

**HEARING BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON FINANCIAL SERVICES**

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Testimony of Vladimir Tenev
Robinhood Markets, Inc.

I. Introduction

Chairwoman Waters, Ranking Member McHenry, and Members of the Committee: My name is Vlad Tenev, and I am the co-founder and CEO of Robinhood Markets, Inc.¹ Thank you for the opportunity to speak with you today about Robinhood and the millions of individual investors we serve.

Robinhood has changed the investing world for the better. We pioneered a mobile-first investing platform that allows our customers to trade stocks, exchange-traded funds (“ETFs”), options, and other investments with no trading commissions and no account minimums. By taking down these traditional barriers to investing and creating an accessible and intuitive platform, Robinhood opened up the markets to millions of retail investors.

¹ It is common in the financial services industry for broker-dealer firms’ operations to be subsidiaries of a larger holding company, as is the case with Robinhood. Robinhood Markets, Inc. (“Robinhood Markets”) is an American financial services company headquartered in Menlo Park, California. Robinhood Markets wholly owns Robinhood Financial, LLC (“Robinhood Financial”), Robinhood Securities, LLC (“Robinhood Securities”), and Robinhood Crypto, LLC (“Robinhood Crypto”). Robinhood Financial acts as an introducing broker for our customers by taking their trade orders. Robinhood Securities, a member SEC-registered clearinghouse, serves as a clearing broker for Robinhood Financial. In that capacity, Robinhood Securities executes customer orders received from Robinhood Financial by routing them to market-makers. Robinhood Securities also clears and settles customer trades. Robinhood Crypto facilitates cryptocurrency trading.

As broker-dealers, both Robinhood Financial and Robinhood Securities are registered with the SEC, and are members of the Financial Industry Regulatory Authority (“FINRA”) and the Securities Investor Protection Corporation (“SIPC”). Robinhood Securities is also a member of several clearinghouses and is bound by membership rules for the clearinghouses with which we transact to fulfill customer orders. Once customer trades have been executed by market-makers, Robinhood Securities then submits those trades to clearinghouses for post-trade processing, which includes clearance and settlement.

Unless otherwise specified, the terms “Robinhood,” “we,” and “our,” as used herein, generally refer to the broker-dealers Robinhood Financial and/or Robinhood Securities.

There have been some inaccurate reports that Robinhood Markets and its senior staff should be registered with FINRA. FINRA requires that only those entities and individuals engaged in the firm’s securities business be registered. However, Robinhood Markets, Inc., as a parent company that wholly owns broker-dealer subsidiaries, need not be registered. The entities and individuals involved in executing, settling, and clearing trades, Robinhood Securities, LLC and Robinhood Financial, LLC, are all appropriately licensed and registered with FINRA. It is common for those broker-dealer operations to be subsidiaries of a larger holding company, as is the case with Robinhood.

The buying surge that occurred during the last week of January in stocks like GameStop Corp. (“GameStop”) was unprecedented,² and it highlighted a number of issues that are worthy of deep analysis and discussion. I look forward to addressing those issues today, but I want to be clear at the outset: any allegation that Robinhood acted to help hedge funds or other special interests to the detriment of our customers is absolutely false and market-distorting rhetoric. Our customers are our top priority, particularly the millions of small investors who use our platform every day to invest for their future.

What we experienced last month was extraordinary, and the trading limits we put in place on GameStop and other stocks were necessary to allow us to continue to meet the clearinghouse deposit requirements that we pay to support customer trading on our platform. We have since taken steps to raise \$3.4 billion in additional capital to allow our customers to resume normal trading across Robinhood’s platform, including trading in the stocks we restricted on January 28. We look forward to continuing to serve our customers.

II. The Robinhood Story

I was born in Bulgaria, a country with a financial system that, at the time, was not accessible to ordinary people and was on the verge of collapsing. I immigrated with my family to America for a better life when I was five years old, and my co-founder Baiju Bhatt is the son of immigrants. Robinhood’s mission to democratize finance for all has special meaning for us. My parents, both of whom worked at the World Bank, instilled in me at an early age the values of financial responsibility and opportunity for all. And those values lie at the heart of Robinhood today. We fundamentally believe that participation in the U.S. capital markets is empowering and that everyone should have the opportunity to participate responsibly in our financial system.

Today, however, approximately 84 percent of the value of all stocks owned by Americans belong to the wealthiest 10 percent of households, and roughly half of all American households do not own any stocks at all.³ We want to open up access to the markets so everyday people, even those with small amounts to invest, can build wealth. We started by eliminating commissions and minimum investments, and we continue to pioneer changes that democratize finance for all, such as fractional shares and recurring investments. Further, we subscribe to the belief that participation and information are power. We provide simple, easy-to-understand and easy-to-use tools and educational resources that are not filled with complex industry jargon. This helps support customers from all backgrounds in their investing journey.

Our rapid growth has confirmed that retail investors were waiting for the right platform to help them enter the markets. We have over 13 million customers, and we are seeing new customers open accounts every day to take part in our financial markets. Robinhood Financial’s customers trade thousands of stocks and ETFs, as well as options and cryptocurrency—all with zero commissions and no account minimums.

² Analysts have referred to the activity as a five standard deviation, or five sigma, event—in other words, an event that had about a 1 in 3.5 million chance of occurring.

³ Edward Wolff, *Household Wealth Trends in the United States, 1962 to 2016: Has Middle Class Wealth Recovered*, National Bureau of Economic Research (Nov. 2017), https://www.nber.org/system/files/working_papers/w24085/w24085.pdf.

Even though we have grown and changed the investing landscape for the better, one thing has not changed: we recognize the responsibility that comes with helping our customers invest in dynamic financial markets. Robinhood is not an investment adviser and does not make investment recommendations, but we are committed to providing quality educational resources to our customers and the general public about the investment opportunities available to them. That is why Robinhood Financial offers a library of free, digestible articles about investing on the Learn website, which is available to the general public. Our goal is to provide people with the resources to make informed financial decisions and become long-term investors.

III. Robinhood’s Products and Features

Customers can invest in over 5,000 securities on Robinhood Financial’s brokerage platform, including U.S. equities and ETFs listed on U.S. exchanges. Robinhood Financial also currently offers covered options contracts for U.S. exchange-listed stocks and ETFs. Robinhood Crypto offers certain cryptocurrencies, including Bitcoin, Dogecoin, Ethereum, and Litecoin.

Importantly, there are some activities and products that are not available on the Robinhood platform.⁴ Robinhood does not offer certain products that may carry a higher risk profile such as uncovered options contracts and over-the-counter bulletin board stocks.⁵ Robinhood also does not allow short selling on our platform.

In addition to the products available, Robinhood Financial has introduced features that have opened the door for many investors who have historically been unable to access the stock market, allowing them to invest in stocks and ETFs they care about for the long-term. Robinhood Financial’s innovative fractional share and recurring investment products, for example, provide the ability for customers to purchase portfolios of blue chip stocks and ETFs over time. Further, the vast majority of our customers appear to be adopting buy and hold strategies to invest over extended periods. In fact, Robinhood customers purchasing fractional shares typically buy shares of blue chip companies. Only about two percent of customers qualify as pattern day traders.⁶

Overall, as of the end of 2020, about 13 percent of Robinhood customers traded basic options contracts (e.g., puts and calls), and only about two percent traded multi-leg options. Less than three percent of funded accounts were margin-enabled.⁷

⁴ Some or all of these products are available on competitor platforms.

⁵ Customers are able to close their positions in securities that trade over the counter after being delisted. Robinhood Financial also offers a limited number of American Depositary Receipts for globally-listed companies.

⁶ FINRA Rule 4210(f)(8)(ii) defines the term “pattern day trader” as “any customer who executes four or more day trades within five business days.”

⁷ Robinhood Instant and options accounts may also be considered margin accounts. However, Robinhood Gold provides customers with the ability to trade securities on margin not simply related to a “float” or short-term extension of credit. In the case of Robinhood Instant, the “float” applies to unsettled funds after the initiation of a deposit from a customer’s bank or the sale of securities. In the case of options accounts, the short-term extension of credit may apply in circumstances such as early assignments. *Letter to Reps. Sherman, Foster, Casten, Underwood and Sens. Durbin and Duckworth*, Robinhood (Aug. 7, 2020).

With respect to options trading, under FINRA rules, broker-dealers are required to collect certain information about a customer to determine whether to approve that customer's request to trade options. Specifically, Robinhood requires customers to disclose, among other things, stated investment experience and knowledge, age, investment objectives, employment status, estimated annual income from all sources, estimated net worth, estimated liquid net worth, and number of dependents. Robinhood conducts an assessment of information collected in deciding whether to approve a customer account for options trading.

We also recently made several changes to our options offering. For example, we improved our options educational materials and hired a dedicated Options Educations Specialist to support our continued education initiatives. We made changes to our app interface to add more safeguards and information, added the ability to cover early assignments in-app, and strengthened the eligibility criteria for new customers seeking to trade certain types of options strategies. We invested in growing our customer support teams and began offering, among other things, phone-based customer support for options traders.⁸

IV. Robinhood's Customers

Since founding Robinhood, we have made great progress removing barriers to finance for everyday investors and spurring changes in the industry. In fact, most incumbent brokerage firms recently followed Robinhood's lead by eliminating their own commissions and account minimums, saving American investors—regardless of whether they are Robinhood customers—millions of dollars per year in commission fees.

By offering zero-commission trades and no account minimums, Robinhood Financial opened up investing to a younger and more diverse group of Americans. The median age of our investors is 31, and about half of the customers self-identify as first-time investors. The median customer account size is about \$240, with an average account size of about \$5,000. As noted above, most customers appear to be investing in listed stocks and ETFs for the long-term. What we see is generally not consistent with popular memes suggesting that most of our brokerage customers are unsophisticated day traders taking inordinate risks with large sums of money on complex financial products.

We are also proud that the number of women trading on Robinhood's platform nearly tripled in 2020, and women today represent a higher percentage of our customer base than ever before. Robinhood customers are also more racially and ethnically diverse than the industry average. Based on a representative sampling between July and December 2020, African American investors represented nine percent of Robinhood's customer base, compared with just three percent at incumbent firms. Over the same period, Hispanic investors accounted for 16 percent of Robinhood's customers, compared with seven percent at incumbent firms.⁹ Across all brokerages in the United States, stock ownership is younger and more diverse than when Robinhood was

⁸ An Update on Robinhood's Options Offering, Robinhood (Sept. 7, 2020), <https://blog.robinhood.com/news/2020/9/7/an-update-on-robinhoods-options-offering>.

⁹ See Answer to Mass. Securities Division Complaint, *In the Matter of Robinhood Financial LLC*, No. E-2020-0047 (Jan. 29, 2021).

founded back in 2013, and we believe that our platform has helped to propel those changes across the industry.

V. How Robinhood Makes Money

As Robinhood has grown and other brokerage firms have adopted our business model, there have been questions about how we offer zero-commission trades and other benefits to customers. As disclosed to customers and the public, Robinhood Securities receives what is called “payment for order flow” to route trades to market makers¹⁰ that generally offer better prices than those available on exchanges.¹¹ Most retail brokerage firms receive payment for order flow, and subject to certain disclosure requirements, the SEC has permitted payment for order flow for decades.¹²

With payment for order flow, market-makers provide Robinhood with a rebate for executed orders, and in return, they provide reliable, quick, and competitive trade executions. Importantly, we have negotiated the same rebate rate with each of the market-makers to whom we route customers’ orders, which eliminates any incentive for Robinhood to direct orders to any specific market maker. Robinhood Financial and Robinhood Securities conduct regular and rigorous reviews of execution quality for our customers as required by mandated best execution rules.

Robinhood’s customers benefit greatly from payment for order flow as market-makers typically provide better prices than public exchanges. In fact, Robinhood customers received more than \$1 billion in price improvement—the price they received compared to the best price on a public exchange—in the first half of 2020. Robinhood Securities’ routing system is designed to prioritize routing orders for execution to market venues based on the likelihood of obtaining price improvement in a stock over the last 30 days. We believe this model benefits customers by further seeking best execution for every trade on the Robinhood platform.

¹⁰ A “market maker” is a firm that stands ready to buy or sell a stock at publicly quoted prices. *See Market Centers, Buying and Selling Stock*, SEC, <https://www.sec.gov/fast-answers/answersmarkethtm.html#:~:text=A%20%22market%20maker%22%20is%20a,routing%20your%20order%20to%20them>.

¹¹ We also generate revenue while serving our customers in a variety of other ways, including our subscription service, Robinhood Gold, which provides customers with a suite of powerful investing tools. Income generated from cash, stock loan income from counterparties, and interchange fees from purchases made with the Robinhood Cash Management debit card are other avenues from which we generate revenue. *See How Robinhood Makes Money*, Robinhood, <https://robinhood.com/us/en/support/articles/how-robinhood-makes-money/>.

¹² Payment for order flow has been used by broker-dealers for decades. Since 1994, the SEC has taken the position that “disclosure is the appropriate response to issues raised by payment for order flow” and acknowledged that payment for order flow “may result in lower execution costs, facilitate technological advances in retail customer order handling practices and facilitate competition among broker-dealers.” *See Payment for Order Flow*, Exchange Act Release No. 34-34902, 1994 WL 587790 (Oct. 27, 1994) (available at <https://www.sec.gov/rules/final/orderfin.txt>). Consistent with this approach, In November 2000, the SEC again considered the potential conflict of interest issues related to payment for order flow and adopted additional rules to “increase[e] the visibility of order execution and routing practices” by requiring Rule 606 reports to be filed quarterly, thereby “empower[ing] market forces with the means to achieve a more competitive and efficient national market system for public investors.” *See Disclosure of Order Execution and Routing Practices*, Exchange Act Release No. 34-43590, 2000 WL 1721163, at *12 (Nov. 17, 2000).

As stated, Robinhood is not unique in receiving payment for order flow. Annual reports show that Charles Schwab, E*Trade, and TD Ameritrade all received significant payment for order flow revenues in 2019.¹³ It is important to note that Robinhood's payment for order flow relationships are with market-makers and not with hedge funds. Robinhood Securities regularly evaluates its counterparties and routes customer orders to those market-makers that can provide the best execution quality on those orders.

Consistent with SEC Rule 606, Robinhood discloses its payment for order flow arrangements with market-makers on a quarterly basis.¹⁴ These disclosure reports are publicly available on the Robinhood Financial website and in the app.¹⁵ These order flow disclosures help our customers better understand our routing decisions on order execution quality.

VI. The Robinhood App

At Robinhood, we pride ourselves on providing access to commission-free investing through an appealing, simple platform. But even though we have made investing easier, we recognize it is not a game. While I am not aware of any agreed upon definition of "gamification," I do know that Robinhood Financial designed its app to appeal to a new generation of investors who are more comfortable trading on smartphones than speaking with a broker, and Robinhood has built it to include features that, based on our outreach and research, customers feel familiar with and expect to see in a mobile product. The mobile app provides the intuitive experience customers want, while also providing them with tools and information to learn about investing and keep tabs on their finances.

I am confident that the easy-to-use interface enables customers to understand, control, and direct their finances in a responsible way. Robinhood Financial does not offer rewards or levels to encourage more trading. Robinhood Financial does sparingly use features like confetti animation to celebrate certain infrequent milestone events or a reward stock for signing up or referring friends. This is in line with similar animations and celebrations used, for example, when customers sign-up for the debit card product in the application. We believe that by making finance accessible and familiar, more people will access the markets. Other features regarding, for example, stock price movements, upcoming earnings calls, and breaking news are for informational purposes only, are opt-in tools, and are used by other retail brokerages.

¹³ Prior to Robinhood's entrance into the market, many incumbent brokerages were charging customers a trading commission and collecting payment for order flow as well. *See, e.g.*, 2017 TD Ameritrade Annual Report (available at https://s2.q4cdn.com/437609071/files/doc_financials/annual/2017/TD-Ameritrade-2017-Annual-Report.pdf); 2017 Charles Schwab Annual Report (available at https://content.schwab.com/web/retail/public/about-schwab/schw_annual_report_2017.pdf).

¹⁴ SEC Rule 606 requires broker-dealers that route customer orders to publish quarterly reports that provide a general overview of their routing practices. In this report, the venues to which non-directed customer orders in U.S. exchange-listed equity securities and options were routed for execution must be disclosed, as well as the nature of any relationship the broker-dealer has with each venue. SEC Rule 606 disclosures also include information on the total shares executed, fill rate, and average fill size. The purpose of this report is to provide the public with information on how broker-dealers route orders, enable the evaluation of order routing practices and foster competition among market participants.

¹⁵ *See 2020 Q4 Rule 606 Disclosure Report*, Robinhood Securities, <https://cdn.robinhood.com/assets/robinhood/legal/RHS%20SEC%20Rule%20606a%20and%20607%20Disclosure%20Report%20Q4%202020.pdf>.

Ultimately, Robinhood listens to its customers and build products that serve their needs. For example, we recently launched a Cash Management feature that allows customers to deposit paychecks, pay bills, make debit-card purchases, manage their budget, and access cash from an ATM.

We are honored to play a significant role in our customers' financial lives. We look forward to further innovation and to offering our customers the services they can use to manage their day-to-day finances and build wealth.

VII. Informing and Supporting Customers

Financial literacy remains a key area of investment as Robinhood Financial continues to grow its trading platform. We fully recognize, and have always taken seriously, the responsibility that comes with helping customers invest. That's why Robinhood provides free educational resources available to everyone—not just our customers—on the Robinhood Learn website. We've also rolled out features like our profiles and “Year in Review” that help customers reflect on their investing activity and understand the diversity of their investments — all with a focus on simplicity and ease-of-understanding.

Our goal is to demystify finance as much as possible by avoiding complex industry language and providing useful tools to inform our customers. Robinhood Financial has published more than 650 articles to help people learn about investing and answer their most fundamental questions about investing such as “What is a Limit Order?” along with articles covering a host of other subjects. In 2020, Robinhood Learn articles were read by more than 3.2 million people, and unique visits rose 260% from January through November 2020. Robinhood Financial provides all customers with free access to premium financial news, including videos and articles from the *Wall Street Journal*, *Bloomberg News*, *Reuters*, and *Barron's*. It is also finding new, innovative ways to share digestible business news to help customers stay up-to-date on the markets, like Robinhood's Snacks Daily podcast, which was downloaded nearly 40 million times in 2020.

Additionally, Robinhood Financial has taken steps to proactively inform customers about certain financial products like options. For example, one type of options contract—a “call option”—confers the right to buy a specified amount of stock at a specified price (the “strike price”) by a specific date (the “expiration date”). If the stock rises above the strike price, a call option is said to be in the money. The customer has the right to buy the stock at the strike price even though the stock is trading at a higher price. By contrast, if the stock price is below the strike price, the option is out of the money (“OTM”). As there is no reason for the customer to exercise an OTM option, the customer could simply let the contract expire. In January 2021, Robinhood became aware that some customers were occasionally exercising OTM options, causing them to suffer losses immediately upon exercise. This issue continued despite Robinhood's warnings and education materials available through Robinhood Learn. To prevent these losses, Robinhood Financial implemented a procedure requiring customers to speak to a live registered representative before exercising OTM options. This requirement was intended to provide an opportunity for the representative to explain to the customer the downsides of exercising an OTM option. This procedure remained in effect through January 28, 2021. As of January 29, 2021, Robinhood

Financial does not permit customers to exercise OTM options. Robinhood Financial has also recently implemented a call-back service line dedicated to answering customers' questions about options trading, and we are in the process of expanding live phone support to customers needing assistance with account security.

VIII. GameStop and Market Volatility

As has been widely reported, there was historic volatility in the trading of certain securities during the week of January 25, 2021. This movement in the market garnered significant attention in the press and was propelled, in part, by increased activity on social media. In the face of this unprecedented volatility and volume, which has been cited as a five sigma event, Robinhood Securities placed temporary restrictions on certain securities to facilitate compliance with clearinghouse deposit requirements, thereby allowing Robinhood to continue to serve our customers and comply with all trading regulations. A number of other brokerage firms imposed similar restrictions for similar reasons.¹⁶ Once again, I want to be clear. The action we took was for one reason and one reason only: to allow us to continue to meet our regulatory deposit requirements.

To understand the actions Robinhood took in the wake of this market volatility, it is crucial to understand how the clearing process currently operates. A brief overview of this process is included below, followed by a description of Robinhood's experience over the course of the week of January 25.

When a customer buys or sells a security, Robinhood Financial, as the introducing broker, sends the order to Robinhood Securities, the clearing broker, which routes the order for execution to a market-maker and submits the resulting trade to a clearinghouse for clearance and settlement. For equities, it takes several days for the clearinghouse to process the transaction and effect the related transfers of cash and securities between buyers and sellers. This is known as "T+2" settlement, denoting the trade date plus a two-day "settlement period." This T+2 settlement cycle is codified by SEC Rule 15c6-1(a), which prohibits broker-dealers from effecting the purchase or sale of a security later than the second business day after the execution of the trade.¹⁷ Pursuant to the SEC Rule, a customer's cash or securities is locked up during the T+2 settlement process.

To cover the open settlement risk during the settlement period, Robinhood Securities is required to place a deposit using its own funds (not customer funds) at the clearinghouse to cover the risk until the trade "settles." To ensure that both sides follow through on a given trade, each side is required to post collateral with the relevant clearinghouse for the two-day period between when a trade is executed and when it settles. This collateral requirement is referred to as the "Value-at-Risk" collateral ("VaR"). To calculate the collateral deposit requirement, the clearinghouse looks

¹⁶ See Mark DeCambre, GameStop and AMC Trading Restricted by TD Ameritrade, Schwab, Robinhood, Others, MarketWatch (Jan. 27, 2021), <https://www.marketwatch.com/story/gamestop-amc-trading-is-now-being-restricted-at-td-ameritrade-11611769804>.

¹⁷ Following the sale of securities, a customer's funds need to settle for two business days before the funds can be withdrawn. See *Withdrawal Rules*, Robinhood, <https://robinhood.com/us/en/support/articles/withdraw-money-from-robinhood/>.

at unsettled trades and applies a number of risk-based metrics. The clearinghouse may also assign additional collateral requirements.

In order to clear and settle customer transactions, each trading day by 10:00 a.m. ET, clearing brokers like Robinhood Securities must satisfy clearinghouse deposit requirements to support their customer trades during the settlement period. Depending on a particular day's deposit requirement at the clearinghouse, Robinhood Securities may be required to deposit additional money with the clearinghouse during the day.

On January 25, Robinhood Securities' collateral obligation from NSCC, its principal clearinghouse, totaled approximately \$124 million. By January 27, Robinhood Securities increased the margin maintenance to 100 percent for GameStop and other securities, making them non marginable. This meant that customers had to pay cash to purchase these securities and they could not use the securities as margin collateral to buy other stocks on margin. Robinhood also began limiting customers from opening new options positions in GameStop and certain other securities. These actions were taken for risk management purposes. The same day, the Chicago Board Options Exchange Volatility Index, or "VIX", spiked by 62%, a dramatic increase that the *Wall Street Journal* reported was the third-largest percentage daily gain since 1990.¹⁸ In just three days, from January 25 to January 28, the price of GameStop shares rose over 530 percent.

At approximately 5:11 a.m. EST on January 28, the NSCC sent Robinhood Securities an automated notice stating that Robinhood Securities had a deposit deficit of approximately \$3 billion. That deficit included a substantial increase in Robinhood Securities's VaR based deposit requirement to nearly \$1.3 billion (up from \$696 million), along with an "excess capital premium charge" of over \$2.2 billion. SEC rules prescribe the amount of regulatory net capital that Robinhood Securities must have,¹⁹ and on January 28 the amount of the NSCC VaR charge exceeded the amount of net capital at Robinhood Securities, including the excess net capital maintained by the firm. Under NSCC rules, this triggered a special assessment—the "excess capital premium charge." In total, the NSCC automated notice indicated that Robinhood Securities owed NSCC a total clearing fund deposit of approximately \$3.7 billion. Robinhood Securities had approximately \$696 million already on deposit with NSCC, so the net amount due was approximately \$3 billion.

Between 6:30 and 7:30 am EST, the Robinhood Securities operations team made the decision to impose trading restrictions on GameStop and other securities.²⁰ In conversations with NSCC staff early that morning, Robinhood Securities notified the NSCC of its intention to implement these restrictions and also informed the NSCC of the margin restrictions that had already been imposed. NSCC initially notified Robinhood Securities that it had reduced the excess capital premium charge by more than half. Then, shortly after 9:00 am EST, NSCC informed Robinhood Securities that the excess capital premium charge had been waived entirely for that day and the net deposit

¹⁸ Quentin Webb, *Volatility Index Soars*, WSJ (Jan. 27, 2021), <https://www.wsj.com/livecoverage/amc-gamestop-stock-market/card/G0TKmyrTdokxPNjwjtwe>.

¹⁹ Robinhood Securities remained in compliance with SEC net capital rules at all relevant times.

²⁰ Those who owned GameStop and the other small number of restricted stocks could sell their shares but not buy more, and those who were exercising options contracts on GameStop could buy shares to cover. Robinhood Securities did not impose these trading restrictions at the request of hedge funds or to try and move prices in GameStop one way or the other.

requirement was approximately \$1.4 billion, nearly ten times the amount required just days earlier on January 25. Robinhood Securities then deposited approximately \$737 million with the NSCC that, when added to the \$696 million already on deposit, met the revised deposit requirement for that day.

The chart below illustrates the approximate NSCC depository requirements that Robinhood encountered over the course of the week of January 25, 2021²¹:

Date	Daily VaR Requirement Start of Day	Daily VaR Requirement End of Day
January 25, 2021	\$125 million	\$202 million
January 26, 2021	\$291 million	\$291 million
January 27, 2021	\$282 million	\$690 million
January 28, 2021	\$1.4 billion	\$1.4 billion
January 29, 2021	\$354 million	\$753 million

The events of the week of January 25, 2021 and the related NSCC depository requirements were unprecedented. In response, Robinhood took swift action to ensure that our customers could continue trading in the thousands of other stocks available on our platform that day and in the days ahead.

Robinhood Securities worked quickly to remove trade restrictions in GameStop and other affected securities. After Robinhood Securities paid the NSCC deposit requirement on January 28, Robinhood began discussions with our investors to raise new capital to ensure that we could meet future potential deposit requirements and thereby return to providing Robinhood customers unrestricted access to all securities on the platform. Over the course of approximately four days, we received commitments for approximately \$3.4 billion from investors.

IX. Robinhood’s Customer Notifications and Communications

Transparency is a priority at Robinhood, and the ability to restrict trades is disclosed to customers when they sign up with Robinhood Financial. Robinhood’s ability to temporarily restrict trading on certain securities during periods of significant volatility is communicated to our customers as part of the account opening agreement. When opening an account, all customers are required to sign a customer agreement, in which the customer acknowledges that Robinhood retains authority, in its “sole discretion and without prior notice,” to restrict customer trading activity. Agreements with these terms are standard across the industry.²²

In addition, on January 30, 2021, the SEC released an investor alert and bulletin titled, “Thinking About Investing in the Latest Hot Stock? Understand the Significant Risks of Short-Term Trading Based on Social Media,” which not only warned retail investors of the risk of short-term investing

²¹ Robinhood’s actual funds on deposit with NSCC may exceed the required deposit amounts.

²² See Robinhood Customer Agreement at 6 (“I understand Robinhood may at any time, in its sole discretion and without prior notice to Me, prohibit or restrict My ability to trade securities.”); *id.* at 11 (“I understand that Robinhood may, in its discretion, prohibit or restrict the trading of securities . . . in any of My Accounts.”) (available at <https://cdn.robinhood.com/assets/robinhood/legal/Robinhood%20Customer%20Agreement.pdf>).

in a volatile market, but made clear that broker-dealers had the right to reject or limit customer transactions for legal, compliance, or risk management reasons. The SEC highlights that “in certain circumstances, broker-dealers may determine not to accept orders where a transaction presents certain associated compliance or legal risks.”²³

Throughout this recent period of heightened volatility in GameStop and other securities, Robinhood Financial continued communicating with customers about the increased risks and the importance of being an informed investor. Robinhood Financial also sent targeted messages to customers with existing positions in GameStop and other affected securities informing them that those securities were experiencing significant volatility and investments in those companies may involve added risk.

X. Real-Time Settlement: Big Changes Could Protect Small Investors

As previously described, it takes the trade date plus two days for an equities transaction to be cleared and settled by a clearinghouse. During this period, the buyer and seller of the security must post collateral with the clearinghouse, and the clearinghouse may require an additional deposit as excess collateral. Clearinghouses look at a firm’s unsettled equity trades when determining how much collateral is required.²⁴ Clearinghouses look at a number of factors, including volatility, when looking at specific stocks in order to quantify risk and may assign additional charges based on how many unsettled trades there are of one stock.²⁵

Additionally, if a firm’s customers have more buy than sell orders, and the securities they are buying are more volatile, the deposit requirement will be significantly higher.²⁶ For example, if a broker-dealer’s customers have submitted more orders to purchase than to sell a particular security and the price of the security that the broker-dealer’s customers are buying is more volatile, then the resulting deposit requirement will generally be higher.

In addition to clearinghouse requirements, as broker-dealers, Robinhood Financial and Robinhood Securities are subject to SEC regulations that require broker-dealers to maintain certain levels of regulatory capital to ensure the ability to promptly satisfy their liabilities at all times.²⁷ The SEC’s primary rule is generally referred to as the “Uniform Net Capital” rule, which sets forth a methodology for computing a broker-dealer’s net capital, sets forth minimum net capital levels which must be maintained at all times, establishes notification requirements in the event that a broker-dealer’s level of net capital falls below certain minimum thresholds, and sets restrictions

²³ *Thinking About Investing in the Latest Hot Stock? Understand the Significant Risks of Short-Term Trading Based on Social Media*, SEC (Jan. 30, 2021), <https://www.sec.gov/oiea/investor-alerts-and-bulletins/risks-short-term-trading-based-social-media-investor-alert>.

²⁴ *See NSCC Disclosure Framework for Covered Clearing Agencies and Financial Market Infrastructures* at 57-61, DTCC (Dec. 31, 2020) https://www.dtcc.com/-/media/Files/Downloads/legal/policy-and-compliance/NSCC_Disclosure_Framework.pdf.

²⁵ *See* SEC Release No. 34-82631, File No. SR-NSCC-2017-808, at 6 (the volatility charge formula is set forth at Procedure XV, § 1(A)(1)(a)(i), p. 287-90 of the NSCC Rules and Procedures) (available at <https://www.sec.gov/rules/sro/nsc-an/2018/34-82631.pdf>).

²⁶ *Id.*

²⁷ *See* 17 C.F.R. § 240.15c3-1.

on broker-dealer activities when capital falls below certain levels.²⁸ The Uniform Net Capital Rule functions as a net liquid assets requirement insofar as the rule recognizes only liquid assets as contributing to regulatory capital.²⁹

To ensure compliance with the Uniform Net Capital Rule, broker-dealers perform repeated net capital computations.³⁰ The calculation begins with the broker-dealer's ownership equity under Generally Accepted Accounting Principles. The broker-dealer is then required to perform adjustments by deducting illiquid assets and applying variable "haircuts" or charges to risky assets such as securities to compensate for market and credit risks. The resulting figure is the broker-dealer's regulatory capital. This amount is then compared to various minimums based on the broker-dealer's types and volume of activity. If a broker-dealer were to fail to maintain specified levels of regulatory capital, it could be subject to immediate suspension or revocation of registration, which could lead to the liquidation of its holdings on behalf of customers and the elimination of its ability to serve its customers.

During the week of January 25, 2021, Robinhood saw the impact the T+2 trade settlement period has on its customers and ultimately the entire American financial system. Clearinghouse deposit requirements skyrocketed overnight. People were unable to buy some of the securities they wanted.

The existing two-day period to settle trades exposes investors and the industry to unnecessary risk and is ripe for change. Every day, clearing brokers like Robinhood Securities have to meet deposit requirements imposed by clearinghouses to support customer trades between the trade date and the date the trades settle. Investors are left waiting for their trades to clear, and the clearing brokers have their proprietary cash locked up, until the settlement is final days after the trade. The clearinghouse deposit requirements are designed to mitigate risk, but last week's wild market activity showed that these requirements, coupled with an unnecessarily long settlement cycle, can have unintended consequences that introduce new risks.

There is no reason why the greatest financial system the world has ever seen cannot settle trades in real time. Doing so would greatly mitigate the risk that such processing poses. Indeed, real-time settlement would have allowed Robinhood Securities to better react to periods of increased volatility in the markets without restricting the purchasing of securities.

It has been four years since the securities industry moved from a three-day to a two-day settlement cycle.³¹ The Depository Trust & Clearing Corporation has recognized the benefits of an even shorter timeframe, leveraging technology.³² Meanwhile, millions of new investors have entered

²⁸ *Id.*

²⁹ *Id.*

³⁰ *See Net Capital Requirements for Brokers or Dealers SEC Rule 15c3-1*, FINRA (2014), <https://www.finra.org/sites/default/files/sea-rule-15c3-1-interpretations.pdf>.

³¹ *See SEC Adopts T+2 Settlement Cycle for Securities Transactions*, SEC (Mar. 22, 2017), <https://www.sec.gov/news/press-release/2017-68-0>.

³² *See Modernizing the U.S. Equity Markets Post-Trade Infrastructure*, DTCC (Jan. 2018) available at <https://www.dtcc.com/~media/Files/downloads/Thought-leadership/modernizing-the-u-s-equity-markets-post-trade-infrastructure.pdf>.

the market for the first time as technology transforms the world. It is time for the financial system to catch up.

The industry, Congress, regulators, and other stakeholders need to come together to deploy our intellectual capital and engineering resources to move to real-time settlement of U.S. equities. Accomplishing this won't be without its well-documented challenges, but it is the right thing to do and Robinhood is eager to drive this critical effort on behalf of all investors.

XI. Conclusion

There are certainly lessons to be learned from the events of the last month, and Robinhood looks forward to being part of the conversation around these issues moving forward. I want to thank the millions of customers who use Robinhood to access the markets every day and to express my appreciation for being able to discuss these important issues with you today. I welcome the opportunity to answer your questions.