GAME STOPPED? WHO WINS AND LOSES WHEN SHORT SELLERS, SOCIAL MEDIA, AND RETAIL INVESTORS COLLIDE

VIRTUAL HEARING

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GAME STOPPED? WHO WINS AND LOSES WHEN SHORT SELLERS, SOCIAL MEDIA, AND RETAIL INVESTORS COLLIDE

Thursday, February 18, 2021

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 12:01 p.m., via Webex, Hon. Maxine Waters [chairwoman of the committee] presiding.

Members present: Representatives Waters, Maloney, Velazquez, Sherman, Meeks, Scott, Green, Cleaver, Perlmutter, Himes, Foster, Beatty, Vargas, Gottheimer, Gonzalez of Texas, Lawson, San Nicolas, Axne, Casten, Torres, Lynch, Adams, Tlaib, Dean, Ocasio-Cortez, Garcia of Illinois, Garcia of Texas, Auchincloss; McHenry, Lucas, Luetkemeyer, Wagner, Huizenga, Stivers, Barr, Hill, Emmer, Zeldin, Loudermilk, Mooney, Davidson, Budd, Kustoff, Hollingsworth, Gonzalez of Ohio, Rose, Steil, Timmons, and Taylor.

Chairwoman WATERS. The Financial Services Committee will come to order. Without objection, the Chair is authorized to declare a recess of the committee at any time.

As a reminder, I ask all Members to keep themselves muted when they are not being recognized by the Chair. This will minimize disturbances while Members are asking questions of our witnesses. The staff has been instructed not to mute Members, except when a Member is not being recognized by the Chair and there is inadvertent background noise.

Members are also reminded that they may only participate in one remote proceeding at a time. If you are participating today, please keep your camera on. And if you choose to attend a different remote proceeding, please turn your camera off.

Today, we will make an exception and allow Members from Texas to participate without their video function if they are experiencing power outages which prevent them from having a working video.

If Members wish to be recognized during the hearing, please identify yourself by name to facilitate recognition by the Chair. I would also ask that Members be patient as the Chair proceeds, given the nature of conducting committee business virtually.

Today's hearing is entitled, "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide."

I now recognize myself for 3 minutes to give an opening statement.

Good afternoon, everyone. This hearing is the first in a series of hearings for the committee to examine the recent market volatility involving GameStop and other stocks. I want to know how each of the witnesses here today and the companies they represent contributed to the historic trading events in January.

This recent market volatility has put a national spotlight on institutional practices by Wall Street firms and prompted discussion about the evolving roles of technology and social media in our markets. These events have illuminated potential conflicts of interest and the predatory ways that certain funds operate, and they have demonstrated the enormous potential power of social media in our markets.

They've also raised issues involving gamification of trading, potential harm to retail investors, and the business models of apps with retail investors as their users.

All of this is why we have witnesses from many of the key players here to testify today, including witnesses representing Wall Street firms, Melvin Capital and Citadel; social media company, Reddit; and trading app, Robinhood; as well as one of the retail investors involved.

In subsequent hearings, we will hear from regulators and other experts regarding these events, including why Dodd-Frank Act rulemakings related to short selling disclosures were never implemented.

Many Americans feel that the system is stacked against them, and that no matter what, Wall Street always wins. In this instance, many retail investors appeared motivated by a desire to beat Wall Street at its own game.

And given the losses that many retail investors have sustained as a result of volatility in the system, there are many whose belief that the system is rigged against them has been reinforced.

Others have noted that there are winners and there are losers in every trade in our financial markets.

Our role, as the Financial Services Committee, is to ensure fairness in our financial markets and systems, robust protections for investors, and accountability for Wall Street.

Today, we will hear firsthand from the witnesses regarding these events. The hearing will be an opportunity for this committee to get the facts about the role each of the entities the witnesses represent played in the events we are examining today.

I now recognize the ranking member of the committee, the gentleman from North Carolina, Mr. McHenry, for 5 minutes.

Mr. MCHENRY. Thank you, Madam Chairwoman.

And let me just begin by saying, I believe Americans are far more sophisticated, informed, and capable than people in D.C. give them credit for.

When I called for this hearing last month, I wanted this to be a fact-finding mission. We have speculation, we have headlines and finger pointing, but we don't have the facts. We need facts, not just the salacious bits or nasty comments on Reddit. And, look, there's plenty of that. We need the facts today.

Now, some on the left are already floating new restrictions or things to, "protect," these so-called uninformed retail investors whom, in their eyes, don't know the difference between a dogecoin and a Dow Jones without Congress telling them.

I think if we've learned anything from the past few weeks, it's that these average, everyday investors are pretty darn sophisticated. There is wisdom in the crowd.

So, let's zoom out on that idea just for a moment. The GameStop story represents a larger truth: A fundamental change is happening. Like never before, everyday investors can communicate, access more information, and work collectively to move markets—all in real time.

Technology is fueling this revolution. Congress cannot put technology back in the box. GameStop is a culmination of years of pent-up frustration. That frustration is now paired with faster, cheaper, and better technology.

Consider for a moment that for every story of someone being able to pay off their student debt from the GameStop trade, or conversely, every story of somebody who lost money, there were stories of those who said they were investing in protest. They would gladly risk losing money just to prove a point.

And while no one should ever risk investing money that they cannot afford to lose, let's tell the truth of why someone would do something like that. The sad truth is the K-shaped economy is nothing new in our capital markets because the structural core of our regulations literally enshrined inequity.

Policies, like the, "accredited investor," definition, blatantly pick winners and losers. If you're wealthy, you're good to go. And if you're not, you're deemed too dumb to be trusted with your own money. So, a privileged few get to invest alongside Ivy League endowments, getting early access in private markets to the greatest returns of the last 2 generations.

But not so fast for the average, everyday investor. In the eyes of our government, you need to be protected, protected from your own decisions, protected from your own money, and protected from more opportunities.

So, you're left with a savings account which pays no interest. And if you need more money than that, well, we created a world where it's easier to go buy a lottery ticket than it is to invest in the next Google.

Is it any wonder why the unhealthy dynamics of GameStop happened?

It's time we get serious about equity and ownership in the American economy. We should live in a world where the construction worker or Uber driver trading on Robinhood has the same access to equity shares in Robinhood itself as the white-collar employees who work there. The same goes for Reddit and Reddit users, by the way. Both contributed to its success. Why can't both share in its future success?

I'll conclude with a reminder for some of my colleagues who want to regulate more and more. In the 1980s, Massachusetts State regulators barred citizens from investing in what The Wall Street Journal called, "the latest in a cascade of stocks of high-technology companies," that occurred that year. What IPO was too risky in the eyes of the government? Apple.

So instead of shutting the American public out through new regulations, new forms of taxation, or so-called protections, let's use this opportunity instead to side with them.

I'll begin where I started: Americans are far more sophisticated, informed, and capable than folks in D.C. give them credit for, and it's time our securities laws treat them that way.

I look forward to the hearing, and I yield back.

Chairwoman WATERS. Thank you so very much.

I'm so pleased that you're cooperating today, and you were able to join with us when we called for this hearing.

I want to welcome today's witnesses to the committee.

Vladimir Tenev is the chief executive officer of Robinhood Markets, Inc., a company with a trading app that after increased trading activity in GameStop and certain other stocks, restricted trading of those stocks for a period of time.

Kenneth C. Griffin is the chief executive officer of Citadel LLC, a firm which is one of Robinhood's main customers and sources of revenue, and which also provided financial support to Melvin Capital Management LP, when Melvin faced significant losses over GameStop and other trades.

Gabriel Plotkin is the chief executive officer of Melvin Capital Management LP, which held a significant short position in GameStop and other stocks and experienced significant losses due to its positions.

Steve Huffman is the chief executive officer and co-founder of Reddit, Inc., a social media platform which is home to the subreddit WallStreetBets, where retail investors discuss trading and where a large number of members discussed the purchase of GameStop and other stocks which experienced volatility.

Keith Gill is a retail investor who posted on Reddit and YouTube regarding investing in GameStop and other stocks.

Jennifer Schulp is the director of financial regulation studies at the Cato Institute.

Each of you will have 5 minutes to summarize your testimony.

And without objection, your written statements will be made a part of the record.

Mr. SHERMAN. Madam Chairwoman? Brad Sherman here. I believe that there were only 3 minutes of Democratic opening statements with the idea that the subcommittee chair on the Democratic side would be called as well. That's what I was told by your staff.

Chairwoman WATERS. Thank you very much. If that is the order that has been organized, I will cease my introductions, and I will call on you, Mr. Sherman, to please go ahead and make an opening statement. Thank you.

Mr. SHERMAN. Thank you so much.

Back in the day, the law school professor would create an exam where he weaved together a story that would exemplify each of the issues in that area of the law. But never did the professor do as good a job as the GameStop saga, which identifies most of the issues facing our capital markets.

Short selling: should there be limits or required additional disclosures?

What do we do with market participants, whether they be on Reddit or on Wall Street, who are shorting a stock or buying a stock for the purpose of influencing its price?

What is this payment for order flow model?

And what does it mean when some participants get best execution and some get enhanced best executions and price-enhanced best execution?

And are all traders being treated fairly and is payment for order flow free to the consumer?

We need to look at the plumbing where it takes 2 days to settle a transaction, but also why is it the broker's capital rather than the customer's capital that is posted during the 2-day period?

And finally, we need to look at the gamification and glorification of high-frequency trading.

I thank the chairwoman for the time. And I hope that in the months to come, we will have several hearings to explore these issues and that we're able to pass legislation this year to deal with each of them.

And I yield back.

Chairwoman WATERS. Thank you.

The Chair now recognizes the gentleman from Texas, Mr. Green, who is also the Chair of our Subcommittee on Oversight and Investigations, for 1 minute.

Mr. GREEN. Thank you very much, Madam Chairwoman. I greatly appreciate the opportunity to express some concerns that I have.

It is a fact that Citadel Securities has paid over $100 million in penalties. And my concern is this: It deals with whether we can allow a market maker's profit from misleading clients and improperly trading ahead of clients to become something as simple as the cost of doing business. The risk of punishment for violations must always exceed the rewards to deter the risk.

I'm concerned, and my hope is that we'll get some additional intelligence on how these punishments have impacted the rewards that have been received.

I yield back.

Chairwoman WATERS. Thank you very much.

And I will go back to the introduction of our witnesses. I left off with Jennifer Schulp, the director of financial regulation studies at the Cato Institute.

Each of the witnesses will have 5 minutes to summarize your testimony. You should be able to see a timer on your screen that will indicate how much time you have left, and a chime will go off at the end of your time. I would ask you to be mindful of the timer and quickly wrap up your testimony if you hear the chime.

And without objection, your written statements will be made a part of the record.

Now, before we begin with your oral testimonies, I would like to swear in the witnesses. I will call each of your names individually to respond.

Would you please raise your hands?

Do you solemnly swear to affirm that the testimony you will give for this committee in the matters now under consideration will be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. Tenev?
Mr. TENEV. I do.
Chairwoman WATERS. Mr. Griffin?
Mr. GRIFFIN. I do.
Chairwoman WATERS. Mr. Plotkin?
Mr. PLOTKIN. I do.
Chairwoman WATERS. Mr. Huffman?
Mr. HUFFMAN. I do.
Chairwoman WATERS. Mr. Gill?
Mr. GILL. I do.
Chairwoman WATERS. Ms. Schulp?
Ms. SCHULP. I do.
Chairwoman WATERS. Thank you very much.

Let the record show that all of the witnesses have answered in the affirmative. We will now begin with their oral testimony.

Mr. Tenev, you are now recognized for 5 minutes to present your oral testimony.

TESTIMONY OF VLADIMIR TENEV, CHIEF EXECUTIVE OFFICER, ROBINHOOD MARKETS, INC.

Mr. TENEV. Chairwoman Waters, Ranking Member McHenry, members of the committee, my name is Vlad Tenev and I'm the chief executive officer and co-founder of Robinhood. Thank you for the invitation to speak about Robinhood and the millions of people we serve.

Almost 8 years ago, Baiju Bhatt and I founded Robinhood. We believed then, as we do now, that the financial system should be built to work for everyone, not just a select few. We dreamed of making investing more accessible, especially for people without a lot of money. The stock market is a powerful wealth creator in which more than half of U.S. households participate.

Chairwoman WATERS. Mr. Tenev, I would like you to use your limited time to talk directly to what happened on January 28th and your involvement in it.

Mr. TENEV. Certainly.

Mr. MCHENRY. Madam Chairwoman, the witness has the opportunity to give their own testimony.

Chairwoman WATERS. Excuse me. You are not recognized.

Mr. MCHENRY. [inaudible]—time for your questioning.

Chairwoman WATERS. You are not recognized.

Mr. Tenev, please go right ahead and speak directly to the question.

Mr. TENEV. We created Robinhood to economically empower all Americans by opening financial markets to them.

I was born in Bulgaria, a country with a financial system that was on the verge of collapse. At the age of 5, I immigrated with my family to America in search of a better life. I have benefited from all that America has to offer, and Robinhood's mission to democratize finance for all has a very special significance for me.

Robinhood's platform allows people from all backgrounds to invest with no account minimums and zero commissions. Contrary to some very misleading and highly uninformed reports, we see evidence that most of our customers are investing for the long term. With features like fractional shares, dividend reinvestment, and recurring investments, our customers can start with small amounts and grow their investments in blue chip stocks and exchange-traded funds (ETFs) over time.

We've always recognized the responsibility that comes with helping people invest. We'll continue to enhance our educational platform to help customers no matter where they are in their financial journey. Hundreds of free educational resources are available to everyone on our Learn website right now.

While markets fluctuate, the total value of our customers' assets on Robinhood exceeds the net amount of money they have deposited with us by over $35 billion. This tells me that our business model is working for everyday Americans, the Robinhood community. Many people say that Robinhood has helped them to pay car loans, reduce student loan debt, meet daily bills, and save for the future, and we're proud to serve them.

You've invited me today to discuss the events of last month, and I welcome this opportunity.

In late January, many brokerage firms saw a massive increase in trading activity in a handful of stocks. Prices were moving dramatically day to day, even hour to hour.

One specific day, January 28th, proved to be a completely unprecedented event. The spike in trading activity and volatility meant that Robinhood Securities, our clearing broker, had to hold the line and post additional firm capital as collateral to support our clearinghouse deposit demands.

To put it in perspective, on January 28th, our daily deposit requirement was 10 times more than on January 25th.

As a result, Robinhood Securities, along with many other firms, imposed temporary trading restrictions on certain securities. We began allowing limited buys of these securities the following day, and we have since lifted the restrictions entirely.

There are two points I want to make clear about these temporary restrictions.

First, Robinhood Securities put the restrictions in place in an effort to meet increased regulatory deposit requirements, not to help hedge funds. We don't answer to hedge funds. We serve the millions of small investors who use our platform every day to invest.

Second, Robinhood immediately secured additional funds. Altogether, through capital raising and other measures, we've increased our liquidity by more than $3 billion to cushion ourselves against increased collateral requirements and related market stress in the future.

Despite the unprecedented market conditions in January, at the end of the day, what happened is unacceptable to us. To our customers, I'm sorry, and I apologize. Please know that we are doing everything we can to make sure this won't happen again.

And I want to highlight one more thing. The existing 2-day period to settle trades exposes investors and the industry to unnecessary risk. There is no reason why the greatest financial system in the world cannot settle trades in real time.

I believe we can and should act now to deploy our intellectual capital and our engineering resources to move to real-time settlement. Together, we can solve this.

Before I close, I want to sincerely thank the millions of customers who continue to use Robinhood to access the markets every day. We are grateful and committed to you.

Members of the committee, I appreciate the opportunity to answer your questions.

[The prepared statement of Mr. Tenev can be found on page 114 of the appendix.]

Chairwoman WATERS. Mr. Griffin, you are now recognized for 5 minutes to present your oral testimony.

TESTIMONY OF KENNETH C. GRIFFIN, CHIEF EXECUTIVE OFFICER, CITADEL LLC

Mr. GRIFFIN. Chairwoman Waters, Ranking Member McHenry, and distinguished members of the committee, thank you for the opportunity to testify today on the recent market events.

The U.S. capital markets are the envy of the world. Our nation's ability to allocate capital to its best and highest use creates jobs, drives innovation, and fuels our economy. America's retail investors play an important role in our capital markets.

According to Gallup, about 55 percent of Americans own stock right now. Citadel Securities, as the largest market maker in the U.S. equities market, executes more trades on behalf of retail investors than any other firm.

As I will discuss shortly, Citadel Securities played an important role in meeting the needs of retail investors during the week of January 24th.

Before doing so, I want to be perfectly clear: We had no role in Robinhood's decision to limit trading in GameStop or any of the other, "meme," stocks. I first learned of Robinhood's trading restrictions only after they were publicly announced. All of us at Citadel Securities are committed to the healthy functioning of the U.S. equities markets.

I first participated in the financial markets as a retail investor. In the late 1980s, while attending college, I traded stocks and options from my dorm room.

My passion for investing led to my founding of Citadel in 1990. Today, Citadel is one of the world's leading alternative investment managers. Our capital partners include pension plans, colleges, hospitals, foundations, and research institutions.

In 2002, my partners and I founded Citadel Securities. Today, Citadel Securities is one of the world's preeminent market makers. We've been a leader in using technology to transform our markets, particularly for retail investors. Citadel Securities invests hundreds of millions of dollars each year to serve the needs of our customers.

In the last week of January, the importance of this investment was on full display. During the period of frenzied retail equities trading, Citadel Securities was able to provide continuous liquidity every minute of every trading day.

When others were unable or unwilling to handle the heavy volumes, Citadel Securities was there. On Wednesday, January 27th, we executed 7.4 billion shares on behalf of retail investors.

To put this into perspective, on that day, Citadel Securities executed more shares for retail investors than the entire average daily volume of the entire U.S. equities market in 2019. The magnitude of the orders routed to Citadel Securities reflects the confidence of the retail brokerage community in our firm's ability to deliver in all market conditions and underscores the critical importance of our resilient and stable systems.

I could not be more proud of our team at Citadel Securities—my colleagues who were committed to ensuring that the interests of America's retail investors were preserved during this extraordinary period.

Once again, I appreciate the opportunity to appear today, and I look forward to answering your questions.

[The prepared statement of Mr. Griffin can be found on page 99 of the appendix.]

Chairwoman WATERS. Thank you, Mr. Griffin.

Mr. Plotkin, you are now recognized for 5 minutes to present your oral testimony.

TESTIMONY OF GABRIEL PLOTKIN, CHIEF EXECUTIVE OFFICER, MELVIN CAPITAL MANAGEMENT LP

Mr. PLOTKIN. Chairwoman Waters, Ranking Member McHenry, members of the committee, I would like to thank you for this opportunity to share Melvin Capital's perspective on the recent trading activities in GameStop.

As the founder and chief investment officer of Melvin Capital, I'm humbled by these unprecedented events. Many investors on all sides have experienced losses. I am here today to share my own personal experience and to be helpful in this conversation.

I understand that part of the focus of this hearing is the decision of stock trading platforms to limit trading in GameStop. I want to make clear at the outset that Melvin Capital played absolutely no role in those trading platform decisions. In fact, Melvin closed out all of its positions in GameStop days before the platforms put those limitations in place. Like you, we learned about those limits from news reports.

I also want to make clear at the outset that, contrary to many reports, Melvin Capital was not, "bailed out," in the midst of these events. Citadel proactively reached out to become a new investor, similar to the investments that others make in our fund. It was an opportunity for Citadel to buy low and earn returns for its investors if and when our fund's value went up.

To be sure, Melvin was managing through a difficult time, but we always had margin access and we were not seeking a cash infusion.

I'm here testifying today far removed from my background. I grew up in a middle-class family in Portland, Maine. I went to a public high school. I studied hard and got into a good college. Upon graduation, I did not have a job.

Today, I'm married with four children, and my time is spent with my family, and on Melvin Capital, which I founded 6 years ago. I named Melvin after my grandfather who ran a convenience store. I wanted the firm to represent his values: integrity; hard work; taking care of customers and employees; and commitment to excellence.

Melvin Capital manages a hedge fund. Investors such as academic institutions, medical research and other charitable foundations, pension funds, retirees, and others, invest with us. We have 36 employees and hundreds of investors, and I feel a personal duty to all of them.

Melvin specializes in the consumer and technology sector, including companies like GameStop, AutoZone, and Expedia.

Most of our investments are long. In other words, we buy stock in companies that create jobs, grow the economy, and develop new products for consumers. We do this after extensive fundamental research, sometimes literally for years.

When our research convinces us that a company will grow relative to expectations, we make a long-term investment. When our research suggests a company will not live up to expectations, and its stock price is overvalued, we might short a stock.

Like with our long positions, our practice is to short a stock for the long term after extensive research. We also short stocks because when the markets go down, we have a duty to protect our investors' capital. There are laws governing shorting stock, and, of course, we always follow them.

In addition, it's very important to understand that absolutely none of Melvin's short positions are part of any effort to artificially depress or manipulate downward the price of a stock. Nothing about our short position prevents a company from achieving its objectives. It is just Melvin's view about whether it will.

Specific to GameStop, we had a research-supported view well before the recent events. In fact, we've been shorting GameStop since Melvin's inception 6 years earlier, because we believed and still believe that its business model—selling new and used video games in physical stores—is being overtaken by digital downloads through the internet.

And that trend only accelerated in 2020 when, because of the pandemic, people were downloading video games at home. As a result, the gaming industry had its best year ever, but GameStop had significant losses.

In January 2021, a group on Reddit began to make posts about Melvin's specific investments. They took information contained in our SEC filings and encouraged others to trade in the opposite direction. Many of these posts were laced with anti-Semitic slurs directed at me and others. The posts said things like, "It's very clear that we need a second Holocaust; the Jews can't keep getting away with this." Others sent similarly profane and racist text messages to me.

In the frenzy during January, GameStop stock rose from $17 to a peak of $483. I do not think anyone would claim that the price had any relationship to the intrinsic value of the business.

The unfortunate part of this episode is that ordinary investors who were convinced by a misleading frenzy to buy GameStop at $100, $200, or even $483 have now lost significant amounts.

When this frenzy began, Melvin started closing out its position in GameStop at a loss, not because our investment thesis had changed, but because something unprecedented was happening. We also reduced many other Melvin positions at significant losses, both long and short, that were the subject of similar posts.

I'm personally humbled by what happened in January. Investors in Melvin suffered significant losses. It is now our job to earn it back. And while I do not think that anyone could have anticipated these events, I've learned much from them and I'm taking steps to protect our investors from anything like this happening in the future.

I look forward to answering your questions.

[The prepared statement of Mr. Plotkin can be found on page 105 of the appendix.]

Chairwoman WATERS. Thank you, Mr. Plotkin.

Mr. Huffman, you are now recognized for 5 minutes to present your oral testimony.

TESTIMONY OF STEVE HUFFMAN, CHIEF EXECUTIVE OFFICER AND CO-FOUNDER, REDDIT, INC.

Mr. HUFFMAN. Thank you. Madam Chairwoman, Mr. Ranking Member, honorable members of the committee, my name is Steve Huffman. I am the co-founder and CEO of Reddit, and I am pleased to talk with you today about how Reddit works and what we have seen on our site in the past few weeks.

Reddit's mission is to bring community and belonging to everyone in the world. What started in 2005 as a single community has since evolved into a vast network of many thousands of communities. They range from standard topics like news, sports, and politics, to internet culture, and support. For example, our unemployment community has become a source of support for hundreds of thousands of Americans who have turned to Reddit after losing their jobs during the pandemic.

Our communities are created and run by our users. Because of this, we describe Reddit as the most human place on the internet. Although we are small compared to the largest platforms, our communities provide an online home for millions of people every day.

I'd like to share a bit about how content moderation on Reddit works. Reddit's moderation system starts with our content policy, the platform-wide rules which all communities must follow. Among other things, these rules prohibit hate, harassment, bullying, and illegal activity on Reddit, and they're enforced by Reddit's Anti-Evil team, which is composed of engineers, data scientists, and other specialists.

This team also ensures the integrity of the site, and we have continuously honed our methods to stay ahead of bad actors to protect Reddit from manipulation, spam, and other threats.

This team searched high and low for the specific comments mentioned in the previous testimony or anything like it. The closest we could find was a single comment that received no votes and was deleted within 5 minutes. Such speech is not tolerated on Reddit, and we will, of course, investigate any further claims of this nature.

Centralized moderation is common, but Reddit additionally uses a governance structure akin to a Federal democracy, where the aforementioned policies and teams represent the Federal Government, and the communities themselves represent States.

All communities, or subreddits, are created by users that we call moderators. They set the community's rules, which may be as strict as they like as long as they are not in conflict with the platform-wide policies, and they have a variety of tools to enforce these rules independently.

Moderators are not paid employees, but rather users who are passionate about their communities. They have the context and judgement to make decisions no algorithm could.

The members of each community contribute both the content itself and the ranking of it by voting up or down on any post or comment. Unlike other platforms where a submission has a built-in audience through the author's follower count, every piece of content on Reddit, no matter how famous the author, starts at zero and has to earn its visibility.

Through their votes, the community itself enforces not just the explicit rules of their community, but also the unwritten rules that define their culture. This layered approach has helped our users create the most authentic communities online.

The specific community we'd like to talk about today is WallStreetBets. It's important to understand that WallStreetBets is one of many finance- and investing-related communities on Reddit. This particular community specializes in higher-risk, higher-reward investments than what you might find in other, more conservative financial communities on Reddit, with such names as personal finance, investing, and financial independence.

I will stress that WallStreetBets is, first and foremost, a real community. The self-deprecating jokes, the memes, the crass-at-times language all reflect this. If you spend any time on WallStreetBets, you'll find a significant depth to this community exhibited by the affection its members show one another. They are just as quick to support a fellow member after a big loss as they are to celebrate after a big gain.

A few weeks ago, we saw the power of community in general, and of this community in particular, when the traders of WallStreetBets banded together at first to seize an investment opportunity not usually accessible to retail investors, but later, more broadly, to defend all retail investors against the criticism of the financial establishment.

With the increase in attention, WallStreetBets unsurprisingly faced a surge in traffic and new users. At Reddit, our first duty in these situations is to our communities, and our role in this moment was to keep WallStreetBets online.

Working around the clock, we scaled our infrastructure, made technology changes to help this community withstand the onslaught of traffic, and we acted as diplomats to help resolve conflicts within WallStreetBets' leadership.

We have since analyzed activity in WallStreetBets to determine whether bots, foreign agents, or other bad actors played a significant role. They have not.

In every metric we checked, the activity in WallStreetBets was well within normal parameters, and its moderation tools are working as expected. We will, of course, cooperate with valid legal requests from Federal and State regulators. That said, we do believe that this community was well within the bounds of our own policies.

To conclude, I would like to reiterate why it is important to protect online communities like WallStreetBets. WallStreetBets may look sophomoric or chaotic from the outside, but the fact that we're here today means they've managed to raise important issues about fairness and opportunity in our financial system. I am proud they use Reddit to do so.

Thank you, and I look forward to your questions.

[The prepared statement of Mr. Huffman can be found on page 102 of the appendix.]

Chairwoman WATERS. Thank you very much, Mr. Huffman.

Mr. Gill, you are now recognized for 5 minutes to present your oral testimony.

TESTIMONY OF KEITH PATRICK GILL, GAMESTOP INVESTOR

Mr. GILL. Thank you, Chairwoman Waters, Ranking Member McHenry, and members of the committee. I'm happy to discuss with the committee my purchases of GameStop shares and my discussions of their fair value on social media.

It is true that my investment in that company multiplied in value many times. For that, I feel enormously fortunate. I also believe the current price of the shares demonstrates that I've been right about the company.

There are a few things I am not. I am not a cat. I am not an institutional investor. Nor am I a hedge fund. I do not have clients and I do not provide personalized investment advice for fees or commissions. I'm just an individual whose investment in GameStop and posts on social media were based upon my own research and analysis.

I grew up in Brockton, Massachusetts. My family was not wealthy. My father was a truck driver and my mom was a registered nurse. I was one of 3 kids, and the first in my family to earn a 4-year college degree when I graduated from Stonehill College in 2009. That was not a good time to be looking for a job.

From 2010 to 2017, I worked for a few start-up companies, but there were significant periods when I was unemployed. I took an interest in the stock market, and even though I had very little money, I used those times to educate myself and learn more about investing.

In 2019, after nearly 2 years unemployed, I accepted a marketing and financial education job at MassMutual. My wife Caroline and I were thrilled that I had an income and benefits. My job was to help develop financial education classes that advisers could present to prospective clients. I was not a stockbroker or a financial adviser. I did not talk to clients, and I did not recommend stocks for them to buy.

Before and after I joined MassMutual, I studied and followed stocks. One of those was GameStop. In early June of 2019, the price of GameStop stock declined below what I thought was its fair value. I invested in GameStop in 2019 and 2020 because, as I studied the company, I became more and more confident in my analysis.

Two important factors, based entirely on publicly available information, gave me confidence that GameStop was undervalued. First, the market was underestimating the prospects of GameStop's legacy business and overestimating the likelihood of bankruptcy. I grew up playing video games and shopping at GameStop, and I plan to continue shopping there. GameStop stores still provide real value to consumers and reliable revenue for GameStop.

Second, I believe that GameStop has the potential to reinvent itself as the ultimate destination for gamers within the rapidly-growing $200 billion gaming industry. GameStop has a unique opportunity to pivot toward a technology-driven business. By embracing the digital economy, GameStop may be able to find new revenue streams that vastly exceed the value of its business. I am hardly the only person who has advocated these points.

When I wrote and spoke about GameStop in social media with other individual investors, our conversations were no different from people in a bar or on a golf course or at home talking or arguing about a stock.

Hedge funds and other Wall Street firms have teams of analysts working together to compile research and analyze shares of companies. Individual investors do not have those resources.

Social media platforms like Reddit, YouTube, and Twitter are leveling the playing field. The idea that I used social media to promote GameStop stock to unwitting investors and influence the market is preposterous. My posts did not cause the movement of billions of dollars into GameStop shares.

It is tragic that some people lost money, and my heart goes out to them. But what happened in January just demonstrates, again, that investing in public securities is extremely risky.

As I said earlier, I consider myself and my family fortunate with our investment. When the stock price broke $20 in December, I knew my investment was a success. I was so happy to visit my family in Brockton for the holidays. The money would go such a long way for us.

We had an incredibly difficult 2020. Most difficult was the tragic and unexpected loss of my sister, Sara, in June. I am grateful to be in a position to give back to and support my family.

As for what happened in January, others will have to explain it. It's alarming how little we know about the inner workings of the market. And I am thankful that this committee is examining what happened.

I also want to say that I support retail investors' right to invest in what they want, when they want. I support the right of individuals to send a message based on how they invest.

As for me, I like the stock. I'm as bullish as I've ever been on a potential turnaround for GameStop, and I remain invested in the company.

Thank you. Cheers, everyone.

[The prepared statement of Mr. Gill can be found on page 94 of the appendix.]

Chairwoman WATERS. Thank you, Mr. Gill.

Ms. Schulp, you are now recognized for 5 minutes to present your oral testimony.

TESTIMONY OF JENNIFER J. SCHULP, DIRECTOR, FINANCIAL REGULATION STUDIES, CATO INSTITUTE

Ms. SCHULP. Chairwoman Waters, Ranking Member McHenry, and distinguished members of the Committee on Financial Services, my name is Jennifer Schulp, and I'm the director of financial regulation studies at the Cato Institute's Center for Monetary and Financial Alternatives. Thank you for the opportunity to take part in today's hearing.

Before addressing the GameStop phenomenon specifically, I'd like to talk about the participation of retail or individual investors in our public equities markets. Retail participation has ebbed and flowed over the years, but the recent upward trend accelerated sharply during the pandemic. Most point to zero-commission trading, but several other factors also likely attracted retail investors, including fractional share trading, low account minimums, and easy app-based platforms. More time at home during the pandemic probably even played a role.

Retail participation in our equities markets is important. The fact that retail investors behave differently from institutional ones, and differently from each other, can be particularly valuable in times of market stress. In fact, individual investors may have helped stabilize the market in March 2020.

Importantly, investing in the stock market also provides a path to wealth for individual investors. But stock ownership traditionally has been skewed towards the already-wealthy and it is highly correlated with race, education, and age.

Retail investors making up this new surge are different. Recent research by the Financial Industry Regulatory Authority 's (FINRA's) Investor Education Foundation, and the National Opinion Research Center (NORC) at the University of Chicago found that investors who opened accounts for the first time in 2020 were younger, had lower incomes, and were more racially diverse. These new investors also held lower account balances. This may portend, as one of the researchers noted, "a shift towards more equitable investment participation."

These new opportunities for individuals to grow their wealth should be welcomed and expanded, not restricted.

Now, I'll turn to GameStop. At the outset, I will note that it is difficult to analyze the impact of the trading in GameStop and other stocks because many facts are unknown.

But some things seem clear. Importantly, the temporary volatility in these stocks did not present a systemic risk to market function. As the Treasury Department recognized, the market's, "core infrastructure was resilient during high volatility and heavy trading volume."

This is not surprising. Despite the huge trading volume and rapid increase in value, only a small part of the market was affected, and spillover effects on the wider market were mild and short-lived.

The fact that GameStop traded temporarily and perhaps still trades above fair estimates of the company's value is not in itself a reason for concern. Stock prices move in and out of alignment all the time and markets are no strangers to bubbles. If a company is valued by the market differently than a review of its fundamentals suggests, it might indicate that the analysis is missing relevant information about a company's prospects, or it might indicate that the company's stock price is due for a correction.

The market's mechanisms, including the tool of short selling, generally work well to handle these circumstances. Stepping in to prevent trading where a stock price moves contrary to conventional wisdom could deprive the market of important information.

The SEC, among a host of others, is reviewing the relevant trading and conducting a study of the events. The SEC will have access to far more information than has been made publicly available, and I believe it has the tools necessary to address any harmful misconduct that may have occurred.

I cannot opine on whether any regulatory changes are warranted on this incomplete record. I tend to believe the answer will be no, in light of the minimal impact on the market's function, but if regulators learn more, there may be areas identified for improvement.

By no means, though, should these events lead to restrictions on retail investors' access to the markets.

Thank you, and I welcome any questions that you may have.

[The prepared statement of Ms. Schulp can be found on page 108 of the appendix.]

Chairwoman WATERS. Thank you, Ms. Schulp.

I now recognize myself for 5 minutes for questions.

The market volatility surrounding GameStop and other securities has highlighted how many people feel that the cards are stacked against them, and that market participants, like our witnesses, hide the ball.

Mr. Tenev, you explained that Robinhood restricted transactions in certain securities to meet demands coming from your clearinghouse, and yet, on January 28th, you represented to the media that there was no liquidity problem.

Isn't it true that being concerned about having enough capital to meet deposit requirements—isn't that a liquidity problem? Could you just answer yes or no?

Mr. TENEV. Chairwoman Waters, I appreciate the opportunity to address that.

Chairwoman WATERS. Just yes or no.

Mr. TENEV. We always felt comfortable with our liquidity and the additional capital that Robinhood raised—

Chairwoman WATERS. Please answer yes or no.

Mr. TENEV. We always felt—

Chairwoman WATERS. Reclaiming my time, I don't have time, I just need a yes-or-no answer.

Mr. TENEV. I stand by my statement. The additional capital we raised wasn't to meet capital requirements or deposit requirements—

Chairwoman WATERS. Does the gentleman—

Mr. TENEV. Excuse me?

Chairwoman WATERS. I'm reclaiming my time.

This liquidity problem had real consequences for your customers, but I wonder if they were all that surprised. Between December 2019 and December 2020, Robinhood customers experienced monetary losses due to system outages. Customer accounts were reportedly compromised. The firm repeatedly failed at its best execution obligations, and it misled its customers regarding its revenue sources. It seems that retail investors often get a bad deal at Robinhood.

Mr. Tenev, while you testified today that, "Robinhood's customers benefit greatly from payment for order flow," in December 2020, the SEC charged Robinhood for not disclosing that it was getting paid to send customer trades to Citadel Securities and other market makers and for not seeking the best terms for its customers' orders. Robinhood provided such inferior trade prices that it cost your customers over $34 million.

Is it your testimony that after Robinhood paid the SEC $65 million to settle those charges, this conflict of interest is in your customers' best interest, yes or no?

Mr. TENEV. Chairwoman Waters, first, let me say, regulatory compliance is at the center of everything that we do. We've made mistakes in the past. I'm not claiming that I'm perfect—

Chairwoman WATERS. But could you answer yes or no to that question?

Mr. TENEV. Citadel Securities is an important counterparty. Nobody's denying that. The reason that—

Chairwoman WATERS. The gentleman cannot answer yes or no. I'm reclaiming my time.

Meanwhile, Mr. Griffin, Citadel's role in this event also raises significant questions for policymakers. Citadel Securities pays Robinhood tens of millions of dollars to process trades by Robinhood's customers. This relationship gives Citadel Enterprise key nonpublic information as to direction and volume of trades by retail investors. Your firm makes use of private exchanges called dark pools and other off-exchange trading to trade large sizes without moving the market against you.

In fact, at some point last month, 50 percent of all trades occurred in dark pools or via over-the-counter (OTC) off-exchange trades. Your business strategy is designed intentionally to undermine market transparency and skim profits from companies and other investors. One problem, though, Mr. Griffin, is that we don't really know how central your forum has become to the capital markets,

Mr. Griffin, does Citadel handle 47 percent of the U.S.-listed retail volume? Please, yes or no?

Mr. GRIFFIN. Excuse me, Chairwoman Waters. What percentage? I couldn't hear that number.

Chairwoman WATERS. 47 percent.

Mr. GRIFFIN. Chairwoman Waters, to the best—

Chairwoman WATERS. Yes or no?

Mr. GRIFFIN. To the best of my knowledge, we handle in excess of roughly 40 percent of all retail volumes.

Chairwoman WATERS. Thank you very much. Reclaiming my time, Mr. Griffin, on January 27th, Citadel executed 7.4 billion shares for retail investors, which would be more trades than the average daily volume of the entire United States equities market in 2019, yes or no?

Mr. GRIFFIN. Chairwoman Waters, that was in my written and oral testimony.

Chairwoman WATERS. Thank you very much.

And with that, I now recognize the distinguished ranking member, Mr. McHenry, for 5 minutes for questions.

Mr. MCHENRY. Thank you.

Mr. Tenev, I'm going to come to you first. I just want to get to what happened on that day in January.

So, let's take a step back here. You get a call in the middle of the night, according to what I've heard you say in interviews, and based on that conversation with your compliance team, you decided to halt the buying of GameStop stock.

People were furious. We'll get into the regulations and the settlement parts of that today. We will get to that. But this is what I think needs to be answered about your decision. Why did Robinhood restrict the buying but not the selling of GameStop? And why did folks get locked out on the buy side only?

Mr. TENEV. Ranking Member McHenry, I appreciate the opportunity to address that.

The reason that Robinhood—first of all, let me say, Robinhood is always committed to providing access. It's in our name. It's in everything that we do.

The decision to restrict GameStop and other securities was driven purely by deposit and collateral requirements imposed by our clearinghouses. So, buying—

Mr. MCHENRY. But why—

Mr. TENEV. —securities—

Mr. MCHENRY. But why—

Mr. TENEV. —in pieces are [inaudible] requirements. Selling does not.

Moreover, preventing customers from selling is a very difficult and painful experience, where customers are unable to access their money. So, we don't want to impose that type of experience on our customers unless we have no other choice.

And even though I recognize that customers were very upset and disappointed that we had to do this, I imagine it would have been significantly worse if we had prevented customers from selling.

Mr. MCHENRY. Okay. Let me ask this question: Is payment for order flow legal?

Mr. TENEV. Yes. Payment for order flow is legal and regulated and is a common industry practice.

Mr. MCHENRY. And is this disclosed to users of your app?

Mr. TENEV. Yes. Payment for order flow is disclosed in multiple places.

Mr. MCHENRY. Okay.

Mr. TENEV. Moreover, payment for order flow enables commission-free trading. And that's why it's become the industry standard model as other brokerages have replicated our model and started offering commission-free trading to their customers as well.

Mr. MCHENRY. Okay. So to that, to this greater point of what happened that day and the model that you're using, let's be crystal clear. That decision you made to restrict the buying but not the selling of GameStop was based—was it based on pressure from anyone on the witness panel here today?

Mr. TENEV. Not at all. Zero pressure from anyone. It was a collateral depository requirement decision made by our Robinhood Securities president, and we stand by it.

Mr. MCHENRY. Let me get in this question. You want to democratize finance. You want to open up Wall Street to retail investors. You say that Robinhood's mission is to democratize finance for all. So, let's talk about that.

Yes or no, can a Robinhood customer invest in Robinhood, the company?

Mr. TENEV. Robinhood is currently a private company, so that's not possible, no.

Mr. MCHENRY. Do you mean to tell me that the people who use your platform, who make you a successful company, and I would say directly contribute to your company's exponential growth and success, don't get the same access to equity shares as a Robinhood employee or your institutional investors. Is that correct?

Mr. TENEV. Currently, that is correct, yes.

Mr. MCHENRY. Okay.

Ms. Schulp, let me pivot to you. Why is that? Why is it that everyday investors on the Robinhood app, people that I would argue contributed to its success, can't invest in Robinhood itself?

Ms. SCHULP. The SEC limits a lot of investment in private companies to those folks who are known as accredited investors. And to become an accredited investor, you have to meet a wealth test of earning at least $200,000 a year or having a net worth of over a million dollars. The vast majority of people in this country don't meet that standard and are unable to invest in most private companies.

Mr. MCHENRY. Okay. So, let me just be clear on this.

Mr. Tenev, I don't blame you for the restriction you've put on your customers not being able to invest in equity. I'd like to have more opportunity to ask Mr. Gill his thoughts on this. But let me just say this: I don't fault you for the inequitable regulatory structure that D.C. has created, but I think we need to clear this up.

Final thing, Madam Chairwoman. For the record, I'd like to submit a letter from the DTCC, which is the clearing company that was not on the panel today, and your staff has this letter.

Chairwoman WATERS. Without objection, it is so ordered.

Mr. MCHENRY. Thank you all, and I look forward to getting to the facts of the matter—

Chairwoman WATERS. The gentleman's time has expired.

Mrs. Maloney is now recognized for 5 minutes.

Mrs. MALONEY. Thank you, Chairwoman Waters and Ranking Member McHenry, for convening this hearing. I hope today's hearing sheds light on how our markets are working, or in many cases, are not working for smaller investors and ways we can fix that.

The events of late January saw tremendous volatility and stock prices that were totally divorced from market fundamentals. The whole enterprise was viewed by some as a giant video game, trading stocks instead of properties in monopoly money. But it is not all fun and games because people can lose their life savings, their hard-earned cash, and tragically, last summer, we know of at least one suicide linked to potential trading losses.

Beyond those possible losses, the actions of Robinhood and other trading platforms during the GameStop frenzy caused confusion and anger, and undermined investor confidence in the fundamental fairness of our capital markets. None of this is healthy for our markets or good for investors. What makes markets work fairly is when everyone knows the rules and that the rules remain consistent and predictable and are enforced.

But because of Robinhood's actions, too many customers did not get that predictability. Many retail investors woke up on January 28th to find that they could no longer buy and sell stocks the same way they could in the days prior, and they were being treated differently than other market participants who could still buy and sell those same stocks. So, I don't blame them for thinking that things were stacked against the little guy.

Mr. Tenev, you stated in your testimony that Robinhood restricted trading for certain securities, including GameStop, in order to meet your financial requirements with your clearinghouse. But when I go to Robinhood's website and the blog post you initially released on January 28th, your financial requirements with your clearinghouse are not mentioned. You only mention market volatility.

And when I review the Robinhood customer agreement, you don't include specifics on how and when you may decide to restrict trading which you did. And you don't include any language or disclosures regarding your capital requirements. It only includes vague language that at any time, and in its sole discretion, Robinhood can restrict trading. In other words, you seem to reserve the right to make up the rules as you go along.

I have two questions for you. First, do you think you owe your customers more disclosure and transparency than you gave them?

And, second, do you believe your lack of candor with your customers might have contributed to the wild speculation and confusion that resulted in the aftermath of your trading restrictions?

Mr. TENEV. Congresswoman, I appreciate the questions.

To answer the second question, look. I am sorry for what happened. I apologize. And I am not going to say that Robinhood did everything perfect and that we haven't made mistakes in the past, but what I commit to is making sure that we improve from this, we learn from it, and we don't make the same mistakes in the future. And Robinhood as an organization will learn from this and improve to make sure it doesn't happen again, and I will make sure of that.

Mrs. MALONEY. I expect we will experience future events with increased volatility, and Robinhood's recent actions appeared arbitrary, which is why I don't blame customers for feeling as though they were treated unfairly. Your trading restrictions came out of the blue, and your communication was not clear.

Mr. Tenev, looking forward, what operational changes is Robinhood making to better respond to future market volatility, to improve transparency with your customers, and to ensure that retail customers don't get the rug pulled out from under them at the last minute?

Mr. TENEV. Thank you for that question, Congresswoman. We will be committing to reviewing absolutely everything about this, but the $3.4 billion that we raised I think goes a long way to cushioning the firm from future market volatility and other similar black swan events.

And I believe that even throughout this process, we improved our risk management processes and strengthened them so that the experience customers had that week was much improved from Thursday.

Chairwoman WATERS. Thank you very much.

Mr. TENEV. We continue to learn and improve upon this.

Chairwoman WATERS. Mrs. Wagner, you are recognized for 5 minutes.

Mrs. WAGNER. Thank you, Madam Chairwoman. I would like to thank our witnesses for testifying today to discuss the late January market volatility that took place, along with what I hope is a broader discussion on market functions and their effect on everyday investors.

Since I was very first elected, I have advocated for America's Main Street investors and worked tirelessly to ensure that all Americans, especially those low- and middle-income savers, are given the investment choice, access, and affordability that they deserve. Retail investors are the strength of our stock market, and I have fought throughout my career for their best interests in the financial markets, and this hearing today is no different.

The advances in financial technology that we have witnessed in the last decade have improved the way that Americans and our businesses perform financial activities.

In just the past year, we have seen retail investors' market participation more than double, and I think this is great. I believe in the wisdom of the retail investor, and I will say that I believe in the First Amendment, too.

This increase is attributed to Robinhood and other trading brokerages who are lowering account minimums, permitting fractional share trading, and implementing zero-commission trading. It is critical that Congress focus on reducing barriers to market participation, they rarely want to do, let me sadly say, and allowing Main Street Americans access to the financial instruments that can create long-term investment savings.

All of these changes have given millions of Americans the ability to invest better for their families and their future. My hope is that the Majority does not use this hearing as an excuse to once again add new Federal regulatory burdens to an industry that is already heavily regulated, which would prevent people from participating in our capital markets. Letting existing regulations work is key, not burdening everyday investors with new and more costly barriers to entry.

Mr. Tenev, it appears that at the time, your company did not have money to meet the collateral requirements for that level of trading by your customers. In your view, were the collateral requirements from the DTCC unreasonably high, was the amount of trading on your platform unforeseeable, or was your company undercapitalized, given its risk profile?

Mr. TENEV. Thank you for the question, Congresswoman.

This event was a Phi Sigma event, which is a 1-in-3.5-million event. To put that in context, there have only been tens of thousands of stock market days in the history of the U.S. stock market, so, a 1-in-3.5-million event is basically unmodelable.

That said, we can learn from it, and in this particular case, our risk management processes worked appropriately to keep us in compliance with all of our deposit requirements and collateral requirements.

Mrs. WAGNER. Mr. Tenev, I realize that you are doing a full review of your practices and such. I encourage you to do that. And certainly, communication with your investors is going to be key to that because you didn't communicate with them early on.

Let me just say, as the ranking member on our Diversity and Inclusion Subcommittee, I am delighted to be speaking with our witness, Ms. Jennifer Schulp. Ranking Member McHenry and I have spent countless hours stressing the importance of having qualified women in finance, so I am pleased to have you here today to lend your expertise.

Ms. Schulp, we now know that it was the daily collateral demands set by the National Securities Clearing Corporation (NSCC) that were the reason Robinhood had to temporarily restrict trading. Can you briefly explain the purpose of these capital requirements and their overall relationship to ensuring that our markets function in an orderly manner? And did you see any broad failures of market function during these events, ma'am?

Ms. SCHULP. Sure. Thank you. And thank you for the compliment.

The NSCC's collateral requirements serve the function to provide security for the stock-selling process. So while an investor thinks that what has happened is they bought a stock on the day that they make a trade, it really takes 2 days for the settlement process to clear. During that time, the brokerage firm, the Depository Trust & Clearing Corporation (DTCC), and the investor on the upper side can remain at risk of that stock not actually clearing. And the collateral report is in place to mitigate the risk that the brokerage firm will not be able to make good on its promises to sell or buy.

I didn't see any broad-scale failures. The DTCC's collateral requirement was long, but understandable, and I think it functioned correctly, for the most part.

Mrs. WAGNER. My time has expired. I thank you all for your testimony, and I yield back, Madam Chairwoman.

Chairwoman WATERS. I thank the gentlewoman.

Mr. PERLMUTTER. Madam Chairwoman, point of order.

Chairwoman WATERS. Point of order

Mr. PERLMUTTER. Just to remind people that when they are not speaking, to mute themselves, because there's a lot of feedback when a question is asked and the microphone stays open, and the people are answering the question. Just remind everybody to mute when you're not speaking. That is all.

Chairwoman WATERS. Thank you very much. You heard Mr. Perlmutter. I would hope that every Member would certainly do that.

Mr. Sherman, you are recognized for 5 minutes.

Mr. SHERMAN. Thank you very much.

We have come to expect things on the internet to be free. Just because you are not paying for it, it is not free. You are the product. Someone else is the customer. When you go onto Facebook and it is free, you are the product being sold to the advertiser, and your information is sold to God-knows-whom.

So, we now have a system where we are telling investors that it is free to buy and sell stock. There are two ways to pay the folks involved in Wall Street for buying and selling stock.

One is a commission, and you know what it is. So, we discourage investors a little bit from buying and selling stock because they have to pay a commission, and they know they are paying a commission.

The other way to do it is to give them a worse execution. Whenever there is, say, a stock being purchased and sold, the market maker, perhaps Citadel, might be willing to sell the stock for $10.05, but will buy it for only $10. The difference is $0.05. And so, the issue is whether Robinhood and other people who are being told you get it for free are really getting it for free.

Mr. Griffin, you are a market maker. You pay some brokers for order flow. You don't pay others for order flow. So when you pay for order flow, you are not making as much on the transaction. You have to pay some of that back to the broker. The amount of that is hidden from the customer. The fact that it exists has perhaps recently been disclosed.

SEC rules require that people get the best execution, but I have recently learned that there is best execution and enhanced pricing. So if you get an order from Fidelity, and you get an order from Robinhood, and you are paying for the Robinhood order flow, is the Robinhood customer getting as good a price as the Fidelity customer?

Mr. Griffin?

Mr. GRIFFIN. Congressman, I believe that is an excellent question. The execution quality that we can provide as measured in terms of price improvement is heavily related or correlated to the size of the order that we receive. So if I were to speculate—

Mr. SHERMAN. Don't tell me that there are other factors involved and take us down another road. I am asking you a clear question.

Assuming same size of order, one comes in from Robinhood, and one comes in from Fidelity, isn't it true that one is going to be getting enhanced best execution, and the other one is just going to get best execution?

Mr. GRIFFIN. As I was trying to explain, because the Robinhood order comes from a community of traders who tend to trade in smaller size—

Mr. SHERMAN. That isn't my question, sir. You are evading my question by making up other questions. Let me repeat: Two identical orders come in; same stock, same quantity. One is from Robinhood, one is from Fidelity. What happens?

Mr. GRIFFIN. The quality of the execution varies by the channel of the order. This is a commonly-understood phenomena in economics, that channels matter. For example, when you go get a mortgage, a mortgage from JPMorgan to their clientele has a different rate of interest than a mortgage—

Mr. SHERMAN. Okay. Reclaiming my time, sir, who gets the better deal, the one that comes from a broker who is being paid for order flow, and one not? Can you testify that on balance, there is no difference, assuming the same size of the order?

Mr. GRIFFIN. As I said earlier, the size of the order is only one factor.

Mr. SHERMAN. You are doing a great job of wasting my time. If you are going to filibuster, you should run for the Senate.

Everyone else I have talked to in this industry says that when your broker is being paid for order flow, you get a worse execution. And otherwise, you are in a peculiar circumstance where you are making more money on a Fidelity transaction than a Robinhood transaction which would be an absurd business practice.

Chairwoman WATERS. The gentleman's time has expired.

Mr. Lucas, you are recognized for 5 minutes.

Mr. LUCAS. Thank you, Madam Chairwoman, for holding this hearing, and thank you to the witnesses for agreeing to testify.

It has been reported that approximately 20 percent of market volume is now attributable to retail customers, which I think is just fascinating, considering that is up from 10 percent in 2019, and that is an overwhelmingly positive development, allowing for more market liquidity, more stability, and additional avenues for households to grow their wealth. It is important to increase market access for retail customers, and I don't want to disrupt that, so I would like to turn with my first question to Mr. Tenev.

Let's talk about the attention that this payment for order flow has received. You explained in your testimony that Robinhood's relationship with market makers is important for Robinhood's ability to offer commission-free trading. So expand, if you would, on how that process benefits the everyday investor. Just expand in general on that, if you would?

Mr. TENEV. Congressman, I'd be happy to. Thanks for giving me an opportunity.

As I mentioned in my written testimony, payment for order flow enables commission-free trading. Prior to Robinhood changing the industry standard model to be commission-free, most brokers collected a commission on top of the payment for order flow on every transaction.

Now, Robinhood routes to market makers. Including Citadel Execution Services, we have seven in total across equities and options, and we route without consideration of payment for order flow. All payment for order flow arrangements are uniform across the market makers, and our system routes orders based on who provides the best execution quality for our customers.

So, the reason Citadel gets a relatively high percentage of our customer order flow is because they provide superior execution quality for our customers, and that is first and foremost, the most important consideration that we look for: How are customers getting the best execution quality?

If another market maker were to improve upon the execution quality that Citadel Execution Services provides on any subset of orders, our system is set up to automatically route more traffic to that market maker.

Mr. LUCAS. Continuing down this line, because clearly, this is one of the things that my colleagues and the public has a very strong interest in, and having lived through Dodd-Frank before, I have seen worse times. Major things can occur. I want to turn to Mr. Griffin.

Could you also elaborate on how payment for order flow provides, whether it is the best price to the retail investor from the market maker's perspective? Could you expand on that—

Mr. GRIFFIN. Congressman—

Mr. LUCAS. —as you outlined in—

Mr. GRIFFIN. Absolutely, Congressman. As the CEO of Robinhood just set forth clearly, the orders that are allocated amongst the market makers today are allocated principally on the basis of price improvement. We have fought for 15 years to make that the basis by which orders are allocated because we strongly believe that Citadel is able to provide a better execution for retail orders in the long run. We make a huge investment in our team and our technology to do so.

How is it that we are able to provide better execution quality than exchanges? Because exchanges are limited in their ability to do business by regulatory mandate. Exchanges, by law, have a minimum $0.01 wide market, which for low-price securities means that they are less competitive than they otherwise could be. We're able to share our trading acumen with retail investors, and we are able to give them a better price, and we are able to make payments for order flow to firms like Robinhood that allow them to have lower, or today, in most cases, no commission. And of particular note, we are able to help Robinhood and other brokers pay exchange fees to the exchanges at the time of execution. This has been very important to the democratization of finance. It has allowed the American retail investor to have the lowest execution costs they have ever had in the history of the U.S. financial market.

Mr. LUCAS. Mr. Tenev, in the Dodd-Frank process that the chairwoman and I went through a decade ago plus, there was much discussion about margin requirements. Give us just a discussion for an instant about when you discovered you had a $3 billion additional margin call?

Mr. TENEV. Thank you, Congressman. I believe the full play by play of that situation was described in detail in my written testimony. Just to clarify, though, this decision had—

Mr. LUCAS. My time has expired, unfortunately.

Thank you, Madam Chairwoman. I yield back.

Chairwoman WATERS. The gentleman's time has expired.

Mr. Meeks, you are recognized for 5 minutes.

Mr. MEEKS. Thank you, Madam Chairwoman, and Mr. Ranking Member, for this hearing,

Let me ask a question to Mr. Tenev. I have been burned once or twice in the market, but particularly since I have been a Member of Congress, one of the things that I recall greatly was the financial crises in 2008.

And we thought that opening the market up to where people had adjustable rate mortgages, et cetera, they were able to get into the market, people who may not have been before, but a lot of disclosure had not happened. So we didn't look, nor were there any documents to look at what their incomes were or anything of that nature.

So when those adjustable rates happened, many individuals lost their homes. Many people who bought those mortgages or who initially agreed to those mortgages sold them immediately because they did know that the people would not be able to afford them, and they would default shortly thereafter.

I understand your model of trying to get more people, more democratization, but that means that there is now a greater responsibility for ensuring that your customers have all of the information they need to access riskier trades. For me, the information has to be digestible and accessible.

One of the problems I have, for example, is you are allowing up to $1,000 to buy stocks on margin, and buying on margin is risky. So, how do you disclose this? How do you make the determination of individuals who are not the most sophisticated investor and allow them to buy these risky stocks that are on margin?

Mr. TENEV. Thank you, Congressman, for the opportunity to address that. Let me set the stage a little bit by saying that about 2 percent of our customers borrow on margin, about 13 percent on a monthly basis perform an options transaction, and a much smaller number, around 3 percent, perform a multi-leg options transaction. So, the vast majority of our customers are engaging in buy and hold activities and long-term investing on our platform.

To clarify your point on the $1,000 margin, that is actually something that we refer to as Robinhood Instant, and it is provided as a courtesy. When a customer initiates a deposit, we allow them access to up to $1,000 of that deposit immediately. Similar to how, if you deposit a check at a bank, as a courtesy, they might provide access to those funds or a portion of them before that check clears.

As for margins specifically, borrowing money on margin, the rules are very ironclad industry-wide. Obviously, Robinhood Securities conforms to all of the applicable rules. And Robinhood's product is in many ways more restrictive than that of our competitors, because in order to even qualify for borrowing on margin, you have to be a Robinhood Gold Customer, which involves paying $5 a month for the service.

Mr. MEEKS. You say that everything is restrictive, but when you are going after the less sophisticated investor, it is more than that. There is a greater responsibility that you have because they could lose. And when they lose, it could make a determination of whether or not they can pay their mortgage or their rent, and they could be taken advantage of.

Oftentimes, we find in the financial industry, it is those who have the least, who are really taken advantage of. So, the big guys—it becomes a reverse Robinhood situation which really concerns me.

Let me get to this really quickly because it was something that you said in regards to liquidity. You said that you didn't borrow the money because you needed it at the time, but later in the question, you raised the additional money, and I want to know how you spent the money for future situations, which says to me that you did have a liquidity problem or you anticipated possibly having a liquidity problem or would have one in future transactions. What is the deal there?

Mr. TENEV. I appreciate that question. I stand by what I said. Robinhood was able to meet our deposit requirements. We were in compliance with firm net capital obligations throughout the period, and that additional capital, the $3.4 billion, wasn't to service our existing requirements. It was entirely to prepare for a future, even greater black swan event, and to unrestrict and remove restrictions on the trading and the buying of these securities.

Chairwoman WATERS. The gentleman's time has expired.

Mr. Huizenga, you are next for 5 minutes.

Mr. HUIZENGA. Thanks, Madam Chairwoman. And this would have been a little nicer 10 minutes ago, when I was supposed to go, but I am going to go back to Mr. Griffin and the Chair of the Capital Markets Subcommittee. The ranking member, I think, was filibustering himself, and I just wanted to make sure, Mr. Griffin, that you had the opportunity to feel comfortable with the explanation of that best execution, and what was attempted, apparently, to try to be asked.

Mr. GRIFFIN. Congressman, I hope so. I think it is important to emphasize that we have vigorously advocated for execution quality to be one of the dominant decision-making factors in the routing of order flow in the United States. This has saved retail investors billions of dollars over the years in contrast to the executions that they would receive through other execution strategies.

Mr. HUIZENGA. Okay.

Mr. GRIFFIN. With respect to payment for order flow, we simply play by the rules of the road. Payment for order flow has been expressly approved by the SEC. It is a customary practice within the industry. If they choose to change the rules of the road, if we need to drive on the left side versus the right side, that is fine with us.

I do believe that payment for order flow has been an important source of innovation in the industry. As the CEO of Robinhood has testified, they drove the industry towards zero dollar commissions. This has been a big win for American investors.

Mr. HUIZENGA. I am going to Ms. Schulp from the Cato Institute. I know that Greenwich Associates had a study, and others are out there. Do you concur that this has been good for consumers, for the most part?

Ms. SCHULP. I think that there are still ongoing studies, but I do think that payment for order flow and the price improvements have largely been good for customers. And I agree with Mr. Griffin that this has helped drive innovation in the industry.

I think disclosure can always be better, and I think people should understand that their broker still needs to make money, even if they are providing a zero-commission trading service.

Mr. HUIZENGA. Okay. I have about 3 minutes left. I was going to start, actually, with this and ask each one of you why you thought you were here today, but I am going to dispense with that because it is going to take too much time, and I will provide the answer. Political theater for the most part. That is what this hearing is today. And we are on the business channels right now and on C-SPAN. I think you will see a few of my colleagues playing to the cameras.

But we need to have some of these fundamental and important questions answered at the end of the day. And one of the assertions that you have heard already today is that investing is, "casino gambling, it is using monopoly funny money," and I guess I want to know, is individual retail participation in the marketplace gambling, casino gambling, or using funny money?

Mr. Gill, why don't we just start with you? Very quickly.

I don't hear him. So, Mr. Huffman, let's move to you.

Mr. HUFFMAN. No. I believe that investing is investing.

Mr. HUIZENGA. Okay. Mr. Griffin?

Mr. GRIFFIN. I believe the vast, vast majority of retail participants are people saving to meet their dreams.

Mr. HUIZENGA. Mr. Tenev?

Mr. TENEV. Congressman, thank you. As I mentioned in my opening statement, Robinhood customers have essentially made over $35 billion in unrealized and realized gains—

Mr. HUIZENGA. Very quickly.

Mr. TENEV. —on all of their assets.

Mr. HUIZENGA. It has been a good thing for them, correct?

Mr. TENEV. Absolutely. It is investing, and it is building wealth.

Mr. HUIZENGA. I'll go back to Mr. Gill.

Mr. GILL. Yes. I believe it is an opportunity for investors to participate in the market just as institutionals participate.

Mr. HUIZENGA. Okay. So actually, the business channels had a good question from one of the Reddit readers, which is, you recommended GameStop before. Would you buy their stock now at roughly $45? It started at $48 earlier today. You were talking about buying it and being happy when it hit cross 20. So are you buying that stock today?

Mr. GILL. Let me just say that investing can be risky, and my particular approach to investing is rather aggressive and may not be suitable for anyone else, but for me personally, yes.

Mr. HUIZENGA. So, yes or no, are you buying the stock, and—

Mr. GILL. For me personally, yes. I do find it is an attractive investment at this price point.

Mr. HUIZENGA. A quick question, did you invest in GameStop because you were not aware of the payment for order flow? That is one of the accusations that people bought into this because they don't know that.

Mr. GILL. Sorry. Could you repeat that question?

Mr. HUIZENGA. Did you buy GameStop because you were not aware of the payment for order flow?

Mr. GILL. My investment in GameStop was based on the fundamentals.

Mr. HUIZENGA. Okay. I think that answers it. I believe my time has expired.

Chairwoman WATERS. Ms. Velazquez, you are recognized for 5 minutes.

Ms. VELAZQUEZ. Thank you, Madam Chairwoman.

Mr. Tenev, Robinhood seems to have perfected the definition of trading, providing the user with a perception that investing through the Robinhood app offers a recreational game, playing with little or downside risk. Of course, many of us understand that investing is not a game and carries significant risk.

How does Robinhood balance disclosures and the potential downside risk of investing, including the risk of substantial loss and the more enticing claims of profitability and the ease of trading?

Mr. TENEV. Congresswoman, I appreciate that question. Giving people what they want in a responsible way is what Robinhood is about. We don't consider that gamification. We know that investing is serious, and we are investing in all of the educational tools and customer support to help people on their investing journey.

What we see is most of our customers are buy and hold. A very small percentage are trading options, about 13 percent, and less than 3 percent borrow on margin. So, most people use Robinhood to build up portfolios over time, and—

Ms. VELAZQUEZ. But can you answer my question? How do you balance disclosures and the potential downside risk of it?

Mr. TENEV. We make lots of disclosures, Congresswoman. We are also a self-directed brokerage, so that means we don't provide advice, and we don't make recommendations for what customers should or should not invest in.

Ms. VELAZQUEZ. So, you are saying that as a result of emphasizing profitability and ease of trading over the risk of loss, many amateur investors were unaware of the situation in which they could find themselves?

Mr. TENEV. I want to mention again, as in my opening statement, Robinhood customers have earned more than $35 billion in unrealized and realized gains on top of what they've deposited.

So, I think this shows us that the product is working for customers, and our mission is working.

Ms. VELAZQUEZ. Okay. Thank you.

Mr. Plotkin, over the course of my time in Congress, I have been concerned and have spoken out about the dangers of short selling. While I understand that short selling can be used for legitimate purposes, too often, I have seen abuse, and it ends up harming ordinary workers and families.

I first saw it against the people of Puerto Rico, and now we are seeing it here against GameStop. Large investors, including hedge funds like yours, have to disclose their long positions when they own 5 percent or more of the company's shares, but no such disclosure is required for short positions.

As we consider reforms, is this type of disclosure for short positions something you will support? Mr. Plotkin?

Mr. PLOTKIN. Yes. Congresswoman, thank you very much for the question. I think it is a really good question. Whenever regulation is put forth in the marketplace, we will obviously operate within those rules. It is certainly something I would be happy to follow up with the committee on.

Ms. VELAZQUEZ. What about my question about short selling?

Mr. PLOTKIN. Yes. I think it is a really good question. It is not for me to decide, but if those are the rules, I will certainly abide by them.

Ms. VELAZQUEZ. Okay. I am glad to hear that answer.

Mr. Gill, public reports credit with you helping to start the GameStop craze by encouraging other amateur investors to bet against the short position that Mr. Plotkin and others took. But the stock has now fallen from its high, and many amateur investors have lost hundreds of thousands of dollars. It is my understanding that you are a registered broker. Is that correct?

Chairwoman WATERS. The gentlelady's time has expired.

Ms. VELAZQUEZ. Okay. Thank you. I yield back.

Chairwoman WATERS. Thank you. And I appreciate all of the Members who are participating today. This is not political theater at all. This is serious oversight responsibility, and Members are reminded not to impugn the motive of other Members. Thank you.

Mr. Luetkemeyer, you are recognized for 5 minutes.

Mr. LUETKEMEYER. Thank you, Madam Chairwoman. My first question will go to Mr. Gill.

Mr. Gill, you are a very serious investor, somebody who does his homework, and invests in the market your own personal funds. We are discussing the actions around Robinhood, all of the transactions that took place. Do you think we need more legislation as a result of what happened here, or did the system actually work?

And let me just make a couple of comments on that part. From the standpoint that it did work, was it self-correcting? Did the fact that somebody like yourself was able to invest and maybe take advantage of the overshorting positions by the hedge fund guys who were trying to really drive down the price of stock for other reasons, whatever, or did it point out perhaps that we had some companies, perhaps like Robinhood, where I would argue it was undercapitalized or underreserved, or maybe there was overaggressive other types of investing that was taking place.

The algorithms that were there, the different business models, they didn't work because you outsmarted the system, so to speak. Would you like to comment on these questions and how I formatted that?

Mr. GILL. Thank you for the questions, Congressman. I would say my expertise is in analyzing the business, the fundamentals of the business, not so much on the inner workings of the market. I am not so sure about legislation, per se. What I would say is that increased transparency could help, that if someone like me could have a better understanding of how those types of things work, I feel as though it would be quite beneficial to retail investors.

Mr. LUETKEMEYER. Thank you for that.

Mr. Tenev, Robinhood has an interesting name. As I recall, the old story is to take from the rich, and give to the poor. I assume what you are doing is allowing the poor to compete with the rich, which is interesting.

You made the comment in your testimony, Mr. Tenev, about settling this in real time. We have the electronic ability to do this. I think that would probably help the situation that occurred here, but what other problems occur when you do this in real time? What are the things we have to look at? What other unintended consequences would there be if you did something like that?

Mr. TENEV. Thank you, Congressman, for the question. I believe that right now, certain market participants rely on next-day settlement to be able to take advantage of intra-day netting and run up larger, one-sided positions in certain stocks with the knowledge that they can close those positions or reduce them by the time settlement happens.

And I understand that would be the limitation to the trading activities of some of these institutions, so that's certainly one area to consider.

The other is around securities lending. We would have to make changes to how securities lending works. I don't think any of these are insurmountable challenges, and I would be happy, as I mentioned earlier, to deploy our intellectual capital and our team's engineering resources to help solve these problems very quickly.

Mr. LUETKEMEYER. Thank you for that.

Mr. Plotkin and Mr. Griffin, the question is for both of you here. Whenever you are short selling—I understand that GameStop stock was short sold at 140 percent. And, Mr. Plotkin, you made the comment in your testimony a minute ago that you were not trying to manipulate stock. Yet, if you are short selling a stock 140 percent, for me, on the outside looking in, it looks like that is exactly what you are doing. Explain to me why that is not manipulating the stock?

Mr. PLOTKIN. Thank you, Congressman. I can't speak to other people who were shorting. For us, any time we short a stock, we locate a borrower. Our systems actually force us to find a borrower. We always short stocks within the context of all of the rules.

Mr. LUETKEMEYER. Mr. Griffin, would you like to comment on that? You guys are both market makers, and brokers and hedge fund guys. You do all of it. Why is this not considered manipulating the stock whenever you can short sell at 140 percent? Don't you think there should be a limit on something like that?

Mr. GRIFFIN. I believe that the short interest in GameStop was exceptional, and I am not sure it is worth us delving into legislative corrections for a very unique situation in terms of the extreme size of the short interest.

I will say that all of the large markets, in fact, every bank, every hedge fund does have to comply with the requirement to borrow shares to short shares in the course of their day in and day out business. The practice of naked shorting was largely curtailed by SEC mandate years ago.

Chairwoman WATERS. The gentleman's time has expired.

Mr. Scott, you are recognized for 5 minutes.

Mr. SCOTT. Thank you, Chairwoman Waters. And let me just say that the people of this country appreciate you for pulling this Financial Services hearing together because this is a threat to the future of our financial system, and we have to get to the bottom of it.

Let me start with you, Mr. Tenev. Let's go through this. The sequence of events that led to the extreme rise in value of GameStop stock and the subsequent market volatility originated through a Reddit discussion, and then that was fueled through social media. And as the story gained traction, tweets by well-known figures with the influence to move markets sent the stock value even higher and higher.

Let me start with you, Mr. Tenev. What policies does Robinhood have in place to monitor what happened on social media and how it drives the use of your trading platforms?

Mr. TENEV. Thank you for the question, Congressman. Currently, Robinhood does not perform any sort of moderation of social media. We simply don't have the data that the social media platforms have at their disposal to tie these posts to identities. We do, however, within Robinhood Securities conform to all regulatory requirements around monitoring and trade surveillance and all things of that nature.

Mr. SCOTT. Mr. Tenev, don't you see something has gone terribly wrong here? What do you do to monitor the trades in individual stocks, particularly when in the case of GameStop, they are singled out and moved on social media? What do you do?

Mr. TENEV. I appreciate the question. Our priority throughout the exceptional market conditions in January and early February was to maintain the uptime and performance of our platform and make sure that we are available to customers—

Mr. SCOTT. Let me try to get to a point here. Do you, Robinhood, have any policies in place to ensure that investors are making trades based on legitimate material financial information and not the influence of social media, the design of trading platforms, or any other superfluous information? Do you have anything, any guards up?

Mr. TENEV. Absolutely. Congressman, we provide educational resources to our customers, including our redesigned Robinhood Learn Portal, which is not just available to Robinhood customers but to the general public, and it had over 3.2 million people visiting in 2020.

Mr. SCOTT. But you are at the center of this. Don't you see and agree that something very wrong happened here and that you are at the center of it? And we are looking on this committee at how we can protect our wonderful, precious financial system. We need it from you.

What about you, Mr. Hoffman. Do you have anything?

Mr. HUFFMAN. Congressman—

Mr. SCOTT. What steps is your company taking to guard against this, anything at all?

Mr. HUFFMAN. Congressman, we spend a lot of time at Reddit ensuring the authenticity of our platform, so we have a large team dedicated to this exact task. Everything on Reddit, all of the content is created by users, voted on by users, and ranked by users, and we make sure that it is authenticated and as unmanipulated as possible. And in this specific case, we did not see any signs of manipulation.

Mr. SCOTT. Madam Chairwoman, I just want to conclude, I have maybe 10 seconds left. But this episode exposes a serious threat to our financial system when tweets and social media posts do more to move the market than material, legitimate information, and this is enormous.

Chairwoman WATERS. Thank you very much.

Mr. Stivers, you are now recognized for 5 minutes.

Mr. STIVERS. Thank you, Madam Chairwoman. I appreciate you calling this hearing. The American financial markets, I believe, are the envy of the world, but they are still imperfect. I would have liked to seen this committee have a meaningful discussion about capital requirements and the T plus 2 clearing rules that may have contributed to some of Robinhood's customers not being able to purchase stock, including GameStop, for a period of time.

But because the Majority didn't include the SEC, the Depository Trust & Clearing Corporation, or the National Securities Clearing Corporation to testify, we are left with what we have. That is because I believe the Majority is attempting to use this hearing to drive a narrative about the U.S. capital markets being rigged. But I do have several questions.

Mr. Tenev, you decided to stop allowing your users to buy GameStop and other stocks as a result of capital requirements on Robinhood securities. Is that correct?

Mr. TENEV. That is correct, yes, deposit requirements with our clearinghouses.

Mr. STIVERS. And those got resolved, but for a period of time, some of your users could only sell and not buy, and that could have contributed to the stock actually not going up as fast because some of your users were prohibited from buying. Do you think it is possible that that could have happened?

Mr. TENEV. I shouldn't speculate on what could have happened.

Mr. STIVERS. If there are more sellers than buyers, does the stock price go down or up?

Mr. TENEV. Congressman, to be clear, Robinhood is a minority of trading activity in—

Mr. STIVERS. I understand.

Mr. TENEV. —these securities.

Mr. STIVERS. I understand. But if your buyers can only sell and not buy, then it clearly keeps you from putting upward pressure on the stock price. Is that correct?

Mr. TENEV. On Thursday—

Mr. STIVERS. Among your users.

Mr. TENEV. —customers on our platform could only sell.

Mr. STIVERS. Correct.

Mr. TENEV. There was no ability to buy, that is correct.

Mr. STIVERS. Right. You said earlier—by the way, I know some people have attacked your arbitration agreements, but I want you to be clear. If your users were harmed as a result of these actions, they can recover through arbitration. Is that correct, yes or no?

Mr. TENEV. Yes. That is correct, and our arbitration is FINRA-supervised and overseen, and we do believe arbitration gives customers a fair and speedier resolution to their claims.

Mr. STIVERS. Thank you. Does your user agreement and your arbitration allow for group arbitration or only individual arbitration?

Mr. TENEV. Let me get back to you on that.

Mr. STIVERS. If a group was treated similarly and similarly affected or lost upside or lost money, can they do it as a group, or is it only individuals in your arbitration agreement?

Mr. TENEV. Congressman, I am sure you are familiar with the number of class action lawsuits filed against Robinhood for—

Mr. STIVERS. And I am not asking about a class action lawsuit. I am asking in your arbitration system, can a group of people come together as an individual? And this is not a trick question. I am not a fan of trial lawyers. I am just trying to understand.

Mr. TENEV. Yes. I appreciate the question, Congressman. I think the best thing I can do is get back to you after making sure that we get you the right answer.

Mr. STIVERS. That would be great. Thank you. That would be helpful.

Mr. Plotkin, are you a frequent short seller, yes or no?

Mr. PLOTKIN. We run a long short portfolio. The majority of our investments are long investments, but we also have short investments to hedge out market risk.

Mr. STIVERS. Thank you, Mr. Plotkin. Has Melvin Capital ever engaged in short selling of Tesla stock?

Mr. PLOTKIN. We have shorted Tesla in the past, that is correct.

Mr. STIVERS. Did you see the tweet from Tesla CEO Elon Musk about GameStop stock?

Mr. PLOTKIN. I did see that after market hours on—yes, on the Tuesday.

Mr. STIVERS. Do you believe that Mr. Musk's tweet had any significant effect of driving the rise in GameStop stock?

Mr. PLOTKIN. I don't want to speculate on what the actions of his tweet were. The stock did rise after hours.

Mr. STIVERS. Then, do you believe that tweet was targeting you because you had shorted Tesla stock in the past?

Mr. PLOTKIN. We had a very small short position years ago in Tesla. That would be pure speculation as to his motives in putting that tweet out.

Mr. STIVERS. Okay. Thank you.

I will go back to Mr. Tenev. On the regulatory requirements, do you believe that the SEC and the Depository Trust & Clearing Corporation should modify any of their rules as a result of what happened to your users because of capital requirements?

Mr. TENEV. I believe—

Chairwoman WATERS. The gentleman's time has expired. And the SEC is not here today because they are in transition with a temporary Chair, awaiting the confirmation of the person who has been appointed by the President of the United States. This is a serious hearing. Members are reminded not to impugn the motives of others. Thank you.

Mr. Green, you are recognized for 5 minutes.

Mr. GREEN. Thank you, Madam Chairwoman.

Ms. Schulp, there is a reason for penalizing a market maker for improperly trading its own accounts ahead of its clients' accounts. Note that I said, "improperly trading." I don't want to go through the scenario of there being a time for proper trading ahead of accounts. I would like for you to tell us what that reason is, please.

Ms. SCHULP. Trading ahead of customer accounts is illegal, and it does not—

Mr. GREEN. I understand that it is illegal. I don't mean to be rude, crude, and unrefined, but I have to ask this question quickly. What can happen that can benefit the market maker? How can that be monetized such that the market maker profits greatly from doing it?

Ms. SCHULP. If a market maker trades improperly ahead of the customer accounts, he can get a better price and can move the market in the process, depending on how big the trade is. That is hurting the customer.

Mr. GREEN. And if this trade is huge, and you can see that this trade that the client has is huge and will have an impact on the market, how does that benefit the market maker to trade ahead of the client?

Ms. SCHULP. The market maker can get a better price for himself before the price changes by the client's trade. He can also engage in self-dealing that way as well.

Mr. GREEN. So, does it benefit a huge market maker to have a great deal with, let's say, a Robinhood, because of the flow that will be coming through that the market maker can take advantage of?

Ms. SCHULP. I don't think that they are necessarily congruent situations. When you are trading ahead of a customer order, which is something that is illegal and that the SEC does monitor for, it is very different from having knowledge as to the way that the market might be moving based on—

Mr. GREEN. I understand, but I want to talk about the circumstance where it is improper, not where it is proper. Remember, we started with improper trading. And here is my point. Let me go to it quickly. The market maker, Citadel, traded over-the-counter stocks for its own accounts in 2012, from 2012 to 2014, while simultaneously delaying client orders for the same shares and was fined for this.

Citadel has been naughty for some time: In 2014, Citadel faced $800,000 in penalties; 2017, $22.6 million; 2018, $3.5 million; 2020, $97 million, and another 2020 of $700,000. This seems like a lot of money. It is for me. More than $124 million.

But over the same period of time, Citadel had revenues generated in the amount of $13.2 billion. It seems to me that the punishment for these improper trades and improper extants because it wasn't just trading. Citadel also did some other things that were not proper. They messed with their clients. It seems that the punishment is so small, given the amount of revenue generated over this same period of time. It seems that Citadel has at least an opportunity to build into its cost of doing business paying penalties, and that concerns me.

It concerns me that the punishment doesn't seem to deter Citadel. It concerns me because I know of circumstances wherein persons who are not in the market do things that are much less harmful, and they can possibly go to jail.

So the question that I have is this: What kinds of systems do we have in place, and back to you again, ma'am, to prevent the very things that I have called to the attention of my colleagues?

Ms. SCHULP. As a former enforcement attorney at FINRA, I can say that regulators have the same concern with fines and other punishments becoming just a cost of doing business, and it is one of the things that is considered, along with the lack of regulations around what can be punished.

Chairwoman WATERS. The gentleman's time has expired.

Mr. GREEN. May I, for the record—

Chairwoman WATERS. The gentleman's time has expired. Mr. Green, as you know, we are going to have a series of hearings, and our next panel will include a whole bevy of experts also on some of these issues.

With that, Mr. Green—

Mr. GREEN. Madam, may I say something in the record, please? I have—

Chairwoman WATERS. Without objection, you may enter into the record. Thank you.

Mr. GREEN. Thank you.

Chairwoman WATERS. Mr. Barr, you are recognized for 5 minutes.

Mr. BARR. Thank you, Madam Chairwoman.

Mr. Griffin, I want to revisit this issue of payment for order flow. Payment for order flow has been around for decades, correct?

Mr. GRIFFIN. I know it has been around for at least 1 or 2 decades. I can't answer before that period of time.

Mr. BARR. And it is a recognized and approved practice by the SEC, correct?

Mr. GRIFFIN. Yes, it is.

Mr. BARR. And payment for order flow is set by the brokerage firm, not the wholesaler, right?

Mr. GRIFFIN. It is ultimately a negotiated number, but it is a number that is set by the brokerage firm and not by us as the market maker.

Mr. BARR. As a market maker that provides execution services to retail brokers, you are required to meet best-execution requirements. Is that correct?

Mr. GRIFFIN. Yes, it is.

Mr. BARR. In other words, market makers are required to provide the same or better pricing than the exchanges, correct?

Mr. GRIFFIN. That is correct.

Mr. BARR. And how can market makers offer that better pricing to Mr. Sherman's line of questions?

Mr. GRIFFIN. There are a number of drivers that permit us to offer better pricing than what is available on exchanges. The first is that exchanges have legally-mandated minimum tech sizes of a penny. So if you look at a stock like AMC, that trade's $5 bid, $5.01 offered, the exchange could trade with a half-cent increment, it would probably trade $5 point 005 bid 501 offer or vice versa, but the exchanges are limited to a $0.01 minimum tech size.

And we have been clear on the record in prior testimony that exchanges should be permitted to have a smaller and more competitive tech size. That's factor number one.

Mr. BARR. Okay.

Mr. GRIFFIN. Number two, is that the average retail order is much smaller in totality than the average order that goes on to an exchange. Because this order is smaller—and I will share a number with you, the typical Robinhood order is ballpark about $2,000 in size. Because it's a small order, the amount of risk that we need to assume in managing that order is relatively small as compared to an order that we have to manage from our on-exchange trading.

And as I'm sure you're well-aware, we are the largest trader of stocks on exchanges in the United States—

Mr. BARR. Let me move to Mr. Tenev really quickly on that point. What impact might greater restrictions on the payment for order flow model have on your ability to offer zero-commission trades?

Mr. TENEV. We do believe, Congressman, that that's an important question and payment for order flow helps cover the costs of running our business and offer commission-free trading to customers. When we started, people didn't even think that there was enough margin left to make this business work, but we've been fortunate to make it work and to make it work for our customers.

Mr. BARR. I'm talking about why Robinhood restricted trades. I think your explanation about margin requirements charged by your clearinghouse makes sense. Is your clearinghouse supervised by the Fed and the SEC?

Mr. TENEV. I believe that—

Mr. BARR. Are the margin requirements charged by your clearinghouse in turn approved by Federal regulators?

Mr. TENEV. Yes.

Mr. BARR. And did Federal regulators approve the value of risk charge that was imposed on Robinhood?

Mr. TENEV. I believe, Congressman, the value of risk charge is outlined in general terms in Dodd-Frank, but I'm not sure who approved the specific implementation of that formula.

Mr. BARR. So if anyone has a problem with your decision to halt trades, it's fair to say that their frustration should be directed toward Federal regulation?

Mr. TENEV. Congressman, I'm not trying to throw anyone under the bus in direct frustration anywhere. All I can say is Robinhood Securities played this by the books and played it basically the only way that we could remain in compliance with our deposit requirements.

Mr. BARR. Mr. Plotkin, I appreciate your testimony that Melvin always follows laws governing shorting stock, but Melvin lost $6 billion in 20 trading days. Let me ask you about your risk management. Did your short positions exceed float?

Mr. PLOTKIN. No, they did not.

Mr. BARR. Shorting has an important role to play in our markets, allowing for legitimate hedging and price discovery, but we are interested in naked shorting. And so, we would hope that you would clarify that and how it is that you make sure that you're first locating the borrower?

Chairwoman WATERS. The gentleman's time has expired. Mr. Cleaver, you're recognized for 5 minutes.

Mr. CLEAVER. Thank you, Madam Chairwoman, and I, too, would like to thank you for this hearing. It's a question that a lot of people are asking, probably many of us as we go through our districts, but let me start with you, Mr. Tenev. I'm just curious if you can answer, in a short period of time, how did you come up with the name of your company?

Mr. TENEV. Absolutely. Thank you for that question, Congressman. Robinhood stands for lowering the barrier to entry and democratizing finance for all. The idea is the same tools that institutions and wealthier, high-net-worth individuals have had for a long time should be available to the people regardless of their net worth or how much money they have.

Mr. CLEAVER. Okay. I appreciate that answer. Because it's something that I would also embrace; however, I have a 23-year-old on the other side of the house whom I love dearly, but he has no training, no income, and no qualifications. How in the world could he get a million dollars worth of leverage?

Mr. TENEV. Thank you, Congressman. The leverage that we provide to our customers, which less than 3 percent of our customers actively use, is regulated strictly by requirements. So, the only way to get that amount of leverage in a margin account through borrowing is to deposit a similarly-sized amount of capital.

Mr. CLEAVER. Or by mistake?

Mr. TENEV. Congressman, I'm not sure what you're referring to.

Mr. CLEAVER. There's a record of a young man getting a million dollars worth of leverage. He was only 20-years-old, so I'm just saying if that's not a policy, that was an error.

Mr. TENEV. Congressman, I appreciate the opportunity to address that really important point. You're referring to Mr. Kearns.

Mr. CLEAVER. I am.

Mr. TENEV. The man who, unfortunately, passed last year.

Mr. CLEAVER. Yes.

Mr. TENEV. First of all, I'm sorry to the family of Mr. Kearns for their loss. The passing of Mr. Kearns was deeply troubling to me and to the entire company, and we have vowed to take a series of steps, very aggressive steps, to make our options products safer for our customers, including changing the customer interface, adding more additional options, education, as well as strengthening and tightening the requirements for people getting options and adding a live customer support line for acute options cases.

It was a tragedy, and we went into immediate action to make sure that we made, not just the most accessible options trading product for our customers, but the safest as well.

Mr. CLEAVER. Okay. In my real life, I'm a United Methodist Pastor and I read your statement after the tragedy of this young 20-year-old, and I don't think you or I want to get into litigating that right here today, but what improvements did you make in the aftermath to your platform or were there improvements?

Mr. TENEV. Thank you, Congressman. There were several improvements. One, we added the ability to instant exercise as well as exercise options positions in-app. We clarified the display of buying power, specifically negative buying power, in situations where one leg of a complex multi-leg options transaction were to be assigned.

We also added an options education specialist. We also added live phone base customer support for acute options cases, which has gotten very great feedback from customers and is something we're expanding to other use cases such as places where customers' accounts have had off-platform hacking incidents.

Mr. CLEAVER. The last one is what I was concentrating on because this young man was trying to get into your system to find out what was going on. He was confused, he was scared, and so he sent emails. And to be fair, there was a response, but it was hours later. And, as I became more and more familiar with this particular case—

Chairwoman WATERS. The gentleman's time has expired.

Mr. CLEAVER. Thank you, Madam Chairwoman. I appreciate it.

Chairwoman WATERS. You're so welcome.

Mr. Hill, you're recognized for 5 minutes.

Mr. HILL. Thank you, Madam Chairwoman, for holding this hearing, and I want to thank our witnesses for their expertise and their patience. Madam Chairwoman, I have a letter from the American Securities Association I'd like to insert in the record, please.

Chairwoman WATERS. Without objection, it is so ordered.

Mr. HILL. Thank you very much.

Mr. Tenev, what a treat to see you, and congratulations on being part of the American Dream. I had the pleasure of working for President Bush 41 in Sophia, Bulgaria, in 1990 and 1991 to try to bring capitalism to Bulgaria after the wall fell, so I'm glad to see you're an American citizen and innovating here in our country.

Mr. TENEV. Thank you.

Mr. HILL. I think you've done a good job talking about the—I'd say the acknowledged lesson that you've learned in terms of these deposits for clearing and the important risk management issue for your firm. So, I'd like to follow up on some of the discussions about retail service that you've also touched on today.

Do you have a call center generally for Robinhood investors?

Mr. TENEV. Thank you for that question, Congressman. And I want to start by saying customer service is fundamental to everything that we do and it's one of the areas where we're investing the most. We have customer service centers in a number of States—Colorado, Florida, Texas, and Arizona, and we're looking to expand aggressively—

Mr. HILL. Well, do you have a call center that I can call, a 1–800 number if I'm having trouble in the middle of the trading day?

Mr. TENEV. We do offer, Congressman, live phone support in-app for certain use cases. We're expanding that as fast as we can. As I mentioned earlier, options, advanced options cases, as well as account takeovers, which typically happen through a customer's email, personal email, who has been compromised, and the feedback has been great. And we're looking to expand the live phone channel, as well as make improvements to our email channel and—

Mr. HILL. Thank you. Thank you. That's helpful.

And on the subject of margin and options, you've talked about that today, but I've spent 40 years in this business and been the general securities principal in three different firms, and this issue of granting margin and option approval to retail clients is always an important issue. You've addressed that today, so I want to turn to a different topic that has not been raised, which is low-dollar stocks.

As I understand it, your policy and procedure manual simply says that you allow low-dollar stocks if they're on an exchange, but many, many brokerage firms are very reticent to allow retail investors to invest in stocks that are under $5. Could you address that issue today?

Mr. TENEV. Yes, I'd be happy to Congressman. Robinhood allows customers to trade in and invest in exchange-listed securities, so that's the objective criteria that we use. And it actually excludes several types of securities that customers commonly request a trade in.

On Robinhood, you can't trade over-the-counter bulletin boards except in limited cases where a listed stock falls to over-the-counter. You can't trade pink sheets and, of course, you can't short sell or enter undefined risk options trades. Our objective criteria involve whether exchanges list these securities.

Mr. HILL. Thank you. And I think that probably—I'm sure you'll re-evaluate that after these effects.

Let me turn to Ms. Schulp. Thank you for being here. The WallStreetBets Reddit platform—I'm curious when you think about the obligation of this SEC pending investigation, based on your FINRA background, do you think the SEC should look at the bulletin board participants under Section 9a2 or potentially inducing trading in a certain direction? Is that worthy of their review?

Ms. SCHULP. Thank you for the question, Congressman. I think that there has been little evidence to this time that there has been any sort of false or deceptive conduct taking place on the WallStreetBets' forum. That does not mean, though, that I think that the SEC should not take a deeper look. Because of the anonymity in the forum, there could have been people who were engaging in deceptive behavior that's not readily apparent to the public.

So I do think the SEC should look, but to this point, I've seen very little that would meet a test for manipulation, which generally involves false or deceptive behavior.

Mr. HILL. Thank you. I appreciate that.

Mr. Tenev, I thought of another question for you. Would a securities transaction tax be beneficial to retail investors in the United States?

Mr. TENEV. Thank you, Congressman. I don't believe it would.

Mr. HILL. Thank you.

Chairwoman WATERS. The gentleman's time has expired.

Mr. HILL. Thank you, Madam Chairwoman.

Chairwoman WATERS. We will take a short recess. The committee stands in recess for 5 minutes. Thank you.

[brief recess]

Chairwoman WATERS. The committee will come to order. Mr. Perlmutter, you are recognized for 5 minutes.

Mr. PERLMUTTER. Thanks, Madam Chairwoman.

Mr. Gill, let's start with you, since you seemed to have started all of this. You began analyzing GameStop in the summer of 2019. Was that your testimony?

Mr. GILL. Congressman, I've been following GameStop for a number of years. I started to buy into it in June of 2019, most recently.

Mr. PERLMUTTER. So back then, what was the price of the stock when you started investing in it?

Mr. GILL. At the time, it was in the ballpark of around $5 per share.

Mr. PERLMUTTER. Okay. And in your analysis, what did you think that was a proper price for the share, because you thought you were getting a good buy?

Mr. GILL. Sure. At the time, I thought that the value of the business could be worth up to roughly $2 billion.

Mr. PERLMUTTER. But how much is that per share? Bring it back to the—you bought at $5, you thought it was worth $10, $20?

Mr. GILL. I felt as though that it could be worth at the time in the range of, say, $20 to $25 per share.

Mr. PERLMUTTER. Okay. And you continued to invest on and off through 2019 and 2020. Is that true?

Mr. GILL. Yes.

Mr. PERLMUTTER. Okay. And you bought some shares, but you also did some options trading, did you not?

Mr. GILL. Correct. I did.

Mr. PERLMUTTER. And options trading is not really for the novice investor, is it?

Mr. GILL. It is a riskier investment, yes.

Mr. PERLMUTTER. Okay. On January 27th, I think the stock price hit $483 or something like that. Is that true?

Mr. GILL. I believe it was in that area, yes.

Mr. PERLMUTTER. In your analysis, back when you started investing in the stock, did you ever see it being valued at $483 per share?

Mr. GILL. At the time, I thought it was possible, but a very low probability, I thought.

Mr. PERLMUTTER. Thank you. In terms of the platforms where you visited and discussed this stock with others, one was the Reddit, subreddit WallStreetBets' platform, correct?

Mr. GILL. Correct.

Mr. PERLMUTTER. And at any given time, how many people were you talking to on that platform?

Mr. GILL. I wasn't so much talking to anyone individually, but rather making posts on that public forum.

Mr. PERLMUTTER. That GameStop was an attractive stock?

Mr. GILL. Yes. Early on, I had felt that it was an attractive investment opportunity and I had shared some of my thoughts as to why that was.

Mr. PERLMUTTER. Did you discuss this on any other platforms? Are there any other kinds of Reddit or other kinds of platforms where you talked about the stock?

Mr. GILL. Yes, I have talked about the stock on some other platforms.

Mr. PERLMUTTER. Okay. Did you ever talk about the short sellers that had bet against this company?

Mr. GILL. Yes, the topic did come up.

Mr. PERLMUTTER. And about when did that occur?

Mr. GILL. Oh, since around the time I had begun investing in it. Someone else thought it was an exceptional level of short interest in the stock since the time I had started investing in it.

Mr. PERLMUTTER. Okay. Let me turn my attention now to you, Mr. Plotkin.

When did Melvin first take short position in GameStop?

Mr. PLOTKIN. Thank you, Congressman. That was in 2014, really right at our inception of the fund.

Mr. PERLMUTTER. And when you did that, you continued to maintain a short position?

Mr. PLOTKIN. That's correct.

Mr. PERLMUTTER. So you said you analyzed the value of the stock, and by taking a short position, you, unlike Mr. Gill, thought that the stock was overpriced. He thought it was underpriced; you thought it was overpriced?

Mr. PLOTKIN. That's a good conclusion, yes.

Mr. PERLMUTTER. In your analysis when you started into the short position, what did you think the stock was worth?

Mr. PLOTKIN. I don't remember exactly at the time. I think when we launched it, it was probably $40 stock. I think we believed the company had a lot of structural challenges. We've seen their earnings go from, I think, north of $3 a share to almost negative $3 a share, so it's been a lot of challenges fundamentally.

Mr. PERLMUTTER. Last question for you, were you in a naked position in your short position because this stock was oversold?

Mr. PLOTKIN. No. Our systems won't even allow that, so that would be impossible for us to do.

Mr. PERLMUTTER. Okay. Thank you. My time has expired. I wanted to get some facts out for Mr. McHenry.

And I yield back.

Chairwoman WATERS. Thank you very much. The gentleman's time has expired. I now recognize Mr. Zeldin for 5 minutes.

Mr. ZELDIN. Thank you, Madam Chairwoman, and Ranking Member McHenry, for holding this hearing. And thank you to the witnesses for being here today. I represent the first congressional district of New York, which encompasses much of Suffolk County on Long Island. My home district is full of people from all different walks of life and industries, and having access to cost-efficient investing is crucial.

While there are always ways to make a system work better, our capital markets are the envy of the world with their liquidity and diversity of investment opportunities. Innovations in securities trading brought by the private sector have increased access for retail investors.

For better or for worse, this situation is a perfect example. For example, one of our witnesses here, Mr. Gill, or should I say, "Roaring Kitty," turned $53,000 into almost $50 million, and that's what you would call some deep you-know-what value. Of course, we know that not all those who invested in these stocks share the same success story. However, I want to highlight a potential vulnerability in these innovations.

I've been concerned for some time in general with the sharing of U.S. individual user data with the Chinese Communist Party (CCP). I sent a letter to the Treasury Department in October 2019 expressing concern with the potential sharing of user information by TikTok to its parent company, ByteDance, and asked for a review by the Committee on Foreign Investment in the United States (CFIUS).

Chinese companies are required by law to regulate online behavior that deviates from the political goals of the CCP. Obey the CCP's censorship directives and participate in China's espionage.

These policies regulate companies like TikTok in the China market, and increasingly, their overseas business. Webull and Moomoo are two examples of broker-dealers that are subsidiaries of Chinese parent companies.

According to Bloomberg, funds affiliated with Xiaomi Corp own at least 14 percent of Webull. Xiaomi is a Chinese company that risks being delisted from U.S. exchanges after the U.S. Department of Defense put the company on a blacklist on January 14, 2021.

Moomoo is owned by Futu Holdings, which is a company that received a significant investment from entities affiliated with Tencent, a company with known ties to the CCP.

On December 8, 2020, Bloomberg Business Week ran an article on Webull stating that the company, "has increased its roster of brokerage clients by about tenfold this year to more than 2 million by offering free stock trades with a slick online interface."

On January 29, 2020, the day after trading activity for long trades on certain stocks discussed on Reddit threads were limited, Bloomberg ran an article with the headline, "Robinhood rival Webull sees 16 fold jump in new trading accounts." It's clear that these apps have rapidly increased their user base, which has me concerned.

Ms. Schulp, do you think we should be concerned about the potential for Chinese entities with ties to the CCP receiving personally identifiable information (PII) or other user data from their subsidiary broker-dealers that are licensed and registered in the United States?

Ms. SCHULP. I think it's a potential national security concern, which is a bit outside of my area of expertise. What I can say is that the rules that the brokers have to apply and comply with regarding personally identifiable information and other material data should be applied equally to companies that are based offshore and companies that are based onshore, and I hope that that's the case with respect to Webull or any other competitors that are not domestically-owned.

Mr. ZELDIN. Having a diversity of choice for different trading apps is generally good for market competition, however, is it a good outcome for millions of Americans to flood into trading apps that could be required to share user data to parent companies that have ties to the CCP?

Ms. SCHULP. Again, I think choice is key here, as well as understanding from a consumer perspective what companies you are choosing to do business with. Again, the national security concerns are a bit outside of my area of expertise.

Mr. ZELDIN. I thank you for being here. This is another angle to this issue with these new options that are being provided to average retail investors and we want these retail investors to have as much information as possible to be set up for success.

I yield back.

Chairwoman WATERS. Thank you very much. Mr. Himes, you're recognized for 5 minutes.

Mr. HIMES. Thank you, Madam Chairwoman, and a big thank you to our panel today for a very interesting conversation. One of the chairwoman's ways of characterizing this hearing was who wins and who loses, and I've spent a bunch of time in the last couple of days looking at the various players here.

I'm pretty convinced that Citadel is one of the winners; they make a lot of money. They're the casino in this story, and the casino tends to win over time. Robinhood has a valuation of $5.6 billion, and makes a lot of money from the casino, so who loses? And I want to spend some time talking about the person who usually loses, and that's the retail investor.

And while I have supported for many years the democratization of finance, as we say, it's not just in Washington, D.C., but on Wall Street. The retail investor is known as, "dumb money," and there are any number of structures that are set up to take advantage of the retail investor. And I think it's worth looking at that because as much as we're celebrating Mr. Gill here, we're not talking very much about Mr. Salvador Vergara, who was featured in a Wall Street Journal story, who took out a $20,000 personal loan through Robinhood and invested it in GameStop only to see the value of his position go down 80 percent.

So, Mr. Vergara is out $16,000 he doesn't have, that he owes to somebody else. And as much as I support the democratization of finance, we need to be thoughtful about this.

Mr. Tenev, my question is for you. You quoted a $35 billion number as what I interpreted to be profits in excess of deposited funds and securities. If you just look at your customers who traded in GameStop over the period of its increase and subsequent decrease, Mr. Tenev, how did your customers in the aggregate do? Did they win or did they lose?

Mr. TENEV. Thank you, Congressman, for that question. I don't have that particular cut of the data top of mind, so maybe we can get back to you on that one.

Mr. HIMES. You don't have that. But you do have a $35 billion figure. That figure doesn't mean a lot to me, because it's just a dollar number. Help me convert that to a rate of return. First of all, is that $35 billion gross or net? In other words, is that actual profit or does it include margin shares, or other forms of leverage that may not actually belong to the account holder?

Mr. TENEV. It does include, Congressman, unrealized gains, so it's the value of assets, both including positions in securities and cryptocurrencies.

Mr. HIMES. I get that, but, again, $35 billion doesn't mean anything to me unless you can convert that into a rate of return. So, do that for me? On what asset under management number is that $35 billion unrealized against?

Mr. TENEV. The asset under management number is not one that Robinhood has publicly shared—

Mr. HIMES. Okay, but you can't share $35 billion—sorry, Mr. Tenev. I just don't have a lot of time, and $35 billion is a meaningless number. I need to know what that is in terms of return. So, convert that for me into rate of return so I can compare it to Treasury, so I can compare it to the S&P 500.

Mr. TENEV. Congressman, with respect, I think the proper comparison is to customers not investing at all. Many of our customers are investing for the first time and are taking money that they, otherwise, would have spent or consumed and put—

Mr. HIMES. Mr. Tenev, again, I don't want to be rude, but it's my time. Again, you offered up the $35 billion number, which as you and anybody else schooled in finance knows is meaningless unless you convert it into a rate of return.

So, just please convert that $35 billion number, which to the folks watching at home sounds like a lot of money, but what does that actually convert to in terms of rate of return which is what matters?

Mr. TENEV. Congressman, $35 billion is indeed a large amount of money, especially for our customers who are mostly small investors. It's more than most corporations, nearly all—

Mr. HIMES. Mr. Tenev, don't make me be rude here. You and I both know that $35 billion of unrealized gains, if that's on a base of $100 billion, that's a 35 percent of return. If that's on under a trillion dollars, it's a radically different rate of return.

So what I'm trying to get at, Mr. Tenev, here is, you threw out the number of $35 billion. I actually think the right comparison is, what if your clients had simply invested in the long run in an S&P index fund. Would that number be more than $35 billion or less?

Mr. TENEV. Congressman, with respect, I don't believe the right comparison is investing in an S&P index fund. I think the right comparison is not having invested at all and having spent that money and consumed it.

Mr. HIMES. No, no. It's most certainly not, Mr. Tenev. I'm out of time, but, again, you put out the $35 billion number, so I think it's only decent, because you and I both know that a hard-dollar number is meaningless unless you can convert is to returns. So, I'm going to ask you to convert that—obviously, I'm out of time—into a rate of return for us.

Chairwoman WATERS. You're out of time.

Mr. Loudermilk, you're now recognized for 5 minutes.

Mr. LOUDERMILK. Thank you, Madam Chairwoman, and I appreciate all of the members of the panel being here. I think you've seen that there are occasions with some on the committee here that if you're not giving them the answer that they want, that they can use, they're just going to continue to push you. So, I just encourage you to continue speaking the truth and you'll always stand up head and shoulders above everyone.

Not surprisingly, the situation with GameStop trading has resulted in commentators and even some of my colleagues engaging in knee-jerk reactions calling for new laws and regulations to be hastily enacted. It just seems to be a trend in Washington, D.C., to never let a crisis go to waste. Some have even spread conspiracy theories and alleged that crimes were committed before knowing what even happened.

I can even testify to what was just being said—I know a number of people, personal friends who have never invested before, but because of Robinhood and other retail platforms, many of them took the stimulus money that they received during the CARES Act, which, because they were still working, they didn't need, and they actually opened an account and started investing.

So, yes, more and more people who have never invested before are now investing using these platforms. This hearing is a reminder that with complex situations, we should take time to understand what actually did or did not happen, especially with this GameStop situation.

Now, the SEC is the proper authority to determine if any rules were broken, and they are looking into it. Congress has already given the SEC broad authority to oversee the capital markets and we do not need to rush to enact even more big government regulations that could ultimately harm the investors.

Mr. Tenev, can you remind us, again, why Robinhood temporarily paused trading of GameStop and other stocks?

Mr. TENEV. Of course. Thank you, Congressman. Robinhood paused trading temporarily or, I should say, paused buying of about 13 securities on Thursday so that we could meet our regulatory deposit and collateral requirements.

Mr. LOUDERMILK. Okay. So what you're saying is, you were paused because you had to comply with regulations. Is that true?

Mr. TENEV. Correct.

Mr. LOUDERMILK. Okay. It's ironic that the people who are criticizing brokerage firms because they paused trading, which they sometimes have to do to comply with regulations, these same folks are now saying, we need to respond to this with more regulations. I would say if people don't like brokers occasionally having to pause trading, I suggest they look at the regulations that required it.

At some point, we need to recognize that piling on more and more regulations only increases complexity and does not help investors.

Ms. Schulp, despite the volatility and the frenzy of media and social media activity, it seems to me that the markets functioned as they were supposed to do during this situation, that the markets are not broken; in fact, they are working well.

Do you agree with that?

Ms. SCHULP. I agree with that.

Mr. LOUDERMILK. Okay. Thank you. I appreciate that. I think most reasonable people who are listening to this would agree that there are regulations in place, the SEC has those to pause activities that could be harmful, not only to the markets, but to the individual investors. And so what I'm understanding you saying is that it did work in the way it was supposed to?

Ms. SCHULP. As the facts that I know now, it does appear to have worked the way it was supposed to. This is not a sign to me that the market is broken.

Mr. LOUDERMILK. Thank you.

Mr. Griffin, what are some of the issues that policymakers should consider in the T plus 2, T plus 1, T plus 0 debate? Obviously, margin requirements exist to make sure firms have enough capital to settle transactions, but faster settlement and lower margin requirements can be positive for the retail investors, and we need to balance those needs.

Can you address what some of the issues are in the T2, T1, and T0 debate?

Mr. GRIFFIN. Congressman, I cannot profess to be an expert on these issues, but I will give you my perspectives from having been in this for 30 years. We started at T5. We will one day be at real-time settlement, and the question is, is how long does that journey take?

From T2 to T1, which reduces the amount of capital required by broker-dealers to meet the needs of their customers, that reduction in capital would have been very helpful to Robinhood during this period of time. It reduces counterparty risk holistically, which is good for everybody in the market. We should push for T1.

As we go to same-day settlement, you now bring into question the complexity [inaudible] movement and you bring into play the necessity for all systems to be functioning every moment of every day with no room for error. On a T1 settlement site—

Chairwoman WATERS. The gentleman's time has expired. Let me remind the Members that we're going to have a series of hearings. Today is the first. There will probably be two more. I didn't hear anyone here today say that they were ready to pile on regulations, so let's make sure we know that our statements are accurate.

Mr. Foster, you're recognized for 5 minutes.

Mr. FOSTER. Thank you, Madam Chairwoman, and I thank our witnesses for being here.

Mr. Tenev, I'd like to follow-up a little bit on payment for order flow and best order execution issues. Democratization of finances is a good and noble goal, but for democracy to work, consumers need transparency and high-quality information. And not only about fees, but about order execution quality.

Your customers actually don't care directly about who you subcontract order execution to or any payment for order flow, but they need a simple way to compare the execution quality between your app and competing apps or other accounts, while institutional investors can afford to run their own tests and they do.

And I'm sure Mr. Griffin is quite often on the receiving end of those tests, and trying to measure up to his competitors to compete for market share there. The institutional investors have the market power to demand best-execution statistics for their prime brokers. And everyday investors do not get the same transparency.

In fact, I believe there's an SEC rule, Rule 606, that requires brokers to disclose at least some order execution data to institutional investors, but this requirement does not apply to retail investors.

So, Mr. Tenev, since Robinhood's mission is to democratize finance for all, I ask, what are the mechanisms that you would accept and support to provide transparent order execution quality statistics so that your customers can engage in a clean, apples to apples comparison between other brokers, between your app and other peoples' apps in terms of the total cost of trading?

Mr. TENEV. Thank you, Congressman, for that very important question. I'm generally in favor of a greater amount of transparency than what we've typically seen in the financial industry, and recently, Robinhood, and me personally, have engaged publicly on the topic of payment for order flow, short selling, and, of course, T plus 2 and real-time settlement.

We do publish 606s via Robinhood Securities that detail our payment for order flow arrangements with various market makers. And just this past year, the industry implemented more detailed 606 requirements, which we, of course, conform to.

Also, back in December of 2020, we released a public page on our website that provided detail about the execution quality, including price improvement that our customers received. And we're proud to announce that in 2020, our customers received in aggregate over a billion dollars of price improvement on their executions.

Mr. FOSTER. Right, but that's not a comparison to your competitors. There are a lot of questions about the accuracy of the best execution reference price, and independent of whether it should be improved, it seems like, if I was a customer of you or one of your competitors, what I'd want to see is, I just executed a trade of $2,000, and on average, I got X percent better or worse than a reference price.

And then over time, and seeing not only the trade that I just executed, but perhaps a running average over the last month or two that you can compare to the running average of whether you're exceeding some benchmark for trade execution quality that can really be compared with potential competitors.

And is that a workable system? Are there difficulties? Is there a reason why industries should move that way in the name of transparency to customers?

Mr. TENEV. Congressman, this is a very interesting topic to me. I'd love to have the conversation. I don't know if this is the right forum to necessarily ideate and brainstorm on all of the solutions, but I just want to say I'd be happy to engage with this in a detailed forum and figure out the right path.

Mr. FOSTER. Okay. We do intend to continue to engage with the industry on this subject because it's very easy to make payment for order flow sound really creepy. You're basically selling a list of rubes to the sharks, okay?

On the other hand, you make part of an argument that this can net out positive for consumers, but for it to fully net out positive, they have to be able to make the apples to apples comparison. That's really an important issue.

And I think that probably your reaction to that, if you found your customers were leaving you because of poor execution quality, you would do what large funds do, which is to split your order flow between multiple order execution firms and then demand of them the best order execution and move your business to whomever does the best for your customers.

Mr. TENEV. Congressman, we already do that. We have seven—

Chairwoman WATERS. The gentleman's time has expired. Mr. Mooney, you're recognized for 5 minutes.

Mr. MOONEY. Thank you, Madam Chairwoman.

Let me just start by saying that in the last Congress, 30 of my Democrat colleagues, 4 on this very committee, cosponsored a bill that would impose a financial transaction tax on the purchase of securities and certain derivatives.

And just recently, after the market volatility surrounding GameStop in January, many Democrats renewed the call for a financial transaction tax. On January 28th, Congresswoman Ilhan Omar tweeted, "How about this financial transaction tax now?" Congressman Peter DeFazio is the lead sponsor of the bill. He's already put the bill back in for this session of Congress. It's now House Resolution 328—it's called the Wall Street Tax Act of 2021. I actually have a copy of it from the last session here. It's in again now. And Congressman DeFazio says that a financial transaction tax would, "help create a more level playing field for Main Street."

So with that background, Mr. Tenev, this question is directed at you. The Robinhood platform has more than 13 million users and most of them are small-dollar retail investors. If the Federal Government levied a .1 percent transaction tax on the sale of securities—and I know one of my colleagues, my good friend mentioned this earlier, and I want to expand upon it a little more. How would that .1 percent transaction tax on the sale of securities affect your platform and the retail investors who are your customers?

Mr. TENEV. Thank you, Congressman. And we'd be happy to engage in this discussion much more in the future. A 10 basis point financial transaction tax would eat into the returns of our customers, which, as you pointed out, are largely smaller investors. And in that sense, it would be a cost to the retail investor.

Of course, that would have to be weighed against the potential benefits of this tax, and I know it's a more complicated issue than meets the eye at first glance.

Mr. MOONEY. Okay. Thank you for that answer. My next question is actually for Jennifer Schulp. I know you spent your career specializing in financial regulation. In your expert opinion, would a financial transaction tax directly prevent fraud or market manipulation?

Ms. SCHULP. No. I don't think a financial transaction tax would have an effect on fraud or manipulation. I also don't think that it ultimately—financial transaction taxes often fail to raise money, and they distort trading in a way that's not necessarily foreseen initially by the tax.

And I'd like to just add in there as well that the financial transaction taxes, while they initially might seem like a small imposition on an individual investor, those taxes often hurt individual investors and their long-term retirement goals by affecting the institutions that also do the trading in mutual funds and with retirement money. I don't think a financial transaction tax is a good idea.

Mr. MOONEY. And a quick follow-up to that, Ms. Schulp, do you think that a financial transaction tax would have done anything to prevent the market volatility and disruption we saw just this past January?

Ms. SCHULP. No, I don't think it's related here. There's been some discussion that it might've decreased the amount of trading and thus changed the volatility. It's my opinion that that would not have had any effect in this particular circumstance.

Mr. MOONEY. Thank you. I only have a minute left, so let me just summarize. The financial transaction tax supported by many Democrats would do nothing to prevent market manipulation or fraud, would have not prevented the market disruption in January, and, most importantly, it would hurt retail investors, yet Democrats are claiming that the events surrounding GameStop and Robinhood in January make it imperative to implement this financial transaction tax. It just doesn't add up.

A financial transaction tax would make it more expensive for small retail investors to trade, and so much for looking out for Main Street. I believe we should be working together to find ways to open up markets to retail investors, not close them. Instead of making trade more expensive with a burdensome tax, let's look for ways to empower retail traders.

Thank you, Madam Chairwoman. I yield back.

Chairwoman WATERS. Thank you very much. Mrs. Beatty, you're recognized for 5 minutes.

Mrs. BEATTY. Thank you, Madam Chairwoman, and thank you to the witnesses. My first question is to Ken Griffin. In the first 3 quarters of 2020, your company paid online brokerages like Robinhood $700 million for their order flow.

Do you believe that brokers like Robinhood can serve the best interests of their users while selling their order flow to companies like yours? And that's a yes or a no.

Mr. GRIFFIN. Congresswoman, I believe that Robinhood actually goes further in the best interests of their customers by, in fact, routing their order flow to Citadel. We give a better price, a better execution for American retail investors than the alternative of going to exchanges.

Mrs. BEATTY. I'm going to take that as a yes, since you said they go further. Then, can you tell me, why does your company urge the SEC to ban the payment for order flow models in a filing to the SEC?

Mr. GRIFFIN. Congresswoman, that is a terrific question. That filing relates to the U.S. options market—it was a filing back, I believe, in 2004. And in the U.S. options market at the time, trades were committed against listed quotes.

We were apprehensive about the direction in which the U.S. options market was heading towards the existence of these price improvement auctions which diminished the incentives to aggressively provide bids and offers in the options market.

We felt that legislative or regulatory efforts to encourage tight quoting, to discourage the existence of these auctions—and this was being, in some sense, fueled by a series of payment for order flow programs was in the best interest of American institutional and retail investors.

Now, regretfully, we did not prevail in our reasoning. The rise of price improvement auctions came into, in essence, the day-to-day model for options trading in the United States. And I do believe that this is a setback for our capital markets.

Mrs. BEATTY. Because my clock is ticking, let me ask you this: Are you saying that you no longer believe that the model is anticompetitive and distorts order routing decisions?

Mr. GRIFFIN. I think it's important to distinguish between a market where you must trade on an exchange. In the options market, we must print the trade on the exchange, versus a market where you can trade off exchange, which would be the U.S. equities market.

So just to be very clear, because your question's very good, every single options trade must be executed on an exchange. Equity trades do not. And because of that, I can save Robinhood exchange fees, and offer a tighter bid-ask spread than—

Mrs. BEATTY. Clearly, we're going to have to have a further discussion. Let me interrupt you only because my time is running out, and I want to follow up with a question for Robinhood's CEO.

Mr. Tenev, several of the brokers offered their users order flow for the sale to the firm, like with the previous CEO at Citadel. However, the price that Robinhood gets for the order flow is much higher than any other brokers receive. And I could go on and tell you we pulled the SEC filings, and that Robinhood received 17 percent per 100 shares of stock traded, and 58 percent to 100 shares, and I could go on. But the question is, why do companies like Citadel pay a premium for their order flows of Robinhood's users?

Mr. TENEV. Thank you, Congresswoman, for that very important question. There are several reasons that may be the case. One important one is that our model and formula for payment for order flow works a little bit differently. We actually receive payment for order flow as a percentage of the bid-ask spread rather than on a per-share basis, and we do believe that's the most optimal way to structure payment for order flow arrangements.

Mrs. BEATTY. Okay. Is it not because companies like Citadel can make more money off of Robinhood users than others? And that's a yes or a no, because my clock is going to run out.

Mr. TENEV. No.

Mrs. BEATTY. I'm sorry. I yield back. My time is up.

Chairwoman WATERS. Thank you very much. Next, we will have Mr. Davidson.

Mr. Davidson, you are recognized for 5 minutes.

Mr. DAVIDSON. Thank you, Madam Chairwoman. And I thank our witnesses and I appreciate the work you've done today.

I just want to share that in May of 2020, the Depository Trust & Clearing Corporation (DTCC) unveiled a working proof of concept called Project Ion. In this project, DTCC said they would examine the potential use of distributed ledger technology in accelerating the clearing and settlement process. Now, since Project Ion was publicly announced, we've received little information pertaining to its progress.

As a long-time advocate for this emerging technology, distributed ledger technology and blockchain, today I've sent a letter to the DTCC to request that they provide an update on the status of Project Ion. And I look forward to hearing back from them, and hope to include them in our next hearing.

Mr. Griffin, with Project Ion in mind, could you briefly state what would be your biggest concern if DTCC implements same-day clearing and settlement?

Mr. GRIFFIN. Same day clearing and settlement requires that every bit of the workflow is perfectly synchronized across all parties, and we have no time for recoverability or for the error management that you have in the overnight batch process.

Mr. DAVIDSON. Right. The technology makes that essential, in my assessment, that is inherent for the architecture for blockchain to move forward with each proof. And, so, I guess, clearly, in your business, just to follow up there, the technology exists for trading firms that are engaged in high frequency trading, you measure success in the course of the day in what, milliseconds for high frequency trading?

Mr. GRIFFIN. As you know, we are the largest market maker in the world and the largest in the United States in equities. We put great emphasis on the performance of our systems. That was one of the reasons that on the week of January 24th, we were the only major market center for retail order flow that was responsive every minute of every trading day.

Mr. DAVIDSON. Perfect. I just wanted to make the point that I think the technology exists, whether you use blockchain or not, and I applaud you for having the ability to execute with precision swiftly already, and I don't think it's a barrier. I'd love to have more dialogue, but unfortunately, I have to go to a few others.

Mr. Tenev, do you believe that the root cause of January 28th, for the problems that you and others experienced, were market infrastructure-related, particularly related to T-2 versus T-0?

Mr. TENEV. Thank you, Congressman. I do believe if we had real-time settlement capability and the infrastructure was modernized, we would not have seen similar problems.

Mr. DAVIDSON. Yes. And thanks for that. I think one of the related things, and it's related to your mission at Robinhood of more democratic access to capital—it's just not the ability for more people and a broader portion of America to become savers and investors. It's also to engage in corporate governance, even. Do you believe that if market infrastructure would guarantee—this is really related to the musical shares where someone could be left with no share when the music stops, mobile claims on a shorted stock. If the market infrastructure would guarantee an investor could retain custody of their shares so that the shares can't be lent to short sellers, there could be a downside. How do you feel that only one claim on the shares would resolve this, and that relates to proxy voting as well or shareholders voting the shares?

Mr. TENEV. Congressman, I believe that's an important question. It's one that Robinhood, and me, personally, have engaged with. I do believe that the ability for the same share to be shorted an indefinite number of times is somewhat of a pathology, and that should be fixed. And I think step one of that is modernizing the antiquated settlement infrastructure that everything is built on. We simply don't have the ability to properly track what shares have been shorted, and how many times, as they're moving through our settlement system currently.

Mr. DAVIDSON. Yes. Thank you for that. And I appreciate that you see the relationship. Hopefully, broadly we do, and we provide the nudge the market needs.

I want to commend Vice Chancellor Travis Laster on the Court of Chancery of the State of Delaware for his letter and paper, "The Blockchain Plunger," which explains how this could be done, and I ask unanimous consent to submit that for the record.

As my time expires, I want to commend you, Mr. Gill, for just representing a large segment of the industry, in my view, where savvy investors have had an opportunity to engage, and it relates to people with diamond hands that hold. You might not call yourself a holder, you might use the words, "diamond hands," but thanks, and congratulations for your success. I yield back.

Chairwoman WATERS. The gentleman's time has expired, and, without objection, your submission is taken. Thank you.

Chairwoman WATERS. Mr. Vargas, you are recognized for 5 minutes.

Mr. VARGAS. Thank you very much, Madam Chairwoman.

First of all, I want to apologize to Mr. Plotkin. You spoke of the anti-Semitic attacks that you suffered online. As a person of color, I always feel the need to confront hate speech and speak out, and I don't think there's ever been a more hateful, evil, sinful event in human history than the Holocaust, so I want to apologize to you and your family for those attacks. You brought it up, and I think we owe you an apology, so I want to apologize for that.

Sometimes, I think some of my colleagues on the other side of the aisle are devoid of any contact with real people when they say this is just political theater, or they don't want to know the rate of return, when that's exactly what people want to know. In fact, there's been a great deal of interest in this hearing, and I think it speaks to a great distrust in our society of government, markets, and institutions.

And then, along comes the story of GameStop, and it's a story, really, of Robinhood turned on its head. And the reason I say that is, and Mr. Luetkemeyer brought it up, Robinhood was an English folk hero, in the 13th, 14th Century, and he was supposed to steal—Robin of Loxley was supposed to steal from the rich and give to the poor, and here, you almost have the opposite. You have a situation where you have stealing from the small retail investor and giving it to the large institutional investor.

From an outsider's perspective, you have, at least, the hedge funds and their armies of analysts and lawyers and regular old suits attacking the trust [inaudible] GameStop by shorting its stock. And to the rescue, here comes the retail investors, and they're taking stock to these incredible levels. And all of a sudden, Robinhood steps in, but not to help the little guy. He steps in and says, I'm going to help the big guy, and stops the sale, because no one knows how high this is going to go. And who is getting it? Who is getting socked in this thing? The bullies are, the hedge funds. And that's why people were excited about this.

But all of a sudden, Robinhood steps in, and they say, No, no. We had to do this because of other conditions, and my good friends, the Republicans, say it was the government, really. It was because the government regulations forced them to do this. Well, that's not what the public thinks. The public thinks that there was collusion, that the big guys, all of you guys were figuring out how to do this, and, ultimately, come out ahead as you always do. And it seems that my colleagues on the other side want to help people.

Now, Mr. Griffin, if I could just ask you the first question: How many people are in the room with you? If you could just count how many people are in the room with you.

Mr. GRIFFIN. There are five people, including myself in this room, sir, Congressman.

Mr. VARGAS. Thank you. So, I don't think my colleagues need to help the CEOs or anybody else. They have plenty of help.

I have to ask this: You said that you didn't talk to anybody at Citadel, Citadel Securities. Did anyone in your organization, since January 1st, contact Robinhood?

Mr. GRIFFIN. Are you asking if we've had contact with Robinhood?

Mr. VARGAS. With respect to GameStop, and what we're obviously talking about.

Mr. GRIFFIN. Congressman, we offered to have my colleague who manages that relationship be here today instead. He has firsthand knowledge. We, of course, are talking to Robinhood routinely in the ordinary course of business. We manage a substantial portion of their order flow.

Mr. VARGAS. I understand that, but did you talk to them about restricting or doing anything to prevent people from buying, not selling, but buying GameStop?

Mr. GRIFFIN. Let me—

Mr. VARGAS. Anybody in your organization?

Mr. GRIFFIN. Let me be perfectly clear: Absolutely not.

Mr. VARGAS. So if we depose everyone in your organization, we'll find that.

Mr. GRIFFIN. That is correct.

Mr. VARGAS. Okay. Thank you. I do want to ask you one thing, and Mr. Sherman was pursuing this. How do you balance the best execution for the order flow for your purchase from Robinhood with the need to profit from the purchase order flow? How do you do that?

Mr. GRIFFIN. As a market maker, we have to provide to the customer a better price than they can achieve on an exchange. Order flow is routed to us on the merits of the execution quality that we provide in contrast to our competitors with whom we are competing.

Mr. VARGAS. Okay. My time's about to expire, but I have to say, Mr. Tenev, when you say that Robinhood has made $35 billion, and you don't say how much your people lost on GameStop, people who invested with you, that's like taking the Fifth. Thank you.

Chairwoman WATERS. Thank you. The gentleman's time has expired.

Mr. Budd is recognized for 5 minutes.

Mr. BUDD. Thank you, Madam Chairwoman. And I also want to thank the panel.

Now, I really care about a level playing field for retail investors to access the market, and I have long been a supporter of financial innovation in fintech, and the shared goal of democratizing finance and making access to the financial system easier for all.

So, Mr. Tenev, your company boasts that it's helping to democratize finance and is at the forefront of innovation. Can you talk a little bit more about what Robinhood is doing to push innovation forward, and create a level playing field for all investors, while at the same time, making sure that those investors are well-informed?

Mr. TENEV. Absolutely, Congressman. Thank you for that very important question. The first thing I should note is that many of the witnesses and representatives here have stated that it's never been a better time to be a retail investor in America than it is right now. I think the combination of zero commissions, no account minimums, and fractional shares, really, things that Robinhood has helped make the industry standard, have helped small investors, and helped level the playing field for people to participate in the markets.

Over the past year, Robinhood has released fractional shares, the ability to do dividend—automated dividend reinvestments, recurring investments so that you could take $1 or $5 and create a habitual investment into a particular stock. And the theme of this year for Robinhood is, how do we take a first-time investor and turn them into a long-term habitual investor? How do we make long-term investing accessible for people around the country?

And we're making huge investments in education and customer support, to support that. We recently released a revamped Learn Portal, we call it Learn 2.0, with the aim of taking a customer from basic concepts such as, what is a share? What is a stock? What's an ETF? And taking them all the way through to more advanced concepts. And we're continuing to invest more and more on Learn as well as on Snacks, which is our popular podcast, and all other forms of content that we distribute. Last year, more than 3.2 million—

Mr. BUDD. I want to interrupt you there. I know you have a lot more things. These are great, and I know we could probably talk for a lot longer than this, but I want to shift gears just a bit. But I do want to keep talking about the retail investor, and I want to switch to Ms. Schulp.

Ms. Schulp, back in December, there was an article that you wrote prior to all of these events that we're having the hearing on today. And in the article, I think that you said that it's inappropriate to refer to these very retail investors that we're talking about that are using these platforms like Robinhood, that we're talking about, and referring to those investors as, "dumb money." I think that is pretty insulting, and my colleague from across the aisle from Connecticut used that term. I think it's insulting. And instead, retail investors are, in fact, revolutionizing the stock market. So would you elaborate on those views, Ms. Schulp?

Ms. SCHULP. Absolutely. Thank you, Congressman. Retail investors are often referred to as, "dumb money," by Wall Street, and it's because they don't have access to the same level of research, or some use the term because they think retail investors make dumb decisions. I think it's insulting. I think that the term needs to go out the window. Retail investors are investors who make their decisions based on the information known to them, and we should focus on educating people so that they can understand the risks and rewards of investing.

Here, I think the GameStop situation is proof that the retail investors are revolutionizing the market. No one would have guessed, when I wrote that article in December, that retail investors were going to initiate a sophisticated short squeeze. I think the retail investors here are learning, learning by doing, which is one of the best ways to learn, and we should expend effort making sure that people are equipped with the knowledge to understand the risks of being in the market.

Mr. BUDD. I appreciate that, and I would like to ask for unanimous consent to insert that letter into the record, Madam Chairwoman.

Chairwoman WATERS. Without objection, it is so ordered.

Mr. BUDD. Thank you. I just want to look—Robinhood wrote about the need for—and this is open to anyone. And I just have a few seconds left, but I'd like for someone to talk aboutx, is it possible for clearinghouses in real-time settlements on the blockchain to exist? And I don't have time for that, but that's something we can come back to at a further point. And, Madam Chairwoman, I'll go ahead and yield back.

Chairwoman WATERS. Thank you very much. And, without objection, I want to make sure that that's in the record, that your insertion was accepted. Thank you. With that, we'll turn to Mr. Gottheimer.

Mr. Gottheimer, you are recognized for 5 minutes.

Mr. GOTTHEIMER. Thank you, Madam Chairwoman, and thank you to our witnesses for being here today. Before I begin, Mr. Gill, I read your testimony, and I'd like to offer my heartfelt condolences for the loss your family suffered last year.

It's not just Melvin Capital that lost money as part of the frenzy around GameStop. Whether it's a security guard losing $20,000, or a dog walker losing a few hundred dollars, everyday retail investors were left holding the bag after GameStop's stock fell back to earth. Not every investor lost money. Mr. Gill, sitting before us here today, remains bullish on the stock. Still, Bloomberg reported yesterday that he was served a lawsuit accusing him of misrepresenting himself and his motivations.

I'm not here to take sides in the litigation. However, it does raise important questions about the role of social media websites, like Reddit, especially in the context of the volatility we experienced with GameStop, AMC, and numerous other stocks last month.

Mr. Huffman, what kind of authentication exists for Reddit users to confirm their identities to verify that they're even real people?

Mr. HUFFMAN. Reddit—and this an important quality of Reddit, so thank you for the question—doesn't require people to reveal their full identity to use the platform. One of our pillars of privacy, and privacy is something that's critically important to us, is that users should be masters of their own identity, and they can choose to reveal as little or as much as they would like.

I'll point out that there are two sides to this that are really important. On one side, this allows Reddit to work. Something like WallStreetBets would not exist if users had to reveal their full identity, because in WallStreetBets, people are revealing gains and losses. They're effectively revealing their financial position in life, and we would not put that burden on anybody to force them to do so.

I'd like to point out that other platforms have real identity, and it doesn't do anything to improve their behavior.

Mr. BUDD. Is there any way for a regular user of WallStreetBets to know what content is genuine, written by other users just like themselves, retail investors who are looking for honest information to invest on? Is there any way for that?

Mr. HUFFMAN. There are a couple of aspects to this. The first is that we, as a company, invest significant resources in enforcing the veracity of our voting system. It's something we've been doing for 15 years, long before events like this, long before even the election and the politics of the last few years where these things have become top of mind for everybody. This has been critically important to us.

Also, our user base is exceptionally good at sniffing out untruths, misinformation, and fake stories both within this community and Reddit at large. So, in order for any piece of content to be successful on Reddit, it has to be accepted by that community and receive the same votes that anything else would.

Mr. BUDD. Okay. Do you have any heightened standards for places like WallStreetBets or other investing subreddits where people can manipulate content to their own financial gains?

Mr. HUFFMAN. We keep a high standard across the entire site. And with this particular community, over the past few weeks, we've been looking especially closely, anticipating these sorts of issues and questions. And, to date, we have not found any nefarious behavior.

Mr. BUDD. Got it. But we could have a situation where thousands, possibly millions of dollars of retail investor money may be being manipulated. We don't know that for sure.

Mr. HUFFMAN. People in the United States talk about stocks on Reddit. They talk about it on TV, in magazines. People can say—in fact, they do, on television, all the time encourage people to make what I would call bad investment decisions. On Reddit, I think the investment advice is actually probably among the best because it has to be accepted by many thousands of people before getting that sort of visibility.

Mr. BUDD. Do you see any difference between someone on Reddit offering advice versus an analyst at a major bank or a financial services firm?

Mr. HUFFMAN. Absolutely. I think on Reddit, you're seeing retail investors who are giving authentic advice based on their knowledge, and you would not, I think, call into question what their motivations are, or what large positions they may hold before going on TV and talking about them.

Mr. BUDD. Do you plan to do more in this space, and is this something that's going to be a major priority of yours? And do you think overall, social media companies, like yourself, should be held to a different standard? Should you be responsible for what happens in your content? If someone manipulates something or if it's a bot, should that be on you, or do you think that's just buyer beware?

Mr. HUFFMAN. We take manipulation of Reddit incredibly seriously. That is one of our, I think, first duties in all of this is to ensure the authenticity of our communities, yes.

Mr. BUDD. Yes. But do you think you should be held responsible if somebody puts something—if there's some collusion or if there is somebody who is a—it's a Russian, it's a bot that's online. Do you think you should be on the line, or this is just a site you offer for people to exchange ideas?

Mr. HUFFMAN. Reddit can be held responsible, and we do take our responsibilities here incredibly seriously.

Chairwoman WATERS. Thank you. The gentleman's time has expired.

Mr. BUDD. Thank you. Thank you, Madam Chairwoman.

Chairwoman WATERS. Mr. Kustoff is now recognized.

Mr. KUSTOFF. Thank you, Madam Chairwoman. And I want to thank you and the ranking member for convening today's hearing.

If I could, Mr. Tenev, I'd like to echo what many of my colleagues have said today. We do appreciate the fact that you've created this platform. To a large extent, you've leveled the playing field so that small, individual investors can have a shot at the American Dream of investing. A lot has been said about the situation that occurred in late January. My question to you is, how did you misjudge your capital requirements to prevent people from being able to trade during that period in January?

Mr. TENEV. Thank you, Congressman. I wouldn't say we misjudged our capital requirements. This was a 1-in-3.5 million occurrence event, one that had never been seen before in capital markets, and we had to play this by the book. Robinhood Securities made the decision that we did so that we could remain in compliance with our regulatory capital and deposit requirements. Unfortunately, it required us to restrict the buying of these securities for Thursday, and limit it to some degree on subsequent days until additional capital came in that allowed us to relax the restrictions.

Mr. KUSTOFF. It was Robinhood's mistake, though, correct?

Mr. TENEV. Robinhood owns what happened, certainly, and we need to make sure it doesn't happen again, but Robinhood—really, Robinhood Securities had limited options on how to address this. And I fully support the team in making the decision that they did, and I believe they did the right thing, and the only thing.

Mr. KUSTOFF. You said at the beginning that you're privately held. With that said, is your primary source of revenue from the order flow payments that you receive from some of the players we've talked about today?

Mr. TENEV. That is correct, Congressman. Payment for order flows is one of our largest revenue sources.

Mr. KUSTOFF. Is it the largest?

Mr. TENEV. It's the largest, yes.

Mr. KUSTOFF. In both your written and oral testimony, you talked about the settlement period, and we're probably capable of doing it in real time, or instead of T plus 2, making it T plus 1. If we had real-time settlement, would the situation that occurred in January have been preventable? In other words, that wouldn't have happened if we had real-time settlement?

Mr. TENEV. Congressman, if we were to have real-time settlement, and of course, there's some implementation details that would govern this, there would be less of a need for collateral at clearinghouses because the cash and securities transactions would be exchanged in real time. Collateral for counterparty risk would be less necessary. So, real-time settlement would lead to reduction, perhaps, and elimination in some of these collateral requirements, a reduction in the money that's sort of clogging up the plumbing of the system, and that would have avoided some of these problems altogether.

Mr. KUSTOFF. Thank you very much. And just to be clear, does the same answer apply if I asked you if settlement was T plus 1 instead of same-day settlement, would your answer be the same?

Mr. TENEV. Congressman, T plus 1 would be better, but it doesn't—it reduces the scope of the problem, but it doesn't eliminate it from a technology standpoint.

Mr. KUSTOFF. Thank you very much.

Mr. Huffman, I'd like to follow up on some of the questions that my colleagues, Congressman Hill and Congressman Gottheimer, asked. You've done an investigation into Reddit and into WallStreetBets. You don't see anything—any bad actors—I'm paraphrasing, but you don't see any bad actors that caused any role in the GameStop frenzy. Am I characterizing that correctly?

Mr. HUFFMAN. Congressman, that's right.

Mr. KUSTOFF. You know that Congress is looking at amending Section 230. What are your thoughts about that as it relates to Reddit?

Mr. HUFFMAN. Sure. Section 230, I think, is a critically important law to the internet as we know it. And it was created, in fact, to protect a forum in the early internet for talking about stocks.

Section 230, I think it's also important to point out, doesn't protect platforms or companies like ours from civil litigation, so there are mechanisms for coming after companies like ours. What it does protect is our ability to evolve the way we moderate our content, which we have done in many ways over the last decade.

Chairwoman WATERS. The gentleman's time has expired.

The gentleman from Texas, Mr. Gonzalez, is recognized for 5 minutes.

Mr. GONZALEZ OF TEXAS. Thank you, Madam Chairwoman, and Ranking Member McHenry, and I want to thank everyone here with us today.

This is for Citadel. Mr. Griffin, in 2020, Citadel violated Regulation SHO, which governs short selling. Citadel is now involved in another short-selling problem, and Robinhood routes half of its customers' orders to you. Robinhood halts buying on a position that you're long on, and you own the hedge fund and the clearing broker. What is there to prevent you from taking advantage of that situation and making sure you profit off of the confusion and retail investors?

Mr. GRIFFIN. Congressman, I'm trying to understand the question.

Mr. GONZALEZ OF TEXAS. Let me give it to you again. In 2020, Citadel violated Regulation SHO, which governs short selling. Citadel is now involved in another short-selling problem, and Robinhood routes half of its customers to you, its orders to you. Robinhood halts buying on a position that you're long on, and you own the hedge fund and the clearing broker. What is there to prevent you from taking advantage of that situation and making sure you profit off of the confusion of retail investors?

Mr. GRIFFIN. In no particular order, I just do not understand the reference to us owning a clearing broker. We do not own DTCC. We do not control DTCC. We are not a party to the discussion, dialogue, or demands between DTCC and Robinhood. So, I do not understand the premise of the question, because we have literally nothing to do with DTCC other than being a member of DTCC for providing settlement services for us, and for doing real-time trade affirmation and clearing.

Now, Citadel Securities owes a duty of best execution for every order that comes from Robinhood, and I will tell you that I'm incredibly proud of how seriously my team takes that duty of best execution. Some of the most earnest, hard-working, and thoughtful people that I've ever met in my life work on our retail execution business here at Citadel, and take great pride in the execution quality that we give to each and every trader, not only at Robinhood, but at every single one of the—

Mr. GONZALEZ OF TEXAS. Thank you.

Mr. GRIFFIN. —of the retail—

Mr. GONZALEZ OF TEXAS. Thank you for your response.

Mr. Gill, I understand that you made your position known on GameStop as far back as 2019, and are lauded as a diamond hands hero by the WallStreetsBets community. Have you ever previously experienced or observed the type of restrictions Robinhood and other applications performed on January 28th?

Mr. GILL. Thank you, Congressman. No, I have not.

Mr. GONZALEZ OF TEXAS. Thank you. That was it for the question.

And, Mr. Huffman, I'm not a Redditer, but I do understand the problems around social media and freedom of speech and the tightrope act that goes on where these intersect. In the near decade of WallStreetBets and subreddit, have they shown themselves to be an exceptionally problematic forum, or just one of the many eccentric communities that call Reddit home?

Mr. HUFFMAN. Congressman, I think your latter description is more accurate. They are an eccentric community, but they're well within the bounds of our content policy. And though we do have difficult decisions to make here and there regarding specific communities, one of the things we look to first is whether the community is trying and putting their best efforts toward being a good citizen of Reddit. And towards that end, we've had consistent communication with the moderators of that community, and they've been doing, I think, an excellent job.

Mr. GONZALEZ OF TEXAS. Thank you. The last financial crisis was caused when we turned a blind eye to the bad practices of our financial institutions. Perhaps today, we've seen a warning about the clearing process, and I hope today can be a jumping-off point for us to take a hard look at our markets, and the practices of these institutions.

In a two-day clearing process, the liability risk and potential financial stress limited trading, but in a key time in market, and, perhaps, in a way that materially affected investors in these recent events. So, I'm hoping that we all get to take a closer look at what is happening.

And with that, I yield back. Thank you.

Chairwoman WATERS. Thank you very much.

Mr. Hollingsworth is now recognized for 5 minutes.

Mr. HOLLINGSWORTH. Thank you, Madam Chairwoman.

Mr. Griffin, I'm going to direct my questions to you, specifically, but I'm hoping to talk a little more philosophically about the market writ large, rather than just Citadel itself. Certainly, there's been a significant amount of evidence supporting the advantages that market makers offer retail investors.

Through sophisticated infrastructure and high-speed technology, bid-ask spreads have decreased from $0.33 to less than a penny over the last 5 decades, and according to some research, saved retail investors $1.6 billion just in the first 6 months of last year alone. None of our discussion after this, and the questions I'm going to ask, is intended to be pejorative to that reality, but I just wanted to pick your brain, given your deep experience about some of the implications of off-exchange trading, specifically. We've seen this year that off-exchange trading has eclipsed nearly 50 percent of all trading.

Can you talk a little bit about what factors have contributed to off-exchange trading's growth versus on-exchange trading? Certainly, I want to talk about the concerns we may have as market participants about that, but first, just the factors that you think are driving that?

Mr. GRIFFIN. I think one of the most significant drivers of off-exchange trading is that exchanges are handcuffed in their ability to fulsomely compete.

Mr. HOLLINGSWORTH. Can you talk a little bit more about that? Is this just regulatory arbitrage?

Mr. GRIFFIN. I hate the word, because it has a negative connotation. I believe that the exchanges should have greater latitude in setting their kick sizes in the most liquid securities. That will allow order flow that's currently going to dark pools to go to exchanges and to receive better executions. So, let me just be very clear: It's not that we want to inhibit dark pools, or market makers like Citadel, from competing.

Mr. HOLLINGSWORTH. Right.

Mr. GRIFFIN. It's that we want to enable and empower exchanges to be better competitors. I started my career as a retail investor in the day where I used to spend $0.25 in a bid-ask spread if I was lucky. I know the days you're referring to. We've come a long way. But to continue on this journey, the next step is to allow exchanges to be more competitive in the market.

Mr. HOLLINGSWORTH. I think you answered this question, but just to put a fine point on it, there is public policy work that needs to be done in order to help resolve some of this challenge that exists in the movement of volume from on-exchange to off-exchange. That's incumbent upon us. It's incumbent upon regulators to find a better solution. Is that what you're saying?

Mr. GRIFFIN. Congressman, I'm saying that yes, it's legislators or the SEC. I believe much of this can be done by the SEC as a policy matter.

Mr. HOLLINGSWORTH. Right.

Mr. GRIFFIN. Think of it as the next step forward in regulation en masse.

Mr. HOLLINGSWORTH. Love it. Great. Thank you for all of those answers. I want to highlight this further. Can you talk about some of the challenges or deleterious impacts on the market if more and more volume is off-exchange versus more—versus [inaudible] trading? Can you talk a little bit about why we should be concerned about that, to make sure we all understand how important it is to make these changes to empower, as you said, exchanges to be better competitors?

Mr. GRIFFIN. I think there are three salient points I'd like to make. First, price discovery is the most important part of our capital market's function, because price discovery combined with liquidity fuels our free enterprise system. It's how companies raise capital. It drives down the cost of capital. The more trading on-exchanges, the better price discovery we have. That is good for our capital markets.

The second is that dark pools are often willing to engage in business practices where they discriminate against one class of investors versus another. I find it very unsettling that we, in any way, prohibit discrimination against one group of investors to the benefit, or at the expense of another in any part of our capital markets. We want our capital markets to represent the values of our country.

The third is that the dark pools themselves create a level of concern and apprehension about the integrity and fairness of our markets. And I believe that we should always be taking steps to advance public confidence and the confidence of retail investors and institutional investors that the United States capital markets are a fair place in which to transact business.

Mr. HOLLINGSWORTH. Mr. Griffin, thank you for those answers, and I would call upon my colleagues to recognize the deep experience Mr. Griffin has in these areas, and how important it is that we take the steps, either via agency or via legislation, to help empower exchanges to compete on a level playing to make sure that we create a public policy.

Chairwoman WATERS. The gentleman's time has expired.

Mr. Lawson, you're recognized for 5 minutes.

Mr. LAWSON. Thank you, Madam Chairwoman. Thank you to you and Ranking Member McHenry for this hearing today, and I want to thank the rest of the panel, the panelists too, for this great forum.

One thing, Madam Chairwoman, I want to clarify for the record is that one of my colleagues earlier said that when people got their stimulus money, they went out and started investing. I want to let them know that my people got their stimulus money and were trying to pay the rent, trying to take care of their kids, and I don't want the panel to think that we worked so hard on the stimulus dollars so that people could run out and invest their money. That's not the norm.

Mr. Plotkin, Wall Street is supposed to be tied to revenue and property fundamentals. We saw these fundamental changes when amateur investors gained control. They publicly stated that this isn't about investing based on their fundamentals and that this is an investment about making a profit in that way. It's about making a profit to demonstrate that they can manipulate the system, and if not, better than professionals such as yourself.

The Reddit trade won, and Wall Street was losing billions of dollars. Melvin Capital bet against GameStop, and was on the verge of bankruptcy. Clearly, there is manipulation and distrust within the system, and inequality in American finance.

Mr. Plotkin, do you believe that there is manipulation, distrust, and overall inequality within American finance? And what do you believe are the consequences to a big guy like yourself, but, also, little guys in this process?

Mr. PLOTKIN. Thank you for the question. I really can't speculate in terms of the broader system. I think Melvin—my focus is on running our portfolio and building a great organization and a strong team. I think some of the issues you speak about are much greater societally, and it's not really my area of expertise.

Mr. LAWSON. Okay. One other thing, you guys have a Series 67 license and everything, but these amateur investors don't have to go through those same standards. And because they do not have to go through those same standards, how are they able to go in and manipulate the market—maybe someone here can answer—over people who have been involved in just research and calculation and investors for so many years? Can anybody answer, how are they able to go in and manipulate markets like this and cause billions of dollars to be lost?

Mr. PLOTKIN. Sure. I think, as we've spoken about today, the financial markets are changing. There's a lot of new players. I think they saw an opportunity to drive the price of the stock higher. And today, with social media and other means, there's the ability to kind of collectively do so. That was a risk factor that, up until recently, we had never seen.

I think sometimes with retail investors, they've been really adept at this, investing in the internet or software stocks or electric vehicles, ideas with big opportunities, and they chase them because they believe in the fundamentals. I think this was very different in that a lot of the mean stocks were businesses with real challenges. But they exploited an opportunity around short interest and the way that was approached. And I think Melvin will adapt, and I think the whole industry will have to adapt.

Mr. LAWSON. I understand that. And I guess from our standpoint, and I don't have much more time, but what do you recommend to us to try to keep this from happening again?

Mr. PLOTKIN. I think to some degree, markets are self-correcting, moving forward, stocks—I don't think you're going to see stocks with the kind of short interest levels that we saw prior to this year. I don't think investors like myself want to be susceptible to these type of dynamics. I think there will be a lot closer monitoring of message boards. There will be software providers. We have a data science team that will be looking at that. Whatever regulation that you guys come up with, certainly, we'll abide by. And I look forward to helping, if you guys want to have future conversations about that.

Mr. LAWSON. Okay. Thank you.

Madam Chairwoman, my time is running out, so I yield back.

Chairwoman WATERS. Thank you very much.

Mr. Gonzalez of Ohio, you're recognized for 5 minutes.

Mr. GONZALEZ OF OHIO. Thank you, Madam Chairwoman. I want to thank Ranking Member McHenry for his leadership in calling for this hearing today, and also you, Madam Chairwoman, for bringing us together.

Mr. Tenev, I'm going to start my questions with you by walking through a series of events from that day in January, just to make sure we're all on the same page. In your testimony, you mentioned that the automated deposit requirements from DTCC came in at 5:11 a.m. Eastern time, and it showed a $3 billion deficit, correct?

Mr. TENEV. I believe that's correct, yes.

Mr. GONZALEZ OF OHIO. At that point, 5:11 a.m., did you have the liquidity to meet the additional $3 billion deposit requirement?

Mr. TENEV. As I wrote in detail in my written testimony, there were a series of steps that the Robinhood securities team took to—

Mr. GONZALEZ OF OHIO. Reclaiming my time, sir. At that exact moment, did you have the liquidity for $3 billion? At 5:11 a.m.?

Mr. TENEV. At that moment, we would not have been able to post the $3 billion in collateral.

Mr. GONZALEZ OF OHIO. Okay. So when you said, and you've said this multiple times, that you did, in fact, have the liquidity, and you didn't have a liquidity problem, at that moment in time, that is not necessarily true, correct? You had to take steps to get there?

Mr. TENEV. Congressman, we did have to—the Robinhood Securities team had to work with our relevant clearinghouses to adjust the risk profile of the trading day in order to meet our collateral requirements.

Mr. GONZALEZ OF OHIO. Right. And in order to do that, your choice was to throttle trading to prevent your clients from being able to purchase certain shares, correct?

Mr. TENEV. That's correct. Robinhood Securities had to restrict buying in about 13 securities.

Mr. GONZALEZ OF OHIO. Okay. And if you had not been able to de-risk the portfolio, you wouldn't have been able to raise the money and get the bar requirement and the excess capital charge waived to de-risk the portfolio, then DTCC would have stepped in and liquidated the portfolio, correct?

Mr. TENEV. I'm not sure what exact steps that they would have taken if we weren't in compliance with the deposit requirements, but it would not have been a good situation for the firm or the customers.

Mr. GONZALEZ OF OHIO. Reclaiming my time, I would draw everyone's attention to the letter that Ranking Member McHenry submitted for the record. I'll just read this, "If a clearing member fails to satisfy a margin call, it exposes other clearing members to risk and can put NSCC out of compliance. In a case of nonpayment, NSCC may cease to act for the clearing member and liquidate its unsettled clearing portfolio."

So, that was definitely in the cards. For my constituents who are Robinhood clients, what would this have done to their portfolios if it would have been forced liquidation as a result of missing the capital call?

Mr. TENEV. Congressman, if there was forced liquidation, at the very least, it would have resulted in a total lack of access to the markets for your constituents, not just to the 13 securities that we restricted buying in.

Mr. GONZALEZ OF OHIO. Right. So, this would have been an enormous catastrophe for Robinhood, correct, and the clients?

Mr. TENEV. That's correct. And not just Robinhood, but the over 13 million customers that we serve.

Mr. GONZALEZ OF OHIO. Yes. And I think that's really sort of the crux of the issue. In a sense, I love your company, because it does, when correctly managed, provide investment opportunities for individuals who are currently frozen out of the markets for one reason or another. At the same time, though, I believe a vulnerability was clearly exposed in your business model, and, perhaps, in the regime that governs your capital requirements, and we just can't live in a world where my constituents could have their shares liquidated without their consent, because you all aren't able to make a capital call. I appreciate that you were able to ultimately satisfy it.

But the amount of time you had, from 5 a.m. to 10 a.m., to figure this out is scary for the company. And, frankly, I care more about my constituents than anything, and it was scary for them, and, so, I hope we'll continue to look at that.

Beyond that, though, I also hope that this hearing highlights a very real problem with our financial markets today and how they're accessed by everyday investors. Today, the Melvins and Citadels of the world, as well as major private equity (PE) and venture capital (VC) funds have access to the world's greatest investment opportunities on the planet, whereas the retail investor world, of which Mr. Gill is a great member, doesn't. It has access to an ever-diminishing set of investment opportunities. While we're debating these vulnerabilities, we're also serious about finding ways to expand access for Main Street investors.

And with that, I yield back.

Chairwoman WATERS. The gentleman's time has expired.

Mr. San Nicolas, you're recognized for 5 minutes.

Mr. SAN NICOLAS. Good morning from Guam, Madam Chairwoman. I've been with the hearing since 3 a.m. The sun is starting to come up out here, but it's always a pleasure to be joining you in these very, very important hearings that you call for the American people. Thank you very much.

I wanted to first begin by congratulating everybody who made money on the Robinhood trade. You guys found a low-float, low-volume, massively-shorted stock, and you guys squeezed it. And I think that investors like Mr. Plotkin, large money managers, probably doubled down on their short positions, thinking that they were going to win. And in the end, the massive communication networks that we have these days rallied the small to beat the large, and that was absolutely something to behold, and Robinhood made that possible.

Mr. Tenev, you mentioned in your testimony that you've secured $3 billion in funding to address the regulatory deposit requirement situation that you faced. Where did that $3 billion come from?

Mr. TENEV. Thank you, Congressman, for that question. To be clear, we were in compliance with all regulatory net capital and deposit requirements without the additional capital infusion. It was simply to provide an extra cushion, allowing us to unrestrict trading and be prepared for other black swan events that might happen in the future. The capital came from mostly existing venture capital investors that Robinhood already had.

Mr. SAN NICOLAS. So, basically, you had to further dilute your position in Robinhood in order to make sure that you secured all of the liquidity and customers affected [inaudible] that additional $3 billion.

Mr. TENEV. That's correct, Congressman.

Mr. SAN NICOLAS. That's why I have a serious concern, Mr. Tenev, because not only was your business model designed to profit off of order flow, which caused you to take extraordinary risks in having 13 million customers with access to large margin trading that facilitated the GameStop situation, but you halted buys on that stock, and you allowed sells in order to mitigate the capital requirement situation, and you materially benefited from it. You materially benefited from it because it reduced the amount that you would have had to go out and raise in additional capital in order to prevent these kinds of crises from recurring.

You took from your customers in order to minimize the $3 billion from being larger than it probably would have been because you wanted to protect your position, and that is very troubling. It's very troubling that the order flow model that you built and the risk that you took on resulted in that halt, and it's very troubling that that halt also materially benefited both you and the existing shareholders by minimizing the amount of additional capital you had to raise in order to prevent that from happening again.

You basically took from the shareholders in order to do that, and that's just—I don't know what to say about that. But I think that this, Madam Chairwoman, presents a very serious situation where we need to ensure that companies are not taking advantage of customers in this way.

Mr. Tenev, you're quoted as saying in this hearing that, "buying increases capital requirements; selling does not." So, it was something that you knowingly did. It was beyond just trying to protect the existing customers. And at the end of the day, while you had to raise an additional $3 billion, it minimized that from being a larger sum. We have customers who purchased the stock, who are now bag holders after the price came down, because they couldn't continue going up with buying, additional buying, and that was willful. That was intentional.

So I'm glad, Madam Chairwoman, that we've called this hearing. I'm glad we're able to put these things on the record, and I'm just very, very concerned with the implications of this. And I only hope that at the end of the day, those bag holders get a lot more than an apology.

Thank you, Madam Chairwoman, and I yield back.

Chairwoman WATERS. Mr. Rose, you're recognized for 5 minutes.

Mr. ROSE. Thank you, Madam Chairwoman, and thank you, Ranking Member McHenry, for holding this important hearing today, and thank you to our witnesses for your testimony and your participation today and for the dedication of time that you've made to this hearing.

There is still so much for us to learn from this market event. Obviously, speculation has been rampant, and I believe we should not get ahead of our skis, so to speak, and rush to policy recommendations before we understand the full scope of this situation. The committee investigation is barely underway, and I would view a large majority of the policy proposals suggested today as half-baked at this point.

At the end of the day, we should all want retail investors to have access to the market and to ensure that they have the information they need to participate in the market in an informed way.

Mr. Griffin, my colleague, Representative Loudermilk, asked you to explain the advantages of cutting down on the settlement time, but you were cut off before you could complete your answer. Would you like to finish your thought there?

Mr. GRIFFIN. Congressman, to be brief, the issue in going to real-time settlement is that everything has to work perfectly in a world where there are still people involved in many of the processes.

We'll get there one day as an industry. I just think it's a bridge too far in the next couple of years.

Mr. ROSE. And then, you were also cut off earlier when answering my colleague, Mrs. Beatty's, question regarding the difference between payment for order flow for the options market versus the equities market. Would you like to continue that explanation?

Mr. GRIFFIN. I think we covered that reasonably well. I think the salient difference is that in the options market, every trade must take place on an exchange to start with.

In the equities market, the current market structure has been arrived at with the blessing of the SEC as the best way to give retail investors in America price improvement as compared to the exchanges.

And to be succinct, we should make exchanges more competitive, not make internalization or dark pools more privileged.

Mr. ROSE. Thank you.

And then finally, Mr. Griffin, earlier, Representative Luetkemeyer asked about how we got to where GameStop was short sold to 140 percent. Given that naked shorting is an illegal practice, how did that happen, given current U.S. law?

Mr. GRIFFIN. Clearly, a number of the purchasers of the short sales—of the shares sold short—are institutions that also lend their securities.

And it's very important to remember that institutional investors earn substantial returns from participating in the securities lending markets.

So if you are lending your GameStop stock out, for example, over the period of the recent crisis, you may have been earning an annualized rate of return of 25 or 30 percent on the shares that you lent out. That accrues to the benefit of pension plans, of ETFs, and of other pools of institutional lending that participate in the securities lending market.

And keep in the back of your mind, when a bank lends money to a business, that business may turn around and lend money to its suppliers. Just because, in some sense, somebody can on-lend what they've bought doesn't necessarily mean something has gone wrong in the chain itself.

Mr. ROSE. Would you see that as an area ripe for regulatory adjustment or do you think that's not a problem?

Mr. GRIFFIN. I think if we were to think about legislative priorities to make our capital markets work better, this doesn't make the top 100 list.

Mr. ROSE. Thank you.

Despite the intense volume and exposures presented in the markets, the broader infrastructure of our financial markets has performed very well, I believe. My concern, like those of my colleagues, is that forging ahead with new regulations at this point would be harmful and have unforeseen consequences.

In the few moments that I have left, Ms. Schulp, can you speak to what the potential dangers are of increased regulation to retail investors?

Ms. SCHULP. That's going to take me more than 12 seconds.

But there's a lot of potential for unintended consequences here, and increased regulation can drive retail investors out of the market. It can cause them to have less good prices.

Mr. ROSE. I'm sorry not to give you more time. Maybe one of my colleagues will give you a chance to complete that.

I yield back.

Chairwoman WATERS. Thank you very much.

Next, we will have Mrs. Axne for 5 minutes.

Mrs. AXNE. Thank you, Madam Chairwoman.

And thank you to the witnesses for being here today.

I just want to quickly follow up on a question that my colleague, Mr. Foster, asked you earlier, Mr. Tenev.

You said that Rule 606 reports detail the arrangements you have with firms like Citadel. However, those only detail the payments you receive.

Are you saying that you're prepared to publicly disclose the detailed terms of your payment for order flow with Citadel and other market makers?

Mr. TENEV. Thank you for the question, Congresswoman.

The 606 reports do publicly detail the payment for order flow arrangements we have with Citadel Securities and our other market makers.

Mrs. AXNE. Okay. I'll look forward to seeing those details then. Will you make sure that you get those over to our committee?

Mr. TENEV. Certainly. We can have that arranged.

Mrs. AXNE. Okay. Thank you.

Last month, of course, as we saw this volatility with GameStop and AMC and the stocks started to rally, everybody seemed to get involved. And one survey recently said that 30 percent of Americans purchased one of those viral stocks. That includes people like my nephew and his two friends who stayed up until 4 a.m., to see if they could get a piece of this action.

One of the most concerning pieces, though, of this whole episode is how many people really felt like that's what they needed to do to get ahead. To me, this just exemplifies the income inequality across America and it's one that we need to deal with.

And I do appreciate the opportunity for retail investing. However, I want to make sure that it creates a good outcome for the people who are using it. And right now what I'm seeing is gambling on the stock market, and it's not a real solution to that income inequality, and I don't think we should pretend that it is.

Just last June, when Hertz declared bankruptcy, and after that, Robinhood was actively pushing the stock on its site, it was trending on Robinhood, and I don't think the promotion of that worthless stock is good for investors. That's a gamble that they shouldn't have taken. And that's just one example.

People having access to the stock market is nice, but if they don't have the money to invest, then really it's not democratization. And that's the real reason that 80 percent of the stock market is owned by 10 percent of the people.

And, of course, those are people who don't have to put all their money into healthcare or childcare or a car payment or whatever it is that's just keeping them going through their day-to-day.

Earlier, Mr. Tenev, you said that you couldn't tell us what your clients' rate of return is, but generally, 99 percent of short-term traders underperform the market.

So, Mr. Tenev, you say that Robinhood's mission is to democratize finances. Is that correct?

Mr. TENEV. That's correct, Congresswoman. Yes.

Mrs. AXNE. Okay. So I want to ask you then, you've invested significantly in behavioral research. And just so you know, I own a digital design firm with my husband, so I'm familiar with what behavioral research can do for platforms and websites. And that behavioral research has really shaped how your app is designed. Is that correct?

Mr. TENEV. Congresswoman, like many technology companies, we employ data scientists, user researchers, and designers to provide a better customer experience and to understand our customers' needs.

Mrs. AXNE. So on the specifics, when people sign up, they get a scratch-off ticket to see what they get, confetti falls every time they place an order, they get push notifications, and they're encouraged to trade. If a friend signs up, they get a free stock, and on and on.

Why have you added specific gaming design developments to look like gambling to your app? That encourages more frequent trading.

Mr. TENEV. Congresswoman, as I mentioned earlier, we want to get people what they want in a responsible, accessible way. We don't believe in gamification. We know investing is serious. And that's why most of our customers are buy and hold. A very small percentage of our customers utilize margin.

Mrs. AXNE. I appreciate that. But folks like my nephew actually aren't your customers; they're your product. Your customer is sitting right next to you, Mr. Griffin with Citadel.

So when you don't pay as much for index funds or Apple or anything like that, your app to me shows me that you're really just trying to encourage more trade, which puts more money in your pocket, not helping people build equity through smarter investing.

Mr. Tenev, I'd ask two things. Who exactly do you believe you're democratizing finance for? And how do you plan to address these conflicts of interest?

Mr. TENEV. First of all, I believe in our business model, Congresswoman. I believe our business model has become the industry standard for a reason. It's because it's good for customers, it's led to the democratization of the markets, and it works.

And we're very proud to route to market makers on uniform terms without taking into account any of the payments that we generate from them in the routing and based purely on the execution and quality we provide to our customers.

Chairwoman WATERS. The time has expired.

Mr. Steil is recognized for 5 minutes. Thank you.

Mr. STEIL. Thank you, Madam Chairwoman, and thank you for holding today's hearing.

I'm concerned about investors in the State of Wisconsin and across our country, to make sure that they have access to the market, access that is fair and equal to the big banks and the hedge funds and Wall Street.

We've seen great improvements in access, the democratization in finance, and I'm concerned that these hearings are going to lead us down the path of additional regulations before we've fully investigated the facts.

It was stated earlier that that may not be the case. And I'd like to insert in the record a Bloomberg article dated January 28th, entitled, "GameStop trades show need for more regulation, Democrat says."

Chairwoman WATERS. Without objection, it is so ordered.

Mr. STEIL. Thank you.

I think it'll be helpful for everyone to review that with the concerns being that we're going to drift away from the democratization of our finance systems.

I'm also a bit disappointed that we don't have representation in our first hearing here today from the SEC or the DTCC, especially in the early days of the Biden Administration. I think that would be helpful. And hopefully, we'll be able to have that participation in a future hearing.

If I can direct my first question to Mr. Gabe Plotkin at Melvin Capital Management, there's obviously a lot of attention that came pouring in on a stock, GameStop, that you held a short position in. People were tweeting about it, things were building.

Do you have any information as to why folks on Twitter and on Reddit and others uniquely targeted that stock?

Mr. PLOTKIN. First of all, thank you for the question. I think it's a really good one.

I think ultimately—I'm not sure how the momentum built around that. There were certainly some signs, as we kind of discovered after the fact. And there were even website names bought, like nasty things about our firm, as far back as November.

So I'm not sure how it started, but I think ultimately, they saw an opportunity with a very high short interest stock that a lot of people could relate to because it was a retail experience, and that's sort of the genesis of it.

Mr. STEIL. Thank you very much.

I'm going to shift gears over to Robinhood and Mr. Tenev, if I can.

As my colleague, Mr. Gonzalez, was talking about, at some point, it became clear that additional collateral would likely be needed.

How many of your customers owned GameStop stock or options on January 27th?

Mr. TENEV. I don't have the exact numbers—

Mr. STEIL. Suffice it to say, had it increased dramatically over the days leading up to the 27th?

Mr. TENEV. Yes. That's accurate.

Mr. STEIL. That's fair. And you saw additional order flow coming into this.

Was it reasonable to believe that there would be additional capital requirements, and did you take any steps, either internally or working in concert with the National Securities Clearing Corporation, to mitigate the risk posed by the volatility before the January 28th collateral call?

Mr. TENEV. We did. On January 21st, we went to 100 percent market requirement for AMC, which requires all purchases for those stocks to be fully paid for, so customers would have been unable to use margins to buy those. And that was January 21st in the case of AMC, and January 26th for GME.

Mr. STEIL. But this was still insufficient ultimately, as related to the collateral call that came in, in the early morning hours of the 28th. Is that correct?

Mr. TENEV. That's correct. The limiting margin was ultimately insufficient.

Mr. STEIL. And as you look to your peers, do you know any other brokerages that were putting in place limitations on their buy orders?

Mr. TENEV. Yes, I do, Congressman. I think that's an important question. Many brokerages put in place similar limitations on buy orders for many of these securities.

Mr. STEIL. For the record, I've heard conflicting reports on that. I think that's something that this committee needs to further look into, is the differential between what occurred under your control at Robinhood, and some of the other brokerages. I think it's a question that we should fully investigate on this committee, and make sure we have all the facts as we're moving forward.

Could you detail, Mr. Tenev, your plans going forward as it relates to making sure that an event like this doesn't occur again, and that you have the foresight to prevent these late collateral needs?

Mr. TENEV. Absolutely, Congressman. Thank you for that important question.

Certainly, the additional $3.4 billion helps provide a significant cushion. In addition, you could see that between Thursday and Friday, Robinhood replaced the PCO, which is a position closing only setting, with a much more granular position—

Chairwoman WATERS. The gentleman's time has expired.

Mr. Casten, you're now recognized for 5 minutes.

Mr. CASTEN. Thank you, Madam Chairwoman.

And thank you so much to our witnesses.

There's a whole bunch of themes in today's hearing, and I want to, if I can, just tie a couple of threads together that I think are relevant that have been—we've had corners of.

In June 2020, Alex Kearns, who was 20-years-old at the time, from Naperville, Illinois, killed himself, largely thanks to a bug in the Robinhood system. The bug was that he turned on the app, and it said that he owed $730,000 that he did not have, because of options positions that he thought canceled out, but didn't appear to.

He called the help line. The help line, of course, was not manned, as we've discussed. He sent several panicked emails, three to be precise, but did not receive a response. Ultimately, there was a response in an email saying that, in fact, his positions were covered, but by that point, it was too late, because he had taken his own life.

This is a gentleman who was 20-years-old. Under Illinois law, he was not allowed to buy a beer, but he was allowed to take on $730,000 in positions and exposure that he did not have the liquidity to cover.

Your mission, Mr. Tenev, is to democratize finance, but the history of financial regulation is to protect people like Alex Kearns from the system.

As the old joke goes, if you're playing poker and you can't figure out who the fish is at the table, you should leave the table because you're probably the fish.

And there's an innate tension in your business model between democratizing finance, which is a noble calling, and being a conduit to feed fish to sharks.

I want to cover a little bit of timeline.

In December 2019, Robinhood was assessed a $1.25 million fine by FINRA for failing to disclose payment for order flow agreements to your customers.

Six months after that, Alex Kearns committed suicide.

Six months after that, on December 20th, Robinhood paid a $65 million fine to the SEC for, among other things, failing to disclose payment for order flow agreements to your customers.

There is a tension in your model.

Now, along with that, according to your 606s, as has been reported by CNBC, you attract a higher rate for equity trades from payment for order flow than any of your competitors, 17 cents per hundred trades, versus about 11 cents for your competitors, and even more, over 50 cents per hundred trades, for options.

I would ask unanimous consent to enter the CNBC article into the record.

Chairwoman WATERS. Without objection, it is so ordered.

Mr. CASTEN. Mr. Tenev, when did you start offering options on your platform?

Mr. TENEV. Thank you, Congressman Casten. And first, let me say—

Mr. CASTEN. We're tight on time. When did you start offering options?

Mr. TENEV. Options trading was offered starting in Q1 of 2018.

Mr. CASTEN. Okay. Thank you.

That's relevant because prior to 2018, your revenue grew basically linearly with user growth. Your revenue in a year, your payment for order flow revenue was about $10 per user, per year. In 2020, it got to $50 per user, per year.

So, your revenue model went from growing revenue by growing users, to growing revenue by growing revenue earned on the back of each user consistent with taking on options.

How many firms do you route options orders to, Mr. Tenev?

Mr. TENEV. Congressman, we have seven market makers. I can get back to you with the precise number for options. It's under seven.

Mr. CASTEN. According to your 606 disclosures, you only list four—Citadel, Susquehanna, Wolverine, and Morgan Stanley. Are there any others besides the ones listed in your 606 disclosures?

Mr. TENEV. If that's in the 606s, Congressman, I'm sure it's accurate.

Mr. CASTEN. Okay. So, do you route options trades to anyone with whom you do not have a payment for order flow agreement?

Mr. TENEV. Currently, we have, Congressman, uniform payment for order flow arrangements with all of our market makers. So, they would all be under the same arrangements.

Mr. CASTEN. Okay. So how do you ensure that you're getting best pricing if every single firm you're ruling out anybody who is not paying you for the privilege to trade?

Mr. TENEV. Congressman, we believe having uniform payment for order flow arrangements with all market makers ensures structurally that there is no conflict of interest, because it prevents payment for order flow from being an input in decision-making for where to route orders.

Mr. CASTEN. Okay. I'm almost out of time, but there is an innate conflict in your model.

Let's imagine right now that we are today's version of Alex Kearns. I'm nervous, I have an exposure, and I call your help line now. Let's call and let's listen in the time we have remaining to what I'm going to hear on the other end of the phone.

[Audio recording played.]

Chairwoman WATERS. Mr. Casten, you may wrap up.

Mr. CASTEN. I yield back my time.

Chairwoman WATERS. You may wrap up. Go ahead, Mr. Casten.

Mr. CASTEN. I have no further questions, Madam Chairwoman.

Chairwoman WATERS. Thank you very much.

I will now recognize Mr. Gooden for 5 minutes.

Is Mr. Gooden on the line?

VOICE. Madam Chairwoman, Mr. Gooden is in Texas, and he's unavailable.

Chairwoman WATERS. Thank you very much.

I now recognize Mr. Timmons for 5 minutes.

Mr. TIMMONS. Thank you, Madam Chairwoman.

It seems we're here today to try to find culpability in the events that transpired last month. I seem to spend a lot of my time thinking about capital requirements and the time it takes to execute these trades. So, I'm going to focus my questions there.

Mr. Tenev, you have repeatedly invoked capital requirements that both your company and your clearinghouse are required to abide by in order to explain the restriction of trading last month.

My friend and colleague, Mr. Barr, asked you about this earlier, but I would like to hone in on this a little bit.

Could you explain what specifically about the nature or volume of the trades being ordered by your customers caused these increased capital requirements to be triggered? And how did the level of collateral required compare to what you would normally have to abide by?

Mr. TENEV. Thank you for that question, Congressman.

To give you a sense for the increase, our capital requirements—our deposit requirements with NSCC from January 25th to January 28th, so a span of 3 days, increased tenfold.

Mr. TIMMONS. What is the most your capital requirements had been prior to this event?

Mr. TENEV. I believe there was a table, Congressman, that I provided in my written testimony that had the precise value at risk and special charges in the prior days.

Mr. TIMMONS. But, obviously, it had never been close to this amount. And now, you have additional capital that you've raised, and so this should not happen again. Again, I think you referenced one in three and a half million was the likelihood of this situation occurring. Is that correct?

Mr. TENEV. That's correct. And that's not a Robinhood number. That's actually a third-party industry number.

Mr. TIMMONS. Are you aware of the origin of these capital requirements?

Mr. TENEV. I do believe that these capital requirements, and specifically the NSCC deposit, was spelled out in Dodd-Frank.

Mr. TIMMONS. So, the Dodd-Frank Wall Street Reform and Consumer Protection Act is arguably to blame for what happened? You would not have halted trading in this case but for this exorbitant capital requirement that you were unable to meet?

I think that when we're searching for culpability, we need to realize that the well-intentioned legislation from over 10 years ago is somewhat culpable in this entire conversation.

Ms. Schulp, will you elaborate on that? Do you agree that Dodd-Frank is somewhat responsible for the situation in which Robinhood found themselves?

Ms. SCHULP. I think the capital requirements in Dodd-Frank can be seen as responsible.

I think it's incumbent on us to evaluate those capital requirements, and whether they are appropriate, given the business models at issue. I think that's also a question of settlement times and modernizing our system.

But I agree that the capital requirements here put into place are one of the reasons that we're having these conversations today.

Mr. TIMMONS. And you went to the next place I wanted to go, which is the time it takes to settle these transactions.

So, 12 years ago, 10, 11 years ago, we never really considered the whole concept of a Robinhood, of an app-based trade platform that democratizes access to purchasing and selling publicly traded companies.

So, I do think that needs to be revisited, especially because it is unfair. There are other companies that have far more resources that are not in the situation, and those companies have larger investors. So, we really are picking on the little guy in this entire conversation.

Between reconsidering capital requirements for retail investor platforms, number one; and, number two, trying to find a way to settle these transactions faster, those two things seem to be the best way to achieve our objective of making sure this doesn't happen again.

I do hope that we can hear from Michael Bodson from the DTCC in the next hearing or perhaps someone from the NFC.

I'll end with this. One of my colleagues across the aisle said the deck is stacked against the little guy, and I couldn't agree more. But in this case, the very committee that is conducting this hearing has more culpability, I would say, than any of the witnesses whom we have brought before us today.

We need to make sure this doesn't happen again. I look forward to working with my colleagues across the aisle.

With that, I yield back.

Chairwoman WATERS. The gentleman yields back.

At the request of one of our witnesses, we will take a short recess. The committee stands in recess for 5 minutes.

[brief recess]

Chairwoman WATERS. The committee will come to order.

Mr. Torres, you are recognized for 5 minutes.

Mr. TORRES. Thank you, Madam Chairwoman.

One of the concerns about payment for order flow is that it creates a perverse incentive for a brokerage firm like Robinhood to send detail orders not to the firms that provide the best execution to retail investors, but rather to firms that provide the highest payment to Robinhood.

There's a concern about a conflict between the interests of brokers and the interests of retail investors, and that concern seems to have been vindicated by the conduct of Robinhood.

The SEC previously found that Robinhood misled its customers about how it makes its money. Both the SEC and FINRA previously found that Robinhood failed to ensure the best execution for retail customers, depriving those customers of $34 million, resulting in a $65 million civil penalty from the SEC.

My first question for the CEO of Robinhood, how much of your revenue comes from payment for order flow?

Mr. TENEV. Thank you, Congressman.

Let me first state that regulatory compliance is at the center of everything that we do—

Mr. TORRES. I want to reclaim my time. How much of your revenue comes from payment for order flow? Please answer the question as asked, given the time constraints.

Mr. TENEV. Congressman, I don't recall the exact percentage. It's over 50 percent.

Mr. TORRES. And do you know how much of your order flow revenue comes specifically from Citadel?

Mr. TENEV. Citadel is indeed an important counterparty. It's our largest counterparty in terms of where we route orders to, and I want to explain that a little bit, Congressman.

Mr. TORRES. I want to move on, because I want to cover the concerns about gamification.

The stated mission of Robinhood is the democratization of finance, but I worry that the real world impact of Robinhood is the democratization of financial addiction.

Robinhood has gaming features that seem to manipulate retail traders into making rash and reckless and potentially ruinous investments. We all know the tragic story of Alexander Kearns.

According to a memo from the Financial Services Committee, there's one feature in particular that encourages retail investors to tap on the Robinhood app up to a thousand times a day in order to improve their position on the wait list for Robinhood's highly-coveted cash management feature.

Do you share my concern that a retail trader tapping on a Robinhood app a thousand times a day is a sign of addiction?

Mr. TENEV. Congressman, that particular feature that you're discussing was to get access to our debit card plus high yield savings product, which is one of the many features targeting passive investors that we've rolled out over the past—

Mr. TORRES. Mr. Tenev, a thousand times a day? You are encouraging your customers to tap on an app a thousand times a day? That to me is a sign of addiction, and it worries me that you fail to see it in the same light.

Mr. TENEV. Congressman, we didn't encourage anyone to tap on anything. To get access to the debit card, people were placed on a wait list. And we wanted to give our customers delightful features so that they know that we're listening to them and that we care about them, and this is just one example of how we add great features, that customers love, to our products.

Mr. TORRES. Addictive trading might be bad for your customers, but it's good for Robinhood. Addictive trading means more trading, and more trading means more money for Robinhood. There's a sense in which Robinhood monetizes addiction. You make money from the quantity rather than the quality of trading.

Much has been said about price improvement. One of the arguments for payment for order flow is price improvement. According to The Wall Street Journal, Citadel Securities claims to have saved investors a total of $1.3 billion last year.

But I'm wondering, how can Citadel possibly know how much it saves retail investors? Citadel does not transact directly with retail investors; it transacts directly with brokers.

And even if you stipulate that there has been a cost savings, it's unclear to me how much of that cost savings is being passed on to the retail investors, and how much of that cost savings is actually being pocketed by Robinhood as profit.

We know that there's no commission, there's no visible fee at the front end of the transaction. But what is the hidden cost to investors at the back end of the transaction? Can you give me clarity about the hidden cost to investors?

Mr. TENEV. Congressman, I appreciate the question. I think that's a very important question.

In 2020, Robinhood provided our customers in excess of $1 billion in price improvement. That price improvement is measured relative to the National Best Bid and Offer (NBBO), which is the reference price per security on all major LID exchanges.

Mr. TORRES. I ran out of time, so I will yield back.

Thank you, Madam Chairwoman.

Chairwoman WATERS. Mr. Taylor, you're recognized for 5 minutes.

Mr. TAYLOR. I will point out that today and this week has been very hard for my home State of Texas and for my district in Collin County. We have faced a record-breaking freeze across the State, which has crushed our power-generation capability. And we have had some really heartbreaking stories of need.

In fact, during this hearing, I was called away to help a mayor try to get power back to their water pumping stations to make sure that they have water for their citizens in Anna, Texas, today.

So, members of the committee, I encourage you to send your thoughts and prayers to the people of Texas as they go through this really challenging time.

On to the topic of this hearing. Mr. Tenev, I just wanted to go—and I know there has been a lot of questions about the margin call that you got on the morning of the 28th of January. But I'm not sure that we really understand how the margin call changed from $3 billion to $1.5 billion to $600 million.

Can you sort of go through, how did you negotiate the margin call down? And these are very sizeable decreases, right, 50 percent, then 50 percent again, to something that you could then in turn manage?

How did you decrease the margin call?

I'm sorry. You're on mute. You're still on mute. I haven't been able to hear a word you said, unfortunately.

Mr. TENEV. How about now?

Mr. TAYLOR. I can hear you now.

Mr. TENEV. Congressman, I appreciate the question. And, first, I want to send my thoughts and prayers to the people of the great State of Texas. I appreciate you mentioning that.

I'd like to just refer to my written testimony, which gives the details of everything that happened on, I believe, pages 9 to 11—

Mr. TAYLOR. I've read that. But did you go in and say, "Hey, you need $3 billion, but I won't sell these stocks if you reduce it," and that's how you got to the point where people could only sell the stock, not buy it? Is that what you did?

Mr. TENEV. I believe—

Mr. TAYLOR. Because that's not in your written testimony. So, I'm just trying to get your answer.

Mr. TENEV. I don't believe we have made any decisions on PCO'ing the stocks between the initial $3 billion request and the subsequent $1.4 billion request.

But between the $1.4 billion and the roughly $700 million, there was a discussion between our operational team at Robinhood Securities and their relevant counterparts at NSCC regarding what measures we intend to take to lower the risk of our portfolio.

Mr. TAYLOR. Okay. So in other words, if you had $3 billion, your customers would have been able to do everything they wanted to do, including purchase more GameStop. Is that correct?

Mr. TENEV. I don't want to speculate on that. If we had infinite capital, certainly.

But I think it's also important to note, Congressman, that this was an evolving situation. We hadn't seen it before. We had no idea what Friday would have looked like had we been able to allow customers to buy these securities unrestricted on Thursday.

So, I think it's difficult to speculate exactly how things would have been different.

Mr. TAYLOR. But isn't the reason they said you need $3 billion was because your customers wanted to buy GameStop and then by saying, "Hey, they can't buy it, they can only sell it," that reduced the capital that you needed?

It seems to me that's what happened, but I'm just trying to get—

Mr. TENEV. They weren't saying specifically that—nobody, I believe, didn't want our customers to buy GameStop. These are regulatorily-mandated deposit requirements, Congressman, that we had to comply with, that were heavily influenced by the concentrated activity in GameStop, AMC, and the other securities.

Mr. TAYLOR. Wouldn't it be fair to say that your firm was undercapitalized to allow your customers to do what it is that you wanted them to be able to do?

Mr. TENEV. I think, Congressman, that in this case, certainly if we had the additional capital, we would have been able to ease restrictions, or perhaps, with sufficient capital, unrestrict altogether.

I think it's important to note that lots of other firms did essentially similar things, if not the same thing, in restricting the buying. Sox, this was really more of a systemic problem rather than a uniquely Robinhood problem.

Mr. TAYLOR. But didn't the fact that you went out and raised more capital so that you can actually answer this problem in the future—doesn't that also belie that you were undercapitalized on the 28th of January?

Mr. TENEV. Again, Congressman, we met all of our regulatory capital requirements and deposit requirements.

Mr. TAYLOR. Your customers wanted to buy the stock. You wouldn't let them do it because you didn't have the capital to allow them to do it, right?

Mr. TENEV. Yes. We didn't have the deposit requirements.

Mr. TAYLOR. I think that's really a core problem that I think this committee hearing has shown me, is that you were, unfortunately, undercapitalized to help your customers do what they wanted to do.

I yield back.

Chairwoman WATERS. Thank you very much.

Mr. Emmer, you're recognized for 5 minutes.

Mr. EMMER. Thank you, Madam Chairwoman. I appreciate it.

Mr. Gill, as was previously noted at this hearing, one of your colleagues at the witness table has as many as five people in the room with him.

I guess, Mr. Gill, my first question for you is, how many people are in the room with you right now?

Mr. GILL. Zero, Congressman.

Mr. EMMER. That's what I thought, Mr. Gill.

And I just want to note for the entire committee that Mr. Gill is actually appearing before our panel by himself while many others are receiving significant [inaudible].

[Inaudible] underestimating the sophistication and the independence of these individual investors.

Now, we've heard a lot of reasons for concern today, and some are legitimate, but there have also been some proposed overreactions by Members of Congress that could create even more problems.

Attention has been given to the positive sides of this story [inaudible] temporarily limiting its investors from trading, which deserves an investigation.

What we saw was a movement of individuals investing to try to make money. I don't see what's wrong with that, even if that motivation is fueled by a desire to stick it to a hedge fund they don't like.

Mr. Gill, you're the only retail investor involved in this GameStop situation on our panel today—why, I don't know, but you are—yet members on the committee have hardly asked you any questions. We've heard from a lot of the companies whose funds were involved in this event, but we've barely heard from the people who made this happen.

Is there anything you would like to add to this hearing that you haven't been able to add yet, given that we're past the 4-hour mark on this hearing?

Mr. GILL. I appreciate that, Congressman. I do.

I don't have anything to add at this time, just that I would be the first to acknowledge that investing in stocks and options is incredibly risky and it's so important for people to do their own thorough research before investing.

But that said, I tend to agree with you that folks should be able to freely express their views on a stock and they should be able to buy or not buy a stock based on those views that they may have.

Mr. EMMER. Mr. Gill, on that note, how would you feel if these brilliant people who are asking you these questions today decided that you should not take the risks that you're making these thoughtful decisions on? What do you think about that?

Mr. GILL. I would probably ask for an explanation, Congressman, and to try to understand their viewpoint as to why they might think that, and perhaps we'd be able to talk through it.

Mr. EMMER. Right. I appreciate it, Mr. Gill. I think we need to value the right of the individual to make decisions for themselves.

And it's fantastic to see so many people getting involved and participating in the greatest financial markets in the world. We should be encouraging individual participation in the market by you and others.

And we should want more people—more, not less. We don't need the people from the mountaintop deciding who's capable and who's incapable. We need more people having the opportunity to develop financial literacy, to build their own portfolios, to secure a safe and comfortable retirement, to grow their wealth so they can send their kids to college.

And most importantly, in my opinion, we should strive for individuals to have the autonomy to do all that they themselves want to do without having to rely on others or, God forbid, their government.

I also want to thank Mr. Budd for using his time to mention blockchain technology applications in the post-trade [inaudible] settlement and clearing process.

In light of this whole situation, it's important now more than ever that we utilize the technology that we have access to, and we do have access to technology that is decentralized and can provide real-time trade settlements.

Mr. Lynch and I have a nonpartisan bill that we introduced last [inaudible] reintroduce very soon that concerns this.

If we should exercise oversight of anything here, it's to ensure that individuals maintain access to our markets, individual investors. And discussions about over- and undervalued companies only continue to increase.

Unfortunately, average investors were locked out of the markets at a time of extreme volatility, while institutional investors were not. While I understand that a lot of what happened during this market frenzy came down to liquidity issues, individual investors were in a vulnerable position and were at the will of online brokerages.

We should be taking this time to discuss how to move forward in a way that promotes market access to all investors, just like we did last month. [Inaudible] clearly does not understand what Reddit is and how you utilize social media and catalyze the market's movement.

Chairwoman WATERS. The gentleman's time has expired.

Mr. EMMER. We've significantly underestimated the sophistication of America's retail investors and we've not been focusing on improving market access.

Chairwoman WATERS. The gentleman's time has expired.

Mr. EMMER. Thank you, Madam Chairwoman.

Chairwoman WATERS. Mr. Lynch, you're recognized for 5 minutes.

Mr. LYNCH. Thank you, Madam Chairwoman.

And speaking for the families of the Eighth Congressional District, we just want the gentleman from Texas to know that we are, indeed, praying for all of the good people of Texas and hope you come out okay and get the power that you need.

I do want to follow up on Mr. Perlmutter's questions, Mr. Gill. I represent the Eighth Congressional District, which includes Brockton, Massachusetts, your home. So I figure I, more than anyone, owe you the opportunity to respond.

You said earlier that you began your trading in GameStop when it was around $5 a share, with the hope that it might go to $20 or $25.

And I want to say, I accept your analysis, your initial analysis that GameStop was undervalued, and I think your belief was sincere, and I think it was fact based.

And, in your defense, we are talking about GameStop, right? It's a shopping mall retailer. We all know it. It's a well-known commodity.

But at some point the stock really takes off, right? It goes from $5 to $100 to $200 to $300. It gains escape velocity, as they say, and it ends up at almost $500 a share.

But we're still in the midst of a pandemic, right? And you can land a jumbo jet in the parking lot of the Westgate Mall in Brockton, or any major mall in America, right? No one's going to the malls, nobody's feeding this company, and so, it's up around $400, $500.

Is there a role for someone to play here, for you to play, or the SEC, or Robinhood, to, say, okay, the price dislocation has become detached from reality and a note of caution might be given to other day traders and individuals, retail traders who might get jammed if they get into this trade?

You have a unique perspective, so what do you think is the proper thing that should have happened? At some point, this thing got away from you and went totally into the stratosphere. And I'm just wondering what your thoughts are on how this should have worked?

Mr. GILL. Thank you, Congressman Lynch. I do know Westgate Mall quite well.

I would say that, just to be clear, I had thought that maybe roughly $20 or $25 per share, I had thought that at that time, but investment theses evolve over time. As the fundamental events change over time, it's important to update theses accordingly.

And I had mentioned that it appeared as though the stock price had gotten a little bit ahead of itself last month. But there's a lot outstanding. There's a lot that has happened in recent months to suggest that GameStop could indeed turn around its business significantly.

And one big element of that is indeed one of the largest investors in GameStop, Ryan Cohen. And he has brought in some colleagues who could turn around this company. And their value could indeed—

Mr. LYNCH. I want to reclaim my time.

Mr. GILL. Sorry.

Mr. LYNCH. Okay. I want to reclaim my time.

Ms. Schulp, I want to ask you, we have this convergence between fintech, social media, and the traditional markets. And, if anything, the GameStop incident and the convergence of all this has demonstrated a certain vulnerability in our markets.

And I'm just wondering, if a loosely associated association of day traders could cause all of this upset in our markets, isn't there a wider national security issue that's out there in terms of other people who might be nefarious actors who are actually intentionally trying to disrupt our markets?

Isn't there a national security dimension to all of this as well?

Ms. SCHULP. Again, I can say that national security is not my area of expertise. But to the extent—

Mr. LYNCH. Well, something more specific then.

You said earlier that you were with FINRA, and they're under Regulation Systems Compliance and Integrity (Regulation SCI.) Is it appropriate to put some of these trading platforms under that same regulation, which requires them to develop systems and policies that protect the integrity of their systems.

Ms. SCHULP. I think protecting the integrity of systems is important for all trading platforms, not simply the Robinhoods of the world. We need to look to make sure that there is integrity on the platforms.

I would agree with that, not necessarily Regulation SCI in particular, but having platforms that are strong is important here.

Mr. LYNCH. Okay. Thank you.

Madam Chairwoman, I yield back the balance of my time. Thank you.

Chairwoman WATERS. Thank you very much.

Ms. Adams, you are recognized for 5 minutes.

Ms. ADAMS. Thank you, Madam Chairwoman. It's been a very interesting hearing. I do want to thank you for organizing this. I think it has certainly been very helpful.

Ms. Schulp, let me ask you, first of all, in the case of GameStop and AMC stocks, the prevailing narrative has been that a band of Reddit-inspired folks rose up against Wall Street, and forced a short squeeze by professional hedge fund managers who were forced to cover their negative bets or risk catastrophic losses.

But, according to a JPMorgan analyst, several signs are pointing to institutional investors as big drivers of the wild price action on the way up.

In your opinion, and based on historical data on retail investors' ability to move the markets, what is the likelihood that GameStop and AMC's market volatility was largely driven by institutional investors looking to ride the wave?

Ms. SCHULP. I think these are questions that we are going to find out the answers to as we get deeper into the data. But I think that it's likely that at some point in this increase in value for all of these stocks, institutional investors were involved. Retail investors traditionally have not been able to move markets in the same way.

But it's important to note here that these were not large stocks to begin with. This was not a massive increase in price in Apple or Google. It was GameStop, a much smaller company. So, the ability of retail investors to have outsized influence here is entirely possible as well.

Ms. ADAMS. Thank you, ma'am.

Mr. Griffin, or Mr. Plotkin, do you have any thoughts on this likelihood as well?

Mr. GRIFFIN. Congresswoman, I believe you are asking one of the single most important questions posed today. I believe that the decline in the short interest as reported over the 2-week period of time—the U.S. updates short interest reporting every other week—indicates that roughly—and I apologize for not having the exact number—but roughly 35 to 40 million shares were bought back by parties that were short the stock.

This would be a dramatic degree of short covering that could cause a dramatic increase in the price of GameStop.

Ms. ADAMS. Okay. Thank you.

Mr. Plotkin?

Mr. PLOTKIN. Yes. Thank you for the question.

I don't have the exact answer to your question, but I do think it's worth noting that as the stock price moved higher, there was a 3-day period where it traded almost 11 times the entire float.

And so, I think that kind of volume gave anyone who was short ample opportunity to cover, and probably suggests tremendous either frenzied buying or institutional buying or some sort of combination.

We did look at some of the options activity in the stock, and on Friday, January 22nd, there were options that were expiring which would have equated to 35 to 40 million shares of stock ownership.

So, I actually don't think the short covering was the biggest driver of the stock when you kind of look at the volume. I really think the biggest driver was the aggressive options activity and then whether it was institutional retail or just the collective buying.

Ms. ADAMS. Okay.

Mr. Griffin, prior to the GameStop volatility in January, did Citadel have any investments in Melvin Capital? And, if so, how much?

Mr. GRIFFIN. We first invested in Melvin Capital on Monday of the week in question. I want to say that it was the 24th of January. And prior to that, we had had no investment with Melvin Capital.

Obviously, Gabe Plotkin is, by reputation, one of the best money managers of his generation, and is well-known to my partners here at Citadel. Gabe actually trained one of my best portfolio managers, who worked with me over the course of his career. So, he is well-known to my colleagues here at Citadel.

Ms. ADAMS. Okay.

Mr. Plotkin, can you confirm that you worked at Citadel LLC before—

Mr. GRIFFIN. I'm sorry. He trained—my portfolio manager worked for Gabe at a different firm and then joined Citadel subsequently.

Ms. ADAMS. Okay.

Mr. Plotkin, can you confirm that you worked at Citadel LLC before eventually starting your own hedge fund, Melvin Capital, in 2014?

Mr. PLOTKIN. When I was 23-years-old, I worked at Citadel for 1 year.

Ms. ADAMS. Okay. Did you solicit or receive any advice from Mr. Griffin during the GameStop volatility that occurred in January?

Mr. PLOTKIN. All of my conversations with Mr. Griffin really centered around his investment in our firm.

Ms. ADAMS. Okay. And did you reach out to Citadel or Point72 for significant investments?

Chairwoman WATERS. The gentlewoman's time has expired.

Ms. ADAMS. Thank you, Madam Chairwoman. I yield back.

Chairwoman WATERS. You're welcome.

Ms. Tlaib, you're recognized for 5 minutes.

Ms. TLAIB. Thank you, Madam Chairwoman.

Hello, everyone. I'm so glad that we're having this hearing. And I'm super appreciative of the leadership of our chairwoman, so that we can at least have some sort of transparency in exactly what happened.

As we all know, the wealthiest 10 percent own 84 percent of all stocks. In fact, 50 percent of American families own no stock at all.

I say this to emphasize that, to many of my residents, the stock market is simply a casino for the rich whose gambling hurts pension and retirement funds. And when you all screw up, the people end up paying the tab through losses or bailouts.

I want to talk about the high frequency trading. We know about half of all stock trading in the U.S. is done by computers. They analyze market activity and instantly complete trades at a profit. This high frequency trading allows Wall Street traders to get ahead of transactions done by pension accounts and retirement funds.

Mr. Griffin, and this truly is a yes-or-no question, is Citadel's trading algorithm programmed to identify and trade ahead of large trades done by pension and retirement funds? Yes or no?

Mr. GRIFFIN. Congresswoman, today, virtually all trades executed by institutional investors are in the form of program trades such as volume-weighted average price (VWAP) and other algorithmic trades.

Ms. TLAIB. So that's a yes, right, Mr. Griffin? Just so it's clear.

Mr. GRIFFIN. I'm answering the question. It's a very complex question that deserves an appropriate level of answer.

Ms. TLAIB. Okay.

Mr. GRIFFIN. These VWAP trades are not large trades that you can—it's not like there's 10 million shares to be bought. It is a trade that is sliced into small slices, 100 or 200 shares, and executed over the course of a day, a week, or a month.

Ms. TLAIB. Help me out with this one. Does this increased cost, this kind of algorithm or whatever program to identify and trade the computers doing the trading, does this increase costs for people who have pension and retirement funds? Yes or no?

Mr. GRIFFIN. Given that we, for example, manage money on behalf of pensions—

Ms. TLAIB. There's no time. This is not out of disrespect. We just have to limit the time.

Mr. GRIFFIN. We use VWAP orders to execute on behalf of our hedge fund and have generated exceptional returns for pension plans and for endowments, so—

Ms. TLAIB. Well, I'm going to help you out, Mr. Griffin. In effect, some estimates indicate that as a result of the high frequency trading, pension and retirement accounts pay nearly $5 billion in taxes. This means that Wall Street firms like yours engaging in high frequency trades are actually making money at the expense of my residents' retirement funds.

One way to ensure that this enormous wealth generated on Wall Street actually reaches the real economy, what's happening right here in our communities, and in my district, is to enact and look at proposals like a financial transaction tax.

And let me tell you, according to recent polling, the majority of Americans—all of you need to hear this—support taxing Wall Street transactions. Taxing them at just 0.1 percent would actually raise $800 billion over 10 years which could fund programs like helping my district expand healthcare, nutrition, and public education.

I heard my friend from Texas—and we are all praying that all of the families will be taken care of—talk about access to water and electricity, but guess what? Right now, in my community, it's so poor that I have families melting snow so that they can flush their toilets, because they have no access to water. So this tax, to me, would discourage risky and high frequency trading, unfair high frequency trading.

Mr. Griffin, has Citadel's lobbyist right now been hired to oppose Federal proposals of a financial transaction tax because it would make high frequency trading less profitable?

Mr. GRIFFIN. We firmly believe that a transaction tax will injure Americans hoping to save for retirement. I believe that Vanguard has publicly come out and said that we'd have to work about 2½ years longer—

Ms. TLAIB. I want to make this—

Mr. GRIFFIN. Let me finish my answer. I think it's important to—

Ms. TLAIB. No, no, no. I'm reclaiming my time. The Hong Kong stock market, Mr. Griffin, imposes a 0.2 percent tax on transactions, and as a result, sees little high frequency trading, but this hasn't stopped the Hong Kong stock market from thriving or becoming the third-largest in the world, after New York and London.

So just to be clear, let's not gaslight the American people. You will all be fine with the tax. And it's fair, because let me tell you, our folks are tired of bailing you all out when you screw up and gamble with the retirement funds, and that's exactly what happens every single moment. And that's the reason why we're having this hearing, is that sometimes you are irresponsible, and it's set up in a way that helps only the wealthy and leaves people like my community here with this large income inequality that I feel like never, ever gets the bailout it deserves.

Thank you so much. I yield back.

Chairwoman WATERS. Thank you very much.

Ms. Dean, you're recognized for 5 minutes.

Ms. DEAN. Thank you, Madam Chairwoman, and I appreciate this hearing for the opportunity to get detailed information and to gather the facts as to what happened over the course of these transactions.

Let me start by saying, and I saw that Members on both sides of the aisle are interested in this question—that the core question that I'm going to be asking is, what did the customers know? What did the users know, and when did they know it? That's the theme of what I want to ask.

Because I believe if we understand what happened, and what they knew and what they didn't, we're going to be able to prevent some of the harm in the future.

Let's go to the narrative. Mr. Tenev, I want to take a look at your page 9. You said that at approximately 5:11 a.m., Robinhood Securities received the automated notice saying that you had a deposit deficit of approximately $3 billion. You then said that between 6:30 and 7:30 a.m., Eastern Standard Time, Robinhood decided to impose the trading restrictions, meaning no more purchases of GameStop. And you said in your testimony that in conversations with NSCC staff, early that morning, you notified NSCC of your intention.

In that time period from 5:11 a.m. to the time you were having the conversations, what did you tell your users? What notice did they have?

Mr. TENEV. Thank you, Congresswoman. I believe during that time period, shortly after the restrictions on purchasing of these relevant securities were made, we communicated to users, to our customers, that these securities would be restricted from purchasing. And then subsequently, we issued broad communications and communication on social media explaining the reason being enhanced deposit requirements due to high volatility.

Ms. DEAN. I'm going to ask you to be much more specific, because in your testimony, you wrote that you offered three different ways of notification. You said that first, the notification to your customers was what they agreed to in their customer opening agreement. That was your first backstop, which, who knows what that boilerplate said or when customers or users agreed to it.

Second, you said they were notified 2 days later by an SEC alert, and we know what that SEC alert was. It was quite general, much more vague.

And third, you said that you also list a more ambiguous mention of targeted messages to customers.

When did you specifically send your customers an alert, "This is what we have had to do, because we were short capital?" When did you do that? What time?

Mr. TENEV. I believe, Congresswoman, that happened at several different points in time. There was a blog post that was published in the afternoon, Pacific time. I don't recall the specific time. Maybe it's in my written testimony.

Ms. DEAN. Would it be after the SEC notice? It seems to me that you didn't notify your customers for at least 2 days. You relied upon the SEC notice 2 days later. Would I be correct?

Mr. TENEV. Congresswoman, that's inaccurate. Customers were notified several times on that day, and they were notified of other restrictions as they happened days prior to January 28th as well.

Ms. DEAN. But you don't say what those notifications were in your testimony. What did you notify them? Specifically, what would I, as a user, have heard from you immediately upon your imposing the restrictions?

Mr. TENEV. Congresswoman, immediately upon imposing the restrictions, customers would have received communications saying that they would be prevented from opening further positions in the relevant securities. Later in the day, on January 28th, around early afternoon Pacific time, we published a blog post which explained that the decision to restrict these securities was due to collateral requirements at NSCC and clearinghouses, and not at the direction of special interests or hedge funds.

Ms. DEAN. Forgive me. Let me interrupt you there. You admitted to making mistakes. Specifically, what mistakes did you make?

Mr. TENEV. I admit to always improving. And certainly, we're not going to be perfect, and we want to improve and make sure that we don't make the same mistakes twice.

Ms. DEAN. But what were those mistakes? That's what we're here to learn about.

Mr. TENEV. Thank you for the question. It's an important question. On Thursday, we did restrict the buying of these securities. On Friday, we imposed position limits, which I believe was a much better long-term solution, one that we'll have in the future if anything like this happens again. We also raised $3.4 billion in capital to allow our customers to trade what they want.

Ms. DEAN. Thank you. I yield back. I think my time has expired.

Thank you very much, Mr. Tenev.

Chairwoman WATERS. Thank you very much.

With that, we'll go to Ms. Ocasio-Cortez for 5 minutes.

Ms. OCASIO-CORTEZ. Thank you so much, Madam Chairwoman.

Mr. Tenev, Robinhood has engaged in a track record of outages, design failures, and most recently what appears to be a failure to properly account for your own internal risk. You've previously tried to blame clearinghouses for your need and scrambled to raise some $3.4 billion in a matter of days. But you've also blamed a lack of industry-wide real-time settlement, or rather, a lack of that settlement of trades.

But Robinhood's requirements for margin have long been far more lax than other brokers—in December, just a couple of months ago, you bragged about having some of the most competitive rates in the industry, and this is evidenced by your recent decision to raise those requirements.

When Robinhood prohibited its customers from purchasing additional shares of several stocks, other brokerages merely adjusted the margin requirements on these stocks.

So Mr. Tenev, given Robinhood's track record, isn't it possible that the issue is not clearinghouses but the fact that you simply didn't manage your own book or failed to appropriately manage your own margin rules or failed to manage your own internal risks?

Mr. TENEV. Thank you for the question, Congresswoman. Let me address the margin point, because I think this is an important one that has been underdiscussed.

In December, when we lowered our margin rates to 2.5 percent, one of the details that I think was missed is that most other brokerages have tiered margin rates where the wealthier customers pay much lower margin rates than lower-net-worth customers.

You'll have someone who has $10,000 paying 9 to 10 percent for margin, whereas someone with a million dollars pays 2 percent. So, our approach was to give everyone a uniform rate so that wealthier customers are not advantaged with lower rates than lower-income customers, and I think that's a unique approach in our industry and is representing—

Ms. OCASIO-CORTEZ. Thank you. I apologize. I have to reclaim my time for questioning.

As many of my colleagues have also pointed out, Robinhood generates much of its revenue from the payment for order flow arrangements with market makers like Citadel, as well as Two Sigma and VIRTU. And in 2016, the SEC highlighted ways that the payment for order flow created a, "potential conflict of interest with the broker's duty of best execution." And then, one of the ideas that the Commission floated in 2016 for addressing these conflicts of interest was to require that brokers pass on the proceeds of a payment for order flow.

Earlier, one of my colleagues, Representative San Nicolas, said that Robinhood owes its customers a lot more than an apology, and I happen to agree with him. I believe that the decisions made by you and this company have harmed your customers.

Mr. Tenev, would you be willing to commit today to voluntarily pass on the proceeds of the payment for order flow to Robinhood customers?

Mr. TENEV. Congresswoman, I appreciate that question. When the statement you refer to was made, I believe in 2015 or 2016, it was before Robinhood forced the entire industry to drop commissions and replicate our business model which made—

Ms. OCASIO-CORTEZ. So, I should take that as a no, you're not willing to pass on the proceeds of payment for order flow to your customers?

Mr. TENEV. When the other brokers dropped—

Ms. OCASIO-CORTEZ. I'm just talking about today, right now.

Mr. TENEV. Payment for order flow, Congresswoman, allows for commission-free trading in the context of trading commissions. It's a much larger source of revenue in the past than payment—

Ms. OCASIO-CORTEZ. Mr. Tenev, I apologize. I don't want to be rude. I just have limited time.

But if removing the revenues that you make from payment for order flow would cause the removal of free commissions, doesn't that mean that trading on Robinhood isn't actually free to begin with, because you're just hiding the cost, the cost in terms of potentially poor execution or the cost of lost rebates to your customers?

Mr. TENEV. Certainly, Congresswoman, Robinhood is a for-profit business and needs to generate some revenue to pay for the costs of running this business. People were initially skeptical that the model, even with payment for order flow, would work when you removed the commissions, and I think we've proven that otherwise by making this the standard model by which brokerages operate now.

Ms. OCASIO-CORTEZ. I see. Okay. Mr. Tenev, I have to move on very quickly.

I have a timeline question here for Mr. Plotkin. Mr. Plotkin, earlier today, you mentioned that Melvin Capital had not engaged in a naked short of GameStop, and Melvin closed out its position on GME on the—is that correct?

Chairwoman WATERS. I'm sorry. The gentlelady's time has expired. We have to go to Mr. Auchincloss for 5 minutes.

Mr. AUCHINCLOSS. Thank you, Madam Chairwoman, and I want to thank our panel for being with us through a very substantive and long afternoon. I think I might be a welcome face for them because I, as the most junior member, am the last one to ask questions here.

And I want to talk with Mr. Tenev about options. I agree with what other members of the committee have said in both parties about the value of democratizing access to assets, and we should give latitude for independent retail investors' judgment.

But in fields where there is an information asymmetry between the user of a product or a service and the provider of it, there's always a professional code of ethics around that. When you go to a doctor, when you go to a lawyer, there is a code of ethics wrapped around that interaction which protects someone who doesn't understand as much about the service being provided. And in finance, as you're well aware, there's a fiduciary responsibility to do what's right.

In Massachusetts, where there are 500,000 users of Robinhood, we hold broker-dealers to a fiduciary standard, and the Secretary of State Securities Division filed a complaint against Robinhood for violating that fiduciary standard, and some of it was premised on options. Two-thirds of customers approved in Massachusetts for options trading identified as having limited to no investment experience.

The first question I would ask you, Mr. Tenev, and please take no more than a minute, is what do you think is the appropriate amount of financial literacy that a user should have before they should be allowed to trade options?

Mr. TENEV. Thank you for the question, Congressman. Let me first say that Robinhood really pioneered commission free and zero contract fee options trading, and I think our market leadership in this space is due to the fact that we not only provide that access but have improved upon the safety of our product in several ways over the past few years. Number one, we don't allow undefined risk options trades so no selling of naked calls, no undefined risk.

Number two, we made several enhancements to the safety of the product over the past year, including the ability to perform an instant, in-app exercise of an options position, clarifications around the user interface, and live customer support by phone for urgent options cases. So, we've actually proven and are committed to improving in the future the safety of our options offering.

Mr. AUCHINCLOSS. But to be clear here, options are decaying assets. They're binary in outcome, so they are qualitatively and quantitatively different than stocks and bonds in the sense that you can lose all your money very fast. You can make a lot of money very fast as well, but this is getting very close to gambling. And especially when you gamify the option-buying experience as your app does, it can very quickly turn into a casino-like feel.

So, I'd ask you just to address the question again. What level of investment sophistication do you think a retail trader should have before they're buying options?

Mr. TENEV. Sure. Congressman, I appreciate the follow-up. I should first say there are strict FINRA rules and regulations governing who gets access to options that, of course, Robinhood complies with. I also should note we're in a competitive market. Several others have mentioned Chinese-based brokerages, and other brokerages that are essentially offering similar products, all having to comply with these regulations.

We're certainly willing to engage in a discussion about how rules should change, if at all. And as long as they're applied uniformly and are fair to small investors and not just benefitting high-net-worth individuals and institutions, we'd be open to having that conversation.

Mr. AUCHINCLOSS. The standard for my constituents in Massachusetts is not going to be what the Chinese regulators think is appropriate. It's going to be a fiduciary standard.

I regret that you really haven't addressed the question, and so I guess I would ask a separate one, which is, would you commit here to offering a higher in-app threshold, including, but not limited to, financial education before allowing people to purchase options?

Mr. TENEV. Again, Congressman, I'd be happy to engage on this topic substantively. I think as long as those requirements are uniformly applied to all brokerages and not just startup brokerages or brokerages catering to small investors, we're open to having that conversation.

Mr. AUCHINCLOSS. The fiduciary standard is applied equally to all brokerages, and yours is the one that was singled out by the Massachusetts Securities Division as having violated, given the way that your users are using the options.

I will cede the balance of my time, Madam Chairwoman, and I thank you for arranging this hearing.

Chairwoman WATERS. Thank you very much.

And with that, Mr. Garcia, you are recognized for 5 minutes.

Mr. GARCIA OF ILLINOIS. Thank you Madam Chairwoman, and Ranking Member McHenry. It has been a long day. I wanted to ask Mr. Griffin some questions. Mr. Griffin, would you consider your firm successful? This is an easy yes or no.

Mr. GRIFFIN. Yes. I would consider Citadel to be successful, and I would consider Citadel Securities to be successful.

Mr. GARCIA OF ILLINOIS. And, of course, I'd agree that you've done pretty well for yourself. As you mentioned earlier in your testimony, your company handles over 40 percent of retail trading. Did I get that correct?

Mr. GRIFFIN. Citadel Securities is the largest destination for retail flow in the United States. It reflects the execution quality that we give.

Mr. GARCIA OF ILLINOIS. And Citadel is a leading market marker for interest rate drops as well. Is that correct?

Mr. GRIFFIN. Due to the great work of the House and Senate on the back of Dodd-Frank, where we permitted competition to exist in the interest rate swap market, and I am grateful for that opportunity to compete in that market, we are now a swap dealer at Citadel Securities and a significant participant in that market, and I'd like to express my gratitude for Dodd-Frank's derivatives reform.

Mr. GARCIA OF ILLINOIS. Good. You're hedge fund managers. Do you manage over $30 billion? Is that correct?

Mr. GRIFFIN. Congressman, yes, that is correct. We manage approximately $35 billion of assets for pension plans, for endowments, for colleges, and for charities.

Mr. GARCIA OF ILLINOIS. Very well. That's pretty significant. I'd say that's a lot. It seems to me that your company is systemically important to our financial system. Would you agree with that?

Mr. GRIFFIN. I believe that we play an important role in the U.S. capital markets. I believe that our hedge fund would not be in the category of systemically important. With $30-some billion of equity, it is simply not at the scale or magnitude of a JPMorgan, a Bank of America, or a Wells Fargo. And in particular, having worked on these policy issues with members of the Fed in various contexts, we don't have to make payroll on Friday.

Mr. GARCIA OF ILLINOIS. Okay. But you're doing pretty well, and yes, you're not one of the big guys that we have visit us frequently, at least a couple of times a year. Was Citadel Securities fined recently by FINRA for trading ahead of customer orders in the past? Is that what I heard from a couple of questioners earlier today?

Mr. GRIFFIN. I believe this was brought up earlier, that we paid a fine to FINRA for trading ahead in the OTC market back in the, let's say, roughly 2012 through 2014. It was due to a systems failure. Now, we have no tolerance internally for having made such a mistake. We, of course, have taken actions to rectify such a mistake.

Mr. GARCIA OF ILLINOIS. But that did occur.

Mr. GRIFFIN. That did occur.

Mr. GARCIA OF ILLINOIS. Okay. I appreciate that. It seems to me that the retail investors using their savings are not exactly an even match for a complex, deeply connected firm like Citadel. Would you agree with that?

Mr. GRIFFIN. I don't actually understand the premise of the question. Retail investors who do good research, and I—one of our fellow panelists said earlier, many retail investors have understood the game-changing technologies unfolding before us, electric cars, solar energy, and have done extraordinarily well investing their assets into these newly emerging parts of the economy.

Mr. GARCIA OF ILLINOIS. Okay. And your firm has done and you've personally done well during the pandemic, right? There hasn't been much of an adverse effect on your firm?

Mr. GRIFFIN. Congressman, we've all been adversely impacted by the pandemic. I think all of us long for the return back to life as it was a year-and-a-half ago.

Mr. GARCIA OF ILLINOIS. But you haven't done badly, right?

Mr. GRIFFIN. There are two dimensions to this. There's the personal impact on everybody, and we've all had to deal with family, with friends—

Mr. GARCIA OF ILLINOIS. But in terms of your bottom line, sir?

Mr. GRIFFIN. Our bottom line over the course of the last year has been successful, Congressman.

Mr. GARCIA OF ILLINOIS. Okay. Good. That's what I thought. Is it true that last year in Illinois, you were involved in an effort, and you spent close to $50 million to defeat a tax increase in Illinois that would have forced the big income earners like yourself to pay more in taxes in Illinois, a progressive tax?

Chairwoman WATERS. The gentleman's time has expired.

Mr. GARCIA OF ILLINOIS. Thank you, Madam Chairwoman.

Chairwoman WATERS. All Members on the platform today have been heard and have had an opportunity to raise their questions.

Before we get to closing statements, I would like to ask unanimous consent to enter letters in the record from the following entities: Bear Markets; Public Citizen; the Depository Trust & Clearing Corporation; and Healthy Markets.

Without objection, it is so ordered.

I now yield 1 minute to the gentleman from Missouri, Mr. Luetkemeyer, for brief closing remarks.

Mr. LUETKEMEYER. Thank you, Madam Chairwoman, and I thank all of the witnesses for being here today. I thought you all did a great job, and we really thank you for spending time with us and educating us on the market and all of the activities surrounding GameStop investing in short selling.

I'd like to reiterate the ranking member's commitment that the House Financial Services Committee Republicans stand ready to work with the Majority to continue to provide oversight on and investigation of the GameStop activities. And going forward, I hope that we always have an eye towards protecting and giving more choice and access to America's everyday investors.

With that, Madam Chairwoman, I yield back.

Chairwoman WATERS. I now yield myself 1 minute.

Today, the committee has heard firsthand from witnesses about their roles in the market volatility in late January. This hearing has allowed us to begin to assess what transpired and whether our guard rails have not kept up with the rapid changes the markets have experienced.

For example, I'm more concerned than ever that some investors are being fleeced, and massive market makers like Citadel may pose a systemic threat to the entire system. The committee is going to continue to examine these issues.

Our next hearing will include securities market experts and investor advocates to discuss the policy issues that are involved, and potential solutions to problems with our system that these events have illuminated.

I will also convene a hearing to hear testimony from the regulators, including the Securities and Exchange Commission (SEC) and the Financial Industry Regulatory Authority (FINRA).

All of these hearings will inform the committee's role and help us to determine potential legislative steps to protect investors and ensure Wall Street accountability.

With that, I'd like to thank our distinguished witnesses for their testimony here today.

The Chair notes that some Members may have additional questions for these witnesses, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

And I sincerely thank you, and I want all of us to pay attention to what is happening in Texas and to do what is necessary to be able to give assistance to all of our people, all of the families in Texas who are experiencing this very, very difficult time. Thank you so very much. This hearing is adjourned.

[Whereupon, at 5:25 p.m., the hearing was adjourned.]

A P P E N D I X

February 18, 2021

TESTIMONY OF KEITH PATRICK GILL
BEFORE THE U.S. HOUSE COMMITTEE ON FINANCIAL SERVICES

Thank you Chairwoman Waters, Ranking Member McHenry, members of the Committee.

Before I go further, I want to be clear about what I am not. I am not a hedge fund. I do not have clients, and I do not provide personalized investment advice for fees or commissions. I am an individual investor. My investment in GameStop and my posts on social media were entirely my own.

I did not solicit anyone to buy or sell the stock for my own profit. I did not belong to any groups trying to create movements in the stock price. I never had a financial relationship with any hedge fund. I had no information about GameStop except what was public. I did not know any people inside the company, and I never spoke to any insider.

As an individual investor, I use publicly available information to study the market and the value of specific companies. I consider a complex array of factors and track hundreds of stocks – all in search of market inefficiencies. Like many people, sometimes I post on social media my thoughts and analysis about individual stocks and whether they are correctly valued.

I did that with GameStop. I believed the company was dramatically undervalued by the market. The prevailing analysis about GameStop's impending doom was simply wrong.

A little about my background: I grew up in Brockton, Massachusetts. My father was a truck driver, and my mom a registered nurse. I was one of three kids, and the first in my family to earn a four-year college degree when I graduated from Stonehill College in 2009, amid the Great Recession and without a long-term job. My first post-college job was in operations at W.B. Mason, an office supplies company headquartered in my home town of Brockton.

Between 2010 and 2014, I worked for a family friend at a start-up company in New Hampshire, trying to build a software program that would help investors analyze stocks and offer related research. We also tried to start an investment firm, which dissolved not long after it was created. My salary never exceeded $40,000, but I did learn something about investing. I learned how to do the tedious work of digging through a company's financials and focusing on its real long-term value, not prevailing market sentiment or headlines.

I married my wife Caroline in 2016, and I found a job working operations and compliance at LexShares. I left that job in March 2017, and for the next two years I was effectively without a job. During that time, I began actively analyzing a wide array of stocks to try to keep and increase our limited savings. It was both a way to make money and an interest that I pursued passionately while I lacked a job.

In April 2019, I accepted a marketing and financial education job at MassMutual. Caroline and I were both happy about our prospects. I had never made a salary over $100,000 a year before, and I was thrilled just to be working and to have benefits again. My title was Director, Financial Wellness Education. My job was to help develop financial education classes that advisors could present to prospective clients. I never sold securities, and I was not a financial advisor.

I continued analyzing stocks on my own time and investing my family's funds. In early June of 2019, the price of GameStop's stock declined on worse than expected earnings, and it began trading at a deep discount, below what I thought was its fair value. I was aware from public reports that a well-known investor, Michael Burry, was interested in GameStop. Because I thought the stock was undervalued, I purchased call options on June 7, 2019. I increased my position throughout much of 2019 and 2020, because as I continued to analyze the company and its prospects, I became increasingly confident that the share price was indeed dramatically undervalued.

Two important factors, based entirely on publicly available information, gave me and many others confidence that GameStop was undervalued in 2019 and 2020. First, the market was underestimating the prospects of GameStop's legacy business and overestimating the likelihood of its going bankrupt. GameStop, the only major retailer dedicated to gaming, has over 60 million members in its loyalty program and continues to maintain a sizable market share within the gaming industry. Its legacy business, comprised primarily of selling physical video games and related equipment within their stores, was likely to generate meaningful cash flow following the release of new gaming consoles in late 2020. I grew up playing videogames and shopping at GameStop, and I'm looking forward to buying a new console at GameStop. I knew the company had an opportunity to reinvigorate this business by improving customer service for gamers, upgrading its online presence, and offering complementary product lines such as PC gaming and accessories.

Second, I believed – and I continue to believe – that GameStop has the potential to reinvent itself as the ultimate destination for gamers within the thriving $200 billion gaming industry. The new console cycle provides GameStop a unique opportunity to pivot from a traditionally brick-and-mortar mindset toward a technology-driven business that excels in gaming products, experiences and services. By embracing the digital economy, GameStop can pursue new revenues streams including larger gaming catalogs, digital content and community experiences, online trade-ins, streaming services, and Esports. While I may be the only panelist here today who had faith in GameStop, I was hardly the only person who advocated these points or ones like them. Investors including Chewy co-founder Ryan Cohen, whose purchase of GameStop shares and advocacy with the GameStop board helped positively affect the share price in late-2020, publicly expressed similar views.

I want to pause to note that the investment I made was risky, but I was confident in my analysis, and I was willing to accept the loss if I was proven wrong. My timing was far from perfect, and many of the options contracts I purchased expired worthless because GameStop's stock price remained depressed longer than I expected.

I've been asked why I decided to share my investment ideas on social media. My investment skills had reached a level where I felt sharing them publicly could help others. I also thought that by sharing my own ideas and accepting critiques, I would be able to identify holes in my analysis. Hedge funds and other Wall Street firms have teams of analysts working together to compile research and critique investment ideas, while individual investors have not had that advantage. Social media platforms like YouTube, Twitter, and WallStreetBets on Reddit are leveling the playing field. And in a year of quarantines and COVID, engaging with other investors on social media was a safe way to socialize. We had fun.

The idea that I used social media to promote GameStop stock to unwitting investors is preposterous. I was abundantly clear that my channel was for educational purposes only, and that my aggressive style of investing was unlikely to be suitable for most folks checking out the channel. Whether other individual investors bought the stock was irrelevant to my thesis – my focus was on the fundamentals of the business. It's worth noting that after five months of streaming, my final stream of 2020 topped out at just ninety-six concurrent viewers, with an average view duration of twenty-five minutes. On Christmas morning I had only 529 subscribers on YouTube, and 550 followers on Twitter. These numbers are tiny. There were rarely more than a few dozen folks on the stream on any night. The reality was people didn't really care about boring, repetitive analysis of GameStop and other stocks, and that was fine. For those of us who did care, the stream provided us an outlet for refining our fundamentals-based thesis. We were able to analyze events in real-time and keep each other honest.

Ultimately my GameStop investment was a success. But the thing is, I felt that way in December far before the peak, when the stock was at $20 a share. I was so happy to visit my family in Brockton for the holidays and give them the great news – we were millionaires. That money will go such a long way for my family. We had an incredibly difficult 2020. In addition to dealing with COVID, we lost my sister Sara unexpectedly in June. It brought me tremendous joy to share good news with my family for a change. I am grateful to be able to give back to my community and to support my family, most of all my wife Caroline who has stuck with me through very tough times.

As for what happened in January, others will have to explain it. Threshold lists, order flow, halting purchases – according to the media these all had a material impact on GameStop stock in January. Here's the thing: I've had a bit of experience and even I barely understand these matters. It's alarming how little we know about the inner-workings of the market, and I am thankful that this Committee is examining what happened. I believe an analysis of GameStop's recent price action must start with a discussion of the exorbitant short interest in the stock, as well as an investigation into any potentially manipulative shorting practices and brokers' reported failures to timely deliver shares and settle trades.

As for what I expect moving forward: GameStop's stock price may have gotten a bit ahead of itself last month, but I'm as bullish as I've ever been on a potential turnaround. In short, I like the stock. And what's stunning is that, as far as I can tell, the market remains oblivious to GameStop's unique opportunity within the gaming industry.

Testimony of Kenneth C. Griffin

Founder and CEO of Citadel and

Founder and Principal Shareholder of Citadel Securities

Before the Committee on Financial Services

United States House of Representatives

February 18, 2021

INTRODUCTION

Chairwoman Waters, Ranking Member McHenry and distinguished members of the Committee, thank you for the opportunity to testify today on the recent market events.

The U.S. capital markets are the envy of the world. Our nation's ability to allocate capital to its best and highest use creates jobs, drives innovation and fuels our economy. America's retail investors play an important role in our capital markets. According to Gallup, about 55% of Americans own stock right now. Citadel Securities – as the largest market maker in the U.S. equities market – executes more trades on behalf of retail investors than any other firm.

As I will discuss later, Citadel Securities played an important role in meeting the needs of retail investors during the week of January 24th. I want to be perfectly clear: we had no role in Robinhood's decision to limit trading in GameStop or any other of the "meme" stocks. I first learned of Robinhood's trading restrictions only after they were publicly announced.

All of us at Citadel Securities are committed to the healthy functioning of the U.S. equities markets.

BACKGROUND

I first participated in the financial markets as a retail investor. In the late 1980s, while attending college, I traded stocks and options.

My passion for investing led to my founding of Citadel in 1990. Today, Citadel is one of the world's leading alternative investment managers. Our capital partners include pension plans, university endowments, hospital systems, foundations and research institutions.

In 2002, my partners and I founded Citadel Securities. Today, Citadel Securities is one of the world's preeminent market makers. We have been a leader in using technology to transform our market infrastructure, particularly for retail investors.

With the balance of my time, I'd like to address three important matters – (1) the retail investing landscape; (2) Citadel Securities' important role within our markets; and (3) opportunities for further market improvement.

THE RETAIL INVESTING LANDSCAPE

Technological innovation advanced by market makers has dramatically improved the efficiency with which buyers and sellers come together. In tandem, U.S. equity market structure enhancements have driven greater transparency and more competition among market participants. Today, retail brokers are legally obligated to route orders based on best execution, which is determined by a number of regulatory factors, including price improvement, customer experience and platform resiliency.

Many brokers charge market makers a set fee to execute retail trades – a longstanding, transparent and regulated practice known as payment for order flow or PFOF. Retail brokers have used PFOF to reduce the costs of trading and it is a key reason why retail investors are able to trade for free or low commissions today.

Altogether, faster execution, better pricing and reduced fees have made the cost to invest in America lower than ever.

CITADEL SECURITIES' IMPORTANT ROLE WITHIN OUR MARKETS

Citadel Securities has been deeply committed to our role in the retail markets. We invest hundreds of millions of dollars each year to serve our customers. In the last week of January, the importance of these investments was on full display.

During the period of frenzied retail equities trading, Citadel Securities was the only major market maker to provide continuous liquidity every minute of every trading day. When others were unable or unwilling to handle the heavy volumes, Citadel Securities stepped up. On Wednesday, January 27, we executed 7.4 billion shares on behalf of retail investors. To put this into perspective, on that day Citadel Securities executed more shares for retail investors than the average daily volume of the entire U.S. equities market in 2019.

The magnitude of the orders routed to Citadel Securities reflects the confidence of the retail brokerage community in our firm's ability to deliver in all market conditions and underscores the critical importance of our resilient systems.

OPPORTUNITIES FOR FURTHER MARKET IMPROVEMENT

Recent events have highlighted clear opportunities to improve our markets. One takeaway is the importance of modernizing the settlement process, including shortened settlement cycles and transparent capital models. As we have seen, longer settlement periods expose firms to more risk in the time between execution and settlement, requiring higher levels of capital. Settlement cycles should be shortened from T+2 to T+1. Transparent clearing house capital requirements will enable brokers and market makers to better prepare for potential capital demands and minimize the risk of associated market interruptions. Both of these enhancements are well within reach today.

CONCLUSION

As we move forward – and consider how to further improve our capital markets – it is important that we build on the tremendous progress of recent years. Individual investors are better served by America's markets than ever before, and it is critical that our markets continue to be a force for fairness and integrity worthy of investor confidence and participation.

I appreciate the opportunity to appear today and look forward to discussing the retail market structure with the Committee.

U.S. House of Representatives Committee on Financial Services
Hearing on "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide"

Testimony Submitted for the Record by
Mr. Steve Huffman, Co-Founder & CEO of Reddit, Inc.

February 18, 2021

I. Introduction

Madam Chairwoman, Mister Ranking Member, Honorable Members of the Committee:

My name is Steve Huffman. I am the co-founder and CEO of Reddit, and I'm pleased to talk with you today about how Reddit works and what we have seen on the site in the past few weeks.

II. What Reddit is

A. Founding & Mission

Reddit's mission is to bring community and belonging to everyone in the world.

What started in 2005 as a single community has since evolved into a vast network of many thousands of communities. They range from standard topics, like news, sports, and politics, to internet culture, to support. For example, our unemployment community has become a source of support for hundreds of thousands of Americans, who have turned to this community after losing their jobs during the pandemic.

Our communities are created and run by our users. Because of this, we describe Reddit as the most human place on the internet. Though we are small compared to the largest platforms, our communities provide an online home for millions of people every day.

B. Site Structure

1. Sitewide Content Policy and Actions Taken by Reddit, Inc.

I'd like to share a bit about how content moderation on Reddit works.

Reddit's moderation system starts with our Content Policy,[1] the platform-wide rules which all communities must follow. Among other things, these rules prohibit hate, harassment, bullying, and illegal activity on Reddit. They are enforced by Reddit's Anti-Evil team, composed of engineers, data scientists, and other specialists. This team also ensures the integrity of the site, and we have continuously honed our methods to stay ahead of bad actors by monitoring data flows to detect and remove threats like spammers, bots, and others.

[1] https://www.redditinc.com/policies/content-policy

Centralized moderation like this is common, but Reddit additionally uses a governance structure akin to a federal democracy, where the aforementioned policies and teams represent the federal government, and the communities themselves represent states.

2. Subreddits

All communities, or "subreddits," are created by users that we call moderators. They set the community's rules, which may be as strict as they like as long as they are not in conflict with our platform-wide policies, and they have a variety of tools to enforce them independently. Moderators are not paid employees, but rather users who are passionate about their communities. They have the context and judgement to make decisions no algorithm could.

3. Upvotes/Downvotes

The members of each community contribute both the content itself and the ranking of it by voting up or down on any post or comment. Unlike other platforms where a submission has a built-in audience through the author's follower count, every piece of content on Reddit—no matter how famous the author—starts at zero and has to earn its visibility. Through their votes, the community itself enforces not just the explicit rules of their community, but also the unwritten rules that define their culture. This layered approach has helped our users create the most authentic communities online.

III. What We've Seen

A. WallStreetBets is a real community

The specific community we'd like to talk about today is WallStreetBets. It's important to understand that WallStreetBets is one of many finance and investing-related communities on Reddit. This particular community specializes in higher-risk, higher-reward investments than what you might find in other, more conservative, financial communities on Reddit such as r/personalfinance, r/investing, and r/financialindependence, to name a few.

I will stress that WallStreetBets is first and foremost a real community. The self-deprecating jokes, the memes, the crass-at-times language, all reflect this. And if you spend time on WallStreetBets, you'll find a significant depth to this community, exhibited by the affection its members show one another. They are just as quick to support a fellow member after a big loss as they are to celebrate after a big gain.

A few weeks ago, we saw the power of community in general and of this community in particular when the traders of WallStreetBets banded together at first to seize an investment opportunity not usually accessible to retail investors, but later more broadly to defend all retail investors against the criticism of the financial establishment.

B. Sudden Traffic Influx

With the increase in attention, WallStreetBets unsurprisingly faced a surge in traffic and new users. At Reddit, our first duty in these situations is to our communities, and our role in this moment was to keep WallStreetBets online. Working around the clock, we scaled our infrastructure and made technology changes to help this community withstand the onslaught of traffic, and we acted as diplomats to help resolve conflict within WallStreetBets' leadership.

C. Authenticity Investigation

We have since analyzed the activity in WallStreetBets to determine whether bots, foreign agents, or other bad actors played a significant role. They have not. In every metric that we checked, the activity in WallStreetBets was well within normal parameters, and its moderation tools were working as expected.

D. Regulators

We will of course cooperate with valid legal requests from federal and state regulators. That said, we do believe that this community was well within the bounds of our own policies.

IV. Conclusion

To conclude, I would like to reiterate why it is important to protect online communities like WallStreetBets. WallStreetBets may look sophomoric or chaotic from the outside, but the fact that we are here today means they've managed to raise important issues about fairness and opportunity in our financial system. I'm proud they used Reddit to do so.

Thank you, and I look forward to your questions.

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

February 18, 2021

Testimony of Gabriel Plotkin,
Founder and Chief Investment Officer, Melvin Capital Management

Chairwoman Waters, Ranking Member McHenry, and Members of the Committee, I would like to thank you for this opportunity to share Melvin Capital's perspective on the recent trading activity in GameStop. I am the founder and Chief Investment Officer of Melvin Capital.

I am humbled by these unprecedented events. Many investors on all sides have experienced losses. I am here today to share my personal experience and to be helpful in this conversation.

I understand that part of the focus of this hearing is the decisions of stock trading platforms to limit trading in GameStop. I want to make clear at the outset that Melvin Capital played absolutely no role in those trading platforms' decisions. In fact, Melvin closed out all of its positions in GameStop days before platforms put those limitations in place. Like you, we learned about those limits from news reports.

I also want to make clear at the outset that contrary to many reports, Melvin Capital was not "bailed out" in the midst of these events. Citadel proactively reached out to become a new investor, similar to the investments others make in our fund. It was an opportunity for Citadel to "buy low" and earn returns for its investors if and when our fund's value went up. To be sure, Melvin was managing through a difficult time, but we always had margin excess and we were not seeking a cash infusion.

<u>My Background, Melvin Capital</u>

I am here testifying today far removed from my background. I grew up in a middle-class family in Portland, Maine. I went to a public high school. I studied hard and got into a good college. Upon graduation, I did not have a job. Today, I am married with four children and my time is spent with my family and on Melvin Capital, which I founded six years ago. I named Melvin after my grandfather, who ran a convenience store. I wanted the firm to represent his values – integrity, hard work, taking care of customers and employees, and commitment to excellence.

Melvin Capital manages a hedge fund. Investors such as academic institutions, medical research and other charitable foundations, pension funds, retirees and others invest with us. We have 36 employees and hundreds of investors, and I feel a personal duty to all of them.

<u>Melvin Capital's "Long" / "Short" Investment Strategy</u>

Melvin specializes in the consumer and technology sector, including companies like GameStop, AutoZone and Expedia. Most of our investments are "long" – in other words, we buy stock in companies that create jobs, grow the economy, and develop new products for consumers. We do this after extensive fundamental research, sometimes literally for years. When our research convinces us that a company will grow relative to expectations, we make a long-term investment.

When our research suggests a company will not live up to expectations and its stock price is over-valued, we might "short" a stock. Like with our long positions, our practice is to short a stock for the long term after extensive research.

We also short stocks because when the markets go down, we have a duty to protect our investors' capital. There are laws governing shorting stock, and of course we always follow them.

In addition, it is very important to understand that absolutely none of Melvin's short positions are part of any effort to artificially depress or manipulate downward the price of a stock. And nothing about our short position prevents a company from achieving its objectives – it is just Melvin's view about whether it will.

GameStop Position

Specific to GameStop, we had a research-supported view well before the recent events. In fact, we had been short GameStop since Melvin's inception six years earlier because we believed and still believe that its business model – selling new and used video games in physical stores – is being overtaken by digital downloads through the internet. And that trend only accelerated in 2020, when, because of the pandemic, people were downloading video games at home. As a result, the gaming industry had its best year ever. But GameStop had significant losses.

January Frenzy Untethered to Fundamentals

In January 2021, a group on Reddit began to make posts about Melvin's specific investments. They took information contained in Melvin's SEC filings and encouraged others to trade in the opposite direction. Many of these posts were laced with antisemitic slurs directed at me and others. The posts said things like "it's very clear we need a second holocaust, the jews can't keep getting away with this." Others sent similarly profane and racist text messages to me.

In the frenzy during January, GameStop's stock rose from $17 to a peak of $483. I do not think anyone would claim that that price had any relationship to the intrinsic value of the company. The unfortunate part of this episode is that ordinary investors who were convinced by a misleading frenzy to buy GameStop at $100, $200, or even $483 have now lost significant amounts.

When this frenzy began, Melvin started closing out its position in GameStop at a loss, not because our investment thesis had changed but because something unprecedented was happening. We also reduced many other Melvin positions at significant losses – both long and short – that were the subject of similar posts.

Looking Forward

I am personally humbled by what happened in January. Investors in Melvin suffered significant losses. It is now our job to earn it back. And while I do not think that anyone could have anticipated these events, I have learned much from them, and I am taking steps to protect our investors from anything like this happening in the future.

I look forward to answering your questions.

CATO INSTITUTE | Center for Monetary and Financial Alternatives

Testimony
Before the Committee on Financial Services, U.S. House of Representatives
Hearing on "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide"

Jennifer J. Schulp
Director of Financial Regulation Studies
Center for Monetary and Financial Alternatives, Cato Institute

February 18, 2021

Introduction

Chairwoman Waters, Ranking Member McHenry, and distinguished members of the Committee on Financial Services, my name is Jennifer Schulp, and I am the Director of Financial Regulation Studies at the Cato Institute's Center for Monetary and Financial Alternatives.

I thank you for the opportunity to take part in today's hearing entitled, "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide."

Retail Investing

Before addressing the GameStop phenomenon specifically, I'd like to address the participation of retail, or individual, investors in our public equities markets.

Retail participation has ebbed and flowed over the years, but the recent trend toward increased retail participation accelerated sharply during the pandemic. Approximately one-fifth of market trading volume is now attributable to retail orders, which is a substantial increase over 2019.[1]

Most commentators point to the increasing availability of zero-commission trading as drawing in more individual investors. In late 2019, many large brokerages began offering zero-commission trading, following the lead of Robinhood Financial, which introduced commission-free trading in 2015. But several other factors also likely attracted retail investors, including the

[1] Alexander Osipovich. "Individual-Investor Boom reshapes U.S. Stock Market." *Wall Street Journal*, August 31, 2020. Available at https://www.wsj.com/articles/individual-investor-boom-reshapes-u-s-stock-market-11598866200; Piece Crosby. "Reflections on 2020 and What's In Store for 2021: Through the Eyes of Retail Traders." *Nasdaq*, December 22, 2020. Available at https://www.nasdaq.com/articles/reflections-on-2020-and-whats-in-store-for-2021%3A-through-the-eyes-of-retail-traders-2020

widespread availability of fractional-share trading,[2] the ability to open accounts with low balances, and the ease of app-based trading platforms. Even limited entertainment options during the pandemic probably played a role in increased retail interest in investing.

Retail participation in our equities markets is important and beneficial. Retail investors are widely understood as providing liquidity in markets. The fact that retail investors behave differently from institutional ones, and sometimes behave differently from each other—far from being a bad thing—can be particularly valuable in times of market stress. Where institutional liquidity dries up, for example, retail trading can help to lower bid-ask spreads and dampen the price impact of trades.[3] In fact, retail investors may have been a market-stabilizing force during the March 2020 coronavirus-induced market crash by staying the course with their investments and buying when stock prices dipped.[4]

Investing in the stock market also provides an important path to wealth for individual investors. With average annual returns for the S&P 500 during the past 60 years of approximately 8%,[5] long-term investors generally benefit by being invested in the market.

There is already a strong degree of retail participation in the U.S. stock market; when measured in 2018, approximately 38% of total U.S. equities were held directly by households.[6] However, only 15% of U.S. households directly hold stock.[7] In other words, ownership of equities is concentrated in the hands of the comparatively few and comparatively wealthy.[8]

Even if you include pooled investment funds, which is how the vast majority of households indirectly hold stocks as a part of their retirement assets, ownership is still skewed

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[2] Fractional-share trading, which permits investors to buy a portion of a stock less than one share, increased in availability throughout 2020. Julia Carpenter. "When Some Investors Look at Stocks They See Dollars, Not Shares." *Wall Street Journal*, January 15, 2021. Available at https://www.wsj.com/articles/when-some-investors-look-at-stocks-they-see-dollars-not-shares-11610706630?reflink=e2twmkts

[3] Gideon Ozik, Ronnie Sadka, and Syiy Shen. "Flattening the Illiquidity Curve: Retail Trading During the COVID-19 Lockdown." *SSRN*, February 10, 2021. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3663970

[4] Ivo Welch. "The Wisdom of the Robinhood Crowd." *NBER Working Paper*, No. 27866. Available at https://www.nber.org/system/files/working_papers/w27866/w27866.pdf; Gideon Ozik, Ronnie Sadka, and Syiy Shen. "Flattening the Illiquidity Curve: Retail Trading During the COVID-19 Lockdown." *SSRN*, February 10, 2021. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3663970

[5] J.B. Maverick. "What is the Average Annual Return for the S&P 500?" *Investopedia*, February 19, 2020. Available at https://www.investopedia.com/ask/answers/042415/what-average-annual-return-sp-500.asp

[6] SIFMA. "SIFMA Insights." *SIFMA*, October 2019. Available at https://www.sifma.org/wp-content/uploads/2019/10/SIFMA-Insights-Who-Owns-Stocks-in-America.pdf. The 38% figure excludes stocks indirectly held by retail investors through mutual funds or other institutions.

[7] Board of Governors of the Federal Reserve System. "Changes in U.S. Family Finances from 2016 to 2019: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin*, Vol. 106, No. 5. Available at https://www.federalreserve.gov/publications/files/scf20.pdf

[8] Board of Governors of the Federal Reserve System. "Survey of Consumer Finances (SCF)." Available at https://www.federalreserve.gov/econres/scf/dataviz/scf/chart/#series:Directly_Held_Stocks;demographic:inccat;population:1,2,3,4,5,6;units:have

towards the wealthy. In 2019, about 53% of all households had stock market investments, but only 31% of families in the bottom half of the income distribution were invested.[9]

Stock ownership is also highly correlated with race, education, and age.[10] For example, in 2019, approximately 19% of white households directly held stock, compared to approximately 7% of Black households and 4% of Hispanic households.[11] Those with a college degree are about twice as likely to directly hold stock than those who just had some college education, and more than three times more likely than those with only a high school diploma.[12] And the older a person is, the more likely he or she is to own stock.[13] These patterns equally apply to ownership of indirectly held stock.

The retail investors making up this new surge, though, are different. Data released by brokerage firms identifies a high number of new clients who are first-time investors and who are younger than the average investor.[14] This is confirmed by recent research by the FINRA Investor Education Foundation and NORC at the University of Chicago ("FINRA/NORC Study"), which found that investors who opened a taxable investment account for the first time in 2020 were younger, had lower incomes, and were more racially diverse than those who had previously opened such accounts.[15] These new investors also held lower account balances, with about a third holding account balances less than $500. Indeed, the ability to invest with a small amount of money was a commonly cited reason for opening an account for the first time in 2020. This may portend, as one of the researchers noted, "a shift towards more equitable investment participation."[16]

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[9] Board of Governors of the Federal Reserve System. "Changes in U.S. Family Finances from 2016 to 2019: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin*, Vol. 106, No. 5. Available at https://www.federalreserve.gov/publications/files/scf20.pdf. By comparison, about 70% of families in the 50-80th percentiles held stock, and more than 90% of families in the top decile held stock.

[10] Lydia Saad. "What percentage of Americans Owns Stock?" *Gallup*, September 13, 2019. Available at https://news.gallup.com/poll/266807/percentage-americans-owns-stock.aspx

[11] Board of Governors of the Federal Reserve System. "Survey of Consumer Finances (SCF)." Available at https://www.federalreserve.gov/econres/scf/dataviz/scf/chart/#series:Directly_Held_Stocks;demographic:racecl4;population:1,2,3,4;units:have

[12] Board of Governors of the Federal Reserve System. "Survey of Consumer Finances (SCF)." Available at https://www.federalreserve.gov/econres/scf/dataviz/scf/chart/#series:Directly_Held_Stocks;demographic:edcl;population:all;units:have

[13] Board of Governors of the Federal Reserve System. "Survey of Consumer Finances (SCF)." Available at https://www.federalreserve.gov/econres/scf/dataviz/scf/chart/#series:Directly_Held_Stocks;demographic:agecl;population:1,2,3,4,5,6;units:have

[14] "Millennials Working from Home May be Moving the Market." *CNN*, June 12, 2020. Available at https://www.cnn.com/2020/06/12/investing/millennials-investing-robinhood/index.html; Robinhood. "Robinhood Raises $280 Million in Series F Funding Led by Sequoia." *Robinhood Blog*, May 4, 2020. Available at https://blog.robinhood.com/news/2020/5/4/robinhood-raises-280-million-in-series-f-funding-led-by-sequoia.

[15] FINRA. "Investing 2020: New Accounts and the People Who Opened Them." *Consumer Insights: Money & Investing*, February 2021. Available at https://www.finrafoundation.org/sites/finrafoundation/files/investing-2020-new-accounts-and-the-people-who-opened-them_1_0.pdf

[16] Angelita Williams and Eric Young. "New Research: Global Pandemic Brings Surge of New and Experienced Retail Investors into the Stock Market." *FINRA Media Center*, February 2, 2021. Available at

The FINRA/NORC Study also calls into question the popular narrative that the rise in retail participation is fueled by those seeking to engage in speculative behavior. New investors most often cited saving for retirement and learning about investing as goals. About a third of investors who opened accounts in 2020 did cite speculating as a goal, but the self-reported trading behavior of these investors is not consistent with day trading or similar strategies. While those who opened new accounts in 2020 appear to trade more frequently than existing account holders, approximately 40% of new investors reported making no trades per month and almost 90% made three or fewer trades a month.

It is also not clear that these new retail investors collectively are making poor decisions. The investing behaviors of retail investors has long been the subject of debate, but there is little consensus that new retail entrants are making systematically worse decisions. Rather, retail investors have received praise for identifying the market bottom in March 2020 and generating better performance than some hedge funds through the same volatile period.[17] Recent research studying investor holdings on Robinhood suggests that the narrative that retail investors were "cannon fodder" for more sophisticated investors is "incomplete to the point of being misleading."[18] While Robinhood investors were overrepresented in certain odd stocks, those unconventional holdings were the exception, not the rule.[19]

The increased participation by retail investors in equities markets is positive news for both investors themselves and the markets. Opportunities for individuals to grow their own wealth should be welcomed and expanded, not restricted.[20]

GameStop Phenomenon

At the outset, I will note that it is difficult to analyze the impact of the trading in GameStop and other stocks because many facts remain unknown at this time. While the popular narrative is that retail traders rose up to target hedge fund short positions, we do not have the data to know what portion of GameStop's rise was attributable to retail investor

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https://www.finra.org/media-center/newsreleases/2021/new-research-global-pandemic-brings-surge-new-and-experienced-retail

[17] Maggie Fitzgerald. "Robinhood Traders Nailed the Market Bottom, Debunking Theory Retail Investors are the Dumb Money." *CNBC*, June 15, 2020. Available at https://www.cnbc.com/2020/06/15/robinhood-traders-nailed-the-market-bottom-debunking-myth-retail-traders-are-the-dumb-money.html; Maggie Fitzgerald. "Follow Robinhood Traders? Amateurs' Favorite Stocks are Beating Hedge Fund Picks, Goldman Says." *CNBC*, June 15, 2020. Available at https://www.cnbc.com/2020/06/15/follow-robinhood-traders-amateurs-favorite-stocks-are-beating-hedge-fund-picks-goldman-says.html?__source=sharebar%7Ctwitter&par=sharebar

[18] Ivo Welch. "The Wisdom of the Robinhood Crowd." *NBER Working Paper*, No. 27866. Available at https://www.nber.org/system/files/working_papers/w27866/w27866.pdf

[19] Ibid.

[20] Another place to expand opportunities for retail investors is by revising or eliminating the accredited investor definition, which limits investment in certain exempt offerings to those who meet a minimum wealth standard. The accredited investor definition has disproportionate impacts on minority and rural communities. Jennifer Schulp. "Let's Not Backtrack on Loosening 'Accredited Investor' Rules." *MarketWatch*, January 29, 2021. Available at https://www.cato.org/article/lets-not-backtrack-loosening-accredited-investor-rules

behavior versus the behavior of other market participants. More so, we may never have the data to determine the diverse motivations of all the individual investors who traded in GameStop.

But some things seem clear. Importantly, the temporary volatility in GameStop and others did not present a systemic risk to the functioning of our markets. As the Treasury Department recognized, following a meeting with officials from the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission, the Federal Reserve, and the Federal Reserve Bank of New York, the market's "core infrastructure was resilient during high volatility and heavy trading volume."[21]

This is not surprising. Despite the huge trading volume and rapid increase in value, the GameStop phenomenon affected a very small part of the market. GameStop's market capitalization, even at its peak, was around $24 billion in an approximately $50 trillion market.[22] And short interests, which may have been targeted by some traders, represent a small, and recently shrinking, portion of equity market value.[23] Even the wider market effects potentially attributable to the GameStop phenomenon, like the dip in the Dow Jones Industrial Average, were mild and short-lived.[24]

The fact that GameStop traded temporarily, and perhaps still trades, above fair estimates of the company's value is not, by itself, a reason for concern. Stock prices move in and out of alignment all the time, and markets are no strangers to bubbles. If a company is valued by the market differently than a review of its "fundamentals" suggests, it might indicate that the analysis is missing relevant information about a company's prospects or it might indicate that the company's stock price is due for a correction. The market's mechanisms, including the tool of short selling, generally work well to handle both of these circumstances. Stepping in to prevent trading when a stock price soars (or declines) contrary to conventional wisdom could limit legitimate information important to the market.

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[21] Jeanna Smialek and Deborah Solomon. "Yellen and Regulators Met Amid GameStop Frenzy to Discuss Market Volatility." *New York Times*, February 4, 2021. Available at https://www.nytimes.com/2021/02/04/business/economy/yellen-gamestop.html

[22] YCharts. "GameStop Corp (GME)." *YCharts Data.* Available at https://ycharts.com/companies/GME/market_cap; Siblis Research. "Total Market Value of U.S. Stock Market." *Siblis Research Database.* Available at https://siblisresearch.com/data/us-stock-market-value/

[23] Lu Wang. "GameStop Short Nightmare Shows Few Signs of Becoming a Contagion." *Bloomberg*, January 31, 2021. Available at https://www.bloomberg.com/news/articles/2021-01-31/gamestop-short-nightmare-shows-few-signs-of-becoming-a-contagion

[24] Yahoo! Finance. "Dow Jones Industrial Average (^DJI)." Available at https://finance.yahoo.com/quote/%5EDJI?p=%5EDJI; Anneken Tappe. "Dow Surges as Stocks Recover from GameStop Mania." *CNN*, February 2, 2021. Available at https://www.cnn.com/2021/02/02/investing/dow-stock-market-gamestop-today/index.html

The SEC, among a host of others, is reviewing the relevant trading and conducting a study of the events.[25] The SEC will probe whether any trading was the result of "abusive or manipulative trading activity that is prohibited by the federal securities laws,"[26] which generally require, with good reason, some sort of fraud or deception. There's been little evidence of such misconduct to this point, but the SEC will have access to more information to evaluate the legality of the trading. The SEC also will probe whether any actions by regulated entities, like brokerages or hedge funds, took action "that may disadvantage investors or otherwise unduly inhibit their ability to trade certain securities."[27] Brokerages, in particular, operate in a highly regulated environment, and many rules apply to their capital requirements and their treatment of customer orders. The SEC will have access to information to permit it to analyze whether any conflicts of interest inappropriately influenced decision-making. I believe the SEC and others likely have the tools necessary to address any harmful misconduct that may have occurred.

Conclusion

I cannot opine on whether any regulatory changes are warranted on this incomplete record. In light of the minimal impact on the market's function, I tend to believe that the answer will be no. But as regulators learn more about what happened here, there may be areas identified for improvement. Any proposals for change, though, must recognize the interconnectedness of the market and its participants. This is particularly important where, as here, individual investors are affected by both their own trading and the trading of the institutions that manage their retirement assets or mutual fund investments. The potential for unintended consequences must not be underestimated.

By no means, though, should the GameStop phenomenon result in changes that restrict retail investors' access to the markets. Reintroducing undue barriers to participation that have been removed, or introducing new restrictions, has the potential to undo the benefits of wider retail participation in our equities markets.

Thank you for the opportunity to provide this information, and I welcome any questions that you may have.

[25] Kate Davidson and Eliza Collins. "Regulators Say Market Infrastructure was Resilient in GameStop Frenzy." *Wall Street Journal*, February 4, 2021. Available at https://www.wsj.com/articles/u-s-regulators-met-to-discuss-recent-market-volatility-11612479757

[26] SEC. "Statement of Acting Chair Lee and Commissioners Peirce, Roisman, and Crenshaw Regarding Recent Market Volatility." Public Statement, January 29, 2021. Available at https://www.sec.gov/news/public-statement/joint-statement-market-volatility-2021-01-29

[27] Ibid.

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

February 18, 2021

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.

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[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.

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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]

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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

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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 makers[10] 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.

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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 <u>not with hedge funds</u>. 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.

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[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-Annu al-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%20Disclos ure%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

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[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

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[18] Quentin Webb, *Volatility Index Soars*, WSJ (Jan. 27, 2021), https://www.wsj.com/livecoverage/amc-gamestop-stock-market/card/G0TKmyrTdokxPNjwtwje.

[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, 2021[21]:

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-compli ance/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/nscc-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

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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.

Retail Investors Are Revolutionizing the Stock Market. So Stop Calling Them 'Dumb Money.'

Retail investors should be recognized as important market participants.

December 19, 2020 • Commentary
By Jennifer J. Schulp
This article appeared on *Business Insider* on December 19, 2020.

TOP

Are you "dumb money?" I am. You probably are too. Wall Street institutions — so-called "smart money" — usually throw around the phrase to describe investment activity they don't like. And by "dumb money," they usually mean individual, or "retail," investors.

Retail investors are big news these days. Retail trading has surged, buoyed by apps, zero-commission trading accounts, and, some argue, limited entertainment options during the COVID pandemic. Wall Street has been griping about how "dumb money" upsets the market's balance, bringing volatility and overinflated prices. And others are voicing concerns that retail investors cannot understand investment risks and will hurt themselves. Both have led to calls, heard by the SEC, for more regulation of retail investor market access.

But placing obstacles to market access for retail investors is a mistake. Retail investors are important participants in our markets, and lowered barriers to their participation should be celebrated. No matter who calls them "dumb money," retail investors deserve the freedom to make their own trading and investment decisions.

Retail investors should be recognized as important market participants.

"Dumb money" isn't so dumb after all

First, let's put the term "dumb money" to rest. It's insulting and invites criticism about retail participation in the markets. It also implies a homogeneity to retail investing behavior that does not exist.

Retail investors should be recognized as important market participants. Like their institutional counterparts, retail investors provide market liquidity. The fact that retail investors behave differently from institutional ones, and sometimes behave differently from each other — far from being a bad thing —can be valuable in times of market stress. Having diverse strategies represented in the market can cabin wild market movements by decreasing herd behavior and allowing better matching of buyers and sellers.

Wall Street institutions complain that retail investors cause irrational market swings, but this claim doesn't hold up. Although approximately 38% of total U.S. equities are held by households, retail stock trading rarely moves the market. Most retail trades are too small, and individual decision-making results in diverse trading strategies.

Of course, there are exceptions. Those exceptions — like recent retail investment in Hertz and Kodak — tend to make headlines because they are unusual. On the whole, Wall Street should question its views, not amp up its criticism.

For instance, retail investing was much wiser in 2020. Non-institutional investors nailed the market bottom according to Societe Generale and generated better performance than a lot of hedge funds according to Goldman Sachs.

Retail investing is growing, but not overwhelming

Approximately 20% of market trading volume is now attributable to retail orders. This trading volume is a substantial increase over 2019, but retail's growing market presence is not new. From discount brokers in the 1970s to online trading in the 1990s, retail investors have flowed into the market whenever barriers to their access have decreased.

The adoption of zero-commission trading accounts by mainstream brokerages in late 2019 — following Robinhood's commission-free trading model — is widely viewed as sparking the retail investor boom, but other changes have also contributed. Tweaks to trading platforms such as fractional share trading, lowered account minimums, and app-based trading interfaces have all opened up retail trading.

These changes should be applauded for making it easier to invest with smaller amounts of capital. Although approximately 53% of households held stock in 2019, according to the Federal Reserve's Survey of Consumer Finances, stock ownership is strongly correlated with household income, education, age, and race.

Investors who have historically been left out of the markets are disproportionately jumping in now. For example, the median age of Robinhood customers is 31, and more than half of the new clients opening accounts at Charles Schwab since 2019 are under 40. More than half of Robinhood's new accounts in the first half of 2020 were opened by first time investors. And the average account size at Robinhood, for example, is estimated to be quite small, suggesting that those with lower household incomes are investing. Whether you call this "democratization" or something else, expanded access gives individuals a chance to build wealth through the market, something traditionally viewed as reserved for the already wealthy.

No, it's not "gambling"

Still some investor protection advocates, pointing to the dismal state of financial literacy in this country, worry that those new to investing—or those enticed by more "fun" aspects of app-based trading—will make poor decisions. That's not a reason to create obstacles to market access.

The emphasis instead should be on empowering retail investors to make their own, informed, decisions about how to invest their money.

Although financial literacy may improve naturally as more people invest, investor education need not passively rely on exposure. While the SEC has an important role to play in promoting financial literacy, it doesn't stand alone. Some brokerages also have enhanced their investor education offerings in response to increasing retail interest. These efforts to help individuals—especially those new to investing—understand the risks of short-term trading and investing in complex products and the benefits of diversification will support, but not interfere, with their ability to invest.

None of this is to say all brokerages are without regulatory issues. Regulations govern many aspects of retail participation, like investing in options or on margin, and brokerages not meeting existing requirements may need reform. But when faced with increased retail investing, we should not create new regulatory requirements that push those investors back out of the markets.

The headlines should celebrate growing retail investor participation in the markets, not deride "dumb money" for investing. A focus on education — not taking investment opportunities away — can help individuals to take full advantage of the opportunities the markets can offer and help banish the phrase "dumb money" for good.

FINANCE

Here's how Robinhood is raking in record cash on customer trades — despite making it free

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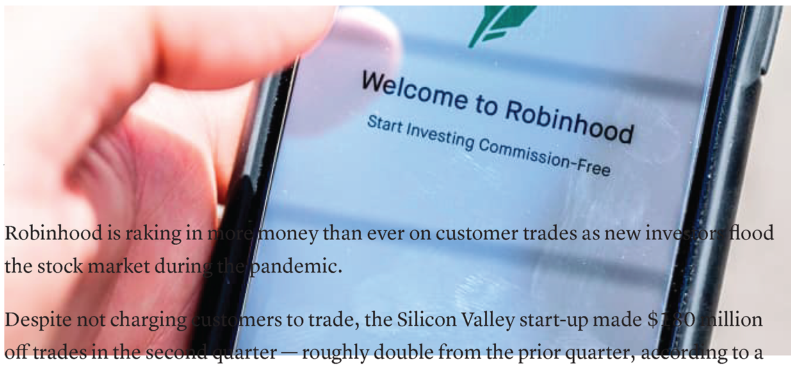
KEY POINTS

- Robinhood roughly doubled the money it makes from customer trades from the prior quarter, according to a recent SEC regulatory filing. The majority of that total came from options trading.
- The Silicon Valley start-up attracts the highest rate of any firm for equity trades, and saw the greatest quarter-over-quarter increase in payment for order flow of any e-broker, according to the documents.
- Options are far more lucrative for these trading firms, leaving some with a "huge conflict of interest," according to Tim Welsh, founder and CEO of wealth management consulting firm Nexus Strategy.

LIVE WATCH LIVE: GameStop hearing: Robinhood, Citadel and Rec



Robinhood is raking in more money than ever on customer trades as new investors flood the stock market during the pandemic.

Despite not charging customers to trade, the Silicon Valley start-up made $180 million off trades in the second quarter — roughly double from the prior quarter, according to a recent Securities and Exchange Commission regulatory filing. The majority of that total came from options trading.

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payment for order flow as their profit engine in lieu of commissions. The pioneer of "free trading," Robinhood's business model hinges on the back end payments, since the other brokers have established other revenue streams and only recently slashed commissions. Thanks to a recent change in SEC rules, these brokers are now required to give more disclosures on how trades are executed, and how much money they bring in for firms.

Payment for order flow is a common practice but it's often criticized for its lack of transparency. It has become especially vital to companies' bottom line after commissions went to zero.

Market makers, such as Citadel Securities or Virtu, pay e-brokers like Robinhood for the right to execute customer trades. The broker is then paid a small fee for the shares that are routed, which can add up to millions when customers trade as actively as they have this year.

Broker	Trade	Payment for Orders	Rate/100 Shares	Payment for Orders	Rate/100 Shares
Robinhood	Equity	$31,116,950	$0.24	$69,116,307	$0.17
	Option	$59,802,125	$0.48	$111,148,089	$0.58
	Total	$90,919,076	$0.36	$180,264,395	$0.30
Charles Schwab	Equity	$25,447,153	$0.11	$32,396,842	$0.11
	Option	$28,517,592	$0.36	$33,745,172	$0.37
	Total	$53,964,745	$0.18	$66,142,014	$0.18
E-Trade	Equity	$29,822,204	$0.16	$50,210,044	$0.15
	Option	$49,829,545	$0.45	$60,117,332	$0.46
	Total	$79,651,749	$0.27	$110,327,376	$0.18
TD Ameritrade	Equity	$72,782,936	$0.15	$144,219,349	$0.15
	Option	[illegible]	[illegible]	[illegible]	[illegible]
	Total	[illegible]	[illegible]	[illegible]	[illegible]

SOURCE: Piper Sandler, SEC filings

VIDEO 01:02

Robinhood blows past its online competition

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This year's regulatory reports showed a significant rise in payment for order flow in the second quarter, according to company disclosures and analysis by Piper Sandler.

Robinhood attracts the highest rate for equity trades, according to the documents, at 17 cents per hundred shares. Charles Schwab, by comparison, makes 11 cents per hundred shares. For options trading, the disparity is even bigger.

TD Ameritrade and Robinhood make by far the most off of options at 58 cents. Schwab and E-Trade make 37 cents and 46 cents, respectively. According to the disclosures, Robinhood saw the biggest increase quarter over quarter of any brokerage firm, with order flow nearly doubling.

Payment for order flow is typically paid on a per share basis. Robinhood, however, receives a fixed rate per spread which is higher than the average rate the other major brokers receive.

Its rivals also reported an uptick in order flow income this year.

At E-Trade, order flow revenue jumped to $110 million in the second quarter, up from $80 million in the comparable quarter last year, according to its quarterly filing. TD Ameritrade reported $324 million in order flow revenue, up from roughly $200 million last year. TD Ameritrade's order flow revenue contributed about 20% to its total second quarter revenue of $1.59 billion.

The boom in order flow coincided with record retail trading activity and new customer accounts across the industry. Robinhood surged in popularity, adding 3 million customers this year alone, according to the company.

"Its been a perfect storm for retail trading with the volatility that we saw early in the pandemic, the work from home environment that drove many people to the market as

Because options are traded less frequently, there's a larger spread between the bid, or the price buyers are willing to pay, and the ask, or the price sellers want, said Tim Welsh, founder and CEO of wealth management consulting firm Nexus Strategy. Welsh said retail brokers "without a doubt" steer customers to options trades since those provide the bigger payday.

"It's a huge conflict of interest for these free trading platforms," Welsh said. "The Citadels, the active traders of the world, know that Robinhood has much more unsophisticated traders, so they can make money on them."

These complicated trades give clients the option to buy or sell securities at predetermined prices. The process is typically used by professional traders, such as hedge funds. The technique tends to be more speculative — it gives clients more ability to use leverage, and therefore more upside. But it can also provide more downside losses.

Robinhood made more than $111 million, of its $180 million total, from options trades in the second quarter but recently made it more difficult for customers to access its options offering, in the wake of a customer's death this summer. Alex Kearns, a 20-year-old Robinhood customer, died by suicide and in a note to his family cited what he incorrectly thought were $730,000 losses from trading options on the trading platform.

"I think they should put a cigarette warning label on Robinhood, because it could be hazardous to your financial health the more you trade. Every study on planet Earth has shown day traders that are not sophisticated do not make money. They game-ify it, they throw confetti after each trade, the make it 'free' but ultimately it's a losers game," Welsh said.

Robinhood said the majority of its customers are not "day traders."

The company is outpacing its rivals by at least one other metric. The start-up said it had

The zero-commissions pioneer announced the close of a funding round that pushed its valuation to $8.6 billion earlier this year. Robinhood also earns revenue off of its gold subscription service; however, the company declined to comment whether it is yet profitable.

Best execution?

Another little-known aspect of zero-commission trading pertains to the execution of a given trade.

Before, when brokers charged commissions for each trade, they often were promising a best possible execution, meaning they prioritized time and therefore share price of a security. As zero commissions became industry standard, brokers now go for the cheapest option to execute a trade.

Steve Sanders, Interactive Brokers' executive vice president of marketing and product development, said its zero-commission option — known as IBKR Lite — may not get best price execution, compared to paying IBKR Pro customers.

"If it's IBKR Lite with zero commissions we do what the other brokers do, we send them off to a market maker just like everybody else and there's payment for order flow that comes back and you may not get as good of an execution," Sanders said. "If its IBKR Pro you'll get better execution."

Robinhood said its routing system automatically sends orders to the market maker that's most likely to give the best execution, based on historical performance.

— with reporting from CNBC's Nate Rattner.

◎ LIVE WATCH LIVE: GameStop hearing: Robinhood, Citadel and Rec

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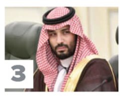

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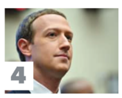

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The Block Chain Plunger:

Using Technology to Clean Up Proxy Plumbing and Take Back the Vote

Vice Chancellor J. Travis Laster

Keynote Speech

Council of Institutional Investors

Chicago, September 29, 2016

This document was the basis for the keynote speech of Vice Chancellor Laster to the Fall 2016 meeting of the Council of Institutional Investors. The remarks as delivered were somewhat abbreviated and otherwise differed in minor respects from this written document.

CII KEYNOTE SPEECH
September 29, 2016

I. Taking Back The System

We've all seen takeovers. Some are friendly. Some are hostile. Some start friendly and turn hostile. Others go the other way around. Today I want to encourage you to start a takeover. I want you, the institutional stockholders of America, to take back the voting and stockholding infrastructure of the U.S. securities markets.

Put a little differently. I want you to become plumbers. You need to fix the proxy plumbing.

The current system works poorly and harms stockholders. But the current plumbers—financial intermediaries—do not have an incentive to fix it. They are making healthy profits in a non-competitive market. They might play around the edges, but real change will have to come from the outside.

The good news is that you have a plunger that you can use to clean up the plumbing. That plunger is distributed ledger technologies, the technology that drives bitcoin.

The Problems

I know you've heard about the problems with the voting and stockholding infrastructure of U.S. securities markets. I am going to quote from comments made by CII's own Amy Borrus in November 2015.[1]

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[1] Statement of Amy Borrus Interim Executive Director Council of Institutional Investors, Corporate Governance Roundtable (Nov. 16, 2015), *available at*, http://www.cii.org/files/issues_and_advocacy/correspondence/2015/11_16_15_cii_Rep%20_Garrett_roundtable_submission_amy_borrus.pdf [hereinafter Borrus Statement]. To

First, she stated that "[the Council] believes that priority should be given to addressing the proxy distribution process and providing end-to-end confirmation that beneficial owners' shares have been voted in accordance with their instructions." This is because of the "the difficulty beneficial owners have in determining whether their votes have been received in time and tabulated accurately."[2]

Second, she agreed with several of the problems identified in the SEC's 2010 proxy plumbing release. These included "the appropriateness of [self-regulatory organization]-determined distribution fees" and intermediaries determining what services they would provide. She noted that since the release was issued, "Broadridge has unilaterally changed its policy on providing preliminary vote tallies in contested situations, refusing to provide them to shareholders engaged in exempt solicitations and raising serious fairness concerns." She observed that "several [Council] members have been adversely affected by this change," that "reform is overdue," and that "the focus should be on promoting competition and ensuring a level playing field for all participants in the proxy process."[3]

Spot on. Let's talk about concrete examples of these problems, then identify a solution.

<u>The Complexity Of The Beneficial-Nominee System</u>

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reduce the incidence of distracting and uninformative footnotes, footnotes support every proposition that follow it until a new source is identified.

[2] *Id.* at 11-12.

[3] *Id.* at 11-12.

The first problem is the complexities created by the nominee system. You all know that most beneficial owners of stock register their shares in the name of Cede & Co., the nominee of the Depository Trust Company, or "DTC." You may be less familiar with *why* this system exists and how it works.[4]

Historically, to execute a trade, sellers manually delivered stock certificates to buyers or would have new shares issued in the name of a buyer. Brokers primarily used pen and paper to record transfers. But this became unworkable in the 1960s and 70s when trading volumes increased dramatically. Brokerage firms and transfer agents could not keep up with the paperwork. Massive backlogs emerged. Markets had to declare trading holidays. The system wasn't working.

Under Congressional direction, the SEC's responded by implementing a national policy of "share immobilization." To end the physical movement of securities, banks and brokers would place into depositories "jumbo certificates" representing tens or hundreds of thousands of shares. These jumbo certificates would be issued in the name of the depository.

This was a top-down, governmental solution, and it used 1970s era technology—the freezing of shares.

[4] *See generally In re Appraisal of Dell Inc. (Dell Continuous Ownership)*, 2015 WL 4313206 (Del. Ch. July 30, 2015).

There were originally three domestic depositories. Today, there is only one, DTC. Almost all U.S. stock is issued in the name of its nominee, Cede. Banks and brokerage firms own DTC, and only they hold accounts at the institution.

There has been an overlay of technical changes on top of the core 1970s concept. Today, DTC accounts for participants' ownership through a Fast Automated Securities Transfer account (its "FAST Account"), which is an electronic book entry system. DTC holds the shares of its custodians in fungible bulk, meaning that it does not subdivide its shares into the separate accounts of the custodians' customers.

By crediting and debiting the accounts of its members, DTC can account for transfers of ownership.[5] For example, if a customer of Chase wants to sell 100 shares of Microsoft to a customer of Bank of America, DTC debits Chase's account by 100 shares of Microsoft and credits Bank of America's account by 100 shares of Microsoft. In other words, DTC facilitates transfers by acting as a central accountant. It tracks book entry movements of securities.

The brokers and banks that are members of DTC hold the shares of their clients, the beneficial owners, in fungible bulk.[6] The members own DTC and benefit from the services it provides.

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[5] *See* U.S. Sec. & Exch. Comm'n, *DTC Chills and Freezes*, (May 1, 2012), https://www.sec.gov/oiea/investor-alerts-bulletins/ib_dtcfreezes.html.

[6] *See* Richard W. Barrett, Note, *Elephant in the Boardroom?: Counting the Vote in Corporate Elections*, 44 Val. U. L. Rev. 125, 148-49 (2009).

The federal solution of share immobilization was like Alexander cutting the Gordian Knot. It solved the immediate problem, but it created a lot of loose ends.

One of those ends was state corporate law. Delaware corporate law is not built to accommodate the nominee system. It assumes that stockholders owns shares directly and treats any deviation from direct ownership as a voluntary choice by the stockholder, which it isn't. Delaware law is also internally inconsistent, because while Delaware corporate law works from a non-existent direct ownership model, Delaware also has adopted Article 8 of the UCC. The UCC has been updated to work with the nominee system. Ironically, at the same time that Delaware corporate law assumes that each stockholder directly owns a specific number of shares, Delaware's version of Article 8 treats each stockholder as own a pro rata interest in the fungible bulk.

The flapping ends of the legal system have real world consequences.[7] I recently decided an issue in the appraisal litigation that followed Michael Dell's 2013 management-led buyout of his company. In Delaware, if a stockholder wants to seek appraisal, the "record holder" must "continuously hold[] such shares through the effective date of the merger."[8] In Dell, certain beneficial stockholders sought appraisal of their shares. They notified DTC of this because Cede served as the record holder for the shares. DTC removed the shares from the FAST Account, issued then in a paper certificate, and delivered those

[7] The following is from *In re Appraisal of Dell Inc. (Dell Continuous Ownership)*, 2015 WL 4313206 (Del. Ch. July 30, 2015).

[8] 8 *Del. C.* § 262(a).

certificates to the custodian. Normally, DTC would issue the paper certificates in Cede's name so the record holder would never change. But the custodian banks at issue here had policies preventing them from holding shares issued in the name of others. Instead of Cede & Co., they wanted the shares issued in the name of Kray & Co. So DTC re-issued the shares in the names of the custodial banks. With the name change, the shares were no longer held continuously by the same record holder through the close of the merger.

Constrained by the law, I held they lost standing to seek appraisal. As I explained, "under current law, ownership changes driven by DTC's role in the depository system are regarded as voluntary transfers."[9] The record holder had changed, so the beneficial owners did not meet the continuous ownership requirement.

Personally, I think that is absurd. This was an example of people doing what they should do and then getting caught up by the system. So I proposed an alternative solution to change the law. Since then, this aspect of the case has settled, so the Delaware Supreme Court will not have to rule on the issue. Nor is there any guarantee that they would follow my suggestion.

The upshot for present purposes is that complexities of the nominee system harmed stockholders. In *Dell*, the stockholders in question lost the prospect of any upside from a higher appraisal award. Meanwhile, they had their capital tied up for the approximately two years between the merger's close and when I issued my decision. Because they had no

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[9] *Id.* at *21.

standing to seek appraisal, they received no interest for the capital represented by their shares. Let me repeat that: no interest. You might want to point that out the next time you hear a defense-side lawyer say that appraisal is a free option with an excessively generous interest rate.

Complexity Creates Voting Problems

The nominee system also creates problems for voting. As Amy noted, under the current system, a beneficial holder cannot necessarily obtain end-to-end confirmation as to how its shares have been voted.[10] Another decision from the *Dell* case that shows how the current system makes it difficult for stockholders to vote their shares accurately.[11]

[10] *See also* Suneela Jain et al., The Conference Board Governance Center White Paper, Task Force on Corporate/Investor Engagement 34 (2014); Voting Integrity: Practices for Investors and the Global Proxy Advisory Industry, Millstein Center for Corporate Governance and Performance, Yale School of Management 12 (2009). End-to-end vote confirmation has not been available in most circumstances at least until this year. In May 2016, the co-chairs of a securities industry End-to-End Vote Confirmation Steering Committee announced that they have "demonstrated the viability" of a vote confirmation process. (See http://proxywatch.com/wp-content/uploads/2016/05/End-to-End-Vote-Confirmation-Announcement-5-2016.pdf.) However, the process apparently will not be implemented in a given case unless the issuer and the tabulator both agree to do so, and it is not yet clear that there is an industry-wide commitment by vote tabulators to cooperate In August 2016, the Securities Transfer Association (STA) indicated that "the STA is not able to agree that vote confirmation can be considered capable of full implementation across the U.S. market, with or without regulatory changes, on the basis of the pilots conducted to date." In any case, the beneficial owner does not yet have assurance that it can obtain end-to-end vote confirmation in a given case.

[11] The following information is from *In re Appraisal of Dell Inc. (Dell Dissenter Requirement)*, --- A.3d ---, 2016 WL 3030909 (Del. Ch. May 11, 2016).

To pursue an appraisal under Delaware law, a stockholder must have "neither voted in favor of the merger . . . nor consented thereto in writing." T. Rowe Price was the beneficial owner of several million shares for which Cede served as the record holder. T. Rowe had the right to vote its shares as it wished, and DTC had an obligation to ensure that it voted T. Rowe's shares accurately. But DTC has to fulfill this obligation through a daisy chain of authorizations.

Recall that under Delaware law, a record holder is the party entitled to vote. But under federal law, beneficial owners must direct how shares are voted. To get T. Rowe's instructions, DTC first had to transfer its state law voting authority to T. Rowe's participant, State Street. It did this by executing an omnibus proxy in State Street's favor.

Next, State Street outsourced to Broadridge Financial Solutions the task of collecting and implementing voting instructions from T. Rowe. To carry out that task, State Street gave Broadridge a power of attorney that authorized Broadridge to execute proxies on State Street's behalf.

Now that it had the authority to vote, Broadridge needed to obtain voting instructions from T. Rowe. T. Rowe used an additional party, Institutional Shareholder Services to help transmit its voting instructions.

To make the voting process more efficient, T. Rowe had a computerized system that automatically generated default voting instructions and provided them to ISS. The default voting instruction for a management-supported merger was to vote in favor.

T. Rowe entered voting instructions to vote against the merger. It checked that instruction not just once, but at least three times. Then, because of a meeting adjournment, ISS sent a new record that replaced T. Rowe's first vote. T. Rowe did not know this happened. So T. Rowe's system issued its default response: to vote in favor of the merger. ISS received those instructions and transmitted them to Broadridge. Broadridge received those instructions and abided by them in executing its proxies. Through Broadridge, Cede voted T. Rowe's shares in favor of the merger. T. Rowe did not know this happened. Despite being a vocal opponent to the merger, T. Rowe wound up voting for it. And it lost standing to seek appraisal.

To me, this case shows how complexity breeds opportunities for people to make mistakes. Unnecessary complexity leads to unnecessary mistakes. This is another example of a stockholder doing what it should have done. Checking three times to make sure your votes are correct should be enough.

But a mistake occurred. And the mistake mattered. It cost T. Rowe two-hundred million dollars and bad press.

T. Rowe is not the only stockholder to have suffered from this daisy-chained system of share ownership. It generally works under normal circumstances, but when the system comes under pressure, it breaks down. That should not be surprising. After all, what is a daisy chain? It's a chain of flowers. Under stress, daisy chains break.

Consider the problem of overvoting. In 2006, for example, the New York Stock Exchange reached settlements with four major banks in which they agreed to pay $2.35

million to resolve allegations that they cast more votes than they had right to vote.[12] Overvoting dilutes the value of every other stockholder's vote.

Aside from overvoting, the complexity in the voting system creates opacity and the opportunity for miscalculated votes. Consider the 2008 proxy fight for control of the board of Yahoo.[13] After the vote, Yahoo announced that two of its directors received approval from approximately 80% of stockholders. The period leading to the vote was tense, and an institutional investor holding about 16% of Yahoo's stock was skeptical about the results. It asked Broadridge to double-check the totals. After Broadridge conducted its investigation, Yahoo announced a corrected vote count. A massive error occurred: almost 20% of the vote was misattributed. Apparently Broadridge "forgot" to include millions of votes in its tally.[14] It did not affect the outcome of the vote, but an error of that magnitude is troubling.

Consider also a case in Delaware in which I represented the defendants before going on the bench.[15] In *Transkaryotic*, the inspector of election certified that stockholders had approved a merger by a margin of 2.6%. Then-Chancellor Chandler determined there

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[12] *See* Kara Scannell, *SEC Probes "Proxy Plumbing"*, Wall. St. J., July 15, 2010, http://www.wsj.com/articles/SB10001424052748703792704575366910882553810.

[13] *See* Yi-Wyn Yen, *Yahoo Recount Shows Large Protest: Yang's Approval At 66, Not 85 Percent*, Huffington Post., May 25, 2011, http://www.huffingtonpost.com/2008/08/06/yahoo-recount-shows-large_n_117195.html.

[14] *Id.*

[15] *See In re Transkaryotic Therapies, Inc.*, 954 A.2d 346 (Del. Ch. 2008).

existed evidence creating genuine disputes of fact about whether there were irregularities in validating and counting certain proxies that exceeded the margin by which the merger was approved. The case settled before trial, but the legitimacy of the merger was cast into doubt.

Nor is it really possible to say that the margin was 2.6%. The votes "for" and "against" a proposal purport to provide an exact vote tally, but that is an illusion. The sheer complexity of the current voting system makes precision impossible. Custodians hold beneficial owners' shares in a fungible bulk.[16] DTC holds the custodians' shares in fungible bulk. The shares that the custodians and DTC own are constantly being bought, sold, and borrowed. As the SEC has explained, "Because the ownership of individual shares held beneficially is not tracked in the U.S. clearance and settlement system . . . **imbalances** occur."[17] When those imbalances occur, "**broker-dealers must decide** which of their customers will be permitted to vote and how many shares each customer will be permitted to vote."[18]

What do broker-dealers do if they hold less shares than they have credited to their customers' accounts? They determine which customers are permitted to vote and how

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[16] Barrett, *supra*, at 163.

[17] Concept Release on the U.S. Proxy System, Release Nos. 34-62495, Investment Advisor Act Release No. 3052, Investment Company Act Release No. 29,340, 75 Fed. Reg. 42,982, 42,990 (proposed July 22, 2010) [hereinafter Concept Release] (emphasis added).

[18] *Id.* (emphasis added).

many votes are allocated to each customer."[19] Some firms "simply reduce the number of proprietary position votes cast."[20] Gil Sparks, one of our leading Delaware lawyers, has estimated that, in a contest that is closer than 55 to 45%, "there is no verifiable answer to the question 'who won?'"[21]

One of the reliable features of human nature is that when there is an opportunity to act self-interestedly, and when no one is likely to find out, some will take advantage of the opportunity. Professor Yair Listokin of Yale Law School conducted an empirical study of corporate elections. He concluded that proposals sponsored by management are "overwhelmingly more likely to win . . . by a very small amount than to lose by a very small amount—to a degree that cannot occur by chance."[22] The finding speaks for itself. Management teams can use opacity in the plumbing system to their advantage, contrary to the wishes of stockholders.

Obviously not all managers are doing this, but some are. I can understand why the management teams and their lawyers would think that was a great thing. I'm not sure why anyone else would.

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[19] *Id.*

[20] *Id.* at 42,991.

[21] Marcel Kahan & Edward Rock, *The Hanging Chads of Corporate Voting*, 96 Geo. L.J. 1227, 1279 (2008) (quoting personal communication between authors and Gilchrist Sparks III).

[22] Yair Listokin, *Management Always Wins the Close Ones*, 10 Am. L. & Econ. Rev. 159, 161 (2008).

The inability to confirm that beneficial holders' stock was timely and accurately voted and tabulated creates doubt about the integrity of the stockholder vote. Meanwhile, federal regulations have created more opportunities for stockholders to vote, and Delaware law is according increased importance to the stockholder vote.[23] These systemic failures undermine the legitimacy of our corporate governance system.

Expensive For Stockholders

So far I've explained why the current plumbing system disfavors stockholders, creates uncertainty as to outcomes, and enables management to manipulate the outcome on close vote. Who pays for this system? You do. And the costs are significant.

Oliver Wyman and affiliates of Santander Bank estimate that there are $100 billion in annual post-trade and securities servicing fees.[24] Issuers pay more than $200 million a year to communicate with stockholders alone, exclusive of printing and postage fees.[25] According to the SEC, the "structure and size of fees charged for the distribution of proxy

[23] *See, e.g.*, *Corwin v. KKR Fin. Hldgs. LLC*, 125 A.3d 304 (Del. 2015); Sec. & Exch. Comm'n, *SEC Adopts Rules for Say-on-Pay and Golden Parachute Compensation as Required Under Dodd-Frank Act*, Jan. 25, 2011, https://www.sec.gov/news/press/2011/2011-25.htm.

[24] Oliver Wyman, Blockchain in Capital Markets: The Prize and the Journey 20 (2016).

[25] Kevin Kearney, Note, *Proxy.gov: A Proposal to Modernize Shareholder Lists and Simplify Shareholder Communications*, 37 Hastings Comm. & Ent L.J. 391, 398 (2015)

materials" has been "[o]ne of the most persistent concerns that has been expressed to the Commission's staff, particularly by issuers."[26]

Concerns exist because Broadridge has monopoly power. It controls over 98% of the U.S. market for proxy vote processing services.

There is only a patina of regulation. SEC rules require *issuers* to pay Broadridge based on contracts Broadridge makes with *DTC* and the *custodians*. As the owners of issuers, stockholders indirectly bear the cost of the fees. The stock exchanges establish the maximum fees Broadridge can charge, but with monopoly power, perhaps unsurprisingly, Broadridge charges the maximum fees allowed.[27]

This is not a competitive market, either as to pricing or services. Getting back to Amy's comments, she noted that Broadridge had not provided stockholders services they want, like preliminary vote tallies. The contractual relationship suggests the reason. Broadridge did not listen to the stockholders because the stockholders weren't its clients. The custodians were. They are also the same institutions that own DTC and handle the settling and clearing of trades.

Given the benefits of incumbency, it's not surprising that the intermediaries who operate this system have not proposed meaningful changes. This is not because they are bad people. This is because they are incumbents.

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[26] Concept Release, *supra*, at 42,995-97.

[27] *Id.* at 42,997.

So let's review. The voting and stockholder infrastructure is complicated. The costs of that complexity fall on stockholders. One type of cost is uncertainty as to voting outcomes, which management uses to its advantage. Another type of cost is financial. Stockholders pay for the system. The folks who run the system are not affected by the election results and are generating profits in a non-competitive environment. Change will have to come from the outside.

The Solution

One possible external solution is to look to the SEC as regulator. The SEC has recognized the myriad problems in the U.S. securities plumbing system. In 2010, it issued a Concept Release to much acclaim.[28] It received over 300 comment letters. But since then, it has not done much of anything. Revamping the system is hard. The SEC has a lot on its plate. Top down reform will take time.

A superior external solution is comes in the form of technological opportunity. Distributed ledger technologies can provide better accuracy, greater transparency, and superior efficiency for settling securities trades and voting in corporate elections.[29] These technologies could reunite legal and beneficial ownership of stock and eliminate many of the problems I identified earlier today.

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[28] *See generally* J. Robert Brown Jr., *The Proxy Plumbing Release Revisited and the Need for Version 2.0*, 91 Denver U. L. Rev. Online (forthcoming 2016).

[29] *See generally* David Yermack, Corporate Governance and Blockchains (Nat'l Bureau of Econ. Research, Working Paper No. 21802, 2015).

Let me explain briefly and at a high level how distributed ledgers work.[30] A distributed ledger—as the name implies—is a database of recorded transactions maintained collaboratively by a decentralized network. The ledger tracks transfers in ownership of a particular asset. It is distributed because no single institution maintains the ledger. Instead, members of the network update it through collective action.

New entries to the ledger are added by a process called "consensus." The method of reaching consensus depends on the specific platform. But the core concept is that actors verify the authenticity of a particular transaction by solving a mathematical problem that involves private and public cryptography. Once someone solves the problem, validators vote on whether or not the solution is correct. If a pre-determined quorum of validators agree that a proposed transaction is legitimate, the ledger updates. Hence, the term "consensus." If consensus is not reached, the system rejects the transaction.

As an example, consider bitcoin's consensus process, which is known as "mining."[31] In mining, validators expend real resources (electricity) to search for a cryptographic key that validates a transaction. When a miner finds the cryptographic key,

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[30] For the following broad concepts concerning how distributed ledgers work, see generally UK Gov't Chief Sci. Adv., Distributed Ledger Technology: Beyond Block Chain (2016) [hereinafter UK Report]; Andrea Pinna & Wiebe Ruttenberg, European Central Bank, Distributed Ledger Technologies in Securities Post-Trading (Apr. 2016) [hereinafter ECB Report].

[31] Michael Mainelli & Allstair Milne, The Impact and Potential of Blockchain on the Securities Transaction Lifecycle 46 (SWIFT Institute Working Paper No. 2015-007, 2016).

other users assess whether that key is correct. If a quorum of users agree, the transaction is added to the ledger, and the system provides the miner a reward, a bitcoin. The reward incentivizes people to contribute resources to validate transactions.

Once consensus is reached, the decentralized computer network immediately adds the new transaction to the ledger.[32] The consensus process creates a digital signature for each new entry. Each new entry, in turn, includes a reference to the signature of previously recorded entries. (Hence the "chain" in "blockchain.") The ledger is public and each participant maintains its own copy, which automatically updates as new entries are added. Therefore, all participants can verify for themselves the source of every transaction on the ledger. The transaction history embedded in the signatures also provides the information the validators use to assess legitimacy of proposed transactions.[33]

The consensus process is secure because updates to the ledger must be verified by public and private cryptography, so the system does a good job in rejecting unauthorized

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[32] *See generally* UK Report, *supra*, at 17-19. The difference between blockchains and distributed ledgers is that blockchains add new transactions in a block. Distributed ledgers add new transactions as they occur.

[33] To determine transactions authenticity, users are equipped with a public and a private key. A private key is a key that only the user knows, and it links the user to its account on the ledger. Each transaction is signed by a user's unique private key. A public key is derived from a private key and is the public address for other wallets to send transactions. By using the public key, validators can check to make sure that the person who signed the transaction holds the private key to which the ledger attributes ownership of the particular asset. By having access to the public key and the history of transactions associated with an asset, validators can determine whether the user had enough of the asset that it purported to send. This combination of information allows validators to verify the authenticity of a transaction without knowing the identity of any participant.

changes to the ledger. Because the ledger is public, users can independently look at transaction histories.

Through this process, beneficial owners can transfer ownership over securities without a central intermediary. As an illustrative example, let's imagine a distributed ledger for trading securities based on a protocol known as Ripple.[34] Imagine that a pension fund wants to buy 100 shares of Microsoft. The pension fund and its counterparty propose that the shared ledger update to credit the pension fund with 100 dollars of Microsoft stock, and the counterparty with $100 in cash. The pension fund selects a group of actors it trusts, called nodes. Those nodes may be other pension funds who use this system. The pension fund then initiates a transfer, *i.e.*, it proposes making a change to the ledger. The nodes then verify that the transaction is authentic by solving a mathematical problem that will be solvable only if the pension fund and the counterparty have the assets they claim. The nodes do this by evaluating the public and private keys associated with the assets. If a supermajority of nodes solve the problem, then the ledger gets updated. If no consensus is reached, the transaction fails. This happens almost instantaneously. Once successful, the ledger updates to show the pension fund owns 100 shares of Microsoft. At that point, the pension in fact owns 100 shares of Microsoft.

[34] *See generally* Marcel T. Rosner & Andrew Kang, *Understanding and Regulating Twenty-First Century Payment Systems: The Ripple Case Study*, 114 Mich. L. Rev. 649, 658-59 (2016).

Today, DTC must update its ledger in the first instance to initiate a trade.[35] Intermediaries must then update their own accounts each time a new transaction occurs, and reconcile their accounts with counterparties. With distributed ledgers, a central accountant like DTC becomes unnecessary. Custodians become unnecessary. Ownership lies only with beneficial owners. A single distributed ledger would allow straight-through accounting. It is a utopian vision of a share ownership system where there is only one type of owner: record owners.[36] If stockholders take the lead in this, stockholders could share a common ledger of their holdings that allows **them** to keep track of the execution, lending, and settlement of securities transactions.

But wait—there's more. Moving securities is not the only thing these distributed ledgers can enable.[37] Smart contracts allow people to embed contractual obligations in a distributed ledger: people can cause automatic responses to specified conditions or events. So, for example, issuers could provide for automatic transactions to take place in the ledger in response to a specific corporate action or market event, such as the payment of a dividend or a coupon payment. Or, an issuer can send out proxy statements to beneficial holders, as defined by the ledger, at a pre-determined time before an annual meeting. Rather than

[35] *See* ECB Report, *supra*, at 19-20.

[36] *See* Oliver Wyman, *supra*, at 9.

[37] ECB Report, *supra*, at 18.

relying on glorified messengers, dividend payments and proxy statements can go directly to the owner's account.

Smart contracts can also improve the voting system. According to a commentator affiliated with SWIFT, a "standard use case" for smart contracts involves using the ledger to define voting permissions, and using consensus and ledgers to record votes.[38] Because the voting process would have the same degree of integrity and security as the functions accounting for ownership changes, it would be highly secure and accurate. With no intermediaries and a quasi-transparent accounting system, beneficial owners could get end-to-end confirmation of their votes without revealing how they voted.

The Moment

Someone is going to do this. If a judge can see it, the opportunity is pretty obvious. It's also monetizable. Although bitcoin is a public protocol that anyone can use, and whose changes depend on the community's adoption, you can have "permissioned" distributed ledgers.[39] Permissioned ledgers can provide certain parties absolute control over changes to the system. Permissioned ledgers also can define who has access to the system and the degree of transparency over actors and transactions. In a permissioned ledger, you can charge for access and services.

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[38] Mainelli & Milne, *supra*, at 21; *see also* Aaron Wright & Primavera De Filippi, Decentralized Blockchain Technology and the Rise of *Lex Cryptographia* 36-37 (March 12, 2015) (unpublished manuscript).

[39] UK Report, *supra*, at 17.

The same financial intermediaries who own DTC understand the threat that distributed ledger technology poses. They are spending big on technology.[40] In 2011, global investment in financial technology companies reached $4.5 billion. In 2015, global investment in financial technologies reached $19.1 billion. That's almost a 4x increase over four years. According to Accenture, banks are embracing this movement. For banks, the alternative is obsolescence.[41]

Companies abroad are developing distributed-ledger-based securities trading services.[42] Nasdaq has started a blockchain technology initiative.[43]

This is a *carpe diem* moment. You can take the lead on distributed ledger technology, or you can let the intermediaries replace one intervening institution with another.

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[40] *See* CBInsights & KPMG, The Pulse of FinTech, 2015 in Review, https://www.cbinsights.com/research-pulse-of-fintech-2015.

[41] Accenture, The Future of Fintech & Banking 3 (2015) ("Digital disruption has the potential to shrink the role and relevance of today's banks, and simultaneously help them create better, faster, cheaper services that make them an even more essential part of everyday life for institutions and individuals. . . Banks are acknowledging that they need to shake themselves out of institutional complacency and recognize that merely navigating waves of regulation and waiting for interest rates to rise won't protect them from obsolescence.").

[42] *See* UK Report, *supra*, at 60.

[43] Luke Parker, *Nasdaq Linq Claims to Have Issued First Securities Over a Blockchain*, Brave NewCoin, Jan. 1, 2016, http://bravenewcoin.com/news/nasdaq-linq-claims-to-have-issued-first-securities-over-a-blockchain/.

Fortunately, Delaware wants to help you. On May 2, 2016, Governor Jack Markell announced the Delaware Blockchain initiative. The Governor has already begun to work with the Delaware State Bar Association to figure out how to incorporate the technology into the DGCL for the benefit of Delaware corporations. Delaware has even hired a blockchain technology company to begin a pilot program to move state archival records onto a distributed ledger. The company promises that for corporations, "the blockchain system will be faster and cheaper than the existing process since it automates a number of processes, including share registry, capital-table management, and shareholder communications."[44]

Governor Markell explained the reasons for this initiative. "We see companies allocate significant financial resources to correct and validate stock authorization and issuance errors that could have been correctly and seamlessly handled from the outset . . . Distributed ledger shares hold the promise of immediate clearance, immediate settlement and bring with them dramatic increases in efficiency and speed in the sophisticated commercial transactions for which Delaware is known."[45]

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[44] Giulio Prisco, *Delaware Blockchain Initiative to Streamline Record-Keeping for Private Companies*, Bitcoin Magazine, May 09, 2016, https://bitcoinmagazine.com/articles/delaware-blockchain-initiative-to-streamline-record-keeping-for-private-companies-1462812187.

[45] *Id.*

The bottom line, in Governor Markells's words, is that we want corporations and their stockholders "to take advantage of distributed ledger and smart contract applications."[46]

Approximately a half century ago, financial intermediaries collaborated to create DTC and the current system that governs today. A similar initiative is required today, but you are the people who need to organize. This should not be difficult. You have an organization through which you can coordinate. You have the capital to get it done. You can also prove out a business case against the fees you are paying to Broadridge and the cost of the errors that the current system creates.

The plumbing needs to be fixed. A plunger exists. The takeover doesn't have to be hostile. It can be friendly. But it needs to be done.

[46] *Id.*

american securities association
America's Voice for Main Street's Investors

February 18, 2021

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
U.S. House of Representatives
Washington, DC 20515

The Honorable Patrick McHenry
Ranking Member
Committee on Financial Services
U.S. House of Representatives
Washington, DC 20515

Dear Chairwoman Waters and Ranking Member McHenry:

The American Securities Association[1] provides these comments for the Financial Services Committee's February 18th hearing entitled "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide." We appreciate the Committee acting swiftly to hold this hearing on an issue of great importance to investors and our markets.

I. Introduction.

As a general matter, a fundamental tenet of our capital markets is the ability of investors to take risks and invest their own assets as they see fit. We do not believe policymakers should wade into determining the merits of individual investment decisions (i.e. choosing an individual stock v. ETF). This would contradict the mission of the Securities and Exchange Commission (SEC) and has been consistently rejected by Congress since the passage of the securities laws eight decades ago.

As is almost always the case, the issues raised by the recent volatility in GameStop (GME) are complex and interrelated. In short, the recent trading in GME represents a classic "short squeeze" which has happened in the past and will happen again in the future. As Congress and the SEC investigate the connection between technology, short sellers, and the financial markets, we believe a few issues deserve further scrutiny and have laid them out on two pillars below: (1) investor protection and (2) safety and soundness.

II. Investor Protection.

A. Customer Protection and the Gamification of Trading**:** A quote from a recent Netflix documentary, *The Social Dilemma,* asserts that "[i]f you're not paying for the product, then you *are* the product!"[2] In this case, the product is the customer's trade, and the business model is

[1] The ASA is a trade association that represents the retail and institutional capital markets interests of regional financial services firms who provide Main Street businesses with access to capital and advise hardworking Americans how to create and preserve wealth. The ASA's mission is to promote trust and confidence among investors, facilitate capital formation, and support efficient and competitively balanced capital markets. This mission advances financial independence, stimulates job creation, and increases prosperity. The ASA has a geographically diverse membership that spans the Heartland, Southwest, Southeast, Atlantic, and Pacific Northwest regions of the United States.
[2] *The Social Dilemma*. Directed by Jeff Orlowski, Argent Pictures, 2020. *NetFlix*.

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predicated upon generating as much trading as possible and then selling those trades for profit. So, while customers are told they can trade for 'free', the reality is a little more complicated.

1. What's Really Going on Here. Without a doubt, trading applications have made investing easier and more accessible for investors. As their popularity and use grows, it seems fair to ask whether certain types of trading apps raise investor protection concerns. One question we have is whether a trade executed from a "self-directed"[3] account on a trading app can actually be a solicited trade. More specifically, is it a trading recommendation when a firm uses an interactive artificial intelligence algorithm to target the behavioral characteristics of its customers to urge them to execute a trade on the app? Does the answer to that question change if the firm has a business model that depends on its customers executing orders on the app so it can receive payment for selling those orders to a third party?

FINRA raised these exact concerns in its 2021 Report on Examination and Risk Monitoring when it asked "[i]f your firm offers an app to customers that includes an interactive element, does the information provided to customers constitute a 'recommendation' that would be covered by Reg BI, which requires a broker-dealer to act in a retail customer's 'best interest', or suitability obligations?"[4] We believe this is another important question to explore during this hearing and the discussions that follow.

2. The Interactive App. Certain mobile applications used by retail investors seem to be blurring the lines between what constitutes solicited and unsolicited orders. Utility trading apps provide a simple platform to allow customers to access quotes and enter trades without help. Interactive trading apps include these basic functions, but they also integrate artificial intelligence algorithms that learn about their customers behavior. This is designed to send them targeted alerts about specific stocks based on their previous trading habits and inform them about what other platform users are buying and selling, among other things.

The interactive trading apps employ many of the features used by social media platforms designed to promote specific outcomes. They have the look and feel of a game with promises of "free" stock, constantly updated "top movers," and congratulatory graphic displays when accounts are opened. And, once a customer clicks "buy" or "sell", the apps employ features such as confetti to celebrate the execution of the trade. This element of celebration is designed to give the customer an "addictive high" in the same way the 'like' button on social media applications keeps the customer on the app, scrolling incessantly, and coming back for more.[5]

[3] A "self-directed" account is one where investors can place an "unsolicited" order for a security without receiving a recommendation from a registered representative (i.e. the customer pulls information from the firm's analyst reports, its market reports, or other outside sources before making an investment decision). When an unsolicited order is received, firms document that the order was placed by the customer without any of its associates having provided advice to the customer in connection with the order. The SEC has recognized the value of allowing customers to utilize self-directed accounts by exempting unsolicited customer orders from certain regulations. New technology has allowed investors to easily open a variety of different "self-directed" brokerage accounts to execute trades on their smartphones. We support this.

[4] https://www.finra.org/rules-guidance/guidance/reports/2021-finras-examination-and-risk-monitoring-program/communications-with-public

[5] https://wentworthreport.com/2017/12/12/why-facebook-is-so-addictive-the-like-button/; https://www.independent.co.uk/life-style/gadgets-and-tech/facebook-inventor-deletes-app-iphone-justin-rosenstein-addiction-fears-a7986566.html;

The interactive app's use of game-like features seems to serve no other purpose than to stimulate as much trading by customers as possible while they are logged in.[6] So, it is not an exaggeration to say that customers are made to feel as if they are being 'sold' certain stocks while using it.

B. Customer Protection Rules and the Interactive App. As Congressman Jim Himes recently said "[t]he idea you're going to be a responsible investor by regularly trading via your device is just plain wrong, and a lot of people are going to get hurt by that idea."[7] We agree, which is why we believe the popularity of 'free' interactive trading applications should be carefully weighed against the importance of investor protection.

In our view, when a registered broker-dealer has a business model that uses an interactive algorithm designed to encourage the execution of customer orders so it can sell those orders to a third party for profit, then policymakers should ask the following questions: (1) is an account under this model really "self-directed'; (2) should the solicitation, Regulation Best Interest, churning, and other customer protection rules be applied to the algorithm carrying out the "recommendations" under the model; and (3) is it appropriate for the firm to offer retail customers with little-to-no trading experience the ability to leverage their accounts by trading on margin.

III. Safety and Soundness.

A. Broker-Dealers Must be Properly Capitalized. Properly capitalized clearing members and clearinghouses are fundamental to protecting the broader financial system. Brokers who are not properly capitalized for the volume or the volatility related to the trading they handle will experience liquidity problems if the market moves against them.

When a firm lacks the capital necessary to meet its financial obligations to the clearinghouse that settles its trades, its management may be forced to take drastic measures such as preventing its customers from continuing to trade and raising emergency capital. While such actions may outrage the firm's customers, no single firm can be allowed to threaten the viability of the clearinghouse or its members. As the GME short squeeze unfolded, the clearinghouse recognized that an inadequately capitalized broker-dealer could pose a risk to our markets and it took the action necessary to protect the system.

Attempts to blame the clearinghouse or the timing of the settlement cycle for what happened during the short squeeze are a smokescreen designed to obfuscate the concerns raised in this letter.

[6] Alter, Adam, Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked, Penguin Books, 2018.
[7] "Fintech's bid to 'democratize finance' dealt a blow by GameStop frenzy", Victoria Guida, February 15, 2021 https://subscriber.politicopro.com/financial-services/article/2021/02/fintechs-bid-to-democratize-finance-dealt-a-blow-by-gamestop-frenzy-2034794

B. Regulation SHO & Stock Lending. Our basic question is how can a company's stock have a short position of 140% of the shares outstanding? University of Georgetown Professor James Angel simply describes it like this, "the same shares can be lent over and over again."[8]

When this happens repeatedly, the level of short interest in a company becomes excessive. As this occurs, the stock becomes susceptible to a short squeeze. A short squeeze happens when traders decide to quickly exit their short positions by buying the shares of the company with the high short interest. This rush to buy forces the price of the stock to catapult higher.

A short squeeze can create volatility that impacts the fair, orderly, and efficient functioning of the market. In the case of GME, this is what happened. But the increase in price volatility was not confined to GME alone, it spread throughout the equity market to every mutual fund and ETF that held a position in GME.[9] This is how retirees, pensioners, working families, and mom-and-pop investors who didn't know they owned GME were impacted during the trading frenzy.

The next question to ask is whether there is any social good in allowing the short interest of a company's stock to exceed 100% of its shares outstanding, and if the answer is no, then we recommend that Congress and/or the SEC should thoroughly examine the details of the Reg SHO delivery rules[10] and the mechanics and pricing of stock lending arrangements.

A thorough examination should (1) determine whether "naked" short selling is still occurring in the market, (2) review the delivery exemption for market makers, which effectively allows them to fail indefinitely, (3) examine whether Reg SHO, which requires those who are short to buy back the stock at any price, contributed to and exacerbated market volatility, and (4) explore whether the re-hypothecation of shares through stock lending arrangements (hard-to-locate or not) and the costs associated with such arrangements should be transparently disclosed to all market participants.

IV. Other Matters to Consider.

A. Transparency in Short Sales. While short selling is a longstanding and necessary market function, it can be subject to certain abuses that harm investors. We have three simple recommendations to improve market confidence and help to level the playing field for all investors:

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[8] Angel, James J., Gamestonk: What Happened and What to Do about It (February 8, 2021). Available at SSRN: https://ssrn.com/abstract=3782195. Example Here: "Short sellers need to borrow shares in order to deliver them to buyers. Suppose that Shareholder #1 owns 100 shares. Shareholder #1 is more than happy to take some money from the short sellers by renting out the shares to Short Seller A. Short Seller A sells the borrowed shares to Shareholder #2. Likewise, Shareholder #2 is happy to take money from short sellers by renting the shares to Short Seller B. Short Seller B sells the shares to Shareholder #3. Shareholder #3 does not lend out the shares. Notice that in this example there are 300 shares of long positions (Shareholders 1,2, and 3) and 200 shares of short positions (Short sellers A and B), but only 100 actual shares".
[9] https://www.thestreet.com/etffocus/market-intelligence/etfs-gamestop-frenzy "XRT only rebalances on a quarterly basis, so there's no real mechanism for adjusting in between those dates (unless the fund wants to do a special rebalance, but those instances are rare). As a result, GME accounted for about 20% of the fund at its peak."
[10] https://www.sec.gov/investor/pubs/regsho.htm

american securities association
America's Voice for Main Street's Investors

(1) SEC Form 13F should include disclosures of institutional holdings of short positions in the same way it does for long positions (this does not harm short sellers because if they are right, then they will be rewarded for their hard work by entering the short first);
(2) aggregate short interest for each equity should be publicly reported weekly or daily, rather than monthly (this information is readily available and calculable today); and
(3) end the existence of "short and distort schemes"[11] by prohibiting the publication of short reports on specific companies by any person or firm that holds an existing short position in such company.

B. Margin Transparency. As it relates to the market turbulence in March 2020, the Bank of International Settlements said that it happened, in part, because clearinghouses issued large margin calls based on models that did not properly account for a period of *prolonged market-wide* volatility.[12] The best way to avoid this in the future would be for market participants to better understand how clearinghouse volatility models work so they can plan appropriately.[13]

IV. Conclusion.

America's capital markets can play a vital role in closing the wealth gap in this country, which is why we must work together to maintain the public's trust and confidence in them. The ASA looks forward to being a resource as you work through these important issues. Please contact me directly if you have any questions and thank you again for holding this hearing.

Sincerely,

Christopher A. Iacovella

Christopher A. Iacovella
Chief Executive Officer
American Securities Association

[11] SEC.gov | SEC Charges Hedge Fund Adviser With Short-and-Distort Scheme This is harmful to capital formation as those who do it typically prey on small public companies, harming their employees and investors.
[12] https://www.bis.org/publ/bisbull13.pdf, BIS Bulletin No. 13, "The CCP-bank nexus in the time of Covid-19" May 11, 2020. In particular, the BIS bulletin said that "[t]he procyclicality of leverage embedded in margining models might have played a role in the events of mid-March. These margin models are critical because they underpin the management of counterparty credit risk. Margin models of some CCPs seem to have underestimated market volatility, in part because they have relied on a short period of historical price movements from tranquil times. These CCPs had to catch up and increase margins at the wrong time, squeezing liquidity when it was most needed."
[13] It would be useful to know the parameters of what will trigger an increase in a capital contribution from clearing members and what levels of volatility will cause different percentage increases in margin. This could take the form of disclosure by the clearinghouses to the SEC in a table format that could be easily accessible on their websites.

DTCC
ADVANCING FINANCIAL MARKETS. TOGETHER.℠

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February 18, 2021

Hon. Patrick McHenry
Ranking Member
Committee on Financial Services
U.S. House of Representatives
Washington, D.C. 20515

Dear Ranking Member McHenry,

The Depository Trust & Clearing Corporation ("DTCC") welcomes your invitation to submit this statement to the House Financial Services Committee in connection with its February 18, 2021 hearing entitled "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide." DTCC is a holding company that owns and operates three clearing agencies that are registered with the U.S. Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 (the "Exchange Act"): National Securities Clearing Corporation ("NSCC"), Fixed Income Clearing Corporation ("FICC") and The Depository Trust Company ("DTC"). The events at issue in this hearing relate to securities transactions cleared by NSCC.

DTCC's direct clearing members are responsible for completing their customers' trades at NSCC. NSCC's rules outline clear financial and operational risk management obligations that apply to direct clearing members.[1] NSCC's requirements for clearing members, and the impact of those requirements during the high-volatility period of late January 2021, are discussed below.

Background

Securities trades submitted to NSCC settle at the end of the second business day after submission, in what is known as T+2 settlement. Between trade submission and settlement, NSCC guarantees all cleared trades among its members. If a clearing member defaults on its settlement obligations, NSCC guarantees the delivery of cash and securities to its non-defaulting members. That is what clearing is, and it is essential to facilitate the high-volume trading that makes today's U.S. equities markets the deepest, most liquid and efficient securities markets in the world. Because of clearing, investors can focus on obtaining the best price and do not need to concern themselves with the creditworthiness of the buyers and

[1] NSCC currently has 155 full-service members, the category of clearing member to which NSCC refers in this statement.

sellers on the other side of their transactions. Clearing members benefit through the netting of securities deliveries and payments, with cash payment obligations compressed by as much as 98%.

Active financial risk management is the foundation of this system. Margin protects NSCC against clearing member defaults, and it is not optional. NSCC's margin requirements are rules-based and subject to regulatory review and approval. NSCC is obligated under the Exchange Act to fully cover its credit exposures to each clearing member with a high degree of confidence, and it is tested against this requirement daily. Meeting this high standard without imposing overly burdensome upfront collateral demands means that margin calls must always be satisfied within hours according to strict timelines. This is the core of the system, and it is the principal obligation of each clearing member. If a clearing member fails to satisfy a margin call, it exposes other clearing members to risk and can put NSCC out of compliance with SEC rules. In a case of non-payment, NSCC may cease-to-act for the clearing member and liquidate its unsettled clearing portfolio. This is a drastic step. It can disrupt markets and impact end investors. This is, however, the appropriate outcome if a clearing member is unable to satisfy its margin requirements and allowing it to continue would increase the risk of needing to liquidate the portfolio later at even greater loss. In an extreme case, losses could even be allocated to non-defaulting clearing members. Correctly managing this balance is NSCC's most essential function.

NSCC collects clearing fund, or margin, at the start of each day and intraday in volatile markets. The calculation of clearing fund component charges and the timing of collection are set forth in NSCC's rules, which are known to every member and changes to which must be filed for public review and comment and approval by the SEC. Most of these charges – generally referred to as core clearing fund components – directly address the estimated risk of the clearing member's unsettled portfolio. The largest component is the value-at-risk or "VaR" charge. Core clearing fund components are calculated identically for each clearing member based on its portfolio and historical activity. NSCC also provides reporting tools, calculators and documentation that allow clearing members to monitor their risk in near real-time and estimate potential clearing fund requirements for actual or hypothetical portfolios. Many clearing members have employed this information to build their own internal calculators and monitoring tools to aid them in risk management.

NSCC's rules-based clearing fund requirements also include certain "non-core" charges that address specific issues. These are also set forth in NSCC's rules. For example, if a clearing member's portfolio is highly variable from day to day, core charges may not adequately capture the risk. If so, the clearing member could be subject to a backtesting charge that addresses this gap. Other charges are intended to encourage operational resiliency and reduce settlement risk. One example is the fails charge that applies when a clearing member fails to deliver securities for settlement.

One such non-core charge that became important during the week of January 25 is the capital premium charge. This charge was adopted in 2006, following market disruptions caused by the failure of a clearing member of NSCC and other clearinghouses. The capital premium charge is intended to discourage clearing members from taking on more risk in their portfolios at NSCC than their capital levels can reasonably support. Because a clearing member may be obligated to quickly provide funds to NSCC and other clearinghouses, a clearing member that is over-leveraged presents a heightened risk of default. NSCC looks to a clearing member's excess net capital (a measure of generally available capital for broker-dealers) as an important cushion against such risks. The capital premium charge applies if a specified portion of a member's core requirement (including the predominant VaR charge)[2] is greater than its excess net capital. The charge is calculated using a simple formula in NSCC's rules that scales upward based on the degree of leverage. A clearing member with a core requirement that barely exceeds its capital cushion will have a small charge. A clearing member with a core requirement that greatly exceeds its capital cushion will have a much larger charge. NSCC provides a warning to clearing members in their daily clearing fund statements on any day that their core requirement exceeds 50% of their capital cushion, to remind them that this charge will be applied if their core requirement grows to exceed their capital cushion.

The capital premium charge is collected not as revenue to NSCC but as part of the clearing fund requirement. It is released to the clearing member when portfolio risk comes down or the clearing member secures additional capital. Collecting this charge both protects NSCC against immediate default risk and operates as a disincentive to risky activity because of the higher margin costs to the clearing member or the need to raise additional capital on a short-term basis. The existence of the charge encourages clearing members to proactively manage the risk they are presenting to NSCC and to have plans to raise liquidity or capital if they take on increased risk. While this charge is important to encourage clearing members to proactively monitor their portfolio risk, liquidity resources and capital, the rule specifically permits NSCC to reduce or eliminate the charge if NSCC believes that imposing the charge in a specific situation is not necessary or appropriate. The rule describes several circumstances in which the charge could be caused by factors not genuinely reflective of a clearing member's risk profile, such that applying the charge would not be appropriate.

A clearing member can avoid a capital premium charge by either raising its capital level or reducing the risk in its portfolio. A clearing member that is monitoring market conditions and risk levels in its portfolio may take a variety of steps to reduce risk, including routing executed trades to other NSCC clearing members, limiting submissions from other broker-dealers that clear through it, or imposing other trading restrictions on its clients. Reducing risk in an unsettled portfolio will typically result in reduced core clearing fund charges, which in turn reduces the likelihood that a clearing member will become subject to the capital premium charge. NSCC does not direct its members whether or how to take such steps, but it does expect members to be able to meet their margin requirements for clearing activity, including the capital premium charge if they incur it.

January Market Volatility Events

During the week of January 25, 2021, the market saw unusually high volumes and price volatility in certain securities that had been popularized on internet message boards, including GameStop. NSCC actively monitored market developments as volumes and prices rose in these "meme" securities at the beginning of the week. NSCC experienced the two highest transaction volume days in its history on Wednesday, January 27 and Thursday, January 28. On Wednesday, NSCC processed approximately 474 million transaction sides, exceeding the March 2020 volume record by more than 100 million. Risk at NSCC, as measured by NSCC's aggregate clearing fund requirement, also increased substantially on January 28, to $33.5

[2] That portion of the core clearing fund requirement that is assessed for purposes of the capital premium charge is described hereafter as the core requirement for simplicity, although it is a specific aggregation of some but not all core component charges, as set forth in NSCC's rules.

billion, slightly higher than the peak that occurred in March 2020 and just under NSCC's historical maximum.[3]

Extreme market volatility and even "short squeeze" events are not new phenomena. What was unusual was that activity in the volatile meme securities was also more concentrated in the portfolios of firms that primarily support individual investors. The concentrated retail interest in purchasing meme securities and the related spike in the prices of those securities was a substantial factor in generating the near-peak aggregate clearing fund requirements at NSCC on January 28. The impact of that increase was more concentrated in the clearing members whose clients drove that activity. The impact of the March 2020 market volatility and the related increase in NSCC clearing fund requirements, by contrast, was more evenly distributed across clearing members.

As volumes and volatility in the meme securities spiked on Wednesday, January 27, NSCC calculated and imposed a special charge under its rules that essentially accelerated collection of a portion of the following morning's VaR charge for many clearing members with exposure to these securities. The imposition of the special charge, in addition to NSCC's collection of intraday mark-to-market charges, reflected significant growth in risk in many clearing members' unsettled portfolios. Final VaR charge estimates were updated at the end of day in the NSCC risk portal to reflect changes in each clearing member's portfolio through the end of the trading day, and then updated overnight to reflect the impact of security price changes using Wednesday's closing prices. Clearing members would have observed these updates in the NSCC risk portal.

Shortly after 5 a.m. Eastern Time on Thursday, January 28, NSCC's daily margin statements were released to clearing members in NSCC's risk portal and excess/deficiency notices were emailed according to NSCC's standard operational timeline. Many clearing members whose unsettled portfolios were exposed to volatile meme stocks saw significant increases in the VaR charges that derived from the risk posed by increased volume and price volatility in these securities. Substantial VaR charge increases also generated capital premium charges for clearing members whose core requirements exceeded their capital cushions. Several clearing members were subject to capital premium charges, which were automatically generated by NSCC's systems based on the formula in NSCC's rules.

NSCC examined the market activity and clearing member margin requirements to consider whether it would be appropriate to adjust or waive the capital premium charge, as permitted under the applicable rule. NSCC determined that the spike in market volatility, particularly in the so-called meme stocks, was a material contributor to elevated VaR charges for several clearing members, including most of those subject to capital premium charges. NSCC determined that it would be appropriate to waive the capital premium charge for all clearing members, using the discretion provided in the rule to reduce or waive this charge.[4] Just after 9 a.m., prior to the market opening at 9:30 a.m., updated daily margin statements reflecting the waiver were released in NSCC's portal and revised excess/deficiency notices were emailed to clearing members. All clearing members timely satisfied their clearing fund requirements.

[3] A peak of $36.4 billion was reached in December 2020 when Tesla was added to the S&P 500 Index.

[4] Consistent with this conclusion, NSCC also decided to waive the capital premium charge for all clearing members through Monday, February 1, by when the unusual market activity from Wednesday and Thursday would have settled.

NSCC's clearing fund charges are rules-driven and based on formulas that are published to clearing members, which must be applied to each clearing member's portfolio of unsettled trades as it changes. A dramatic increase in a clearing member's VaR charges over a short period results directly from a correspondingly large increase in the risk presented to NSCC by the clearing member's portfolio, due to increases in transaction volume, volatility and concentration of the unsettled transactions in the clearing member's portfolio, and not from any discretionary action taken by NSCC.

NSCC's role in the market is a neutral one. It does not impose trading restrictions upon its clearing members or their customers, and it did not instruct any clearing member to impose restrictions during the market volatility events of late January. NSCC expects all clearing members to employ effective tools to monitor and manage their risk, and to maintain an appropriate level of capital to support any expansion of or change in their business activities. Clearing fund requirements are rules-based and subject to limited discretion. NSCC exercises this discretion carefully, often in unique circumstances. In such cases, NSCC's sole objective is to balance the need to protect the system from a potential clearing member default against the damage and other risks that could result if NSCC were to cease-to-act and liquidate a clearing member's portfolio.

Accelerated Securities Settlement

NSCC has long worked with the industry to identify ways to enhance efficiency and reduce costs in post-trade processing. Following a multi-year, industry-wide effort, securities settlement was shortened in 2017 from T+3 to T+2, achieving margin savings estimated at 25%. Shortening the settlement cycle beyond T+2 would reduce the risks that drive margin requirements and further reduce costs to clearing members.

Over the past year, NSCC has worked with a cross-section of clients and stakeholders to explore the benefits of moving to T+1 or T+0. NSCC has conducted pilot projects exploring new technologies that could be employed in accelerated settlement or even real-time gross settlement ("RTGS").[5] Additionally, NSCC is exploring an integrated settlement model with clearing members that could introduce more settlement efficiencies between NSCC and DTC, which is the central securities depository for the U.S. market, to reduce margin demands at NSCC.

Engagement with the industry and NSCC's own assessment indicates that the industry is increasingly prepared to move to T+1. NSCC's analysis suggests that T+1 settlement could reduce NSCC VaR charges by 30-40% for sample portfolios. NSCC notes, however, that the potential margin reduction will vary based on the portfolio characteristics.

Substantial procedural hurdles remain for a move to T+0. Beyond T+0, a move to RTGS would eliminate the substantial efficiencies of netting, which currently compresses the amount of cash required to fund daily transactions at NSCC by over 98%. RTGS could require that transactions be funded on a trade-by-trade basis. While this could eliminate most margin component charges for clearing members if customers fully prefunded all trading activity, that prefunding would be difficult to forecast as settlement obligations change in real-time. The heightened costs of the substantial liquidity buffers required to support this approach could

[5] T+0 settlement, in which trades are netted and settled at the end of the same trading day, should not be confused with real-time gross settlement, in which trades are settled instantly.

erode market liquidity. Additionally, the real-time reconciliation and real-time stock records required for either T+0 or RTGS would be difficult for the industry to implement. There would be negative impacts to processing for short sales, the use of securities lending as a financing tool, and institutional trade processing operations. For these reasons, while NSCC is fully supportive of a shorter settlement cycle, NSCC does not believe the industry is ready to support shortening the settlement cycle beyond T+1 at this time.

Conclusion

As an SEC-registered clearing agency, NSCC is charged under the Exchange Act with facilitating the prompt and accurate clearance and settlement of securities transactions and safeguarding the securities and funds in its custody and control. It is subject to stringent SEC requirements regarding the management of financial risk, including the daily collection of margin requirements. The obligations that NSCC's rules-based requirements impose on clearing members protect not only NSCC and its other clearing members, but all securities investors. The regulatory framework established by the SEC and the stringent financial and operational risk management requirements at NSCC are the foundation of this system. Without clearing, investors could not trade in the accessible, transparent and highly efficient securities markets that they do today. NSCC continues to promote further improvements and efficiencies, such as acceleration of the current T+2 settlement cycle, that will ultimately benefit clearing members and securities investors alike. We look forward to engaging with our clearing members and the broader industry on this important initiative.

Thank you for your time.

Sincerely,

Michael C. Bodson

CC: Chairwoman Maxine Waters

STA

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February 17, 2021

The Honorable Maxine Waters
Chairwoman
U.S. House Committee on Financial Services
2129 Rayburn House Office Building
Washington, DC 20515

The Honorable Patrick McHenry
Ranking Member
U.S. House Committee on Financial Services
4340 O'Neill House Office Building
Washington, DC 20024

Dear Chairwoman Waters and Ranking Member McHenry,

The Security Traders Association[1] ("STA") appreciates the opportunity to provide comments in response to U.S. House Committee on Financial Services February 18, 2021, virtual hearing, "Game Stopped? Who Wins and Loses When Short Sellers, Social Media and Retail Investor Collide." STA is an organization comprised of individuals who are involved in the trading of financial securities in the U.S and Canada. Our members are employed at retail brokerage firms, agency only broker dealers, asset owners and managers, liquidity providers and exchanges.

Background

The Evolution of Open and Free Markets

The U.S. markets are in a constant state of evolution driven by innovation and at times, new entrants. Throughout the history of U.S. markets, there have been moments when inefficiencies are identified and the evolutionary process proceeds toward an improved market. We believe the events that occurred in late January and early February, 2021, involving the trading of GameStop (GME) are one such moment. We have a marketplace that provides educational resources to millions of investors and enables them to connect and trade with little to no transactional friction. However, the recent events demonstrate more needs to be done towards educating investors, improving efficiencies in market infrastructure and providing greater transparency into certain activities.

While there is still more to learn about the events surrounding trading in GME, STA hopes our initial insights offer constructive contributions to conversations that will ultimately determine the short- and longer-term actions of this committee, the Securities and Exchange Commission (SEC), the Financial

[1] STA is a trade organization founded in 1934 for individual professionals in the securities industry. STA is comprised of 24 affiliate organizations in North America with individual members who are engaged in the buying, selling and trading of securities. STA is committed to promoting goodwill and fostering high standards of integrity in accord with the Association's founding principle, Dictum Meum Pactum – "My Word is My Bond." For more information, visit https://securitytraders.org/.

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Industry Regulatory Authority (FINRA), the Depository Trust and Clearing Corporation (DTCC) and the broader industry.

Remarks

Developments in the Markets Benefiting Investors

The democratization of the markets – which has been an overwhelmingly positive, but not new, development – has been at the core of many conversations recently. Among the key drivers for the democratization of the U.S. markets are: low explicit and implicit costs; investment products; and a regulatory regime which protects investors, contributes to the overall integrity of the markets, and provides investor choice. The combination of these factors can be seen throughout the history of the U.S. markets.

In 1975, the SEC ordered the end of fixed commission rates for all securities transactions. While some brokerages tried to maintain existing rates, Charles Schwab created a new kind of brokerage – a discount brokerage that today has over 30 million client accounts worldwide and over $6 trillion in client assets.

In January 1993, the first exchange-traded fund (ETF) in the U.S. was launched, the Standard & Poor's Depositary Receipts (SPY) by State Street Global. This product provided individual investors a basket of assets designed to track an index and was an alternative to mutual funds. At the end of 2020, ETF assets under management in the U.S. topped $5 trillion dollars. ETFs provide investors the ability to gain investment exposure to equity, fixed income, commodity markets, and foreign markets. Investors who prefer mutual funds have also benefitted from the competitive forces ETFs brought to investment management industry, as well as the intense competition amongst mutual funds which has contributed to expense ratios substantially decreasing.

In the 1998, the SEC approved the Limit Order Display Rule,[2] and several years later approved the Order Protection Rule (OPR) as part of Regulation NMS.[3] The Limit Order Display Rule gives investors the ability to directly advertise their trading interest to the marketplace, enabling them to trade inside the current bid-ask spread and thereby compete with market maker quotations. The OPR protects investors' orders from being traded through and being executed at inferior prices.

In April 2001, under an SEC notice,[4] all stock markets within the U.S. converted from fractional quoting and trading to decimals. Among the immediate and lasting results of this change has been the narrowing of bid to ask spreads in securities. This has provided an implicit cost savings to individual investors.

While there is debate on the barriers to entry for new broker dealers and investment advisory firms, few will argue that investors are not provided an ample choice of such firms to choose from. According to FINRA,[5] there were 3,517 FINRA registered firms at the end of 2020. Additionally, the Automated

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[2] https://www.sec.gov/rules/final/37619a.txt
[3] https://www.sec.gov/rules/final/34-51808.pdf
[4] https://www.sec.gov/rules/other/decimalp.htm
[5] https://www.finra.org/sites/default/files/2020-07/2020-industry-snapshot.pdf

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Customer Account Transfer Service[6] (ACATS) is a regulated process which enables investors to move assets from one brokerage to another.

These are just a few examples of a continued willingness of the industry and regulators to democratize access to our markets for all investors while also protecting their interests.

Performance of our markets; market structure

In offering comments on the performance of our markets during the periods of peak volatility in GME, we believe it is best to separate remarks on market structure (the trading of securities) from market infrastructure (the clearing and settlement process of transactions).

Looking at the market structure, the U.S. equity and options markets once again proved to be resilient during this period of heightened volatility and record levels of message traffic attributed to quote and trade information and trading volumes. Unlike March 2020, when the market experienced prolonged periods of heightened volatility across all securities and asset types attributed to the onset of the COVID-19 pandemic, much of the volatility and trading activity during the timeframe in question was concentrated in GME and a small number of other securities. For example, quote updates on GME options averaged more than 500 million per day during this period, a 50x increase. Material increases were also experienced in the number of options contracts traded and trades per day.[7] This unique attribute of the trading activity did not cause any burdensome stress and the markets functioned properly. Certain ETFs which held GME in their portfolios experienced increased price volatility, but the mechanism for creating and redeeming ETFs was not impeded.

Performance of our markets; market infrastructure

The DTCC and its National Securities Clearing Corporation (NSCC) subsidiary are an essential part of the markets today. Their role is to protect the broader financial system and member firms from the trading defaults of a member firm(s). Maintaining a safe market infrastructure requires well-capitalized clearing members with internal controls to manage risk associated with their trading activity, and expertise in understanding their regulatory net capital requirements and margin requirements from NSCC.

The events of the timeframe raised questions on the effectiveness of the process and transparency with regard to the calculation for determining amounts of collateral clearing firms need to deposit in order to satisfy margin requirements on their portfolio of activity. We believe these questions deserve a response, but this is not the first time they have been raised. The NSCC provides an important role in the functioning of a safe and efficient market; however, claims of a lack of transparency led some market participants needing to deposit additional capital on short notice. Some firms also observed this happening in early 2020 during the onset of the COVID pandemic. Whether inefficiencies or poor transparency exist, or whether there is a disconnect between what NSCC provides versus what industry participants know what is available to them, needs to understood. Additionally, most brokers only receive margin obligations a few hours before the market opens, which suggests the technology underpinning this function could be improved.

[6] https://www.dtcc.com/clearing-services/equities-clearing-services/acats
[7] https://s3.com/gmeoptionsdatajan2021/

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While market participants are able, and should be expected, to operate under this current regime, understanding the inefficiencies in this section of the market – in particular how current rules intended to protect the financial system could in certain situations exacerbate risks – seems prudent to prevent or mitigate against a negative impact in future market-driving events and to ensure the effective use of capital.

A shorter settlement period from the existing T+2 regime would reduce the amount of financial risk in the financial system, which in return would lower the amount of collateral clearing firms would need to deposit with NSCC. It is important to note that in March 2017 the SEC, with support from the industry, adopted an amendment[8] which shortened the settlement period for securities transactions from T+3 to T+2. During that time, consideration on an even shorter settlement window was discussed, but due to several factors, including a cost and benefit analysis, a determination on T+2 was believed to be the best outcome. Given the market volatility experienced in early 2020 and more recently, it seems prudent to revisit this topic. Competition in this space could also help drive innovation to keep our markets moving forward while continuing to maintain the safety, fairness and efficiency of the market.

Decouple Short term responses from long term

STA supports the efforts of regulators in conducting a rigorous investigation into potential violations of rules and laws. Simultaneously, the regulatory agencies also need to gather data. Our industry and the investors we serve need information. A report described by Treasury Secretary Janet Yellen as "a timely study of the events" would be useful in identifying longer-term issues and possible solutions.

Decouple Entity Specific Issues from Broad Market Structure Issues

As the regulatory agencies gather and make public data their findings, STA believes it is imperative to decouple events and issues which may be specific to one entity or market participant from those which may have industry-wide implications or could represent a market-wide inefficiency. Tremendous progress has been made to democratize our markets in recent years. While we acknowledge that some investors may have been harmed in the events surrounding GME, we believe existing laws and the investigative powers of regulatory agencies will enable them to punish illegal behavior and recoup economic damages if necessary.

The Role of Social Media

Social media continues to play an ever-increasing role in the markets. This should be embraced, but in a pragmatic way. If investors find value on these platforms, then they should be allowed to engage in the online forum of their choice. However, investors who use these platforms need to realize that illegal activity is sometimes propagated on legal platforms. Inquiries by regulators -- whether they are broad in nature about how the platform operates or narrow in regards to potential nefarious activity performed on a legal platform -- are not an indictment on the platform itself or on all of its users. Individuals who violate securities laws need to be identified and brought to justice if they are engaging in manipulative

behavior, whether it occurs via a social platform in the public domain or through some other venue. The regulatory and enforcement agencies will need to reexamine how social media platforms are being used

[8] https://www.sec.gov/news/press-release/2017-68-0

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in the marketplace, and we encourage these platforms to work with regulators in a spirit of cooperation in the best interests of investors.

Additionally, it is imperative that individuals registered to practice in the financial services industry, law, accounting and other professions also carry professional obligations outside of their professional activities, including when they engage on social media platforms.

Facilitating Individual Investing

Brokerage firms want to empower investors and make investing easy. Brokerage firms also have a duty to ensure that investors on their platform are provided adequate disclosures, education on investment and trading matters, including the risks and regulation, and a means to self-evaluate their level of financial literacy. Providing educational resources is an area where brokerage firms compete for investors. Brokerage firms invest heavily in this area, and it is a contributing factor in the growth of investing experienced today.

Given the events surrounding GME, we believe more needs to be done towards educating investors and that the report by the regulators could be useful in identifying specific areas. For example, it is important for investors to understand the risks of trading on margin and the transaction rules for cash account established under Regulation T[9]. As regulators conduct their investigations, their findings would help the industry understand if additional education in this area is needed. We also believe the industry will respond accordingly in the area of education and investors will be well served.

Short Selling and Securities Lending

Short selling has received much attention in the events surrounding GME. Questions have been raised, such as how it was possible for the aggregate short position in GME to be roughly 140% of its float, or available shares. While regulators should examine how this came to be, we offer several remarks on short selling and the securities lending practices which facilitate it.

The vast majority of short selling is a necessary lubricant to the smooth functioning of markets. Short selling is done by equity market makers when they facilitate customer purchases. Options market makers who also facilitate customer purchases in options will hedge that position by shorting the underlying security. Arbitrageurs will short stocks and purchase an ETF or index futures that hold the index components if the prices are not aligned efficiently.

Additionally, market participants who believe a company is overvalued will short its shares. Normally, the market depends upon short sellers to sell overpriced stocks and thus help prevent overvaluation. We believe that a difference in opinion between buyers and sellers contributes favorably in the price discovery of a security. Short selling, whether it be in the normal course of a functioning market or to express an opinion on over-valued security, contributes favorably to price discovery and available liquidity.

[9] https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title12/12cfr220_main_02.tpl

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Regulation SHO[10] was implemented by the SEC in 2005 to govern short sale practices. Regulation SHO requires participants to locate and affirm a borrow in a security before selling it short. This affirmation requirement ensures that the purchaser receives the security on the settlement date of the transaction and that stocks can only be shorted when there are holders willing to loan their stock

Rule 15c3-3 of the Securities Exchange Act of 1934,[11] governs securities lending programs which play a critical role in locating and obtaining affirmation of shares. In the event of a broker-dealer failure, Rule 15c3-3 seeks to avoid a delay in returning customer securities -- or worse, a shortfall in which customers are not made whole -- by requiring broker-dealers to safeguard both the cash and securities of their customers. Rule 15c3-3 regulates how a broker-dealer can lend out their customers' shares which were either purchased on margin or paid for in full, and financial institutions that participate in securities lending are expected to have written policies and procedures governing these activities.

The regulatory regime for short selling and the vehicles which support it are meant to protect individual investors while allowing for an integral part in the functioning of our markets to exist. In the case involving GME, regulators should investigate whether these rules which govern the act of short selling and the vehicles which support it were abided by.

Conclusion

The history of the U.S. markets demonstrates a commitment by industry participants and regulators to democratize access to all types of investors. While the events surrounding GME may have harmed certain investors and overall investor confidence, we believe existing laws and the investigative powers of regulatory agencies will address the former and the industry's most likely response to provide greater and improved amounts of education and transparency will address the latter. Finally, even with the market infrastructure inefficiencies that we have identified, firms must operate in a compliant and responsible way so as not to harm investors and the broader financial system. Efforts to improve upon these inefficiencies should be done with the mindset of the benefits they bring to the entire financial market system and the investors we serve.

James Toes

James Toes
President & CEO

Andrew D'Amore
2021 Chairman of the Board

[10] https://www.sec.gov/rules/final/2010/34-61595.pdf
[11] https://www.sec.gov/divisions/enforce/customer-protection-rule-initiative.shtml

Citadel Securities and Citadel Advisors Responses to Questions for the Record ("QFRs")

U.S. House of Representatives, Committee on Financial Services

February, 18, 2021 Hearing

Congresswoman Beatty QFRs

Question 6

Citadel Securities is a registered broker-dealer and global market maker, while Citadel Advisors refers to the alternative investment manager business (sometimes colloquially referred to as a hedge fund manager). Both Citadel Securities and Citadel Advisors operate in highly regulated industries and have robust legal and compliance functions to help ensure compliance with all applicable laws, rules, and regulations.

Citadel Securities does not receive or use any personally identifiable information ("PII") from Robinhood or any other retail broker-dealer, and thus such information is never shared with or used by Citadel Advisors. Citadel Securities receives open orders from its counterparties and has established and implemented information barriers to protect those open orders consistent with FINRA Rule 5320, and those open orders are never shared with or used by Citadel Advisors when making investing decisions.

Question 7

Citadel Securities and Citadel Advisors are deeply committed to the important issue of diversity and inclusion. While we are encouraged by the progress we have made, we recognize that we—and our industry generally—need to continue to improve. Approximately 50% of the employees in the U.S. represent women and people of color as well as 40% of our leadership team, including the CEO of Citadel Securities, and the Chief Investment Officer and Chief Risk Officer of Citadel. In addition, for the fourth consecutive year, Citadel Advisors has had four women named in the 50 Leading Women in Hedge Funds List—more than any other firm in its industry. We believe that a diverse team accelerates innovation, strengthens our competitive advantage, and keeps us at the forefront of finance.

Citadel Securities and Citadel Advisors Responses to Questions for the Record ("QFRs")

U.S. House of Representatives, Committee on Financial Services

February, 18, 2021 Hearing

Congressman Green QFRs

Question 1

Given the confidential and proprietary nature of this information and obligations to investors and partners, Citadel Securities and Citadel Advisors are limited in what can be disclosed publicly.

Citadel Securities and Citadel Advisors conduct trading and other activities in compliance with all applicable laws, rules, and regulations, including specific prohibitions against front running and trading ahead, such as FINRA Rule 5320.

Consistent with their respective regulatory obligations under Section 13(f) of the Securities Exchange Act of 1934, Citadel and Citadel Securities (through their affiliates) disclose their securities holdings on Form 13F on a quarterly basis, with the most recent filing publicly reported on February 16, 2021.

Question 2

Citadel Securities executes trades on behalf of institutions and nearly every major retail broker-dealer in the United States—including Fidelity, Morgan Stanley/E*Trade, Robinhood, Schwab/TD Ameritrade, Vanguard, and many others. While many retail broker-dealers charge market makers a fee for routed trades—a practice known as payment for order flow ("PFOF")—some do not, and Citadel Securities handles trades for both kinds of counterparties.

Because retail order execution is a very competitive business, the magnitude of the orders routed to Citadel Securities reflects our firm's consistent provision of price improvement, our ability to deliver best execution in all market conditions, and the resilience of our systems. It also reflects the corresponding confidence the retail brokerage community has in our firm and our track record of success. Bid-ask spreads received reflect the consideration of the risk that market makers take on in making two-way markets and, as Citadel Securities has done, in keeping those markets consistently available.

Citadel Securities' computation based on publicly available data provides that the median daily bid-ask spread in GameStop from January 12, 2021, through February 11, 2021, was approximately $0.20.[1]

[1] This has been calculated, based on publicly available data, as the time-weighted median of the bid-ask spread during each day from 1/12/2021 through 2/11/2021, using 1-minute samples of the National Best Bid and Offer each day from 9:35 AM to 3:55 PM E.T.

Question 3

Citadel Securities is a leading global market maker across a broad array of fixed income and equity products. Our unique set of capabilities and tools are designed to drive down the cost of transactions, helping to meet the liquidity needs of asset managers, banks, broker-dealers, hedge funds, government agencies, and public pension programs. We strive to provide the most efficient execution and the highest caliber of services, making markets more fair and accessible for all. While some may characterize a subset of our trading activity as "high frequency trading," there is no standard definition of "high frequency trading." Although all of the following criteria does not apply to much of the trading activity of Citadel Securities, according to the SEC, the following are generally understood to constitute the practice: (1) use of high speed and sophisticated programs for generating, routing, and executing orders; (2) use of co-location services and individual data feeds offered by exchanges and others to minimize network and other latencies; (3) very short time-frames for establishing and liquidating positions; (4) submission of numerous orders that are cancelled shortly after submission; and (5) ending the trading day in as close to a flat position as possible (that is, not carrying significant, unhedged positions overnight).[2]

During the period January 12, 2021 to February 12, 2021, Citadel Securities continued to execute orders routed by counterparties in GME and continued to make markets in GME, notwithstanding exceptional volumes and volatility. Simply put, when others were unable or unwilling to handle the heavy volumes, Citadel Securities stepped up. Specifically, on Wednesday, January 27, 2021, Citadel Securities executed 7.4 billion shares on behalf of retail broker-dealers channeling the orders of their customers.

Finally, as has now been widely acknowledged, neither Citadel Advisors nor Citadel Securities played any role in Robinhood's decision to impose trading restrictions on January 28, 2021. Furthermore, Citadel Advisors and Citadel Securities had no advanced knowledge of Robinhood's decision to restrict trading of GameStop or any other "meme" stock.

Question 4

Given the confidential and proprietary nature of this information and obligations to investors and partners, Citadel Securities and Citadel Advisors are limited in what can be disclosed publicly.

Consistent with their respective regulatory obligations under Section 13(f) of the Securities Exchange Act of 1934, Citadel and Citadel Securities (through their affiliates) disclose their securities holdings on Form 13F on a quarterly basis, with the most recent filing publicly reported on February 16, 2021.

[2] *See* Staff of the Division of Trading and Markets, *Equity Market Structure Literature Review, Part II: High Frequency Trading*, U.S. SECURITIES AND EXCHANGE COMMISSION (Mar. 18, 2014), https://www.sec.gov/marketstructure/research/hft_lit_review_march_2014.pdf.

Question 5

It is important to make clear that Citadel Securities itself has no retail customers. Rather, Citadel Securities serves counterparties who are broker-dealers, many of whom have retail customers of their own. Under FINRA Rule 5310, the duty of best execution is determined, among other things, by price improvement, speed of completion, enhanced liquidity, and platform resiliency. Citadel Securities competes directly with other wholesale market makers on those factors. Any best execution obligations of Citadel Securities are separate and independent from any best execution obligations that its counterparties may owe to their own customers.

Because retail order execution is a very competitive business, the magnitude of the orders routed to Citadel Securities reflects our firm's consistent provision of price improvement, our ability to deliver best execution in all market systems, and the resilience of our systems. It is also important to note that Regulation NMS generally prohibits the execution of transactions outside of the National Best Bid and Offer.

Question 6

In our experience, retail-oriented broker-dealers allocate their order flow based primarily upon (i) best execution and (ii) reliability objectives in a highly competitive process. As mentioned above, while many counterparties use payment for order flow, some do not, and Citadel Securities handles trades for both. In all cases, Citadel Securities believes it is allocated order flow based on its ability to deliver execution quality for our counterparties, many of whom have retail customers of their own, as well as the resiliency of its platform and systems. The obligation of best execution under FINRA Rule 5310, which is determined, among other things, by price improvement, speed of completion, enhanced liquidity, and platform resiliency, applies regardless whether payment for order flow is paid or not.

Question 7

Citadel Securities has consistently advocated for competitive, transparent, and robust financial markets, and we are proud of the role we play in the marketplace. Based on our estimates derived from monthly SEC 605 Data, we estimate that Citadel Securities' percentage of marketable NMS order flow has ranged between 39% and 46% between January 2018 and January 2021. This percentage reflects Citadel Securities' ability to compete in a highly competitive market based on execution quality and reliability.

Question 8

While there have been various press reports that have speculated as to the cause of the volatile market conditions during the week of January 25, 2021, neither Citadel Securities nor Citadel Advisors has access to all data reported to regulatory authorities, and are therefore not in a position to opine on the role short selling may have played. That said, we understand from public reporting that this is an issue the SEC is looking into.

Question 9

Citadel Securities operates in a highly regulated industry and has a robust legal and compliance function to help ensure compliance with all applicable laws, rules, and regulations, including regulations related to trading ahead and frontrunning. Citadel Securities has established and implemented information barriers to protect open counterparty orders consistent with prohibitions regarding trading ahead or frontrunning, such as FINRA Rule 5320. In addition, Citadel Securities has written policies, physical and technological controls, written supervisory procedures, independent surveillance, and regular training covering such regulatory requirements. Finally, Citadel Securities is subject to regular and rigorous reviews by its regulators including FINRA and the SEC.

Question 10

Neither Mr. Griffin nor any Citadel entity has made any equity investments in Robinhood.

Question 11

Neither Mr. Griffin nor any Citadel entity provided any capital or credit to Robinhood in January 2021.

Question 12

Neither Mr. Griffin nor any Citadel entity is represented on the board of Robinhood.

Citadel Securities and Citadel Advisors Responses to Questions for the Record ("QFRs")

U.S. House of Representatives, Committee on Financial Services

February, 18, 2021 Hearing

Congressman Lynch QFRs

Question 1

While exchanges do offer *non-displayed*, or "hidden", midpoint liquidity—and Citadel Securities factors this liquidity into the execution prices counterparties receive—exchanges are prohibited from offering *displayed* liquidity at quotations of a tick size smaller than one penny. As a result, market makers like Citadel Securities are able to offer better pricing for retail orders than what is displayed on exchanges. We support steps that would enable and empower exchanges to better compete.

As we recently stated in a white paper outlining policy recommendations to enhance competition, transparency, and resiliency in U.S. Financial Markets,[3] the SEC should reduce the minimum tick size to a half-penny for symbols trading above $1.00 per share that are tick constrained (i.e., have a penny spread the overwhelming majority of the time). This change will improve on-exchange execution quality and increase the overall competitiveness of exchanges. To the extent the SEC reduces the minimum tick size for certain symbols, the access fee cap should be commensurately reduced to reflect the reduction in bid-offer spreads. We recommend that the current access fee cap be reduced by 50% to 15 cents per 100 shares for symbols captured by our previous recommendation to reduce the minimum tick size to a half-penny. This will effect a reduction in access fees that is proportionate to the tick size reduction recommended for these symbols, thereby reducing the trading costs and increasing the competitiveness of on-exchange trading. Leveling the playing field with exchanges will enhance the public price discovery process, one of the most important functions in our capital markets.

[3] *See* Enhancing Competition, Transparency, and Resiliency in U.S. Financial Markets, CITADEL SECURITIES (May 2021); https://s3.amazonaws.com/citadel-wordpress-prd102/wp-content/uploads/sites/2/2021/05/03130457/EnhancingCompetitionTransparencyandResiliencyinUSFinancialMarkets.pdf.

Citadel Securities and Citadel Advisors Responses to Questions for the Record ("QFRs")

U.S. House of Representatives, Committee on Financial Services

February, 18, 2021 Hearing

Congressman Sherman QFRs

Question 1

As the question recognizes, while many counterparties use payment for order flow, some do not, and Citadel Securities handles trades for both. In all cases, Citadel Securities believes it is allocated order flow based on its ability to deliver execution quality for our counterparties, many of whom have retail customers of their own, as well as the resiliency of its platform and systems. The obligation of best execution under FINRA Rule 5310, which is determined, among other things, by price improvement, speed of completion, enhanced liquidity, and platform resiliency, applies regardless whether payment for order flow is paid or not.

For those retail broker-dealers that do charge payment for order flow, this information is publicly reported and disclosed quarterly under SEC Rule 606. The decision to charge a fee and the rates charged are made by the retail broker-dealer. Because payment for order flow is a long-standing and transparent practice that has been accepted and regulated by the SEC for decades,[4] it has become a customary commercial practice within the U.S. equity market. Citadel Securities currently operates within this market structure, but if payment for order flow were no longer to be paid, Citadel Securities would anticipate that counterparties would continue to focus on "best execution" as the primary factor in order routing decisions.

[4] *See* 17 C.F.R. § 242.606.

Citadel Securities and Citadel Advisors Responses to Questions for the Record ("QFRs")

U.S. House of Representatives, Committee on Financial Services

February, 18, 2021 Hearing

Chairwoman Waters QFRs

Information Barriers

Questions 1-5

Citadel Securities is a registered broker-dealer and global market maker, while Citadel Advisors refers to the alternative investment manager business (sometimes colloquially referred to as a hedge fund manager). Both Citadel Securities and Citadel Advisors operate in highly regulated industries and have robust legal and compliance functions to help ensure compliance with all applicable laws, rules, and regulations.

Citadel Securities does not receive or use any personally identifiable information ("PII") from Robinhood or any other retail broker-dealer, and thus such information is never shared with or used by Citadel Advisors. Citadel Securities receives open orders from its counterparties and has established and implemented information barriers to protect those open orders consistent with FINRA Rule 5320, and those open orders are never shared with or used by Citadel Advisors when making investing decisions.

Payment for Order Flow

Question 1

Below is the list of Citadel Securities' payment for order flow payments in 2020 Q4 and 2021 Q1 to our 5 largest retail broker-dealer counterparties (as derived from their respective 606(a) reports):

NMS

Counterparty	Q4 2020	Q1 2021
TD Ameritrade Holding Corp	$58,147,024	$84,312,549
Robinhood Securities LLC	$31,913,295	$52,260,536
ETrade	$14,713,879	$22,968,491
Webull Financial LLC	$10,630,426	$14,828,561
Charles Schwab	$8,372,019	$11,114,799

Option

Counterparty	Q4 2020	Q1 2021
TD Ameritrade Holding Corp	$91,969,725	$116,931,662
Robinhood Securities LLC	$75,801,145	$89,645,324
ETrade	$23,972,063	$28,490,035
Fidelity	$11,546,034	$16,111,256
Charles Schwab	$11,783,058	$14,183,389

Questions 2 - 4

Please see response to Question 1 above.

Questions 5-8

Given the confidential and proprietary nature of this information, Citadel Securities is limited in what can be disclosed publicly. For this year and for 2020, Citadel Securities has paid more to exchanges in access fees than it has received from exchanges in rebates (and other potential benefits); thus, on a net basis, Citadel Securities has not received net payments in the form of payment for order flow and "transaction rebates" from trading venues.

Question 9

Given the confidential and proprietary nature of this information, Citadel Securities is limited in what can be disclosed publicly. Citadel Securities has adopted written policies and procedures related to regulatory requirements regarding best execution, order routing, and other aspects of our business. Our order routing systems are assessed and revised consistent with our periodic assessments of execution quality. Citadel Securities is constantly assessing our own execution strategies to strengthen our ability to be as competitive as possible. Our best execution policies and implementation are regularly reviewed and examined by our regulators, including the SEC and FINRA.

Question 10

Each retail broker-dealer requesting payment for order flow has different rates and breakdowns. As such, each individual retail broker-dealer is best positioned to explain what they do and the underlying rationale(s). While Citadel Securities of course has awareness regarding its own engagement with any particular retail broker-dealer counterparty, other than what is publicly reported pursuant to 606 reports, Citadel Securities does not have access to the complete details of payment for order flow provided by other market participants to such broker-dealers, which may vary based on order type or other features.

Question 11

Most payment for order flow arrangements are calculated based upon a fixed rate per share, although one counterparty of Citadel Securities performs its calculation based upon a fixed percentage of the spread between the National Best Bid and National Best Offer for the security at the time of execution. The amount of the spread that is retained by Citadel Securities as a market maker is highly variable and differs by counterparty based on a number of factors including: our actual retention after subsequent price movements, price improvement paid, and other execution costs and fees that we incur.

Question 12

As a registered market maker on a variety of exchanges, Citadel Securities has an obligation concurrent with that registration to maintain two-sided markets in accordance with the specific SRO rules; however, these obligations are not contractual.

Question 13

The percentage of incoming orders from all broker-dealer sources that are internalized and the percentage that are routed to external venues for execution, including to national securities exchanges, varies from day to day. Generally, Citadel Securities internalizes a majority of the marketable retail orders and routes a material percentage of marketable retail orders to external venues for execution, including exchanges.

Question 14

Please see Response to Question 10.

Question 15

Citadel Securities is constantly assessing our own execution quality to strengthen our ability to be as competitive as possible. Given the confidential and proprietary nature of this process, Citadel Securities is limited in what we can disclose publicly. Citadel Securities' counterparties constantly evaluate the execution quality that they receive from different venues, including Citadel Securities, in order to ensure that they are satisfying their best execution obligations to their customers and to encourage competition among Citadel Securities and other venues. Finally, it is important to note that regulators also regularly review Citadel Securities' execution quality and best execution polies and procedures.

Question 16

Given the confidential and proprietary nature of this process, Citadel Securities is limited in what we can disclose publicly. The system logic determining where we route customer orders is determined by numerous factors. First, Citadel Securities considers factors related to the potential venues to which an order may be routed, including such things as market conditions, available liquidity, quoted spread, a venue's perceived operational robustness and resilience, and any costs paid to or rebates received from a market center. In addition, Citadel Securities considers the attributes of the order itself—including such things as order terms and specific conditions the routing counterparty may place on the order.

Question 17

Given the confidential and proprietary nature of this information, Citadel Securities is limited in what can be disclosed publicly. Our order routing systems are assessed and revised consistent with our periodic assessments of execution quality. Citadel Securities is constantly assessing our own execution quality to strengthen our ability to be as competitive as possible. Our best execution policies and implementation are regularly reviewed and examined by our regulators, including the SEC and FINRA.

Question 18

Given the confidential and proprietary nature of this information, Citadel Securities is limited in what it can disclose publicly.

Question 19

The most relevant market characteristic that differentiates the options market from the equities markets in terms of informing views on the practice of payment for order flow is the fact that in the options market, trades must occur on exchange, whereas in the equities markets, trades can occur either on exchange or off exchange.

Payment for order flow is a long-standing and transparent practice in both the equities and options markets that has been accepted and regulated by the SEC for decades, and Citadel Securities operates within this market structure.

Policy Questions

Questions 1-2

Citadel Securities recently published a white paper outlining policy recommendations to enhance competition, transparency, and resiliency in U.S. Financial Markets.[5] One such recommendation is that the SEC should reduce the minimum tick size to a half-penny for symbols trading above $1.00 per share that are tick constrained (i.e., have a penny spread the overwhelming majority of the time).

Under Regulation NMS, exchanges generally are not permitted to have a tick size of less than one penny. This regulatorily-mandated tick size impedes the ability of exchanges to compete for order flow in symbols that are highly liquid and commonly trade inside a bid-offer spread of a penny. We believe this "constrained" tick size directly leads to complexities and inefficiencies—such as

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[5] *See* Enhancing Competition, Transparency, and Resiliency in U.S. Financial Markets, CITADEL SECURITIES (May 2021); https://s3.amazonaws.com/citadel-wordpress-prd102/wp-content/uploads/sites/2/2021/05/03130457/EnhancingCompetitionTransparencyandResiliencyinUSFinancialMarkets.pdf.

driving order flow into alternative venues, complex exchange pricing structures, and increased overall market fragmentation. Therefore, we recommend that the SEC reduce the minimum tick size to a half-penny for symbols trading above $1.00 per share that are tick constrained (i.e., have a penny spread the overwhelming majority of the time).

Permitting a half-penny tick size for these highly liquid symbols will allow exchanges to display more aggressive pricing, without moving to full sub-penny quoting, which could raise other concerns. This change will improve on-exchange execution quality and increase the overall competitiveness of exchanges.

Question 3

Citadel Securities recently published a white paper outlining policy recommendations to enhance competition, transparency, and resiliency in U.S. Financial Markets.[6] The following represent Citadel Securities' top seven recommendations for the equities market:

> Recommendation #1: The SEC should reduce the minimum tick size to a half-penny for symbols trading above $1.00 per share that are tick constrained (i.e., have a penny spread the overwhelming majority of the time).
>
> Recommendation #2: The SEC should reduce the current access fee cap by 50% to 15 cents per 100 shares for symbols trading above $1.00 per share that are tick constrained (i.e., have a penny spread the overwhelming majority of the time).
>
> Recommendation #3: The SEC should re-examine Regulation ATS with a view to ensuring that dark pools do not have inappropriate competitive advantages over exchanges when competing for order flow, including expanding the application of fair access and public display requirements.
>
> Recommendation #4: The SEC should perform a comprehensive review of the 606 reports being published pursuant to the recently updated rules and propose any necessary enhancements to further increase the transparency of PFOF arrangements.
>
> Recommendation #5: The SEC should perform a comprehensive review designed to modernize Rule 605, similar to the effort recently undertaken for Rule 606.
>
> - At a minimum, adopt the recommendations put forward by the Financial Information Forum to improve the reporting of price improvement achieved by retail investors, such as taking order size into account and including odd lot orders.

[6] *See* Enhancing Competition, Transparency, and Resiliency in U.S. Financial Markets, CITADEL SECURITIES (May 2021); https://s3.amazonaws.com/citadel-wordpress-prd102/wp-content/uploads/sites/2/2021/05/03130457/EnhancingCompetitionTransparencyandResiliencyinUSFinancialMarkets.pdf.

- In addition, determine if additional disclosures or detail would be helpful in enabling market participants to evaluate execution quality.

Recommendation #6: The SEC should endorse and oversee industry efforts to move to T+1 settlement.

Recommendation #7: The SEC should assess whether greater predictability and transparency can be provided to market participants regarding CCP margin requirements.

Question 4

Citadel Securities has consistently explained that intentional delay mechanisms—including asymmetric speedbumps—threaten to impair market quality, efficiency, and fairness. Asymmetric speedbumps are explicitly designed to favor certain market participants over others—typically they allow liquidity providers to bypass the speedbump (when cancelling/repricing resting quotes) while liquidity takers are subject to the speedbump (when seeking to trade with displayed liquidity). These proposals:

- Deny investors access to the firm and reliable prices they expect on exchanges;
- Create the mere illusion of greater liquidity that is inaccessible when needed most;
- Introduce a "last look" functionality that has been denounced in other markets;
- Advantage a small subset of traders at the expense of all other market participants, including retail and institutional investors; and
- Impair the ability of market makers to price ETFs and listed options given the illusory nature of quotes in the underlying stocks.

Question 5

Beyond the recommendations described above, Citadel Securities believes that public reporting of aggregate short interest, which is currently done on a bi-weekly basis and two weeks in arrears, could be done on a weekly basis and one week in arrears.

Melvin Capital Management

Question 1

Neither Citadel Securities nor Citadel Advisors had any ownership or revenue stake in Melvin Capital Management or related companies prior to January 2021.

Question 2

On January 25, 2021, it was announced that Citadel Advisors, the separate hedge fund business, and its partners had made a strategic investment of $2 billion in Melvin Capital's largest fund.

Question 3

Given the confidential and proprietary nature of this information and obligations to investors and partners, Citadel Securities and Citadel Advisors are limited in what can be disclosed publicly.

Questions for the Record
House Committee on Financial Services
Hearing on
"Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide?"
February 18, 2021

Questions for Gabriel Plotkin, Founder and Chief Investment Officer, Melvin Capital Management

Rep. Brad Sherman (D-CA)

1. **According to recent reporting, at one point in January, up to 140 percent of GameStop shares available for trading had been sold short. Some have argued that this was likely the result of illegal naked short selling activity. Under Section 13(f) of the Securities Exchange Act of 1934, Melvin Capital, as an institutional investor, is required to file quarterly disclosures detailing the fund's holdings of certain assets. However, institutional investors are not currently required to include short positions in their 13F filings. In your opinion, are there any reason 13F filings should not require institutional investors to disclose short positions?**

   If institutional investors were required to disclose their short positions, would it not help put to rest accusations that major market participants have engaged in naked short selling?

   Response: As Mr. Plotkin stated during his oral testimony, both he and Melvin Capital will follow whatever laws or regulations either Congress or the SEC impose regarding the disclosure of any positions. With respect to whether requiring the disclosure of short positions would put to rest accusations of naked short selling, while, as Mr. Plotkin testified, Melvin Capital always locates a secure borrow of shares before putting on a short position, neither he nor Melvin is sufficiently knowledgeable about the process by which brokerage firms loan securities to provide an informed view about whether requiring disclosure of short positions would put to rest those accusations.

Rep. Joyce Beatty (D-OH)

1. **During your previous employment at SAC, did you ever trade on inside information?**

   Response: Mr. Plotkin is not aware of any instance when he traded on the basis of inside information while employed at SAC or at any other time.

2. **As part of the deal Melvin Capital made with Point72 and Citadel in late January 2021, is Melvin Capital required, explicitly or implicitly, to share trading information or ideas with either Point72 or Citadel prior to execution?**

   Response: Melvin Capital is neither explicitly nor implicitly expected nor required by its deal with Point72 and Citadel to share trading information or ideas with either prior to execution.

CATO INSTITUTE | CENTER FOR MONETARY AND FINANCIAL ALTERNATIVES

Game Stopped? Who Wins and Loses When
Short Sellers, Social Media, and Retail Investors Collide
Questions for the Record to Jennifer J. Schulp
Submitted April 7, 2021

QUESTION FROM REPRESENTATIVE ROGER WILLIAMS

1. Do you think that the current laws in place regarding market manipulation and securities fraud are strong enough to find illegal activities without trying to regulate financial speech on the internet?

RESPONSE: I believe the current laws and regulations regarding market manipulation and securities fraud would not benefit from specifically regulating financial speech on the internet. One of the strengths of the current legal regime is that it focuses on the fraudulent or deceptive conduct itself, not on the means through which the activity occurs.[1] This allows regulators to apply the rules to evolving methods of communication and technology.

With respect to financial speech, specifically, the existing laws and regulations apply equally to financial speech that occurs through mass print media, television, and email. Similarly, the rules apply to speech that occurs during a cocktail party, in a conference room, or in an exhibition hall. Each of these methods of communication share some similarities and differences, and there is nothing so different about internet speech that requires separate regulation. Indeed, the SEC has applied its anti-market manipulation and anti-fraud tools to conduct on the internet.[2]

Moreover, the specific regulation of financial speech occurring on the internet raises other concerns. While the First Amendment does not prohibit all regulation of speech

[1] I'm primarily referring to the regulation of fraudulent and deceptive behavior by Section 9 of the Exchange Act (15 U.S.C. § 78i), Section 10(b) of the Exchange Act (15 U.S.C. § 78j(b)) and Rule 10b-5 thereunder (17 C.F.R. § 240.10b-5), and Section 17 of the Securities Act (15 U.S.C. § 77q).

[2] For example, the SEC recently announced fraud charges against a trader "who used social media to spread false information about a defunct company, while secretly profiting by selling his own holdings of the company's stock." SEC. "SEC Obtains Emergency Asset Freeze, Charges California Trader with Posting False Stock Tweets." *Press Release,* March 15, 2021. Available at https://www.sec.gov/news/press-release/2021-46. The SEC also recently suspended trading in a number of issuers due to "questions about recent increased activity and volatility in the trading of these issuers, as well as the influence of certain social media accounts on that trading activity." SEC. "SEC Suspends Trading in Multiple Issuers Based on Social Media and Trading Activity." *Press Release,* February 26, 2021. Available at https://www.sec.gov/news/press-release/2021-35.

relating to securities and markets, of course, the regulation of financial speech on the internet would need to be carefully examined to ensure that it is consistent with the First Amendment's protections.[3] The line between political and commercial speech, as the GameStop phenomenon demonstrated, may be difficult to ascertain. But even assuming that a regulation of internet financial speech would be subject to the less stringent test for commercial speech, any regulation focused on one method of communication may be insufficiently tailored to advance the government's interest in preventing fraudulent or deceptive conduct.[4]

Separate from First Amendment concerns, however, specific regulation of internet financial speech could be particularly harmful to non-professional investors. Such individual investors are less likely to have access to the same sources of information relied on by professional investors. Internet chat forums, for example, serve as a place where individual investors can share information and investment ideas. Professional investors, on the other hand, have access to research reports and investment conferences. Imposing more restrictions on internet speech would disadvantage individual investors in a way that regulating based on the content of that speech—whether it is false or deceptive—does not.

[3] See, for example, *Ohralik v. Ohio State Bar Association*, 436 U.S. 447, 456 (1978).
[4] The general test for whether regulation on commercial speech violates the First Amendment is laid out in *Central Hudson Gas & Electric v. Public Service Commission*, 447 U.S. 557 (1980).

Robinhood

85 Willow Road
Menlo Park, CA 94025
robinhood.com

Robinhood Responses to Questions for the Record

Chairwoman Maxine Waters

1. *As of February 24, 2021, what is the dollar value of total cash and assets held in the customer accounts at Robinhood?*

As stated in its Form X-17A-5 filing with the United States Securities and Exchange Commission ("SEC"), Robinhood Securities, LLC[1] held approximately $6,003,814,000 Payable to users as of December 31, 2020.[2] As defined in that filing, "Payable to users" represents "free credit balances from users' funds on deposit, and/or funds accruing to users as a result of settled trades and other security related transactions."[3]

As you may know, Robinhood Markets, Inc., confidentially submitted a draft registration statement on Form S-1 with the SEC. Given Robinhood's S-1 filing and our obligations to the SEC, we do not feel comfortable providing additional information at this time, but we would be happy to update this information at such time as our S-1 filing obligations have concluded.

2. *As of February 24, 2021, what is the dollar value of total cash and assets held in customer margin accounts at Robinhood?*

Please see the response to Question 1 above.

3. *As of February 24, 2021, what is the dollar value of total available credit in customer margin accounts at Robinhood?*

Please see the response to Question 1 above.

4. *As of February 24, 2021, what is the dollar value of total cash and assets held in the customer accounts at Robinhood, excluding all accounts opened since January 1, 2021?*

Please see the response to Question 1 above.

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1 Unless otherwise specified, references to Robinhood herein refer collectively to Robinhood Markets, Inc. ("RHM"), Robinhood Financial LLC ("RHF"), and Robinhood Securities, LLC ("RHS"). RHM wholly owns RHF, which acts as an introducing broker for its customers by taking their trade orders. RHM also wholly owns RHS, which, as a member of SEC-registered clearinghouses, serves as a clearing broker for RHF. In that capacity, RHS executes customer orders received from RHF by routing them to market makers and also clears and settles trades for RHF.

2 Robinhood Securities, LLC, Form X-17A-5 (Mar. 1, 2021), https://www.sec.gov/Archives/edgar/data/1699855/000169985521000006/fy20rhsshortfinal.pdf .

3 *Id.* at 8.

5. *As of February 24, 2021, what is the dollar value of total cash and assets held in customer margin accounts at Robinhood, excluding all accounts opened since January 1, 2021?*

Please see the response to Question 1 above.

6. *As of January 1, 2021, what was the dollar value of total cash and assets held in the customer accounts at Robinhood?*

Please see the response to Question 1 above.

7. *As of January 1, 2021, what was the dollar value of total cash and assets held in customer margin accounts at Robinhood?*

Please see the response to Question 1 above.

8. *What percentage of Robinhood's accounts were enabled to trade options as of February 1, 2021? What percentage of Robinhood's customers were enabled to trade on margin as of February 1, 2021?*

As stated in Robinhood CEO Vlad Tenev's written testimony, which is attached as Exhibit A, 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.[4] Otherwise, please see the response to Question 1 above.

With respect to options trading, under Financial Industry Regulatory Authority ("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. We refer you to our August 7, 2020 letter to Representatives Sherman, Foster, Casten, and Underwood and Senators Durbin and Duckworth, which details Robinhood's approach to options trading. This letter is included as Exhibit B. We also refer you to our September blog post where we describe recent updates to our Options offering, including improving our options education resources, revised eligibility criteria for access to options trading, and additional customer support.[5]

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

4 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), attached as Exhibit B.

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

approve a customer account for options trading. Not all customers that request to trade options are approved to do so.

Our Options Agreement,[6] Options Knowledge Center,[7] and additional information on investing with options, including an explanation of options levels available on Robinhood, are all publicly available on our website.[8]

9. *What was the total dollar value of payment for order flow received in 2020? Please do not reference securities filings in lieu of answering this question.*

Consistent with SEC Rule 606, RHS discloses its payment for order flow arrangements with market makers on a quarterly basis. These disclosures include revenue received from market makers pursuant to those arrangements and reflected a total dollar value of $687,094,991.65 in 2020.[9]

10. *What was the total dollar value of payment for order flow received in 2020 from each of the executing firms used by Robinhood? Please do not reference securities filings in lieu of answering this question.*

Consistent with SEC Rule 606, RHS discloses its payment for order flow arrangements with market makers on a quarterly basis. These disclosures include revenue received from market makers pursuant to those arrangements and reflect the totals provided in the table below.[10]

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6 https://cdn.robinhood.com/assets/robinhood/legal/Options%20Agreement.pdf.

7 https://robinhood.com/us/en/support/articles/options-knowledge-center/.

8 https://robinhood.com/us/en/support/trading/investing-with-options/.

9 Robinhood Securities LLC - Held NMS Stocks and Options Order Routing Public Report, 1st Quarter, 2020 (May 29, 2020, 15:51), https://cdn.robinhood.com/assets/robinhood/legal/RHS%20SEC%20Rule%20606A%20and%20607%20Disclosure%20Report%20Q1%202020.pdf (reflecting Q1 2020 Rule 606 Report); Robinhood Securities LLC - Held NMS Stocks and Options Order Routing Public Report, 2nd Quarter, 2020 (July 28, 2020, 23:30), https://cdn.robinhood.com/assets/robinhood/legal/RHS%20SEC%20Rule%20606a%20and%20607%20Disclosure%20Report%20Q2%202020.pdf (reflecting Q2 2020 Rule 606 Report); Robinhood Securities LLC - Held NMS Stocks and Options Order Routing Public Report, 3rd Quarter, 2020 (Oct 28, 2020, 15:15), https://cdn.robinhood.com/assets/robinhood/legal/RHS%20SEC%20Rule%20606a%20and%20607%20Disclosure%20Report%20Q3%202020.pdf (reflecting Q3 2020 Rule 606 Report); Robinhood Securities LLC - Held NMS Stocks and Options Order Routing Public Report, 4th Quarter, 2020 (Jan 25, 2021, 11:07), https://cdn.robinhood.com/assets/robinhood/legal/RHS%20SEC%20Rule%20606a%20and%20607%20Disclosure%20Report%20Q4%202020.pdf (reflecting Q4 2020 Rule 606 Report).

10 *Id.*

Market Maker	**Total**
Citadel Execution Services	$322,333,484.59
Virtu Americas, LLC	$55,963,167.11
Two Sigma Securities, LLC	$26,066,879.23
G1X Execution Services, LLC[11]	$41,007,684.75
Wolverine Securities LLC[12]	$20,896,989.90
Wolverine Execution Services, LLC	$71,095,718.66
Global Execution Brokers, LP	$131,091,016.40
Morgan Stanley & Co., LLC	$18,640,051.01

11. What was the total dollar value of payment for order flow received in each of the first two months of 2021?

This information will be available in our Quarter 1 2021 regulatory disclosures. Our disclosures are subject to a governance process which involves internal controls and validations, and we are still completing that process for the Quarter 1 2021. RHS will soon make this disclosure publicly available, and we respectfully ask that the Committee bear with us while we complete this process. The disclosure will be accessible from the Disclosure Library on our website[13] by the end of this month.

12. What was the total dollar value of payment for order flow received in each of the first two months of 2021 from each of the executing firms used by Robinhood?

Please see the response to Question 11 above.

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[11] RHS's Q1 2020 Rule 606 Report inadvertently lists "G1X Execution Services, LLC" as one of the firms paying rebates for options trades; the correct firm for those rebates is "Global Execution Brokers, LP." This table reflects the correct totals for each executing firm.

[12] RHS's Q1 2020 Rule 606 Report inadvertently lists "Wolverine Securities LLC" as one of the firms paying rebates for options trades; the correct firm for those rebates is "Wolverine Execution Services, LLC." This table reflects the correct totals for each executing firm.

[13] Disclosure Library, Robinhood.com (last accessed Apr. 5, 2021), https://robinhood.com/us/en/about/legal/.

13. *Please provide all policies and procedures in effect as of January 1, 2021 implementing best execution requirements, governing customer order routing, and setting forth governance of best execution requirements.*

We refer the Committee to the Written Supervisory Procedures for RHF and RHS, which are included as Exhibits C and D. These documents provide the framework for the supervision of the respective broker-dealer businesses, with an eye toward complying with applicable securities laws and regulations. Specifically, the Written Supervisory Procedures describe policies for best execution, execution quality and execution services. Exhibit C at 195–200; Exhibit D at 142–70. Otherwise, please see the response to Question 1 above.

14. *How is the rebate (payment for order flow) generated on transactions with each of your executing dealers calculated? If this rebate differs by order types and/or financial instruments routed to your executing firms, please explain that calculation for each such order type and/or each financial instrument category and break that down for each executing firm.*

Each of RHS's arrangements with its market maker counterparties for equities trading is essentially the same, allowing us to compare the execution services that they provide to our customers so we can automatically route orders to the market makers that are most likely to provide the best execution on these trades.

Pursuant to these arrangements, RHS generally earns a fixed percentage of the bid-ask spread at the time a customer's trade is executed. Each of our market maker counterparties pays us the same rate for the trades they execute. As such, Robinhood's order routing system is designed to achieve quality execution and price improvement for customer orders, not to incentivize routing to the market makers that provide the highest rebates.

In fact, Robinhood, like all retail brokerages registered with FINRA and the SEC, is subject to what's called a "Best Execution" obligation to provide customers with the best price reasonably available and seek price improvement on trades whenever possible. And RHS routes orders to market makers to fulfill this responsibility, as they provide liquidity, opportunity for price improvement and generally better overall quality than can be attained on an exchange. This practice is not unique to RHS and is used industry-wide.

These arrangements are modified from time to time. As of December 31, 2020, RHS received 13.4% of the bid-ask spread from its market maker counterparties on a per-execution basis for equities trades.[14] Otherwise, please see the response to Question 1 above.

15. *Please provide all documentation setting forth the specific terms of payment for order flow arrangements with your executing firms as of January 1, 2021.*

Each of RHS's arrangements with its market maker counterparties for equities trading is essentially the same, allowing RHS to compare the execution services that they provide to

[14] Note that Robinhood has, in limited circumstances, capped the amount of payment for order flow per share.

Robinhood customers so RHS can automatically route orders to the market makers that are most likely to provide the best execution on these trades.

Pursuant to these arrangements, RHS earns a fixed percentage of the bid-ask spread at the time a customer's trade is executed. Each of our market maker counterparties pays RHS the same rate for the trades they execute. As Jim Swartwout, President and COO of RHS and an industry veteran, stated in a recent blog post:

> That means there's no incentive for us to route [a customer's] order to any specific market maker based on payment we receive. In fact, our routing system incentivizes the market makers we have relationships with to compete for order flow by giving [a given customer] a better price than the one [they] were quoted at the time [their] order was placed. This algorithm prioritizes sending [a customer's] order to a market maker that's likely to give [them] the best execution, based on historical performance.[15]

These arrangements are modified from time to time. As of December 31, 2020, RHS received a rebate of 13.4% of the bid-ask spread on a per-execution basis for equities trades executed by its market maker counterparties.

This system allows us to continue to provide commission-free trading while encouraging market makers to compete to provide better execution and price improvement for our customers. Indeed, our algorithm does not even consider the rebates that RHS receives from market makers, and for equity trades it is entirely determined by the price improvement opportunity.

Changing one practice, like eliminating or substantially curbing payment for order flow, could lead to unintended, negative consequences for investors. For example, former SEC commissioner Michael Piwowar said during a recent hearing, "if the SEC were to ban payment for order flow, we would likely go back to commission trading—it would cost to trade." We could have built Robinhood like every other brokerage, charging customers $4 or $10 for every trade. Before Robinhood, many well-known incumbent brokerages were both charging commissions and earning payment for order flow. Instead, in order to democratize finance for all, we decided to make it more affordable for people to invest by building a platform with commission-free trading.

16. *Please provide meeting minutes, reports, studies, and assessments provided in all governance meetings discussing best execution requirements, execution quality, customer order routing, payment for order flow arrangements, or commercial considerations relating to these topics. Please provide these for the last the 15 months.*

Please see the response to Question 1 above.

[15] Jim Swartwout, Blog, Demystifying payment for order flow, Robinhood.engineering (Mar. 4, 2021), https://robinhood.engineering/demystifying-payment-for-order-flow-119581544210.

17. *How does Robinhood compare execution quality across its executing firms? What specific metrics are used in periodic assessments of execution quality? Please provide a copy of all such assessments in the last 24 months.*

We have relationships with several market makers, and RHS's routing system is designed to automatically prioritize sending customer orders to the market maker that is likely to give them the best execution, based on historical performance. RHS does not route orders based on any rebates it receives. Further, all market makers with whom we have relationships pay RHS rebates at the same rate, which means RHS is not incentivized to send orders to any one specific market maker.

Most orders placed on Robinhood are executed at the nationally published quote—also known as at National Best Bid and Offer—or better. Nearly 95 percent of Robinhood customer equity orders are receiving, at a minimum, the best available bid or ask price.[16]

RHS keeps up with the execution quality our customers receive by performing thorough reviews on a daily, monthly, and quarterly basis. When RHS reviews execution data, RHS evaluates critical factors that go into receiving a quality execution, such as execution price, speed, and price improvement, as well as market conditions.

Otherwise, please see the response to Question 13 above.

18. *Please explain how order routing systems are programmed to route orders to each of your executing dealers. How does the system logic determine where to route customer orders?*

As stated in a blog post[17] by Jim Swartwout, President and COO of RHS, RHS's order routing system "incentivizes the market makers we have relationships with to compete for order flow by giving [our customers] a better price than the one [they] were quoted at the time [their] order was placed. This algorithm prioritizes sending [their] order to a market maker that's likely to give [them] the best execution, based on historical performance."

More specifically, RHS's proprietary algorithm is designed to prioritize routing orders for execution to market venues based on the likelihood of obtaining price improvement in a particular symbol of a particular order size over the last 30 days. The algorithm statistically analyzes the prior 30 days of trading activity for each symbol by order size bucket.

19. *Please explain how your order routing systems are re-programmed, if at all, following periodic assessments of execution quality. What is the governance of that process? Please provide all governance documentation relating to that decision process and such determinations. Please provide these for the last the 15 months.*

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16 Our Execution Quality, Robinhood.com (last accessed Apr. 7, 2021), https://robinhood.com/us/en/about-us/our-execution-quality/.

17 Jim Swartwout, Blog, Demystifying payment for order flow, Robinhood.engineering (Mar. 4, 2021), https://robinhood.engineering/demystifying-payment-for-order-flow-119581544210.

We refer the Committee to Written Supervisory Procedures for RHS, included as Exhibit D. This document describes our Order Routing practices, including our Router Change Log. Exhibit D at 159–61. Otherwise, please see the response to Question 1 above.

20. *What was the percentage of gross revenues that Robinhood received in payment for order flow in 2020?*

Currently, the majority of Robinhood's revenue comes from rebates received from market makers, as explained on our website.[18] Otherwise, please see the response to Question 1 above.

21. *Please provide the total capital premium margin amount assessed by the National Securities Clearing Corporation (NSCC) on each business day the week of January 25, 2021. In addition to the assessment, please provide any capital premium margin amount that NSCC initially called for or requested, even if it was subsequently withdrawn, revised, or reduced.*

The week of January 25, 2021, the NSCC only assessed an excess capital premium charge the morning of Thursday, January 28, which was a total of approximately $2.2 billion. Later that morning, around 9:15am ET, the NSCC waived the total excess capital premium charge.

22. *Please provide any written communications between Robinhood and NSCC relating to any capital premium margin call(s). In addition, please provide all communications between Robinhood personnel and NSCC personnel relating to NSCC's determination to waive capital premium charges.*

The week of January 25, 2021, the NSCC only assessed an excess capital premium charge the morning of Thursday, January 28, which was a total of approximately $2.2 billion. Later that morning, around 9:15am ET, the NSCC waived the total excess capital premium charge. Robinhood previously produced documents responsive to this question as part of its March 3, 2021 production in response to the Committee's February 4, 2021 request. For your convenience, those documents are included in a Zip file in the folder "Q22." Note that the NSCC communications do not specifically mention the excess capital premium charge, but we include communications from January 28 stating RHS's deposit requirement for that day, which included the excess capital premium charge.

23. *What was Robinhood's excess net capital at the beginning and end of each business day for the two-week period beginning on January 18, 2021 and ending January 29, 2021?*

Robinhood has maintained excess net capital since its inception and continued to maintain excess net capital during the two-week period beginning on January 18, 2021 and ending January 29, 2021. As stated in our Form X-17A-5 filing, our net capital balance changes day to day, but on December 31, 2020, RHS's net capital was $554.4 million which was $486.8

[18] How Robinhood Makes Money, Robinhood.com (last visited Mar. 5, 2021), https://robinhood.com/us/en/support/articles/how-robinhood-makes-money/.

million in excess of the minimum required net capital $67.6 million,[19] and RHF's net capital was $154.2 million which was $153.9 million in excess of the required net capital of $0.25 million.[20]

24. Please provide all NSCC margin communications or statements for the two-week period beginning on January 18, 2021 and ending January 29, 2021, including any warning communications or statements with respect to potential or actual non-core margin calls. Please provide all daily margin communications or statements during this time period, including those provided in connection with the approximately 5am ET and 9am ET NSCC margin calls.

Robinhood previously produced documents responsive to this question as part of its March 3, 2021 production in response to the Committee's February 4, 2021 request. For your convenience, those documents are included in a Zip file in the folder "Q24."

25. Please provide the total value at risk (VaR) margin amount assessed by the NSCC on each business day the week of January 25, 2021. In addition to the assessment, please provide any VaR margin amount that NSCC initially called for or requested, even if it was subsequently withdrawn, revised, or reduced.

The chart below illustrates the approximate VaR component of the NSCC depository requirements that RHS encountered over the course of the week of January 25, 2021:

[19] Robinhood Securities, LLC, Form X-17A-5, at 14 (Mar. 1, 2021), https://www.sec.gov/Archives/edgar/data/1699855/000169985521000006/fy20rhsshortfinal.pdf.

[20] Robinhood Financial, LLC, Form X-17A-5, at 12 (Feb. 26, 2021), https://www.sec.gov/Archives/edgar/data/1561014/000162828021003429/fy20rhfshortfinal.pdf.

Date	Daily VaR Requirement
January 25, 2021	**Approximately $78 million**
January 26, 2021	**Approximately $204 million**
January 27, 2021	**Approximately $245 million**
January 28, 2021	**Approximately $1.3 billion**
January 29, 2021	**Approximately $144 million**

26. *Please provide the total margin amount assessed by the National Securities Clearing Corporation (NSCC) on each business the week of January 25, 2021. In addition to the assessment, please provide any margin amount that NSCC initially called for or requested, even if it was subsequently withdrawn, revised, or reduced.*

Date	Deposit Requirement Start of Day	Deposit Requirement End of Day
January 25, 2021	**Approximately $125 million**	**Approximately $202 million**
January 26, 2021	**Approximately $291 million**	**Approximately $291 million**
January 27, 2021	**Approximately $282 million**	**Approximately $690 million**
January 28, 2021	**Approximately $3.7 billion (reduced to approximately $1.4 billion**	**Approximately $1.4 billion**
January 29, 2021	**Approximately $354 million**	**Approximately $460 million**

27. Which specific margin call components were reduced on account of Robinhood's trading halt, if any, and by how much in each case? Please provide both the initial NSCC margin amount component called for or requested as well as the final amount assessed and collected for each of the margin components.

As stated in Mr. Tenev's written testimony, between 6:30 and 7:30 am EST, the RHS operations team made the decision to impose trading restrictions on GameStop and other securities. In conversations with NSCC staff early that morning, RHS 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 RHS that it had reduced the excess capital premium charge by more than half. Then, shortly after 9:00 am EST, NSCC informed RHS that the excess capital premium charge had been waived entirely for that day and the net deposit requirement was approximately $1.4 billion, nearly ten times the amount required just days earlier on January 25. RHS 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.

28. As a percentage of actual margin posted, what is your estimate of how much T+1 settlement would have reduced your margin calls during the week of January 25, 2021?

As stated in Mr. Tenev's written testimony, 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 RHS 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 January's wild market activity showed that these requirements, coupled with an unnecessarily long settlement cycle, can have unintended consequences that introduce new risks.

The Depository Trust & Clearing Corporation ("DTCC") recently studied this issue and found that T+1 settlement could reduce the Volatility component of the NSCC margin calculation by 41%.[21] The DTCC's report states, "Over the last year, the Volatility component has accounted for approximately 60% of NSCC's total margin."[22] This would mean a reduction of approximately 25% overall. This report, which was released on February 24, 2021, also found that moving to T+1 would see benefits including: cost savings, reduced market risk and lower margin requirements. Mr. Tenev noted in a February 2, 2021, blog post to the public that the securities industry is overdue for a change, as it has been four years since the industry moved from T+3 to a T+2 settlement period. Mr. Tenev further stated:

> 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

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[21] Depository Trust & Clearing Corp., Advancing Together: Leading the Industry to Accelerated Settlement (Feb. 2021), https://perspectives.dtcc.com/downloads/whitepaper/leading-the-industry-to-accelerated-settlement.

[22] *Id.* at 11.

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.

29. *Please provide all liquidity risk management policies and procedures relating to NSCC margin calls in effect as of January 1, 2021.*

RHS is in regular communication with NSCC and DTCC regarding deposit requirements, and our staff took quick action to work with NSCC and DTCC to address the increased requirements on January 28th. Additionally, the RHS Written Supervisory Procedures contain sections on minimizing margin risk, see Exhibit D at 125-27, and on NSCC/DTCC margin requirements, see *id.* at 223-27.

30. *On January 28, 2021, what time did Robinhood Securities receive any excess/deficiency notice from DTCC/NSCC and the amount of the deficiency?*

As stated in Mr. Tenev's written testimony, at approximately 5:11 a.m. EST on January 28, the NSCC sent RHS an automated notice stating that RHS had a total net deposit requirement of approximately $3 billion.

31. *On January 28, 2021, what time did Robinhood Securities receive any revised excess/deficiency notices from DTCC/NSCC and, if applicable, please state the amount of the revised deficiency?*

As stated in Mr. Tenev's written testimony, RHS received a communication from NSCC shortly after 9:00 am EST on January 28, 2021, stating that the excess capital premium charge had been waived in its entirety and the total net deposit requirement had been revised down to approximately $1.4 billion.

32. *On January 28, 2021, what time did Robinhood impose trading restrictions on meme securities?*

As stated in Mr. Tenev's written testimony, the RHS operations team made the decision to impose trading restrictions on certain meme securities between 6:30 and 7:30 am EST. That same day, we notified the public and our customers via various communications efforts, such as through our blog, of the reasoning behind our decision. We focused on clearly communicating the mechanics of investing and reassured customers of our intent to restore full trading for these securities while continuing to monitor and assess market conditions in the days following January 28.

Ten of the equity symbols, including AMC, GME, NOK, BB, NAKD, KOSS, EXPR, BBBY, CTRM, and TRVG were PCOed by market open, while the remaining three equity symbols, including, SNDL, TR and AAL were PCOed by approximately 10:30am ET. On the options side, AMC, GME, NOK, BB, EXPR and BBBY were PCOed before market open, while TRVG, SNDL, TR and AAL were PCOed before 10:30am ET.

33. Please provide all communications generally disseminated to your customers in connection with the January trading halts.

As stated in Mr. Tenev's written testimony, "[t]hroughout 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."

Robinhood previously produced documents responsive to this question as part of its February 8, 2021 production in response to the Committee's February 4, 2021 request. For your convenience, those documents are included in a Zip file in the folder "Q33."

34. Prior to imposing the January 28, 2021 trading restrictions, what regulatory agencies did Robinhood confer with about the scope and nature of the trading restrictions.

Robinhood was in regular communication with the SEC, FINRA, DTCC and NSCC regarding the market volatility events earlier this year.

35. Please provide all policies and procedures, if any, relating to the imposition of trading halts.

Robinhood's Customer Agreement, which customers must accept to access our platform, communicates to customers our ability to temporarily restrict trading on certain securities during periods of significant volatility. The agreement states that "Robinhood may at any time, in its sole discretion and without prior notice to [customers], prohibit or restrict [customers'] ability to trade securities." Exhibit E at 6; *see also id.* at 11.

Additionally, the SEC released an investor alert on January 30, 2021, which not only warned retail investors of the risk of short-term investing 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]

[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.

We also refer the Committee to excerpts of the Written Supervisory Procedures for RHF, included as Exhibit C. This document describes our Trading Halts policies. Exhibit C at 190–91.

36. *In the last 24 months, has Robinhood engaged in A/B testing relating to use of specific order types? In the last 24 months, has it engaged in A/B testing relating to frequency of trading? If yes, for the last 24 months, please provide all governance documentation discussing or referencing the results of any such A/B testing.*

Please see the response to Question 1 above.

37. *Does Robinhood sell its customers' trading and financial data? If yes, to whom? If yes, how much revenue did Robinhood generate from this activity? If no, does Robinhood monetize its customers' trading and financial data in another way? If yes, please describe and provide total revenues derived from this activity.*

Robinhood does not sell customers' trading and financial data.

38. *In the last 24 months, has Robinhood discussed ways (or additional ways) to monetize its customers' trading and financial data? If yes, please provide all governance documentation discussing ways to monetize its customer data.*

Please see the response to Question 37 above.

39. *During Mr. Tenev's testimony before the House Financial Services Committee on 2/18/21, Mr. Tenev stated "We know that investing is serious and we're investing in all the educational tools and support to help people on their investing journey." Please provide a summary of all educational tools and resources for Robinhood users that are currently available, alongside any information and timeline on educational tools that Robinhood plans to introduce in the future.*

Robinhood is not an investment adviser and does not make investment recommendations, but we are committed to providing quality, digestible educational resources to our customers and the general public about the investment opportunities available to them. That is why RHF offers a library of free, digestible articles about investing on the Robinhood Learn[24] website, which is available to the general public. Through such tools, we hope to provide people with the resources to make informed financial decisions and become long-term investors.

Our goal is to demystify finance as much as possible by avoiding complex industry language and providing useful tools to inform our customers. RHF 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 3.4 million people, and unique visits rose 310% from January through December 2020. RHF provides all customers with free access to premium financial news, including videos and articles from the Wall Street Journal, Bloomberg News,

[24] Learn, Robinhood.com (last accessed Apr. 12, 2021), https://learn.robinhood.com/.

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.

RHF is continually investing in our educational and support tools, such as our recently released "Learn the Basics" modules in the app where customers can take quick courses on the basics of investing before their first trade.[25] Additionally, RHF has taken steps to proactively inform customers and the general public about certain financial products like options through supplementary and expanded education tools. This includes modules on options trading essentials available on Robinhood Learn, which are designed to be intuitive while providing customers with important information about financial concepts and associated risks. RHF is in the process of expanding these Robinhood Learn modules to address a wide variety of situations. RHF also improved its options educational materials and hired a dedicated Options Educations Specialist to support our continued education initiatives. In addition, RHF launched an Options Support Team of licensed financial service professionals, headed by a Series 4 and Series 24-licensed leader, who respond to options-related inquiries and provide high-quality support.

RHF also recently began rolling out a call-back service line dedicated to answering customers' questions about options trading, such as help with an open options position or recent expiration. The call-back service has recently expanded to customers needing assistance for issues related to account security, transfers, and selling.

40. *In the last 24 months, has Robinhood done any study on the psychological and behavioral effects of gamification elements of user behavior on your trading app, including but not limited to confetti animations, user taps of up to 1,000 times to improve the user's waitlist position for Robinhood's cash management feature, and other designs that may be addictive? If yes, please provide all documents discussing the effects that gamification has had on your users. If not, do you have plans to study this issue, and consider curtailing the usage of gamification design elements in your investment products to reduce risky investment behavior by novice retailers?*

At Robinhood, we stand behind our customers taking steps to begin their financial journey and invest for the long term. With commission-free trading, no account minimums, and features like fractional shares, recurring investments, and dividend reinvestments, everyday investors now have the tools at their fingertips to do just that. Our platform is modern, intuitive and accessible—it is designed based on input from our customers regarding how they actually want to invest. This should not be confused with certain traditional hallmarks of "gamification" used in other products, such as badges, leaderboards, points or other forms of competition, which are elements the Robinhood platform does not have. As Mr. Tenev pointed out in his February 18, 2021 testimony:

> Robinhood Financial does not offer rewards or levels to encourage more trading....... We believe that by making finance accessible and familiar, more people will access the

[25] Learn and Grow with Robinhood, Blog, Robinhood.com (Apr. 6, 2021), https://blog.robinhood.com/news/2021/4/6/learn-and-grow-with-robinhood.

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.

Moreover, we note that as announced on March 31, 2021, Robinhood has removed the confetti feature from the app, and we refer the Committee to our recent blog post for additional context around this decision.[26] We also note that Cash Management—a feature that is common in the retail brokerage industry and is designed to allow customers to save and earn a competitive interest rate on uninvested cash in their brokerage accounts by moving, or "sweeping," it to accounts at FDIC-insured banks—is currently available to all of our customers and thus the waitlist feature is no longer available. Otherwise, please see the response to Question 1 above.

41. Does Robinhood believe that existing disclosures used by Robinhood are sufficient? Please provide a summary of disclosures and notices received by retail investors regarding how Robinhood operates and makes money as a commission-free broker?

Consistent with its regulatory obligations under SEC Rule 606,[27] RHS discloses on a quarterly basis its payment for order flow arrangements with market makers. These Rule 606 disclosures are publicly available on Robinhood's website.[28]

In adopting its most recent amendments to Rule 606, the SEC stated that "[t]ransparency has long been a hallmark of the U.S. securities markets, and the Commission continuously strives to ensure that investors are provided with timely and accurate information needed to make informed investment decisions."[29] Robinhood shares these values and seeks to operate in accordance with them. This is why we post our 606 disclosures, along with other disclosures and pertinent information, in our Disclosure Library that is easy to navigate to from our home page or through a search engine. Additionally, we describe our payment for order flow arrangements in layperson's terms on our website to further inform our customers about our revenue sources.[30]

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[26] A New Way to Celebrate with Robinhood, Blog, Robinhood.com (Mar. 31, 2021), https://blog.robinhood.com/news/2021/3/31/a-new-way-to-celebrate-with-robinhood.

[27] 17 C.F.R. § 242.606.

[28] See Robinhood Securities LLC - Held NMS Stocks and Options Order Routing Public Report, 4th Quarter, 2020 (Jan. 25, 2021, 11:07), https://cdn.robinhood.com/assets/robinhood/legal/RHS%20SEC%20Rule%20606a%20and%20607%20Disclosure%20Report%20Q4%202020.pdf (reflecting Q4 2020 Rule 606 Report).

[29] Disclosure of Order Handling Information, Securities and Exchange Commission Final Rule Release, 83 Fed. Reg. 58338, 58339 (Nov. 19, 2018).

[30] How Robinhood Makes Money, Robinhood.com (last visited Mar. 5, 2021), https://robinhood.com/us/en/support/articles/how-robinhood-makes-money/.

42. How many cases, if any, does Robinhood currently have in arbitration? How many has Robinhood had in arbitration in the last 24 months?

When customers sign up for accounts, they must acknowledge their agreement to the terms set forth in the operative customer agreement. The disclosures in RHF's customer agreements regarding arbitration are consistent with RHF's and RHS's regulatory obligations under FINRA Rule 2268, which governs requirements when pre-dispute arbitration agreements are used. In particular, the customer agreements include the language set forth in FINRA Rule 2268(a). Further, as required by FINRA Rule 2268(b)(1), the operative customer agreement sets forth, before the customer indicates acceptance, that it contains a pre-dispute arbitration clause and refers to where that clause is located.

As of April 7, 2021, there are 31 arbitrations pending. Over the last 24 months, there have been 65 total arbitrations.

43. What is total dollar value of arbitration claims that Robinhood has paid out to customers in the last 24 months? What is total dollar value of arbitration claims that Robinhood has paid out to customers in the last 12 months? What is total dollar value of arbitration claims that Robinhood has paid out to customers in the last 2 months?

All cases that have been finally determined by independent arbitrators in FINRA's dispute resolution forum are publicly available on FINRA's website.[31] A FINRA panel issued a $21,970 award for a case that resulted in a final determination in May 2019.[32] There have been only four other awards, each of which was $0.

[31] https://www.finra.org/arbitration-mediation/arbitration-awards-online.

[32] https://www.finra.org/sites/default/files/aao_documents/19-00145.pdf.

Representative Joyce Beatty

1. *In your written testimony, you routinely mention your 13 million customers. How many of these 13 million users are actual customers, meaning they have purchased a product or service directly from Robinhood aside from engaging in commission-free trading?*

We consider everyone who has signed up to use our platform to be our customers, and we remain focused on providing them with an accessible investment experience, including through enhanced educational content. We do not currently disclose the number of customer accounts at any given time that are net funded accounts.

2. *In your written testimony, you cite the disclosures found in the Robinhood user agreement which states "Robinhood may at any time, in its sole discretion and without prior notice to Me, prohibit or restrict My ability to trade securities." Additionally, you also cite the statement which states "I understand that Robinhood may, in its discretion, prohibit or restrict the trading of securities…in any of My accounts." Do you believe the small font disclosures found in the 33-page Robinhood user agreement adequately discloses to the user the risk of trading on your platform?*

   (a) How is the Robinhood user agreement conveyed to the user? Is it mailed, emailed, or displayed on the mobile platform?

   (b) While the disclosure mentioned above conveys the risk of Robinhood's ability to suspend trading in a given security in any individual user's account, it is silent on the risk of Robinhood's ability to suspend the buying or selling of a given security across the 13 million users of the brokerage platform simultaneously as it did in the events in late January. The key difference being that restricting an individual user from purchasing a certain security will not affect the price of any security. However, restricting 13 million users from purchasing a certain security can have a material effect on the price of that security in a market where supply and demand create the price. Are there any disclosures in Robinhood's user agreement that speaks to this risk?

When customers sign up for accounts, they must acknowledge their agreement to the terms set forth in the operative customer agreement. The agreement is also accessible to customers both in our mobile app and on our website.[33]

As stated in Mr. Tenev's written testimony, transparency is a priority at Robinhood, and the ability to restrict trades is disclosed to customers when they sign up with RHF. 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

[33] Robinhood Customer Agreement, Robinhood.com (Dec. 30, 2020), https://cdn.robinhood.com/assets/robinhood/legal/Robinhood%20Customer%20Agreement.pdf.

industry. Moreover, RHS President and COO Jim Swartwout recently published a blog post in which he describes how Robinhood decides to restrict trading and includes some past examples.[34]

Additionally, the SEC released an investor alert on January 30, 2021, which not only warned retail investors of the risk of short-term investing 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."[35]

3. *Do you believe that Robinhood's trading restrictions on certain stocks like Gamestop had a direct effect on the stock's precipitous fall?*

It is difficult to speculate as to the exact cause of the events surrounding the extreme market volatility we witnessed earlier this year. Robinhood's decision to restrict trading in stocks like GameStop, however, was not driven by or intended to impact the price of any security.

Like other brokerage firms that imposed restrictions, Robinhood imposed trading limits on certain stocks in response to historic market volatility and resulting increases in clearinghouse deposit requirements. It is hard to say what kind of impact any particular brokerage firm's actions had on the price of any given stock.

Robinhood is a safety-first company, and we take our regulatory responsibilities to mitigate risk seriously. As the SEC articulated in a January 30, 2021 bulletin, "broker-dealers may reserve the ability to reject or limit customer transactions. This may be done for legal, compliance, or risk management reasons, and is typically discussed in the customer account agreement. In certain circumstances, broker-dealers may determine not to accept orders where a transaction presents certain associated compliance or legal risks."

4. *What is Robinhood's approval rate for allowing users to engage in options trading on your platform? Additionally, please provide your policy and steps necessary for a user to be approved for options trading on your platform.*

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. We refer you to our August 7, 2020 letter to Representatives Sherman, Foster, Casten, and Underwood and Senators Durbin and Duckworth, which details Robinhood's approach to options trading. This letter is included as Exhibit B. Specifically, Robinhood requires customers to disclose, among other things, stated investment experience and knowledge,

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[34] Jim Swartwout, Blog, When and Why We Restrict Trading, Robinhood.engineering (Mar. 23, 2021), https://robinhood.engineering/when-and-why-we-restrict-trading-a4df54e0c839.

[35] *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.

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. Not all customers that request to trade options are approved to do so.

As stated in Mr. Tenev's written testimony, which is attached as Exhibit A, 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.[36]

Our Options Agreement,[37] Options Knowledge Center,[38] and additional information on investing with options, including an explanation of options levels available on Robinhood, are all publicly available on our website.[39]

5. *Throughout the course of the hearing and public statements made in the run up to the hearing, you state that the typical Robinhood investor is a "buy and hold" investor. What is your definition of a "buy and hold investor" and how do you measure the percentage of investors that meet this definition to back up your statement?*

Robinhood supports long-term investing and designs our platform with the safety of our customers in mind. This is one reason why we continue to invest in our educational resources which help our customers learn about markets, financial concepts, and investing generally. We have also introduced innovative new products like fractional shares and recurring investments, which allow customers to start out with small amounts and build a diversified portfolio of exchange-listed stocks and ETFs over the long term.

As stated in Mr. Tenev's written testimony, and contrary to some misleading and inaccurate press reports, uninformed social media posts, and memes, we do not see evidence that the majority of our customers are using Robinhood to trade in a manner that could be characterized as excessive or overly risky. New and younger investors have been generalized—without evidence—to be reckless and uninformed day traders. Most of Robinhood's customers, however, appear to be employing buy and hold strategies. For example, the majority of our customers invest in exchange-listed stocks and ETFs, and they generally buy more stocks than they sell over time. For customers who take advantage of Robinhood's recurring investment

36 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), attached as Exhibit B.

37 https://cdn.robinhood.com/assets/robinhood/legal/Options%20Agreement.pdf.

38 https://robinhood.com/us/en/support/articles/options-knowledge-center/.

39 https://robinhood.com/us/en/support/trading/investing-with-options/.

feature, the average amount invested is about $300 per month. Only about two percent of our customers actually qualify as pattern day traders.[40] A limited percentage of our customers trade options contracts (about 13 percent as of the end of 2020, as noted in our response above), and an even smaller percentage trade complex options (about 2 percent as of the end of 2020, as noted in our response above). As of the end of 2020, less than 3 percent of accounts were margin-enabled. Robinhood does not currently allow customers to trade naked options or over-the-counter bulletin board stocks, and does not allow short selling.[41] We are, and have always been, committed to ensuring customers have access to educational resources that can help them learn the basics of investing and the risks involved, as evidenced through Robinhood Learn, Robinhood Snacks, and our blogs.

[40] As required by FINRA rules, customers marked as pattern day traders must maintain a $25,000 minimum portfolio value (minus any cryptocurrency positions) to continue day trading. For further details, please see https://www.finra.org/investors/learn-to-invest/advanced-investing/day-trading-margin-requirements-know-rules.

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

Representative Brad Sherman

1. *When Robinhood users buy their first stock, digital confetti explodes across their phone screen, a feature which you have promoted in television ads for your app. Were the details of this confetti feature filed with FINRA before being added to the Robinhood app?*

At Robinhood, we stand behind our customers taking steps to begin their financial journey and invest for the long term. With commission-free trading, no account minimums, and features like fractional shares, recurring investments, and dividend reinvestments, everyday investors now have the tools at their fingertips to do just that. Our platform is modern, intuitive and accessible—it is designed based on input from our customers regarding how they actually want to invest. This should not be confused with certain traditional hallmarks of "gamification" used in other products, such as badges, leaderboards, points or other forms of competition, which are elements the Robinhood platform does not have. As Mr. Tenev pointed out in his February 18, 2021 testimony:

> Robinhood Financial does not offer rewards or levels to encourage more trading....... 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.

We note that as announced on March 31, 2021, Robinhood has removed the confetti feature from the app, and we refer the Committee to our recent blog post for additional context around this decision.[42] Robinhood does not publicly disclose the details of matters involving our engagement with our regulators.

2. *The Robinhood app also includes a feature which encourages users to increase their chances of getting access to certain premium products by tapping the phone screen as many times as possible. Was this feature filed with FINRA prior to being added to Robinhood the app?*

We note that Cash Management—a feature that is common in the retail brokerage industry and is designed to allow customers to save and earn a competitive interest rate on uninvested cash in their brokerage accounts by moving, or "sweeping," it to accounts at FDIC-insured banks—is currently available to all of our customers and thus the waitlist feature is no longer available. Robinhood does not publicly disclose the details of matters involving our engagements with our regulators.

3. *During the hearing you testified that "over 50 percent" of Robinhood's revenue is generated by payment for order flow. Just over two months ago, the Securities and Exchange Commission announced that Robinhood had agreed to pay $65 million to settle charges that it had actively mislead customers as to its largest source of revenue. The Commission's announcement also indicated that Robinhood had mislead customers as to "the true costs of*

[42] A New Way to Celebrate with Robinhood, Blog, Robinhood.com (Mar. 31, 2021), https://blog.robinhood.com/news/2021/3/31/a-new-way-to-celebrate-with-robinhood.

choosing to trade with the firm," and had failed to fulfill its obligation to get its customers best execution, depriving customers of "$34.1 million even after taking into account the savings from not paying a commission."

(a) How does the payment for order flow model not create an inherent conflict of interest?

We believe any potential conflicts of interest that may be associated with payment for order flow are substantially mitigated, if not entirely eliminated, because RHS does not make order routing decisions based on the rebates it receives from market makers. RHS has the same payment for order flow arrangements with each of its market maker counterparties, which allows us to compare market makers and try to route orders to the market maker that is most likely to provide the best execution on a given trade. As Jim Swartwout, President and COO of RHS and an industry veteran, stated in a recent blog post:

> That means there's no incentive for us to route [a customer's] order to any specific market maker based on payment we receive. In fact, our routing system incentivizes the market makers we have relationships with to compete for order flow by giving [a given customer] a better price than the one [they] were quoted at the time [their] order was placed. This algorithm prioritizes sending [a customer's] order to a market maker that's likely to give [them] the best execution, based on historical performance.[43]
>
> Payment for order flow and Robinhood's practices are described in more detail below.
>
> *(b) How might Robinhood better disclose the revenue it generates from payment for order flow so that its customers have a clearer understanding of what they are paying in transaction costs for each trade?*

Payment for order flow is not a new practice and has been common in the industry for many years. In fact, the SEC has regulated the practice for nearly three decades, including through mandated public disclosures by broker-dealers and other market participants.[44] When it adopted its initial rule regarding disclosures, the SEC recognized 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 and securities markets."[45] Indeed, the Commission considered and rejected the idea of banning payment for order flow in 1994, finding that the practice could benefit consumers provided there were adequate disclosures. The Commission pointed out that "it is unclear what harm lurks in specialists' or market makers' payment for order flow practices if unpriced orders are subject to a meaningful

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[43] Jim Swartwout, Blog, Demystifying payment for order flow, Robinhood.engineering (Mar. 4, 2021), https://robinhood.engineering/demystifying-payment-for-order-flow-119581544210.

[44] See, e.g., Payment for Order Flow, Securities and Exchange Commission Final Rule Release, 59 Fed. Reg. 55006 (Oct. 27, 1994).

[45] *Id.* at 55007.

opportunity for price improvement, or if other benefits are provided to the customer due to the dealer's ability to use the payments."[46]

Robinhood pioneered commission-free, no minimum trading for retail investors. Our ability to do this was made possible in large part by the practice of payment for order flow. In our experience, routing to market makers that provide payment for order flow has also generally resulted in our customers receiving better prices than they would have received on exchanges. This has created real benefits for retail investors and allowed the industry to evolve to bring more Americans into the fold.

The way that broker-dealers have used payment for order flow has changed over time. As Jim Swartwout, President and COO of RHS and an industry veteran, recently stated on our blog: "For years before Robinhood's founding, brokerages earned commissions *in addition to* earning payment for order flow every time you traded with them. Robinhood changed the industry and pioneered the commission-free model—others then followed."[47] Robinhood helped change how the industry interacts with retail investors, reducing the transaction costs that kept many less affluent investors from entering the market in the first place. By eliminating commissions and forcing the rest of the industry to follow suit, Robinhood has directly and indirectly caused billions of dollars to be returned to the pockets of everyday American investors. Payments from market makers that execute trades help support the now-standard commission-free trading model, which has increased access to the market while generally providing better execution and price improvement on retail trades.

Consistent with its regulatory obligations under SEC Rule 606,[48] RHS discloses on a quarterly basis its payment for order flow arrangements with market makers. These Rule 606 disclosures are publicly available on Robinhood's website.[49]

In adopting its most recent amendments to Rule 606, the SEC stated that "[t]ransparency has long been a hallmark of the U.S. securities markets, and the Commission continuously strives to ensure that investors are provided with timely and accurate information needed to make informed investment decisions."[50] Robinhood shares these values and seeks to operate in accordance with them. This is why we post our 606 disclosures, along with other disclosures and

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[46] *Id.* at 55011.

[47] Jim Swartwout, Blog, Demystifying payment for order flow, Robinhood.engineering (Mar. 4, 2021), *https://robinhood.engineering/demystifying-payment-for-order-flow-119581544210*.

[48] 17 C.F.R. § 242.606.

[49] See Robinhood Securities LLC - Held NMS Stocks and Options Order Routing Public Report, 4th Quarter, 2020 (Jan. 25, 2021, 11:07), https://cdn.robinhood.com/assets/robinhood/legal/RHS%20SEC%20Rule%20606a%20and%20607%20Disclosure%20Report%20Q4%202020.pdf (reflecting Q4 2020 Rule 606 Report).

[50] Disclosure of Order Handling Information, Securities and Exchange Commission Final Rule Release, 83 Fed. Reg. 58338, 58339 (Nov. 19, 2018).

pertinent information, in our Disclosure Library that is easy to navigate to from our home page or through a search engine. Additionally, we describe our payment for order flow arrangements in layperson's terms on our website to further inform our customers about our revenue sources.[51]

[51] How Robinhood Makes Money, Robinhood.com (last visited Mar. 5, 2021), https://robinhood.com/us/en/support/articles/how-robinhood-makes-money/.

Representative Bryan Steil

1. *Would you agree that the trade restrictions imposed by Robinhood were more severe than those imposed by similar retail brokerages?*

We respectfully disagree with any characterization that our restrictions were more severe than those imposed by certain other retail brokerages. Like a number of other brokerage firms that imposed restrictions, Robinhood imposed trading limits on certain stocks in response to historic market volatility and resulting increases in clearinghouse deposit requirements.[52]

What happened in the market that day was reported to be a five sigma event—a one in 3.5 million chance of it occurring. Robinhood is a safety-first company, and we take our regulatory responsibilities to mitigate risk seriously. As the SEC articulated in a January 30, 2021 bulletin, "broker-dealers may reserve the ability to reject or limit customer transactions. This may be done for legal, compliance, or risk management reasons, and is typically discussed in the customer account agreement. In certain circumstances, broker-dealers may determine not to accept orders where a transaction presents certain associated compliance or legal risks." In this instance, Robinhood imposed temporary trading limits on certain stocks to meet our clearinghouse deposit requirements and continue to serve our customers by allowing them to trade in thousands of other stocks.

2. *You have referred to the recent market volatility as a "five sigma event" and a "black swan event." Though market volatility in late January was extreme, other retail brokerages were not forced to take the same drastic measures as Robinhood. Can you explain why Robinhood was uniquely impacted by this event?*

We respectfully disagree with the characterization that Robinhood was uniquely impacted by this event.[53] Robinhood cannot speak for the actions of other brokerage firms, although it is important to note that a number of other retail brokerage firms took the same or similar actions in response to the market volatility leading up to January 28, 2021, including imposing position closing only restrictions on certain securities and options.[54] With respect to our approach, the

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52 Gillian Friedman and Tara Siegel Bernard, *Trading Platforms Are Limiting Trades of GameStop and Other Companies*, N.Y. Times (Jan. 27, 2021), https://www.nytimes.com/2021/01/27/business/gamestop-td-ameritrade-robinhood.html#:~:text=Trading%20platforms%20are%20limiting%20trades%20of%20GameStop%20and%20other%20companies.,-Jan.&text=TD%20Ameritrade%20said%20it%20placed,for%20our%20company%20and%20clients.%E2%80%9D; Will Daniel, *Ameritrade Restricts Some Trading in GameStop, AMC as Trading Platforms Struggle to Keep up with Historic Volume*, Insider (Jan. 27, 2021), https://markets.businessinsider.com/news/stocks/ameritrade-restricts-trading-gamestop-amc-trading-platforms-struggle-historic-volume-2021-1-1030011248; Jay Peters, *E-Trade Confirms It Halted GameStop and AMC Stock, Will Let You Buy Some Friday*, The Verge (Jan. 28, 2021), https://www.theverge.com/2021/1/28/22254863/etrade-gamestop-amc-stock-reddit-wallstreetbets-robinhood.

53 *See id.*

54 *Id.*

amount required by our clearinghouses to cover the settlement period of some securities rose tremendously during the extreme market volatility earlier this year, though we remained in compliance with the net capital requirement the entire time. To put it in perspective, during the last week of January, our clearinghouse-mandated deposit requirements related to equities increased ten-fold. And that is what led us to put temporary buying restrictions in place on a small number of securities on which the clearinghouses had raised their deposit requirements.

It was not because we wanted to stop people from buying these stocks. We did this because the required amount we had to deposit with the clearinghouse was so large—with individual volatile securities accounting for hundreds of millions of dollars in deposit requirements—that we had to take steps to limit buying in those volatile securities to ensure we could comfortably meet our requirements.

Our goal is to enable purchasing for all securities on our platform. But this is a dynamic, volatile market, and we took action to make sure we met our requirements as a broker so we can continue to serve our customers for the long term.

Representative Roger Williams

1. *What internal changes have been made after the GameStop incident that would ensure that users of Robinhood will always be able to purchase securities on your exchange?*

Robinhood prioritizes allowing our customers to trade the securities they want, when they want, and we have taken significant steps to make sure that our customers will continue to have this freedom.

As stated in Mr. Tenev's written testimony, Robinhood raised $3.4 billion in new capital from investors to ensure that we could meet future potential deposit requirements. This allowed us to return to providing our customers with unrestricted access to all securities on our platform and puts us in a better position to meet future deposit requirements during times of significant volatility. In fact, based on the prudent steps we have taken, the amount of regulatory net capital that RHS has now puts us in a strong position to address significant future market volatility.

Our actions go beyond the trading of securities. We have rolled out and announced changes addressing different parts of the Robinhood experience:

- We've updated the app with new informational features so that customers have educational resources at their fingertips, and redesigned how our customers celebrate important milestones on their investing journey;
- We relaunched our educational resource database Robinhood Learn;
- We shared with our customers and the general public how we are expanding and improving our customer support. Live phone support is now available right in the app, we're using automation to make a faster experience that respects our customers' valuable time, and we're doubling our number of full-time registered financial representatives in 2021;
- We also recently announced plans to open new Robinhood offices in New York, Seattle, and Charlotte, which will include additional registered representatives for customer support;
- Mr. Tenev continues to hold regular fireside chats and takes questions directly from customers as part of our commitment of transparency;
- On Robinhood's blog, we regularly publish posts to help customers understand our goals, our strategy, and the complicated inner workings of the finance industry; and
- Our engineering blog has even more detail about the ins and outs of what's happening at Robinhood, including how a trade works.

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These responses and the attached Exhibits and produced files contain sensitive and confidential business information of Robinhood. Disclosure of this information would cause significant harm, economic or otherwise, to Robinhood and its affiliates and/or its directors, officers, employees, and agents, and could constitute a violation of federal and state laws. Accordingly, Robinhood respectfully requests that such information be accorded special protection from disclosure and that it be maintained confidential under all applicable House and Committee rules. Robinhood further requests that Committee staff provide the undersigned with notice and an opportunity to be heard in the event that the Committee determines that it will disclose to a third party any documents from Robinhood's production marked as confidential. Such treatment would be consistent with the respect for sensitive and proprietary business information the Committee has shown in the past.

Neither this letter nor Robinhood's production is intended to, and does not, waive any applicable privilege or other legal basis under which information may not be subject to production. In producing these materials, Robinhood has taken reasonable steps to prevent the disclosure of privileged materials. If it were found that any of the enclosed documents constitutes disclosure of otherwise privileged matters, such disclosure would be inadvertent. By the production of such documents, Robinhood does not intend to waive and has not waived the attorney-client privilege or any other protections.