

SIMIAN GAME THEORY

AN APE'S PRIMER TO
DECISION MAKING



U/MRRIPPINGTON







An Ape's Primer to Decision Making - Game Theory

Possible DD

Okay everyone, I want to help to all my anonymous friends on [r/superstonk](https://www.reddit.com/r/superstonk) be it ants/apes/queens/or anything else. I am not some finance person, more am i in anyway useful with math. But I read a few things in the past and I think they are relevant here and thought the community could benefit.

Thank you all for your time having a look at my post and your feedback is very welcome. Hopefully, enjoy!

Outline

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- +  Who am I?
- +  Why is Game Theory (GT) is relevant here, and what is it?
- +  Thinking fast and slow (optimism – loss aversion)
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Aim / Disclaimer

I own stocks in GME.

What I share below is not financial advice. Reading this you understand that all actions you take with any portion of your funds are entirely your responsibility.

My aim is to learn, inspire and stimulate improvement... I also think the enemy **we are least prepared to deal with will be internal**. With the impending MOASS I forecast distress, confusion and frustration. and I want to make sure I have done my part sharing what I know that can help others to deal with their frustrations.

Who am I?

Key facts (for the sake of skills potentially targeting me I want to say random things here):

I am a cyclist, a novelist, a lover of flowers and most likely and ape with moon tix. A John Doe if you will.

Why is Game Theory (GT) is relevant here, and what is it?

GT is the science of decision making in complex situations where reliable information is scarce and many parties are involved. Like what we are exactly going through.

I evaluate unity as one of our ([r/superstonk](https://www.reddit.com/r/superstonk)) strengths, and I really think we are fuk without it. Frankly, that's what brought us here (notice: ape **TOGETHER** strong?). But I also notice the worrying discourse between “**selling on the way up**” vs “**selling on the way down**”. As a matter of fact, check out this thread (mainly why I am making this post: https://www.reddit.com/r/Superstonk/comments/mw33v7/weve_made_it_this_far_dont_screw_it_up_for_the/gvfpo8j/?context=3) . I will refer these groups as **sellUP** and **sellDOWN**.

Okay now, hammer time. GT defines models of thinking that enables rational decisions based on probabilistic outcomes

of decision of other parties involved. Although our situation is much more complex (actually not, but more on that below), the best way to grasp this is to review the infamous prisoner's dilemma.

Prisoner's dilemma

(source: https://en.wikipedia.org/wiki/Prisoner%27s_dilemma)

Two members of a criminal gang are arrested and imprisoned. Each prisoner is in solitary confinement with no means of communicating with the other. The prosecutors lack sufficient evidence to convict the pair on the principal charge, but they have enough to convict both on a lesser charge. Simultaneously, the prosecutors offer each prisoner a bargain. Each prisoner is given the opportunity either to betray the other by testifying that the other committed the crime, or to cooperate with the other by remaining silent. The possible outcomes are:

- If A and B each betray the other, each of them serves two years in prison
- If A betrays B but B remains silent, A will be set free and B will serve three years in prison
- If A remains silent but B betrays A, A will serve three years in prison and B will be set free
- If A and B both remain silent, both of them will serve only one year in prison (on the lesser charge).

Prisoner's dilemma payoff matrix

	B	B stays silent	B betrays
A			
A stays silent	-1	-1	-3
A betrays	0	-3	-2

Prisoner's Dilemma Matrix

(Above table is called a matrix and is used to give an overview of possible benefit/loss outcome. Additionally I personally think "Betray" is such a strong word, but that is from Wikipedia and does not indicate my view of sellUPs.)

However, notice that the best possible outcome of the situation is when both prisoners act for the **benefit of the both together**.

Now let's look at how this applies to stock market:

(source: <https://blogs.cornell.edu/info2040/2016/09/13/shall-we-make-some-profits-game-theory-and-the-stock-market/>)

...that traders should successfully predict the investing decisions of other players and then, based on those decisions, choose profit maximizing strategies for themselves. [...] Your profits depend on how well you can predict the

investment decisions of the majority of other investors but of course, the stock market and its investors are hard to predict.

		Majority of Other Investors	
		Long	Short
You	Long	(10,10)	(-20,40)
	Short	(-20,40)	(10,10)

Stock market matrix

The above matrix shows how longs and shorts can be viewed here, I will just use ape-talk to apply this to us and develop our view. In our case we do not know what each other is doing and are feeling pressure to due to external fud. Below is the matrix which I think applies to us. Notice how this is different and extra spicy for us APEs if everyone sellUPs, kenny wins because they are able to close algo trades at discounts.

		(we are) The float	
		sellDOWN	sellUP
a single APE	sellDOWN	most possible tendies for all apes	maybe most for few apes
	sellUP	maybe most for single ape	Kenny wins.

sellUP/sellDown matrix, majorly different than the generic stock market one

I know that there are apes that disagree with controlling the urge to sell as soon as they see a good price. and I think this is their survival instinct taking the best of them preventing them from thinking 'slow' (concept borrowed from "Thinking Fast and Slow", see below for more). And the reason this is harmful for the very same ape (yes, the one that sold for their perceived best price) is that this prevents them from **achieving higher gains by exercising most rational decision for them.**

It is established, by people far smarter than myself (and most of us) on here many times that if you sellUP you are hurting chances the algorithmic purchases raising the price. Because you just offered a trade on the way up. And you just also contributed towards a correction to the price indicating fellow APES that there is sellUP is happening via the chart. Believe it or not, this during the MOASS will cause fud leading to fuk. (see link - https://www.reddit.com/r/Superstonk/comments/mlzkg/apes_listen_the_fuck_up_trading_computers_at/, also there is a ~30seconds clip one from DFV on this which I can not find- help?).

Why could you be doing this? Say you just want to get one or 2 months of rent, or not work for 6 months, buy a new set of cutlery, sneakers, a down payment or idk what has you, and you think 10k, 100k, 1mil is enough for that at this

time. This decision will eventually deny you the right to sell at a higher price. Whatever, it is you think you just can not wait to spend money on, think literally one-more-time. You think these hedgies care about 10k, 100k, 1mil?

Also note in above copy-paste where it says "*market and its investors are hard to predict*". What could be hard to predict on a regular day for a regular stock in the market, does not apply here. Because there is overwhelming sentiment for sellDown. Why? Because we apes understand sellUP leaks jet fuel, costs ROI to-every-each-one-of-us.

And instructions could not be simpler: hold and sellDOWN you have proven to be able to do the first part over the last couple of months. And respectably you endured watching the price sideways why not watch it going up and actually enjoy what you are watching for once? I certainly will.

Remember, if you sell for a price that is high for you, you will continue to live the same life.



Thinking fast and slow

This fantastic book tells you how your brain works (how it can be a little too jerky sometimes) based on solid research over multiple decades it explains this through the perspective of stock market. Basically, your brain has 2 systems, Fast and Slow:

(source: https://en.wikipedia.org/wiki/Thinking,_Fast_and_Slow)

Fast characterises as automatic, frequent, emotional, stereotypic, unconscious. Examples (in order of complexity) of things Fast thinking can do:

+ determine that an object is at a greater distance than another

+ localize the source of a specific sound

+ complete the phrase "war and ..."

+ display disgust when seeing a gruesome image

+ solve $2+2=?$

+ read text on a billboard

+ drive a car on an empty road

+ think of a good chess move (if you're a chess master)

+ understand simple sentences

+ associate the description 'quiet and structured person with an eye for details' with a specific job

Slow characterises as effortful, infrequent, logical, calculating, conscious. Examples of things Slow thinking can do:

+ prepare yourself for the start of a sprint

+ direct your attention towards the clowns at the circus

+ direct your attention towards someone at a loud party

+ look for the woman with the grey hair

- + *try to recognize a sound*
- + *sustain a faster than normal walking rate*
- + *determine the appropriateness of a particular behavior in a social setting*
- + *count the number of A's in a certain text*
- + *give someone your telephone number*
- + *park into a tight parking space*
- + *determine the price/quality ratio of two washing machines*
- + *determine the validity of a complex logical reasoning*
- + *solve 17×24*
- + *[Mr Rippington addition] : sell GME at unimaginably, never-seen-before prices. Literally make history with your trading account.*

The whole being okay with what's mediocre but 'oh, at least it's mine' mentality, the book mentions this as 'Optimism and loss aversion'. A natural experiment reveals the prevalence of one kind of unwarranted optimism. The planning fallacy is the tendency to overestimate benefits and underestimate costs, impelling people to begin risky projects. In 2002, American kitchen remodeling was expected on average to cost \$18,658, but actually cost \$38,769 (same sauce as above) .

This applies to us when you think about the profit you lose if you sellUP, as you lose the margin between your price point which will be eclipsed by price point of the community of sellDOWN.

Bonus: Catching a missile (opposite of catching a dropping knife [more on this](#))

Special topic for the thrill seeking people chasing the peak, who wants to sell it at the tippy top. You know, for bragging rights.

Now, lets level with each other here: If any of us could read a chart to foretell it's peak, and can do it consistently. We'd already be living a very different life. And especially in this case you are not dealing with any security that you have dealt before. (this is once a history event

- https://www.reddit.com/r/Superstonk/comments/mpoe6q/gme_is_not_a_once_in_lifetime_opportunity_its/).

The perceived top will fool you my friends. Just when you think we made it to moon, the rest of us will leave for andromeda.

Don't believe me, why not pick a coin and predict it's daily absolute highs & lows on consecutive days. Oh that stuff is all algo, is it all manipulated and can't be done? I know, GME too.

TLDR

Writer claims the unity of this community is key to their combined best interest, while attempting to justify this with examples from social sciences and popular literature. Now read it.

APE TOGETHER STRONG.

