Title: The View From The Other Side
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^(Disclaimer: This is strictly speculation. While I have a good understanding of markets - I've sat in a money market desk chair, I've traded + held swaps, managed a small bank's investment portfolio - I do not pretend to have factual knowledge about any specific positions held by any institution. I am also not any sort of big shot - my experiences are outside the US and in medium-small organizations. This isn't DD, since we're just making a guided tour of what's plausible, according to my experience. This is not a commentary on market structures or macroeconomics, as other users have far more insight (and more better words)) ^(than me. This is just a LARP of how I imagine a hypothetical scenario might have plausibly gone down. My experience is not in the US market, so that might introduce some errors. I might also just be plain mistaken, due to unknown unknowns, or being an idiot. I welcome corrections. Through this scenario, "we" means this hypothetical institution, and not retail.))

Let's imagine we're a financial entity, with:

* market making privileges in equity, and a large market share of order processing, meaning we could, potentially, internalize demand as liabilities (IOUs/FTDs) or let them pass through to the market.
* with access to all standard products, meaning we're only limited by having to find a counterpart to any financial instrument we might want to use - even bespoke instruments.
* a big balance sheet.
* a large contact network, including political, enforcement and media.
* a widespread reputation of "knowing what we're doing" in a field in which very few people know what they're doing.

For some reason or another, we decide to short a stock - we're fairly confident that it'll go bankrupt. Why we are so confident is irrelevant - we just are. However, we're not really allowed - or it's suspicious, or just want to avoid the connection - to have a position in the securities we market-make, therefore we use our network of institutions to have a series of hedge funds - not us, but bound to us through shared ownership or debt or aligned incentives or whatever - hold the short positions for us. It's also possible that these hedge funds are taking this short position of their own volition, and we have nothing to do with it yet.

The point is, this specific stock has a growing short interest. It's easy to find the shares to borrow. All broker-held shares are kept within the DTCC books, that means they're all kept in a neat pile. We can borrow from the pile/warehouse and throw a few pennies back as fees. We then sell these stocks to retail, so the stocks end up right back on the borrowable pile - they never "leave" the brokerage, and the brokerage stores them in the same pile. We're adding a liability (the short stock) and an asset (the cash) on our sheet. They're fungible, and it's all happening in aggregate and behind closed doors, so nobody has actual proof - hell, nobody has reason to suspect in the first place, since the stock in question is a "bad stock," according to the news, and so the collective meme says it should go down. Since each sold stock goes back to the pile, there's no shortage to the borrowable supply, and therefore no reason for the interest fee to go up. We can keep pointing at a share, using that share to create a liability, receive cash, and then point at the same share again. Also, if we occasionally/often fail to deliver/borrow, who's gonna notice, let alone stop us, right?

In essence:

* Customer bids/demands a share.
* The bid is routed to us by the broker.
* We grab a share from the borrowable pile - add this to liabilities. We add this same share to the customer's assets. We also take the customer's cash from their assets, and drop it in our assets.
* The customer's share is stored in the borrowable pile, thanks to the broker, so the pile's size hasn't changed.

Result: Demand is satisfied. The borrow pile is unchanged. Our liabilities grow. Supply is not reduced. We took the customer's cash.

We just need to be careful about the reporting methodology - make sure everything's tidy when the picture's taken, and as long as the pile is large enough relative to the daily volume, it's foolproof.

Fantastic, then. Each sale is free money, and the sold stock goes right back for-sale. Unnoticed, we're actually recycling the supply. The demand, on the other side, isn't - buyers need actual cash to buy, and that shit runs out. With endless supply and limited demand, the price goes down. Price going down should increase demand, but as long as the price is expected to continue going down, then that's neutered - people don't buy because the price is low, but because they expect it to rise. Besides, more demand means more sales, and more profit, yes? Eventually, we're confident the company will go bankrupt, and then we'll just be left with two piles: one of cash, and one of worthless liabilities, valued at 0. Pure profit, no need to even pay taxes, since we didn't really close our positions.

Then, two things happen. First, some schmuck begins actually looking at the numbers - "bad stock" meme isn't enough for him, and he realizes that the stock is too cheap, related to the fundamentals. He begins buying and spreading the word, which challenges our preferred meme. Suddenly, there's a narrative of counter-culture/resistance around buying the stock, it's seen as giving us the middle finger, and the kids think that's cool. Whatever, let's underestimate them. The second thing to happen, is that another guy - this one actually has three commas, so he's a bit more difficult to deal with - buys a bunch of the stock, and declares his intent to become an activist investor. He maneuvers intelligently, and before long, he's chairman of the board. While we're good at making memes for boomers, this dude is good at making internet-native memes, and he, without ever actually interacting directly with the community, manages to cement himself as a trustworthy, competent figure, opposed to wall street and internet savvy. He outlines a turnaround plan which actually - independently of everything else - makes sense, and he brings the drive and level of compromise a founder figure can provide, as opposed to distant institutional owners.

Now, a short position is a leveraged position, meaning we can be margin called if our unrealized losses exceed our collateral. Therefore, as the stock price stops going down, and begins going up, we have to begin to actually monitor the stock price and the short position size, versus the rest of our assets - and not all assets, but those considered high quality liquid assets, and therefore valid collateral. The way this works is, different asset types get assigned different weightings: the more liquid and risk-free the asset, the higher it counts. Cash is completely accounted, at 100%, but a risky bond might be counted at 10% only. Some assets might not count at all. The difference between the average short-sale price, and the current market price, multiplied by the short position size, can't exceed our high quality liquid assets, or we get a margin call.

`Liability: Current Market Price * Position Size, the value of the equities owed`

`Assets: Average Sold Price * Position Size, the cash we got for the sales`

Our collateral must be greater than the difference between these.

`(Average Sold Price - Current Market Price) * (Position Size) < = Value of HQLA`

Suddenly, demand - which has been growing steadily thus far - spikes. This has gone viral, and the transacted volume goes insane - way beyond what we can handle. The daily demand is bigger than the pile, so we're forced to let some of it through. Our methods had not been stress tested before, and thus we slipped. This means the price starts increasing, which fuels both more demand - from FOMO - and more supply - from people who consider the stock overvalued, and an easy short. The internal supply chains break, suddenly everyone's getting margin requirement notifications. The brokers don't necessarily know what's happening, all they know is that they sold a lot of the stock, and before they can turn around and buy it from us, the price has doubled - margin requirements go up! So, seeing this, trading is stopped at the broker level - they literally can't afford to owe any more shares. The apple store is out of apples. Close only. We, however, can keep selling, and we do. No new long positions, only new short positions - perfect, the price has to go down, regardless of the demand! The price falls down, the news spin this as a squeeze that's now over.

The price falls all the way down to 40$, and then something breaks. Someone gets a margin requirement they can't meet, or someone places a buy order that's large enough, or something else happens, and forced buying begins, which again spikes the price. Liquidations are carried out, and at some point, these short positions end up in the market maker's books. While a hedge fund can get killed from such a spike, not us. We're a massive player, and we can sustain a lot more. We consolidate most of the short positions, to avoid any further melt-ups, and formulate an actual long-term strategy to get out of this mess. Melvin, Archegos, and others, are now dead, and we hold their books within ours.

Up to now, we've had to survive by using collateral against the short positions, which means that, at a certain point, we need to liquidate non-qualifying assets, and turn them into cash (or some other acceptable form of collateral.) Therefore, when the stock price rises, we need to sell our other positions, and turn them into cash. This explains the stock's negative beta: when its price rises, we sell other stocks to raise cash, which lowers their prices. When crypto is no longer acceptable collateral, we sell it for cash, and the price dumps around June. So, in essence, **the stock price has an inverse correlation to the price of anything else in our books that's not collateral.**

However, this isn't the best way to handle this - this is affecting the rest of our business, and won't work in a longer timeframe. Since we're a market maker, we don't really need to do the whole song and dance around borrowing shares, and holding collateral we can just directly create them as liabilities. This is the famous Fail to Deliver - they marked your assets and their liabilities, but that's it. Also, instead of being worried about collateral we're now worried about solvency.

We turn around to security based swaps/total return swaps. What are these? They're a piece of paper that's worth the difference between the values/returns of two securities. I can then replace the shorts vs. collateral method with swaps. No need to bother so much with high quality collateral, since whatever's on the other side of the swap essentially functions as collateral - I only need collateral for the difference. I can get a negative exposure on the stock price, against a positive exposure on the overall market. This way, if both go up together, then it makes no difference to me. Likewise if they both go down together. Any decrease in value from the movement of one is offset by the movement in the other. Let's assume our swap is done against a broad market basket and call it the counterweight (CW.) Now, instead of the stock and the market having an inverse correlation, they have a positive one. If the stock goes up 10%, then as long as the CW also goes up 10%, then the value of the swap hasn't changed. I don't have to massively sell anything, it's less suspicious, reporting rules are way more relaxed, the enforcement agency is much more, uh, amenable to my proposals. This works both for being long stock vs short market, or long market vs short stock - I can finetune my exposure both ways.

Importantly, what before were these counter-cyclical spikes, are now pro-cyclical. Has the stock gone up? Nah, it's the whole market, nothing suspicious! While before we counteracted the demand with short-selling, now we just fail to deliver - essentially neutralizing demand. Sure, that's even more troublesome, but nobody's ever paid any mind to Dr. Trimbath before, why would they start now? So if anyone buys the stock, we just add that to our liabilities, without it impacting actual market supply/demand. We can selectively decide to let some demand pass, in case we need to raise the price.

What this brings about, then, is a delicate balance:

* we can let demand for the stock reach the market, in which case the price increases.
* we can let demand for the stock go to our liabilities directly, in which case the price decreases.

Then, we can observe demand/supply, and have an algorithm decide which % of purchases to deliver. Monitor social media. Bullish sentiment? Sell them calls, and reduce the delivery % (let the spot purchases go directly to the balance sheet) - price doesn't rise. Bearish sentiment? Do the opposite.

If the stock's demand goes up, we can decide whether to lower the delivery %, through which we avoid a price increase, but in exchange become more levered. We want the price to be as high as possible, up to the point in which we get margin called - the ceiling. Therefore, we'll deliver as much as we can, and start FTDing when the price gets too high.

If the stock's demand goes down, we can decide to increase the delivery %, through which we lower our leverage, but in exchange the price doesn't go down. We don't want low prices: more people will buy, and we'll lower our average entry price. Therefore, we'll reduce leverage as much as we can. We might prefer to lower the price, but that'd depend on more meme-manipulative strategies, and not market-based ones.

Therefore, we observe demand + supply, and decide what % to internalize, and what % to externalize, thereby controlling the price. Depending on how big of an institution we are, we might be able to do the same, to a lesser extent, to the CW itself. Say, if we processed 70% of all orders, who's to say we can't nudge the S&P; a bit, eh? Even if we can't, though, that's unimportant.

If the CW's price goes up, that gives us more breathing range. We can tolerate a higher ceiling stock price without danger, so we'll internalize less, reducing leverage, and increasing the price, until we reach the new, heightened ceiling.

If the CW's price goes down, that gives us less range. We can tolerate a lower ceiling high stock price or risk a margin call, so we'll have to internalize more, and become more levered, but lowering the stock price. Alternatively, we may choose to pump the CW - a couple million hitting the ask at the right moment should be enough.

We have, then, two variables of import:

* the CW's price, over which we may or may not have a degree of influence.
* the stock price, which results from demand, which we observe, and % of FTDs, which we control.

In this way, short selling is something we long stopped doing. Did the shorts close? Not really, but who cares. The question is whether we still have an exposure to the stock price, regardless of the mechanism.

Up to now we have a nice little model. It's not infallible: our control over the variables might not be perfect, and if demand doesn't stop we'll eventually be in trouble, but these dudes need to eat - wait long enough, and they'll get discouraged. A split, you say? The size of my liabilities hasn't changed. Yeah, they're 4 times as many stocks, but IDGAF about stock number - I care about the notional size of the position. "In the shape of a stock dividend"? Yeah, nope. Spread some confusion about it. What can they do? Yeah, they'll seethe, but they've already been seething all along. If someone in an actual position of power comes around, we'll send some guys in suits to dazzle them with words. Who will they believe, the suits, or cherrypicked examples of particularly stupid apes? We like the chaos. The more chaos, the more tiring it is to find the truth, and the longer we can get away with shit. Unless the company withdraws from our system. In which case, I have no idea, because the debate shifts over to the legal battleground instead.

What else could threaten us? Well. You know what. DRS.

On one hand, if 100% of the shares are accounted for outside our system, then we're suddenly on the defensive. Now they don't really have to care about what we say the price is, do they? They could separate completely, accounting for all the shares, and trade within a separate system. What would we do with the deluge of DRS that'll hit? I have no idea, but it seems like the supply/demand equivalent of dividing by zero.

On the other hand, every share removed is, essentially, forcefully accounted demand. Say, you buy a share, I drop it on liabilities and FTD, and then you DRS it, then you're indirectly increasing leverage, since (total shares in books/actual shares in my vault, "the ratio") just got reduced by one on both the numerator and denominator. Do that enough times, and since the numerator is higher than the denominator, we're gradually increasing the ratio, which makes the effect of demand on price have a larger magnitude. How? Because the ratio is also the ratio in which I transform demand into either a price increase or leverage. When we turn demand into price increase or leverage, the rate at which that happens is that ratio - the more we DRS, the higher the "cost" of turning demand into price or leverage. Meaning, the more we DRS, the more violent price changes will be, and the more magnified the leverage assumed will be. DRS 100%, and that rate becomes \[divides by zero.\]

Therefore, a separate market observer might want to consider two indicators as endgame conditions:

1. the DRS percentage + its rate of change, which can be proxied by the price of the stock, against some measure of how much free cash retail has, because this determines the speed of DRS. The lower the price, and the more available cash, the faster DRS will increase.
2. the price of the stock, against the CW (let's assume a broad market index of multiple asset classes.) If the stock outpaces the market, then we know the swaps are closer to breaking - this will have two possible effects:

* every time except the last, it will cause the stock price to go down, or the market prices to go up, to keep the swaps alive.
* eventually, the swaps will die, and then the stock will go up, and the CW go down, in a self-reinforcing de-leveraging.

What happens then? I dunno. I wouldn't want to find out, either. I'd take more and more risky moves. If at one point I'd have been careful about the legality of my moves, then by the end that wouldn't really matter much. Might even want to try to get political power to leverage that. After a certain point, the capital market problem spills over into the legal, social, memetic, political. Whoever's managing this shitshow hasn't slept well in a while, I can guarantee that.