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Beyond Unprecedented: The Post-Pandemic Economy
Episode 2: "Meme Stock Mania"

[00:00:04] **Joshua Mitts:** What social media has done is accelerate the interaction between market participants. If everyone in the forum says their intent is to squeeze short sellers, there is a question of whether intent to drive a share price in one direction or another can itself be a form of market manipulation.

[00:00:23] **[Music and media clips of journalists saying "unprecedented"]:** The coronavirus pandemic has tanked the global economy with unprecedented speed. The steepness of the decline here is unprecedented. This is a crisis that is unprecedented. It is unprecedented, and we just don't know.

[00:00:37] **Eric Talley:** This is *Beyond Unprecedented: The Post-Pandemic Economy* from Columbia Law School and the Ira M. Millstein Center for Global Markets and Corporate Ownership. I'm Eric Talley, Sulzbacher Professor at Columbia Law School and co-director of the Millstein Center.

[00:00:51] **Kate Waldock:** And I am Kate Waldock, a research fellow at the Millstein Center and a 2L at Columbia Law. What happens when people are stuck at home with too much time on their hands and a Robinhood trading app on their phone? Today on Beyond Unprecedented, we're talking about meme stock trading. That is when individual investors, sometimes known as retail investors, egged on by viral internet memes, drive up the share price of companies like GameStop. We'll be joined by Columbia Law Professor Josh Mitts, who studies the intersection of capital markets, data, and social media. But first, Eric, we're both economists. So that certainly means you've done tons of stock picking and day trading in your lifetime, right?

[00:01:37] **Talley:** Well, yes and no. As you well know, Kate, lesson number one that we teach to our students, which in principle, I guess we should believe, is the magic of broad diversification: that if you really want to make systematic money in the stock market, don't consider yourself a genius, because there aren't any real geniuses out there. And either the really, really hot stock picks are illegal, or they're not going to be sent to you anyway. So really what you should do is just find a really highly diversified mutual fund or an exchange traded fund. Invest your money in that, and set it and forget it, and just check in every once in a while. But I must confess, I even succumbed, myself, to individual stock trading and stock picking.

[00:02:22] **Waldock:** Did you do it on Robinhood?

[00:02:24] **Talley:** I didn't do it on Robinhood, which I guess was my saving grace because had I, I'm almost certain I would have fallen prey to the meme stock craze. But I was still trying to pick stocks based on, oh, do their financials look good or something like that. And I came across a stock like GameStop, which was rocketing through the air, and then I looked at its financials, and they looked absolutely terrible. So I thought to myself, "OK, this is going to die a very cruel death. This is a bubble. I should stay away from it." And it just kept going up and up and up and up. What about you?

Did you take your student loans [laughter] and ratchet them into a leveraged investment in individual stocks?

[00:03:04] **Waldock:** I did take a little bit of my savings and put them in the stock market in, like, March. But no, I didn't really pick individual stocks. However, back in the day when I was 20 years old—this is in the midst of the last crisis—I did pick an individual stock called Lehman Brothers, and I used all of my summer money, and I poured into Lehman. I lost it all in a matter of hours and never picked an individual stock ever again.

[00:03:30] **Talley:** So we have sat this meme stock trend out, but we've both been witnessing it with some degree of amazement from afar. This is a crop of investors, many of whom are brand new to individual stock picking, certainly, who have come in with a vengeance and have taken a position that I think a lot of people didn't think was possible for retail investors to have effectively coordinated in substantially affecting the stock price of individual companies. They are a new crop of investors. They are younger, there are more women than in traditional groups, and they seem not to be as queasy about the volatility that is inherent in picking individual stocks.

[00:04:15] **Waldock:** Yeah, and there's a lot of them, right? Apparently there are something like 6 million new brokerage accounts created in 2020, which I think was double, roughly, the number of new brokerage accounts the year before. So they were out in full force during the pandemic.

[00:04:28] **Talley:** Gosh, I wonder whether there's someone who could help shed some light on this trend?

[00:04:32] **Waldock:** Well, I think a great person might be Columbia Law Professor Josh Mitts. Josh uses data science for his research on corporate and securities law. His primary focus is on informed trading in capital markets and related topics in law and finance. He's a fellow in the Law and Economics of Capital Markets program and a member of the Center for Financial and Business Analytics at Columbia University's Data Science

Institute. In addition to doing some of the most cutting-edge research in law and finance, Josh can predict the future. His 2019 paper basically foresaw the meme trading phenomenon before anyone else did. Welcome to the show, Josh.

[00:05:26] **Mitts:** Thank you. It's great to be here.

[00:05:28] **Talley:** Kate and I have been talking about GameStop, largely because we're sort of confused about the phenomenon. But this is a traditional, I guess you would almost call it a brick and mortar company that got its origins selling physical game discs to teenagers and preteens across the country. That was a business model that was already going into decline well before the pandemic struck. And the fact that GameStop, a company whose business was just not really future proofed, was suddenly in the middle of the pandemic going into the stratosphere of stock price. What was going on with that? How did that happen?

[00:06:07] **Mitts:** It's a really, I think, fascinating story. For many people, it begins at the end of January. But the story actually begins earlier in the month of January of 2021, maybe even the end of December, when large hedge funds started amassing short positions, which are really just negative bets on GameStop stock. So GameStop had become a target for investors and hedge fund managers who make money by betting that stock prices will fall, many of them advancing this thesis that this brick and mortar store was headed to zero, that this was not an investment worth making. And, ironically, in this strange sequence of events, the online community of Reddit users, Robinhood traders basically came together and said, we disagree. We disagree with this not because we necessarily think that GameStop has a bright future, but we disagree with the attempts by hedge funds and elite Wall Street institutions to drive down the price of GameStop. And as a result, they said, we are going to band together and buy shares of GameStop and push the price up and thereby inflict losses on those very negative voices which had amassed these large positions betting against GameStop's future.

[00:07:42] **Talley:** So this is really like sticking it to the man. But in this case, the man was the short sellers.

[00:07:47] **Mitts:** I think that's right. So what you had was this uprising that began in response. There was a moment there in early to mid-January where a very well known hedge fund, Citron Capital, had put out a report. Citron was, at the time, one of the most well known short sellers, which are sometimes called activist short sellers. Activist short sellers are those who not only make a negative bet on a company's stock price but put out reasons for that bet—put out a thesis arguing why a company's stock is overvalued. That's an area that I have been studying now for the last couple of years, and Citron is one of the big players in that space—was one of the big players in that space. They put out that report saying that GameStop was a $20 stock. That incited a mass revolt, if you will, among the Reddit users and Robinhood traders who ended up buying the stock to prove Citron wrong.

[00:08:50] **Talley:** We've talked a lot about short selling, it may be worth just giving us a brief overview of what you do when you short sell a stock. It's easy to understand what you do when you buy a stock hoping it's going to go up. But how do you make money on a stock when you know it's going to go down?

[00:09:07] **Mitts:** It can sound mysterious at first glance, but it's really quite simple. If you want to make money expecting that a stock price is going to go down, the first thing you want to do is borrow those shares of stock. So when you call up your broker and you say, "I want to place a short sale on a stock," what your broker actually does is go to the large institutions, generally, who hold shares of that company's stock; say, "We want to borrow these shares from you temporarily." And so what happens is the short seller borrows the stock, sells it immediately, gets some cash as a result, waits for the price to fall, and then goes out into the market and buys those shares, hopefully at a lower price than what they received. You then give back the shares that you repurchased back to the lender who lent them to you. So the key to short selling is the stock lending market, which is this market that exists in parallel to ordinary securities markets. And it makes it possible for people to place these kinds of negative bets by selling first and buying later.

[00:10:16] **Talley:** And so the stock gets borrowed from a big institutional holder that might actually be a broker who holds, like, Kate's stock. They might actually lend out 200 shares of Kate's GameStop stock to this short seller who's then going to pay it back. Does Kate even know that that's happened?

[00:10:36] **Mitts:** This was a big point that came out even during the GameStop episode that ordinary investors who had opened brokerage accounts, even with brokers like Robinhood who were catering to that market, were often unaware that they had, in effect, allowed their broker to lend out those shares. It's as simple as opening what's called a margin account, which is the default account type for Robinhood users. It basically says to your broker, you're not required to hold the shares of stock that I've purchased. So long as I have the ability to sell my stock, then the broker is generally free to lend it out in the meantime. This, in turn, led many of those participants in the Reddit- and Robinhood-fueled GameStop trading mania to call up their brokers and say, change my account type, don't lend out my shares to short sellers, give me what's called a cash account where those shares have to stay in my possession so that short sellers can't borrow them to drive the price down.

[00:11:46] **Talley:** So is there a sense in which these online trading platforms like Robinhood were actually making money on the short side of the deal as well because they were helping, sometimes, facilitate the lending of shares to the short sellers for which, I guess, they would get interest payments? Is that right?

[00:12:04] **Mitts:** There's a number of moving parts, all of which add up to the way in which fintech platforms and brokers more generally, like Robinhood, were profiting from the GameStop episode. And all of these factors collectively fueled the kind of popular rebellion against Wall Street that we saw at the end of January. So one was absolutely the role that brokers play in facilitating these sorts of transactions. Actually, their brokers are collecting payments along the way. That's a big source of revenue for Robinhood and for other brokers who offer commission-free brokerage services. But Wall Street and the Wall Street machine, they were profiting off of this contest of wills between forum Reddit users and short sellers. They were profiting in a number of ways. One was simply by taking advantage of all of this trading volume and more or less playing both sides of the game, Citadel in particular. What they basically were doing was just collecting massive amounts of profits from standing as the counterparty to all of these transactions. And this, in many ways, I think, fueled the sense that Robinhood, the fintech industry, and Wall Street formed this unholy alliance, if you will, against the average investor who simply wanted to be a part of this optimistic, bullish trend in buying the shares of GameStop. Wall Street was very happy that this was happening. Regardless of where GameStop's price went at the end of the day, they were making money from the short sellers on the lending fees, and they're making money on the trading side from Robinhood users.

[00:13:58] Waldock: So it seems like there's a lot of different players, right? We have Redditors and Robinhood traders and the original short sellers and then these algorithmic funds. Along the course of this bubble, who is making money and who's losing money?

[00:14:10] **Mitts:** So I think it's important here to discuss a little bit the SEC's recent report on the GameStop episode. Most notably, the SEC concluded that in their view some of the wide-spread media narratives about what happened in this case were less supported by the data, maybe, than it seems. So one of those narratives concerned what's called a short squeeze. A short squeeze is the idea that short sellers were being forced to close their positions. Now remember, we said a short seller would borrow the stock, sells it, and then waits for the price to go down. But it could be the case that the price goes up, and the more that price goes up, the greater the losses that the short seller will suffer. So that ends up putting a lot of pressure on short sellers, and their brokers start getting concerned that they're just not going to have enough money to pay for that more expensive stock. And so this puts short sellers in a situation where they might have to buy the stock as the price is going up, a situation that they don't want to find themselves in. This is known as a short squeeze. And one of the big contentions was that what happened to GameStop short sellers was that they were forced to buy stock at ever increasing prices. Those purchases are then like pouring fuel on the flames because they in turn end up driving the price of the stock up even more because as you buy more and more stock, that ends up signaling to the market that someone is out there buying the stock, and so the price should go up. The SEC looked at that particular question and felt that the data was less clear than maybe it had seemed. Personally, I and others have looked at this, and we have some doubts and some questions about the SEC's analysis. One, just to give one example, when concluding that there seemed to not be much evidence of a short squeeze, the SEC began their measurement of who had a short position in GameStop on December 24. This is in footnote 78 of their report for those who are having trouble falling asleep at night and want to look it up.

[00:16:25] [Laughter]

[00:16:26] **Mitts:** And December 24, 2020, was a pretty late point in time to begin to measure the accumulation of a short position in GameStop. They actually peaked around December. The SEC seems to have begun its measurement after all the action took place, and they made a, sort of, sweeping conclusion that it didn't look like short sellers were squeezed. It's possible that they basically mismeasured and forgot, if you will, the vast majority of short sellers which had accumulated their positions prior to December 24. So the possibility of a short squeeze is one that we, I think, need more study and more investigation of because we need to look further back and try and get a better sense for who might have been building up that position. If short sellers were in fact forced to close their position, to your question, Kate, who's winning and who's losing? They're going to be losing a lot of money because they will have opened those short positions at a much lower price. The SEC seemed to doubt how much these losses were driven by short sellers closing their positions as opposed to just optimistic, bullish ordinary investors. And they seem to think that was a much larger driver of what happened. We're going to have to, I think, look more carefully at the data to see who was really winning and who was really losing over this time.

[00:17:49] **Talley:** That's an interesting point, Josh. If this were a genuine short squeeze, contrary to what the SEC concluded, why does that matter? What's the relevance of that from a policy or a legal perspective?

[00:18:02] **Mitts:** The conclusion that there was no evidence of a short squeeze led the SEC to focus on other institutional reforms that have nothing to do with short selling. The implication of the SEC's conclusion is that perhaps we have animal spirits out there. Perhaps we have excessive exuberance, but there's just not much that can be done about that. If in fact the evidence shows that there was a short squeeze, perhaps that means that the SEC needs to revisit some of the questions we've been thinking about for decades now concerning short selling. This is a situation where it appears that a powerful constraint on short selling emerged that inflicted tremendous losses on short sellers. And that's been a big area of research of mine: good short selling, bad short selling, what should we do about short selling in the markets. And I think what's, to me, most troubling about the SEC's conclusion is that they walked away saying, basically, nothing needs to be done with short selling, that that's not the problem. And I think the data suggest otherwise. And I think more broadly, as far as what the SEC could be doing is asking some of the hard questions about how we encourage and regulate healthy short selling in stocks like these.

[00:19:22] **Waldock:** So switching gears a little bit, for these meme stocks, assuming that for at least a certain amount of time, their prices were overinflated or out of line for a period. How did managers, CEOs benefit from these trends?

[00:19:39] **Mitts:** AMC, for example, issued stock—that is, they sold shares—at a valuation which many thought was very high relative to the true value, if you will, of the company. And that was fueled by elements of this meme-stock-type trading. And the company's view, as I best understand it, was we have a duty to our shareholders if we don't know why this is happening to finance our projects at the best possible price. And if the stock price is very high, that means we can finance our projects at a much lower cost to the rest of our shareholders. But I think that was definitely the exception and not the rule. I think by and large, a lot of the companies who have been the targets of meme stock trading felt that it was incredibly risky to do that and in fact added disclosures to the effect that their share price volatility may be driven by irrational trading, in a sense, trading that's not related to the fundamental value of the firm. Now, that's not to say that executives don't benefit from this sort of thing. Executive compensation by design is generally structured to encourage executives to maximize the value of the company's stock price. And what that means is that executives are likely to have payoffs—financial payoffs—which increase as the share price gets higher. I think it was troubling for many of those corporate executives that they couldn't really explain why their share price had gotten so high. And, in fact, one conclusion that the SEC made in their report, which I did agree with, is that episodes like these call into question some of the classical assumptions of market efficiency that we've made.

[00:21:27] **Talley:** So I want to bring the meme stock traders back into the picture here and to motivate the discussion about the legality of what they did in the first instance with GameStop. I want you to imagine that the three of us are gazillionaires, and we've decided that there's some company that we just want to conspire to drive up the price in. So we get together in a smoke-filled room, and we secretly agree that we're going to start buying and buying and buying shares, and then we're going to go out and make all these statements about how fantastic the company is knowing that those actions and statements are going to drive up the price. We wait until it hits a peak, and then we sell everything, pocketing the difference. We've almost certainly just committed some version of securities fraud. And if we've used our phones in coordinating, we've probably also committed some form of wire fraud. Why is the existence of hundreds or thousands of Redditors any different?

[00:22:26] **Mitts:** One of the common refrains you'll hear from people who have to make the decision, whether to prosecute cases like those, is the question of intent. The law does not distinguish between three people and 300 people. The law refers only to actions taken which are performed with the intent of inducing others to trade. Now the problem, as I said, prosecutors and enforcement lawyers will say, is how do you prove that that was the intent? If everyone in the forum says the intent is to drive the price up to squeeze short sellers, that seems to satisfy the text of the statute. And yet I still think that prosecutors will hesitate, to be perfectly candid with you. And I think one reason they'll hesitate is that—and this is an open question right now, actually, in a case before the 10th Circuit—there is a question of whether declared and transparent intent to drive a share price in one direction or another can itself be a form of market manipulation. I'm referring here to the Overstock case in which the CEO declared that he was issuing a digital dividend with the intent of driving up the share price, of squeezing short sellers. The basic problem that prosecutors will have is that they're used to prosecuting schemes where things happen in secret. And there's this, sort of, overt criminality in that we know when we're doing something wrong. Here, arguably, there was tremendous passion and fervor, almost religious zeal, to push back against these short sellers. And it would be, I think, a very interesting and challenging case for the courts because it really stretches the notion of fraud, and manipulation as a form of fraud, far beyond the traditional, historical way that fraud cases have been conceived and prosecuted.

[00:24:22] **Talley:** What contributory factor did the pandemic and our isolation in our person-caves have on the meme stock craze, do you think?

[00:24:31] **Mitts:** Well, I think for a lot of economists, this is the most natural explanation because from a rational economic theory standpoint, this is all a waste of time in the sense that you're not going to be any smarter than the most sophisticated hedge funds out there, and so you're expected to lose at the beginning and the middle and the end of the day—at all points in time, you expect to lose. But of course, people go to casinos, where they are also expected to lose. And so there is a sense in which this is, maybe, the kind of gambling that appealed to people when they weren't able to gamble the way that they, perhaps, had originally intended or had prior to the pandemic. It certainly, I think, played a role in sensitizing ordinary investors to being at home and spending an inordinate amount of time with their devices, which is, certainly, a precondition to trading many, many, many, many times a day: You have to be comfortable with the technology. I think the pandemic got people more fluent and comfortable with their devices, and apps like these certainly fueled the flame.

[00:25:43] **Talley:** And so on a related point, does the meme stock craze happen without a concurrent explosion in social media outlets?

[00:25:54] **Mitts:** What social media has done is accelerate the interaction between market participants. It's facilitated the emergence of fads, if you will, or herd stampedes in one direction or another. I had written about this on the short side, that this is what activist short sellers had perfected; that was in 2018 and 2019. Just two years later, the exact same phenomenon appeared on the long side: That is, people started buying as part of these herds. And I think it's really the same effect of technology in getting people to stampede one way or the other.

[00:26:28] **Waldock:** Crystal ball question: Are meme stocks going to die out, or are they here to stay?

[00:26:33] **Mitts:** Well this, I think, goes back to the question of social media and the way in which the ability to instantly communicate your views to something can encourage and facilitate the emergence of a quick consensus, a kind of flash consensus, which can then take on a snowball, can pick up momentum, and before you know it, it's an avalanche, and you've got little pictures selling for a lot of money—for example, NFTs, nonfungible tokens. And so you've got this phenomenon. I think it's a little bit outside my area of expertise to speculate on what at a macro level is driving this. Many have said that it's the product of the Federal Reserve's quantitative easing and interest rate policy, which has flooded the market with so much money that people are looking for returns, and they're looking for them all over the place. I don't know how to evaluate that argument—if that's compelling or not—but I would suggest that it may have just as much to do with technology creating new forms of community that a lot of what people are getting out of these training episodes is they're getting a kind of consumption. That is, they're benefiting in ways that are hard for us right now to understand, but that are very real. As technology has isolated us, and politics divides us, and so forth, maybe these sorts of trading experiences are a way to, in effect, bring people together. That people are looking for these ad hoc, spontaneous moments to be a part of something. I think when folks talk about crypto, that's a rationale that they emphasize a lot: that they want to be a part of the movement. And this movement rationale is something, I think, that economists are just now beginning to wrap their minds around because what it implies is that there's a payoff to participating that's more than the financial gains to this investment. And I think that's really a broader notion of investing that's not just about the dividends and the cash flows that I get from holding this asset, but from these other community-centric, psychological, and so forth, payoffs that come from being a part of those who are invested in this movement.

[00:28:48] **Waldock:** Aw. I was not expecting to end an episode on short selling and asset price bubbles on such a poignant note. It was very sad and sweet.

[00:28:58] **Talley:** Well, with that having been said, I have to say I'm going to be on the lookout for my Josh Mitts NFT, if I can buy it. I promise not to short it.

[00:29:08] [Laughter]

[00:29:09] But this was terrifically helpful and incredibly informative.

[00:29:16] **Waldock:** Josh, thank you so much for joining us.

[00:29:17] **Mitts:** Thanks to you both, Eric and Kate, for having me. Really enjoyed the discussion.

[00:29:23] **Talley:** Our guest today has been Josh Mitts, professor of law at Columbia Law School.

[00:29:32] **Waldock:** *Beyond Unprecedented* is brought to you by Columbia Law School and the Ira M. Millstein Center for Global Markets and Corporate Ownership. This podcast is produced by the Office of Communications, Marketing, and Public Affairs at Columbia Law School. Our executive producer is Michael Patullo. Julie Godsoe, Nancy Goldfarb, and Cary Midland are producers. Editing and engineering by Jake Rosati. Writing by Martha Moore. Production coordination by Zoe Attridge. Special thanks to Erica Mitnick Klein and Molly Calkins at the Millstein Center. If you like what you hear, please leave us a review on your podcast platform. The more reviews we have, the more people will listen. If you're interested in learning more about law, the economy, and society, visit us at law.columbia.edu or follow us on Facebook, Twitter, and Instagram. Thanks so much for listening.