

Retail Investors: Naïve or Sophisticated?

By Zhipeng Yan

***About us:** the Leir Center for Financial Bubble Research seeks to understand through quantitative and qualitative research how a financial bubble can be identified including its stages of development and what policies can best manage its impacts.*

Prior to 2021, some big-name short sellers, such as Citron Research and Muddy Waters, had been successfully employed a nonconventional arbitrage strategy. They publicly revealed their valuable information to induce the target's shareholders to sell, thereby accelerating price discovery. They produced detailed reports, which tend to focus on questionable governance and accounting practices of targets and often include recorded phone calls, videos and photographs, facts that are hard, if not impossible, to dismiss. Financial economists Alexander Ljungqvist and Wenlan Qian (2016) studied 124 short-sale campaigns by 31 short-sellers in the United States between 2006 and 2011. They showed that investors respond strongly to the information. Share prices fall by an aggregate \$14.8 billion.

This strategy had been working fairly well until they met their match in the fight of GameStop. A large group of retail investors from the Reddit page r/wallstreetbets in January 2021 gobbled up shares from GameStop, sending the price surging by 1,500% by January 27 over the course of two weeks and forcing Andrew Left, founder of Citron Research, to call it quits. Basically, retail investors, led by a few sophisticated individual investors, turned the nonconventional strategy of short sellers on its head. Millions of retail investors connected with each other on Reddit and chat forums, shouted it from the rooftops: buy GameStop!

In his 2013 bestseller, "David and Goliath", Malcolm Gladwell examines what happens when ordinary people confront giants – powerful opponents of all kinds. Goliath was an infantryman. He was expecting a hand-to-hand combat. "It never occurred to him that the battle would be fought on anything other than those terms, and he prepared accordingly". David, the shepherd boy, thought differently. He decided to fight Goliath the same way he had learned to fight wild animals – as a slinger. In a battle, slingers beat infantry, hands down. "Goliath had as much chance against David," Gladwell quoted the historian Robert Dohrenwend, "as any Bronze Age warrior with a sword would have had against an [opponent] armed with a .45 automatic pistol."

In the fight of GameStop, Andrew Left, a Goliath-like investor, didn't expect that tens of thousands of retail investors-Davids could openly 'collude' via Reddit and other social media platforms. It never occurred to him that investors could do things like that. And short sellers had their Achilles Heel or Goliath's exposed forehead, if you prefer, – approximately 140% of GameStop's public float had been sold short in January 2021, indicating a significant number of shorted shares had been re-lent and shorted more than once.

Retail investors are often deemed as naïve, psychologically biased, and otherwise ill-informed. In recent years, a nascent literature has started to challenge this conventional wisdom. For example, in a survey study of clients of Vanguard Group, Giglio et al. (2019) examine how individual investors make decisions. They show them, overall, to be patient and prudent. Kelley and Tetlock (2013) find that net buying by retail investors positively predict firms' monthly stock returns with no evidence of return reversal, and retail investors' collective actions contribute to market efficiency.

In addition, the potential power of individuals has risen exponentially in the digital era of mobile communications and social media. A tweet or a video posted by an individual can possibly cost a company tens of millions of dollars¹. My co-authors and I (2020) illustrate that retail investors in China can coordinate their actions intentionally or unintentionally with the help from internet and social media platforms and exert a strong influence on a company.

James Surowiecki argues eloquently in his best-selling *The Wisdom of Crowds*, that the aggregation of information in groups, resulting in decisions that are often better than could have been made by any single member of the group. However, whether or not pools of individual judgments can do well depends on whether the individual observations are independent and their errors uncorrelated. Daniel Kahneman in his *Thinking, Fast and Slow*, points out that “if the observers share a bias, the aggregation of judgments will not reduce it. Allowing the observers to influence each other effectively reduces the size of the sample, and with it the precision of the group estimate.”

In the case of GameStop, retail investors' observations or judgments are NOT independent. But the large base of retail investors suggests that some of the more willing and sophisticated individuals could have enough expertise to dig out valuable investment opportunities. That is, crowds can still be wise even when judgments are not independent. Keith Gill is such a willing and sophisticated retail investor. Gill, known on Reddit by his screen name “DeepF***ingValue” and the YouTube and Twitter alias “Roaring Kitty”, is a marketing professional and CFA (Chartered Financial Analyst). He purchased around \$53,000 in call options on GameStop's stock in 2019². He shared information on his investment regularly.

While retail investors' behavior looked crazy, it, in my mind, was actually rather rational. Let's assume you have an opportunity to play a game. In order to play the game, you need to put down a certain amount of money. if you win, you make 20 times of your original money; if you lose, you lose your money. Will you play?

¹ On April 11, 2017, United Continental Holdings' market value was off by \$250 million after a video showing a passenger being forcibly dragged off an overbooked United Airlines flight went viral.

² For more references, please visit https://en.wikipedia.org/wiki/GameStop_short_squeeze#Timeline.

I don't know about you. I will play this game if the following two conditions are met. First, how much money do I need to throw in initially? Second, what are the odds of winning? If the amount of money I could possibly lose is a small fraction of my wealth and if the odds are reasonable, say 30%, I will play the game!

Jim Cramer, the host of Mad Money of CNBC, insists that a portion of one's assets be devoted to pure speculation. "*That way you can be truly diversified, own some solid blue chips, some good dividend yields from many groups and yet still have that lottery ticket that can't hurt you and can make you rich in a quick stroke.*"

I tend to agree with him in this regard. How about you?

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