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Exploring the Social Networks of Online Investors

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Exploring the Social Networks of Online Investors

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Abstract

Online trading has now become the prevalent form of stock market investing. With a large percentage of investors now online, understanding how they make use of social media to share and gather information is of major interest to service providers, regulators, researchers and to investors themselves. Previous studies have explored public online investor networks such as stock forums, but few studies have investigated investors' private online social networks. This paper reports on a qualitative study that interviewed 26 online investors about the various forms of social networks they participate in. Some online investors continue to rely on their private, offline networks of family and friends for information and advice. Other investors have taken their social networks online, but these online networks are still private. While investors do participate in public stock forums, it was also found that private social networks exist within these public virtual communities. Forum members get to know other members outside of the forums and form personal relationships. Such private social networks are not visible to outsiders.

Keywords

Online Investing, Stock Market, Social Networks, Information Seeking, Behavioural Finance

INTRODUCTION

Stock market investment is a very large industry, with many millions of individuals and households investing in stocks in many parts of the world. In the USA, over 20% of all households own stocks directly and that figure jumps to almost 50% when managed funds are taken into account (Bucks et al. 2009). In Hong Kong, 36% of the adult population invest directly in stocks (HKEX 2011). Almost 40% of the adult population of Australia own stocks directly and half of those monitor their investments weekly (ASX 2012).

Online trading has now become the prevalent form of stock market trading. The latest ASX (Australian Securities Exchange) retail investor report found that 65% of Australian investors trade online using an online broker (ASX 2012). Similar rates of uptake of online investing are found in Hong Kong, where 70% of all investors trade online, with 70% of those trading exclusively online (HKEX 2011).

With such a large percentage of investors now online, understanding how investors make use of social networks to share and gather information is important to many stakeholders. Service providers, such as online brokers, need to understand their customer's needs and behaviours to provide a better service and attract more investors. Researchers questioning or surveying online investors about their 'social network' need to be aware of all the possible networks that investors may be thinking of when answering the questions. Securities market regulators need a better understanding of the possible information flows in the new online realm to determine if securities laws need to be updated. Investors themselves may also benefit from the knowledge of all the different ways online investors communicate with others.

Previous research into investor use of online social networking platforms has consisted of analysing the postings found on a variety of publicly accessible virtual communities, including stock discussion forums, blogs and more recently micro-blogs such as Twitter. Studies from the field of Behavioural Finance have sought to find links between stock forum postings, investor behaviour and actual price or volume movements in stock markets. Researchers from the field of Information Science have focussed on the form and structure of the postings themselves, seeking to understand the information behaviours of the virtual community and the form and speed of information dissemination and communication. A number of studies have also investigated the social

networks of online investors as an integral part of their information seeking behaviours. These previous studies are detailed in the background section.

This paper contributes to the understanding of how investors use online social media by exploring the various forms of social networks that investors participate in, both online and offline, and how they overlap. By interviewing actual investors about their online activities, this study provides a deeper insight into how investors view and use social media platforms and also uncovers forms of social networks that are not publicly visible.

BACKGROUND

Previous studies of online investor social networks have primarily been from the fields of Information Science and Behavioural Finance.

Information Content of Stock Forums

A number of studies have examined the information content of postings on stock forums to gain insights into how the members of those virtual communities communicate and how quickly information is disseminated.

Das et al. (2005) conducted an in depth study of postings on four different message boards in relation to four different companies. The companies were chosen to represent different spectrums of posting activity versus company size, with Amazon being the largest with the most activity. They found that a small core of members carried out extended discussions on the companies studied. The discussions were substantial and were a mix of questions, answers, analysis and also opinions. The message boards were also found to quickly disseminate company news and discussions about the news, with postings occurring within minutes of news announcements by the companies, more rapidly than online media services. They also found many rumour postings about mergers and takeovers, but only 2% turned out to actually be true (Das et al. 2005).

One fascinating element of their study was that they sought out and interviewed Glenn, the most prolific poster on the Amazon boards at the time. Although Glenn ran a small chain of jewellery stores, he spent about 30 hours a week on the boards. "He was interested in stocks and in technology, so he gravitated toward tech stocks. He also actively searched the web for news stories about these stocks". One of Glenn's primary motivations for spending so much time on the forums was that he wanted to learn from others with more investing experience. He lived in a small town of 15,000 people and there were not many people he could talk to about investing. "His activity in the Silicon Investor board was equivalent to membership in an investing club" (Das et al. 2005).

The forums also provided Glenn with interaction with colleagues that he enjoyed. Although there were close to 1000 posters, Glenn estimated that there was a much smaller number that were relatively active. "Of these he came to know five or six personally, through phone calls or in-person meetings". He also gained some self-esteem from being part of the online community. "The boards provided Glenn with a venue to engage in enjoyable debate and to earn the respect of others. Glenn called this interaction the 'entertainment value' of the boards, the ability to engage others in sustained discussion" (Das et al. 2005).

Tan and Tan (2012) conducted a survey study of investors in Taiwan in relation to their social networks and use of investment information sources. They surveyed 96 investors and asked questions in relation to their demographics, views of technology, offline and online social networks and the information sources they used for investment purposes. Their primary finding was that despite the popularity of online social networks, investors still utilized and trusted their personal, offline social networks more than those online when it came to seeking information and advice for investing from family and friends. Younger investors and those more comfortable with technology were the investors more likely to use online media and social networks, together with their personal offline networks (Tan and Tan 2012).

Lisa O'Connor (2013) investigated the information content of postings on three different investment discussion forums over a four year period (2007-2010). A total of 354 discussion threads with 1,787 postings were analysed. Postings were coded as being 'Hostile', 'Collaborative Non-Informational' and 'Collaborative Informational' (those that cited some external information source such as a web site or a book). Collaborative posts were further coded in relation to the nature of the posts, such as 'Neutral', 'Humorous', 'Responses to Neutral', 'Queries' and 'Responses to Queries'. She found almost no hostile postings (such as spam and flaming), which was not surprising as all the discussion forums were moderated (O'Connor 2013).

The vast majority of the postings (75%) were information-oriented, being made up of people posting requests for information (queries) and others responding to the requests, with most requests receiving multiple responses that contained opinions, statistical data and also citations to other information sources. The information sources cited were also coded, with a surprising finding that the most quoted information source was actually posts on other discussion forums. She concludes that investor discussion forums constitute rich information environments

where participants gather as a virtual community to collaborate and share information. She observes that investor virtual communities are more information rich than other similar communities in health and politics (O'Connor 2013).

These studies have provided valuable insights into online investor social networks but they are limited in that they have studied only the publicly available forum postings. As eluded to by the interview with Glenn described by Das et al. (2005), there may be more to investor social networks than what is visible on the surface.

Online Investor Information Seeking

Several recent studies have investigated the information seeking activities of online stock market investors, with social networks being a key part of many investors' information sources.

One major study is by Kirsty Williamson and Dimity Kingsford-Smith. They conducted a qualitative pilot study in 2004 that involved interviewing Australian investors about how they seek information on the Internet (Kingsford-Smith and Williamson 2004; Williamson 2006). One of the reported observations was that many of the investors interviewed sought information and conducted activities both online and offline at the same time. They reported that all their investors spoke to others about investing and sought advice from trusted family members, friends or colleagues – with few investors using online forums such as chat rooms. For some investors, there was also a community or hobby aspect to their investing activities – they were part of an investment club or often communicated with others about investing, both online and offline (Kingsford-Smith and Williamson 2004).

This was followed by a larger research project, from 2006 to 2008, funded by an Australian Research Council (ARC) Discovery Grant (Williamson 2010; Williamson and Kingsford-Smith 2010). They conducted both a survey of over 500 online investors and also a qualitative study, interviewing 26 investors personally. Few of the investors surveyed reported using online forums such as chat rooms. However, 10% did say they used chat rooms every day, indicating a small but active subset of investors that use stock forums. The one surprise finding from the survey was the lower than expected numbers of investors reporting interpersonal sources of information. The investigators questioned this finding, however, after conducting the interviews as they found many investors did actually admit having discussions with friends and family, but had not reported these in their survey. They found that almost all of the investors interviewed did, in fact, talk with others who were also investors – particularly family members, friends and work colleagues (Williamson and Kingsford-Smith 2010).

An in depth study of an investor social network, a women's investment club, was conducted by Lisa O'Connor (2011), looking at their information practices. This involved attending their meetings for 6 months and also interviewing 8 of the women. She found that the club members carried out their investing and related information-seeking activities to master some of the various needs of their everyday lives. Participants were classed into three distinct needs-meeting categories. Managers (30%) viewed the investment club as a convenient way to set aside time to attend to their own financial growth and well-being. Managers joined the club for pragmatic reasons such as 'to make money'. Hobbyists/Amateurs (56%) viewed their investing activities along the lines of what Stebbins calls serious leisure, which is the systematic pursuit of an amateur activity that people find so fulfilling that it becomes a (leisure) career centred on acquiring special skills, knowledge and experience (Stebbins 2009). Mentors (14%) viewed their involvement in the club as a means for helping others. Mentors tended to approach their information-seeking as a means for modelling effective behaviours for other members (O'Connor 2011).

She was surprised to find that all participants except one had used the Internet for investment research, given that half the members were over 55. She also found the members showed a strong preference for personal and unmediated sources. Hobbyists reported spending more time talking to family, friends, and co-workers about investing than any other member type, and this activity was directed beyond information gathering toward building their unique social world (O'Connor 2011).

In a study of Swiss customers of financial service providers, Nussbaumer et al. (2011) found that respondents start their information search using impersonal sources (professional Internet sources, media), then turn to personal sources (such as family and friends), only seeking advisory services late in the process.

These studies are valuable in demonstrating that social networks are still of key importance to stock market investors, despite having access to a seemingly endless supply of information online. Some investors rely on personal networks to discuss stocks while others are involved in online social networks such as stock forums. These studies, however, do not delve deeper into the structures of the social networks themselves.

Impact of Stock Forums on Investor Behaviour and the Stock Market

How investors communicate information with others and possible effects on stock prices (and bubbles in particular) has long been recognised as important in the field of Finance, with earlier studies focussing on how investors communicate stock tips within personal networks (Shiller 2003; Shiller and Pound 1989). This research moved into the online realm once the Internet became widely used by investors. Considerable research has been conducted into the postings on stock forums and blogs from the perspective of Behavioural Finance. Researchers have primarily sought to investigate if such virtual communities have an effect on investor behaviour, and by implication, on price and volume movements in stock markets themselves.

Tumarkin and Whitelaw (2001) studied postings on the RagingBull.com site and found that days with very high message activity correlated with abnormal returns and higher trading volumes. They could not determine, however, if the message board activity was the cause or the result of the abnormal activity. In an Australian study, Clarkson et al. (2006) looked at postings of takeover rumours on the discussion site Hotcopper and concluded that the market was reacting to the postings of takeover rumours. Bettman et al. (2011) also looked at takeover rumours on Yahoo! Finance message boards and claimed that traders could make significant profits trading on the rumours within a 24 hour period of the postings. Antweiler and Frank (2004) studied postings on Yahoo! Finance and RagingBull.com and found that “when many messages are posted on a given day, there is a statistically significant negative return on the next day” but the return is economically small so is not usable for trading purposes after allowing for brokerage costs.

Sabherwal et al. (2008) studied the 10 most actively discussed stocks each day on TheLion.com and found that the most actively discussed stocks had a 19% abnormal return on that day and on the preceding day, but the returns became negative on following days. In a later study they found the same price pattern even on days with no market news, suggesting manipulators may have been using the stock forum to hype stocks in a “pump and dump” strategy (Sabherwal et al. 2011). Fotak (2008) analysed the stock recommendations posted in 106 different blogs on SeekingAlpha.com. He found that “blog recommendations do appear to have an impact on stock prices and trading volumes” but claimed that bloggers tend to post about large liquid companies and act out of a genuine desire to spread real information, rather than try to manipulate the market with small companies (Fotak 2008).

Most of these studies have found that higher levels of stock forum postings for a given stock will tend to correlate with higher trading volumes and price volatility in the actual stock in the market. As observed by Tumarkin and Whitelaw (2001), however, it is still unclear whether higher levels of forum postings cause higher trading volumes in the stock or it is simply that the stocks that are being more actively traded due to significant news are more likely to be discussed on forums.

Twitter, StockTwits and Sentiment Analysis

Recent attention has turned to micro blogs (such as Twitter), to see if sentiment analysis of tweets can be used to forecast future movements in stock prices, with sentiment analysis (or opinion mining) being “one of the hottest research areas in computer science” at present time (Feldman 2013).

Bollen et al. (2011) collected public tweets from Twitter, classified them according to mood measurements, and found that the mood indicator ‘Calm’ was the strongest predictor of the direction of the stock markets three days later (Bollen and Mao 2011; Bollen et al. 2011). Sprenger and Welppe (2010) coded stock related tweets from Twitter into buys and sells. They found that buy signals were followed by abnormal market returns, but the returns were small and not exploitable.

Oh and Sheng (2011) measured and studied investor sentiment in postings from Stocktwits.com and concluded that this sentiment does “appear to have strong predictive value for future market directions”. Bar-Haim et al. (2011) analysed tweets from Stocktwits.com and found their system could identify the top 20 expert posters who achieved success rates of between 55% and 65%.

All of these studies show that social media and social networks are a very important part of the stock market investing landscape. The social networks themselves have the potential to alter investor behaviour and change the functioning of the market itself. The studies are limited, however, in that they only consider the publicly visible networks on the social media platforms themselves.

RESEARCH DESIGN

This study sought to explore how online investors seek and use information in depth, and the role that social networks play within that wider context. It sought to go beyond the publicly visible online social networks and

also investigate potential private online social networks. The study was therefore exploratory in nature. The aim of qualitative research is “to achieve a deeper understanding of a phenomenon” (Kvale 1989), to “explore substantive areas about which little is known” and “obtain intricate details about phenomena” (Strauss and Corbin 1998). Therefore a qualitative research approach was chosen as the most appropriate to achieve the goals of the study. The qualitative research methodology used in this research was Grounded Theory as extended by Eisenhardt (1989).

The primary method of data collection was semi-structured interviews with individual stock market investors (Eisenhardt 1989). The interviews for this study were conducted face-to-face, either in person or over the Internet using Skype (audio only), with most interviews lasting approximately one hour. The researchers followed the ethics requirements as approved by the relevant ethics committee, obtaining informed consent from the participants to record the interview.

A total of 26 online investors were interviewed for this study. Investors were recruited from a variety of sources. Some were known personally to the researchers and some were referred by others, in a snowball fashion. Investors were also recruited from those answering general requests for participants that were posted to online stock forums and also sent to mailing lists. The aim of recruitment was to interview as wide a range of investors as possible, in order to explore the range of information behaviours and online activities that are important to investors.

Five of the investors interviewed were female and twenty one were male. Although females were somewhat under-represented in the sample, it was not unexpected as previous research has found that women are usually less active investors than men (Loibl and Hira 2011) and this study specifically sought investors from the more active end of the activity spectrum. A similar ratio of females to males (20% to 80%) was also observed in the survey of online investors conducted by Williamson and Kingsford-Smith (2010).

Age groups were widely represented, with 6 interviewees under 30, 5 between 30 and 40, 3 between 40 and 50, 5 between 50 and 60 and 7 over 60 years of age. A good range of investing experience levels was also achieved, with the years of investing experience ranging from beginners with less than 1 year of trading to veterans with over 30 years of experience, with the majority having between 10 and 20 years of experience. Most of the interviewees could be considered relatively active investors, making 10 to 20 trades per year while four of the investors interviewed were very active day traders, trading daily and making more than a thousand trades per year. All the investors interviewed were individual investors investing their own funds on their own account or for their self-managed superannuation fund, which was the population the study sought to investigate.

The questions were semi-structured but many questions were left open ended so participants could expand what they thought was important. This also allowed the interviewer to follow up on interesting comments made by participants with further questions. The interview questions generally asked each investor to describe the process they went through in identifying, researching, buying and selling shares in companies. The questions tried to delve into not only what information sources they used but also what they did with the information once it was obtained and how the information was used to make decisions at each step of the process. The questions also sought to solicit if and how investors communicated with others as part of their investment process.

Interviews were recorded and then transcribed. The transcriptions were analysed using the grounded theory principles of open and axial coding. Open coding involves examining the text of the interviews in detail and identifying concepts that are being discussed. As concepts evolve out of the interview texts, comparisons are also made between case studies to identify both similarities and differences, so that the concepts can be further enhanced and developed. Axial coding involves developing concepts in more depth by looking at various attributes related to the concepts and exploring their range of possible values, so that they encompass as many of the cases as possible. Relationships between concepts are also explored, to look for condition-action-consequence patterns (Strauss and Corbin 1998).

This paper reports the findings of the study that relate to online investor social networks. An overall theory of the information behaviour of online investors has been developed and is reported elsewhere.

FINDINGS AND DISCUSSION

All of the investors in this study participated in some form of social network as part of their stock market investing. Not all of the social networks were online, however, with a number of investors stating that they preferred to discuss financial matters with others only in person. Some individuals were part of multiple, distinct social networks.

Public and Private Online Social Networks

This study found that as well as the obvious public social networks created by online platforms such as stock forums, there are also many private online social networks using a variety of technologies (see Figure 1). Some investors are involved in multiple social networks simultaneously. Some networks are totally distinct while others may overlap. For example, a private stock chat group may be made up of investors that are also part of a public stock forum, while some of those investors may also talk to family members privately.

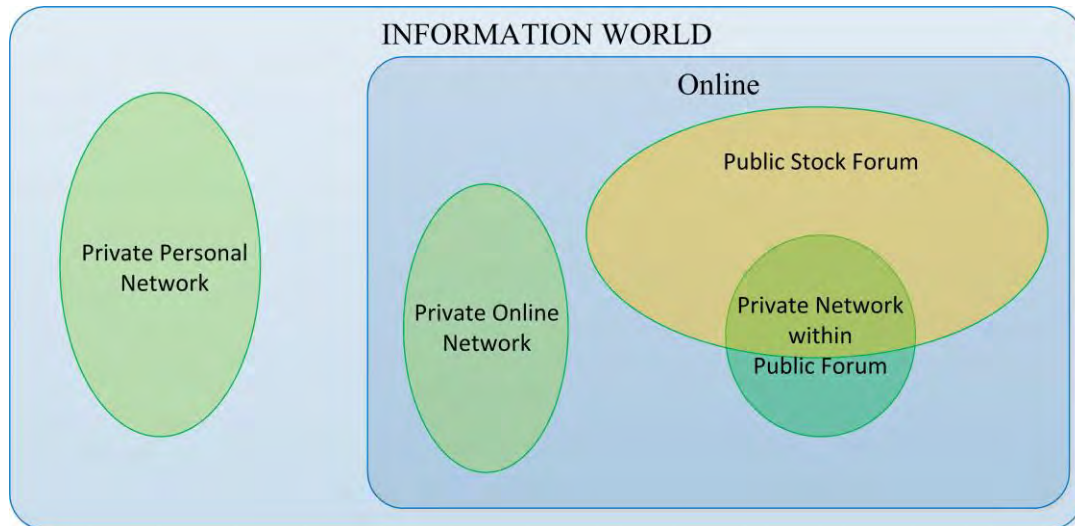


Figure 1: Public and Private Social Networks of Online Investors

Private Personal Networks

In line with the findings of Tan and Tan (2012), personal (offline) networks are still alive and strong despite all the investors in the study using online resources for a considerable part of their investing activities. Most investors reported discussing stock market investing with other investors in person. Some investors specifically stated that they preferred not to discuss financial issues online and only discussed them with others in person or on the phone. In some cases the networks are very small, being only immediate family members or close friends. Other networks were larger, such as a group of workplace colleagues that discuss stocks or members of an investment club.

One significant finding in the study was that for a number of investors, their personal network was not just casual discussion but purposely chosen as their primary source of investment guidance. They would obtain stock tips from trusted family or friends but then do some additional research of their own before acting.

“I just relied on a couple of bottles of wine, a nice lunch, and the recommendation from my friend the director. So I guess that was my information system.”

“Well I know people that are very aware of the market and who occasionally seem to have, as everybody's friend has, a big tip. Except, this person has been extremely successful and he is also much more prepared to take a risk than I am.”

Private Online Networks

Some investors took their private networks online, using various technologies. These networks were made up of people that already knew each other in person, so the online networks overlapped and extended the personal networks to some extent. Several investors described being part of a group that regularly emailed each other information and stock tips and rumours.

“It's basically done via a network. So through all of us accountants, we all work in different industries, and it's all done through rumours.”

Others were involved in small groups using online chat facilities in their workplace, discussing stocks along with other discussions during the day.

“We have an internal messaging system at work. So I normally keep in touch with colleagues, while I’m at my desk, just chatting. And there might be a copy and paste of a screen shot from the trading website saying ‘check this out’.”

One day trader reported being part of several private online live chat groups that were password protected so only accessible to those who were invited. Most, if not all, of the members of these private chat groups were also active on public stock forums, so these private social networks were a subset of the larger public social networks found on stock forums.

“One was a private group of friends. Some lived on the Gold Coast and some in Melbourne and Adelaide. We all know each other from seminars and we have similar interests and views on things.... If half a dozen people band together and keep an eye on stocks, it's more likely you will find something that somebody else missed.”

Public Online Networks (Stock Forums)

Half of the investors interviewed for this study reported using stock forums in some fashion. The other half had never looked at stock forums at all. Two of the interviewees were heavy users of stock forums, having made thousands of postings over a number of years and using them on a daily basis. Another five were actively reading stock forums daily or weekly as a regular part of their stock research process.

“I’ll always have a look to see what people are saying. You’d be surprised how many people put their opinions on there.”

“I might see a share shoot up and I’ll go on [forum name] and see what all the fuss is about.”

The other six investors only looked at stock forums occasionally. Although they reported finding useful information in posts they were also often sceptical of what was posted and the possible reasons behind posts. Some also commented they were put off by the level of aggression found on some of the forums.

Private networks within Public Networks

A significant finding of this study is the existence of smaller private networks between the members of public stock forums. As members of stock forums get to know other members from their postings, small private networks form through the use of the private messaging facilities. These forum members not only make public postings that are visible to everybody but also discuss stocks privately. Some relationships move beyond the virtual and the forum members contact each other through other means such as email, Skype or on the phone. Some may also meet up with other forum members physically and form personal relationships. In other cases, forum members have met others at seminars or training courses.

The existence of such private networks were described by both of the heavy forum posters that were interviewed, even though they were active on different stock forums and not part of the same networks.

“Some people have a good track record. You know who thinks along your lines. Especially with some of the fundamental analysts - often I’ll run the stocks by them to bring them to their attention as well, to see what they think. I developed a couple of friendships with some of the fundamental analysts because they appreciate seeing different stocks as well.”

“If I see, for instance, [forum user name], I know who that is and I know him personally. So if we discuss something, then I know if I tell him this or he tells me that, then we know exactly how to take it and what to make of it and how to act on it.”

Motivations for Use of Stock Forums

Those investors actively using stock forums described a range of motivations for using the forums, both in relation to seeking information and also providing information and opinions through posting. The primary one was that the forums are a great source of information and a way to see the opinions of many different people.

“Definitely [forum name] would have to be a huge prompting to buy stocks, and a wealth of information for new stocks. So you might be currently in a stock that is in the gas industry, and through the course of people posting they might mention other companies, that have a relation to this, that they might recommend.”

Learning about investing and trading was also mentioned as very important, with some forum members considered to be experienced and able to provide general guidance as to how to go about trading. The forums also provide the ability to test out ideas.

“I guess I was trading for maybe 6 months and I had a bit of success and I think that was probably just luck - it was a bull market. Then I came across the stock forums and they seemed to just give really, really good advice. It wasn't until I actually got involved with the stock forum that I started making a lot more progress and it became a lot easier because I actually knew what I was doing.”

“Often I'll have a look and see what people's thoughts are, and to talk about my ideas of a stock as well. Particularly with trading breakouts, there are quite a few on there that trade in a similar way. I find it quite helpful for identifying and comparing analysis as well.”

One of the heavy forum users, a very experienced day trader, also described his activity on stock forums as an important means of communicating with the world and also a way of ‘giving back’ something to the trading community.

“So this is my main window to the world and I can discuss things that I feel passionate about and I can keep my mind ticking over on a worthwhile financial exploit.”

“At the risk of sounding cocky, I had lots of support in my early trading days from technicians more experienced than I, and this is my way of trying to give something back to as broader community as I can.”

All the investors that use forums, even the highly active ones, did mention, however, that forum postings must be taken ‘with a grain of salt’, given the anonymous nature of those posting. Most were wary of the practice of ‘ramping’ – people discussing a stock with the sole goal of pushing the price up so they can sell at a profit into the rally.

Half of the investors interviewed for this study did not use stock forums at all. When asked why they did not use them, some responded with trust issues – not knowing who was posting information and not being able to trust what was being posted. The vast majority, however, explained that the primary reason they did not look at forums was the lack of time. For most, investing is a part time activity that needs to fit in with work and family commitments, so they simply did not have the time to spend looking at forums.

“I have limited time - you know the time frame I have to spend on this is limited. So when you're trying to scrunch something in, when you get home from work or on a weekend somewhere, you haven't really got time to sit and browse through.”

No Financial Discussion on Facebook

One very interesting insight observed in this study is that although most of the investors interviewed reported having Facebook accounts and using Facebook regularly, they all reported that they never discuss financial matters on Facebook. They use Facebook to maintain social contact with their friends and family but never use it to discuss shares with others. Surprisingly, this was even the case with the two heavy users of stock forums that had made thousands of stock related postings on those forums.

“Well I use Facebook, but I don't use it for shares. To see how my sons are doing, that's what I use it for.”

CONCLUSIONS

This paper contributes to the understanding of how investors use online social media by exploring the various forms of social networks that online investors participate in. Some investors prefer to discuss financial matters only in person, so continue to rely on their private, personal networks of family and friends. Other investors have taken their social networks online, but in many cases these online networks are still private and personal, between investors that already know each other in person. These networks may be occasional, using email, or they may be more regular and instant, using facilities such as private chat rooms on the Internet or work based messaging platforms.

Investors also participate in public virtual communities such as stock forums. Some choose to only read these forums and gather information, while others actively participate in the discussions. One major contribution of this paper is the finding that private social networks exist within the virtual communities made up of public stock

forums. Forum members that become active in stock forums can also communicate directly with each other through private messages and email. Some may get to know other members outside of the forums and form personal relationships. Such private social networks are not visible to outsiders.

This paper also reports findings in relation to what motivates investors to use online communities. Most investors using the stock forums find they provide useful information, but that care must be taken to verify information with other sources. The forums can also provide a valuable learning resource for those starting out or wishing to improve their knowledge. To some members, stock forums also provide a way of testing out their ideas and joining discussions, communicating with the world and 'giving something back' to the community.

A deeper understanding of how online investors use social media is of major importance to service providers, researchers, regulators and also to investors themselves. Companies providing online services to investors, such as online brokers, need to understand their customer's needs and behaviours. They are then able to provide a better service and attract more investors to use their services.

Researchers need to understand that online investor social networks go beyond what is publicly visible on social media platforms. Smaller private networks exist within these same public platforms, as well as private networks between groups of individuals, using such technologies as email and instant chat. Researchers questioning or surveying online investors about their 'social network' need to be aware of all the possible networks that investors may be thinking of when answering the questions.

Authorities that are charged with regulating securities markets to ensure that markets remain informed at all times, need a better understanding of potential online information networks that may have an impact on investor behaviour.

Investors themselves may also benefit from the knowledge of all the different ways online investors communicate with others. This knowledge may open their minds to opportunities to communicate with other investors that they may not have immediately thought of themselves.

The findings presented in this paper are based on interviews with the 26 participants in this study. As such, they cannot be generalised to represent all online investors. The findings, however, are still valuable in that they provide a new perspective on the different potential forms of social networks, to those looking to provide services to investors or conduct further research into online investing.

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