Title: Many misunderstand the mechanism that actually drives price movements.
Author: ibb893
Created 2022-07-05 14:19:37 UTC
Permalink: /r/GME/comments/vryys8/many_misunderstand_the_mechanism_that_actually/
Url:
https://www.reddit.com/r/GME/comments/vryys8/many_misunderstand_the_mechanism_that_actually/

Does it surprise you that it's technically possible for a $1 purchase of an asset to shoot the market cap up by millions of dollars, or for a $100 Million purchase to not move the price by a single penny? Let me explain.

Intro:

A lot of people seem to have misconceptions like thinking if x dollars flow into an asset, its market cap will go up by x dollars. In fact, it is not possible to determine how much money has been put in to an asset based on its market cap, or conversely how much a market cap will move when some amount of money flows into or out of the asset.

Price is simply a function of the current state of the order books across all markets that list the asset.

Consider this: let's say the current price of GME on NYSE is $125. What does that really mean? It simply means that the very cheapest limit sell order currently on their order books is for $125. That's what price means by definitional, right? Price is just the amount you have to pay to buy something, so on a exchange price is always simply the current cheapest limit sell.

Example 1: Huge Purchase with No Effect on Market Cap

Let's say that the current price of GME on NYSE is $125, and the person currently willing to sell at $125(and who is thus the person currently defining the NYSE price of GME)is a whale who is offering 10.000 GME at $125. Let's say I am a whale buyer and I am put in a market order for 9999 GME. Well, I will end up buying all 9999 from the whale seller, leaving them with 1 GME still for sale at $125. Since they are still selling 1 GME at $125, the price of GME on the NYSE is still $125. So I just bought nearly $1.25 million worth of GME but the price (and therefore the market cap) didn't move by even a penny.

Example 2: Tiny Purchase with Huge Impact on Market Cap

Now imagine another scenario. The current price of GME on NYSE is $125, because the current cheapest limit sell is someone selling 1 GME at the price of $125. Let's say I decide to buy 2 GME. Well, half of that will come from the person selling 1 at $125, which means I will consume that seller. The price of GME on NSYE will now teleport to whatever the next cheapest limit order is for (this is the mechanism by which price goes up when people buy). If GME is very high in liquidity (which means lots of limit orders on the books packed densely across the price spectrum), the next cheapest limit sell after the 1 GME at $125 would probably be at like $125,01. But if the liquidity is low for the sake of the example, let's imagine a more extreme scenario in which GMEC liquidity is extremely low so the next cheapest offer after the 1 GME at $125 is at 126,5 fully 1% more expensive. Ok, well, I end up getting 1 GME at $125, and another 1 GME at 126,5 fulfilling my market order and leaving the price of GME on NYSE $126,5. So, I have spent about $252,50. but I moved the price of GME by 1%, which means my purchase of $252,50 increased the GME market cap by nearly $ 95 million.

Closing Thoughts
There you have it, that is how prices actually move. It's not possible to know how much a given buy or sell will move a market cap unless you know the exact state of the order books at that moment on the exchange you're selling on, as well as the amount of arbitrage friction between all markets.