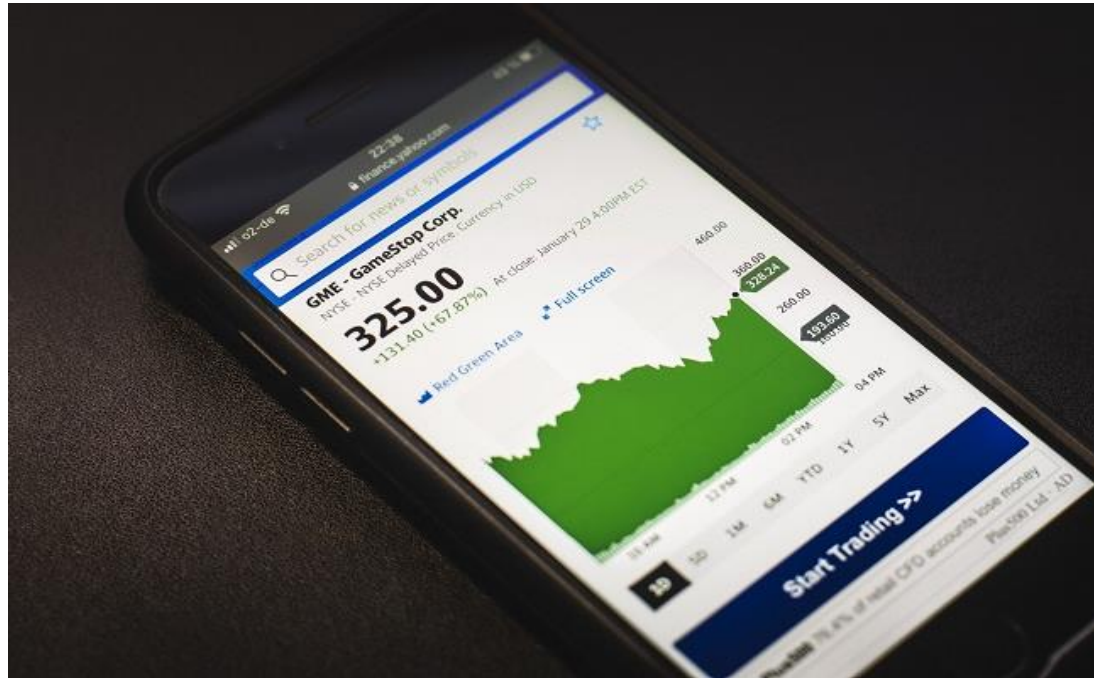




Short selling and meme stocks

The GameStop and Archegos sagas, what they mean for regulation and the latest research on short selling bans.



What is short selling?

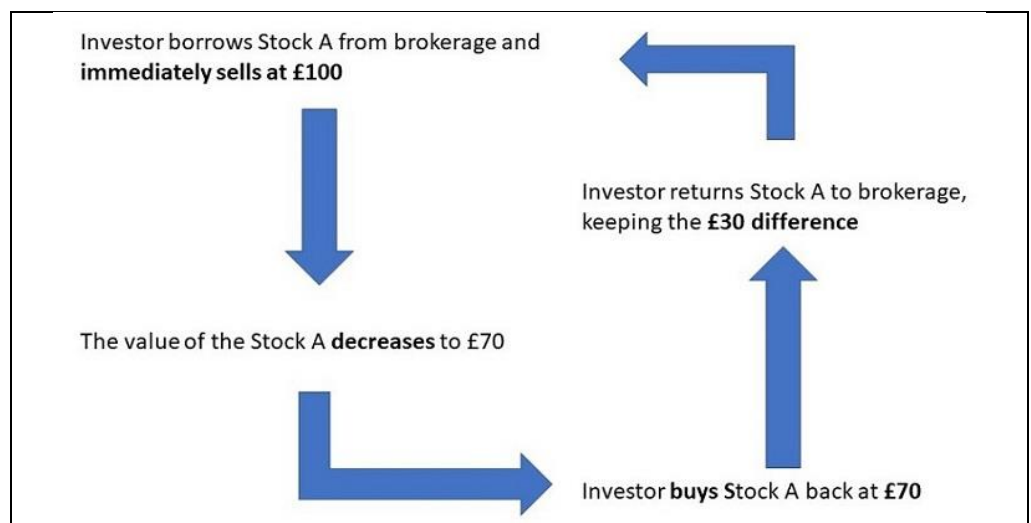
Short selling is a trading tactic used by investors to profit from stocks that are likely to decline in value:

- An investor borrows some stocks from a brokerage and immediately sells them on.
- The value of the stock decreases (they hope).
- The investor buys the stock back at the current, cheaper, market value.
- They then return the stocks to the brokerage, keeping the difference in price (their profits.)

Short selling works on the premise that a stock is currently overpriced and is likely to fall in value at some point in the near future. Of course, there is always the risk that the stock may increase in price, meaning the investor will have to buy them back at a loss (because the stocks are only borrowed from the brokerage and must be returned.)

What is a meme stock?

A "meme stock" is a stock which has gone viral online, i.e. it has been widely discussed via social media platforms and online forums, drawing attention from retail investors.



Why should we care about short selling and the meme stock phenomenon?

GameStop

One example of a so-called meme stock and the risks of short selling in action is the recent GameStop price hike. A meme stock is a stock which has seen a considerable increase in volume, not due to how the company has been performing, but due to it receiving lots of publicity online. Meme stocks often quickly become overvalued, drastically increasing in price over a short period.

GameStop began receiving increased attention from retail investors after it was revealed on a Reddit forum that hedge funds were shorting the stock. It began as an opportunity for retail investors to profit by shorting the stock too, but soon escalated into an online campaign to beat large, multi-billion dollar hedge funds at their own game by hiking the GameStop share prices higher and higher, so that they were forced to sell at a loss.

Archegos Capital Management

Archegos Capital Management (Archegos) was a family-run investment office owned by Bill Hwang. Hwang had been a successful trader for many years until he was accused of insider trading by the US authorities and pleaded guilty to wire fraud in 2012 on behalf of his hedge fund, Tiger Asia. Major banks including Credit Suisse and Nomura were still keen to lend

him money though, because Archegos was so lucrative for them.

Archegos ran into trouble when it became over-reliant on leverage (i.e. borrowed assets) to chase higher returns in the market. Its lenders began to get nervous because Hwang was losing too much money through his leveraged investments, so they issued a margin call. The total losses are estimated to be around US\$20bn.

Multiple lenders issued margin calls with Archegos simultaneously, which is what triggered its collapse.


How did Archegos' collapse affect others in the wider market?

Credit Suisse Group AG, one of Hwang's biggest lenders, lost US\$4.7bn and Nomura Holdings lost approximately US\$2bn due to the collapse of Archegos. Morgan Stanley is understood to have lost around US\$911m. Hwang's family office held tens of billions of dollars in stocks and so margin-call selling drove stock prices lower and lower creating a downward spiral of low prices, big losses and more margin calls.

Shares of Archegos, ViacomCBSm, Discovery Communications and others (the media stocks Archegos had leveraged) temporarily crashed during the unwinding process.

Risk management lessons from Archegos

One of the key issues in the case of Archegos was that because it was registered as a family office, it wasn't subject to the same reporting requirements as a hedge fund and therefore did not need to publicly disclose its position on a quarterly basis. As a result, none of its lenders were aware Hwang was using credit from up to eight different banks to invest in just a handful of stocks.



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Brokerages should be prepared for scrutiny around the nature of trading apps

What does all this mean for regulation and compliance?

Most of the potential regulatory developments in this area appear to be aimed at US markets (probably because the US is one of the most liberal countries in its approach to short selling regulation), so financial institutions should expect to face scrutiny from the US House Financial Services and the US Senate Banking Committee.

Regulatory analysis provided by law firm Hogan Lovells via [Lexology.com](https://www.lexology.com) suggests hedge funds are likely to be required to make additional disclosures in relation to their short-selling positions. There will also probably be expanded scope in this area on the 13F disclosure form that investment management firms are required to submit to the SEC (listing all assets currently under their management.)

Brokerages should also be prepared for scrutiny around the nature of trading apps, with concerns being raised about the gamification of trading and the ease with which trades can be placed.

Shorter settlement cycles

All market makers - including banks - should expect the settlement cycle to be shortened as part of these regulatory developments. Currently, it takes two days once a trade has been placed for those stocks to be transferred to the new owner/borrower. Shortening this cycle would help to reduce the credit risk generated during that period. Retail traders might also see limitations put on how many trades they can make on a certain stock in a certain time period.

There is also likely to be some legal fallout from the Archegos scandal as further details from the investigation emerge. "Firms should consider the risk of being called to testify before a hostile congressional panel," say lawyers at Hogan Lovells. "Before the letter from Congress comes in, thinking about who should testify and preparing that person to provide written and oral testimony to Congress, will be critical."

US regulation for short selling

Several hearings have been held by the House Financial Services Committee and the Senate Banking Committee to discuss the Gamestop and Archegos events and the potential regulatory response. Areas under discussion include:



- 13F disclosures
- family office exemptions
- gamification of trading apps
- options trading for retail traders
- payment for order flow
- trading ahead.

The SEC is reviewing its rules around short-selling, securities lending (which underpins the short selling market) and the nature of retail brokerage platforms. It will also look at reporting rules for total return equity swaps, which helped fuel the collapse of Archegos. The regulator is due to publish its draft rules and requests for comment on the areas listed above, soon.

Should short selling be banned?

The past 12-18 months have brought short selling and its impacts on the wider markets into focus. During times of economic stress, some jurisdictions choose to place a temporary ban on short selling to try to prevent a market crash.

Between 23rd and 28th February 2020, as the extent of the COVID-19 pandemic began to unfold, US\$6tn was wiped from global markets, with sell-offs exceeding those seen during the financial crisis of 2008.

Short sellers can earn huge profits when share prices drop rapidly, but this can be damaging to the wider market, triggering panic selling. In March 2020, Governor of

the Bank of England, Andrew Bailey warned against the trading method, saying in an interview with the BBC: "Anybody who says, 'I can make a load of money by shorting' which might not be frankly in the interest of the economy, the interest of the people, just stop doing what you're doing."


Which countries banned short selling in 2020?

EU regulations state that financial regulators can suspend short selling when the price of one or more securities falls by a set percentage. In 2020, Italy, Spain, Belgium, France, Greece and Austria all imposed temporary short selling bans on certain shares.

Thailand and the US chose a different tack, making short selling more expensive for traders, rather than imposing a blanket ban.

Research on short selling bans

Evidence around the benefits of banning short selling during a crisis is mixed. There is considerable research into the potential pros and cons of short selling bans, much of which is summarised in NERA Consulting's white paper, [*Short Selling: To Ban or Not to Ban?*](#), which was published pre-Archegos/GameStop, but post COVID-19. "The efficacy of historical short-selling bans in stemming market declines has...been called into question," says the report. "For example, Battalio et. al. (2012) examined the US's 2008 short-selling bans and found that they had little impact on stock prices. Similarly, Beber and Pagano (2013) examined data for approximately 17,000 stocks in 30 countries over the 2008–2009 period and concluded that short-selling bans were 'at best neutral' in terms of



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their effects on stock prices.”

Xi Jiang, an assistant professor of accounting at Duke University's Fuqua School of Business in Hong Kong has been researching the impact of short selling bans. In March 2021 he co-published a model and analysis on the topic:

[Manipulation, Panic Runs and the Short Selling Ban](#). Jiang says critics of a ban

argue that “short sellers are considered to be the investigative journalists of the capital markets...They are exposing failing business models, bad management and excessive leverage...On the other hand, there are proponents of the short selling ban saying [it] is necessary, because short sellers generate rumours, create fear and panic and [it] brings down good firms.”

In the study, Jiang argues that both sides have merit and can be incorporated into his model which provides an indication of when a ban should be considered by

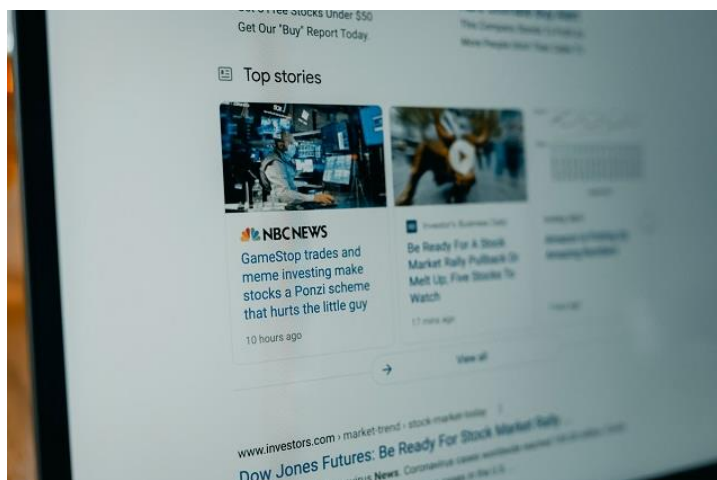
regulators and at what point this is most effective for preventing a market crash.

Distinguishing between informed and uninformed short selling

Jiang explains that it is important to make a distinction between informed short selling, i.e. trades made by an investor who has good reason to believe a stock is overpriced and will soon drop in value; and uninformed short selling, i.e., panic and rumour-induced sell offs. Informed short selling provides important insight on the market and can actually impact a company's decision to go ahead with a major deal or merger. But telling the difference between these two scenarios isn't always straightforward.

The feedback effect

Jiang gives the example of Coca-Cola's plan to buy Quaker Oats in 2000. The stock market reacted negatively to the announcement of the acquisition; the price of Coca-Cola stocks declined because people were selling, so Coca-Cola pulled out of the deal. This is known as the “feedback effect.” Coca-Cola evidently believed there was a legitimate reason why the market felt the deal was a bad idea and trusted its feedback. In this type of scenario, a blanket ban on short selling would be bad for the markets. But, argues Jiang, if the feedback effect is combined with another factor known as the “coordination effect,” a different approach may be beneficial.



The coordination effect

An example of the coordination effect in action is a bank run. If everyone is taking their money out of a bank because they are worried it may collapse, this then causes panic and increases the likelihood of bank collapse anyway. If there is potential for the coordination effect to come into play during a short-selling event, uninformed speculators can profit from short selling. "In this case, we show that a blanket ban on short selling is beneficial," says Jiang.

In other words, short selling bans are most effective when the coordination effect is strong and the probability of informed trading is low and uncertainty is high, such as during the global financial crisis and the COVID-19 pandemic.

The SEC on short selling

The US Securities and Exchange Commission has said it supports a ban on short selling in the event of a crisis. It temporarily banned short sales of most stocks in 2008. Former SEC chair Jay Clayton said in March 2020 that "we shouldn't ban short selling," and instead pointed to the alternative uptick rule which was implemented in 2010.

What is the alternative uptick rule?

The alternative uptick rule was put in place to allow investors to exit any long positions before short selling happens due to a fall in share prices. The rule is triggered when a share price falls by at least 10% in one day. "The rule is designed to preserve investor confidence and promote market efficiency, recognising short selling can potentially have both a beneficial and a harmful impact on the market," said then-SEC chair Mary Schapiro in 2010. "It is important for the Commission and the markets to have in place a measure that creates certainty

about how trading restrictions will operate during periods of stress and volatility."

The SEC didn't deem it necessary to put a blanket ban on short selling during market volatility triggered by the COVID-19 pandemic. Thanks to lessons learned from the 2008 financial crisis, it was felt enough liquidity could be provided by the Federal Reserve to prevent a run on the banks.

What are the alternatives to banning short selling?

One way regulators choose to minimise short selling in a crisis is to make it more expensive. The thinking behind this is that most uninformed short selling tends to happen via retail investors, who make less money than larger, more-informed investors such as hedge funds. Making it more expensive therefore tends to discourage uninformed short sellers more than informed ones. However, this does require the ability to determine how much profit short sellers are likely to make in order to ensure the cost of selling is greater than the profits of retail investors and less than the profits of hedge funds. This also has ethical connotations, because it means the system works in favour of larger investors and against smaller retail investors.

Risk management lessons from GameStop

The ramifications of the GameStop incident are still unfolding as Robinhood, the brokerage app used by retail investors to buy and sell GameStop shares, faces class action litigation and a US\$70m fine from US regulators.

What did Robinhood do wrong?

Robinhood was forced to limit sales of GameStop shares because it could not meet capital requirements from the NSCC (National Securities Clearing Corporation) as the share price shot up. The NSCC reportedly contacted Robinhood in the middle of the night asking for more than US\$3bn, forcing the brokerage to restrict sales of GameStop.

Jim Swartwout, chief operating officer of Robinhood Securities said he was woken on 28th January 2021 at 5.55am New York time by the firm's treasury manager who informed him of the clearing house's requirements. "We had expected to have a higher than usual requirement," said Stalwart, "but what we received from the system-generated NSCC invoice was a US\$1.4bn value-at-risk calculation - tenfold our normal. But on top of that they had added a US\$2.2bn special maintenance call. Our total was around US\$3.7bn."

Robinhood restricted trading of GameStop shares that same day in order to allow time to raise the necessary capital. Questions have been raised around why the firm was so underprepared for the call. Campbell Harvey, a professor of international business at the Duke Fuqua School of Business says it was a basic risk management failure. "The surprise to me is that Robinhood wasn't doing these calculations in real time...The formula [for calculating capital requirements] is not secret. I think like any basic risk management process, they need to be figuring out what the capital requirement actually is. They were blindsided and it doesn't make any sense to me."

The future of short selling

It doesn't look as though short selling as a trading tactic is going anywhere soon, but recent events have forced regulators to focus on this area and have brought into focus how well the traditional financial markets function in the modern world.

Harvey argues that the inefficiencies and inequity exposed by the GameStop saga in particular are pointing towards a more decentralised, peer-to-peer based financial system where transactions are instant.

"The tide is going out and the power of the retail investor should not be underestimated," says Harvey. "We have seen they can exercise substantial influence over prices."

"Any one of them can't really influence the price. But you put them all together, and they can have substantial influence... [they have] the power of a large institutional investor."

Further reading

[The basics of shorting stock, thebalance.com](#)

[What is a meme stock? thebalance.com](#)

[Preparing for the regulatory response to meme stock investing, Lexology.com](#)

[Short selling: to ban or not to ban? Nera Economic Consulting](#)

[Manipulation, Panic Runs and the Short Selling Ban, Xu Jiung et al](#)

[Short Selling, ESMA \(European Securities and Markets Authority\)](#)

[Bill Hwang had US\\$20m then lost it in two days, Bloomberg.com](#)

[US SEC chair says reviewing short-selling, swap rules after GameStop, Archegos Sagas, Reuters.com](#)

[Short-selling bans and bank stability, ESRB \(European Systemic Risk Board\)](#)

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Risk Universe by RiskBusiness provides in-depth analysis, reviews and research on areas of interest within the broader governance, risk, audit and compliance landscape, designed to provide proactive, 360° intelligence for informed decision making across the enterprise.

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