Title: (Fixed Post) MOASS Formula?: Calculating initial price of a squeeze and the market forces to trigger it (GME)
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Permalink: /r/TheGloryHodl/comments/p22czd/fixed_post_moass_formula_calculating_initial/
Url: /r/DDintoGME/comments/ozb7t1/fixed_post_moass_formula_calculating_initial/

Linked Post Content:
How would we know a margin call was made? How we would know that the rockets have been started? With a SI% of 226.42% and if the short squeeze were to occur at the price of $200, the resulting price would be at least $90,545 per share (think of this as the floor). However, that price is not the end of the journey. It is NOT the final price. And yes, low volume is very good, so good in fact that if we just had a bit more shares not getting diluted by the dark pools, we would already be on our rocket (look in tutorial screenshots for example). If this caught your attention, please continue reading fellow ape.

TL;DR: If you just want the research paper and the excel sheet of the *formulas* (MOASS formula?) right away, see the screenshots below. EDIT: Links are in the captions.

Alternatively, you can google search the research paper: *Clearing prices under margin calls and the short squeeze by Dr. Feinstein*. The researchgate link will be the one to click on. ResearchGate is a very well respected database chuck full of research papers. Highly encourage you look into other research papers by him.

For the excel sheet, if you are afraid of the link, I'll provide tutorial screenshots at the *very bottom* of the post, showing how to make your own excel sheet on this. So, no excuses you lazy apes ;)

Disclaimer: Nothing in this post or the research study is to be taken as financial or investment advice. Read rest of the post for more information and caveats to that excel sheet.

Screenshots Disclaimer: If you have trouble seeing them, either zoom in or open in new tab.

Lastly, before we get started, I want to thank those who provided constructive criticism in making my post better. I would also like to ask smart apes to help others in the comment section about questions for this research paper. Before some apes and trolls masquerading as apes dismiss this out of hand, consider that the professor put much research into this, as he has 9 pages of research and 10 sources backing him up. With that in mind, be considerate and thoughtful in your debates and discussions below.

Now, let's get on that rocket!

[https:\/\/www.researchgate.net\/profile\/Zachary_Feinstein\/publication\/349026959_Clearing_prices_under_margin_calls_and_the_short_squeeze\/links\/601d1d88a6fdcc37a802ec84\/Clearing-prices-under-margin-calls-and-the-short-squeeze.pdf](https://preview.redd.it/6v2hzw70drf71.png?width=2528&format;=png&auto;=webp&s;=f024a3a650d94a5f4b4adebeafc9d8b772fbd814)

Excel Screenshot:

[ ](https://preview.redd.it/fl7932reokf71.png?width=2534&format;=png&auto;=webp&s;=3283bec1384a6e0c11900e29e436f312a65e21ae)

https://www.docdroid.net/fmngajW/squeeze-xlsx

or https://docs.google.com/spreadsheets/d/1fL-szC9Fpw8M6SrpxC-2YIRFxgB0mQzw3lFB-ahkFaY/edit?usp=sharing

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Hello fellow apes. The last few months, there has been much speculation on price and how high GME can go once the squeeze happens. Some think it won't break 1k while others think 100 million is the floor. Others wonder how to know when the squeeze is occurring? It's important to understand that the term BLACK SWAN event means it's outside the bound of current understanding and so whatever and whenever it happens a great proportion of us are going to be sat looking dumbfounded and saying:"Wow I did not see that happening..." While rocking in a corner hugging our fresh bananyacat (ultra squeezable).

So while reading all the DD on this, I thought that there must be others outside of reddit discussions focusing on this event, so I googled "margin+short squeeze" and the first result that came up was a research paper by a very qualified chap: Dr. Feinstein's research. I highly encourage everyone to read this paper. The math is complex but so is the subject. The Dr has looked into both GME and AMC back in January and using the available information, he developed formulas to determine the clearing prices of a stock when it squeezes. There's also formulas used to determine the threshold for a short squeeze to occur.

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Here are screenshots of the research paper:

1

[Abstract and Introduction](https://preview.redd.it/p263wu6urkf71.png?width=866&format;=png&auto;=webp&s;=42f3774ae89702e9dba157054afba8add65880f2)

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2

[Introduction and Margin calls on short sales](https://preview.redd.it/hp34dumkskf71.png?width=884&format;=png&auto;=webp&s;=e97aad44cf97f8097aa8574700dfaf4c9a56673d)

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3

[Clearing Prices](https://preview.redd.it/xbxybhbpskf71.png?width=885&format;=png&auto;=webp&s;=6bf9689a68a3d2bf4c1e85d5139c7c44b11aa840)

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4

[Clearing Prices Continued](https://preview.redd.it/kf8z4matskf71.png?width=877&format;=png&auto;=webp&s;=fcda926e7b9d2802b198dde8c7277d332e0a73be)

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5

[Clearing Prices Continued](https://preview.redd.it/y4e8n32xskf71.png?width=899&format;=png&auto;=webp&s;=9e3f066888db65ae831c518095a335e22261edd8)

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6

[Clearing Prices Continued and The Short Squeeze](https://preview.redd.it/zkdhner7tkf71.png?width=882&format;=png&auto;=webp&s;=41c18b3bd04edec159cfcc78970488ab927962ff)

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7

[The Short Squeeze and Case Studies](https://preview.redd.it/i2s6oktbtkf71.png?width=922&format;=png&auto;=webp&s;=7692e83cfe3c47add9497b487b89e2dc8e3825ab)

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8

[Case Studies Continued](https://preview.redd.it/h18a6yngtkf71.png?width=885&format;=png&auto;=webp&s;=e9d5afed6739ab5942a3d06d16ade2c22f586f5e)

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9

[Conclusion and References](https://preview.redd.it/qrl4kxnltkf71.png?width=881&format;=png&auto;=webp&s;=1532fceea011f04d53d255d874122498e461a529)

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Naturally, I had many questions about this and I emailed the professor to clarify a few things. He kindly answered my many questions and he even provided an excel sheet in order to use his formulas.

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Below are the screenshots of our email exchanges: Major caveat: His models are theoretical in nature, main purpose is to show that a true jump in prices due to margin calls-occur only if the short interest is above a threshold value.

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Part 1 of Email 1

[Professor states quite clearly that is model is not to determine a final price, but the threshold for a short squeeze and the corresponding jump in price. Also, he assumes that the margin call is covered, rather than providing additional collateral. External investments will trigger the short squeeze and with the low volume we have, we don't need much \(darn you dark pool, messing it up\). His model is a static mode, not a dynamic model.](https://preview.redd.it/ocii13tzokf71.png?width=2210&format;=png&auto;=webp&s;=54344c9aa133d3750562c0a2de080936869fbc11)

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Part 2 of Email 1

[This explains the excel sheet](https://preview.redd.it/gny9vxxxpkf71.png?width=1723&format;=png&auto;=webp&s;=ccfc5b60fdeece0a97c2888694eb26b9ede39b31)

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Email 2

[Explains the excel sheet more. Banks and hedge funds are hindering research into short squeezes. Lastly, a situation like 2008 can happen again, as the regulators are greatly outmatched.](https://preview.redd.it/qst7mjbydrf71.png?width=1672&format;=png&auto;=webp&s;=cb065c9e036ecdde8349defa09fa37b6148f5cdb)

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Undoubtedly, as the caveats state that this study doesn't capture the full picture of a short squeeze and especially with GME, as we all know is heavily manipulated. With that said, this study is a good starting point and my conversation with the professor suggests that it can be further studied.

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Below are the tutorial screenshots to make your excel sheet of Dr. Feinstein's formulas. Zoom in or open images in new tab.

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1

[Zoom in or open new image in tab to see the formula for red](https://preview.redd.it/vig39b3tarf71.png?width=2560&format;=png&auto;=webp&s;=42e1ddb6578eed472f7333cc7cabce256b6bc7fc)

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2

[Zoom in or open new image in tab to see the formula for red](https://preview.redd.it/rwiammc1brf71.png?width=2554&format;=png&auto;=webp&s;=861cba9c88c821d060440e3ffb68b7ae11eb9832)

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3

[Zoom in or open new image in tab to see the formula for red](https://preview.redd.it/wanwuav9brf71.png?width=2560&format;=png&auto;=webp&s;=bd3f87955aa3257fa49cad683a93dce86226c5a6)

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4

[Zoom in or open new image in tab to see the formula for red](https://preview.redd.it/8dboq0wobrf71.png?width=2534&format;=png&auto;=webp&s;=ebe9e6882f228fb96186a6142be484283af49c4c)

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5

[Formula is in red; copy and paste the symbols in blue for your excel sheet μ α β δ](https://preview.redd.it/6zhv95j09rf71.png?width=2555&format;=png&auto;=webp&s;=201d317b96b1e03ba2509b7e7bdc1574c5dc83aa)

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6

[Change the numbers in red for your scenarios](https://preview.redd.it/smqpqi8wkrf71.png?width=2560&format;=png&auto;=webp&s;=0ddb37edc7993c13b956b3a6363cba21362d84e6)

Only change the numbers in green if you know clearly know why the reason behind it and you are a smart ape as they are not really meant to be changed. Read and understand research paper before doing so

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Lastly, if you have enjoyed Dr.Feinstein's research, I would highly encourage you to look into his other papers that are at researchgate (click on his name and it'll bring up other research papers he has done). He has done much research into systemic risk, fire sales, and repo.

I also wish to thank Chewy-bat in making my post more readable (ape friendly) and shartmcqueef in providing formatting and editing advice.

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*Nothing in this post or the research study is to be taken as financial or investment advice. *