

Trading on Social Trading Platforms

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1 Sociability in the Market

Individual participation in financial transactions has been a market feature since at least the days of the tulip mania. While in North America and Western Europe individuals have lost ground to institutional investors since the 1960s (Useem, 1996), it is worth noting that in other major financial markets, especially Asian ones, they continue playing a significant role in terms of share of market transactions and volume. Since the late 2000s, though, we observe an increased participation of retail investors in market operations in North America and Western Europe too: Episodes such as the GameStop saga in 2021 – when groups of retail investors managed for a while to cause significant losses to some hedge funds – have brought some of this participation to public attention. Equally, periodic waves of popular enthusiasm for Bitcoin, tokens, or nonfungible tokens have contributed to this public attention, especially since of late crypto assets have gained regulatory legitimacy.

A common ground for these apparently disparate phenomena – GameStop was

about the stock of a fading game retailing chain, while crypto manias are about a new and ill-defined class of assets – is the infrastructures that made them both possible. Chat forums such as Reddit, where retail traders coordinated their actions and summoned each other in real time, trading apps such as Robinhood, or crypto trading apps belong to the infrastructures that made possible this broader individual participation to financial transactions. Of course, as David Pinzur argues (this volume), we need to distinguish between ready-to-hand devices and infrastructures: Trading apps on smartphones and chatrooms belong to the former, while data centers, cloud computing, or transmission lines, as well as the algorithms calculating spreads on the GameStop stock (among many other things) would belong to the invisible background that solicits awareness only in moments of crisis. Yet, we have to notice here a few interrelated aspects: First, while communication infrastructures play a crucial role in finance (see also Coombs in this volume), social media have been seldom counted by academics as pertaining to financial infrastructures (though

professional investors have recognized their significance). Second, we need to ask the question, how does social media, as part of this infrastructure, impact investor behavior? How do they (mis)align participants? What kind of social dynamics do they foster?

While financial markets are social by definition and communication has played a key role since their inception, this has been less recognized in benchmark models of financial decision-making, which have focused on individual behavior seen as striving toward utility maximization, grounded in an efficient processing of information, and risk aversion (e.g., Fama, 1970). Forms of sociability and their consequences have been largely seen as imitative behavior and investigated as such (herding phenomena). Finance scholars have more recently recognized that social behavior in markets extends beyond imitation phenomena – hence the shift in focus toward “social finance” (Hirshleifer, 2015) meant to emphasize a reorientation of investigations away from the presumption of individual decision-making to the effects of mediated social dynamics upon markets. While there is a decades-long body of financial research on individual investors, social media-influenced decisions are much less well understood. This opens a potentially fertile ground for dialogues between sociologists of finance and financial economists interested in social behavior.

Over the last fifteen years, social media have become more and more integrated with trading platforms, giving rise to what are called social trading platforms (STPs) (see also Tong and Preda (2023) for more detail). From the perspective of social research, STPs, as we have argued, add another dimension to the study of how evolving infrastructures reshape not only market institutions but also the behavior of participants.

The rise of general social media (such as Facebook) has been quickly followed by the rise of social media exclusively dedicated to traders and integrated with online trading, often built in a smartphone app (“Facebook” for traders). In the institutional realm, data providers such as Bloomberg have also integrated social messaging in their data

provision. By offering much lower fees compared with traditional brokerages, coupled with a global outreach, STPs have managed to attract millions of individuals into financial transactions. Some of the largest STPs have millions of subscribers and revenues of over one billion US dollars (The Insight Partners, 2022). STPs offer platform-wide communication forums, as well as the possibility of building communication groups. Traders can exchange messages in real time – meaning as they trade and observe the market – either within distinct groups or with everyone who has an account on the platforms. At least as important, STPs use metrics for ranking the most successful traders and embed copying algorithms that allow participants to automatically copy the transactions of those traders deemed to be more skilled. Should the latter be successful, they receive a share of the profits made by those who have copied them. In this sense, STPs can be seen as integrating within broader societal trends of generating status differentials by means of commensuration and public rankings (Mennicken and Espeland, 2019).

For sociologists of finance and financial economists alike, there is very rich data to be studied from STPs, such as trading data, network data, and communication data (e.g., Tong and Preda, 2023). These different types of data have become increasingly valuable with the rapid growth in technological innovations, such as AI and machine learning. Institutions or individuals may utilize these tools to construct trading strategies or even perform algorithmic trading. Trading data includes traders’ everyday trading records, such as daily balances, profits and losses, number of trades, trade sizes, and so on. Network data includes the structures of how traders are connected to each other as well as whether/how often they participate in the social communication features, such as online discussion forum (ODF) and one-on-one messaging. Communication data includes the discussion content on the ODF, revealing how traders perceive and frame market events, how they justify their trading decisions, and how they account for market

events. As some STPs (and other trading platforms) have made this data available for social science research, it becomes possible to investigate how new communication infrastructures shape the social dynamics of markets. This chapter aims to shed light on this issue.

2 Sociability and Financial Performance

At least three streams of literature are directly relevant to the notion of “sociability” in relation to the financial performance of investors. We present three streams of literature to reflect the profound impacts of social interactions on financial decisions as well as the inherent skills and abilities of both professional and retail investors in financial markets. We aim to highlight the dynamic nature of human behavior, particularly in financial markets, in the presence of infrastructures that facilitate interactions among investors (e.g., social media). We argue that it is important to further understand the relationship between social interactions and investors’ financial performance, as well as the underlying mechanisms through which investors’ financial decisions are influenced.

The first stream of literature investigates the relationship between social interactions and investment biases, such as disposition effects (Heimer, 2016) and herding effects (Gemayel and Preda, 2018b). We should make clear that the notion of bias, widely used in behavioral finance, does not mean “irrationality” or “prejudice” or attachment to stereotypes on the part of investors. It simply means that observed behavior does not fit the predictions of the benchmark model of individual decision-making – as such, “bias” should be understood as deviation from such predictions (it is used interchangeably with “effect” in the sense of empirically observed effects). This being said, most studies are silent on how social interactions through media impact the financial performance of individual investors (Heimer, 2014, 2016; Gemayel and Preda, 2018a). Online communication represents a distinct form of social

interaction. Research indicates that online chats can offer valuable information for individual investors, aiding their decision-making (Antweiler and Frank, 2004; Das and Chen, 2007). A recurring theme in this body of literature is the emphasis on the significance of STPs (Gemayel and Preda, 2018a, 2018b) and information systems (Abuelfadl, Choi, and Abbey, 2016) through which individual investors make their financial decisions. Online trading platforms, including social interaction features, provide a unique avenue for researchers to explore the impact of social interactions on investor behavior and financial performance. It is important to note, however, that a majority of individual investors tend to experience financial losses on such platforms (Preda, 2017). For instance, studies using data from investment-specific online social networks, involving 5,693 foreign exchange retail traders with around 2.2 million trades from early 2009 to December 2010, have examined the influence of social interactions on the disposition effect (investment bias). These studies have shown that after gaining access to social networks, traders tend to exhibit nearly twice the magnitude of the disposition effect. This effect refers to a trader’s tendency to sell winning stocks while holding onto losing stocks (Heimer, 2016). By utilizing data from the Consumer Expenditure Quarterly Interview Survey spanning from 2000Q2 to 2010Q1, Heimer (2014) has demonstrated a strong association between social interactions and active portfolio management. This is more prevalent among active investors compared to passive investors. It is important to note that this study cannot establish the direction of causality in the relationship between sociability and active portfolio management, as acknowledged by the author. Furthermore, there is an implication that social interactions may increase risk-taking, which could potentially have a negative impact on the financial welfare of traders.

However, a fundamental question remains unaddressed in existing literature: whether being sociable in the market, involving more social interactions, is advantageous or disadvantageous for the financial performance

of individual investors. Notably, the existing literature does not distinguish between individual investors in terms of their social characteristics. Future research should bridge this gap by examining the financial performance of individual investors in relation to their varying levels of sociability in the market.

The second strand of literature is in alignment with broader social sciences and natural sciences. It seeks to uncover the impact of social interactions on the financial performance of individual investors, from the perspective of complex human systems and social networks (Saavedra, Duch, and Uzzi, 2011; Saavedra, Hagerty, and Uzzi, 2011; Liu, Govindan, and Uzzi, 2016). This strand's focus lies in understanding the complexity of human systems and the collective wisdom of human interactions rather than merely examining the outcomes of financial decisions (Pan, Altshuler, and Pentland, 2012; Altshuler, Pentland, and Gordon, 2015). Research in this area highlights that the patterns and content of instant messages (IMs) sent and received by professional stock day traders in typical trading firms can be interpreted as indicators of collective wisdom among individual investors across various platforms and can potentially influence investors' financial performance (Saavedra, Duch, and Uzzi, 2011; Saavedra, Hagerty, and Uzzi, 2011; Liu, Govindan, and Uzzi, 2016). For example, Saavedra, Hagerty, and Uzzi (2011) used a dataset consisting of 66 individual stock day traders in a typical trading firm from September 2007 to February 2009, including over 1 million trades, with 55% being profitable. Their findings indicate a positive association between synchronous trading and the probability of making a profit, and the levels of synchronous trading are closely related to the patterns of IMs. Similarly, Liu, Govindan, and Uzzi (2016) examined a dataset from 30 professional day traders, covering around 886,000 trading records and over 1.2 million IMs from January 2007 to December 2008. Their research reveals a connection between the expressed emotions in online communications and the profitability of

actual trades. Traders who exhibit minimal or excessive emotional expression tend to make relatively unprofitable trades, while those with moderate emotional expression tend to make relatively profitable trades. Pan, Altshuler, and Pentland (2012) utilized data from the online STP eToro and provided evidence that social trades, often associated with crowd wisdom, are more likely to outperform individual trades. However, it's important to note that social traders are not consistently optimal performers (Pan, Altshuler, and Pentland, 2012). These studies operate with a notion of collective or crowd wisdom that in part sends back to the established concept of herding, and in part attempts to identify emerging phenomena in communication processes, based on large datasets: Communication is synchronized with trading actions, while interpretive frames (for market events) emerge within communication and become objectified (more specifically, are iterated across communication sequences and cannot be attributed to a single source anymore). The results point to at least two effects of communicational infrastructures: action synchronicity and objectification of interpretive frames.

These studies suggest that social communication and interactions play a significant role in the decision-making process of individual investors, highlighting the need for a more precise behavioral model (Pan, Altshuler, and Pentland, 2012). Furthermore, Altshuler, Pentland, and Gordon (2015), using data from the same online STP (eToro), which involved over 3 million individual investors and more than 40 million trades spanning from 2011 to 2014, revealed an inverted U-shaped relationship between the average financial gains and the number of information sources used for decision-making. This suggests that having too little information is insufficient, while an excess of information can be harmful in terms of financial performance. As mentioned earlier, while some studies indicate an association between social interactions and financial performance, the literature does not investigate different degrees of

communication in relationship to investors' financial performance. Future research needs to address this question by taking into account different levels and degrees of communication and to develop an analytical model to explore the relationship between communicative interactions and the financial performance of individual investors.

The third strand of literature investigates the skills and abilities of investors (including both professional and retail) in relationship to the (positive) returns on investments. We distinguish here between professional and retail investors. This is because individual investors tend to exhibit different patterns of decision-making compared with professional investors (Preda, 2017). In terms of professional investors, previous research indicates that approximately 24% of professional currency managers (drawn from a sample of thirty-four individual currency fund managers) have the potential to achieve significantly positive abnormal returns within a four-factor model in the currency market (Pojarliev and Levich, 2008). However, there is no evidence demonstrating that currency fund managers can consistently generate abnormal returns (Pojarliev and Levich, 2010). In contrast, when we consider retail investors, conventional wisdom suggests that, in the stock market, active trading individual investors tend to underperform passive trading individual investors. This underperformance is often attributed to the costs associated with a high level of trading (turnover) (Barber and Odean, 2000). However, other studies present evidence that within the highly active individual investors there exist small subsets of individual investors that earn abnormal returns (Goetzmann and Kumar, 2008; Dahlquist, Martinez, and Söderlind, 2016). For instance, in Sweden's Premium Pension System approximately 5.8% of active and 0.6% of highly active individual investors earn significantly higher returns, achieving average returns of 6.86% and 12.57% per year, respectively. This is in comparison to the remaining 93.5% of inactive individual investors who achieve average returns of 3.82% per year.

These active investors manage their investments by reallocating money from different funds in their pension accounts (Dahlquist, Martinez, and Söderlind, 2016). Moreover, there is evidence suggesting that around 2% of high-turnover and under-diversified individual investors' portfolios perform better than their high-turnover and better-diversified counterparts in the stock market (Goetzmann and Kumar, 2008). This demonstrates that active trading is not always hazardous to wealth, at least for some investors, although their proportion is quite small. In the context of individual currency investors, which is the focus of this chapter, certain studies employing a four-factor model (Pojarliev and Levich, 2008) indicate that individual currency investors can achieve abnormal returns even after accounting for transaction costs (Abbey and Doukas, 2015).

Building upon these strands in existing literature, it becomes evident that they all place significant emphasis on communication and instant messaging within the context of STPs. Sociability, as implicitly depicted in these studies, revolves around engaging in communication with other traders through instant messaging and participating in community discussions. However, existing studies do not furnish clear-cut evidence regarding whether this sociability, understood as engaging in communication, has a positive or negative impact on financial performance. The underlying assumption is that the "wisdom of crowds" is superior to making decisions independently. But is this indeed the case? Does online communication with other traders enhance financial performance? On the one hand, one can argue that engaging in online communication enables traders to swiftly exchange information and acquire knowledge. On the other hand, however, an opposing argument can be made – that online communication distracts traders and exerts a detrimental influence on their performance. The question of whether sociability in the form of communication is ultimately advantageous or detrimental to financial performance remains a pivotal one.

3 Communication and Survivorship: A Case Study of STP

Communication alters investors' trading behavior and decision-making process (Heimer, 2016; Han, Hirshleifer, and Walden, 2022; Tong and Preda, 2023). Traders can be influenced by communication with friends and neighbors in terms of stock market participation (Hong, Kubik, and Stein, 2004; Guiso and Jappelli, 2005) and investing strategies (Han and Hirshleifer, 2012; Heimer, 2014). Empirical studies have documented that communication plays a role in retail traders' decision to start trading in equity and foreign exchange (FX) markets (Brown et al., 2008; Kaustia and Knüpfer, 2012; Changwony, Campbell, and Tabner, 2015; Chen and Roscoe, 2017). Against this background, it is intuitive that traders can also be influenced by the conversations they have with other traders while trading, especially when they are discussing their ongoing trading activities and decisions. The consequences of social communication on traders can not only include the decision to participate and to adapt their trading strategies, but also the decision to continue (survive) or to cease (quit) their trading activities.

However, the relationship between survivorship in trading and social communication is unexplored in the literature. The investigation of the survival of traders has a distinct value for understanding the dynamics of a trader's lifetime decision-making processes, which is different from the decision to participate (at the beginning of a trading life) and to choose their trading strategies (in the middle of a trading life). It is the decision to quit trading (at the end of a trading life) which finally concludes the story of a trader's trading life. This decision constitutes an important aspect of the characteristics of a trader's trading life.

It is not fully clear to the academic community what traders talk about and how the various aspects of their trading activities are influenced by the content of the conversations they have while making their trading decisions (let alone examining the impact of social communication on traders' behavior).

However, in the setting we explore in this chapter (data from a STP) we can observe what traders talk about while trading and how their behavior is subsequently altered by such social communication. We observe that traders are keen to talk about the future in the ODF. For example, "Today is looking very sketchy, I'm going to hold a long aud/jpy averaged about 77.90 and call it a week," "What do you [sic] think the EURUSD pair is going to do in the next 5 hours?," and "Maybe MyFXtrade will have a real-time graph of these numbers in the future we can use."

Intuitively, these discussions anchor traders' expectations regarding the future. Traders should therefore be more curious to check out their expectations in the future and more likely to stick around to see what happens, compared to instances where they do not have any expectations at all. Consequently, traders should have the incentives to continue to stay (survive) in the market (as opposed to exiting the market) after having such conversations regarding the future of the market. Therefore, we examine whether social communication impacts the survival of traders.

Such an investigation is especially relevant since, as we have argued, technological evolutions have led to integrating communication with real-time trading. This integration changes the way transactions are organized, in the sense that it becomes possible to obtain real-time information about how fellow traders make decisions, swap opinions, and interpret market information jointly. Evidence shows that communication on social media can predict prices in equity markets and FX market movements (Ozturk and Ciftci, 2014; Reed, 2016; Lachanski and Pav, 2017). FX markets are of particular interest because entry barriers are usually lower compared with the stock market, attracting a broader spectrum of investors of different financial means. Crypto asset markets are another domain of interest here, but studies of crypto traders are still in an incipient stage. Recently, studies have developed theoretical models in order to describe information transmission in the market through network communication,

capturing the implications for asset prices (Ozsoylev, 2004; Han and Yang, 2013; Han, Hirshleifer, and Walden, 2022).

4 Communication and Survivorship: Possible Explanations

We encounter several converging explanatory approaches. One, coming from the sociology of finance, is that market participants (i.e., professional traders) use face-to-face communication or online messaging to coordinate with each other, build joint expectations based on what they observe while trading, and reciprocal obligations (e.g., Knorr Cetina and Bruegger, 2002; MacKenzie, 2009; Laube, 2016). This explanation is grounded in studies of institutional trading floors and trading rooms, studies that do not examine massive online communication.

Another explanatory approach is that capitalist organizations generate fictional projections of the future as a means of coping with uncertainty (Beckert, 2016). However, such projections are generated at an organizational level, including various tools (e.g., business plans). It is unclear how they impact survival at organizational or individual level (if at all).

A third approach is provided by the anticipatory discourse theory which has been advanced in applied linguistics and psychology studies (Kinsbourne and Jordan, 2009; Streeck and Jordan, 2009; Saint-Georges, 2012; Poli, 2019). Specifically, the anticipatory discourse theory suggests that “futurity is an inevitable component of text, talk, and more largely of social life, because human action has an intrinsically forward-looking nature” (Saint-Georges, 2012). The “forward-looking nature” embedded in human communication takes two forms in the discourse processes, namely projection and anticipation (Kinsbourne and Jordan, 2009). Streeck and Jordan (2009) suggest that the forward-looking nature “consistently emerges in any discussion of interaction” (p. 93).

These insights reveal an important theoretical implication on the dynamics of human behavior subsequent to communication.

That is “the very fabric of interaction and communication seems to be imbued with forward-looking anticipatory structures that facilitate ongoing, fluid interactions in a dynamic social environment” (Streeck and Jordan, 2009, p. 95). Applied to the case discussed here, it would mean that communicational infrastructures present in markets embed such anticipatory affordances – they provide participants with opportunities to project the future repeatedly – and such anticipations ground actions in the market.

This theoretical implication is not exclusive to finance. We find that, in the context of STPs, these insights are evidenced by the discussion contents of the ODF. When reading through the content of the ODF, one significant feature is that traders are keen to talk about events in the future, share their predictions about the future, and discuss trading strategies based upon their perception of different states of the market in the future.

Given the discussed forward-looking nature of online discussions, we would expect that social communication increases the survival of traders. This is because traders, based upon the online discussions, may change their future expectations about the market or the platform, alter their perception of their own trading skills, and try out new trading strategies. These influences can be eventually translated into an increased survival probability of traders in the short term or a prolonged trading period in the long term. Therefore, we would expect that social communication increases the survivability of traders on a STP.

5 Sociability and the Wisdom of Crowds

This section aims to shed light on the effect of social media on the wisdom of crowds, and among different types of crowds, most of which are affected by communication. At least two strands of literature are directly relevant to the issue. The first one is the influence of social media on human behavior and the second one is the wisdom of crowds.

As the literature shows that social media has broad influences on human behavior, we have sufficient grounds to expect that social media plays a (positive or negative) role in the decision-making process of individual investors. However, the wisdom-of-crowds literature focuses more on when and why crowds make better decisions. It remains unclear whether this wisdom can be influenced by social media and whether it is influenced differently according to different types of crowds. For instance, we can expect that social media accelerates crowd formation and/or polarization of opinions, and that there are differences in this respect between media and other communicational infrastructures.

5.1 The Impact of Social Media on Individual Behavior

There is ample evidence coming from nonfinancial domains showing that social media alters the behavior of individuals, affects life satisfaction, and even causes addiction-like symptoms and mental health issues (i.e., mental depression, see Shensa et al., 2017) in a variety of settings (Kuss et al., 2013; Leung, 2014; Colucci, 2016; Alkhalaf, Tekian, and Park, 2018; O'Reilly et al., 2018; Turel and Gil-Or, 2018). For instance, the use of WhatsApp is not directly linked to the academic performance of students, but the time spent using WhatsApp is proportionally related to symptoms of addiction (Alkhalaf, Tekian, and Park, 2018). Moreover, besides the evidence suggesting that the negative relationship between social media addiction and well-being varies between women and men to some extent (Turel and Gil-Or, 2018), adolescents themselves often perceive social media as a threat to their well-being (O'Reilly et al., 2018). Furthermore, symptoms resembling addiction and problematic behaviors associated with excessive or even compulsory social media usage are prevalent among the general population. These phenomena can be explained from the perspective of the morphology of the posterior subdivision of the insular cortex in human

brain systems and processes (Turel et al., 2018). It is estimated that more than 210 million people worldwide suffer from internet and social media addiction (Longstreet and Brooks, 2017).

Similarly, in the financial markets, social media is also found to have a significant impact on the behavior of individual investors, in terms of both financial performance and decision-making (e.g., the decision to quit or stay in the market). More recently it has been argued that social media significantly impacts the behavioral biases of individual investors, such as herding effect and disposition effect (Heimer, 2016; Gemayel and Preda, 2018a, 2018b). For example, it is estimated that after the inclusion of social media on trading platforms, trading behavior is significantly influenced and, as a result, investors exhibit around twice as much disposition effect as before the inclusion (Heimer, 2016). In addition, on different types of trading platforms, investors tend to exhibit different magnitudes of disposition effect. For example, individual investors on an online STP, one that incorporates social media features such as the ability to observe the financial performance of other investors, exhibit a lower disposition effect when compared to individual investors using a traditional trading platform (Gemayel and Preda, 2018a). However, individual investors on a STP tend to exhibit higher levels of herding when compared with those within traditional trading environments (Gemayel and Preda, 2018b).

5.2 The Wisdom of Crowds

Another strand of literature documents the collective effect of the wisdom of crowds, which is similar to a self-fulfilling prophecy. Once collective anticipations of the future are adopted by a crowd and objectified, the crowd starts acting according to the anticipations and thus realizes them. A case in point is provided by the predictability of price movements based on analyzing the anticipative information produced by a group of people (Chalmers, Kaul, and Phillips, 2013; Nofer and Hinz, 2014; Azar and Lo, 2016; Karagozoglu and Fabozzi, 2017; Polzin,

Toxopeus, and Stam, 2018). For instance, through text analysis, research demonstrates that both articles and investor comments posted on a popular US social media platform for investors have the predictive power for stock returns and earnings surprises (Chen et al., 2014). Moreover, social media, serving as a tool to reflect investor sentiment, contains valuable information regarding future asset prices. For example, using Twitter data that includes tweets related to the Federal Reserve, a tweet-based asset allocation strategy outperforms several benchmarks. This includes outperforming a buy-and-hold strategy on the market index (Azar and Lo, 2016). Furthermore, in the domains other than finance, such as in computer science (as well as in other social sciences), research shows that a complex human system, including social interactions between participants, has a significant impact on the decision-making processes of individuals. This decision-making in turn influences the financial performance of participating investors (Saavedra, Duch, and Uzzi, 2011; Saavedra, Hagerty, and Uzzi, 2011; Pan, Altshuler, and Pentland, 2012; Altshuler, Pentland, and Gordon, 2015; Liu, Govindan, and Uzzi, 2016). For instance, there is an inverted-U shaped relationship between information and the financial performance of investors who engage in sending and receiving IMs while making financial decisions. In this relationship, financial performance tends to improve as the information level increases, but it eventually reverses when information becomes excessive (Altshuler, Pentland, and Gordon, 2015). The accuracy or efficiency of the wisdom of crowds relates to the diversity of the agents in the crowd (in terms of their skills and abilities) and to the structure of the crowd, such as population size and social structure (e.g., Hong and Page, 2001, 2004; Page, 2007; Economo, Hong, and Page, 2016). For example, a group with diverse agents sampled from a competent population outperforms a group with high-ability agents in terms of problem-solving, which indicates the tradeoff between ability and diversity on the wisdom of crowds (Hong and Page, 2004).

5.3 *The Impact of Social Media on the Wisdom of Crowds*

We can see from this that social media significantly impacts the behavior of individual investors in both financial markets and other domains of everyday life. As individuals are impacted under a variety of settings, it is worth considering how exactly this social feature influences the behavior of a group of participants and the associated outcomes. However, based on the literature on the wisdom of crowds in financial markets, there is not enough evidence on its temporal dynamics or under different circumstances, and on the reactions of the wisdom to external shocks (e.g., inclusion of social media). Furthermore, there is insufficient evidence to indicate which specific groups within the crowd are most affected by external shocks, particularly the inclusion of social media. There is also a gap in understanding how the wisdom evolves in the presence of social interactions compared to when there are no social interactions among individuals.

So far, this impact seems not to be very clear and there is a need to examine additional empirical evidence. One can argue that the inclusion of social media improves the wisdom of crowds. This is because individual investors get access to more sources of information which helps with their investing activities online. However, one can argue that the wisdom of crowds is negatively impacted by the inclusion of social media: The additional information disseminated through social media can be ambiguous or manipulated, while individual investors can also be distracted by information-exchanging activities. Similarly, it is also not clear who will be impacted more by social media. We could say that more intensive users will be impacted more. However, we could also say that less involved investors are impacted more, since they do not fully understand what is going on in these chats, given their lesser exposure to these activities and, eventually, they will get distracted by these activities. Consequently, intuition cannot help us much here. We need more evidence on these issues.

In summary, the puzzle here is how exactly the inclusion of social media impacts the decision-making of individual investors and, more importantly, which categories/groups of investors are most affected in terms of different levels of sociability. Trading platforms can be structured in various ways: some incorporate social media features, while others do not. Furthermore, among investors on STPs, there are those who actively utilize these social media features, and conversely, there are those who do not, even if these features are available. The crucial question is whether this disparity in the use of social media features has an impact on the wisdom of crowds of individual investors. This inquiry can be focused on identifying which groups of investors are more profoundly affected by the inclusion of social media, particularly with regard to their level of engagement in these online social activities (e.g., the wisdom of more sociable vs. less sociable individual traders as distinct groups).

6 Conclusion

We have examined here two interrelated issues: the integration of communication infrastructures into trading platforms and the impact of social media on trading behavior. This chapter has primarily focused on three aspects: the potential impact of communication on trading decisions and associated outcomes (i.e., financial performance); decisions to quit trading (i.e., survivorship); and the wisdom of crowds (i.e., group decisions). We discuss existing literature on each of these aspects and highlight potential areas for future research.

We have formulated two arguments: The first, theoretical, is that communication infrastructures, long seen as essential in finance, need to include social media. These play a key role not only in the realm of individual traders – which we have discussed here – but also in that of institutional traders. As we have mentioned in the opening, institutional data providers have integrated social messaging into their offerings, while, to the best of our knowledge, we have limited evidence

on the impact of social media on the behavior of institutional traders. We know that social media data is intensely used in devising trading strategies, including algorithmic ones. Especially as communicational infrastructures evolve rapidly under the impact of AI and machine learning, it is imperative to examine closer both their evolution and their impact in finance and beyond.

The second argument we have made here concerns the impact of social media on trading behavior. Evidence points to the fact that social media usage increases imitative behavior and conformism (perhaps not surprisingly), but also that financial performance, at least in the realm of individual traders, is not positively impacted by social media usage (except for a tiny minority). This raises, among others, regulatory issues with regard to the integration of social media with trading platforms, even more so as these media incessantly evolve and as market infrastructures are regulated.

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