Title: DD: Rolling Borrows, Haircuts, & Annual SLDs

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Url: /r/Superstonk/comments/tk9jk8/dd_rolling_borrows_haircuts_annual_slds/

Linked Post Content:

There was a [recent discussion about borrowing shares to close short positions](https://www.reddit.com/r/Superstonk/comments/tk2h15/_/), and it was met with so much vitriol so quickly, the OP deleted it.

That's not cool.

That's not how this community works.

Here is the process courtesy of [BlackRock (PDF)](https://www.blackrock.com/us/individual/literature/brochure/us-retail-securities-lending-brochure.pdf):

https://preview.redd.it/yw0aowh6zyo81.png?width=734&format;=png&auto;=webp&s;=76f4d341d9fbcd0fa0d4aaec0bda836d912978e0

The same process applies to stocks, and the collateral requirements vary by the stock and your wealth as a client, but the collateral requirements *typically* range from 102% to 150%. The more money and assets you have, the bigger the client you are, the more favorable rate you get. For us poor retail plebs, it's usually 125% to 150%.

There is also a borrow fee, and that varies by broker and stock. We're ignoring that here.

There are two important details in this process.

- 1. Closing an existing short position requires shares;
- 2. And the 102-150% collateral requirement.

For the first point, it doesn't matter where the shares come from. Let's pretend you borrowed 100 shares of GME at \$10 each to make the math easy.

You can purchase an ITM Call and immediately exercise it to purchase 100 shares, then use those shares to close 100 short sale positions on the stock. (You would probably sell an ITM Put at the same time and incur 100 FTDs to stay neutral on the books, less a bit for the cost of the Call.)

You can purchase 100 shares today on the open market for \$118 (current price right now) and return those shares to the lender.

You can purchase and unpack a custom or pro rata redemption basket from an ETF like XRT to gain the underlying assets (stocks) and return those GME shares.

You can borrow 100 shares worth \$118 each from a different lender and return those 100 shares to the previous lender.

Which brings us to Dr. T's tweet: https://twitter.com/susannetrimbath/status/1506067621707333635?s=21

https://preview.redd.it/jej7umotxyo81.png?width=828&format;=png&auto;=webp&s;=096590b1fcb04c1ef8 786b2ad5f92ba918cb0385

The language here is important.

Dr. T is saying in 2013, the *NSCC* ended their stock borrow program where the *NSCC* borrowed shares from the DTC members to close Failures to Deliver.

She is not saying other parties cannot do the same process the NSCC was doing.

The market is opaque. Each entity in the market, whether it's a company like a brokerage or an exchange or an individual like you or me, can only see one layer away. I can see my brokerage. My brokerage can see me and the exchange. The exchange can see my brokerage and the other side of the transaction's brokerage, but the exchange doesn't know if it's me or some other client in the same brokerage.

Which means, when I borrow 100 shares of GME from BlackRock at \$10 per, and then borrow 100 shares of GME from Fidelity at \$118, I can return the Fidelity GME shares to BlackRock, and BlackRock has no idea where they came from.

So let's walk through a Borrow To Close cycle.

Borrow To Close

When you borrow shares, you put up collateral equal to 102-150% of the asset.

As I said above, the collateral requirements vary by your status, the stock, and the lender. Some lenders are more stringent. Some are more favorable. Some stocks are hard to borrow, some stocks should be but aren't. Some clients are wealthy. Some of us are The Poors. So we're just going to use the typical range of 102-150%.

It's November 2020, and GME is \$10. I borrow 100 shares of GME from Ape Inc. at \$10 each for a total notional value of \$1,000. I'm either a whale (102%) or a garbage can (150%).

I have to put up 102% to 150% collateral. I've got an even mix of FAANG stocks as collateral. I give those shares to the lender (or a neutral third party). Ape Inc. will hold the collateral until I return 100 shares of GME.

\$1000 * 1.02 = \$1020 worth of FAANG

\$1000 * 1.50 = \$1500 worth of FAANG

A year and change later, I've decided I'm going to roll my existing short position by borrowing 100 shares of GME at \$118 each from Hedgies 'R' Fukt for a total notional value of \$11,800. I'm going to use the 100 shares of GME from HRF and give those to Ape Inc.

\$11,800 * 1.02 = \$12,306

\$11,800 * 1.50 = \$17,700

Right now, I have between \$13,326 (\$1,020 Ape + \$12,306 HRF) and \$19,200 (\$1,500 Ape + \$17,700

HRF) worth of collateral tied up.

I take the 100 shares of GME that I borrowed from HRF and give those to Ape Inc. Ape Inc returns my collateral, and now I've got between \$12k and \$17k assets tied up as collateral in HRF.

It's not like the shares from HRF have a toe tag that Ape Inc can read that says, "From Hedgies 'R' Fukt, with love, am borrows." The market is opaque. Ape Inc is happy they get their 100 shares back, and they don't care where the shares came from.

But there is a catch. Do you remember last December when the DTCC applied a market-wide haircut?

DTCC Haircut

https://www.dtcc.com/Globals/PDFs/2020/December/14/14411-20 (PDF)

A haircut says, "These assets are worth X% less than the market value when used as collateral (and other stuff)." Market Value is what you see on the ticker. Every asset belongs to a category. Publicly traded stocks like GME and FAANG are Securities.

Unless the asset is rated AAA to Aa2 (top tier collateral), pretty much every asset got at least a 5% haircut and lost 5% of its market value. The C-anything rated assets lost 100%. And the B's lost double digits.

Here's a snippet, but the entire PDF is worth reading. It's short.

https://preview.redd.it/8dm7bnev4zo81.png?width=608&format;=png&auto;=webp&s;=6258db46d61a1f4dd2bc1291b069267aaed0fcb9

Remember all those Municipal Bond DD's we had? If they're not at least BBB-, they lost 100% of their value as collateral. And the bonds that didn't lost either 25% or 30% of their value. Thank goodness my assets are FAANG, right? Because their market price falls in the, "\$10.00 or more per share," category and only took at 25% hit.

https://preview.redd.it/3i60b0e95zo81.png?width=610&format;=png&auto;=webp&s;=37e0f4bcede811106caf8292361b65b89132feb2

If the haircut is 100%, they can't use it as an asset, so they'll have to use something else. The next worse haircut I see is 70%.

We were here:

\$11,800 * 1.02 = \$12,306

\$11,800 * 1.50 = \$17,700

Now we're here:

 $11,800 \times 1.02 / (1.00 - 0.25) = 16,048$

\$11,800 * 1.50 / (1.00 - 0.25) = \$23,600

Sure, I was able to borrow 100 shares from HRF and return those to Ape Inc, but it cost me dearly.

That 25% haircut means our assets are worth 75% of market value. Suddenly we have to put up 4/3rds the collateral compared to no haircut at all.

This is a big, big deal.

The market **always** eats. It doesn't matter if there is a crime, a conflict of interest, or both. The market **always** eats.

These brokerages do not want to eat your losses. They will eat you first.

Every time they take a loss from your bad bets, they change the rules or their rules so it won't happen again, and the market-wide notional haircut rule cuts deep into the SHF's pockets. The noose is tightening.

This time last year (February 22, 2021) GME was \$46. It's now running \$123 and climbing. That's an \$80 difference in share price equates to ***an \$81.60 to \$400 worth of additional collateral per share compared to last year***.

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80 \times 1.02 / (1 - .00) = 81.60  (minimum)
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 $80 \times 1.50 / (1 - 0.70) = 400 (maximum)$

The haircut did apply this time last year, but I don't know who had what assets. Maybe they sold off all their pristine AAA rated assets in the meantime to stay afloat. Maybe their assets were already in the 70% haircut bracket. Whatever it is, they have to have enough collateral to make a second borrow, while the first borrow's collateral is tied up, to roll borrows.

This is a big deal.

These numbers are a bigger deal than the borrow fee going up a few % points. I couldn't care less about the borrow fee % being low. It matters, but not as much as the haircut from last December.

And since many of these positions are annual, and only have annual SLD checks, this time next year is going to be another big deal. Maybe the haircut rule will be revoked. Maybe it'll be worse. I don't know. But you should pay attention because it matters.

Extra: Supplemental Liquidity Deposits (SLD)

You borrow 100 shares of GME from me.

SLD comes along and says, "Price of GME went up \$80. Haircut did its thing. You owe me \$254/share worth of collateral."

Either, you pony up \$254/share worth of collateral, or I forcibly close your positions by selling your collateral and using the proceeds to buy 100 shares of GME.

When and/or how I actually purchase those shares is another topic.

I can purchase them now if my models indicate the price will only go upwards. I can purchase them later if my models indicate the price will go down. I can purchase ITM or OTM options. There's lots of avenues.

And the where can be a lit or unlit exchange.

But whatever you put up as collateral is mine. Doesn't matter if it's 102% or 150%. Maybe you get some of it back, but I doubt it.

Edits: Added SLD explanation to the end