

The anchor that makes you safe cannot help much. Heuristics of information search and communication in an online forum of investors under market uncertainty.

Manuela Testa*, Pierpaolo Dondio[°], Niccolò Casnici[^], Marco Castellani*, Flaminio Squazzoni*

*Department of Economics and Management, University of Brescia, Italy: e-mail: manuela.testa@unimi.it

[^]Department of Clinical and Experimental Sciences, University of Brescia, Italy
[°] Dublin Institute of Technology, Ireland

Abstract

This paper aims to examine the impact of heuristics of information search and communication in an online forum of investors under market uncertainty. Today, in financial markets, investors communicate directly, share information and create common interpretations of market trends through direct and indirect links as a means to reduce strategic and operational uncertainty. Real-time communication between multitudes of investors on a global scale has made rational expectations of investors strongly dependent on information signals and communication. In order to try to predict market trends, investors extract relevant information from multiple sources, which need to be intelligently interpreted. This determines a dramatically unpredictable context in which investors try to reduce semantic, strategic and operational uncertainty by processing a huge amount of information, which is often redundant.

Previous research in psychology suggested that emotions, like fear, empathy or euphoria, are key for human decision-making, albeit they can lead individuals to irrational decisions (Nofsinger, 2005). Research in behavioural finance found that even financial decisions by rational investors are significantly driven by emotion and mood. The fact that investors now use peer-to-peer information systems and direct and indirect decentralised communication platforms makes them extremely susceptible to a variety of direct and indirect contacts as the set channel an impressive amount of information. This is way they need heuristics and emotional shortcuts while processing information under time and resource constraints (Saavedra et al, 2011).

Understanding the interplay of new communication platforms and information search strategies requires to go beyond the conventional hypothesis of rational expectations, which is still dominant in economics and finance. Investigating the dynamics of communication between investors is key to understand market behaviour when uncertainty prevails as prices do not reflect all information available and must be interpreted.

For instance, one of the most well known heuristics is anchoring, i.e., the common human tendency of individuals to rely too heavily on the first piece of information found, the "anchor" when making decisions. Once an anchor is set, individuals tend to judge other events by simply adjusting away from the anchor from which they started. This in turn biases them towards interpreting other information around the anchor. Research showed that individuals tend to anchor to known things especially when they are under uncertainty as a strategy to maintain their confidence and feel safe. It is probable that investors use similar heuristics when processing market information and communicating with other experts.

In our study, we examined anchoring effects among investors by analysing N 391,574 messages that were exchanged on the forum site "finanzaonline.com". The financial community of this site is the largest in the Italian market with more than 300,000 users who exchanged 28,000,000 messages from

YEAR to YEAR. The forum is divided into several subcategories: “Operational Finance threads”, “finance insights”, “live meeting” and “free discussion”, “help”, “archive”. Each of these subcategories includes its own basic statistics, include e.g., the number of threads, posts, last user who posted and the number of users who are active online in a given time.

Previous research showed that this forum attracted a variety of investors, from newcomers to half professionals, from individual investors to bank traders (Casnici et al, 2015). They typically log-in to ask questions to more expert investors, who have accumulated good trading experience and are specialised in specific stocks on which they are investing.

We focused on the category of “Operational Finance threads” as this had the largest number of messages. It included the Italian market, smallcap and forex. Here, we found a segmentation of investors: “Italian Market” mostly included newcomers and expert investors, while the other two topics (SmallCap e Forex) attracted only expert investors.

We traced communication forms between investors by measuring how they reacted to negative or positive news and with whom they communicate preferentially. We wanted to understand if market uncertainty could change communication processes. To do this, we identified high-volatility periods (market uncertainty) and low volatility (market security) in market trends on a daily base.

Our hypothesis was that in times of low volatility, investors were more prone to explore and search for information by communicating preferentially with investors with whom they never interacted before. In this case, we expected that the anchoring effect was weaker. On the contrary, in periods of high volatility, we hypothesised that, under higher stress and panics, investors were pushed to search for safety and certainty so remaining anchored to investors who were already "known".

We looked at every citation that an investor made to another user and measured if these were repeated in the following days. To do so, we used the Jaccard index, also known as the similarity coefficient of Jaccard. Preliminary results shows that, in the Forex topics, people are more anchored when the volatility doesn't change significantly or when the volatility is medium.

Our research aims to contribute to link cognition, communication and economic behaviour in a rich sociological perspective. Here, we tried to link anchoring to overconfidence in that a potential access to large amount of data in these online systems can fatally induce investors to think they know well the context in which they are moving, thereby inducing a systematic overestimation of their own abilities.

References

- Casarin, R., Casnici, N., Dondio, P., & Squazzoni, F. (2015). Back to Basics! The Educational Gap of Online Investors and the Conundrum of Virtual Communities. *Journal of Financial Management, Markets and Institutions*, 3(1), 51-69.
- Nofsinger, J. R. (2005). Social mood and financial economics. *The Journal of Behavioral Finance*, 6(3):144–160.
- Saavedra, S., Duch, J., and Uzzi, B. (2011). Tracking traders' understanding of the market using e-communication data. *PloS one*, 6(10):e26705.