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United States House of Representatives
Committee on Financial Services
2129 Rayburn House Office Building
Washington, D.C. 20515

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RANKING MEMBER

March 15, 2021

Memorandum

To: Members, Committee on Financial Services
From: FSC Majority Staff
Subject: March 17, 2021, Full Committee Hearing entitled, "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide, Pt. II"

The full Committee will hold a virtual hearing entitled, "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide, Part II" on Wednesday, March 17, 2021 at 10:00 am Eastern Daylight Time on the virtual meeting platform Cisco Webex. There will be one panel with the following witnesses:

- Sal Arnuk, Partner/Co-Founder, Themis Trading LLC
- Michael Blaugrund, Chief Operating Officer, New York Stock Exchange
- Dr. Vicki Bogan, Associate Professor, Cornell University
- Alexis Goldstein, Senior Policy Analyst, Americans for Financial Reform
- Dennis Kelleher, Co-Founder, President and Chief Executive Officer of Better Markets
- Alan Grujic, CEO, All of Us Financial
- Honorable Michael S. Piwowar, Executive Director, Milken Institute

Overview

In January 2021, retail investors on social media site Reddit's "WallStreetBets" subchannel ("subreddit") collectively executed an investment strategy to induce a short squeeze in stocks such as GameStop, AMC and KOSS, as well as other securities they identified as being heavily shorted by hedge funds. These social media users collectively drove the stock prices up, forcing short sellers, who bet the stock price would go down, to purchase shares at an increased price. On February 18, 2021, the House Financial Services Committee held a hearing to discuss the facts and circumstances around the short squeeze with those who were directly involved, including Keith Gill, WallStreetBets user; Kenneth C. Griffin, Chief Executive Officer, Citadel LLC; Steve Huffman, Chief Executive Officer, Co-Founder, Reddit; Gabriel Plotkin, Chief Executive Officer, Melvin Capital Management LP; and Vladimir Tenev, Chief Executive Officer, Robinhood Markets, Inc. These events raised several critical questions about the conflicts of interest between payment for order flow and best execution, the sufficiency of short sale disclosures, whether settlement times should be accelerated, the market dominance of certain participants, and the impact of gamification on America's capital markets. These issues are discussed in more detail below.

Payment for Order Flow and Best Execution

Instead of sending customer orders to national exchanges, Robinhood Financial LLC, as well as other retail broker-dealers, route customer orders to principal trading firms or electronic market makers that, in turn, either execute the orders or submit them to market centers.[1] Principal trading firms profit from accepting these orders "either by taking the other side of the customer orders and exiting the positions at a profit … or by routing the orders to other market centers."[2] Broker-dealers also receive incentives from submitting their customers' orders to a particular principal trading firm. One such incentive is called "payment for order flow" (PFOF).[3]

Reporting from Alphacution, a research firm, indicates that aggregate PFOF revenue nearly "tripled at four major brokerages—TD Ameritrade, Robinhood, E*Trade, and Charles Schwab—to $2.5 billion in 2020 from $892 million in 2019."[4] Other broker-dealers, including Webull, Ally Invest, and Interactive Brokers reportedly received nearly $300 million in such payments.[5] Some argue that PFOF helps to lower retail broker-dealer commissions and allows some retail broker-dealers, such as Robinhood, to offer "commission-free trading." Others, including the U.S. Securities and Exchange Commission (SEC or Commission), have noted that, in some cases, commission-free trading comes "with a catch," including customers receiving inferior execution prices.[6]

The SEC's regulatory approach to PFOF has largely involved disclosure requirements aimed at addressing the potential conflicts of interest that PFOF may pose for broker-dealers.[7] Critically, in addition to those disclosure requirements, retail broker-dealers are also required to get the "best execution" for their customers.[8] This means that if a retail broker-dealer routes customer orders to a market maker, retail broker-dealers such as Robinhood have to make sure the market maker will execute the customer's order on the most favorable terms and prices reasonably available in the market. The retail broker-dealer may not, for instance, route an order based solely on which market maker will offer the most incentives for order flow. Nonetheless, there is an inherent conflict between a retail broker-dealer's receipt of PFOF, and its best execution obligations, because retail broker-dealers may be inclined to send a customer order to the principal trading firm that will pay the most, instead of to the one that will execute the customer's order on the most favorable terms.

Form 13-F Reporting

Section 13(f) of the Securities and Exchange Act of 1934 and Rule 13(f) requires institutional investment managers that have investment discretion with respect to accounts holding certain equity securities, with an aggregate fair market value of at least $100 million, to file a report with the SEC.[9] Institutions reporting under 13(f) may include hedge funds.[10] Melvin's short against GameStop was expressed in listed put options and, therefore, was disclosed in Melvin's form 13F

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[1] *See* *In Re Robinhood*, Admin. Pro. File No. 3-20171 (Dec. 17, 2020)
[2] *Id.*
[3] *Id.* Rule 10b-10(d)(8) of the Securities and Exchange Act of 1934 (Exchange Act) defines PFOF as "any monetary payment, service, property, or other benefit that results in remuneration, compensation, or consideration to a broker or dealer from any broker or dealer, national securities exchange, registered securities association, or exchange member in return for the routing of customer orders by such broker or dealer to any broker or dealer, national securities exchange, registered securities association, or exchange member for execution…". S*ee also* 17 CFR § 240.10b-10.
[4] Yahoo Finance. Payments for order flow almost tripled in 2020 at Robinhood, other brokerages. Feb. 18, 2021.
[5] *Id.*
[6] *See* *In Re Robinhood*, Admin. Pro. File No. 3-20171 (Dec. 17, 2020)
[7] *See*, e.g., 17 CFR § 240.10b-10; 17 CFR § 242.606; and 17 CFR § 242.607
[8] *See* FINRA Rule 5310
[9] *See*17 CFR § 240.13f-1
[10] *Id.*

filing with the SEC.[11] This enabled WallStreetBets users to discover the hedge fund's short against GameStop.[12] Prior to this, on July 10, 2020, the SEC had proposed to raise the reporting threshold under Rule 13(f) from $100 million to $3.5 billion.[13] Members of Congress[14] and others opposed the rulemaking because it would reduce transparency into "portfolios controlling $2.3 trillion in assets."[15] Others have called for changes that would require institutional investment managers to report more frequently than the rule currently requires.[16]

Short Sale Disclosures

Section 929X(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) requires the Commission to "…prescribe rules providing for the public disclosure of the name of the issuer and the title, class, CUSIP number, aggregate amount of the number of short sales of each security, and any additional information determined by the Commission following the end of the reporting period. Pursuant to section 929X(a), at minimum, such public disclosure shall occur every month."[17] Section 929X(a) also instructed that this reporting should occur, at minimum, on a monthly basis.[18] The SEC has not engaged in this rulemaking to date.

Accelerated Settlement

"Clearance" is the process of calculating the mutual obligations of market participants, usually on a net basis, for the exchange of securities and money, and "settlement" is defined as the completion of a transaction wherein the seller of a financial instrument transfers the instrument to the buyer, and the buyer transfers the money to purchase the financial instrument to the seller.[19] The standard settlement cycle for most broker-dealer securities transactions, including stocks, bonds, municipal securities, and exchange-traded funds is two business days after the trade is executed (T+2).[20] Serving as the primary post-trade market infrastructure in the U.S., the Depository Trust & Clearing Corporation (DTCC), a member-led holding company that is responsible for clearing and settling much of U.S. stock trades, facilitates the clearing process by serving as a centralized clearinghouse for more than 50 exchanges and equity platforms,[21] processing trillions of dollars in securities transactions daily.[22]

Because there is a two-day period between trade date and settlement date (T+2), there is a risk that a broker may not be able to complete its end of the transaction by the settlement date (e.g. the buyer fails to deliver the cash, or the seller fails to deliver the security) due to potential changes in market or financial conditions, including price fluctuations in the transacted security.[23] To safeguard against a potential default by either the buyer or seller, the National Securities Clearing Corporation (NSCC), a subsidiary of DTCC, maintains a multibillion-dollar clearing fund which

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[11] Institutional Investor, Buried in Reddit, the Seeds of Melvin Capital's Crisis Jan. 25, 2021
[12] Financial Times, Melvin Capital, GameStop and the road to disaster Feb. 6, 2021
[13] Proposed Rule: Reporting Threshold for Institutional Investment Managers (sec.gov)
[14] Chairwoman Maxine Waters. Letter Re: File No. S7-08-20. Reporting Threshold for Institutional Investment Managers. Oct. 2, 2020.
[15] Commissioner Allison Herren Lee. Statement on Proposal to Substantially Reduce 13F Reporting. Jul. 10, 2020.
[16] Rulemaking Petition: Request for rulemaking concerning amendment of beneficial ownership reporting rules under Section 13(f) of the Securities
[17] See Pub. L. No. 111-203, § 929X(a). (Codified as amended at 15 U.S.C. § 78m(f)(2). (2012)).
[18] *Id.*
[19] *Id*.
[20] 17 C.F.R. § 240.15c6-1(a).
[21] DTCC. FAQs: How Issuers Work with DTC. (accessed Mar. 10, 2021).
[22] The Wall Street Journal. Clearinghouse Urges Faster Trade Settlement Amid GameStop Scrutiny. Feb. 24, 2021.
[23] Bank of International Settlements. The Interdependence of Payment and Settlement Systems. June 2008.

is funded by member brokers, including Robinhood, in the event of such a failure.[24] The clearing fund deposit amounts are calculated at least once daily pursuant to a formula, established by NSCC's rules, designed to cover the fund's exposure to a given member's risk based on the riskiness of that particular member's portfolio that includes, among other factors, a "member's concentration in volatile stocks, the volume of trades occurring, imbalances in buying and selling, and the [member] firm's financial condition."[25] As a member broker's risk profile grows, the NSCC may demand that it deposit more money in the fund.[26]

Early in the morning on January 28, 2021, the NSCC reportedly requested roughly an additional $3 billion from Robinhood due to Robinhood's increased risk exposure generated by the GameStop frenzy.[27] Vlad Tenev, Chief Executive Officer of Robinhood, claimed that because Robinhood was unable to immediately produce the additional $3 billion to the NSCC, he was forced to restrict trading in certain stocks, including GameStop, to reduce Robinhood's risk profile, thereby reducing the additional amount Robinhood would be required to deliver to the NSCC to $700 million.[28]

Some have advocated for the reduction of the settlement cycle to one business day (T+1), or even real-time settlements. Blaming the inherent risk generated by the T+2 settlement cycle for forcing Robinhood to restrict trading in certain stocks, Mr. Tenev has called for the US to move toward a real-time settlement system which, he says, "would greatly mitigate the risk" inherent in the current settlement cycle.[29] DTCC itself has stated the "immediate benefits of moving to a T+1 settlement cycle would mean cost savings, reduced market risk and lower margin requirements."[30] Others have expressed caution against immediate actions to shorten the settlement cycle. For instance, SEC Commissioner Hester Pierce cautioned against shortening the settlement cycle too quickly, because it has not been long since the 2017 adjustments to T+2 (from T+3).[31]

Market Dominance by Certain Participants

The market dominance of some capital market participants raises concerns about systemic risk and, in particular, correlated risks arising from the relationship between financial institutions. For example, Citadel LLC is a multi-service hedge fund and financial services company, and its subsidiary, Citadel Securities LLC, is one of the largest market makers and, according to its website, executes "approximately 47% of all U.S.-listed retail volume."[32] Citadel Securities also, reportedly, handles almost as much trading volume as Nasdaq.[33] Further, Citadel Securities along with market maker Virtu Financial, "account for more of the overall equity market than the New York Stock Exchange."[34] With respect to Citadel, some have raised concerns about a single market maker managing such a large volume of retail order flow, and what that means in terms of pricing.[35]

[24] The Wall Street Journal. Clearinghouse Urges Faster Trade Settlement Amid GameStop Scrutiny. Feb. 24, 2021.
[25] Bloomberg. Robinhood's Collateral-Crunch Explanation Puzzles Wall Street. Feb. 6, 2021.
[26] The Wall Street Journal. Clearinghouse Urges Faster Trade Settlement Amid GameStop Scrutiny. Feb. 24, 2021.
[27] The Wall Street Journal. Robinhood's GameStop Debacle Calls to Modernize Stock Clearing. Feb. 8, 2021.
[28] *Id*.
[29] Reuters. Robinhood CEO Calls for Move to Real-Time Settlement of Trades. Feb. 2, 2021.
[30] DTCC. Advancing Together: Leading the Industry to Accelerated Settlement. Feb. 2021.
[31] CNBC. SEC Commissioner on GameStop Fallout: We Can Consider Adjusting Short Selling Limitations. Feb. 2021.
[32] Citadel Securities Website.
[33] Quartz, Citadel Gets Almost As Much Trading Volume as Nasdaq Feb. 5, 2021.
[34] Id.
[35] Yahoo Finance, Biden's SEC pick: Some crypto markets 'rife with fraud and scams' March 2, 2021.

Others have questioned whether Citadel has such dominance in our financial markets that it poses a systemic risk to the entire U.S. financial system.[36]

Gamification and Social Media

Gamification in investing involves tactics used to increase consumer engagement, time spent on an investment platform, and number of trades.[37] This includes design elements and psychological tools meant to keep the attention of its users, including emoji-filled notifications, prizes, graphics, and animations. Robinhood, at the forefront of the gamification movement by broker-dealers, provides prizes designed to increase engagement including a confetti animation when investors complete their first trade, and a chance of winning a share of a glamorous stock (e.g., Apple) if they get a friend to sign up for the platform. Robinhood also offers "scratch-off" stocks, similar to scratch-off lottery tickets, which have variable reward schedules akin to slot machines.[38] Some attribute the GameStop short squeeze itself to the gamification of investing and to the increasing role that social media and technology play in capital markets.[39]

The gamification of complex investment systems has been shown to have detrimental consequences for novice investors' financial health and emotional well-being. Alexander Kearns, a twenty-year-old novice Robinhood investor, mistakenly believed that he had lost hundreds of thousands of dollars in options trading.[40] Robinhood sent him an automated email telling him to take "immediate action," and requested a payment of over $170,000. Believing that he had made irreparable mistakes, Mr. Kearns took his own life.[41] Only on the day after Mr. Kearns died did he receive an email from Robinhood stating, "Great news! We're reaching out to confirm that you've met your margin call and we've lifted your trade restrictions. If you have any questions about your margin call, please feel free to reach out. We're happy to help!"[42]

Robinhood's one-click trading makes trading feel like a game to such an extent that users have resorted to taking out loans to fund their usage, including one user who took out two $30,000 home equity loans so he could purchase and sell speculative stocks and options, with the aim of paying off debts he incurred from his trading activities.[43] The amalgamation of gamification features, such as those seen on Robinhood's platform, has driven criticism that gamified online trading platforms encourage behavior similar to a gambling addiction.[44] Research indicates the more the do-it-yourself investors trade, the worse their financial outcomes are.[45]

There has also been an increase in social media usage discussing investment strategies on apps such as TikTok and Reddit. Investors and their fellow social media users often discuss stocks often traded on Robinhood. TikTok videos with the hashtag #robinhoodstocks have garnered 19.4 million views.[46] Similarly, users of the Reddit subchannel ("subreddit") WallStreetBets have

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[36] The Wall Street Journal, Citadel 'May Pose a Systemic Threat,' Waters Says Feb. 18, 2021.
[37] The Washington Post. *Robinhood's Role in the 'Gamification' of Investing*. Dec. 21, 2020.
[38] Business Insider. *I was addicted to Robinhood and Wall Street Bets — and lost everything*. Feb. 11, 2021.
[39] *See, e.g.,* The Washington Post. *Robinhood's Role in the 'Gamification' of Investing*. Dec. 21, 2020.
[40] CBS News. *Alex Kearns died thinking he owed hundreds of thousands for stock market losses on Robinhood. His parents have sued over his suicide*. Feb. 8, 2021.
[41] *Id.*
[42] *Id.*
[43] *Id.*
[44] NBC. *Gambling addiction experts see familiar aspects in Robinhood app*. Jan 30, 2021.
[45] The New York Times. *Robinhood has Lured Young Traders, Sometimes with Devastating Results*. Feb. 2, 2021.
[46] TikTok, *#robinhoodstocks Hashtag Videos on TikTok*, (accessed Feb. 23, 2021).

posted screen shots of their Robinhood accounts, discussed the short squeeze of GameStop stock abundantly,[47] and used Robinhood to buy GameStop equities.[48]

[47] Reddit. *r/WallStreetBets,* (accessed Feb. 23, 2021).
[48] Business Insider. *Robinhood says it doesn't monitor social media stock discussions* Feb. 18, 2021.