UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA

CASE NO. 21-2989-MDL-ALTONAGA/Torres

IN RE:

JANUARY 2021 SHORT SQUEEZE TRADING LITIGATION
_____/

This Document Relates to:

ALL ANTITRUST ACTIONS

AMENDED CONSOLIDATED CLASS ACTION COMPLAINT

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Plaintiffs Angel Guzman, Burke Minahan, Christopher Miller, and Terell Sterling, on behalf of themselves and all others similarly situated, bring this Amended Class Action Complaint against Defendants Robinhood Markets, Inc., Robinhood Financial LLC, and Robinhood Securities, LLC (collectively, "Robinhood") and Citadel Securities LLC ("Citadel," or "Citadel Securities," together with Robinhood, "Defendants") for violations of Section 1 of the Sherman Act, 15 U.S.C. § 1.

INTRODUCTION

1. This case involves a collusive agreement to restrict individual investors ("Retail Investors") from exercising control over their trades and trading accounts. Robinhood and Citadel, each of whom are market leaders in their own relevant markets (the downstream and upstream markets, respectively), hatched an anticompetitive scheme to restrict Retail Investors' access to specific securities in the stock market, to suppress the prices of these securities, and to prevent the market from operating freely and fairly. Robinhood and Citadel entered into an illegal agreement to implement this scheme and committed a series of overt acts in furtherance of the conspiracy. The agreement was implemented, effective and caused its intended purposes, causing hundreds of millions in dollars in damages to the Plaintiffs and the Class they represent.

2. Robinhood and Citadel hatched their anticompetitive scheme to restrict Retail Investors' access. Robinhood and Citadel had developed an important and lucrative relationship. The relationship was crucial to their respective businesses. They implemented the scheme to protect each other: Defendants conspired to prohibit Retail Investors from purchasing the Relevant Securities, defined below, to save Citadel from hemorrhaging losses due to its accumulation of large short positions, and to save Robinhood's business model, which depends predominantly on the lucrative order flow payments that Robinhood receives from Citadel. In

preventing the market from operating freely and fairly, Defendants exercised their market power to restrain competition and harm Retail Investors—precisely the type of conduct that the modern antitrust law aims to prohibit.

3. Defendants' collusive agreement prevented the market from operating in a competitive manner as it would have absent the restraint. As such, Defendants' agreement introduced price artificiality by preventing the trading price from reflecting the supply and demand conditions that would have otherwise prevailed in a competitive market. Defendants harmed competition by leveraging each other's market power in their respective markets to limit output (trades), reduce the quality of order execution (and thus increase the quality-adjusted price), and induce artificial prices for relevant market securities for their own benefit. This antitrust injury resulted in damages to Retail Investors, who could not avail themselves of the trading opportunities they would have taken advantage absent Defendants' conduct.

4. Robinhood and Citadel are market leaders in the products and services they provide. Robinhood has significant market power as a brokerage and controls investor accounts of over 31 million American Retail Investors. Robinhood brands itself as a commission free brokerage, which was integral to its growth and market valuation. That is, Robinhood does not charge Retail Investors money for creating an account or buying securities through its platform. How, then, does Robinhood survive as a business? Through the money it makes by selling its order flow to market makers like Citadel. Payment for order flow is Robinhood's primary source of revenue. Indeed, Robinhood derives as much as 80% of its revenues from payment for order flow. That revenue exceeds hundreds of millions of dollars on an annual basis. Without PFOF income, Robinhood would not survive.

5. Citadel is not just any other business partner to Robinhood. Citadel is crucial to Robinhood's success and business prospects. Robinhood's entire business model is built around the PFOF revenue it derives from market makers like Citadel. Citadel alone contributed an astonishing 43% to Robinhood's PFOF revenue, over ***$326 million***, in the first quarter of 2021. Indeed, Vlad Tenev, Robinhood's founder and CEO, acknowledged in Congressional testimony that Robinhood's PFOF relationship with Citadel is Robinhood's primary source of revenue.

6. Retail Investors are individual investors who make investments on their own behalf. They purchase securities such as stocks, bonds, options, mutual funds, and exchange traded funds (ETFs) through websites and apps provided by brokerage firms or other investment service providers such as Robinhood.

7. Leading up to January 27, 2021, based on their research and observations, the Retail Investors, primarily through Robinhood, invested in certain stocks—GameStop (GME), AMC Entertainment (AMC), Bed Bath & Beyond (BBBY), BlackBerry (BB), Express (EXPR), Koss (KOSS), Nokia (NOK), Tootsie Roll Industries (TR), and Trivago NV (TRVG) (the "Relevant Securities")—that they believed would increase in value and serve as good investment opportunities.

8. Historically, Retail Investors paid a fee or commission to their brokerages for executing personal trades. Today, most brokerages do not charge their investors a fee per transaction, rather, they earn revenue through rebates, kickbacks and other payments from market makers. These payments are collectively known as "payment for order flow" or "PFOF." Robinhood bases its business model on payment for order flow. While Robinhood offers commission-free app-based brokerage services to Retail Investors at no-cost, it profits by routing orders to market makers such as Citadel.

9. When a market maker executes an order, it makes a profit on the spread between the "bid" price, the price at which a market maker is willing to buy a security, and the "ask" price, the price at which a market maker is willing to sell the security.

10. For every transaction, there must be a buyer and a seller. Market makers typically will take the other side of a transaction for orders routed to them. For example, if a buy order is routed to a market maker and there is no sell order available, market makers execute the order, either by selling a security in its inventory or by selling short.

11. As more Retail Investors bought the Relevant Securities through Robinhood, those orders were routed to market makers like Citadel. Citadel took the other side of the buy orders placed by the Retail Investors, i.e., Citadel sold the Relevant Securities short to complete the routed Retail Investors' orders. As Citadel took the other side of more and more buy orders, it acquired a massive short position in the Relevant Securities in excess of a billion dollars.

12. As the Relevant Securities increased in value, due in large part to Retail Investors' purchases of the Relevant Securities, Citadel Securities exposed itself to potential losses of several billion dollars. As Retail Investors and others continued to purchase the Relevant Securities, Citadel Securities and unnamed co-conspirators were caught in a classic "short squeeze." A "short squeeze" occurs when a stock or other asset rises sharply in value, distressing short positions. Short selling investors are faced with a rapid increase in the shorted asset's value, exposing the short seller to increased and theoretically limitless loss.

13. Faced with the threat to its short positions posed by the nascent short squeeze, Citadel leveraged its PFOF relationship with Robinhood to form and implement an anticompetitive scheme to halt trading for essentially all Retail Investors. Robinhood could not take the risk of routing its rapidly increasing buy orders to a different market maker, or to the

open market, because its relationship with, and revenue stream from Citadel was critical to its survival. Robinhood and Citadel conspired, colluded, agreed, and acted in concert to cut off access to Retail Investors' ability to buy the Relevant Securities and thereby artificially suppressed the prices of millions of dollars of securities that would have otherwise traded freely on the stock market. The scheme arrived at was finalized during the last week of January 2021.

14. Knowing full well that Robinhood would follow through with the plan on January 28, 2021, on January 27, 2021, Citadel Securities executed additional short trades in the Relevant Securities in the after-hours session to develop larger short positions in the Relevant Securities in anticipation of the Relevant Securities declining in price on January 28, 2021. Robinhood was aware that Citadel intended to do so. Then, on January 28, 2021, Robinhood disabled all buy features for the Relevant Securities on its platforms thereby stripping the demand-side of the market and halting the price appreciation in the Relevant Securities.

15. Defendants' scheme was successful as it drove the stock prices down. Retail Investors had no option but to sell or hold shares of their Relevant Securities. At the point in time where Defendants engaged in this conspiratorial effort to thwart buyers, the Relevant Securities had appreciated to unprecedented levels. Such highly appreciated stocks are generally sensitive to reversals in price and can make sharp price movements lower when a reversal occurs. Defendants were aware of this dynamic and the propensity of the Relevant Securities to drop substantially as a result of the Defendants' collective action to prevent customers from buying the Relevant Securities and thus conspired to ensure that the stock prices for the Relevant Securities did not appreciate further and would instead sharply decrease.

16. By forcing the Retail Investors to sell their Relevant Securities at lower prices than they otherwise would have sold, Defendants caused damage to Plaintiffs and members of

the Class they represent. Defendants artificially constricted the price appreciation of the Relevant Securities and reduced the price of the Relevant Securities that Retail Investors either sold or held below the prices that they would have otherwise obtained in a competitive market free of collusion. The injuries caused by Defendants continued for several days and weeks. As a direct, foreseeable and proximate result of Defendants' illegal conspiracy, Plaintiffs and the Class they represent sustained hundreds of millions of dollars in damages.

JURISDICTION AND VENUE

17. Plaintiffs bring this action on behalf of themselves and on behalf of the members of the Class to recover damages, including treble damages, costs of suit, and reasonable attorneys' fees arising from Defendants' violations of Section 1 of the Sherman Act, 15 U.S.C. § 1, as well as any and all equitable relief afforded to them under the federal laws pleaded herein.

18. This Court has federal question jurisdiction pursuant to 28 U.S.C. § 1331 because the case arises under the Constitution, laws, or treaties of the United States.

19. This Court also has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1332(d) and 1367, in that this is a class action in which the matter or controversy exceeds the sum of $5,000,000, exclusive of interest and costs, and in which some members of the proposed Class are citizens of a state different from some Defendants.

20. Venue is proper in this judicial District pursuant to 28 U.S.C. § 1391(b), (c) and (d), because a substantial part of the events giving rise to Plaintiffs' claims occurred in this District, a substantial portion of the affected interstate trade and commerce was carried out in this District, and one or more of the Defendants reside in this District or are licensed to do business in this District. Each Defendant has transacted business, maintained substantial contacts, or committed overt acts in furtherance of the illegal scheme and conspiracy throughout the United

States, including in this District. The conspiracy occurred in this judicial District. The conspiracy has been directed at, and has had the intended effect of, causing injury to persons residing in, located in, or doing business throughout the United States, including in this District.

21. This Court has personal jurisdiction over each Defendant because, each Defendant: (a) transacted business throughout the United States, including in this District; (b) transacted in substantial amounts of the Relevant Securities throughout the United States; (c) had substantial contacts with the United States, including this District; and/or (d) engaged in an antitrust conspiracy that was directed at and had a direct, foreseeable, and intended effect of causing injury to the business or property of persons residing in, located in, or doing business throughout the United States, including in this District.

22. The activities of the Defendants and all co-conspirators—whether unnamed or as of yet unknown—as described herein, were within the flow of, were intended to, and did have direct, substantial, and reasonably foreseeable effects on the foreign and interstate commerce of the United States.

PARTIES

A. Plaintiff Angel Guzman

23. Plaintiff Angel Guzman ("Guzman") is a resident of the State of New York. Guzman purchased shares of BlackBerry Ltd., GameStop Corp., and Nokia Corp. on Robinhood and held said shares as of the close of market on January 27, 2021.

24. On January 28, 2021, Guzman was prohibited from purchasing the Relevant Securities on Robinhood due to the anticompetitive conduct alleged herein.

25. Consequently, on January 28, 2021, in an effort to purchase the Relevant Securities, Guzman applied for an account with Charles Schwab ("Schwab") because Schwab

was not prohibiting its customers from purchasing the Relevant Securities. Yet, on January 28, 2021, Guzman was unable to purchase any of the Relevant Securities on Schwab due to the amount of time required to open the account.

26. From January 29, 2021 through February 4, 2021, Guzman was subject to the trading limitations Robinhood imposed on certain of the Relevant Securities.

27. As a result of the anticompetitive conduct alleged herein, Guzman sold shares of BlackBerry Ltd., GameStop Corp., and Nokia Corp. on Robinhood during the Class Period.

B. Plaintiff Burke Minahan

28. Plaintiff Burke Minahan ("Minahan") is a resident of the State of Minnesota. Minahan purchased shares of BlackBerry Ltd., GameStop Corp., and Nokia Corp. on Robinhood and held said shares as of the close of market on January 27, 2021.

29. On January 28, 2021, Minahan was prohibited from purchasing the Relevant Securities on Robinhood as a result of the anticompetitive conduct alleged herein.

30. Consequently, on January 28, 2021, in an effort to purchase the Relevant Securities, Minahan applied for and funded an account with Fidelity because Fidelity was not prohibiting its customers from purchasing the Relevant Securities. Minahan was subsequently able to purchase a share of GameStop Corp. on Fidelity that day.

31. From January 29, 2021 through February 4, 2021, Minahan was subject to the trading limitations Robinhood imposed on certain of the Relevant Securities.

32. As a result of the anticompetitive conduct described herein, Minahan sold shares of BlackBerry Ltd., GameStop Corp. and Nokia Corp. on Robinhood during the Class Period.

C. Plaintiff Christopher Miller

33. Plaintiff Christopher Miller ("Miller") is a resident of the State of Kansas. Miller purchased shares of GameStop Corp. on Robinhood and held said shares as of the close of market on January 27, 2021.

34. On January 28, 2021, Miller was prohibited from purchasing the Relevant Securities on Robinhood due to the anticompetitive conduct described herein.

35. Consequently, on January 28, 2021, in an effort to purchase the Relevant Securities, Miller applied to open accounts with Fidelity and TD Ameritrade ("TD"), because these firms were not prohibiting their customers from purchasing the Relevant Securities. Yet, on January 28, 2021, Miller was unable to purchase any of the Relevant Securities on Fidelity or TD due to the amount of time required to setup the accounts.

36. From January 29, 2021 through February 4, 2021, Miller was subject to the trading limitations Robinhood imposed on certain of the Relevant Securities.

37. As a result of the anticompetitive conduct alleged herein, Miller sold shares of GameStop on Robinhood during the Class Period.

D. Plaintiff Terell Sterling

38. Plaintiff Terell Sterling ("Sterling") is a resident of the State of California. Sterling purchased shares of AMC Entertainment Holdings, Inc., BlackBerry Ltd., GameStop Corp. on Robinhood and held said shares as of the close of market on January 27, 2021.

39. On January 28, 2021, Sterling was prohibited from purchasing the Relevant Securities on Robinhood due to the anticompetitive conduct described herein.

40. From January 29, 2021 through February 4, 2021, Sterling was subject to the trading limitations Robinhood imposed on certain of the Relevant Securities.

41. As a further result of the anticompetitive conduct alleged herein, Sterling sold shares of AMC Entertainment Holdings, Inc., BlackBerry Ltd. and GameStop Corp. on Robinhood during the Class Period.

E. Defendant Robinhood

42. Defendant Robinhood Markets, Inc. ("Robinhood Markets") is a Delaware corporation with its principal place of business at 85 Willow Road, Menlo Park, California. Defendant Robinhood Markets, Inc. is the corporate parent of and manages, controls and directs the affairs of Defendants Robinhood Financial LLC and Robinhood Securities, LLC.

43. Defendant Robinhood Financial LLC ("Robinhood Financial") is a Delaware limited liability company with its principal place of business at 85 Willow Road, Menlo Park, California. Robinhood Financial is an introducing broker that provides financial services, including an electronic trading platform through which retail investors can trade financial assets. It is a wholly-owned subsidiary of Robinhood Markets.

44. Defendant Robinhood Securities, LLC ("Robinhood Securities") is a Delaware limited liability company with its principal place of business at 500 Colonial Center Parkway, Suite 100, Lake Mary, Florida. Robinhood Securities is a clearing broker that clears accounts exclusively for Robinhood Financial LLC. It is a wholly owned subsidiary of Robinhood Markets.

45. Robinhood Markets and its wholly owned subsidiaries operate as one entity, and they are treated as one entity in Robinhood Markets' IPO Registration Statement. *See* Robinhood Markets, Inc., Registration Statement (Form S-1) (July 1, 2021) ("S-1") at F-8 ("Robinhood Markets, Inc. ('RHM', together with its subsidiaries, 'Robinhood,' the 'Company,' 'we,' or 'us,')". The S-1 explains that "[t]he consolidated financial statements include the accounts of

RHM and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated."). *Id*. at F-9. The S-1 also describes Robinhood Markets and its subsidiaries as a "Vertically Integrated Platform." *Id*. at 7.

46. Robinhood restricted and/or otherwise limited the ability of Retail Investors to purchase the Relevant Securities. During the relevant period, Robinhood actively participated in the conspiracy and the wrongful acts alleged herein.

F. Defendant Citadel

47. Defendant Citadel Securities LLC is a Delaware limited liability company, headquartered at 131 South Dearborn Street, Chicago, Illinois.

48. Citadel Securities is a leading market maker to the world's institutions and broker-dealer firms. Citadel Securities executes approximately 37% of all U.S.-listed retail volume, making it the industry's top wholesale market maker.

49. Citadel Securities took significant short positions in the Relevant Securities. During the relevant period, Citadel Securities actively participated in the conspiracy and the wrongful acts alleged herein.

AGENTS AND CO-CONSPIRATORS

50. The anticompetitive and unlawful acts alleged against the Defendants in this Amended Class Action Complaint were authorized, ordered or performed by the Defendants' respective officers, agents, employees, representatives, or shareholders while actively engaged in the management, direction, or control of the Defendants' businesses or affairs. The respective Defendant parent entities identified herein exercise dominance and control over all of their respective Defendant subsidiary entities and those respective subsidiaries have a unity of purpose and interest with their respective parents.

51. To the extent any respective parent Defendant did not keep a tight rein on its respective subsidiary Defendant(s), it had the power to assert control over the subsidiary if the latter failed to act in the parent's best interest. The respective parent Defendants and their respective subsidiaries, affiliates and agents thus operated as a single unified entity.

52. The Defendants' agents operated under the explicit and apparent authority of their principals.

53. Various persons and/or firms not named as Defendants herein may have participated as co-conspirators in the violations alleged herein and may have performed acts and made statements in furtherance thereof.

54. Each Defendant acted as the principal, agent, or joint venture of, or for other Defendants with respect to the acts, violations, and common course of conduct alleged herein.

CLASS ALLEGATIONS

55. Plaintiffs bring this action for damages on behalf of themselves and all others similarly situated as a class action pursuant to Rules 23(a), (b)(2) and (b)(3) of the Federal Rules of Civil Procedure, on behalf of the following Class:

> All persons or entities in the United States that held shares of stock or call options through Robinhood in GameStop Corp. (GME), AMC Entertainment Holdings Inc. (AMC), Bed Bath & Beyond Inc. (BBBY), BlackBerry Ltd. (BB), Express, Inc. (EXPR), Koss Corporation (KOSS), Nokia Corp. (NOK), Tootsie Roll Industries, Inc. (TR), or Trivago N.V. (TRVG) as of the close of market on January 27, 2021, and sold the above-listed securities from January 28, 2021 up to and including February 4, 2021 (the "Class Period").

56. This Class definition specifically excludes the following person or entities:

a. any of the Defendants named herein;

b. any of the Defendants' co-conspirators;

c. any of Defendants' parent companies, subsidiaries, and affiliates;

d. any of Defendants' officers, directors, management, employees, or agents;

e. all governmental entities; and

f. the judges and chambers staff in this case, as well as any members of their immediate families.

57. Plaintiffs do not know the exact number of Class members, because such information is in the exclusive control of Defendants. Plaintiffs are informed and believe that, due to the nature of the trade and commerce involved, there are millions of Class members geographically dispersed throughout the United States and elsewhere, such that joinder of all Class members in the prosecution of this action is impracticable.

58. Plaintiffs' claims are typical of the claims of their fellow Class members because Plaintiffs and all Class members were damaged by the same wrongful conduct of Defendants as alleged herein, and the relief sought herein is common to all members of the Class.

59. Plaintiffs will fairly and adequately represent the interests of the Class. Plaintiffs have no conflicts with any other members of the Class. Furthermore, Plaintiffs have retained sophisticated and competent counsel who is experienced in prosecuting antitrust class actions, as well as other complex litigation.

60. Numerous questions of law or fact common to the entire Class—including, but not limited to those identified below—arise from Defendants' anticompetitive and unlawful conduct:

a. whether Defendants combined or conspired with one another to artificially suppress prices for the Relevant Securities at any time during the Class Period to shareholders of the Relevant Securities in the United States;

b. whether Defendants combined or conspired with one another to fix, raise, maintain, stabilize and/or suppress prices for the Relevant Securities at any time during the Class Period to shareholders of the Relevant Securities in the United States;

c. whether Defendants' conduct caused the prices of the Relevant Securities, sold or held by the Retail Investors in the United States at any time during the Class Period to be artificially fixed, suppressed, maintained or stabilized; and

d. whether Plaintiffs and the other members of the Class were injured by Defendants' conduct and, if so, the appropriate Class-wide measure of damages.

61. These and other questions of law and fact are common to the Class and predominate over any questions affecting the Class members individually.

62. Defendants have acted on grounds generally applicable to the Class. This class action is superior to alternatives, if any, for the fair and efficient adjudication of this controversy. Prosecuting the claims pleaded herein as a class action will eliminate the possibility of repetitive litigation. There will be no material difficulty in the management of this action as a class action.

63. The prosecution of separate actions by individual Class members would create the risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Defendants.

FACTUAL ALLEGATIONS

64. Retail Investors participate in online financial discussion forums like Reddit, Facebook, and TikTok. Through these forums, Retail Investors share information about their market observations to help fellow investors benefit from their research. During the relevant period, Retail Investors exchanged information regarding the Relevant Securities on public fora. Based on their research, the Retail Investors, through SEC registered broker-dealers, such as Robinhood, purchased the Relevant Securities.

65. In contrast, market makers like Citadel and unnamed co-conspirators established "short" positions in the Relevant Securities. By the nature of the developed short positions, Citadel and certain unnamed co-conspirators, stood to benefit and substantially profit were the prices of the Relevant Securities to decrease. Entering into short positions is highly speculative. In a free and open market, there would be substantial financial risk that prices might increase causing traders with short positions to experience losses.

66. Citadel and unnamed co-conspirators found themselves poorly positioned for the rise in the Relevant Securities prices that occurred in late January 2021. As Relevant Securities increased in price, Citadel was exposed to billions of dollars in potential losses.

67. Rather than facing the consequences of their exposure to the rising prices of the Relevant Securities, Citadel and their co-conspirators entered into an anticompetitive scheme with Robinhood to prevent the market from operating freely, to halt the significant increase in the prices of the Relevant Securities, to avoid their own financial losses and reduced profits, and to cause financial losses to Plaintiffs and the members of the Class.

Robinhood's Business Model and Relationship with Citadel

68. Robinhood Financial is an introducing broker-dealer that offers brokerage services to Retail Investors. Its primary business is providing retail customers with an app-based brokerage platform ("App") to place orders to buy and sell stocks, ETFs, and other securities or investments strategies such as trading on margin or using options strategies.

69. Robinhood was founded on the belief that "everyone should be welcome to participate in [the] financial system." (S-1 at 1). Marketed exclusively to Retail Investors, the Company's stated mission is to "democratize finance for all." *Id.* In furtherance of this mission, Robinhood offers "commission-free" brokerage services to its users.

70. Robinhood's business model proved successful. Robinhood launched its application in 2015, and by mid-2018, it had become one of the largest-retail brokers in the United States. In October 2018, Robinhood launched its own custody and clearing system (i.e., Robinhood Securities), which allowed it to help its customers more easily and efficiently. As a result, Robinhood's customer growth continued to surge.

71. In 2015, Robinhood had fewer than 500,000 users. Today, Robinhood has more than 31 million users, 12.5 million of whom had funded accounts as of December 31, 2020 (11.7 million monthly active users) and 18.0 million of whom had funded accounts as of March 31, 2021 (17.7 million monthly active users). (S-1, at 55, 121-122). And, according to Robinhood itself, close to 50% of all new funded retail accounts opened in the United Stated from 2016 to 2021 were new accounts created on Robinhood. (S-1, at 2).

72. The trading demand of Robinhood's users has a substantial and outsized influence on the movements of stock price. According to a research study published by the Swiss Finance Institute, Robinhood users drove 10% of the variation in returns from stocks in the

second quarter of 2020, despite holding only about 0.2% of the aggregate U.S. market capitalization. This is because Retail Investors buy and sell more than their institutional counterparts in response to changes in the price of the underlying security.

73. Robinhood was able to grow its user base, in part, by offering "commission-free" investing. But "free trading" on Robinhood is not really free. While Robinhood users do not pay trade commissions, they pay a hidden price with each trade in the form of higher transaction costs as Robinhood earns revenue through rebates, kickbacks and other payments from market makers, such as Citadel Securities, who compensate Robinhood for preferential access to Robinhood's order flow (i.e., payment for order flow).

74. For example, if a Retail Investor purchases a share of stock through Robinhood, Robinhood sends the order to a large market maker like Citadel Securities and receives payment in return. Citadel Securities, meanwhile, makes money by executing an offsetting trade at a more favorable price than it transacted for the Robinhood user's purchase, a practice known as "capturing the spread." While the profit may be relatively small for an individual trade, the sheer number of trades sum to a significant value.

75. Payment for order flow is Robinhood's primary source of revenue. From 2015 to 2016, an astonishing 80% of Robinhood's revenue came from this practice. Today, Robinhood still derives the vast majority of its revenue, somewhere between 60% to 70%, from selling order flow. In the first quarter of 2021 alone, Robinhood reportedly earned a staggering $331 million in revenue from payment for order flow, more than tripling its earnings from the first quarter of 2020, a record year in which Robinhood earned $687 million in payment for order flow revenue, up 514% year-on-year from 2019.

76. Notably, market makers such as Citadel pay a premium for Robinhood's order flow. For example, in the first quarter of 2020, market makers were paying Robinhood 24 cents per 100 equity shares, while Charles Schwab, E*Trade and TD Ameritrade received an average of 14 cents per 100 shares.

77. Payment for order flow is so vital to Robinhood's business model that in its Form S-1, Robinhood stated "[b]ecause a majority of [Robinhood's] revenue is transaction-based (including payment for order flow, or "PFOF"), reduced spreads in securities pricing, reduced levels of trading activity generally, changes in our business relationships with market makers and any new regulation of, or any bans on, PFOF and similar practices may result in reduced profitability, increased compliance costs and expanded potential for negative publicity." (S-1, at 34).

78. Not only is payment for order flow vital to Robinhood's business model, so too is Robinhood's relationship with Citadel Securities. As illustrated in Robinhood's Form S-1 below, in 2019, 29% of Robinhood's revenue, or over $80M, was derived from its payment for order flow relationship with Citadel Securities, and in 2020, 34% of Robinhood's revenue, or over $326M, was derived from these transactions:

Concentration of credit risk

We had revenues from market makers in excess of 10% of total revenues, as follows:

	Year Ended December 31,	
	2019	2020
Market maker:		
Citadel Securities, LLC	29 %	34 %
Entities affiliated with Susquehanna International Group, LLP(1)	13 %	18 %
Entities affiliated with Wolverine Holdings, L.P.(2)	12 %	10 %
All others individually less than 10%	8 %	13 %
Total as percentage of total revenue:	62 %	75 %

(1) Consists of Global Execution Brokers, LP and G1X Execution Services, LLC
(2) Consists of Wolverine Execution Services, LLC and Wolverine Securities LLC

We are engaged in various trading and brokerage activities in which the counterparties primarily include broker-dealers, banks, and other financial institutions when applicable. In the event our counterparties do not fulfill their obligations, we may be exposed to risk. The risk of default depends on the creditworthiness of the counterparty. It is our policy to review, as necessary, the credit standing of each counterparty.

79. The SEC requires broker dealers to disclose how their customers' orders are handled, including reporting the entities that handle their order flow, in what are known as Rule 606 disclosures.

80. According to Robinhood's SEC Rule 606 disclosure, Citadel Securities was responsible for approximately 43%, or ***over $141 million*** of the approximate $330 million that Robinhood received as payment for order flow in the first quarter of 2021.

81. Robinhood's Form S-1 revealed the following risk related to Robinhood's business relationships with market makers, such as Citadel Securities:

> Our PFOF and Transaction Rebate arrangements with market makers are a matter of practice and business understanding and not documented under binding contracts. For the three months ended March 31, 2021, 59% of our total revenues came from four market makers. If any of these market makers, or any other market makers with whom we do business, were unwilling to continue to receive orders from us or to pay us for those orders (including, for example, as a result of unusually high volatility), we may have little to no recourse and, if there are no other market makers that are willing to receive such orders from us or to pay us for such orders, or if we are unable to find replacement market-makers in a timely manner, our transaction-based revenue would be impacted negatively. This risk is particularly heightened for RHC as there are very few market makers that are currently able to execute cryptocurrency trades. Furthermore, if market makers decide to alter our fee structure or to enter into more favorable fee structures with our competitors, our transaction-based revenue could be impacted negatively. Any decrease in

> transaction-based revenue from market makers could have an adverse effect on our business, financial condition and results of operations.

(S-1, at 53).

82. Notwithstanding the outlined risks associated with Robinhood's PFOF arrangement with market makers, Robinhood was able to continue to capitalize off of its business model. In March 2021, Robinhood filed confidentially for an initial public offering ("IPO") and on July 29, 2021, Robinhood went public, listing on the NASDAQ stock exchange under the ticker "HOOD."

The Mechanics of Trading on Robinhood

83. Once a trade is placed on Robinhood's App, the customer's cash and securities are custodied by Robinhood Financials' clearing broker, Robinhood Securities, which services the customer's account by executing, clearing and settling the customer's trade.

84. In order to execute the trade, Robinhood Securities typically routes the trade to a market maker, predominately Citadel. Citadel pays or provides rebates to Robinhood in exchange for Robinhood routing its customers trades to them, a controversial practice known as "payment for order flow."

85. As a market maker, Citadel's job is to provide bid prices (i.e., the price investors are willing to purchase at) and ask prices (i.e., the price investors are willing to sell at) for the securities. The difference between the two is known as the "spread." Citadel maintains an inventory of securities from its own trading and matches incoming buy and sell orders in order to fill those orders. Once an order is filled, the spread is pocketed by Citadel as a profit. These spreads can be very small (e.g., under even a penny per transaction) but become significant due to the very large volume of orders fueled by Robinhood and filled by Citadel.

86. Citadel may execute an order routed to it by Robinhood by taking the other side of the transaction, a process known as "internalization." For example, if Citadel receives an order to buy a certain security, it may route that order to an exchange or it may execute the order in its capacity as a dealer by transacting against the buy order with contra-side sell orders, either from its own inventory or by selling the security short."

87. Once the trade is executed, Robinhood relays the trade information to the Depository Trust & Clearing Corporation's ("DTCC") affiliated clearinghouse entity, the NSCC for clearinghouse and settling services. Trades do not settle instantaneously. Rather, trades submitted to the NSCC settle at the end of the second business day after submission, in what is known as T+2 settlement. This means that when a trade is executed on a Monday, the cash and the securities related to that trade are electronically transferred on Wednesday.

88. The NSCC's stated purpose is to reduce the cost, settlement risk, and operational risk of clearing and settling multiple transactions among multiple parties. Between trade submission and settlement, NSCC guarantees all cleared trades among its members. If a clearing member (i.e., Robinhood) defaults on its settlement obligations, NSCC guarantees the delivery of cash and securities to its non-defaulting members.

89. On May 6, 2021, Michael C. Bodson ("Bodson"), the CEO of the DTCC, testified before the U.S. House Committee on Financial Services and explained that:

> The U.S. Markets are multi-layered, and customers generally execute trades through one or more brokers or broker-dealers. NSCC direct clearing members are responsible for completing their customers' trades at the NSCC. NSCC's rules outline clear financial and operation risk management obligations that apply to direct clearing members.

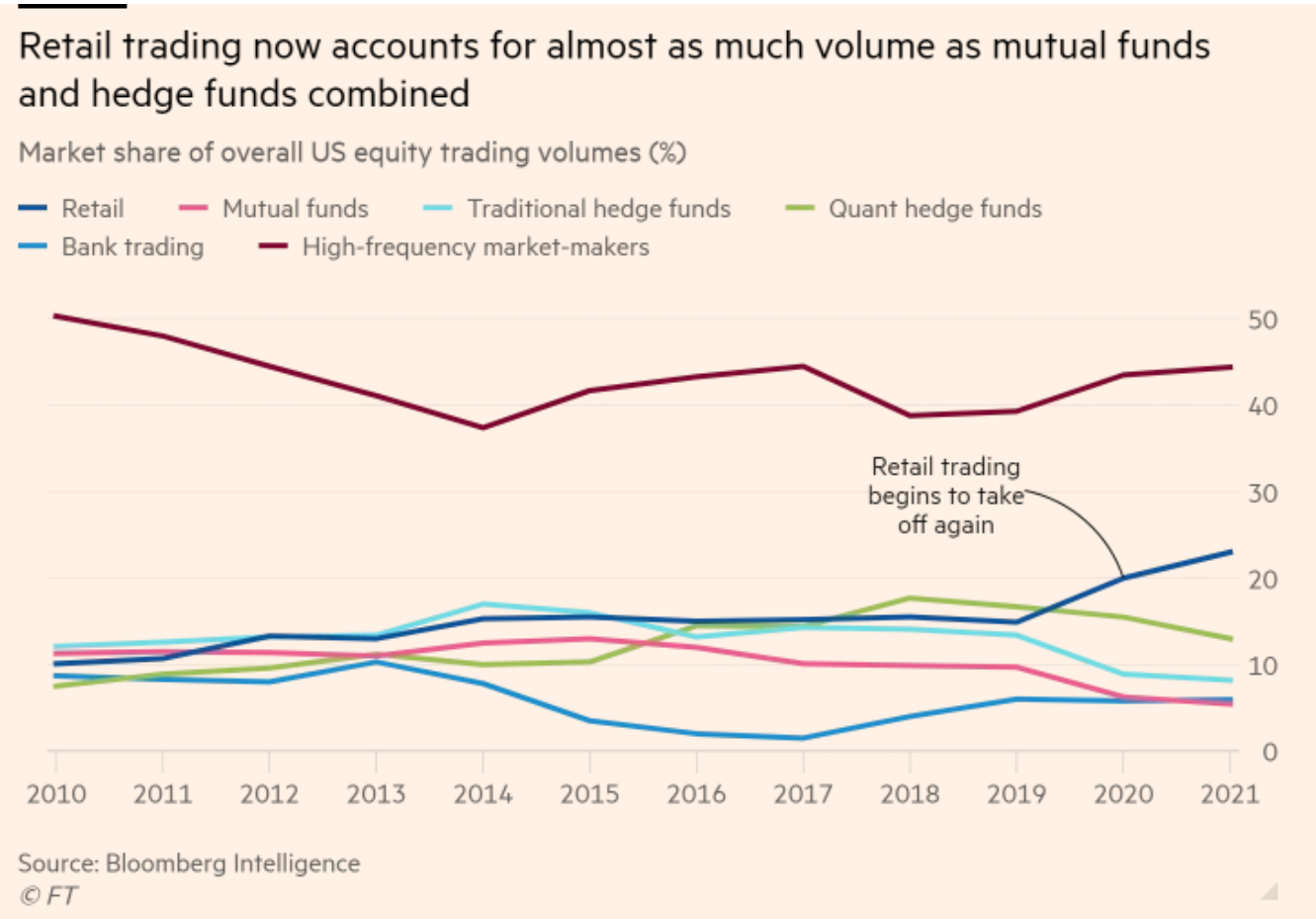
90. As explained by Bodson in his Congressional testimony, margin protects NSCC and all market participants against clearing member defaults, and margin requirements must be

met by clearing members on a timely basis. NSCC's margin requirements are rules-based and subject to regulatory review and approval. The NSCC collects clearing fund contributions, or margin, at the start of each day and intraday in volatile markets. According to Bodson, the rules for calculating the contribution requirements and the timing of collection of these margin requirements are known to every member. Furthermore, according to Bodson, NSCC provides reporting tools, calculators and documentation that allow clearing members to monitor their risk in near real-time and estimate clearing fund contribution requirements. Bodson indicated that many clearing members have employed this information to build their own internal calculators and monitoring tools to aid them in risk management.

91. Internal communications at Robinhood over the operative time period demonstrate that Robinhood's staff did not use these tools in a proactive manner to anticipate the events of January 28, nor was there a consistent practice of tracking concentration levels relative to margin requirements. In short, Robinhood did not utilize NSCC tools to conduct routine and rigorous risk assessment and scenario analysis of the Relevant Securities despite the significant role Robinhood played in providing services to traders that actively traded such securities.

Background: Retail Investors, Institutional Investors, and Short Selling

92. As reported in the Financial Times, among other sources, Retail Investors' market share of U.S. equity trading has steadily increased since 2019.



93. Credit Suisse estimated that at various times in 2021, Retail Investors accounted for a third of all U.S. stock market trading.

94. Retail Investors execute their personal trades through brokerages, such as Robinhood, that provide mobile apps and online platforms from which Plaintiffs and other Retail Investors are able to buy and sell securities.

95. As early as 2019, the Retail Investors, via online discussion forums, developed the trading hypothesis that shares of GameStop's (GME) stock were trading at lower prices than they should be based on GameStop's publicly available financial disclosures and future prospects.

96. GameStop for example, despite being a brick-and-mortar store specializing in video games that can now be downloaded from a person's home, possessed ample cash reserves,

was regularly paying off its debts and was presented new opportunity with the release of the next generation of gaming platforms. Despite this, in 2019, shares of GameStop's stock were trading as low as $3 per share. Some Retail Investors correctly deduced that GameStop was undervalued for a variety of reasons that included the observation that large financial institutions had taken large short positions that resulted in levels of short interest that would bear significant costs if the outlook on GameStop improved and the short positions had to be exited.

97. In addition to GameStop, Retail Investors invested in the other Relevant Securities based on their own valuations and anticipated business performance.

98. Like other Retail Investors, Plaintiffs purchased "long" positions in the Relevant Securities.

99. In a free and open market, stock prices are determined by supply and demand and other market forces. Ordinarily, as more investors buy a certain stock, they tend to bid up the stock's price, and the market price for the stock rises. Conversely, as investors sell stock, the stock price is bid down and the market price for the stock declines.

100. If an investor has long positions, it means that the investor has bought and owns those shares of stocks (in contrast to a short position, where the investor owes those stocks to someone, but does not actually own them yet). Investors holding long positions generally own the stock with the expectation that it will rise in value and it will be worth more than they paid for it. When the investor sells a long position, the profit or loss from the sale is the difference between the purchase price of the security and the sale price of the security.

101. Retail Investors took long positions in the Relevant Securities because they believed that the respective companies' business prospects were improving, and that share prices

of the Relevant Securities would rise, as can be expected when a market is operating freely, without fraud, conspiracy or manipulation.

102. Retail Investors have limited access to the stock market. Generally, Retail Investors must invest in the stock market through intermediaries such as Robinhood.

103. Institutional investors, like Citadel, on the other hand have considerably greater access to the stock market. They can invest directly, and those that are broker-dealers do not need to use other brokerages to execute their trades in securities.

104. Institutional investors also can trade on private stock exchanges that members of the public cannot access. These exchanges are known colloquially as "dark pools" or "dark exchanges" because of their lack of transparency and because they do not disseminate public quotations of securities prices.

105. Similarly, as market makers internalize trades they do so within their own dark trading operations, which are not accessible to the broader market.

106. Dark pools, which account for 40% of all U.S. stock trades, are vastly different from traditional or "lit" stock exchanges such as the New York Stock Exchange or NASDAQ. In a lit exchange, the order book including the price and amount an investor wants to trade is public and visible to all participants. Dark pools on the other hand do not display publicly how much an investor wants to buy or at what price. Stock purchased in a lit exchange can be sold on a dark exchange, and stock purchased in a dark exchange can be sold on a lit exchange.

107. While institutional investors can trade on both dark and lit exchanges, many prefer dark pools over "lit" exchanges because they can discreetly buy or sell securities in large blocks, even in the millions, while mitigating some of the price impact their buying or selling activity would otherwise have if they transacted on the "lit" national securities exchanges. Dark

pools permit institutional investors to trade without visible exposure of their order to the market as a whole until after the trade has been executed. Furthermore, dark pools typically offer lower execution fees than national securities exchanges and may provide some access to retail order flow that market making units have decided not to internalize.

108. As indicated above, "short" sellers essentially bet on an asset's failure rather than its success. Short sellers borrow shares of a company that they believe will reduce in price, in the hope that once the share price falls, they might be able to buy the shares at a reduced price and return them to the lender. They pocket the difference. A short seller's profit is the share value lost at the time a short seller "buys" a security versus the time when the short seller "borrows" the security. For example, a short seller might sell a share of a stock in Company X for $10 and then borrow a share of Company X (for a fee) from a broker for $10. The short seller immediately sells the share and hopes that the value of the share will drop. The share price then falls to $4. The short seller then purchases the share at the reduced value of $4 and returns it to the lender and earns the difference of $6 (less the fees incurred in borrowing the share). On the other hand, if the price of the share rises to $20, the short seller would need to purchase the share at $20 to return it to the lender, thereby incurring a loss of $10 on top of any fees incurred.

109. The more a stock price increases, the greater the loss to the short seller. The theoretical loss to a short investor who predicts wrongly is potentially infinite because there is no upper boundary on the price to which a company's share price can rise. Should a short seller want to exit a short position in the face of rapidly increasing stock price, they must "buy back" the stock at the higher price to return to the institution they borrowed the share from. Risk from bad short selling investments is potentially catastrophic.

110. On the other hand, the loss to an investor who purchases a stock "long" is limited to the difference between the amount paid for the shares and the lowest price to which the stock can fall, which, of course, is zero.

111. As reported by the financial analytics firm S3, on January 4, 2021, GameStop's peak short interest was 141.8% of its float (i.e., publicly tradable shares), which indicates that some short sellers were selling shares without either owning them or identifying an owner from whom shares could be borrowed. The practice of short selling without identifying a source from which they can be borrowed is an illegal practice known as "naked shorting." In a "naked" short sale, a seller does not borrow or arrange to borrow the necessary securities in time to deliver them to the buyer within the standard two-day settlement period.

112. Naked short selling is illegal pursuant to SEC Regulation SHO, which requires broker-dealers "to identify a source of borrowable stock before executing a short sale in any equity security with the goal of reducing the number of situations where stock is unavailable for settlement." The regulation is available at: https://www.sec.gov/investor/pubs/regsho.htm. Sometimes, however, the stock being borrowed may not be available from the lender at the time of settlement, possibly resulting in a failure to deliver.

113. Regulation SHO also requires firms that clear and settle trades to take action to close out failures to deliver by borrowing or purchasing securities of like kind and quantity. For short sale transactions, failures to deliver must be closed out by no later than the beginning of regular trading hours on the settlement day following the settlement date, referred to as T+4. For long sale transactions or bona fide market making activities, failures to deliver must be closed out by no later than the beginning of regular trading hours on the third settlement day following the settlement date, referred to as T+6.

114. As a result of Retail Investors building long positions in the Relevant Securities, by both buying stock in the Relevant Securities and buying "out of the money" call options in the Relevant Securities that had "strike prices" well above the prices that the Relevant Securities were then trading at, the stock price of these companies began to rise. As the value of the Relevant Securities increased, this resulted in both a "short squeeze" and a "gamma squeeze."

115. As explained above, a short squeeze occurs when a stock or other asset rises sharply in value, distressing short positions in the asset. A short squeeze therefore is when investors in short positions are faced with a rapid increase in the shorted asset's value, exposing the short seller to increased loss. As the price of the asset rises, short sellers may face pressure to buy back shares of stock to exit their short positions to mitigate their losses. In the absence of market manipulation or some other intervention, as short sellers exit their short positions by buying shares of stock to cover their short positions, the purchase of those shares further increases the price of the stock.

116. There is another phenomenon known as a "gamma squeeze" involving a derivative financial vehicle known as an option or an option contract.

117. "Options" are derivative financial instruments based on the value of an underlying security. An option contract offers the buyer the opportunity, but not the obligation, to buy or sell the underlying asset depending on the type of option contract.

118. The holder of an option contract is not required to buy or sell the asset if they choose not to.

119. An option is "in the money" (ITM) if the option has a strike price that is favorable in comparison to the prevailing market price for the asset. For example, a call option is in the money if the option holder has the right to exercise the option to buy the underlying asset

below its current market price. An ITM put option means the option holder can sell the security above the current market price.

120. Conversely, an "out of the money" (OTM) option has a strike price unfavorable in comparison to the market price for the underlying asset. For example, an OTM call option means the underlying asset's current market price is below the strike price of the call. An option is "at the money" if the strike price equals the underlying asset price.

121. Options are priced based on a variety of risk variables known colloquially as the "Greeks" as they are represented by letters of the Greek alphabet.

122. "Delta" represents the rate of change between an option's price a small change in the price of the underlying asset, i.e., the price sensitivity of the option with respect to the asset. The units of Delta can be normalized to the range -1 to +1, reflecting a one-dollar change in the underlying asset price. The Delta of a call option ranges from 0 to 1, whereas the Delta of a put option ranges from 0 to -1. A call option with a Delta of 0.10 therefore will increase by 10 cents for every one dollar the price of the underlying asset rises, absent any other changes.

123. "Gamma" represents the rate of change between an option's Delta and the underlying price. The units of Gamma can be normalized to reflect the amount the Delta would change given a one-dollar move in the price of the underlying asset. For example, if a call option has a Gamma of 0.10, if the price of the underlying asset increases by one dollar, then the option's Delta will increase by 0.10, absent any other changes.

124. Like a short squeeze, a Gamma Squeeze occurs when a security experiences a sharp price increase. For example, consider when the price of an underlying security rises up towards the direction of the strike prices of deep out of the money options. When such an increase occurs, options that were previously unlikely to reach their strike prices before

expiration see a rapid increase in values as it becomes more likely that the options will reach their strike prices.

125. At the same time, the options' sensitivity to the price increases, i.e., the Delta, also increases due to the options' Gamma. The Gamma also increases as the option approaches being in the money.

126. As the Gamma increases, market makers hedge by purchasing more of the underlying security, further driving the price of the security higher. As the price goes higher, more deep out of the money options either go in the money or approach their strike price, creating a feedback loop that rapidly increases the price of the underlying security, which then moves more out of the money options towards at the money or above.

The Rise in Stock Prices of the Relevant Securities

127. With regard to GameStop, a popular Reddit user who also creates content on YouTube under the handle Roaring Kitty ("Roaring Kitty") had reason to believe that hedge funds had entered into these short positions with respect to GameStop's stock. Based on his own financial analysis, Roaring Kitty determined that GameStop was actually undervalued due to a range of factors, including that there had been extensive shorting of GameStop by numerous funds, and made an initial purchase of $50,000 of GameStop stock and published his investments on the Reddit financial discussion forum WallStreetBets.

128. WallStreetBets is a financial discussion forum on Reddit. WallStreetBets is characterized by a particular culture centered around discussion of financial investments and memes. Many users on WallStreetBets are sophisticated, financially savvy Retail Investors with business acumen.

129. Roaring Kitty regularly updated and continued to publish information and analysis that GameStop stock was undervalued. In August 2020, Roaring Kitty posted an in-depth analysis of GameStop's stock on his YouTube channel, walking his subscribers through his extensive analysis of the value proposition of the stock.

130. Attention to GameStop's stock was not limited to online financial communities and discussion forums. Dr. Michael Burry (who gained fame for his investment decisions and for correctly predicting the 2008 financial crisis as depicted in the film The Big Short) and his investment firm Scion Asset Management, LLC spent nearly $15 million to purchase stock in GameStop in 2019 at share prices between $2 and $4.20 per share for a 5% ownership position. GameStop's share price steadily increased and Retail Investors took notice.

131. Ryan Cohen, the co-founder and former CEO of the pet e-commerce website Chewy.com, invested $76 million and acquired a 12.9% stake in GameStop in 2020. Several Retail Investors were optimistic about Ryan Cohen's involvement in GameStop, who joined the board of directors on January 11, 2021.

132. In response, Retail Investors continued to build long positions and call options in GameStop and the other Relevant Securities. Given the operation of a free and open market, GameStop and other Relevant Securities were bid up and share prices increased. GameStop, for example, jumped 78.46% from $43.03 per share on January 21, 2021, to $76.79 per share on January 25, 2021. This massive price increase exposed the short sellers of the Relevant Securities, including Citadel Securities, to very substantial loses. It was a textbook short squeeze.

133. The tremendous growth in the Relevant Securities' stock price resulted in significant and potentially disastrous exposure of institutional investors, like Citadel and hedge funds, holding short positions in the Relevant Securities.

134. On January 25, 2021, Citadel LLC injected around $3 billion along with another fund, Steven Cohen's Point72 Asset Management ("Point72"), to bailout Melvin Capital from its distressed short position. Notably, Melvin Capital's founder and CEO, Gabe Plotkin, began his career at Citadel before becoming a top portfolio manager at Point72's predecessor firm, SAC Capital Management.

135. The following day, January 26, 2021, GameStop's share price continued to surge after Social Capital's Chamath Palihapitiya tweeted that he bought GameStop call options, betting the share price would go higher. GameStop closed at $147.98, up 92.7% from the previous day's close.

136. Also on January 26, 2021, Tesla CEO Elon Musk ("Musk") rallied behind GameStop's epic price surge, tweeting "Gamestonk!!" along with a link to the WallStreetBets Reddit page. Shares of GameStop were up more than 60% in after-hours trading following Musk's tweet.

137. On January 27, 2021, the price of the Relevant Securities soared as trading volumes in U.S. cash equities and options hit an all-time record level at 24.5 billion shares traded and 57.1 million contracts traded. GME's stock price peaked at $380.00, before reaching a closing high of $347.51, a 134.84% increase from the previous day. Other Relevant Securities experienced similar surges. AMC's share price skyrocketed over 300% and EXPR's rose over 200%.

138. Concurrently, Retail Investors were buying deep out of the money call options in the weeks leading up to January 28, 2021, based on their beliefs that the Relevant Securities were unfairly valued below their true value.

139. As the price of the Relevant Securities increased, the Delta and Gamma of the previously deep out of the money call options purchased by Retail Investors came closer to their strike price, further increasing the price of the Relevant Securities.

140. Additionally, January 29, 2021 was an expiry date for options. As the expiration date for options approaches, the Gamma generally increases, further compounding the effects the price increases of the Relevant Securities had on the Delta and Gamma of the Retail Investors' call options.

141. Similarly, as retail orders for the Relevant Securities were routed to the market makers, the market makers, such as Citadel Securities, took the other side of those buy orders, i.e., improvidently short selling the security to execute the order by filling buy orders without owning the securities being purchased.

142. Further, as market makers such as Citadel Securities took the other side of the incoming call option and security purchases from Retail Investors, they built up significant short positions in the Relevant Securities.

143. As set forth above, the more a stock price increases, the greater the potential loss for the short seller. This culmination of events (i.e., the short squeeze) triggered Robinhood to place unprecedented trading restrictions on the Relevant Securities.

144. At approximately 5:00 p.m. on January 27, 2021, the SEC released a statement that it was "aware of and actively monitoring the on-going market volatility in the options and equities markets," but neither the SEC nor any other government agency issued any directive to restrict trading in the Relevant Securities.

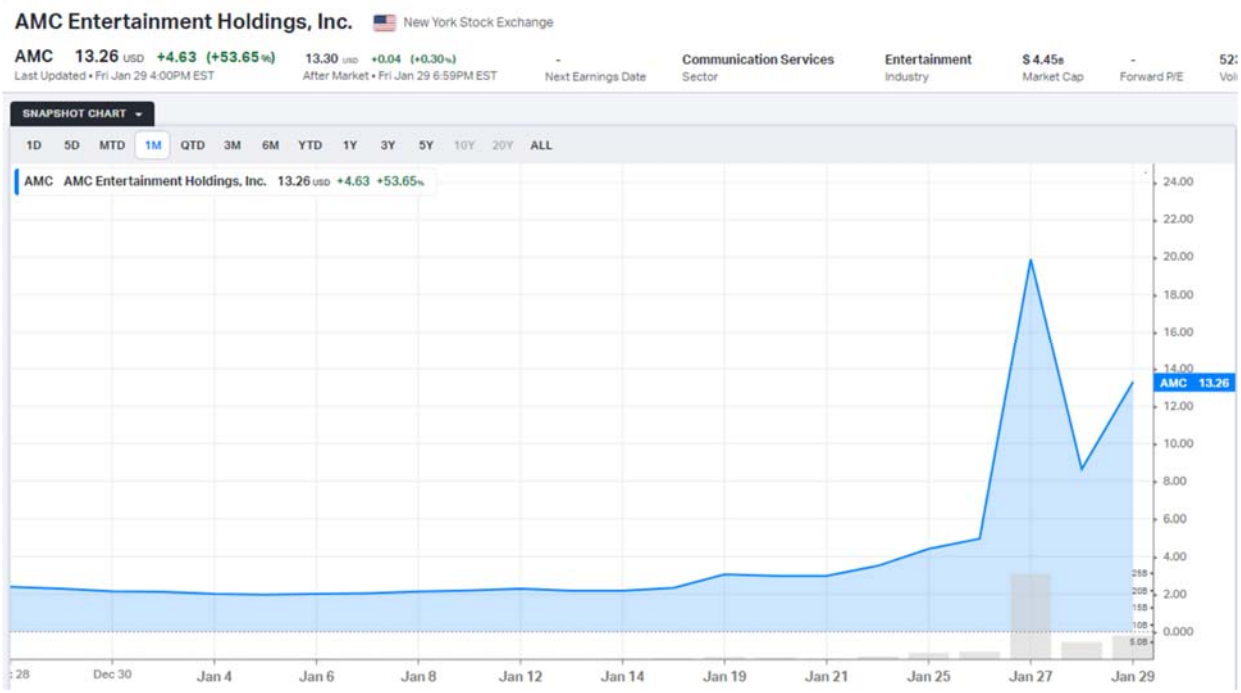
145. The figure below summarizes the prices of GameStop's stock from December 28, 2020 through January 29, 2021.



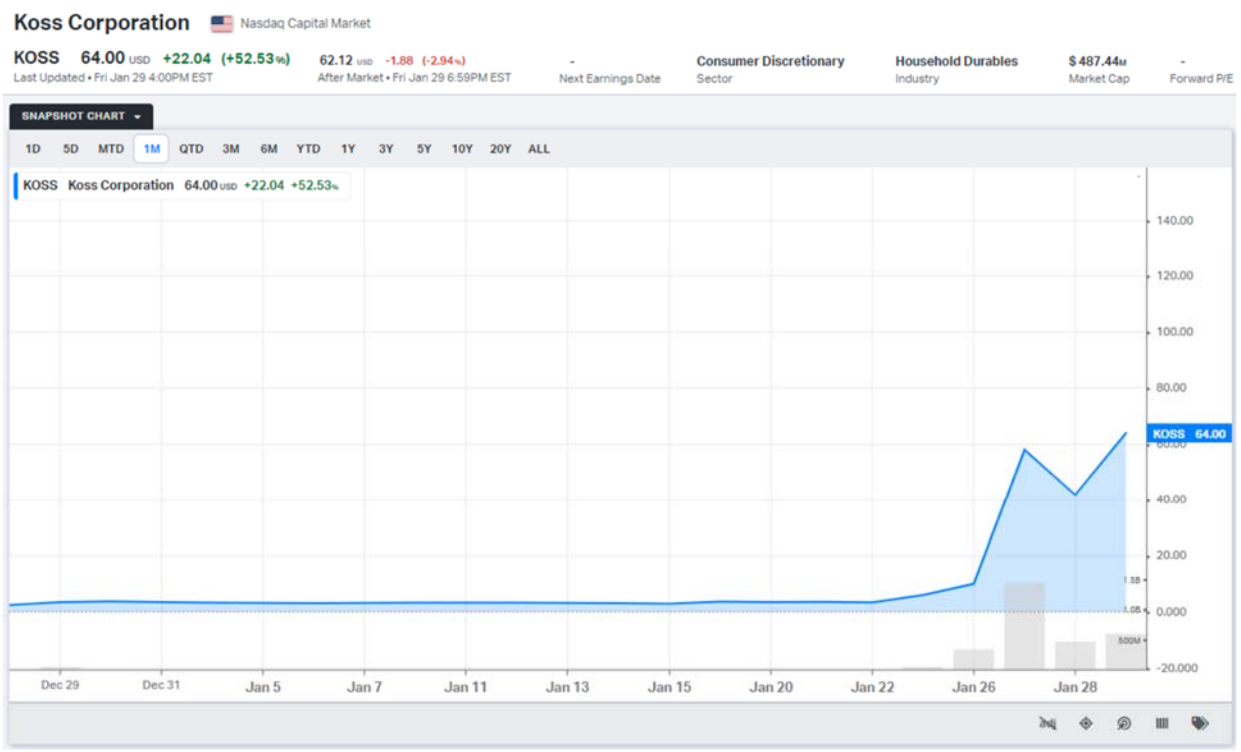
146. The figure below summarizes the prices of Nokia Corporation's stock from December 28, 2020 through January 29, 2021.



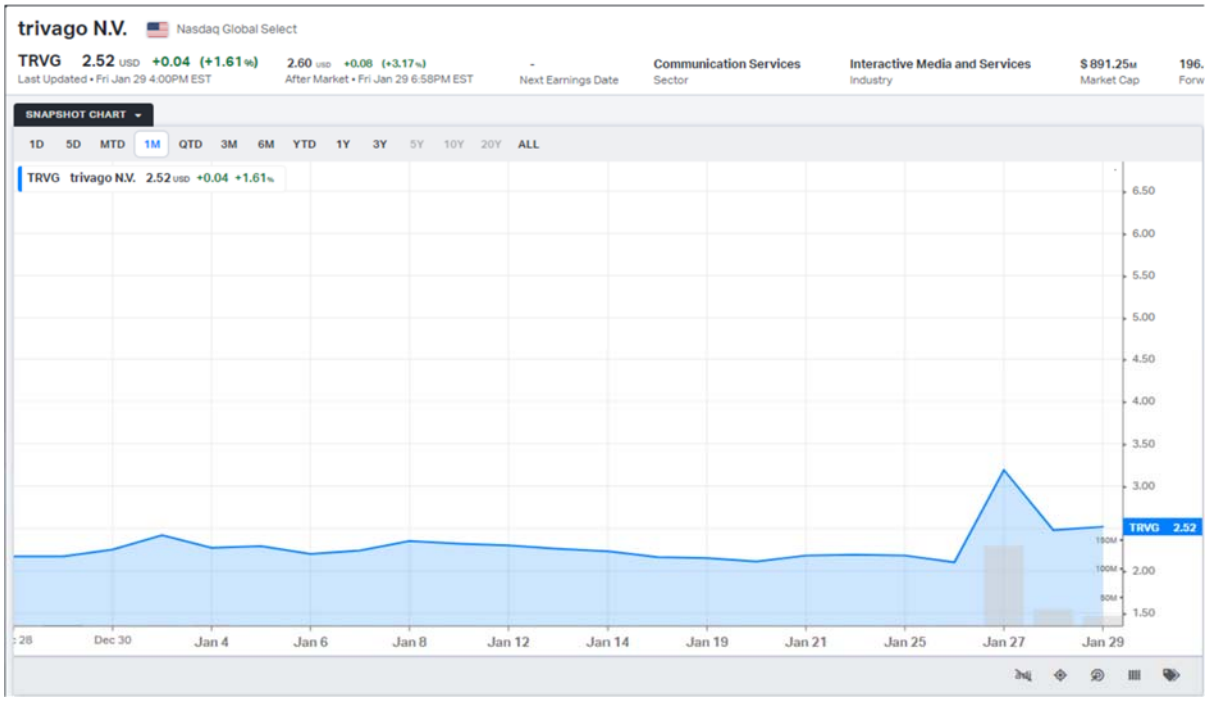
147. The figure below summarizes the prices of AMC Entertainment Holdings, Inc.'s stock from December 28, 2020 through January 29, 2021.



148. The figure below summarizes the prices of Koss Corporation's stock from December 28, 2020 through January 29, 2021.



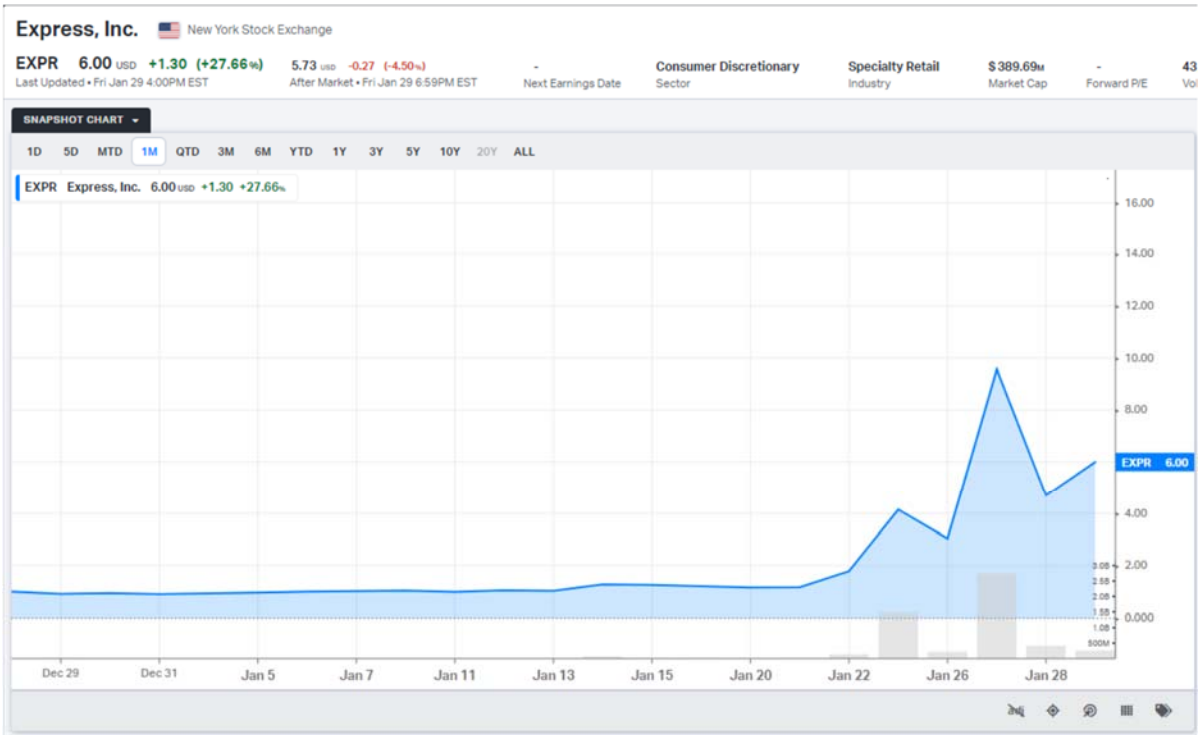
149. The figure below summarizes the prices of Trivago stock from December 28, 2020 through January 29, 2021.



150. The figure below summarizes the prices of Bed Bath & Beyond stock from December 28, 2020 through January 29, 2021.



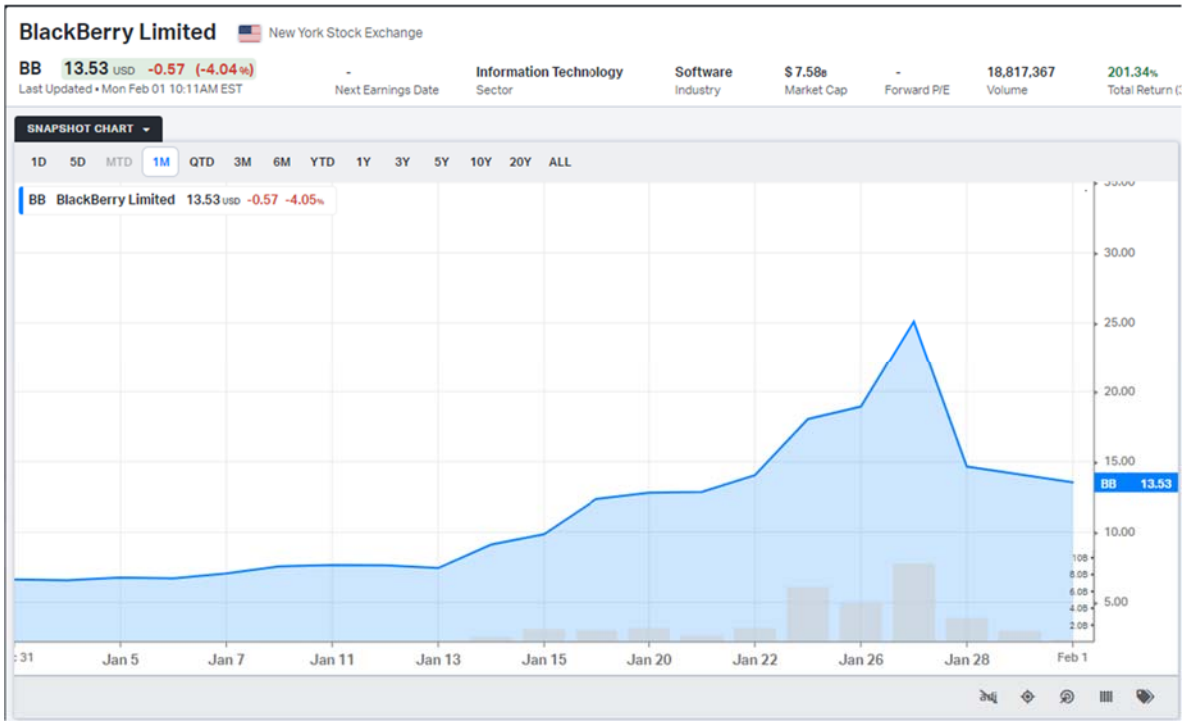
151. The figure below summarizes the prices of Express stock from December 28, 2020 through January 29, 2021.



152. The figure below summarizes the prices of Tootsie Roll Industries Inc.'s stock from December 28, 2020 through January 29, 2021.



153. The figure below summarizes the prices of BlackBerry's stock from December 28, 2020 through January 29, 2021.



The Illegal Scheme

154. Rather than use their financial acumen to compete and invest in good opportunities in the market to recoup the loss in their short positions as a result of the growth in the Relevant Securities' prices or paying the price for their highly speculative accumulation of large short positions, Robinhood and Citadel instead hatched an anticompetitive scheme to limit buy-side trading in the Relevant Securities.

155. After the market closed on January 27, 2021, suspicious coordinated after-hours trading occurred.

156. Analytics reveals a significant volume of GME short volume immediately prior to the markets opening on January 28, indicating that the after-hour traders were trading in anticipation of a GME sell-off. The grey lines in the chart below represent the volume of short

positions in GME; they show the volume of short positions was much higher before January 28, 2021 than any of the prior days and had steadily increased the week prior.



157. Due to constraints imposed by retail brokers, Retail Investors cannot engage in after-hours trading to the same extent as institutional investors. It is therefore likely that this increase in short volume is the result of institutional investors, like Citadel Securities and hedge funds taking new short positions.

158. Retail investors cannot freely switch broker-dealers at any time. Oftentimes, it takes days to open a new account at another broker dealer, meaning that if a broker dealer were to restrict trading on their platform, an individual retail trader is generally not able to invest with another broker dealer at that time unless they had a pre-existing account.

159. Further, transferring or withdrawing funds from an existing account with a broker dealer often requires days to effectuate. For example, on Robinhood, it takes three-to-five days from the time a Robinhood user requests funds to be transferred or withdrawn for those funds to be actually available for use elsewhere. Should a Robinhood user wish to completely withdraw or transfer all funds from their account, in addition to the delay, the user would be prohibited from making trades on their Robinhood account while the request is being processed, i.e., the user would be prohibited from buying positions in securities or selling positions in securities they already hold.

160. During the week of January 25, 2021, many Robinhood users reported even lengthier delays when attempting to transfer or withdraw funds. When some Robinhood users attempted to close their accounts, they experienced errors or otherwise had their requests to close their accounts and to fully withdraw their funds cancelled.

161. Failure to deliver ("FTD") occurs when one party in a trading contract does not deliver on its obligations. For example, recall a short seller borrows a security at a price in hopes its price will decrease. If, however, a short seller fails to locate and borrow a security to deliver to a buyer, then that transaction is recorded as a failure to deliver.

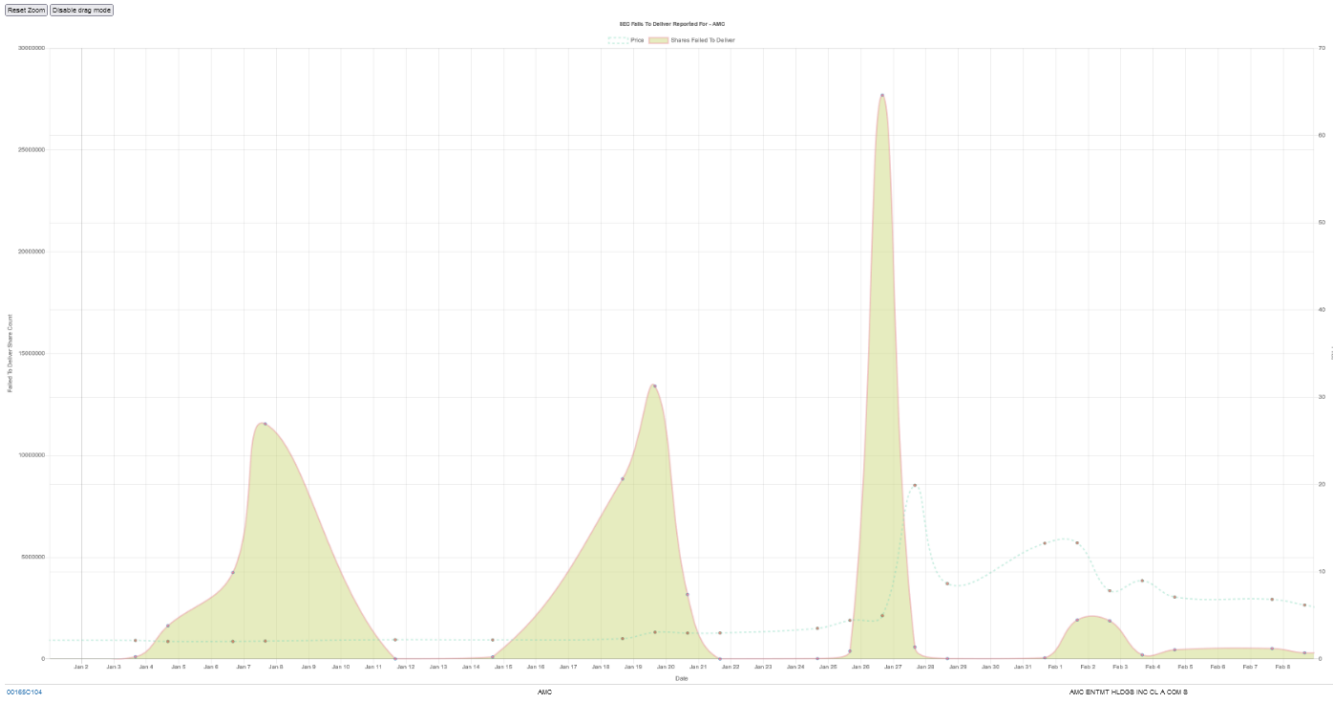
162. Increases in FTDs are indicative of naked short selling. That is because naked short sellers do not actually possess the security they are supposed to "borrow." Thus, when a buyer then seeks to purchase the borrowed security, the short seller cannot deliver because the short seller never possessed the security in the first place and fails to deliver on its obligations.

163. Increases in FTDs are also consistent with market makers taking on increased short positions. As market makers take the other side of buy orders routed to them, they borrow securities to sell short, developing a substantial short position themselves.

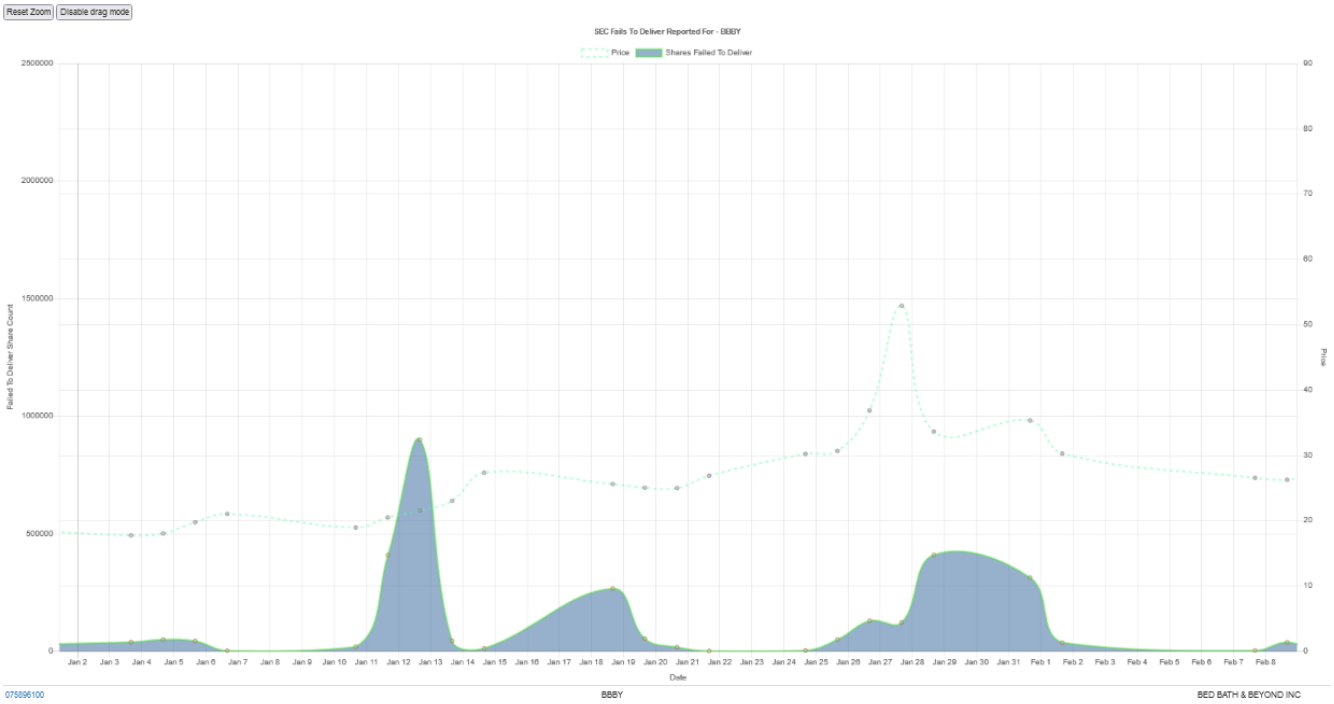
164. This practice of shorting stock that is not borrowable is largely inaccessible to Retail Investors, i.e., Retail Investors cannot engage in naked short selling. However, market makers are able to short stock that is not borrowable by utilizing a market maker exemption.

165. FTDs in the Relevant Securities also rose dramatically in the period leading up to January 28, 2021, a phenomenon consistent with both increasing short interest by Citadel Securities and unnamed coconspirators as well as with improper trading in the form of selling securities without identifying stocks to borrow to deliver to the retail investors who bought them.

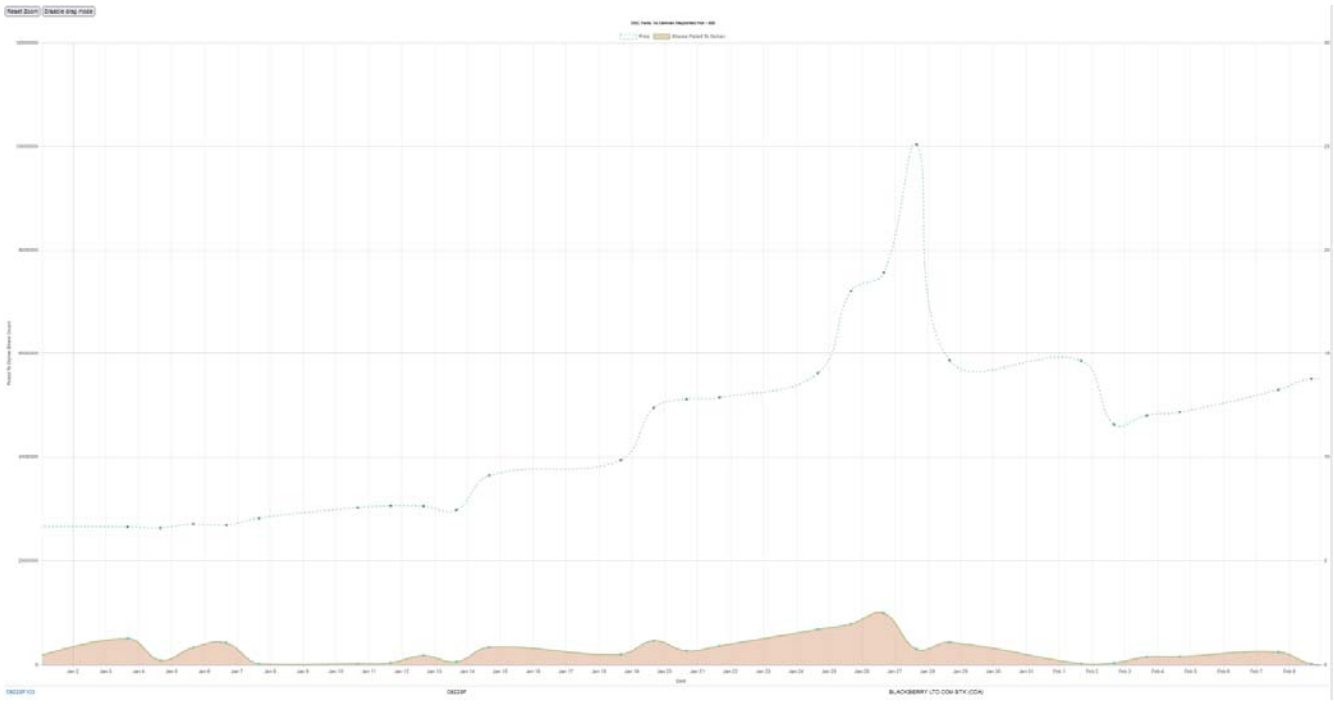
166. The figure below summarizes FTDs for AMC from January 1, 2021 through February 9, 2021:



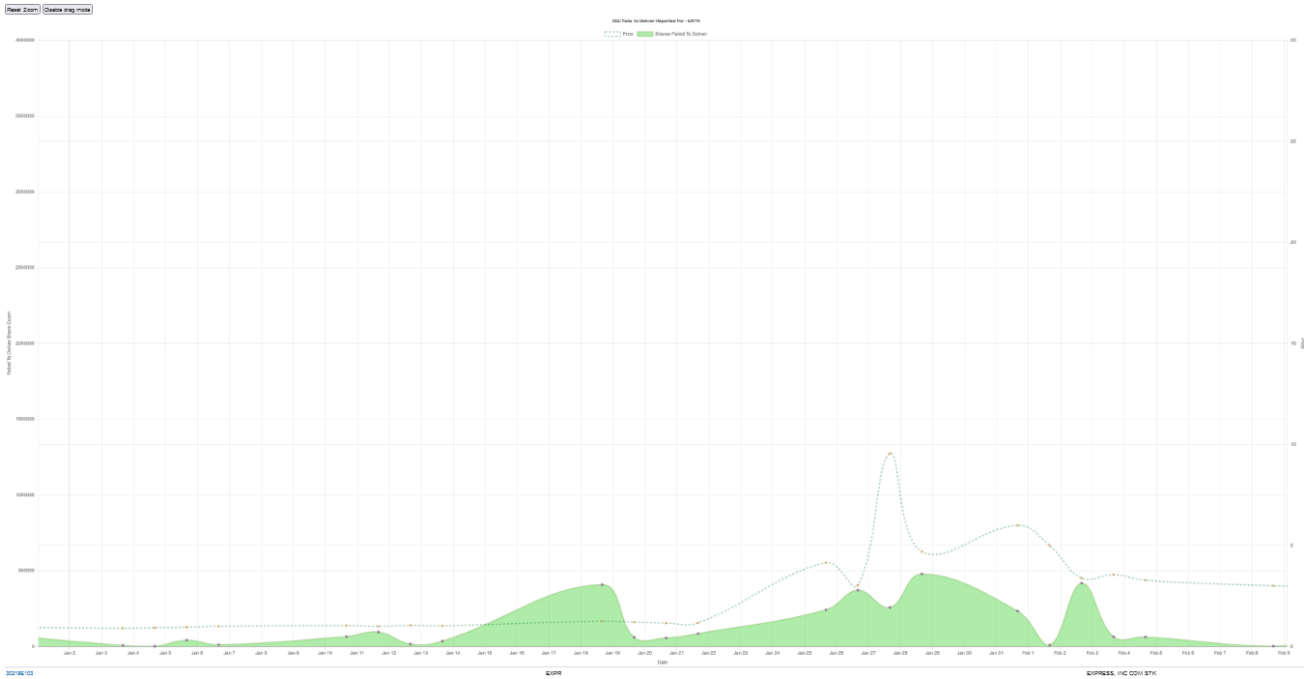
167. The figure below summarizes FTDs for BBBY from January 1, 2021 through February 9, 2021:



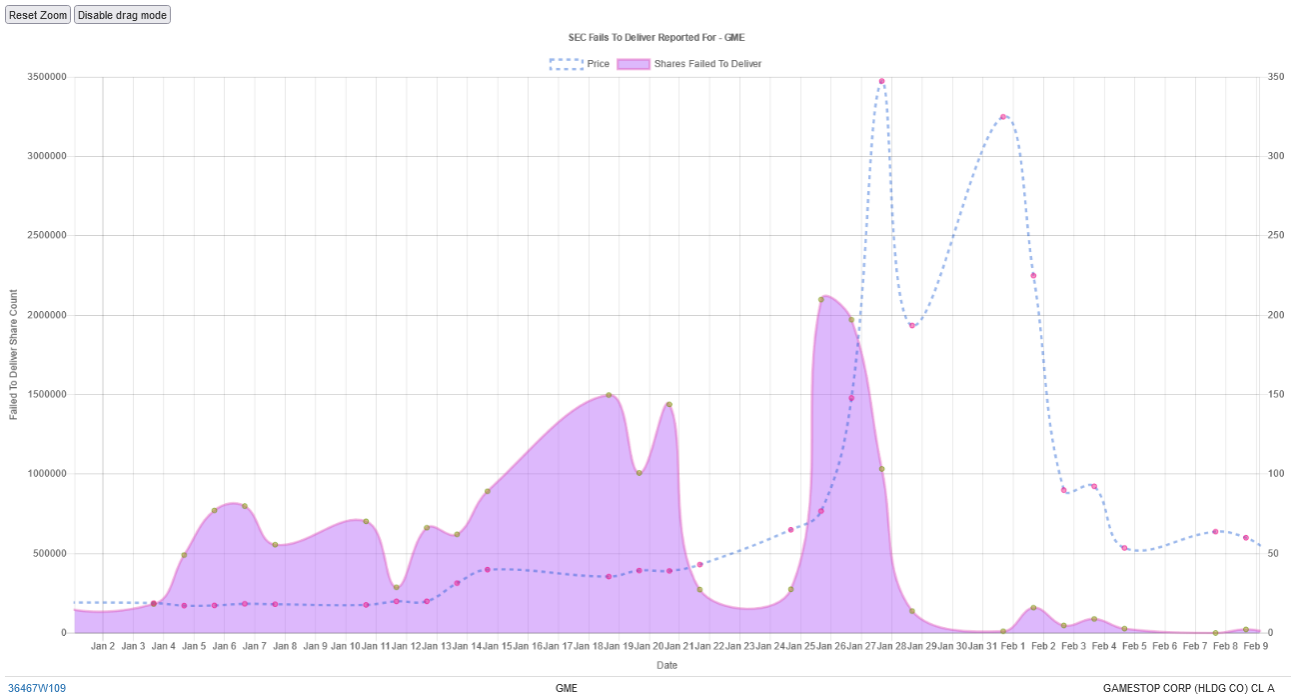
168. The figure below summarizes FTDs for BB from January 1, 2021 through February 9, 2021:



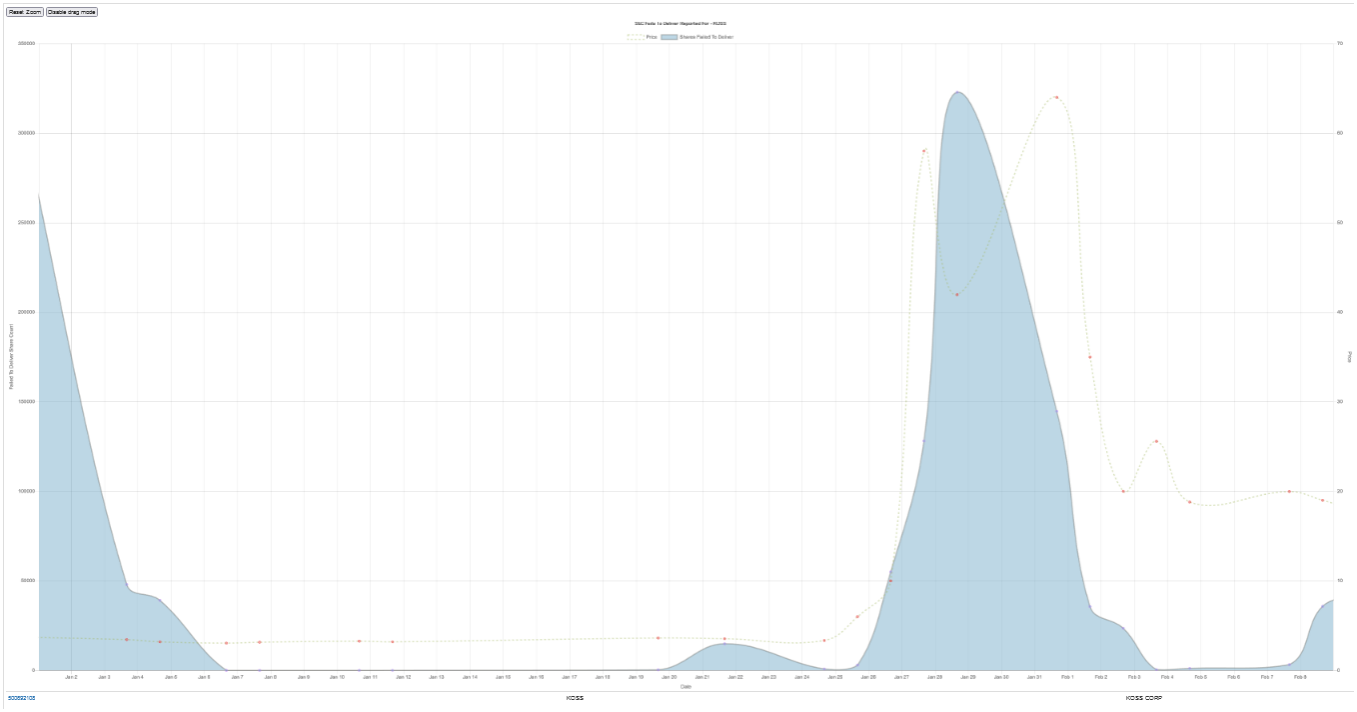
169. The figure below summarizes FTDs for EXPR from January 1, 2021 through February 9, 2021:



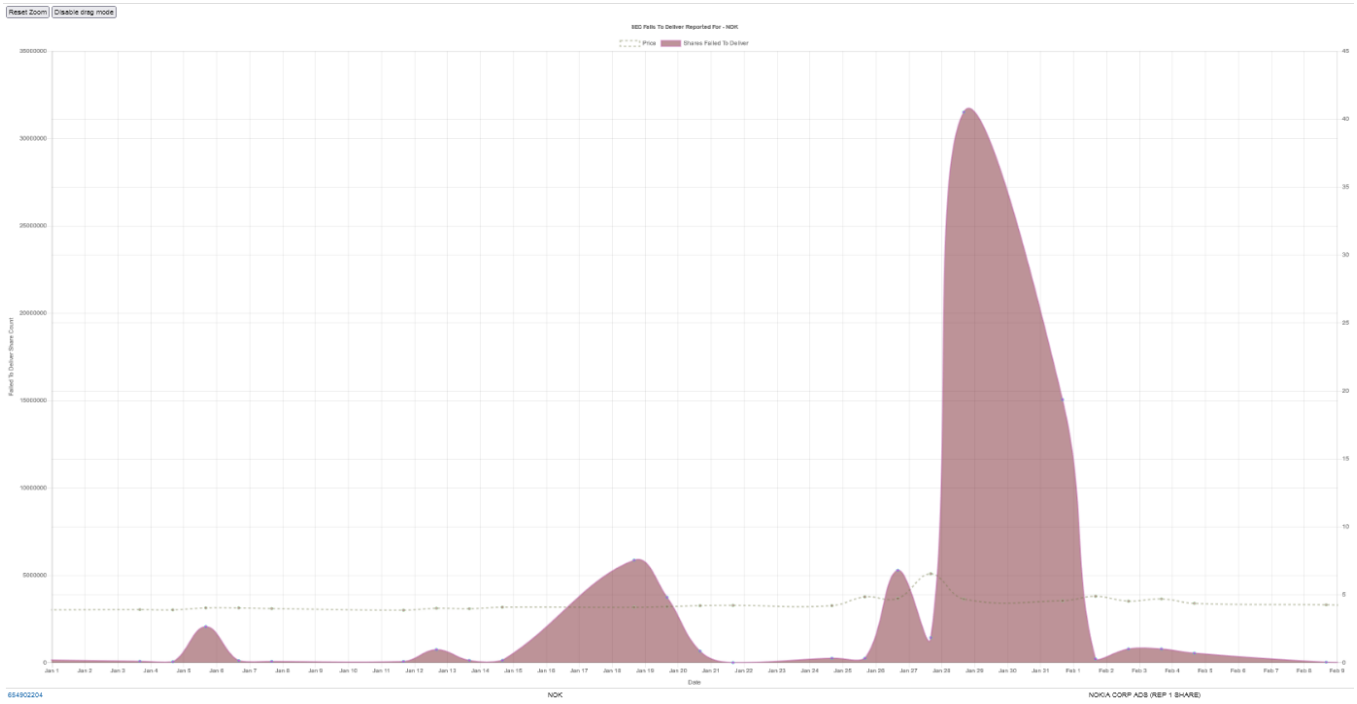
170. The figure below summarizes FTDs for GME from January 1, 2021 through February 9, 2021:



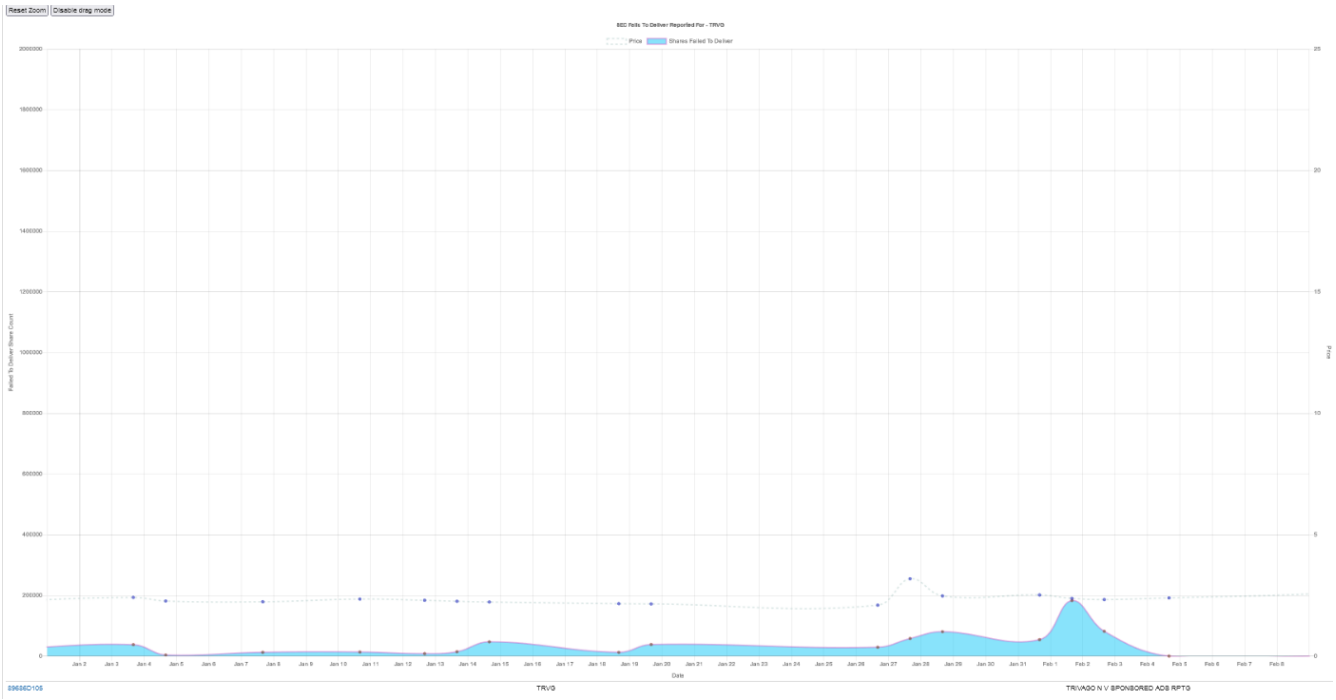
171. The figure below summarizes FTDs for KOSS from January 1, 2021 through February 9, 2021:



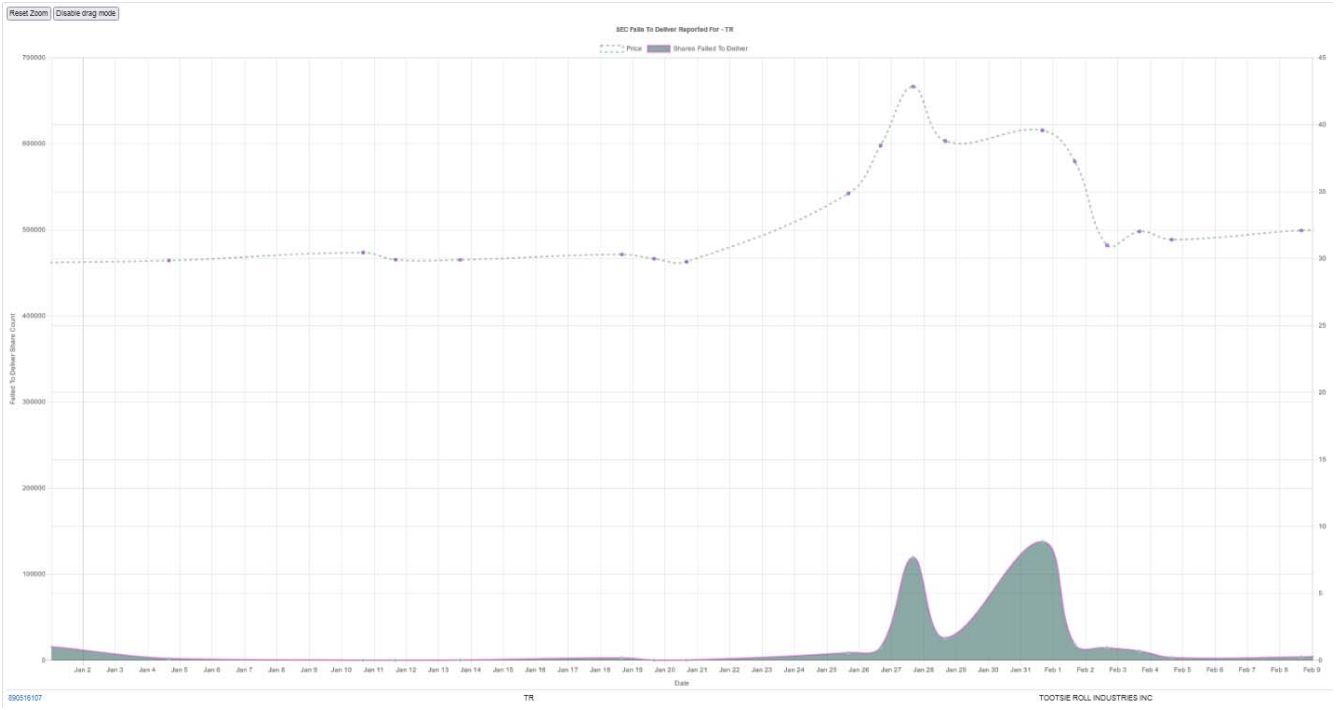
172. The figure below summarizes FTDs for NOK from January 1, 2021 through February 9, 2021:



173. The figure below summarizes FTDs for TR from January 1, 2021 through February 9, 2021:



174. The figure below summarizes FTDs for TRVG from January 1, 2021 through February 9, 2021:



175. The dramatic increase in short positions was counterintuitive. Chatter in various financial discussion forums indicated high excitement and motivation on the part of Retail Investors to continue investing in the Relevant Securities. Many Retail Investors announced plans to increase long positions in the Relevant Securities on January 28, 2021, which would mean the prices for the Relevant Securities were likely to go further up, not down.

The Events of January 28, 2021

176. At approximately 1:00 a.m. EST on January 28, 2021, Defendant Robinhood circulated an email to its users with the subject line "[a]n important update on your expiring options," informing them that purportedly due to unprecedented volatility surrounding GME and AMC, and in a purported effort to help reduce risk, all GME and AMC options with expirations of January 29, 2021, would be set to closing transactions only. This meant that customers could close out their positions but could not make new investments.

177. The email was silent as to any restrictions placed on trading shares of GME, AMC, or other securities.

178. At 5:11 a.m. EST, Robinhood received an email from NSCC indicating that Robinhood had a deficit of roughly $3 billion dollars.

From: [redacted]@dtcc.com
Sent: Thu, 28 Jan 2021 10:11:19 +0000 (UTC)
To: [redacted]
Subject: 6769 ROBINHOOD SECURITIES, LLC - NSCC Daily Margin Statement

---

ROBINHOOD SECURITIES, LLC # 6769 DEFICIT:($3,006,178,364.89)

TO OBTAIN DETAILED INFORMATION REGARDING YOUR REQUIREMENT, NAVIGATE TO NSCC RISK MANAGEMENT REPORTING UNDER THE SETTLEMENT SERVICES MENU IN THE PBS PORTAL.

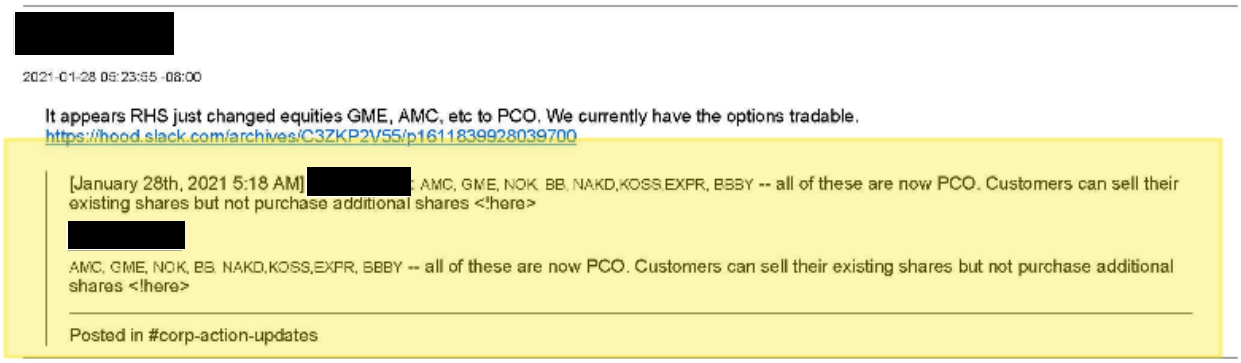
Questions in reference to requirements should be addressed to the following phone numbers:
Hotline [redacted]
Or via email at [redacted]

TO OBTAIN DETAILED INFORMATION REGARDING YOUR DEPOSIT, NAVIGATE TO THE CLEARING FUND SECTION UNDER THE SETTLEMENT SERVICES MENU IN THE PBS PORTAL.

Questions in reference to deposit information should be addressed to the following phone numbers:
Hotline [redacted]

DTCC DISCLAIMER: This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error, please notify us immediately and delete the email and any attachments from your system. The recipient should check this email and any attachments for the presence of viruses. The company accepts no liability for any damage caused by any virus transmitted by this email. Message content created by DTCC is automatically secured using Transport Layer Security (TLS) encryption and will be encrypted and sent through a secure transmission connection if the recipient's system is configured to support TLS on the incoming email gateway. If there is no TLS configured or the encryption certificate is invalid on the recipient's system, the email communication will be sent through an unencrypted channel. Organizations communicating with DTCC should be using TLS v1.2 or newer to ensure continuation of encrypted communications. DTCC will not be responsible for any disclosure of private information or any related security incident resulting from an organization's inability to receive secure electronic communications through the current version of TLS.

179. Shortly thereafter, Robinhood, in furtherance of the conspiracy, moved the Relevant Securities to position close only ("PCO"), i.e., Robinhood users could only sell shares in the Relevant Securities and were foreclosed from buying them.


[redacted]

2021-01-28 05:23:55 -08:00

It appears RHS just changed equities GME, AMC, etc to PCO. We currently have the options tradable.
https://hood.slack.com/archives/C3ZKP2V55/p1611839928039700

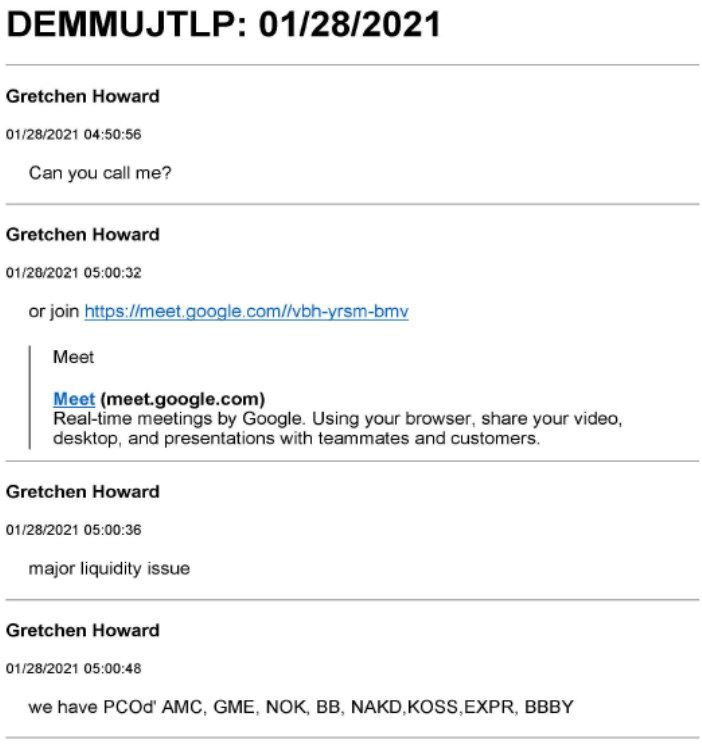
[January 28th, 2021 5:18 AM] [redacted]: AMC, GME, NOK, BB, NAKD,KOSS,EXPR, BBBY -- all of these are now PCO. Customers can sell their existing shares but not purchase additional shares <!here>

[redacted]

AMC, GME, NOK, BB, NAKD,KOSS,EXPR, BBBY -- all of these are now PCO. Customers can sell their existing shares but not purchase additional shares <!here>

Posted in #corp-action-updates

180. Gretchen Howard, Robinhood's Chief Operating Officer, messaged internally that Robinhood has a "major liquidity issue," and that it was moving the Relevant Securities to PCO.


DEMMUJTLP: 01/28/2021

Gretchen Howard

01/28/2021 04:50:56

Can you call me?

Gretchen Howard

01/28/2021 05:00:32

or join https://meet.google.com//vbh-yrsm-bmv

> Meet
>
> **Meet (meet.google.com)**
> Real-time meetings by Google. Using your browser, share your video, desktop, and presentations with teammates and customers.

Gretchen Howard

01/28/2021 05:00:36

major liquidity issue

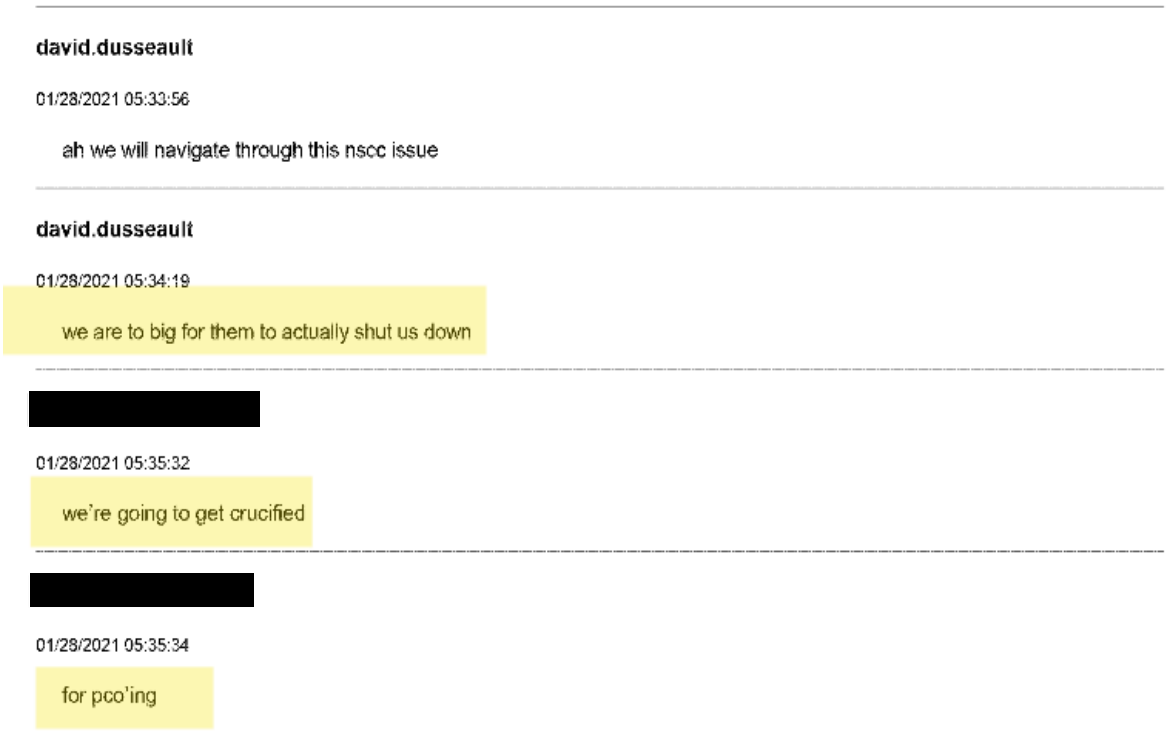
Gretchen Howard

01/28/2021 05:00:48

we have PCOd' AMC, GME, NOK, BB, NAKD,KOSS,EXPR, BBBY

181. While Robinhood would ultimately attribute its decision to move the Relevant Securities to PCO to the NSCC's increased collateral requirement, Robinhood was able to meet the revised deposit requirement before the stock market opened on January 28, 2021. Moreover, Robinhood made the decision to PCO the Relevant Securities with knowledge that it was not in serious danger of being shut down by the NSCC.

182. In an internal Robinhood Slack chat, David Dusseault, President and Chief Operating Officer of Robinhood Financial, says "we are to[sic] big for them to actually shut us down" in response to queries about the NSCC.



183. Indeed, within hours of NSCC's initial margin call, NSCC reduced Robinhood's deposit requirement by nearly half. Prior to the market opening, Robinhood successfully negotiated that its margin requirements be reduced even further to $733,976,926.71.

184. The fact that the NSCC reduced Robinhood's deposit requirement is remarkable, in particular, because of Robinhood's direct involvement in negotiating with the NSCC. Indeed, some experts have described the fact that Robinhood was able to negotiate down its margin requirements with the NSCC as unheard of.

185. Robinhood was subsequently able to meet its revised NSCC deposit requirement shortly after 9.00 a.m. EST. Nevertheless, as the markets opened on January 28, 2021, Retail Investors woke up to find that Robinhood had suddenly and without notice restricted their ability

to purchase the Relevant Securities.

186. Robinhood users could no longer purchase the Relevant Securities. The "buy" button was deactivated as a feature, leaving users with no option but to sell or hold their securities.

187. Robinhood addressed the "[w]hy don't I see a buy button?" question on its website here: https://robinhood.com/us/en/support/articles/why-dont-i-see-a-buy-button/. It offered three reasons for the buy button being unavailable on a user's account. The three reasons are: 1) "It's a foreign stock, which we don't support." 2) "It's an over-the-counter (OTC) stock or a warrant, which Robinhood generally doesn't support"; and 3) "It's a stock undergoing corporate action. The stock will be tradable again once the corporate action has been finalized." Robinhood's explanations did not correspond with reality, however, because the Relevant Securities were not foreign stocks, OTC stocks or stocks undergoing corporate actions during the Class Period. Robinhood did not warn users of any situation where it could prevent users from buying stock out of its own volition. This explanation was incomplete, inaccurate, untrue, and did not disclose the conspiracy underlying the change.

188. Worse, Retail Investors who had queued purchase orders overnight on January 27, 2021 to purchase stock when the markets opened on January 28, 2021 discovered that their purchase orders had been cancelled without their consent. Some received messages that claimed "[y]ou canceled your order" despite the fact that they did no such thing.

189. The restrictions on trading took different forms but had the same effect. Robinhood users were prohibited from opening new long positions in the Relevant Securities. In other words, Retail Investors were not permitted to purchase new positions but only permitted to sell their long positions and not buy more.

190. On Robinhood's web platform and mobile app, Retail Investors were blocked from searching for the Relevant Securities' ticker symbols.



191. News of Robinhood's trading restrictions soon came to light via widespread media coverage and through Robinhood's own admissions.

192. Robinhood tweeted that, purportedly, in light of then current market volatility, it was restricting transactions for certain securities to position closing only, including $AMC and $GME.

193. Robinhood subsequently updated its website with a list of securities set to position-closing only, meaning that the Retail Investors could sell and close their positions in these securities, but they were prohibited from opening new positions. The securities included, *inter alia*, AMC, BB, BBBY, EXPR, GME, KOSS, NOK, TR and TRVG.

194. Robinhood attributed the aforesaid restrictions to ongoing market volatility and other pretextual explanations while not disclosing its communications with other members of the conspiracy. Robinhood, acknowledged that it had canceled open orders for the listed securities and also disabled the ability for users to search for these securities in Robinhood's mobile app. Robinhood's January 28 blog post titled, *Keeping Customers Informed Through Market Volatility*, also attributed the restrictions to "significant market volatility" and further disclosed that Robinhood raised margin requirements for certain securities.

195. Following Robinhood's lead, later on January 28, 2021, other broker-dealers, including Ally, Dough, Public.com, SoFi, Stash, Tastyworks and Webull implemented purchasing restrictions in some, but not all, of the Relevant Securities. Many of these introducing brokerages reported that their clearing firm, Apex, was responsible for implementing the restrictions, but unlike Robinhood's purchasing restrictions, which lasted throughout the entirety of the trading day and beyond, the restrictions imposed by Apex were only temporary. Indeed, in a matter of hours, the foregoing brokerages all reported that the purchasing restrictions had been lifted. For example, Stash notified its users of the restrictions at 12:13 p.m., and by 3:16 p.m., it announced that the restrictions had been lifted.

196. Indeed, Robinhood was actively monitoring the actions of other broker-dealers to insure Robinhood would not be alone in restricting trading on January 28, 2021. Internal Robinhood documents include emails and messages from other broker-dealers to their customers announcing their restrictions on trade that Robinhood otherwise would not have had access to.

197. As intended, pursuant to the illegal anticompetitive scheme, Robinhood's prohibition on buying any new Relevant Securities, led to a massive sell-off, which resulted in a steep decline in the stock prices of the Relevant Securities.

198. For example, on January 28, 2021, GME shares reached an intraday peak of $483.00—before plunging down to $112.25, eventually closing at $193.60, a 44.29% drop from GME's close of $347.51 just one day prior. Similarly, shares of AMC plummeted 56.63%, shares of EXPR fell 50.79% and shares of BBBY fell 36.40%. Retail Investors who wanted to take advantage of the price drop to buy more shares of the Relevant Securities were unable to due to the prohibition on purchasing.

199. The figures below (reproduced from above for ease of reference) illustrate the share prices of Relevant Securities from December 28, 2020 through January 29, 2021, and show the rise in share price attributable to the Retail Investors continued purchase of the stocks, as well as the sharp decrease in share price resulting from the restrictions imposed by the Brokerage Defendants on or about January 28, 2021.

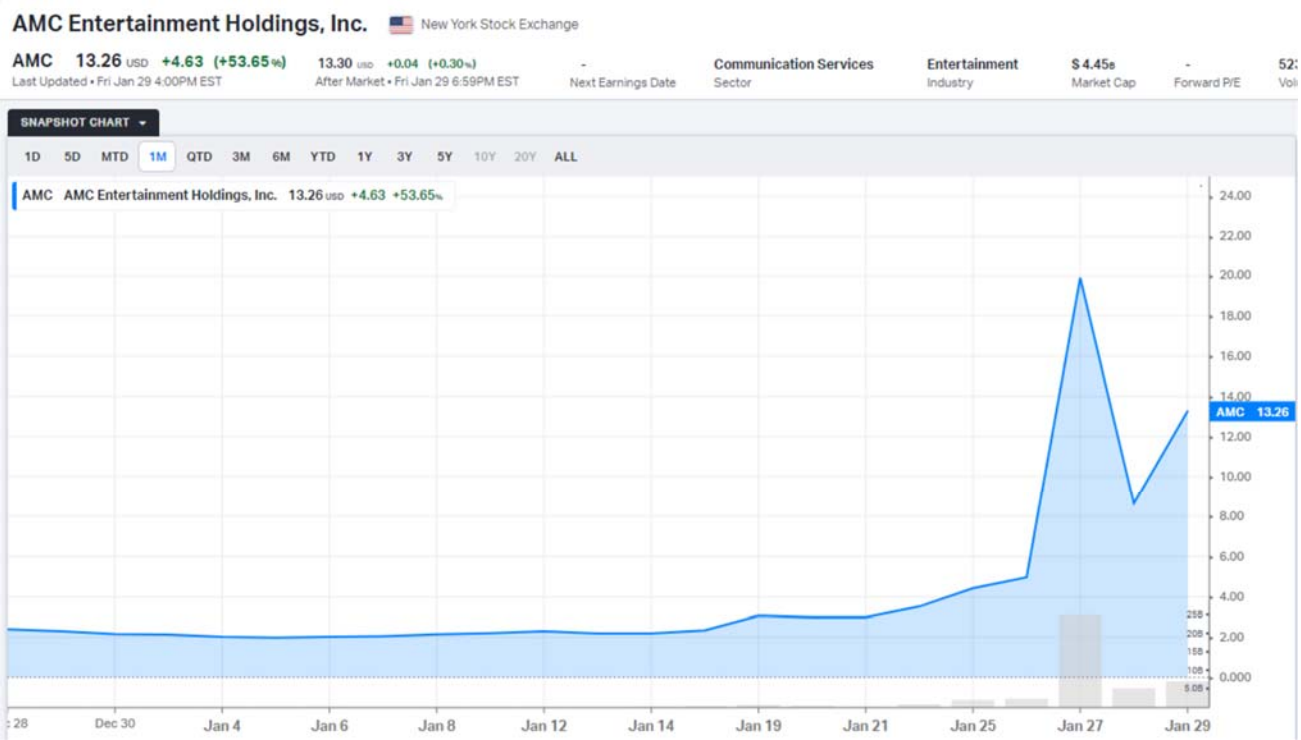
200. The figure below summarizes the prices of GameStop's stock from December 28, 2020 through January 29, 2021.



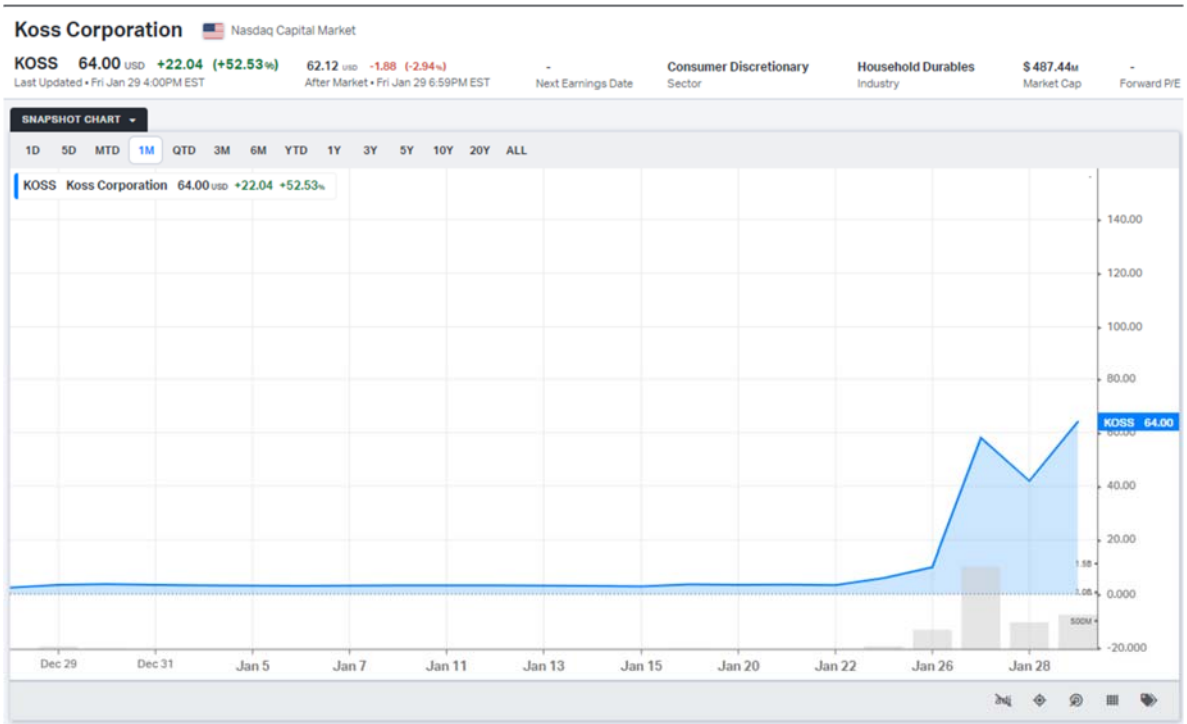
201. The figure below summarizes the prices of Nokia Corporation's stock from December 28, 2020 through January 29, 2021.



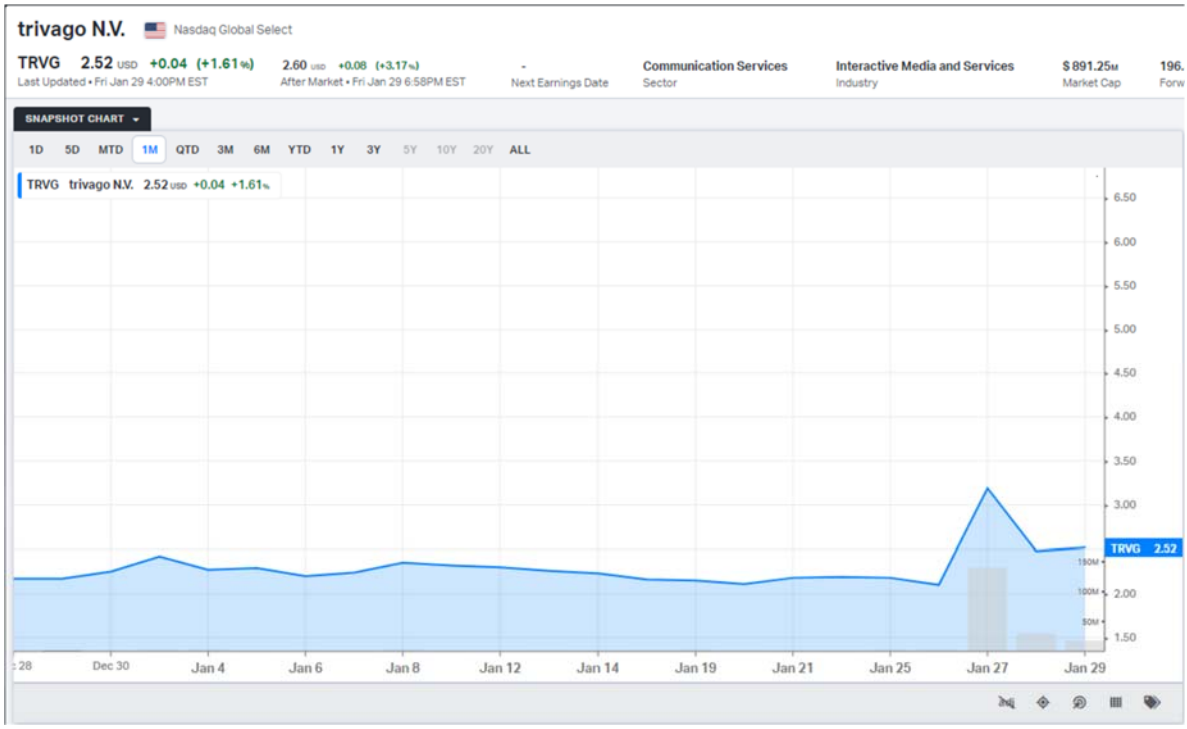
202. The figure below summarizes the prices of AMC Entertainment Holdings, Inc.' stock from December 28, 2020 through January 29, 2021.



203. The figure below summarizes the prices of Koss Corporation's stock from December 28, 2020 through January 29, 2021.



204. The figure below summarizes the prices of Trivago stock from December 28, 2020 through January 29, 2021.



205. The figure below summarizes the prices of Bed Bath & Beyond stock from December 28, 2020 through January 29, 2021.



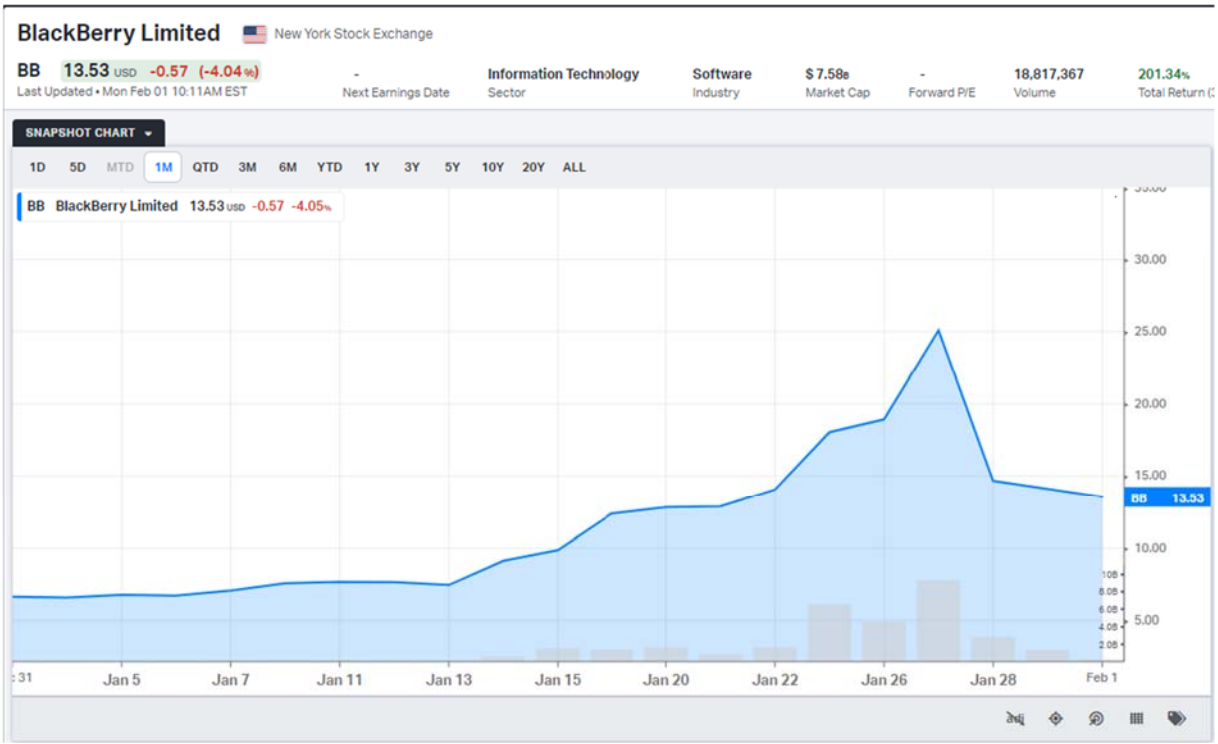
206. The figure below summarizes the prices of Express stock from December 28, 2020 through January 29, 2021.



207. The figure below summarizes the prices of Tootsie Roll Industries Inc.'s stock from December 28, 2020 through January 29, 2021.



208. The figure below summarizes the prices of BlackBerry's stock from December 28, 2020 through January 29, 2021.



209. The prohibition on purchasing stock did not apply to all investors. Citadel Securities was not restricted from purchasing the Relevant Securities. While Retail Investors were excluded from purchasing securities at the reduced rate, investment firms and market makers such as Citadel Securities holding short positions were permitted to cover their short positions by buying securities at the artificially reduced price, including from dark pools such as Citadel Securities's own internalized exchanges.

210. As the Retail Investors sold their shares in the Relevant Securities due to the trading restrictions, Citadel Securities internalized those transactions and took the other side of those sell orders, i.e., they bought the shares the Retail Investors were selling—at an artificially reduced price—to close their short positions. In doing so, Citadel Securities was able to buy and return the borrowed securities they had sold short.

Collusion Between Robinhood and Citadel Securities

Citadel Securities Established Substantial Short Positions in the Relevant Securities

211. Citadel Securities developed large short positions in the Relevant Securities in the days leading up to and including January 28, 2021, as a result of its regular market making activities. As stock prices rise in an environment driven by retail trader buying activity, market makers typically take the other side of the retail traders' stock buys and as a result the market makers develop short positions in the stocks that the retail traders have been buying. Traditional market makers would try to avoid building a short position and remain market neutral in such an environment by buying back shares that the market makers have sold short, while aiming to capture the bid and ask spread to profit. However, a different type of market maker will integrate market making and speculative position taking in such an environment, which would allow the market maker to take on more trading volume by assuming more risk. It can be difficult for a

market maker to both remain neutral and handle high order flow, and it can be natural for more aggressive market makers to take on more risk. Thus, many larger market makers become a hybrid of a market maker and a proprietary trader.

212. Market makers that engage in hybrid market making and proprietary trading, in an environment such as that seen in late January 2021 where retail traders are continually buying certain stocks, will see the size of the market makers' short positions grow as they take the other side of the retail trading activity and do not adhere to a strictly market neutral approach. As those market makers' short positions increase, the short positions will at some point begin to reach the market makers' risk limits. This is particularly the case when there are unidirectional market flows, i.e., when a stock is "breaking out," and there are no correlated instruments with which the market makers can hedge their positions. In such a time, it may be impossible for the market makers to buy back all the shares that the market makers have sold short without locking in a loss. A market maker is then faced with the choice of either allowing a continued speculative buildup of a short position, presumably because the market maker expects the market to subsequently reverse, or closing out at the position at loss. Market makers that hold significant short positions that continue to build up during break-out conditions where a security has no natural hedges are clear examples of the hybrid model where speculative position taking is embedded in a market maker operation.

213. As market makers build their short positions under the dynamic described above, the market makers will approach the market makers' risk limits. When a market maker approaches the market maker's risk limit, the market maker will be faced with the decision to either stop selling and begin buying back the shorted stock at a loss, or to work with the firm's management and risk group to increase the firm's risk limits.

214. For a market maker that chooses not to increase the risk limits and instead routes orders away to the exchange, that market maker will face dramatic adverse consequences for the following two reasons.

215. The first reason is that market makers have an incentive to keep the retail traders' buy orders off the exchange to prevent the buy orders from driving further up the price of the securities that the retail traders are buying. For example, directing an order of $500,000 for a given security towards a public exchange would increase the demand for that security on the exchange and drive the security's price up. If the market maker had already developed significant short positions in that security from the dynamic described above, then any increase in the price of the security would make it difficult for the market maker to buy back that security and close the market maker's short positions, and the market maker would experience mark to market losses as the security moved upward against the market maker's short position.

216. The second reason is that these market makers have arrangements whereby the market makers pay retail brokers for payment for order flow. Under these arrangements, the market makers pay retail brokers to direct trades towards the market makers, thereby creating volume for the market makers' market making services. If a market maker is unable to take the other side of a trade itself internally, the market maker must instead route the trade to the exchange. In doing so, the market maker then pays a "taker fee" for each trade that the market maker directs to an exchange. In other words, the market maker must realize a mark to market loss for each trade that the market maker directs away from itself to an exchange. This loss may amount to roughly one-half of one cent per share, when payments to the broker and exchange transactions fees are considered.

217. Those two reasons were strong enough incentives to not route orders away to an

exchange and the reasons that led Citadel Securities to build large short positions in the Relevant Securities in the days leading up to January 28, 2021.

218. Market makers that continue to grow large short positions in the way described above may at some point cross the line from market making activity to speculative proprietary trading as the market makers begin to take directional bets on the direction of the market. Such speculative proprietary trading violates SEC Regulation SHO, which allows market makers that engage in bona fide market making activities to benefit from an exception to the "locate" rules that would otherwise require a broker-dealer to locate stock before selling the stock short.

219. Regulation SHO, which was promulgated in 2004, only applies to bona fide market making activities, and the preamble to Regulation SHO indicates that "[b]ona-fide market making does not include activity that is related to speculative selling strategies or investment purposes of the broker-dealer and is disproportionate to the usual market making patterns or practices of the broker-dealer in that security." (69 FR at 48015). A significantly large short position developed by a market maker should be considered evidence that the market maker actually has a speculative view on the direction that the market will move and that the market maker has chosen not to maintain a neutral position. When large market makers such as Citadel Securities develop such large short positions, those large market makers divert from bona fide market making activities within the meaning of Regulation SHO by not keeping a neutral book and instead taking a bet that the market will drop. Such market makers are then no longer engaged in a bona fide market making activity within the meaning of Regulation SHO but are instead engaged in "speculative selling strategies" that are "disproportionate to the usual market making patterns or practices" of the market maker. Notably, the SEC has successfully pursued actions against several market makers for violating Regulation SHO through similar speculative

short selling activities that did not constitute bona fide market making activities. *See, e.g.*, https://www.sec.gov/litigation/admin/2016/34-79579.pdf and https://www.sec.gov/litigation/admin/2012/34-66283.pdf.

220. Citadel Securities built substantial short positions in the Relevant Securities in late January 2021 through the dynamic described above. Since short positions are not disclosed on Form 13F, though, such positions are not publicly disclosed.

Robinhood and Citadel Securities's PFOF Relationship Was Ripe for Collusion

221. The highly lucrative PFOF relationship between Robinhood and Citadel Securities accounts for a large majority of Robinhood's profits (Citadel Securities was responsible for ***over $141 million*** of the approximate $330 million that Robinhood received as payment for order flow in the first quarter of 2021 alone) and is what allows Robinhood to provide zero-commission trading to its users. By paying Robinhood for its order flow, Citadel Securities, in turn, is able to earn a profit through the spread between the securities bid and offer price and is also afforded the opportunity to profit from the large amount of trading data collected by Robinhood.

222. In short, Robinhood monetizes its users' orders through payment for order flow, in particular with Citadel Securities, which generates a lion's share of Robinhood's revenue and profits.

223. PFOF relationships are riddled with conflicts. According to the SEC, payment for order flow can "create conflicts of interest for brokers because of the tension between the firms' interests in maximizing payment for order flow or trading profits generated from internalizing their customers' orders, and their fiduciary obligation to route their customers' orders to the best markets."

224. Citadel itself recognized that payment for order flow relationships created conflicts of interests for brokers. In an April 13, 2004 letter to the SEC from Citadel Investment Group, L.L.C., the precursor entity to Citadel LLC, which is an affiliate entity of Citadel Securities, Citadel acknowledged that "[t]he practice of payment for order flow creates serious conflicts of interest and should be banned." Specifically, Citadel argued that "[t]his practice [i.e., payment for order flow] distorts order routing decisions, is anti-competitive, and creates an obvious and substantial conflict of interest between broker-dealers and their customers."

225. Not only does the PFOF relationship between Citadel Securities and Robinhood create serious conflicts of interest, but it also fosters an environment ripe for illegal coordination.

Communications between Robinhood and Citadel Securities

226. Citadel Securities was able to communicate with Robinhood swiftly and effectively because of their pre-existing relationship. Indeed, high-level executives of Citadel Securities regularly communicated with and coordinated with high-level executives of Robinhood in the lead up to, during and after the restrictions imposed on or around January 28, 2021.

227. For example, on January 20, 2021, [redacted], Head of Execution Services for Citadel Securities, and Josh Drobnyk, the newly hired Vice President of Corporate Relations and Communications for Robinhood, agreed to communicate. [redacted] and Drobnyk had a prior relationship through Drobnyk's employment at FINRA when [redacted] served on FINRA's board.

228. During this communication, [redacted] extended a proposition to Drobnyk. Drobnyk discussed with Dan and Lucas, likely Daniel Gallagher and Lucas Moskowitz, Robinhood's chief legal officer and deputy general counsel respectively and agreed to revert to [redacted] "by early next week at the latest."

229. [redacted] responded it was "good to reconnect and very happy that we will be working together." Additionally, [redacted] responded for Drobnyk to "just let us know if interested and who the main contact should be."

From: [redacted]
Sent: Wed, 20 Jan 2021 22:53:44 +0000 (UTC)
To: "Josh Drobnyk" [redacted]
Subject: RE: [EXTERNAL] Great to connect

Thanks Josh, good to reconnect and very happy that we will be working together. Sounds good, just let us know if interested and who the main contact should be.

From: Josh Drobnyk [redacted]
Sent: Wednesday, January 20, 2021 5:35 PM
To: [redacted]
Subject: [EXTERNAL] Great to connect

CAUTION: This email is from an external sender.

[redacted] Really great to connect today. Glad we will be working together. Connected with Dan and Lucas and going to be discussing at our next meeting and will loop back by early next week at the latest. Ping me if you need anything in the meantime -- otherwise will be back in touch shortly.

Talk soon,

Josh

--

_x0000_i

Josh Drobnyk
VP Corporate Relations and Communications
Washington, DC

Don't copy, share, or use this email without permission. If you received it by accident, please let us know and then delete it right away.

230. On Monday, January 25, 2021, Robinhood, through Drobnyk emails [redacted]: "We are on board." Drobnyk says Lucas Moskowitz, Robinhood's Deputy General Counsel, Moskowitz, would be the main point of contact for Robinhood.

From: Josh Drobnyk [redacted]
Sent: Monday, January 25, 2021 1:01 PM
To: [redacted]
Cc: Lucas Moskowitz [redacted]
Subject: [EXTERNAL] follow up

CAUTION: This email is from an external sender.

Hi [redacted]

Quick follow up. We are on board. Lucas Moskowitz, who I am cc'ing, is going to be central point of contact on our end. You probably know Lucas already, he is our deputy general counsel.

Talk soon,

Josh

--

Josh Drobnyk
VP Corporate Relations and Communications

231. [redacted] in turn extends an invitation to Moskowitz to "chat" and expressed that "we obviously have a strong relationship between the two firms."

232. [redacted] and Moskowitz then arranged a call for 11 a.m. EST on January 26, 2021.

From: Lucas Moskowitz [redacted]
Sent: Mon, 25 Jan 2021 20:14:42 +0000 (UTC)
To: [redacted]
Subject: Re: |EXTERNAL| follow up

Great, thanks -- 11 AM tomorrow works. I will send an invite.

On Mon, Jan 25, 2021 at 2:34 PM [redacted] wrote:

Assuming you are still in an Eastern time zone see if any of these line up:

- Tuesday before 10, 11 to 12, 5
- Wednesday 9 to 12, 1 to 3
- Friday pretty flexible late morning to early afternoon

From: Lucas Moskowitz [redacted]
Sent: Monday, January 25, 2021 2:31 PM
To: [redacted]
Subject: Re: [EXTERNAL] follow up

CAUTION: This email is from an external sender.

Thanks! I'd love to connect when you have some time.

On Mon, Jan 25, 2021 at 2:29 PM [redacted] wrote:

Good luck in the new role.

If you want to chat at any point, we obviously have a strong relationship between the firms, happy to catch up.

Here is my contact info so you have:

233. While the details of these communications have not yet been disclosed, it is clear that these high-level representatives of Citadel Securities and Robinhood reached an explicit agreement on January 25, 2021, and each took affirmative steps in furtherance of the illicit scheme.

234. Notably, on January 26, 2021, Robinhood Securities President and COO James Swartwout alerted others, including [redacted], Robinhood's Head of Global Securities Management, via an internal chat that Robinhood was moving GameStop to 100%

margin the next day, stating "I sold my AMC today. FYI – tomorrow we are moving GME to 100% – so you are aware." The 30-year industry veteran's actions indicate knowledge that Robinhood was going to restrict trading in certain securities and that any such restrictions would lead to a sharp decline in price.

DHPSSQF3N: 01/26/2021

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jim.swartwout

01/26/2021 15:58:06

I sold my AMC today. FYI - tomorrow morning we are moving GME to 100% - so you are aware

---

[redacted]

01/26/2021 16:18:04

Yup, thank you! Battled that one and AMC all day.

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235. On January 27, 2021, the day before the restrictions were implemented, high level employees of Citadel Securities and Robinhood had numerous communications with each other that indicate that Citadel Securities applied pressure on Robinhood.

236. Citadel's business was critical to Robinhood's survival. Robinhood's entire business model rested on its payment for order flow income, and Citadel contributed nearly half of Robinhood's PFOF income—making it Robinhood's most valuable customer, business partner, and stakeholder. Robinhood was under tremendous pressure from Citadel to implement one-sided restrictions that benefited Citadel and other market makers like itself.

237. In an internal Slack chat conversation, Gretchen Howard, Robinhood's Chief Operating Officer, informs Vlad Tenev that "Dan and I are joining Jim at 5pm on a call with

Citadel." Dan and Jim likely refer to Dan Gallagher and Jim Swartwout, President and Chief Operating Officer of Robinhood Securities. Citadel Securities had requested to speak that evening. Howard indicated that she believed Citadel Securities would make demands on limiting payment for order flow.

238. As described above, Robinhood makes significant sums from selling order flow, and in particular, selling order flow to Citadel Securities.

239. Tenev muses that "Maybe this would be a good time for me to chat with Ken griffin [sic]" and tells Howard, "You guys can mention that."

DEMMUJTLP: 01/27/2021

Gretchen Howard

01/27/2021 16:39:23

Just a FYI that Dan and I are joining Jim at 5pm on a call with Citadel. They reached out and want to speak this evening and we believe they will make some demands on limiting PFOF across the board. We won't agree to anything but wanted to give you a heads-up.

Vlad Tenev

01/27/2021 16:44:21

Ok

Vlad Tenev

01/27/2021 16:44:49

Maybe this would be a good time for me to chat with Ken griffin

Vlad Tenev

01/27/2021 16:44:54

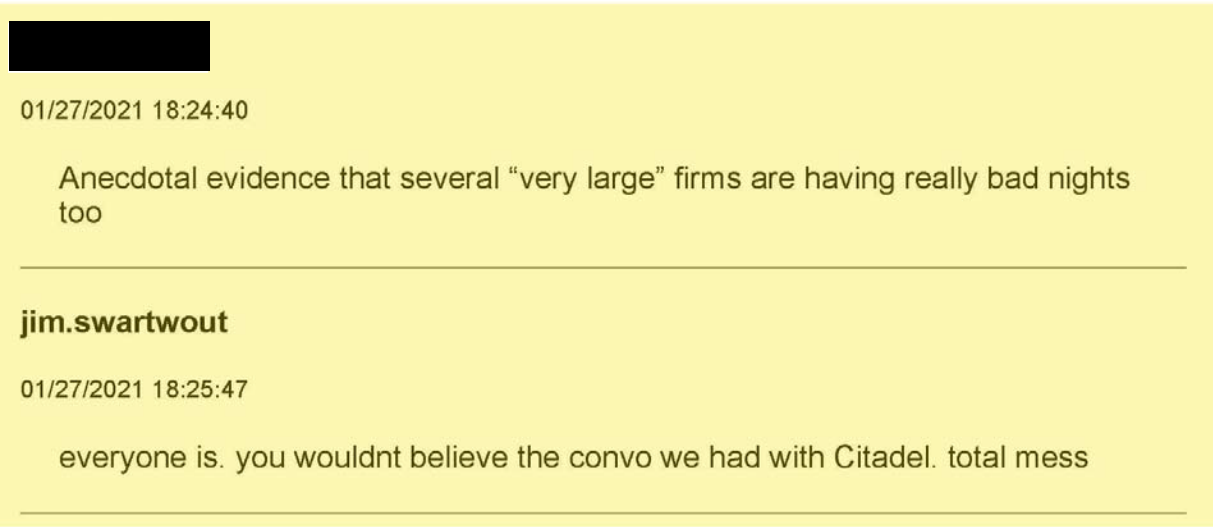
You guys can mention that

Vlad Tenev

01/27/2021 16:46:03

I've never met him

240. Shortly thereafter, in an internal chat, [redacted], Senior Director of Clearing Operations at Robinhood tells Swartwout, "[a]necdotal evidence that several 'very large' firms are having really bad nights too."


[redacted]

01/27/2021 18:24:40

Anecdotal evidence that several "very large" firms are having really bad nights too

jim.swartwout

01/27/2021 18:25:47

everyone is. you wouldnt believe the convo we had with Citadel. total mess

241. Swartwout responds that "everyone is. you wouldnt [sic] believe the convo we had with Citadel. total mess."

242. At 8:16 p.m., Swartwout emails [redacted] at Citadel Securities looking for "new Citadel numbers." [redacted] informs Swartwout at 9:31 p.m. that the numbers were "[f]irming up right now in light of the follow up conversation between Gallagher and [redacted]."

From: "Jim Swartwout" [redacted]
Sent: Thu, 28 Jan 2021 02:32:20 +0000 (UTC)
To: [redacted]
Subject: Re: [EXTERNAL] Any update?

ok. thanks. Didn't know that happened

On Wed, Jan 27, 2021 at 9:31 PM [redacted] wrote:

> Firming up right now in light of the follow up conversation between Gallagher and [redacted]
>
> **From:** Jim Swartwout [redacted]
> **Sent:** Wednesday, January 27, 2021 8:16 PM
> **To:** [redacted]
> **Subject:** [EXTERNAL] Any update?
>
> **CAUTION:** This email is from an external sender.
>
> Still looking for the new Citadel numbers.
>
> --
>
> gmail-m_-1000219874893481l0_x0000_i1025
>
> **Jim Swartwout**
> President / Chief Operating Officer
> Robinhood Securities LLC
> Lake Mary, FL
>
> Don't copy, share, or use this email without permission. If you received it by accident, please let us know and then delete it right away.

243. At 8:29 p.m., [redacted], Citadel Securities's Vice President of Business Development, emailed Robinhood personnel including Swartwout that [redacted], "whom Vlad has met before, is available until 10pm EST to speak to Vlad." [redacted] offers to set up a call.

244. Swartwout, in turn responds minutes later, "Because of our partnership, Vlad would like to have a discussion with Ken [Griffin] at some point, just given our relationship. Not specific to this crazy issue."

245. Swartwout later cryptically tells [redacted], "I have to say I am beyond disappointed in how this went down. It's difficult to have a partnership when these kind of things go down this way."

From: "Jim Swartwout" [redacted]
Sent: Thu, 28 Jan 2021 01:41:29 +0000 (UTC)
To: [redacted]
Cc: [redacted]
Subject: Re: [EXTERNAL] Re: Call w/Vlad

Nope. just got off the phone with him. Just looking for your dictated schedule and caps. I have 20 minutes until batch so whatever it is we are not going to be able to address it tomorrow given the notice.

I have to say I am beyond disappointed in how this went down. It's difficult to have a partnership when these kind of things go down this way.

Jim

On Wed, Jan 27, 2021 at 8:38 PM [redacted] wrote:

Makes sense. We can look to set that up at a later date.

Let me know if you guys and/or Vlad want to hop on with [redacted] tonight?

From: Jim Swartwout [redacted]
Sent: Wednesday, January 27, 2021 8:32 PM
To: [redacted]
Cc: [redacted]
Subject: [EXTERNAL] Re: Call w/Vlad

CAUTION: This email is from an external sender.

Because of our partnership, Vlad would like to have a discussion with Ken at some point, just given our relationship. Not specific to this crazy issue

On Wed, Jan 27, 2021 at 8:29 PM [redacted] wrote:

Hi Jim and [redacted],

The head of our business, [redacted] whom Vlad has met before, is available until 10pm EST to speak to Vlad. Let me know, and we will set this up

Thanks,

[redacted]

246. The heated discussions between Robinhood and Citadel Securities, which were described as a "a total mess" and which resulted in Robinhood being "beyond disappointed," illustrate that Robinhood and Citadel Securities were engaging in more than regular business communications prior to the implementation of the trading restrictions. Given that Robinhood's relationship with Citadel Securities was critical to its bottom line and thus continued survival,

these communications arguably demonstrate that Robinhood was upset that its PFOF would be limited when Citadel Securities demanded that Robinhood restrict trading to allow Citadel Securities to cover its short positions.

247. Defendants' conspiratorial acts resulted in lockstep price movements of the Relevant Securities.

248. As demonstrated by the charts below, the stock prices of the Relevant Securities moved in parallel fashion throughout January 28, 2021. The charts reveal a coordinated rise in the prices of the Relevant Securities from approximately 11:00-11:30 a.m., immediately after the Relevant Securities took a steep dive after the markets opened. At that time, few if any Retail Investors were permitted to purchase positions in the Relevant Securities and only institutional investors such as hedge funds and market makers, including Citadel Securities, were permitted to purchase.



The Anticompetitive Scheme Continued After January 28, 2021

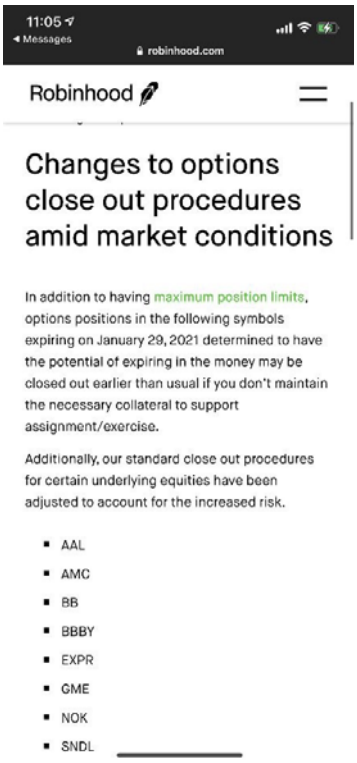
249. Partly as a result of criticism, as the market opened on January 29, 2021, Robinhood had lifted its purchasing restriction and permitted Retail Investors to open new long positions in the Relevant Securities.

250. Even in the face of increased scrutiny, however, Defendants continued their anticompetitive scheme to suppress the price of the Relevant Securities.

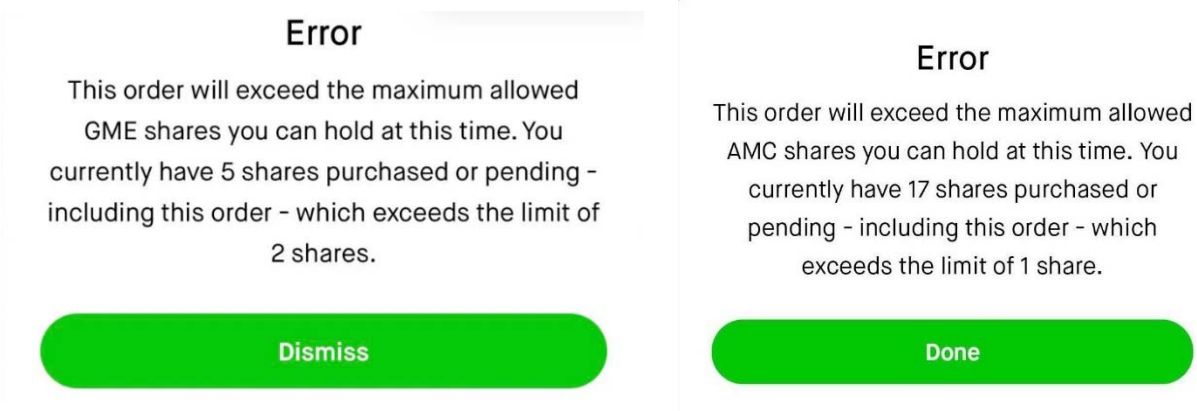
251. Although Robinhood permitted purchases of the Relevant Securities, those purchases were heavily restricted, resulting in continuing suppression of the Relevant Securities' value.

252. Moreover, Robinhood restricted trading of long option contracts and announced to Retail Investors they would close out their profitable option positions automatically.

253. Robinhood also placed limitations on the number of new positions its users could open by capping the total number of shares and options contracts an individual could hold in certain securities. Nevertheless, Retail Investors, still believing in the value of the assets, continued to purchase the Relevant Securities once they were permitted.

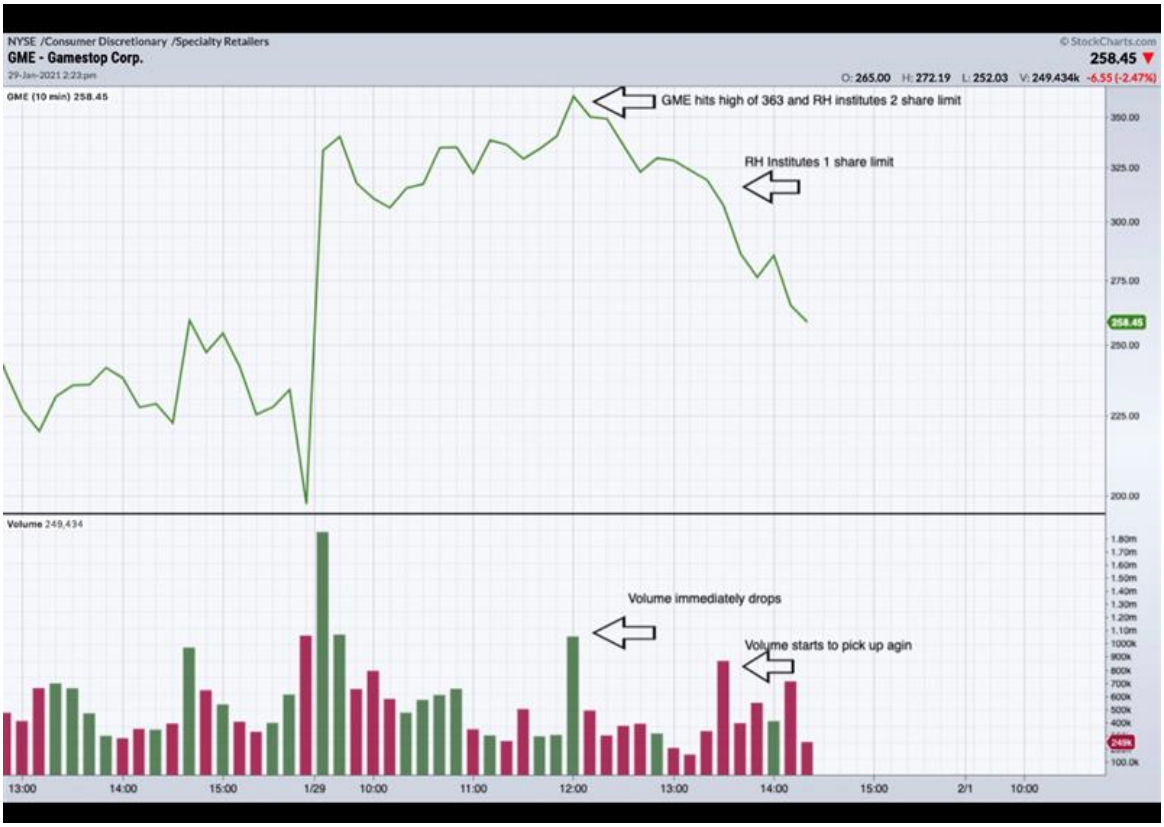


254. On January 29, 2021, Robinhood placed limits on the number of Relevant Securities its customers could purchase. With respect to GameStop, Robinhood first restricted Retail Investors to purchasing only two shares of GameStop, which resulted in a rapid decline in the value of GameStop.



255. The value of the Relevant Securities began to regain the value lost in the days immediately prior as a result of Defendants' coordinated action to suppress the value of the stocks. Because Citadel Securities, hedge funds, and other unnamed conspirators still had

distressed short positions outstanding, this threatened their ill-gotten gains achieved the day before. Robinhood then imposed a one share limit on the Relevant Securities, including GME and AMC further causing the value of the stocks to decrease.



256. Each artificial limitation in the amount of securities a Retail Investor could purchase correlated with a subsequent decrease in share value. As purchases of the Relevant Securities were limited, more investors were pressured to sell who otherwise would not have in the presence of a free and open market.

257. In order to disguise their illegal agreement after the restrictions on or around January 28, 2021, high-level executives and communications professionals at Citadel Securities and Robinhood communicated to coordinate their messaging.

258. On January 30, 2021, Citadel Securities's [redacted] sent an email to Josh Drobnyk, Robinhood's Vice President of Corporate Communications. In this email, [redacted] introduced Drobnyk to [redacted], who [redacted] described as the person "running point on this narrative for us." [redacted] indicated he "wanted to generally coordinate messaging." Additionally, [redacted] cc'd two individuals he described as "our GCs" "for privilege."

259. [redacted], who was on a flight, arranged to "connect" with Drobnyk once [redacted] landed. [redacted] asked if the issue was "urgent" or "super urgent."

260. [redacted] called Drobnyk twice after the flight landed.

From: [redacted]
Sent: Sat, 30 Jan 2021 15:57:41 +0000 (UTC)
To: Josh Drobnyk [redacted]
Subject: Re: [EXTERNAL] Re: connecting

Hi, its Redacted for PII, but I am on a plane for another hour. I Urgent? call you shortly after I land? Super urgent?

On Jan 30, 2021 10:40 AM, Josh Drobnyk [redacted] wrote:
CAUTION: This email is from an external sender.

looks like emails just crossed. whats best # for you?

On Sat, Jan 30, 2021 at 10:36 AM [redacted] wrote:

Thanks [redacted]
Josh, good to meet you, happy to connect whenever you like.

On Jan 30, 2021 9:57 AM, [redacted] wrote:

Just want to connect [redacted] and Josh.

[redacted] – Josh just joined Robinhood to run corp comms (impeccable timing ☺) and wanted to generally coordinate messaging, in particular some of the narrative around Ken owning Robinhood. Josh is a great professional, he ran corp comms at Finra during my Board tenure.

Josh – [redacted] has been running point on this narrative for us. I am copying Shawn and [redacted] (our GCs) as an FYI and for privilege. Both know Gallagher well.

Thanks all.

261. Robinhood ultimately continued to impose limitations on certain securities through February 4, 2021, despite announcing on January 29, 2021, that it raised more than $1 billion to help meet rising demands for cash and shore up its balance sheet. The money raised was on top of $500 million Robinhood accessed through credit lines to ensure it had the capital required to keep allowing its clients to trade the Relevant Securities. On February 1, 2021, Robinhood announced that it raised an additional $2.4 billion in funding on top of the $1 billion it raised the previous week.

262. On January 31, 2021, Robinhood's CEO Tenev published an opinion piece in USA TODAY. Despite previously citing market volatility as the reason for Robinhood's decision to impose the trading restrictions, Tenev now stated Robinhood's decision was made based on clearinghouse-mandated deposit requirements that it claimed were "increased ten-fold."

263. However, Tenev's excuse that Robinhood restricted trading because of NSCC deposit requirements increasing ten-fold was merely pretext as Robinhood likely knew it had liquidity issues before the NSCC margin call and conspired to restrict trading in the Relevant Securities before the NSCC margin call.

264. On February 18, 2021, Robinhood's CEO Tenev testified before the U.S. House Committee on Financial Services. Tenev's prepared statement disclosed that Robinhood Securities' operations team made the decision to impose trading restrictions on the Relevant Securities between 6:30 and 7:30 a.m. EST. Although Robinhood had been attributing its trading restrictions to increased clearinghouse-mandated deposit requirements, Tenev revealed that Robinhood met its revised deposit requirements a little after 9:00 a.m. EST on January 28, 2021. Nevertheless, Robinhood held fast to the conspiracy to restrict purchases of the Relevant Securities when the market opened, continued to impose restrictions for the entirety of the

trading day, and limited the number of stocks and option contracts its users could acquire through February 4, 2021.

Data Reveals that Shorts Exited Their Exposed Short Positions

265. Publicly available data reveals that short interests significantly decreased as a result of the trading restrictions described herein, with the sharpest and most significant decreases occurring after the coordinated restrictions on January 28, 2021.

266. While it is difficult to determine who owns a particular short interest at any particular time and when that investor exits their short position, entities such as FINRA and governmental organizations such as the SEC regularly aggregate and report certain statistics related to short interests.

267. FINRA member firms are required to report their short positions as of settlement twice every month: on the 15th (or the preceding business day if the 15th is not a business day) and the last business day of the month. FINRA compiles the data and publishes the total short interest on the 8th business day after the reporting settlement date.

268. Short interest is defined as the number of shares of a security that have been sold short but have not yet been covered or closed out and may be expressed as a number or percentage.

269. Based on published short interest rates, aggregate short interest in the Relevant Securities, a strong indicia of bearish market sentiment, generally climbed in the reporting periods before the restrictions on and around January 28, 2021 and dropped precipitously as of January 29, 2021 and continuing through the first few weeks of February, i.e., short interest plummeted during the periods including the trading restrictions indicating short holders had exited their short positions during or soon after the trading restrictions. While some of the

Relevant Securities reflect increasing short interest as of the report on January 29, 2021, because the reports do not require investors to disclose when those short positions were purchased, the data could capture large openings of short interest before January 28, 2021.

270. The below are charts of the estimated total short interest for the Relevant Securities as reported by Market Beat from December 2020 through February 2021:

AMC Entertainment Holdings, Inc. (AMC)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	38,080,000	$121.48 million	+13.6%
Dec. 31, 2020	38,990,000	$84.22 million	+2.4%
Jan. 15, 2021	44,670,000	$97.38 million	+14.6%
Jan. 29, 2021	37,720,000	$325.52 million	-15.6%
Feb. 12, 2021	48,130,000	$270.01 million	+27.6%
Feb. 26, 2021	55,490,000	$460.01 million	+15.3%

BlackBerry Ltd. (BB)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	34,570,000	$285.20 million	+16.8%
Dec. 31, 2020	39,560,000	$263.87 million	+14.4%
Jan. 15, 2021	43,490,000	$396.19 million	+9.9%
Jan. 29, 2021	20,410,000	$299.01 million	-53.1%
Feb. 12, 2021	32,350,000	$403.08 million	-58.5%
Feb. 26, 2021	43,030,000	$455.26 million	-33.0%

Bed Bath & Beyond Inc. (BBBY)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	72,770,000	$1.37 billion	+9.3
Dec. 31, 2020	76,180,000	$1.42 billion	+4.7%
Jan. 15, 2021	74,890,000	$2.05 billion	-1.7%
Jan. 29, 2021	31,770,000	$1.07 billion	-57.6%
Feb. 12, 2021	26,240,000	$723.96 million	-17.4%
Feb. 26, 2021	25,460,000	$669.34 million	-3.0%

Express, Inc. (EXPR)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	6,970,000	$7.25 million	+9.5%
Dec. 31, 2020	8,020,000	$7.59 million	+15.1%
Jan. 15, 2021	7,220,000	$9.24 million	-10.0%
Jan. 29, 2021	8,560,000	$40.23 million	+18.6%
Feb. 12, 2021	5,930,000	$16.72 million	-30.7%
Feb. 26, 2021	4,560,000	$13.63 million	-23.1%

GameStop (GME)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	68,130,000	$866.61 million	+0.2%
Dec. 31, 2020	71,200,000	$1.37 billion	+4.5%
Jan. 15, 2021	61,780,000	$2.47 billion	-13.2%
Jan. 29, 2021	21,410,000	$4.14 billion	-65.3%
Feb. 12, 2021	16,470,000	$841.62 million	-23.1%
Feb. 26, 2021	14,200,000	$1.54 billion	-13.8%

Koss Corporation (KOSS)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	700	$1,715.00	-83.3%
Dec. 31, 2020	590,300	$2.18 million	+84,228.6%
Jan. 15, 2021	12,800	$39,296.00	-97.8%
Jan. 29, 2021	756,100	$31.73 million	+5,807.0%
Feb. 12, 2021	289,000	$4.60 million	-61.8%
Feb. 26, 2021	598,700	$12.89 million	-107.2%

Nokia Corp. (NOK)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	48,240,000	$192.96 million	-5.7%
Dec. 31, 2020	50,520,000	$196.52 million	+4.7%
Jan. 15, 2021	59,550,000	$243.56 million	+17.9%
Jan. 29, 2021	56,840,000	$266.58 million	-4.6%
Feb. 12, 2021	16,470,000	$841.62 million	-23.1%
Feb. 26, 2021	48,270,000	$197.91 million	-15.1%

Tootsie Roll Industries, Inc. (TR)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	7,260,000	$223.03 million	-1.4%
Dec. 31, 2020	7,390,000	$219.34 million	+1.8%
Jan. 15, 2021	7,400,000	$222 million	+0.1%
Jan. 29, 2021	5,010,000	$194.29 million	-32.3%
Feb. 12, 2021	3,960,000	$122.64 million	-21.0%
Feb. 26, 2021	4,020,000	$128.36 million	+1.5%

Trivago N.V. (TRVG)			
Report Date	Total Shares Sold Short	Dollar Volume Sold Short	Change from Previous Report
Dec. 15, 2020	2,410,000	$5.78 million	-18.0%
Dec. 31, 2020	1,990,000	$4.48 million	-17.4%
Jan. 15, 2021	1,940,000	$4.33 million	-2.5%
Jan. 29, 2021	976,500	$2.42 million	-49.7%
Feb. 12, 2021	2,900,000	$7.74 million	+197.0%
Feb. 26, 2021	2,580,000	$10.73 million	-11.0%

271. The data shows that short interest generally declined sharply after Robinhood's trading restrictions on January 28, 2021 and continued to decrease into February.

272. According to Reuters, short interest in GameStop ultimately declined to an estimated 15% as of March 24, 2021 from a peak of 141% in the first week of January.

273. FINRA also aggregates dark pool trading activity. Generally, FINRA classifies over-the-counter ("OTC"; OTC is generally the trading of securities between two counterparties outside of formal exchanges and without the supervision of an exchange regulator) trading data into two categories, alternative trading systems ("ATS"), and OTC non-ATS dealers. Both ATS's and OTC non-ATS's are considered dark pools or dark exchanges due to their lack of transparency.

274. As mentioned above, dark pools are the preferred trading venue for large institutional investors largely because they are not transparent. Additionally, Retail Investors generally do not have access to trading on dark pools.

275. Additionally, the internal exchanges market makers such as Citadel Securities use to internalize order executions are also dark exchanges.

276. FINRA data shows notable and significant increases in dark pool trading activity

for each of the Relevant Securities on and around January 28, 2021, captured in the data tables below in the week beginning January 25, 2021.

277. Below are the trading data for ATS and OTC non-ATS as published by FINRA for the Relevant Securities for the months of December 2020 through February 2021.

AMC Entertainment Holdings Inc. (AMC)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	3,892,732	18,682	67,419,270	129,817
12/14/2020	18,391,507	46,178	104,778,002	202,961
12/21/2020	11,346,974	24,141	33,528,313	82,458
12/28/2020	16,302,709	26,755	64,304,993	117,401
1/4/2021	26,753,239	57,147	91,328,050	155,666
1/11/2021	34,838,029	52,224	190,054,425	219,454
1/18/2021	39,025,588	107,140	468,261,296	579,153
1/25/2021	**163,944,634**	**861,814**	**1,316,481,677**	**6,387,856**
2/1/2021	53,119,619	396,405	679,049,807	5,292,157
2/8/2021	19,006,375	100,007	267,479,975	1,581,292
2/15/2021	11,094,977	47,451	128,498,955	606,484
2/22/2021	57,563,861	255,961	655,595,790	2,765,472

BlackBerry Ltd. (BB)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	6,741,741	28,369	52,582,544	83,413
12/14/2020	7,390,537	29,589	42,234,476	69,413
12/21/2020	4,080,363	16,744	22,436,470	33,445
12/28/2020	3,328,364	18,541	14,320,357	24,573
1/4/2021	5,497,996	23,126	24,320,552	35,956
1/11/2021	15,749,501	70,140	120,235,955	233,852
1/18/2021	22,768,771	102,523	214,606,499	485,668
1/25/2021	**97,793,056**	**537,722**	**517,348,442**	**2,535,183**
2/1/2021	15,853,070	71,561	115,283,157	706,823
2/8/2021	9,421,223	47,468	46,803,945	289,363
2/15/2021	4,935,816	27,732	28,637,443	150,047
2/22/2021	8,031,370	40,568	40,626,852	168,204

Bed Bath & Beyond Inc. (BBBY)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	5,657,584	32,668	8,876,324	22,509
12/14/2020	4,042,873	30,348	10,771,286	29,748
12/21/2020	1,750,491	13,449	5,254,166	14,276
12/28/2020	3,178,084	23,109	8,607,888	24,582
1/4/2021	11,217,626	58,775	29,015,914	89,634
1/11/2021	8,259,495	45,764	29,383,395	71,871
1/18/2021	6,835,010	38,787	25,306,634	64,126
1/25/2021	**38,730,381**	**193,066**	**110,400,806**	**466,999**
2/1/2021	5,591,490	28,687	16,197,789	103,485
2/8/2021	4,498,953	17,566	6,783,384	40,971
2/15/2021	1,599,526	14,266	2,724,684	17,053
2/22/2021	3,416,041	19,961	4,886,756	22,852

Express, Inc. (EXPR)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	1,380,310	5,117	10,348,509	10,888
12/14/2020	2,071,231	5,695	8,254,132	8,387
12/21/2020	409,385	2,000	4,185,373	4,102
12/28/2020	953,642	2,928	7,992,473	8,329
1/4/2021	903,858	3,041	6,556,352	6,822
1/11/2021	2,745,296	9,087	32,839,484	33,322
1/18/2021	3,192,561	11,068	29,041,757	31,091
1/25/2021	**38,745,046**	**219,271**	**393,960,045**	**832,222**
2/1/2021	5,518,566	24,966	51,136,521	169,630
2/8/2021	1,955,926	9,126	25,409,465	73,501
2/15/2021	1,483,747	7,268	16,072,575	31,354
2/22/2021	4,167,742	23,818	67,521,294	105,853

GameStop Corp. (GME)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	4,150,662	23,690	26,137,279	107,667
12/14/2020	3,104,483	16,397	19,437,594	60,013
12/21/2020	4,900,689	28,967	35,405,726	122,854
12/28/2020	1,876,336	12,173	14,402,253	64,118
1/4/2021	3,458,092	21,807	13,926,925	63,783
1/11/2021	22,330,904	145,558	156,958,902	588,136
1/18/2021	29,392,454	206,476	170,039,730	849,773
1/25/2021	**44,126,023**	**593,161**	**184,322,090**	**4,275,955**
2/1/2021	17,913,654	392,399	109,775,294	3,417,362
2/8/2021	6,997,461	80,593	49,113,110	825,424
2/15/2021	3,905,721	45,227	21,554,348	341,014
2/22/2021	18,960,413	370,347	121,667,858	3,157,435

KOSS Corporation (KOSS)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	1,020	25	12,957	141
12/14/2020	1,053	16	7,541	110
12/21/2020	957	14	17,168	99
12/28/2020	704,028	4,886	7,693,766	24,331
1/4/2021	49,563	281	222,980	1,144
1/11/2021	19,983	175	101,229	560
1/18/2021	84,142	495	787,582	3,456
1/25/2021	**4,018,164**	**38,573**	**30,297,563**	**227,899**
2/1/2021	1,333,623	13,244	12,227,611	119,411
2/8/2021	445,988	3,444	3,053,718	28,387
2/15/2021	691,320	4,516	4,781,106	25,017
2/22/2021	3,766,876	33,228	24,262,377	157,009

Nokia Corp. (NOK)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	15,304,870	37,078	58,343,774	67,572
12/14/2020	11,046,987	22,587	38,453,491	51,333
12/21/2020	6,159,632	14,672	37,235,226	47,585
12/28/2020	6,279,603	13,492	29,688,635	44,172
1/4/2021	17,024,361	27,365	53,243,415	61,097
1/11/2021	22,745,501	35,962	84,580,606	83,576
1/18/2021	14,035,810	33,249	51,579,395	62,745
1/25/2021	**244,503,016**	**912,658**	**971,216,858**	**3,015,757**
2/1/2021	54,513,067	158,502	316,724,886	1,331,964
2/8/2021	299,776,442	79,687	147,701,559	519,336
2/15/2021	14,722,906	35,643	57,872,060	199,581
2/22/2021	33,203,315	71,206	124,573,499	292,852

Tootsie Roll Industries, Inc. (TR)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	308,812	2,804	175,519	1,131
12/14/2020	132,678	2,076	166,570	1,263
12/21/2020	64,967	909	65,986	1,036
12/28/2020	229,091	1,890	118,505	1,394
1/4/2021	213,383	2,306	130,491	1,305
1/11/2021	78,974	1,036	91,898	1,096
1/18/2021	103,510	1,486	117,530	1,046
1/25/2021	**3,042,836**	**17,884**	**2,490,108**	**23,595**
2/1/2021	555,331	5,426	688,068	7,510
2/8/2021	147,255	1,835	282,505	2,971
2/15/2021	243,438	2,667	294,213	2,313
2/22/2021	408,039	3,555	303,286	2,759

Trivago N.V. (TRVG)

	ATS Issue Data		OTC (Non-ATS) Issue Data	
Week Starting	Total Shares	Total Trades	Total Shares	Total Trades
12/7/2020	594,590	2,369	3,598,268	7,023
12/14/2020	289,827	1,184	2,231,256	4,985
12/21/2020	432,013	1,722	1,486,232	2,818
12/28/2020	327,779	1,787	1,517,784	2,911
1/4/2021	303,728	2,063	1,809,736	4,073
1/11/2021	188,440	1,216	1,552,429	3,724
1/18/2021	331,955	1,480	1,230,548	2,732
1/25/2021	**6,425,337**	**22,467**	**31,902,982**	**64,826**
2/1/2021	1,326,788	6,219	8,513,999	21,645
2/8/2021	2,006,351	8,135	20,579,588	42,034
2/15/2021	1,232,263	6,429	12,896,577	33,888
2/22/2021	1,864,214	9,477	18,561,297	54,194

278. As reported by FINRA, the columns representing total shares are the total volume of shares of that security reported for that particular week. The total trades represent the total amount of transactions involving those shares.

279. For each of the Relevant Securities, total shares and total trades in dark exchanges peaked during the week of January 25, 2021 and February 1, 2021 during the period when restrictions were first placed on the Relevant Securities, and were higher than every other week recorded from December 2020 through February 2021.

280. Given that Retail Investors are generally not able to trade in dark pools and dark exchanges, the trading increases set forth in the FINRA reports indicate high institutional investor trading including high market maker activity around the time of the restrictions on the Relevant Securities, consistent with institutional investors taking advantage of the trading restrictions to exit their vulnerable short positions.

281. Furthermore, FINRA OTC transparency data indicates that not only dark trading activity was elevated for the week of January 25, 2021, but that the bulk of that trading activity can be attributed to Citadel Securities.

SYMBOL	BROKER	VOLUME	% OF VOLUME
GME	CANACCORD GENUITY LLC	119,079	0%
GME	**CITADEL SECURITIES LLC**	**92,991,756**	**50%**
GME	CLEAR STREET LLC	148,717	0%
GME	COMHAR CAPITAL MARKETS, LLC	3,157,898	2%
GME	COWEN AND COMPANY	3,030,737	2%
GME	CUTTONE & CO., LLC	326,013	0%
GME	De Minimis Firms	1,114,777	1%
GME	G1 EXECUTION SERVICES, LLC	22,258,085	12%
GME	HRT EXECUTION SERVICES LLC	249,973	0%
GME	INTERACTIVE BROKERS LLC	2,999	0%
GME	JANE STREET CAPITAL, LLC	6,306,835	3%
GME	LEK SECURITIES CORPORATION	375,071	0%
GME	NASDAQ EXECUTION SERVICES, LLC	582,562	0%
GME	NATIONAL FINANCIAL SERVICES LLC	33,408	0%
GME	STOCKPILE INVESTMENTS, INC.	28,622	0%
GME	TWO SIGMA SECURITIES, LLC	4,379,714	2%
GME	UBS SECURITIES LLC	4,163,075	2%
GME	VIRTU AMERICAS LLC	43,388,647	24%
GME	WOLVERINE SECURITIES, LLC	1,664,101	1%
	TOTAL	184,322,069	

SYMBOL	BROKER	VOLUME	% OF VOLUME
AMC	CITADEL SECURITIES LLC	732,531,515	56%
AMC	CLEAR STREET LLC	833,054	0%
AMC	COMHAR CAPITAL MARKETS, LLC	13,573,292	1%
AMC	COWEN AND COMPANY	3,935,620	0%
AMC	CUTTONE & CO., LLC	504,341	0%
AMC	De Minimis Firms	3,739,069	0%
AMC	G1 EXECUTION SERVICES, LLC	99,468,601	8%
AMC	HRT EXECUTION SERVICES LLC	3,325,069	0%
AMC	INTERACTIVE BROKERS LLC	1,595	0%
AMC	JANE STREET CAPITAL, LLC	38,571,184	3%
AMC	LEK SECURITIES CORPORATION	2,537,780	0%
AMC	NATIONAL FINANCIAL SERVICES LLC	25,683	0%
AMC	SAGETRADER, LLC	536,154	0%
AMC	STOCKPILE INVESTMENTS, INC.	252,242	0%
AMC	TWO SIGMA SECURITIES, LLC	37,512,324	3%
AMC	UBS SECURITIES LLC	36,872,566	3%
AMC	VIRTU AMERICAS LLC	333,698,597	25%
AMC	WOLVERINE SECURITIES, LLC	8,562,991	1%
	TOTAL	1,316,481,677	

282. For example, as shown in the first two tables from FINRA's OTC transparency data reports for GME and AMC for the week of January 25, 2021, Citadel Securities represented roughly 50% of the non-dark pool over-the-counter market, the bulk of which is market maker volume. The scale of Citadel Securities's business will have significant impact on short volume reports available from FINRA and provides insight into Citadel Securities's short selling activity beyond what is disclosed in 13F reporting.

283. The FINRA short volume reports provide daily numbers for Short Volume and Total Volume (one-sided volume) for all dark OTC trading activity. The percentage of the total volume represented by short sales constitutes the percentage volume of sales that were sold short. The associated volume of each trade that is reported through such metrics provides supporting evidence that a party that executed off-exchange had a short position at the time the contributing trade was executed. If a market maker maintains a consistent short position, the market maker will report significant short volume through these metrics. When a market maker that has significant market share has been maintaining a long position and then switches the position to a short position that is subsequently maintained, there will be a significant increase in the short volume reported. Because Citadel Securities represents about 50% of the dark trading activity, a large shift in the percentage of sales represented by short trades is highly likely to be caused by a shift in Citadel Securities's position from long to short or vice versa.

284. The short volume reporting is consistent with a material change in Citadel Securities's position on January 27th, 2021, where Citadel Securities appears to have shifted from reporting shares sold long to shares sold short, as evidenced by the change in short ratios and short volume reported over the period. As seen in the table below, for each day, January 22, 25 and 26, the percentage of sells represented by shorts was about 35%. On January 27 that

amount jumped to about 53% where it plateaued for roughly 3 days. Such an increase is highly unusual and consistent with Citadel Securities taking on a large short position and strongly implies that Citadel Securities was short during that time. The transacted volume and 13F reports of other candidate market makers that might have contributed to the increase in the percentage of short volume relative to total volume does not suggest alternative explanations, given their relatively low share of the OTC market for the week of January 25, 2021.

DATE	SYMBOL	SHORT	SHORT SALE EXEMPT	TOTAL VOLUME	% SHORT VOLUME
20210129	GME	8,814,229	527,920	16,327,706	54%
20210128	GME	9,606,123	455,032	18,899,860	51%
20210127	GME	16,292,827	161,900	29,923,417	54%
20210126	GME	27,348,512	514,375	82,653,297	33%
20210125	GME	27,342,770	393,941	72,224,899	38%
20210122	GME	33,257,918	686,860	97,123,046	34%

285. While the financial markets are generally regulated, important aspects of it are opaque and render the market susceptible for collusion.

286. For example, it is generally impossible to know who owns a short interest at any given time despite the prevailing regulatory regime.

287. While it is possible that a large investor may publicly disclose its present short positions, it would be unusual as it would give competitors an insight into their strategy. Also, because there is no way to verify if that were truly the short position the investor had at that moment, it could just as well be disinformation.

288. Investment managers who have at least $100 million in assets under management are required by the SEC to file a Form 13F every quarter. Congress created the 13F requirement in 1975 with the intention of providing investors transparency into the holdings of the U.S.'s institutional investors.

289. Notwithstanding Congress's intent to provide transparency to investors and the public, these reporting requirements are significantly unregulated and subject to abuse. Form 13F filings have earned a reputation for being unreliable. Indeed, a 2010 SEC Report titled "Review of the SEC's Section 13(f) Reporting Requirements" found that "no SEC division or office regular or systemic review of the data filed on Form 13F" and that "no SEC division or office monitors the Form 13F filings for accuracy and completeness." The SEC found that, "[a]s a result, many Forms 13F are filled with errors or problems, which may not be detected or corrected in a timely manner."

290. Another issue with Form 13F filings is that disclosures are limited. Investors are only required to report long positions, and put and call options, but not short positions.

291. Because Form 13F filings do not require disclosure of short positions, Form 13F filings can paint a misleading picture as some investment firms generate most of their returns from short selling while using long positions as "hedges."

292. A "hedge" is an investment made with the intention of reducing the risk of another investment. For example, an investor with a large short position in a particular security may hedge by taking an offsetting or opposite position in a related or the same security. Hedging can also be accomplished through the use of derivative securities such as options.

293. Another issue with Form 13F filings is the temporal scope of the require reporting. 13F filings may be filed up to 45 days after the end of a quarter. As a matter of

practice, 13F filings are submitted as late as possible. 13F filings, however, do not require reporting of when a particular position was purchased. Therefore, a reported position could have been purchased at any time within the four months prior to the filing.

294. Additionally, if a 13F filing reports purchases of put or call options, there is no requirement to report the strike price or the expiry date, i.e., the price at which an option can be exercised and the date the option contract becomes invalid, respectively.

295. FINRA also requires member firms to report short interest positions in all equity securities twice a month. Reporting is typically on the 15th and the last day of each month with an adjustment to the previous business day if those days themselves do not fall on a business day.

296. Even though FINRA publishes short interest reports publicly, as a general matter, it takes several days before the information is published and the number of shares sold short in the market may have changed dramatically.

297. Further, the FINRA reports do not account for smaller intervals of time. Dramatic changes in short interest may occur within a particular window and not be captured in the regularly required report.

298. Generally, it is not possible to ascertain which investor has a short position in a particular security at any particular time unless the holder of the short position voluntarily publicly discloses the position. Unsurprisingly, very few investors voluntarily disclose their short positions.

299. Although it is not possible to detect which specific investors are in large exposed short positions, the companies issuing affected securities are aware and can (and sometimes do) confirm if their stock has been significantly shorted or had been subject to a short squeeze.

300. For example, in GameStop Corp.'s Form 10-K filed March 23, 2021, GameStop Corp. specifically identified a "short squeeze" as a potential risk factor. Further, GameStop Corp. disclosed that it experienced a short squeeze and that a large proportion of its stock had been sold short.

> A large proportion of our Class A Common Stock has been and may continue to be traded by short sellers which may increase the likelihood that our Class A Common Stock will be the target of a short squeeze. A short squeeze has led and could continue to lead to volatile price movements in shares of our Class A Common Stock that are unrelated or disproportionate to our operating performance or prospects and, once investors purchase the shares of our Class A Common Stock necessary to cover their positions, the price of our Class A Common Stock may rapidly decline.

301. In the wake of the 2008 financial crisis, Congress legislated wide sweeping reforms designed at increasing transparency and curtailing the abuses within the financial sector that led to the crisis in the form of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.

302. Section 929X of the Dodd-Frank Act, titled "Short Sale Reforms," empowered the SEC to promulgate rules providing for the public disclosure of short positions to occur monthly at a minimum.

303. To date, the SEC has not promulgated rules related to Section 929X.

304. Additionally, Congress placed into Dodd-Frank an antitrust savings clause:

> Nothing in this Act, or any amendment made by this Act, shall be construed to modify, impair, or supersede the operation of any of the antitrust laws, unless otherwise specified. For purposes of this section, the term "antitrust laws" has the same meaning as in subsection (a) of section 12 of title 15, except that such term includes section 45 of title 15, to the extent that such section 45 applies to unfair methods of competition.
>
> 15 U.S.C. § 5303.

Relevant Product Markets

305. Market makers and brokerages operate at two different levels within the distribution of securities trading services. Citadel (a market maker) operates in a relevant market upstream of that in which Robinhood (a brokerage) operates. The term "upstream" refers to an earlier stage in the production or distribution chain. The downstream market faces the ultimate consumer (the Retail Investor). The market maker creates the market in which Retail Investors' trades can be consummated by agreeing to take the opposite position in a trade. The brokerage deals directly with the Retail Investors to assist them in placing those trades. The market makers in this case deal with the brokerages, compensating them for the order flow created by myriad Retail Investor trades.

Upstream Market

306. The relevant upstream product market consists of market makers that pay brokerage firms to route their clients' trades to that market maker (the Payment for Order Flow or "PFOF Market"). These include Citadel Securities (which holds the highest market share), G1 Execution Services, Global Execution Brokers, Virtu Americas, and other relatively minor competitors. Defendant Robinhood is able to operate a "zero transaction fee" platform only because it derives revenue through PFOF from market makers like Defendant Citadel. In the absence of PFOF, brokerages like Defendant Robinhood would likely need to charge their investors transaction fees to defray the costs of operating an online brokerage. On October 26, 2021, Robinhood, when asked, could identify no expected alternative to its PFOF revenue system, only claiming that "over time, we're going to be rolling out more products and services."

307. As the relative behemoth in the PFOF market, Citadel Securities wields significant market power. Accounting for approximately 27% of U.S. equities volume and

executing approximately 37% of all U.S.-listed retail volume, Citadel Securities is the top wholesale market maker in the PFOF Market. For approximately two years, Citadel Securities has garnered approximately 40 percent of all PFOF in the United States, more than its next three largest competitors, Global Execution Brokers, Virtu Americas, and Wolverine, *combined*.

308. In 2020, Citadel Securities paid approximately $1.1 billion to brokers for their order flow, the most of any market maker and nearly equal to its four largest competitors combined. By comparison, Global Execution Brokers paid approximately $446 million to brokers for order flow (the second highest amount) and Virtu Americas paid approximately $312 million to brokers for order flow (the third highest amount).

309. Further, according to regulatory filings collated by Bloomberg Intelligence, from January 2021 through June 2021, Citadel Securities paid nearly $1.5 billion to brokers for their order flow – the most of any market maker.

310. While Citadel Securities advertises itself as "a leading global market maker across a broad array of fixed income and equity products", it is (by far) *the* leading PFOF market maker in the United States, the relevant product and geographic market.

311. The geographic scope of the PFOF Market is limited to the United States because securities regulations vary across countries and because the brokerages in the relevant downstream market (defined below) are based in the United States.

Downstream Market

312. The downstream or consumer-facing relevant product market consists of zero account-minimum, no-fee brokerages that 1) offer a user-friendly mobile app to Retail Investors to place orders to buy and sell stocks, exchange-traded funds (ETFs), and other securities or investments strategies such as trading on margin or using options strategies, and 2) receive

payment for order flow from market makers instead of fees from Retail Investors (the "No-Fee Brokerage Trading App Market").

313. The No-Fee Brokerage Trading App Market consists of brokerages such as Robinhood, Charles Schwab, E*Trade, TD Ameritrade, WeBull, and others. Such brokerages offer no-fee transactions because they receive PFOF from market makers in the upstream relevant market. For purposes of this complaint, "no-fee" implies PFOF, as the brokerage firm must cover its costs via payments from market makers.

314. Robinhood's customers can be characterized as "micro-investors," as the median Robinhood customer holds an account balance of approximately $240. Robinhood attracts micro-investors because, inter alia, it permits the purchase of fractional shares as small as one-millionth of a single share. TD Ameritrade and E*Trade do not offer fractional shares. Charles Schwab and Webull permit fractional shares purchases, though both impose a minimum $5.00 investment in such shares. Fidelity likewise permits fractional shares with a $1.00 minimum investment. Robinhood's fractional share offerings thus provide unmatched flexibility for micro investors.

315. The geographic scope of the No-Fee Brokerage Trading App Market is limited to the United States because U.S.-based investors are most comfortable investing in a U.S.-based brokerage and because the nature of securities regulation changes across countries.

Robinhood Depended on Citadel Securities for Its Continued Operation

316. Robinhood's business model hinges on payment for order flow, which represents approximately 80 percent of Robinhood's revenues. Unlike Robinhood, other major brokers had previously established other revenue streams and only recently slashed commissions.

317. As set forth in Robinhood's Registration Statement, Robinhood's "PFOF … arrangements with market makers are not documented under binding contracts." (S-1, at 35)

(emphasis added). This means that the PFOF arrangement between Robinhood and Citadel Securities is terminable by either party at any time.

318. As previously noted, Citadel Securities was responsible for approximately 43%, or over $141 million of the approximate $330 million that Robinhood received as payment for order flow in the first quarter of 2021 alone. Given that Robinhood planned to move forward with an IPO in 2021, the continued growth of Robinhood's business, which depended significantly on the PFOF fees it received from Citadel Securities, was on the line if it did not collude with Citadel Securities to impose the purchasing restrictions on the Relevant Securities on January 28, 2021.

319. Simply put, if Robinhood did not acquiesce to the anticompetitive agreement with Citadel Securities, it could not rely on the possibility that other market makers, such as Virtu Americas, were standing by willing and able to pay Robinhood for order flow that Citadel would have otherwise accepted. Further, Citadel Securities knew that Robinhood relied on Citadel Securities' order execution in order to consummate Robinhood Retail Investors' orders and to generate revenue from PFOF. Thus, Robinhood was 1) economically beholden to Citadel Securities and 2) therefore willing to take actions against its Retail Investors' interests and in restraint of trade to collude with and thus preserve its financially lucrative relationship with Citadel Securities.

320. Indeed, communications between executives and high-level employees of Robinhood and Citadel Securities demonstrates Robinhood and Citadel's PFOF relationship was precisely a topic of discussion during the week of January 25, 2021, and on the eve of the trading restrictions on the Relevant Securities.

321. In the evening of January 27, 2021, the night before Robinhood enacted restrictions, Robinhood's Gretchen Howard indicated to Vlad Tenev that she and Jim Swartwout were going to have a call with Citadel wherein she believed that "they [Citadel] will make some demands on limiting PFOF across the board." Later that evening, Swartwout indicated that the conversation was a "total mess." Robinhood's Dan Gallagher and Citadel's [redacted] also had discussions, which as Citadel Securities's [redacted] noted to Robinhood's Swartwout, altered certain "Citadel numbers" that required "[f]irming up." Robinhood's Swartwout later emailed Citadel Securities's [redacted] that he was "beyond disappointed in how this went down," and that "[i]t's difficult to have a partnership when these kind of things go down this way."

322. As these communications show, Robinhood and Citadel Securities's PFOF relationship was a central topic in the lead-up to the imposition of restrictions on January 28, 2021. The discussions were tense and indicated that Robinhood believed that its PFOF relationship with Citadel Securities was in jeopardy.

323. While Robinhood could have routed orders to the public exchanges, this was not a viable option for Robinhood. As Robinhood derives revenue primarily from payment for order flow, any orders routed to the public exchanges would not yield the lucrative payments for order flow upon which Robinhood relies for revenues and profits.

Robinhood Dominates the No-Fee Brokerage Trading App Market

324. By pioneering commission-free trading and offering an easy to use "gamified" investment mobile app experience, Robinhood was able to capture millions of Retail Investors and catapult to the top of the No-Fee Brokerage Trading App Market.

325. Robinhood claims to have opened nearly 50% of all retail brokerage accounts in the past five years, boasting an industry-leading 12.5 million online accounts by the end of 2020 and adding another 3 million during the month of January 2021. As of March 31, 2021, Robinhood had 18.0 million funded accounts, with 17.7 million monthly active users.

326. Based on monthly active users, Robinhood is by far the most popular eTrading App in the world. Robinhood is also responsible for a significant amount of daily trades.

327. In an April 2021 appearance on Jim Cramer's CNBC show, Robinhood's Tenev boasted that Robinhood "has continued to have over 50% of the market share of new brokerage accounts," which was more than "all of the incumbent legacy providers [e.g., E*Trade, TD Ameritrade, Edward Jones and Fidelity] put together."

328. In June 2020, Robinhood reported 4.3 million daily average revenue trades which was the most among brokerages. Robinhood reported approximately a half-million more trades reported than the next highest broker dealer TD Ameritrade, who reported approximately 3.8 million daily average revenue trades. Robinhood's reported trades were more than E-Trade and Charles Schwab combined.

329. Indeed, Robinhood is far and away the brokerage App of choice for active retail traders. On January 27, 2021, Robinhood's App was downloaded 120,000 times and Robinhood set its own record for active daily users on mobile, at 2.6 million, propelling Robinhood to the No. 1 App on the App Store for the first time.

330. On January 28, 2021, Robinhood's App was downloaded more than 177,000 times, twice the daily download rate over the previous week, and it had 2.7 million daily active users on its mobile App that day, its highest ever and more than its rivals — Schwab, TD Ameritrade, E*Trade, Fidelity and WeBull — combined.

331. Robinhood's market dominance is demonstrated by the fact that on January 29, 2021, after Robinhood imposed the trading restrictions on January 28, 2021, Robinhood's App was downloaded 600,000 times.

332. In total, Robinhood had more than 3 million App downloads in January 2021, its highest on record. By comparison, the next highest number of downloads for a comparable company was 800,000, which was on Webull's App. TD Ameritrade's App was downloaded approximately 370,000 times, Fidelity's App was downloaded approximately 340,000 times, E*Trade's App was downloaded approximately 220,000 times, Sofi's App was downloaded approximately 121,000 times and Charles Schwab's App was downloaded approximately 75,000 times.

333. Further, Robinhood has by far the most users on its platform as compared to other participants in the No-Fee Brokerage Trading App Market.

334. According to data from data-aggregator Statista, as of January 2021, Robinhood had nearly three-times as many users as then second-place Fidelity Investments.

335. Surprisingly, even after Robinhood imposed the purchasing restrictions on the Relevant Securities and/or otherwise limited the number of new positions its customers could open, Robinhood was able to raise billions of dollars in capital in just a few short days. As explained by one of Robinhood's investors, "[i]n spite of the trouble last week, the metrics suggest retail trading is exploding and Robinhood is still the only game in town."

336. Even in the aftermath of the January 28, 2021 trading restrictions, despite any purported reputational hit Robinhood may have incurred, Robinhood still has magnitudes more users than other participants in the space. According to Statista, in July 2021, Robinhood still had nearly triple the number of active users as than second-place brokerage WeBull. In other words,

even after Robinhood and Citadel Securities's collusive restraint on Retail Investors' ability to trade by limiting consumers' choices and reducing their order execution (and hence increasing the quality-adjusted transaction costs), customers still did not churn so as to make such action unprofitable. This result underscores Robinhood's market power over Retail Investors and its acquiescence to Citadel's interests. Short-term consumer lock-in helps illuminate the nature of Robinhood's market power.

Retail Investors in the No-Fee Brokerage Trading App Market Are Locked-In to Their Respective Brokerages in the Short Term

337. Investors who trade with brokerages in the No-Fee Brokerage Trading App Market suffer from short-term lock-in, limiting their ability to instantly switch to a competing brokerage. A Retail Investor who wanted to purchase the Relevant Securities from a no-fee brokerage trading App, but was unable due to purchasing restrictions (i.e., Robinhood), could not simply open a new account with another no-fee brokerage App that permitted purchases of the Relevant Securities (i.e., Schwab), as the investment opportunity would pass before the trade could be consummated.

338. Although a Retail Investor may typically apply for an account with a no-fee brokerage trading App in a matter of minutes, it usually takes between one to seven days to fund the account and begin trading.

339. Carleton English, a journalist reporting for Barron's, documented this limitation when comparing opening brokerage accounts with Robinhood versus Fidelity. Ms. English demonstrated that, while she could begin trading with Robinhood immediately, one to two days were required after opening before she could begin trading with Fidelity.

340. Thus, as a result of the delay between opening an account, funding it, and beginning trading at other brokerages, many Retail Investors did not have the opportunity to

mitigate the harm caused by Robinhood's restraint by purchasing the Relevant Securities on January 28, 2021.

341. In fact, Plaintiffs Guzman and Miller each attempted, but were unable to open accounts with competing no-fee brokerage apps so they could purchase the Relevant Securities on January 28, 2021.

342. While some Retail Investors were able to open an account on another no-fee brokerage trading app, like Plaintiff Minahan, they represented the rare exception rather than the rule. Retail Investors like Minahan were only able to apply and open an account on another no-fee brokerage trading app because of their remarkably high credit scores and ability to immediately transfer thousands of dollars to their new trading accounts. The vast majority of Robinhood users were unable to open accounts with other brokerage apps.

343. In addition to the time needed to open and fund a new account on a competing no-fee brokerage trading App, many Retail Investors may not have had the resources to do so as their assets were already tied up in their Robinhood account and thus they would have had to transfer their assets to another no-fee brokerage trading app in order to have the ability to purchase the Relevant Securities on January 28, 2021. As noted previously, the median Robinhood customer has $240 in her brokerage account.

344. Like opening and funding a new account, transferring accounts takes time. Brokerage firms are required by regulators to respond to any requests to transfer their account to another brokerage and must initiate the transfer within 24 hours. However, even if the transfer is initiated within 24 hours, it typically takes about six days for the process to be completed. According to Robinhood, should a user wish to transfer or withdraw funds from their account, it typically takes three to five days for the transfer to effectuate.

345. Moreover, many Robinhood customers reported that they were unable to liquidate their accounts and move to other brokerage firms. One Robinhood user told the Federal Trade Commission that the ability to "continue depositing money is still active but withdrawing money or trading stock is completely blocked." CNBC reported that Robinhood uses a service called the Automated Customer Account Transfer Service, or ACATS, to facilitate transfers from Robinhood to another brokerage firm, but that ACATS does not support fractional shares, which are popular among Robinhood's user base and which may cause an issue if a Robinhood user with fractional shares in their portfolio attempts to transfer his or her account.

346. Retail Investors trading on Robinhood's App could not simply go elsewhere to purchase the Relevant Securities on January 28, 2021. In other words, Retail Investors faced high (or insurmountable) switching costs in the short-term. Such lock-in gave Robinhood market power over its investors in the short-term.

Robinhood Customers Have Significant Influence on the Price of Securities

347. Robinhood's 17.7 million monthly active users have significant influence on the price of securities. According to a research study published by the Swiss Finance Institute, Robinhood customers drove 10% of the variation in returns from stocks in the second quarter of 2020, despite holding only about 0.2% of the aggregate U.S. market capitalization. This is because Retail Investors react more strongly to price changes than their institutional counterparts.

348. In June 2021, the Wall Street Journal reported that Larry Tabb, the head of market-structure research at Bloomberg Intelligence, estimated: "[a]ctivity from individual investors ***trading on Robinhood Markets Inc. accounted for roughly 4% of total U.S. share volume in January*** …" Given the fact that one out of every 25 shares traded on all U.S. markets

in January 2021 traded on Robinhood's platform, the purchasing restrictions Robinhood imposed on the Relevant Securities undoubtedly moved their share price.

349. While Robinhood imposed a wholesale purchasing restriction on the Relevant Securities on January 28, 2021, it ultimately continued to impose limitations on certain securities through February 4, 2021. Robinhood's purchasing restrictions likewise affected the share price of those securities. On February 1, 2021, *The Wall Street Journal* published an article, which noted that after Robinhood relaxed restrictions in the overnight hours, by 6:00 a.m., "[t]welve of the 13 stocks that Robinhood Markets had restricting trading in last week jumped premarket."

Antitrust Injury

350. As a result of the collusive actions of Robinhood and Citadel, Retail Investors suffered a reduction in the quality of their trades. In other words, Retail Investors paid a higher quality-adjusted price as a result of Defendants' conduct. This is true even though Robinhood customers do not pay the brokerage a commission fee in exchange for their trades. Rather, customers pay in kind by permitting Robinhood to exchange their aggregate trading volume for payment for order flow from market makers such as Citadel Securities. In exchange, Retail Investors reasonably expect that Robinhood and Citadel Securities will efficiently execute their trades as directed. Defendants' ability to leverage their market power to restrict such trades represents a quality degradation of the brokerage services rendered, or, alternatively, a quality-adjusted price increase of trading on Robinhood.

351. Robinhood degraded the quality of its services to Retail Investors because of its relationship and agreement with Citadel. In a competitive market where Robinhood faced the threat of consumer defection resulting from such a degradation in service quality, Robinhood would not have cut off market access to its paying clients, as doing so would have resulted in

sufficient client loss as to render its actions unprofitable. However, because Robinhood exercises market power and relies on Citadel as its primary source of revenue, Robinhood chose to prioritize its business relationship with Citadel over Retail Investors and enter into an agreement in restraint of trade to do so. To prevent Retail Investors from defecting, Robinhood curtailed investors' ability to transfer funds out of Robinhood by placing barriers in their way—leaving them stuck and helpless while Robinhood served at the pleasure of Citadel. Thus, while investors did not pay a brokerage fee, they did pay a price in terms of opportunity cost. Indeed, financial experts have recognized that brokerage costs represent only one component of the trading costs for an asset. Opportunity costs, the bid-ask spread, and price impacts are all costs that Retail Investors still had to incur and which Robinhood's actions affected.

352. Putting financial jargon aside, a simpler way to view Robinhood and Citadel's collusive restraint of trade is through the lens of a bribe or kick-back. Citadel Securities faced the threat of short squeeze, as Retail Investors pushed the prices of the relevant securities upward. As a result, Citadel Securities could have incurred potentially unlimited losses. To stem its losses and shore up its financial position, Citadel leveraged its power over Robinhood, which originates from Citadel's absorption of Robinhood's order flow. Robinhood, aware of its dependence on Citadel, in turn leveraged its own market power over Retail Investors by limiting their ability to purchase the relevant securities. In doing so, the combination of Citadel and Robinhood, powered by the former's ability to bribe and/or squeeze the latter, the market price of the securities could not rise to the competitive level that it would have absent the restraint. Thus, in effect, by assuring Robinhood that it would continue to receive PFOF, Citadel bribed Robinhood to take actions not only against its own self-interest but also against the interests of its micro investor clients—the Retail Investors. Bribery is recognized in economics and antitrust law as a

means of participating in the conduct of another enterprise's affairs. Had Citadel Securities not exerted its power over Robinhood, the latter would have had no incentive to cut off market access for Retail Investors. Instead, in a competitive counterfactual unencumbered by market power, Robinhood would have diverted the trades to a different market maker. If Robinhood did let the markets operate freely and fairly, the prices of the Relevant Securities would have likely increased, further squeezing Citadel's aggressive short positions. Regardless of whether Citadel may have offered Robinhood additional compensation to work contrary to the interests of its investor users, the most economically logical conclusion is that Citadel Securities may have threatened to walk away from its relationship with Robinhood, a relationship which Citadel knew Robinhood was dependent upon, which is tantamount to a bribe.

353. Basic valuation methodology further explains how Robinhood's prohibition on purchases of the Relevant Securities imposed a transaction cost (i.e., a price increase) on Retail Investors. The trading restriction effectuated a blackout period for stock purchases. Robinhood's actions constrained traders willing to sell from accommodating the demand of Robinhood-based traders were willing to purchase, thus resulting in a decrease in liquidity and thus artificially deflating the prices of the Relevant Securities. The larger the desire of Robinhood investors to purchase, the greater the downward the effect of the restrictions on securities' prices.

354. In addition, Defendants' actions resulted in a reduction in output in the form of a reduced number of trades (specifically, purchases) of securities. Such a constraint on the competitive process resulted in an artificial market price; the price at which securities could be sold (which Robinhood did not restrict) no longer reflected the actual market price set through the supply and demand mechanisms that characterizes competitive markets. In effect, Defendants' collusive conduct resulted in a downward manipulation of the prices of the Relevant

Securities. By colluding to prohibit Retail Investors from purchasing (but not selling) the Relevant Securities, Defendants harmed the very competitive mechanism that sets the market price through the forces of supply and demand and thus distorted the price-discovery process.

355. Finally, by colluding to manipulate the price of the Relevant Securities downward, Defendants harmed the companies whose securities the Retail Investors wanted to purchase and resulted in a reduction of output compared to the competitive counterfactual. For example, as a result of the price increase that it enjoyed even in the presence of Defendants' conduct, GameStop announced in April that it would issue up to an additional 3.5 million shares and indicated that it would use the proceeds "to further accelerate its transformation as well as for general corporate purposes and further strengthening its balance sheet." Likewise, AMC announced a plan to issue 25 million more shares.

356. Alternatively, Defendants' conduct can be understood as an artificial restriction on output. By moving the Relevant Securities to position-close only, i.e., prohibiting users from opening new positions in the security and only allowing them to sell, Defendants effectively eliminated the output of those securities through Robinhood's platform. Because Robinhood users were effectively locked-in to the Robinhood app and could not purchase securities on other broker-dealer platforms, Retail Investors using Robinhood were effectively denied any opportunity to open new positions in the Relevant Securities. By restricting Retail Investors' ability to open new positions in the Relevant Securities on Robinhood, Defendants were able to curtail the upward momentum of the stock price and caused an artificial decline in the price of the Relevant Securities.

There Are No Procompetitive Efficiency Justifications

357. Defendants' likely efficiency claim that increased market volatility prompted Robinhood's prohibition on purchases of the Relevant Securities is pretextual for several reasons.

358. *First*, Robinhood had an economic incentive to permit, not prohibit, purchases of the Relevant Securities. This is because, as it noted in its Form 10-Q for the period ended September 30, 2021, Robinhood's transaction fees for equities are based on the market maker's publicly-quoted bid-ask spread for the traded security in question. Robinhood receives a fixed percentage of the bid-ask spread, meaning that a higher bid-ask spread results in greater compensation for Robinhood. Larger bid-ask spreads characterize periods of higher volatility, as the market maker widens the spread to protect itself from volatility-based risk. Thus, had it acted in its own self-interest rather than at the behest of Citadel Securities per the scheme, Robinhood would have welcomed the period of volatility and its accompanying higher revenues.

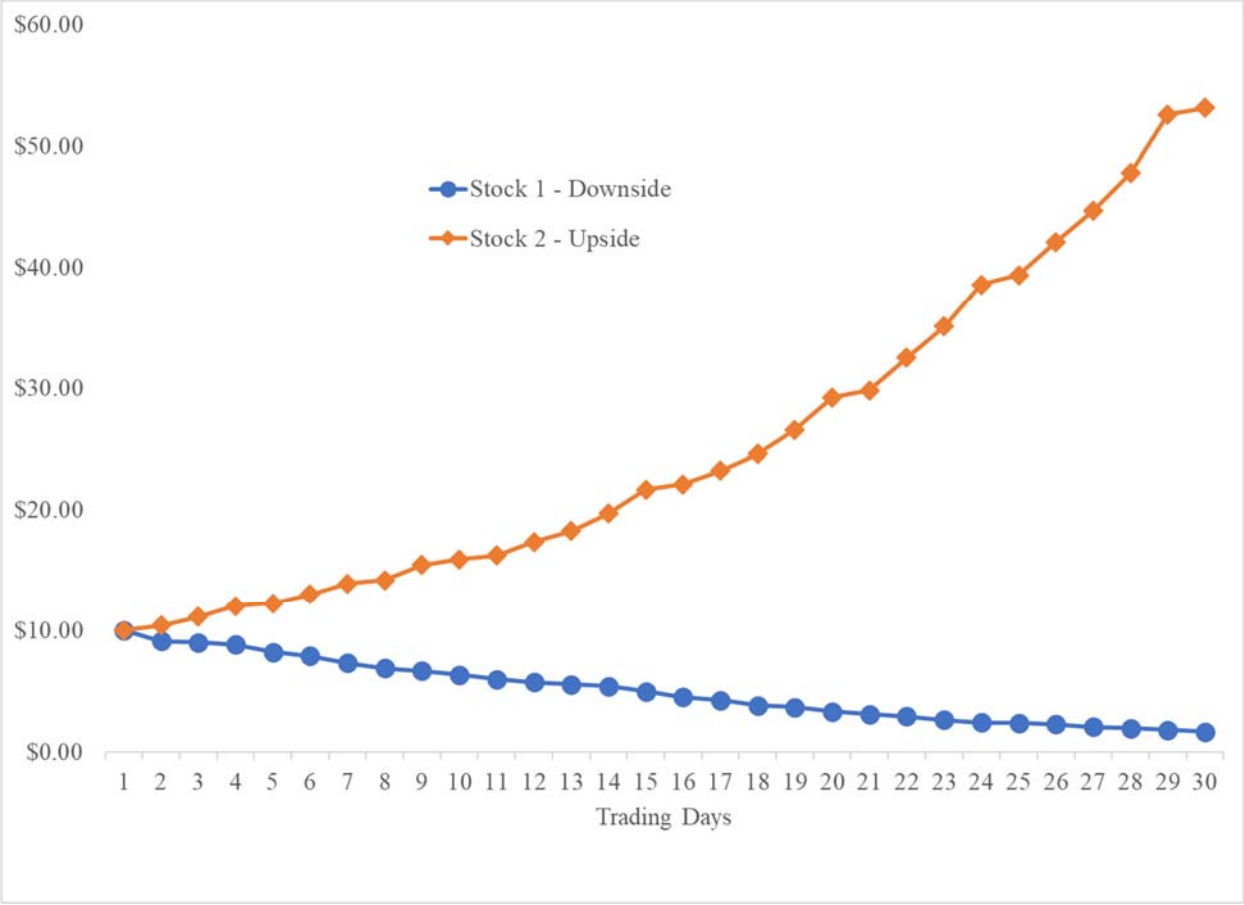
359. To wit, Robinhood has acknowledged that it has previously benefited from higher market volatility. In the same form 10-Q, it observed that the onset of the COVID-19 pandemic and its concomitant period of increased volatility resulted in a substantial growth of its user base: "Since the onset of the COVID-19 pandemic, we have seen substantial growth in our user base, retention, engagement and trading activity metrics, as well as continued gains and periodic all-time highs achieved by the equity markets generally. During this period, *market volatility*, stay-at-home orders and increased interest in investing and personal finance, coupled with low interest rates and a positive market environment, especially in the U.S. equity and cryptocurrency markets, *helped foster an environment that has encouraged an unprecedented number of first-time retail investors to become our users and begin trading on our platform*." (Emphasis added).

360. Thus, any argument justifying Robinhood's prohibition on purchasing the Relevant Securities on the basis of increased market volatility is plainly incongruous not only with Robinhood's economic interests, as reflected in its compensation model, but also its own financial statements.

361. *Second*, Robinhood's prohibition on *purchases* of the Relevant Securities but permitting their *sale* on its platform obviates any market volatility defense as a mathematical matter. Volatility equals the annualized standard deviation of a stock's returns over a particular time period. Volatility results from both upside (increases) and downside (decreases) movements in a security's price (i.e., returns). A rapid price decline would result in high volatility (large changes in returns) just as a rapid price increase does. Indeed, in absolute terms, a smaller price decrease can yield the same volatility as a much larger price increase. A 10 percent *increase* in the price of a $30.00 stock equals $3.00. But a 10 percent *decrease* of a $3.00 stock is only $0.30. However, the absolute values of the two returns (the percentage changes) are the same: ten percent. Changes in the price of a stock result in asymmetric differences because any security's price has a lower bound of zero (i.e., the price cannot be negative) but no upper bound. For this reason, potential losses on a put option (i.e., a short position) are considered infinite. The nature of such losses also explain Citadel Securities's desire to enter into a collusive agreement to limit purchases and thus constrain such losses, given that it held large short positions in the Relevant Securities.

362. The figure below demonstrates how monotonic price increases and decreases can both yield the same volatilities. Consider the prices of a two stocks, each of which trade at $10 on the first day of trading. The first stock randomly decreases every day for 30 trading days at between 1% and 10%. The second stock randomly increases over the same period by the same

amount, as shown in the graph below. One may be tempted, based on the asymmetric appearance of the upward and downward trajectories to conclude that Stock 2 (upward) has a higher volatility than Stock 1 (downward). But this is not the case. Indeed, the two volatilities are nearly identical: 43.5% for Stock 1 and 43.2% for Stock 2. This simple mathematical fact illustrates why an attempt to justify prohibiting purchases of the Relevant Securities while permitting their sales on the basis of moderating market volatility is inapposite.



363. Further, Robinhood's public attempt to attribute the motivation for its collusive conduct with Citadel Securities to the NSCC margin call also fails. As any brokerage, Robinhood had lines of credit at its disposal precisely for periods such as this, when investor demand would require it to provide float for a limited time period until clearing (2 days).

364. Indeed, according to Robinhood Securities's Annual Audited Report filed with the SEC, as of December 31, 2020, Robinhood Securities has "six revolving and unsecured lines of credit with the Parent [i.e., Robinhood Markets] for a total of $550.0 million." Indeed, Robinhood CEO Vlad Tenev told CNBC at the time that accessing its credits lines was a standard procedure: "By drawing on our credit lines which we do all the time as part of normal day to day operations we get more capital that we can deposit with the clearing houses and that will allow us to enable ideally more investing with fewer restrictions." Further, Robinhood, based on its own characterization of "democratizing finance", should have reasonably expected that it may need substantial credit to meet its self-proclaimed goals. Yet, far from democratizing finance, Robinhood's actions demonstrated its subservience to Citadel to the detriment of its Retail Investors.

365. Other efficiency arguments are also unavailing. Not all brokerages restricted Retail Investors from purchasing the Relevant Securities on or about January 28, 2021. Charles Schwab and TD Ameritrade, for example, did not halt any trading, but merely adjusted margin requirements for certain securities and restricted certain exotic strategies usually employed by the most advanced traders.

366. Further, the purchasing restrictions imposed by Robinhood far exceeded those imposed by other brokerage firms in both duration and scope. On January 28, 2021, Ally, Dough, Public.com, SoFi, Stash, Tastyworks and WeBull each restricted two or three of the Relevant Securities, but only for a matter of hours. Dough, for example, announced its restrictions at about 12:05 PM and at 2:45 PM announced that its restrictions had been lifted.

367. Similarly, on January 28, E*Trade imposed purchasing restrictions on just two of the Relevant Securities (GME and AMC), and these restrictions, which came late in the trading

day, were lifted the next day. And Interactive Brokers only restricted trading on options, not stocks, for five of the Relevant Securities. Interactive Brokers likewise lifted its trading restriction the next day.

368. By contrast, Robinhood's trading restrictions far exceeded those imposed by other brokerages. For starters, Robinhood was the only brokerage to restrict trading in all of the Relevant Securities. And even though Robinhood removed its purchasing restriction on the Relevant Securities on January 29, 2021, it continued to impose restrictions through February 4, 2021, by limiting the number of new positions of the Relevant Securities its users could open.

369. Indeed, this demonstrates that not only did Robinhood lack any procompetitive justifications for its anticompetitive acts pursuant to its collusive agreement with Citadel, but even if it did, Robinhood could have achieved those using less restrictive means.

The Structure and Characteristics of the Market Support the Existence of an Anticompetitive Agreement

370. The structure and characteristics of the market for securities, and in particular the lack of disclosure of short interest positions at any given time, make it conducive to collusion and anticompetitive conduct.

371. Courts, scholars, economists, and government agencies such as the Department of Justice recognize that structural market factors can help assess whether collusive conduct in violation of the antitrust laws has occurred.

372. *High Barriers to Entry.* Markets with high barriers to entry are susceptible to anticompetitive collusion. Under basic economic principles, if there are high barriers to entry, new entrants are unlikely to enter the market. If a broker dealer were to restrict trading in a security in high demand, new broker-dealers would enter the market to seek to benefit from the investors who wish to trade in the restricted security.

373. The No-Fee Brokerage Trading App Market is characterized by substantial barriers to entry. An entrant seeking to become a broker dealer or a clearing firm would need specialized knowledge, several licenses and memberships, including memberships in organizations such as FINRA. In addition to licensure costs, compliance costs to adhere to industry and regulatory standards are also significant.

374. Additionally, entrants require significant amounts of cash or capital to deposit at clearinghouses such as the DTCC as collateral. The significant collateralization requirement also serves as a barrier to entry.

375. Technological infrastructure has also become a barrier to entry. As the financial services industry shifts to become more and more technology focused and as many successful participants are financial technology firms, a new entrant needs to have the necessary infrastructure and expertise to navigate the digital market. Many of the exchanges on which securities are traded are electronic and fully automated and allow institutions to directly interact with the securities on offer on the exchanges. NASDAQ for example has been fully electronic since its inception in 1971. Therefore, any potential market entrant would also need significant technological wherewithal and sophistication in order to participate in the financial markets.

376. In particular, an entrant seeking to enter the No-Fee Brokerage App Market requires technical expertise in order to design an app or trading platform that users can access. This requires coding expertise as well as dedicated servers to maintain connections to exchanges in order to facilitate trades.

377. The PFOF Market is likewise defined by high barriers to entry. In particular, market makers are driven by sophisticated algorithms which require significant mathematical expertise to design.

378. Additionally, PFOF Market participants are generally HFT market makers and rely on latency and high-speed connections in order to engage in arbitrage strategies. This requires extensive infrastructure including high speed connections to exchanges and sophisticated hardware that enables their computerized algorithms to react to changes in the market in fractions of a second.

379. *High Fixed Costs and Low Variable Costs*. Markets characterized by high fixed costs and low variable costs are susceptible to anticompetitive collusion. The market for No-Fee Brokerage Trading Apps and the PFOF are defined by high fixed costs, low variable costs and benefit greatly from scale, particularly with regards to online broker-dealers and clearing firms.

380. For example, online broker-dealers participating in the No-Fee Brokerage Trading App Market require significant IT infrastructure, software, and data security infrastructure in order to develop and maintain the applications through which investors trade. This is in addition to the licensure and regulatory costs described above.

381. Likewise, PFOF Market participants (i.e., market makers) require significant IT infrastructure, software, and data security infrastructure in order to facilitate the digital clearing and custodial services they provide to online broker dealers.

382. Further, PFOF Market participants are generally high frequency traders and rely on sophisticated software and algorithms to match the incoming bids and offers of the orders routed to them from either broker dealers or clearing firms.

383. In particular for HFT market makers, latency is critical in order to react quickly and engage in arbitrage strategies. As a result, HFT market makers invest significant effort and resources to increase the speed of trading technology to maximize their profits.

384. Variable costs are low. Once infrastructure is in place, it generally is not more expensive to handle 10,000 trades as opposed to 10, particularly in the high-tech financial services industry as it exists today.

385. *Retail Investors Subject to the Conspiracy Are a Locked-In Captive Market.* In a competitive market, if a consumer desires a product or service that is not offered by a particular seller, the consumer can go to a different seller who does offer the desired product or service.

386. For example, in a competitive market for no-fee trading apps, if a broker does not offer a particular security the investor desires, investors will move assets and invest with a broker dealer that does offer trading in that security.

387. In the short run, however, an investor is generally locked into broker dealers that they already invest with.

388. Generally, the process to open a trading account with a broker dealer takes a short amount of time, typically several days. Depending on the type of account, the waiting period may be longer or shorter. For example, opening a cash account typically takes a shorter amount of time than opening a margin account or options account because a broker dealer may require additional levels of proof of financial solvency such as a credit score check.

389. Robinhood makes transfer of assets from users' Robinhood accounts difficult and expensive. For example, if a Robinhood user wishes to transfer or withdraw funds from their Robinhood account to their personal bank account, according to Robinhood, the funds would not be available for three-or-five days after the user initiates their request. In addition to being slow, Robinhood charges a $75 fee for a user to transfer her own assets to another brokerage. On its website, Robinhood answers the question: "Are there any fees to transfer my assets to another brokerage?" with "If you're transferring stocks or cash from Robinhood to an outside brokerage,

there is a $75 fee, which will be debited from your Robinhood account's available cash balance." *See* https://robinhood.com/us/en/support/articles/transfer-stocks-out-of-your-robinhood-account/

390. Should a user wish to withdraw all of their funds from their Robinhood account, Robinhood imposes further restrictions, and does not permit Robinhood users from trading positions in their owned securities, i.e., Robinhood users are unable to sell securities they already own if they initiated a request to withdraw all of their funds from their Robinhood account.

391. During the week of January 25, 2021, numerous Robinhood users reported these already substantial delays were exacerbated and Robinhood users were unable to withdraw or transfer their funds even within those time windows.

392. If restrictions occur, investors have no opportunity to switch or change broker dealers for days and are investing without market power.

Motive to Collude

393. Defendants Robinhood and Citadel Securities shared a common motive to conspire—to protect their individual self-interest over the welfare of Robinhood's users. Robinhood restricted competition on its platform to protect itself and Citadel from hemorrhaging losses totaling potentially billions of dollars. Defendants Robinhood and Citadel Securities shared a common motive to conspire—to protect their individual self-interests.

394. Citadel Securities possessed significant short positions in the Relevant Securities during the period in question. As the prices of the Relevant Securities went up, its exposure increased, and its losses were potentially infinite if it did not stop the surge of the Relevant Securities.

395. As Retail Investors bought securities and call options, Citadel Securities developed a large short position as a function of its market making, i.e., taking the other side of

buy orders or purchased call option orders. As of December 31, 2020, Citadel Securities (the market maker), reported $57.5 billion in "securities sold, not yet purchased, at fair value," which is likely representative of Citadel Securities's short position.

396. As the price of the Relevant Securities increased, Citadel Securities's short position became increasingly distressed subjecting to a potential Short or Gamma Squeeze. Citadel Securities stood to benefit from the one-sided restrictions by taking the other side of the Retail Investors' sell orders that resulted from the one-sided sell-only restrictions placed by Robinhood. By taking the other side of the sell orders, Citadel Securities could return the stock it had borrowed to sell short, and benefit from the rapidly decreasing price of the Relevant Security, mitigating its loss as a result of the Short or Gamma Squeeze.

397. Citadel Securities stood to gain from stopping the short squeeze by purchasing new short positions at the peak of the Relevant Security price increase and then profiting from the artificial decrease in share price after the trading restriction on January 28th. While there is no publicly available data to show that Citadel Securities was one of the parties that opened up new short positions on January 25th—recall there is no requirement that hedge funds disclose their short positions except as described above—it would be in Citadel Securities's best interest to open up new short positions if Citadel Securities planned to leverage its relationships to halt trading of GameStop and other Relevant Securities and artificially depress their share price.

398. Public Form 13F disclosures by market makers such as Citadel Securities reveal large short positions in Relevant Securities such as GME and AMC that grew substantially from December 2020 to March 2021. While short positions in stocks, call options and put options are not disclosed on Form 13F, long positions in put options are disclosed, and long put options represent short positions on the underlying stock.

399. On Citadel's December 31, 2020 13F filing, which consolidated Citadel's advisory and market making subsidiaries, Citadel disclosed a long put option position on 2,224,500 shares of GameStop stock and a long put option position on 1,749,200 shares of AMC stock. On Citadel's March 31, 2021 13F filing, Citadel disclosed that the GameStop long put option position had grown by almost 50% to 3,271,400 shares and that the AMC long put option position had grown by 224% to 5,676,200 shares.

400. As a result of Robinhood's PFOF relationship with Citadel Securities, which accounted for 34% of its revenue in 2020, more than Robinhood received from any other market maker, Robinhood was beholden to Citadel Securities. Rather than jeopardize what high level executives of Robinhood and Citadel Securities characterized as a "strong relationship" and/or "partnership" and risk not being able to find a replacement market maker willing to pay for its orders, Robinhood colluded with Citadel Securities to restrict competition on its platform to protect Citadel Securities from hemorrhaging losses totaling potentially billions of dollars.

401. As set forth in Robinhood's Registration Statement, Robinhood would have little to no recourse "if there are no other market makers that are willing to receive such orders from us or to pay us for such orders, or if we are unable to find replacement market-makers in a timely manner." (S-1, at 35). And in light of its planned 2021 IPO, Robinhood simply could not run the risk that its "transaction-based revenue would be impacted negatively" should Citadel Securities terminate its relationship with Robinhood.

402. As a result, Robinhood had every motivation to participate in the anticompetitive scheme to restrict trading to benefit its real client: Citadel Securities. In this relationship, it is actually the Retail Investors who are Robinhood's product; a product for which Citadel Securities is paying Robinhood a premium.

CLAIMS FOR RELIEF

COUNT ONE

CONSPIRACY TO RESTRAIN TRADE IN VIOLATIONOF SECTION 1 OF THE SHERMAN ACT, 15 U.S.C. § 1 (Against all Defendants)

403. Plaintiffs hereby incorporate by reference the factual allegations as set forth above.

404. Defendants conspired and entered into an anticompetitive scheme to fix, raise, stabilize, maintain or suppress the price of the Relevant Securities, and in order to restrain trade.

405. Faced with potentially disastrous losses due to their short positions, Citadel Securities, rather than engage in competition or the ordinary activities of the market, conspired, combined, agreed and colluded with Robinhood to restrict purchases in stocks by Retailer Investors and to manipulate and artificially suppress the price of stock, through which it could cover its short positions.

406. Defendants conspired and agreed with one another with the intent to artificially lower the price of the relevant stocks.

407. Defendants coordinated a collective shutdown of the stock brokerage market with respect to the Relevant Securities, prohibiting market participants with the exception of institutional investors such as Citadel Securities from purchasing stock in the Relevant Securities. Pursuant to the conspiracy, the restriction of stock purchases resulted in a sell-off of stocks, driving down prices in the Relevant Securities to levels that would not have been obtained, but for the conspiracy, combination, agreement and restraint of trade.

408. In furtherance of the conspiracy, combination, agreement and restraint of trade, before the opening of the stock market on January 28, 2021, Citadel Securities increased short volumes in anticipation of short calls on January 28, 2021.

409. In furtherance of the conspiracy, combination, agreement and restraint of trade, Robinhood prohibited or unreasonably restricted the purchases of shares of the Relevant Securities by Plaintiffs in restraint of trade.

410. As a direct and intended result of Defendants contract, combination, agreement and restraint of trade or conspiracy, Defendants caused injury to Plaintiffs and Class members by restricting purchases of the Relevant Securities. Robinhood deactivated the buy option on its platforms and left Plaintiffs and Class members with no option but to sell or hold shares of the stocks on their platforms. Plaintiffs and Class members, faced with an imminent decrease in the price of their positions in the Relevant Securities due to the inability of Retail Investors to purchase shares, were induced to sell their shares in the Relevant Securities at a lower price than they otherwise would have, but for the conspiracy, combination, agreement and restraint of trade. Additionally, Class members that would have purchased more stock in the Relevant Securities given the upward trend in price could not do so.

411. Robinhood disguised its wrongdoing by offering pretextual explanations for the restrictions, claiming it was subject to increased collateral requirements, when in reality the decision to restrict had already been made.

412. Pursuant to the contract, combination, agreement, conspiracy and restraint of trade, Robinhood continued to route sell orders to Citadel Securities to purchase stocks at the artificially deflated prices to reduce their distressed short positions. Citadel Securities, who were in exposed short positions due to the short and gamma squeeze, purchased the artificially price-

suppressed stocks to cover their short positions and concealed their activity by using off-exchange trading, including their own internal dark market maker units.

413. Defendants' anticompetitive and unlawful conduct is per se illegal.

414. Alternatively, even if Defendants' conduct does not constitute a per se violation of the Sherman Act, Defendants are liable under a rule of reason analysis.

415. As a direct and proximate result of Defendants' unlawful conduct, Plaintiffs and Class members were injured in their business and property.

PRAYER FOR JUDGMENT

WHEREFORE, Plaintiffs request that the Court enter judgment on their behalf and on behalf of the Class defined herein, by adjudging and decreeing that:

a. This action may proceed as a class action, with Plaintiffs serving as Class Representatives, and with Plaintiffs' counsel as Class Counsel;

b. Defendants have contracted, combined, and conspired in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1, and that Plaintiffs and the Class have been injured in their business and property as a result of Defendants' violations;

c. Plaintiffs and the Class are entitled to pre-judgment and post-judgment interest on the damages awarded to them;

d. Defendants are to be jointly and severally responsible financially for the costs and expenses of a Court-approved notice program through post and media designed to give immediate notification to the Class;

e. Plaintiffs and the Class recover their costs of this suit, including reasonable attorneys' fees as provided by law;

f. Plaintiffs and the Class are entitled to equitable relief appropriate to remedy Defendants' past and ongoing restraint of trade, including:

1) A judicial determination declaring the rights of Plaintiffs and the Class, and the corresponding responsibilities of Defendants.

g. Plaintiffs and the Class receive such other or further relief as may be just and proper.

JURY TRIAL DEMANDED

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs demand a trial by jury of all the claims asserted in this Complaint so triable.

Dated: January 20, 2022

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Joseph R. Saveri

By: /s/ *Frank R. Schirripa*
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