estimate a regression model where we analyze the factors affecting the average daily turnover for CRSP companies in all three periods. We include as explanatory variables an indicator for meme stock, two dummies for *Post-Zero Commission* and *Post-Meme Surge*, and the interaction of the meme indicator with each time dummy. Both interaction terms are positive and statistically significant.

The results are presented in Table 3. Therefore, even controlling for time trends, meme companies seem to have especially gained with respect to this measure of liquidity in the latter time periods. The event study results presented in this section show that meme stock companies gained value around the time major brokerages abolished commissions. The influx of retail investors precipitated by zero commissions could therefore have been particularly impactful for the meme stocks.

V. Direct Shareholder Engagement at Meme Stock Companies

In this Part, we explore the effect of meme stock investing on the more direct mechanisms for shareholder engagement: voting and making shareholder proposals. This can help us empirically assess claims that the influx of retail investors would affect corporate governance, and possibly empower shareholders to more actively engage with management. To briefly summarize the findings, empirical results show that predictions of retail investor-driven changes in corporate governance may be overstated. First, the level of shareholder voting at meme companies *decreased* after the abolition of commissions by online brokerages, and reduced *further* in the aftermath of 2021's meme surge. Second, we find no evidence of active shareholder engagement by way of shareholder proposals at the companies in our sample, except in limited circumstances.

A. Non-Voting Among Meme Traders

A central claim in this literature is that the retail shareholders brought in after the meme phenomenon may be more likely to be assertive and more vigorously engage with management. At least as one proxy of such heightened engagement, one could expect more retail shareholders to vote on governance proposals, including director elections and other consequential decisions, at these firms after 2021. Non-votes in shareholder meetings (i.e., votes that were not cast for or against a proposal and were not abstentions) are usually attributable to "low-information" retail investors.[60] Corporate

[60] *See* Kastiel and Nili (2016), *supra* note 39, at 62–64.

insiders and institutional investors, on the other hand, are usually more diligent in registering their votes. Therefore, if retail investors became more engaged after 2021, we could expect the overall share of non-votes to fall.[61]

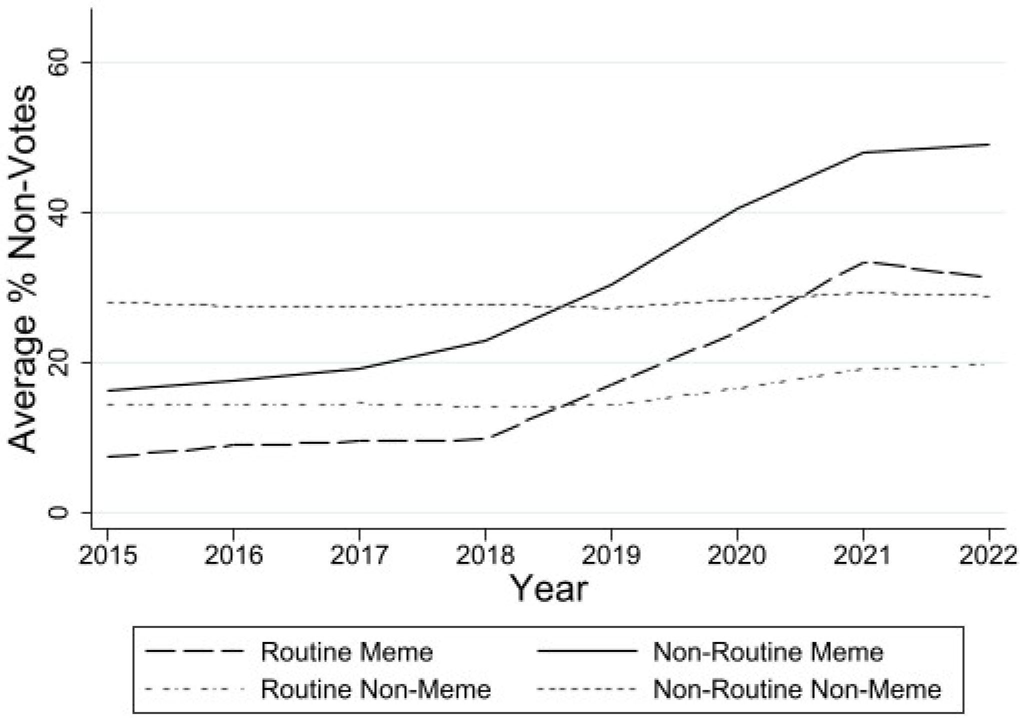

Figure 3. Average Share of Non-Votes for Meme and Non-Meme Stocks Over Time, By Proposal Type. This figure presents information on the yearly average percentage of votes that were not voted in shareholder meetings. We define the number of non-votes as Total Outstanding Shares – (Votes For + Votes Against + Abstentions). We split the data by meme/non-meme stock as well as proposal type (i.e., whether or not it qualifies as "routine" as defined in NYSE Rule 452).

In analyzing the rate of non-votes, it is also important to account for the *type* of proposal. Shareholder proposals at U.S. public companies are generally of two types: routine and non-routine. For our purposes, there is an important distinction between these two types: brokers can vote shares on behalf of their owners for routine matters, but *not* for non-routine matters. Therefore, only a

[61] *See* Rachel Geoffroy, *Electronic Proxy Statement Dissemination and Shareholder Monitoring* (Dec. 8, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3264846, at 12.

shareholder can vote their own shares for non-routine proposals.[62] Figure 3 graphically presents the yearly average of non-vote rates on proposals at both meme and non-meme companies between 2015 and 2022. We hand-coded each proposal listed in the ISS data as either "routine" or "non-routine" based on Rule 452 of the New York Stock Exchange.[63] Consistent with the literature, we find that non-routine proposals (where brokers cannot vote on behalf of shareholders) have consistently higher levels of non-participation for both meme and non-meme firms. More importantly, we find an increase in shareholder non-voting rate after 2018, concentrated in meme companies (for both routine and non-routine proposals). This is the opposite trend from what one would expect if post-meme-surge retail shareholders were more engaged with respect to corporate governance at firms such as AMC and GameStop. Figure 3 thus suggests there was a surge in non-voting beginning in 2019, concentrated in meme stocks.

Table 4 presents a more formal regression analysis (using linear probability models), where the dependent variable is the percentage of non-votes at a shareholder proposal level. We collect this data for all companies from the ISS database, from 2015 to 2022, to make sure we capture any secular time trends in shareholder voting across the market. Column (1) presents the baseline model, while column (2) adds financial variables as controls. Note, foremost, that the coefficient estimates (except for the estimate on variable, *Meme* x 2019-20), along with their statistical significance, are fairly consistent across the two models, indicating that the specifications are fairly robust. In terms of the results, at the top of the table, the dummy for non-routine proposals is positive (with the point estimates of 14.04 and 13.98, respectively) and highly statistically significant (at 1% level), indicating that these types of matters generally have greater non-participation than routine proposals (per stock exchange

[62] *Id.* at 4.
[63] *See* N.Y. STOCK EXCH'G. R. 452, https://nyseguide.srorules.com/rules.

regulations): non-vote shares on non-routine matters are about 14% points higher compared to those on routine matters.

	(1) Baseline	(2) With Firm Financials
Non-Routine	14.04***	13.98***
	(0.198)	(0.223)
Meme *x* Non-Routine	-5.607***	-5.585***
	(1.495)	(1.534)
2019-20	0.681***	0.830***
	(0.140)	(0.170)
Meme *x* 2019-20	5.204***	2.650
	(1.780)	(1.760)
Non-Routine *x* 2019-20	-0.630***	-0.688***
	(0.149)	(0.162)
Meme *x* Non-Routine *x* 2019-20	7.910***	8.125***
	(1.406)	(1.425)
2021-22	3.899***	4.622***
	(0.195)	(0.232)
Meme *x* 2021-22	13.91***	11.59**
	(4.841)	(4.672)
Non-Routine *x* 2021-22	-3.297***	-3.531***
	(0.178)	(0.195)
Meme *x* Non-Routine *x* 2021-22	7.503***	7.901***
	(1.725)	(1.942)
Constant	12.29***	23.68***
	(0.179)	(2.087)
Observations	238,506	194,929
R-squared	0.699	0.735
Firm Fixed Effects	Yes	Yes
Firm Financials	No	Yes

Table 4. Meme Stocks and Non-Voting. This table presents the results of a linear regression model where the dependent variable is the percentage of shares that were **not** voted for a proposal at shareholder meetings. We define the number of non-votes as Total Outstanding Shares – (Votes For + Votes Against + Abstentions). *2019-20* equals 1 for years 2019 and 2020, while *2021-22* equals 1 for 2021 and 2022. We split the data by proposal type (i.e., whether or not it qualifies as "routine" as defined in NYSE Rule 452). Column (2) adds controls for firm assets, cash ratio, debt ratio, and return on assets. Columns (1) and (2) include year and firm fixed effects, and all standard errors are clustered at the firm level. The ***, **, and * denote significance at the 1%, 5%, and 10% levels.

The coefficient estimates on 2019-20 and 2021-22 indicator variables are also positive and statistically significant, indicating that there is a general trend towards non-votes across all companies. When we interact both time period dummies with the *Meme* indicator, on the other hand, is positive and highly statistically significant at least in the baseline model, indicating that there seems to be more non-voting at meme companies after both the abolition of commissions and the surge in social media interest in these companies.[64] The rise in non-voting for meme stocks seems concentrated in non-routine proposals, as one would expect since brokers cannot vote on behalf of the shareholders on these issues.

Most tellingly, the triple interaction of *Meme*, each time period dummy, and *Non-Routine* is also positive (with coefficient estimates ranging from about 7.5 to 8.1) and highly statistically significant (at 1% level) in both the baseline model and with financial controls. The estimates tell us that compared to routine matters at meme companies at these two time periods, the share of non-votes on non-routine matters are about 7.5 to 8 percentage points higher. The results indicate that, for 2019-22, meme stocks saw a greater rise in non-voting compared to other firms, and this effect was especially pronounced for proposals for which brokers cannot vote on behalf of shareholders.

B. Shareholder Proposals at Meme Stock Companies

As another measure of shareholder engagement, we look at the number (and the content) of shareholder proposals that were submitted by retail shareholders at meme stock companies. For example, it is possible that even if the level of retail shareholder voting at meme companies has remained low (or has gotten lower) the meme surge may have emboldened a minority of retail shareholders to take more active steps in submitting shareholder proposals to affect corporate governance and corporate policies. While there are other channels of influencing corporate governance—such as running a proxy contest or nominating a director candidate through proxy access (if the company allows it)—these other channels require significant economic resources (in the case of proxy contests) or more significant ownership thresholds and holding periods (in the case of accessing proxy ballots directly). As such, these are less salient means for meme traders. For this

[64] Controlling for firm financials in column (2), the interaction between *Meme* and 2019-20 is no longer significant.

reason, the more promising route for meme traders is likely through submission of a shareholder proposal.

First, some institutional background and potential complication for our empirical analysis. The eligibility requirement for a shareholder to submit a shareholder proposal is governed by Rule 14a-8,[65] which imposes an ownership threshold. Once a proposal is submitted by an eligible shareholder, the SEC rules require the company add the proposal to the agenda for voting at the next annual shareholders meeting, unless the SEC provides special permission to exclude it from consideration.[66] Since 1998, Rule 14a-8 has maintained a relatively low share ownership threshold: it required only that a shareholder had held at least $2,000 or 1% of a company's securities for at least one year.[67] The SEC, however, recently replaced the $2,000 threshold with three alternative thresholds and adjusted the corresponding holding periods. Specifically, (1) if a shareholder owns more than or equal to $25,000, then he may submit a proposal if he has held the shares for at least one year; (2) if a shareholder owns less than $25,000 but more than or equal to $15,000, he must have owned for at least two years; and (3) if a shareholder owns less than $15,000 but more than or equal to $2,000, he must have owned for at least three years.[68] The rule was proposed on November 5, 2019,[69] adopted on September 23, 2020, and went into effect on January 4, 2021.[70] However, the SEC noted that the changed thresholds would only affect proposals submitted for annual meetings that take place after January 1, 2022.[71]

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65 *See* Securities Exchange Act of 1934 Rule 14a-8, 17 C.F.R. § 240.14a-8 (2020).
66 *See id.*
67 *See* Securities Exchange Act of 1934 Rule 14a-8, 17 C.F.R. § 240.14a-8 (1998); Securities Exchange Act of 1934 Rule 14a-8, 17 C.F.R. § 240.14a-8 (2007); Securities Exchange Act of 1934 Rule 14a-8, 17 C.F.R. § 240.14a-8 (2011).
68 *See* Securities Exchange Act of 1934 Rule 14a-8, 17 C.F.R. § 240.14a-8 (2020).
69 U.S. Securities & Exchange Commission, Procedural Requirements and Resubmission Thresholds Under Exchange Act Rule 14a-8, Release No. 34-87458, 84 FR 66458 (Nov. 5, 2029).
70 U.S. Securities & Exchange Commission, Procedural Requirements and Resubmission Thresholds Under Exchange Act Rule 14a-8, Release No. 34-89964, 85 FE 70240 (Sept. 23, 2020).
71 Press Release, *SEC Adopts Amendments to Modernize Shareholder Proposal Rule* (Sept. 23, 2020) https://www.sec.gov/news/press-release/2020-220 ("[T]he final amendments will apply to any proposal submitted for an annual or special meeting to be held on or after January 1, 2022.").

The SEC's revised thresholds are presumably much more difficult to meet, and this was indeed the agency's intention. The previous requirement of $2,000 and a one-year holding period is arguably a (more) reasonable threshold for meme traders. The revised thresholds and the corresponding holding periods are much less likely met by meme traders. For this reason, we can reasonably expect little activity from meme traders by way of shareholder proposals for annual meetings taking place after January 1, 2022.

As a threshold inquiry, we first examined whether investors reacted to the SEC's decision to change the Rule 14a-8 thresholds. There were no changes in the thresholds between the SEC's rule proposal (November 5, 2019) and rule adoption (September 23, 2020). We examined both of these event dates—the rule proposal date as setting the market's expectation and the rule adoption date as finalizing the proposal through adoption. If meme traders were particularly committed to influencing corporate governance, these events may correlate with negative stock market reactions. In unreported results, we find no significant market reactions for meme stock companies for both of these events, which we interpret to be consistent with the idea that meme traders were never interested in participating in corporate governance.

We followed through by reviewing the meme stock companies' definitive proxy statements filed with EDGAR from 2015 to 2022 to see whether they included shareholder proposals. While these proxy statements do not always indicate whether a particular proposal is submitted by a shareholder, they do indicate whether the board approves each proposal, which is a good indication that the proposal is internally proposed. Note, however, that the lack of shareholder proposals in definitive proxy statements does not necessarily indicate that no shareholder submitted a proposal to be included in the proxy. First, under Rule 14a-8, management is permitted to exclude a shareholder proposal under a few specific circumstances.[72] But exclusion is permitted only after management

[72] *See* Securities Exchange Act of 1934 Rule 14a-8, 17 C.F.R. § 240.14a-8 (2020).

submits its reasons to the SEC. For this reason, we also searched through the SEC's No-Action Letter archives to see whether any of these companies sought to exclude shareholder proposals, and if so, on what grounds. Second, it is also possible for management to persuade a shareholder to withdraw a proposal through negotiation.[73] These are done through private agreements, and we are unaware of any public data that would capture withdrawn proposals. We are also unaware of any study that has examined such proposals.[74] For this reason, for data analysis purposes, we will assume that all shareholder proposals properly submitted are reflected under our search. Nevertheless, given the possibility of negotiations that may occur as a result of submitted-but-withdrawn shareholder proposals, we will look to other measures in Part VI.

Company\Year	**Shareholder Proposals Included/Approved/Excluded**							
	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
AMC Entertainment Inc.	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Bed Bath and Beyond	0/0/0	3/2/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Blackberry	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Express, Inc.	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
GameStop Corp.	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/3
Koss	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Robinhood	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0/0/0
Vinco Venture	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0

Table 5. Shareholder Proposals at Meme Stock Companies, 2015-2022. This table presents the number of shareholder proposals at meme companies between 2015 and 2022. For each company-year observation, we provide the total number of shareholder proposals included in the proxy statements, approved by shareholder vote, and excluded via SEC no-action letters.

For all meme companies in the sample, with respect to observable shareholder proposals, we verified our numbers and analysis for this Section using the SharkWatch dataset, which is a standard resource for studying shareholder proposals.[75] Table 5 describes, for each meme stock company, the

[73] *See, e.g.*, Yaron Nili & Kobi Kastiel, *The Giant Shadow of Corporate Gadflies*, 94 S.C. L. REV. 569, 580 (2021)("After a shareholder submits a proposal . . . , the proponent may withdraw the proposal after negotiations with the company."). There is also reason to believe that companies may be less likely to seek to exclude proposals through SEC no-action letters, as the result of the SEC's recent policy change with respect to issuing no-action letters. *See* SEC Division of Corporation Finance, *Shareholder Proposals: Staff Legal Bulletin No. 14L (CF)* (Nov. 3, 2021), https://www.sec.gov/corpfin/staff-legal-bulletin-14l-shareholder-proposals.
[74] For example, in their extensive empirical study on shareholder proposals, Nili & Kastiel (2021) acknowledge that their data set "does not include proposals that were withdrawn due to a negotiated agreement or otherwise." *Id.* at 581.
[75] *See, e.g.*, Kastiel & Nili (2016), *supra* note 39.

number of shareholder proposals included (i) in the company's proxy statements, (ii) approved each year, and (iii) properly excluded via SEC's no-action letter.

At this point, some benchmark figures may be helpful to set proper expectations. In terms of raw numbers of shareholder proposals among the S&P 1500 companies, Professors Kobi Kastiel and Yaron Nili document "a relatively steady and significant number of shareholder proposals submitted to the S&P 1500 [between 2005 and 2018] (an average of 517 proposals per year)."[76] The pattern, however, is not uniform across 1500 companies. In 2015, for example, "over 450 proposals were submitted to large-cap companies" that comprise the S&P 500, while "fewer than 150 shareholder proposals combined were submitted to the mid- and small-cap companies that comprise the S&P 400 and 600, respectively."[77] Given that meme stock companies are small-cap to mid-cap companies, there would be no expectation that any of these companies would be inundated with shareholder proposals.

Nevertheless, the results shown in Table 5 may be revealing. For AMC Entertainment Inc, Blackberry, Express, Inc., Koss, Vinco Venture, there were *no* shareholder proposals submitted between 2015 and 2022.[78] The same is true with Robinhood, but the company went public fairly recently, and thus has had only one definitive proxy statement issued (in 2022). Thus, for these companies, no proposal was ever included in any definitive proxy statement (which the board did not recommend), and none of these companies have had to request no-action letters from the SEC (in excluding a shareholder proposal) during the time frame.

Bed Bath and Beyond received three shareholder proposals in 2016, all of which the board recommended against. These included (i) a proposal for the board to implement proxy access, (ii) a

[76] Kastiel & Nilli (2021), *supra* note 73, at 14.
[77] Kastiel & Nili (2022), *supra* note 3, at 807.
[78] Kastiel and Nili explain, however, that "in many cases, shareholder proposals do not reach the voting stage" because "some companies prefer to work with the proposing shareholder to bring about a change rather than have the proposal go to a shareholder vote." *Id.* at 582.

proposal to have shareholders approve future severance packages, and (iii) a proposal for equity-based compensation for senior executives. Of these three, only the last one failed to pass.[79]

Finally, GameStop sought and received three no-action letters from the SEC for excluding shareholder proposals, all dating to April 22, 2022.[80] These involved proposals by three different shareholders, and management could permissibly exclude all of them for failing to meet the deadline for submission. Note, however, that given that these proposals for the 2022 annual meeting, which requires raised thresholds, these shareholders are *unlikely* to be meme traders. Meanwhile, the content of these proposals is worth examining.

In one proposal, one shareholder (a self-described registered shareholder of GME who didn't specify how many shares he held) proposed that the company offer an NFT dividend to its stockholders.[81] In another proposal, a shareholder, who claims to own 191 Class A shares of GME proposed that the board "immediately engage the services of the Company's Transfer Agent, Computershare Limited to enable both investment and Direct Registration of Class A shares in both Roth and Traditional Individual Requirement Account Shareholder Investment Programs at Computershare."[82] Finally, a third shareholder who beneficially owns 540 Class A shares of GME submitted an identical proposal as the second shareholder.[83]

What can we learn from the shareholder proposals we examined? The 2016 proposals by Bed Bath & Beyond shareholders do reflect a genuine attempt at participating in corporate governance matters. The GameStop shareholder proposals, however, tell a different story. On the one hand, they do indicate retail investor participation. It is possible that they were encouraged by the meme surge of

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[79] *See* Form 8-K, Bed Bath & Beyond Inc. (July 1, 206), available at https://www.sec.gov/Archives/edgar/data/886158/000117184316010938/f8k_070116.htm.
[80] *See* GameStop Corp., SEC No-Action Letter, 2022 WL 1037146 (Apr. 21, 2022); GameStop Corp., SEC No-Action Letter, 2022 WL 1037147 (Apr. 21, 2022); and GameStop Corp., SEC No-Action Letter, 2022 WL 1037148 (Apr. 21, 2022).
[81] *See* GameStop Corp., SEC No-Action Letter, 2022 WL 1037147 (Apr. 21, 2022).
[82] *See* GameStop Corp., SEC No-Action Letter, 2022 WL 1037146 (Apr. 21, 2022).
[83] *See* GameStop Corp., SEC No-Action Letter, 2022 WL 1037148 (Apr. 21, 2022).

2021 to actually organize some activist effort. On the other hand, these proposals also do not relate to corporate governance matters. One is a dividend payment suggestion, while the other is a proposal to help certain retail shareholders take tax advantages. As of yet, there is no indication that GameStop investors—meme traders or not—are particularly likely to bring about governance reforms through shareholder proposals.

VI. BEYOND VOTING: ESG AND BOARD GENDER DIVERSITY

Voting is not the only way shareholders can influence corporate governance at public companies. Boards, institutional investors, and policymakers are increasingly paying attention to a firm's prosocial performance as captured by ESG metrics.[84] Even if retail investors do not directly participate in governance (through voting or making proposals), it is also possible that their presence and preferences could indirectly influence how firms are governed. For example, the meme surge could have left a considerable imprint on public companies if retail investors managed to make their firms' preferences more prosocial. In addition, it is also possible that a meme trader may have submitted a shareholder proposal but decided to withdraw it in return for some concession from the board or management, such as instituting some prosocial changes. To estimate this indirect influence, in this subsection, we assess the impact of the meme phenomenon on firm ESG scores.

A. ESG Scores at Meme Stock Companies

An important claim in the legal scholarship on retail investors is that these new entrants to the financial markets have different goals and expectations from management (as compared to more established institutional players). Ricci and Sauter, for example, envisage meme trading as "a social movement able to bring business corporations to serve their original partly-private-partly-public

[84] *See* Max M. Schanzenbach & Robert H. Sitkoff, *Reconciling Fiduciary Duty and Social Conscience: The Law and Economics of ESG Investing by a Trustee*, 72 STAN. L. REV. 381 (2020).

purpose."[85] In other words, scholars envisaged meme companies as potentially deviating from the shareholder wealth-maximization norm and advancing social and environmental causes, under pressure from retail investors. There is a demographic aspect to this argument. As Fisch observes, many of the retail investors who invested in meme stocks were younger people. Since some argue that the millennial generation has different preferences and is in favor of socially responsible investing even at the cost of wealth-maximization, Fisch expected the young cohort of retail investors to potentially pressure management to improve ESG metrics.[86] However, Fisch is careful to note that "the extent to which citizens will pursue stakeholder or societal goals in their role as investors remains unclear."[87]

To shed some light on the extent to which meme traders affected socially responsible investing and management, we obtain data on ESG scores for each firm in the Compustat dataset between 2015 and 2021. The ESG scores are taken from the MSCI ESG Score Indexes. This indexes measure ESG in several different ways, but we choose the most comprehensive measure—industry-adjusted total ESG score—as our outcome of interest.[88] MSCI measures the ESG for each firm at different points in the year. Therefore, we count an ESG score to "belong" to a given year if it was assessed after June 30 of the previous calendar year or before June 30 of that year. For example, any ESG score assessed between June 30, 2015 and June 30, 2016 is counted as that firm's 2016 ESG score. We estimate a difference-in-difference regression model assessing whether ESG scores changed differently for

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[85] *See* Ricci & Sautter, *supra* note 3, at 51.
[86] *See* Fisch, *supra* note 4, at 1850-51. *See also* Michal Barzuza, Quinn Curtis, & David Webber, *Shareholder Value(s): Index Fund ESG Activism and the New Millennial Corporate Governance*, 93 S. CAL. L. REV. 1243, 1250 (2020) (arguing that the direct and indirect pressure from millennial investors is pushing mutual funds, who are competing for the millennial investors' investment, to become more active on ESG issues).
[87] *See id.* at 1851.
[88] There is some debate as to what the ESG rating really captures. The rating is intended to measure risk, but ESG scholars also employ this metric as a performance indicator—e.g., firms' efforts to manage ESG risks. For studies using this index as a performance indicator, see, for example, Ľuboš Pástor et al., *Dissecting Green Returns*, 146 J. FIN. ECON. 403 (2022); Mozaffar Khan et al., *Corporate Sustainability: First Evidence on Materiality*, 91 ACC'T. REV. 1697 (2016). For more on the debate, see George Serafeim & Aaron Yoon, *Stock Price Reactions to ESG News: The Role of ESG Ratings and Disagreement*, REV. ACC'T. STUD. 1 (2022).

meme stocks after the abolition of commissions and the meme surge of 2021. Table 6 presents the results of this regression.

	(1) Baseline	(2) With Financials
2019-20	0.326***	0.292***
	(0.0305)	(0.0347)
2019-20 x Meme	-0.0817	-0.0108
	(0.127)	(0.125)
2021	0.644***	0.601***
	(0.0434)	(0.0494)
2021 x Meme	-1.818**	-1.722*
	(0.918)	(0.910)
Constant	4.219***	4.244***
	(0.0515)	(0.0792)
Observations	16,646	12,910
R-squared	0.806	0.810
Firm Fixed Effects	Yes	Yes
Firm Financials	No	Yes

Table 6. Meme Stocks and ESG Scores. This table presents the results of a linear regression model where the dependent variable is the yearly industry-adjusted ESG score reported for each firm by MSCI ESG Indexes. *2019-20* equals 1 for years 2019 and 2020, while *2021* equals 1 for 2021. Column (2) adds controls for firm assets, cash ratio, debt ratio, and return on assets. Columns (1) and (2) include firm fixed effects, and all standard errors are clustered at the firm level. The ***, **, and * denote significance at the 1%, 5%, and 10% levels.

B. Board Diversity at Meme Stock Companies

As a final exercise, we look at the relationship between meme trading and board gender diversity. We use data on board gender diversity from BoardEx, with the dependent variable equaling the fraction (between 0 and 1) of a company's board that is female.[90] The regression analyses, presented in Table 7, does not show meme companies granting women greater representation on boards either after the abolition of commissions or the advent of the social media-driven meme surges. Unlike the ESG results in Table 6, we do not see meme companies performing "worse" than other

[90] Ethnic diversity is another variable we could examine. Nevertheless, BoardEx datasets do not include ethnicity data in a readily usable format.

companies. Our results simply imply that there is no significant relationship between the meme phenomenon and women's representation on the board.

This Part's results are not necessarily inconsistent with the observations made in the literature about retail investors primarily belonging to the millennial generation,[91] or this age cohort of investors having pro-ESG preferences. Instead, taken together with the earlier results about low levels of voting by retail investors, they imply that retail investor apathy renders them likely unable to change management policies toward the environment or social causes. Therefore, while the earlier scholarship on retail investors understandably thought millennial retail investors would move firms away from the wealth-maximization norm once they got a seat at the table, they underestimated the possibility that these investors would neglect to actually take their seat by voting.

	(1) Baseline	(2) With Financials
2019-20	0.0637***	0.0575***
	(0.00200)	(0.00232)
2019-20 x Meme	0.00955	0.0103
	(0.0587)	(0.0609)
2021	0.103***	0.0942***
	(0.00269)	(0.00315)
2021 x Meme	0.00897	0.0168
	(0.0612)	(0.0620)
Constant	0.170***	-0.0106
	(0.000967)	(0.0297)
Observations	11,539	10,657
R-squared	0.809	0.811
Firm Fixed Effects	Yes	Yes
Firm Financials	No	Yes

Table 7. Meme Stocks and Board Gender Diversity. This table presents the results of a linear regression model where the dependent variable is the share of directors that is female, per BoardEx. *2019-20* equals 1 for years 2019 and 2020, while *2021* equals 1 for 2021. Column (2) adds controls for firm assets, cash ratio, debt ratio, and return on assets. Columns (1) and (2) include firm fixed effects, and all standard errors are clustered at the firm level. The ***, **, and * denote significance at the 1%, 5%, and 10% levels.

VII. CONCLUSION

[91] *See* Barzuza et al. (2020), *supra* note 86.

This Article has examined the impact of the dramatic influx of retail shareholders (from the "meme surge" of 2021) on various corporate governance metrics at meme stock companies. The analysis suggests that retail shareholders could be the leopards that failed to change their spots. For one, during the same time period as retail investor ownership of meme stocks has increased, the rates of non-voting have significantly risen for meme stocks. Since non-participation is generally attributed to retail investors,[93] the result supports the conclusion that the surge of retail investor interest in these companies is linked to the rise in non-voting. Importantly, we observe the increase in non-votes beginning in 2019, the same year major brokerages abolished trading commissions. The result is also consistent with the event-study evidence presented in Part III that the 2019 advent of zero-commission trading could have stirred retail investor interest in meme stocks. Retail investors as a whole have also failed to affect corporate governance at meme firms through the shareholder proposal process. Finally, since retail investors have not participated in corporate affairs even after increasing their ownership in meme companies, they have been unable to translate their millennial prosocial preferences into concrete improvements in these firms' ESG scores or board gender diversity. While preliminary, all evidence to date suggests that meme trading may be a social phenomenon that remains largely orthogonal to the corporate governance aspirations of millennial investors.

The Article's primary target has been on a handful of meme stock companies, such as GameStop, AMC, and Bed Bath & Beyond, with the principal finding that the new retail shareholders at these companies do not seem to be active in engaging with the management or in influencing the companies' governance outcomes. Given that the Article's focus is on a small number of companies that went through an unusual experience of facing a sudden surge of retail investors' interest, one needs to be cautious about generalizing the results to other companies or making overarching conclusions. At the same time, these companies were chosen precisely because they were the primary

[93] *See* Geoffroy, *supra* note 61.

targets of meme trading. Thus, to the extent we should have observed a new paradigm of corporate governance associated with meme surges, these companies would have been the most promising ones. Accordingly, we believe that the Article's findings are informative in getting a better understanding of retail shareholders' engagement and potential, democratizing benefits of allowing more retail investor participation. To get a better understanding of the importance of retail investor base on corporate governance, a future research project may take a closer look at how technological changes, including the introduction of zero-commission trading, may have had a broader effect on the capital markets and also the more general impact of retail investors on corporate governance across a larger segment of the market.

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