PRICE AND VALUE: THE FEEDBACK LOOP AT GME AND AMC

Connecting Price to Value

The Question

- One topic that I have always wanted to write about is the potential for a feedback loop between price and value. I can see you already rolling your eyes and getting ready to move on.. But hang on…
- With the frenzy around GameStop and AMC, you may find it interesting.
  - Specifically, a key question that many investors, traders and interested observers have been asking is whether a company, whose stock price and business is beleaguered, can take advantage of a soaring stock price to not just pull itself out of trouble, but make itself more valuable.
  - Conversely, can a healthy company be dragged down by its stock price dropping too low?

Price, Value and the Gap

Value is driven by fundamentals, i.e., cash flows, growth and risk.

The Gap

Price is determined by demand & supply, with mood, momentum and other behavioral factors playing a role.

Price > Value. Stock is over valued

Price = Value. Stock is fairly valued

Price < Value. Stock is under valued

Efficient Markets?

- In an efficient market, the value and pricing processes do not leak into each other. In terms of specifics, when a stock's value is roughly equal to its price:
  - Issuing new shares at the market price will have no effect on the value per share or the price per share, dilution bogeyman notwithstanding.
  - Buying back shares at the market price will have no effect on the value per share or price per share of the remaining shares, even though the earnings per share may increase as a result of decreased share count.

The Feedback Loop

	Price > Value (Over Valued)	*Price < Value (Under Valued*
Perception	1. Lenders/Bondholders are more likely to cut the firm some slack and/or renegotiate debt. 2. Attracting and keeping new employees becomes a little easier.	1. Lenders/Bondholders tighten constraints more and are less likely to renegotiate debt. 2. Attracting and keeping new employees becomes difficult.
Implicit Effects	1. Convertible debt converts to equity, at the higher price, reducing distress/default risk. 2. Existing employees see a rise in the value of their stock-based compensation, making them more likely to stay.	1. Conversion options in convertible debt become less valuable, making it almost all debt, increasing distress/default risk. 2. Existing employees see a fall in the value of stock-based compensation, making them more likely to leave.
Explicit Effects	1. Issuing new stock at a price > value augments the value per share. 2. Cash proceeds from the issuance can be used to change business models (new investments & acquisitions).	1. Buying back shares at price < value, will increase the value per share. Issuance will have the opposite effect. 2. To get the cash for the buybacks, the firm will have to liquidate assets and shrink its business.

And its limits with stock issuances..

- Regulations and legal restrictions: A share issuance by a company that is already public is a secondary offering, and while it is less involved than a primary offering (IPO), there are still regulatory requirements that take time and require SEC approval.
- Demand, supply and momentum: If the price is set by demand and supply, increasing the supply of shares will cause price to drop, but the effect is more insidious. To the extent that the demand for an over valued stock is driven by mood and momentum, the very act of issuing shares can alter momentum, magnifying the downward pressure on stock prices.
- Value transfer, not value creation: The increase in value per share that you get comes from a value transfer, from the shareholders who buy the newly issued shares at too high a price to the existing shareholders in the company.
- Cash and trust: If you can live with the value transfer, there is one final hurdle. The new stock issuance will leave the company with a substantial cash balance, and if the company's business model is broken, there is a very real danger that managers, rather than follow finding productive ways to fix the model will waste the cash trying to reinvent themselves.

And with buybacks..

- With buybacks, the benefits of buying shares back at below value are much touted, and Warren Buffett made this precept an explicit part of the Berkshire Hathaway buyback program, but buybacks face the same problems often in reverse.
- But it too has its limits:
  - A large buyback may require a tender offer, with all of the costs and restrictions that come with them.
  - The act of buying back stock may push the price up and beyond value and buybacks too create no value.
  - The value transfer in buybacks, if they occur at below fair value, is also for existing shareholders, but the losers will be those shareholders who sold their shares back.
  - Finally, a buyback funded with cash that a company could have used on productive investment opportunities is lost value for the company.

Reality Checks for GME and AMC

- Perception: For the moment, the rise in the stock price has bought breathing room in both companies, as lenders back off, but that effect is likely to be transient. Perception alone cannot drive up value.
- Implicit effects: On this dimension, AMC has already derived tangible benefits, as $600 million in convertible debt will become equity, making the company far less distressed. For those Redditors primed for revenge, it is worth noting that the biggest beneficiary in this conversion is Silver lake, a hedge fund that invested in these bonds in the dark days for the company.
- Explicit effects: On December 11, well ahead of the stock run-up. In that offering, AMC filed for approval for issuance of up to 178 million additional shares, from time to time, primarily to pay down debt. If the stock price stays elevated, and that is a big if, AMC will be able to issue shares at a price > value and increase its value per share. It is unclear whether GameStop has the time to even try to do this, especially if the stock price rise dissipates in days or weeks, rather than months.

Feedback Loop at GME – Value per share effect

- I modified my base case GameStop valuation, which gave me an intrinsic value of $28.17, and allowed for two additional inputs: new shares issued and an issuance price.

		Issuance Price/Share				
		$ 20.00	*$ 28.17*	*$ 50.00*	*$ 100.00*	*$ 200.00*
# Shares Issued (in millions)	*2.50*	$ 27.86	$ 28.17	$ 28.97	$ 30.82	$ 34.52
	5.00	$ 27.58	$ 28.17	$ 29.72	$ 33.29	$ 40.42
	10.00	$ 27.08	$ 28.17	$ 31.07	$ 37.73	$ 51.05
	25.00	$ 25.90	$ 28.17	$ 34.22	$ 48.10	$ 75.85
	50.00	$ 24.62	$ 28.17	$ 37.65	$ 59.37	$ 102.81

And the value transfer

	Aggregate Equity	Share Count	Equity per share
Intrinsic Value (without new stock issuance) =	$ 1,833.67	65.10	$ 28.17
Intrinsic Value (with new stock issuance) =	$ 11,833.67	115.10	$ 102.81
Change in Value	$ 10,000.00		
Intrinsic Value of existing shareholders before issuance	$ 1,833.67		
Intrinsic Value of existing shareholder stake after issuance	$ 6,693.07	(65.1/115.1) share of value	
Value transferred to/from new to existing shareholders	**$ 4,859.40**		
Price paid by new shareholders for issued shares =	$ 10,000.00		
Intrinsic Value of new shareholder stake after issuance	$ 5,140.60	(50/115.1) share of value	
Value transferred to/from existing to new shareholders	**$ (4,859.40)**		

Revenge on your mind..

- Investing with the intent of causing pain to someone else is understandable, especially when the other party is viewed as evil or privileged.
- But it is also dangerous, at least in the context of markets because:
  - By losing sight of the end game in investing, which is preserving and growing your wealth, you may very well succeed at hurting your targets but do even more damage to yourself.
  - The winners and losers from an investing episode are a quickly shifting coalition, with investors moving from side to side. The people who are helped and hurt are not always the people that you set out to help or hurt.
  - If you truly want to punish a group that you think is deserving of punishment, you have to find a way to alter their investment models. With hedge funds, the best revenge you can have is to see investors collectively pull their money out of funds, and that will happen if they under perform as a group.