Retail Investors and ‘Noise’ Trading

Clients often chase attention-grabbing stocks and severely underperform the market due to active trading.

Larry Swedroe | Feb 14, 2023

Research has found that retail investors tend to be naive “noise traders” who trade on sentiment rather than on fundamentals.

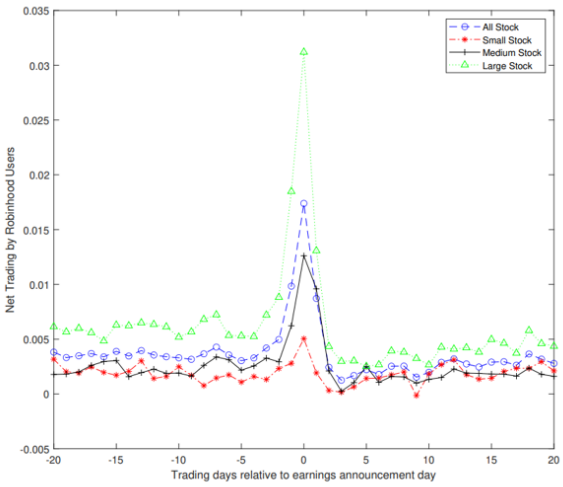
In a series of papers, Brad Barber and Terrance Odean demonstrated that retail investors are susceptible to behavioral biases such as overconfidence, often chase attention-grabbing stocks and severely underperform the market due to active trading.

Further research shows that noise trading can lead to mispricing, especially for hard-to-arbitrage stocks and during periods of high investor sentiment. Eventually, any mispricing would be expected to be corrected when the fundamentals are revealed, making investor sentiment a contrarian predictor of stock market returns. In fact,

overpricing is more prevalent than underpricing because investors with the most optimistic views about a stock exert the greatest effect on the price; their views are not counterbalanced by the relatively less optimistic investors inclined to take no position if they view the stock as undervalued, rather than a short position. Thus, when the most optimistic investors are too optimistic, overpricing results. Underpricing on sentiment is less likely.

Qiqi Liang, Mohammad Najand, David Selover and Licheng Sun contribute to the already voluminous literature on this topic with their December 2022 study "Retail Trading Around Earnings Announcements: Evidence from Robinhood Traders." It examines the retail trading activities around earnings announcements with data from the U.S. online discount broker Robinhood, "whose clients are known to be mostly young, inexperienced, but tech-savvy investors." Their data sample, consisting of 3,771 stocks with 27,307 earnings announcement events, starts on May 2, 2018 and ends on August 13, 2020, after which the data source was shut down by Robinhood. They used two measures of investor attention: turnover (the ratio of daily trading volume over the outstanding number of shares of stock) and volume-weighted abnormal return. Here is a summary of their findings:

Robinhood traders swarm into stocks with pending earnings announcements and lose interest in them immediately after the announcements—earnings announcement dates play a pivotal role in explaining their trading activities. There is a surge in buying starting from about four days prior to earnings announcement. However, the buying peaks exactly on the announcement date and then quickly fizzles out after announcement.



Proxies for investors' gambling preference cannot explain trading activities from Robinhood traders, but proxies for investor attention can. As can be seen in the chart above, Robinhood investors appear to focus more on the large stocks—large firms are more likely to catch investors' attention due to a higher degree of media coverage.

Table 3: Cumulative Abnormal Return around Earnings Announcements

This table reports the average cumulative abnormal returns of all stocks traded by Robinhood traders around earning announcements. We calculate the abnormal return as the difference between the returns of stock i and that of the CRSP value-weighted index (CRSPVW). Cumulative abnormal returns are reported for various windows before, during, and after the announcement. The table also present the results both for the full sample and three size groups. We report clustering-corrected t-statistics in parentheses. ** and * indicate significance at the 1% and 5% levels, respectively.

		[-10, -1]	[-10, -6]	[-5, -1]	[-3, -1]	[-1, -1]	[0, 0]	[1, 2]	[1, 5]	[1, 10]
All stocks	Mean	0.0058**	0.0017**	0.0041**	0.0025**	0.0011**	0.0014**	-0.0016*	-0.0031**	-0.0031**
	t-stat.	(7.39)	(3.60)	(6.33)	(4.97)	(4.70)	(3.25)	(-2.43)	(-3.97)	(-3.17)
Small stocks	Mean	0.0052*	-0.0002	0.0054**	0.0044**	0.0017**	-0.0008	-0.0096**	-0.0114**	-0.0084**
	t-stat.	(2.26)	(-0.13)	(2.77)	(2.80)	(2.73)	(-0.82)	(-6.20)	(-6.10)	(-3.50)
Mid-cap stocks	Mean	0.0075**	0.0025**	0.0050**	0.0018**	0.0010**	0.0022**	0.0009	-0.0011	-0.0028
	t-stat.	(6.70)	(3.36)	(5.67)	(3.44)	(2.71)	(2.68)	(0.76)	(-0.83)	(-1.56)
Large stocks	Mean	0.0048**	0.0025**	0.0024**	0.0017**	0.0007**	0.0024**	0.0022**	0.0014*	0.0005
	t-stat.	(7.85)	(5.45)	(5.28)	(5.39)	(3.43)	(4.99)	(3.15)	(1.70)	(0.54)

Robinhood investors, on average, lost money after the earning announcements, with negative average returns immediately after the announcements; and the negative returns persisted even after two weeks—casting serious doubts on the premise that Robinhood traders possess private information, as their bets on a positive post-earnings announcement drift were unfruitful. They also do not trade to provide liquidity—one day

ahead of earnings announcements, the average net trading was smaller among high-spread (more illiquid) stocks than low-spread stocks. In addition, if investors are compensated for providing liquidity, then their trading should be profitable. Yet, as mentioned, their trades tend to be unprofitable.

These findings led Liang, Najand, Selover and Sun to conclude that there is "significant and consistent evidence that suggests investor attention acts as the main driving factor that motivates Robinhood investors' trading around earning announcement dates."

Investor Takeaways

While the results of Liang, Najand, Selover and Sun's findings are based on a sample from a brokerage firm whose clients are dominated by the younger generation, they appear to confirm that this generation is no different from their predecessors, failing to learn from their poor experiences. The first takeaway, then, is to avoid being a noise trader. However, there is perhaps an even more important takeaway.

Unfortunately for noise traders, not only do their behaviors tend to negatively impact their returns, but they also pay a price in terms of wasting efforts on non-productive behaviors. Instead of engaging in attention-driven trading, they could be engaging in far more productive activities and paying more attention to the important things in their lives, such as their family, friends and the activities they enjoy. Helping investors learn this important lesson is one of the greatest value-adds a financial advisor can offer—some would even argue it's priceless.

Larry Swedroe has authored or co-authored 18 books on investing. His latest is "Your Essential Guide to Sustainable Investing." All opinions expressed are solely his opinions and do not reflect the opinions of Buckingham Strategic Wealth or its affiliates. This information is provided for general information purposes only and should not be construed as financial, tax or legal advice. LSR-22-423