

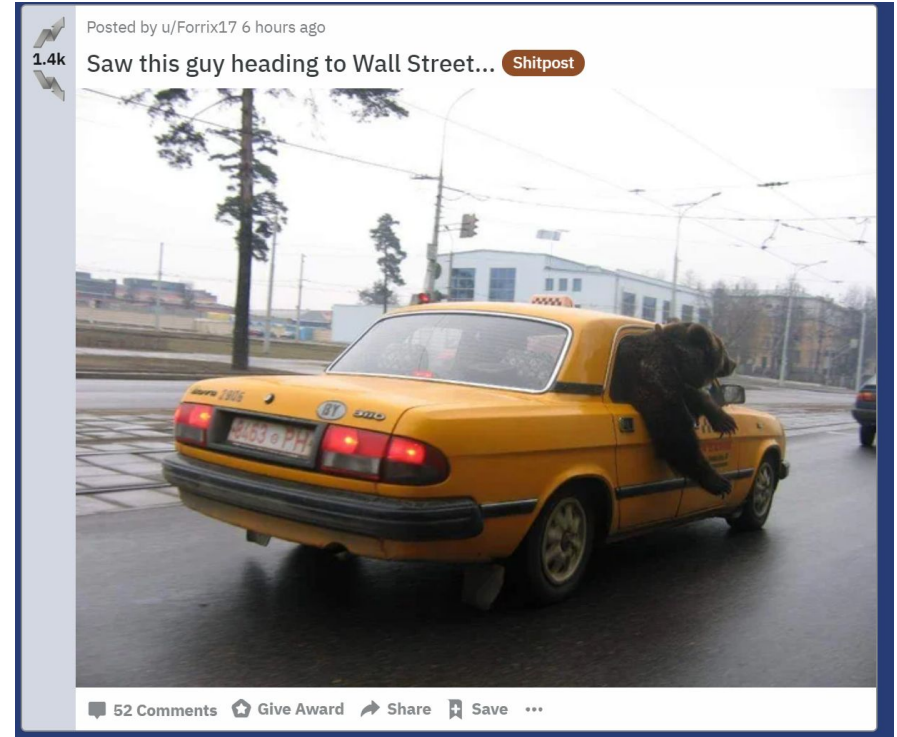
The Rise of the Reddit Trader

By Jonathan Hu



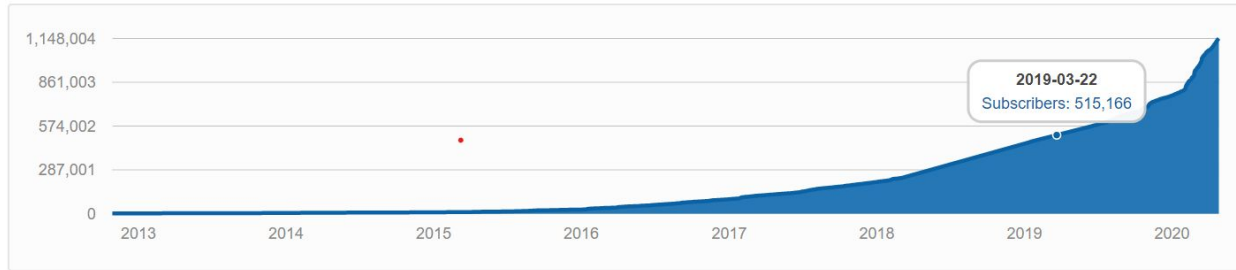
r/WallStreetBets

- A few educational posts
- A couple of light-hearted posts
- Some fundamental analysis (DD)
- People posting about the P&Ls
- And lots of borderline gambling



15 Minutes of Fame

- 2012 Creation of r/WallStreetBets
- 2017 100k subscribers
- 2019 500k subscribers
- 2020 Headlines on Bloomberg Businessweek



Redditer's Toolbox of Tactics



1. Swamp the market with call purchases for Stock A early in the morning
2. Market Maker buys a percentage of the Stock A options contract to hedge
3. Upward pressure on Stock A's price

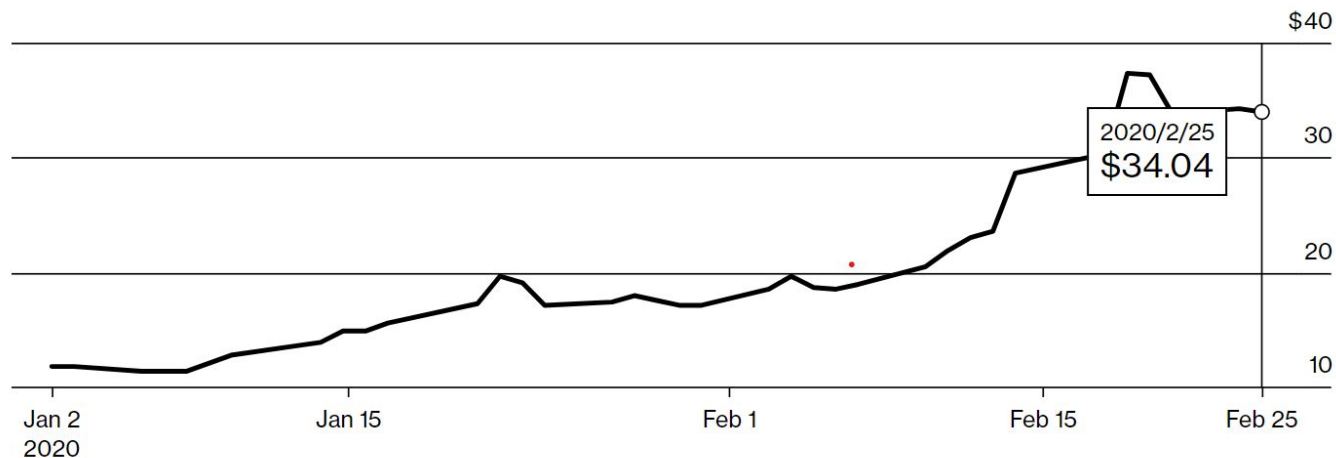
Questions

- Do Reddit posts have a real effect on the US equities and options market?
- Are Reddit traders moving the market through coordinated options trades?
- If so, are Reddit traders able to hand it to a greater fool and make a profit?

Putting the Anecdotal Evidence to the Test

Case Study: Virgin Galactic (SPCE)

Virgin Galactic Stock Price



Data: Compiled by Bloomberg

Timeline of Virgin Galactic's Major Events

Virgin Galactic IPO

October 28,
2019

November 12,
2019

SPCE starts gaining
momentum on WallStreetBets

January 10,
2020

February 25,
2020

Q4 Earning Announcement
2019 Year-End Results









It's a jungle out there, stay safe!



Progress

- Failed to connect to Reddit API :(
- OptionMetrics data ends on June 2019 :(
- CRSP pricing data ends on Dec 2020 :(
- Connected to Reddit API thanks to Sentdex's Tutorials :)
- Queried all subreddits posts related to SPCE ($n = 244$)
- Recent pricing data from Yahoo Finance :)
- Still wrestling with Pandas, Python's panel data package



1.6k	 <p>I rode SPCE up on Calls, and then down on Puts. Was able to buy myself a nice custom embroidered hoodie, tendies, a Corona, and a small treat for St. Jude's. Gain</p> <p>r/wallstreetbets · Posted by u/Pipe_Hitting_Loggie I love the Air Force 1 month ago 🤪👑🐶👹 2 & 2 More</p> <p>↗️ 💬 166 Comments 🏆 Give Award ➦ Share 📌 Save ...</p>
805	 <p>PSA for those missed out on SPCE DD</p> <p>r/wallstreetbets · Posted by u/Youkiame 2 months ago</p> <p>↗️ 💬 219 Comments 🏆 Give Award ➦ Share 📌 Save ...</p>
660	 <p>AMD is the new SPCE Shitpost</p> <p>r/wallstreetbets · Posted by u/slkerlin 2 months ago 🤪</p> <p>↗️ 💬 290 Comments 🏆 Give Award ➦ Share 📌 Save ...</p>
395	 <p>Yes, I'm still living in \$SPCE. No trim yet, still all in. Gain</p> <p>r/wallstreetbets · Posted by u/achari01 Welcome to the SPCE Jam 2 months ago 🤪</p> <p>↗️ 💬 153 Comments 🏆 Give Award ➦ Share 📌 Save ...</p>
483	 <p>SPCE to 26 today. Discussion</p> <p>r/wallstreetbets · Posted by u/-WOWZ- Kenyan rainmaker 2 months ago</p> <p>↗️ 💬 479 Comments 🏆 Give Award ➦ Share 📌 Save ...</p>
319	 <p>SPCE is going parabolic very soon and this week is the best time to get in. DD</p> <p>r/wallstreetbets · Posted by u/daddydickie 2 months ago</p> <p>↗️ 💬 343 Comments 🏆 Give Award ➦ Share 📌 Save ...</p>

Next Steps

- Finish data wrangling
- Address reverse causality with minute-resolution pricing data
- Add controls
- Test if data fits multi-period information diffusion model (Dellavigna & Pollet)
 - Signal = Reddit DD posts
 - Time 0 = creation date
 - Check for upward or downward drift
- Perform similar analysis on Tesla and Microsoft

Best of luck on your explorations

