In Tok We Trust – Exploring Social Media's Role in the Worlds of Retail Investors and Institutions

by

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Glossary of Terms

Retail Investors: Individuals who manage their own investing and trading transactions on their own, without the involvement of professionals or professional financial organizations.

Financial Institutions: Organizations which provide financial services to individuals (considered their clients), including advice and transactional services for investing, as well as managing the funds and investing decisions for retirement savings. Financial Institution is a broad term which encompasses banks as well as other financial services organizations such as investment firms.

Clients: Individuals currently receiving financial services from financial advisors or larger financial institutions. Most individuals in a client-based relationship with an advisor or institution pay fees for the services they receive from these groups.

Financial Advisors: Individuals who provide financial advice and management services to other individuals (considered their clients). In most cases, financial advisors are compensated either directly from their clients or from the financial institutions on whose behalf they operate.

App-based Investing and Trading: Software platforms and apps which offer retail investors the ability to conduct their own investing and trading of stocks and shares. These services are largely what enable retail investors to conduct their characteristic personal financial management.

Pension Funds: Accumulations of portions of a company's employees' earnings into a sum of money which is managed and invested through a financial institution, ultimately paid out to participating employees upon retirement as a form of retirement savings. The size of pension funds can grow and shrink through the performance of the investment decisions of the managing financial institutions.

Investment Indexes: Approaches to investing which focus on following pre-defined rules and collections of companies, considered a safe alternative to actively-managed approaches to investing.

Social Media: Content which is created and shared to mass audiences of consumers, typically through digital channels (known as social media platforms). Social media content is typically digital, and can take the form of written messages as well as pictures or videos.

Social Media Content Creators: Individuals who build and upload content onto social media platforms for distribution to either defined or public audiences.

Foresight: A blanket term for research and design methodologies which are aimed at identifying the factors and forces of uncertainty which may determine the way that present phenomena evolve and impact the world over time. Foresight methodologies can offer illustrative visions and versions of the future which provide insight for decisions to make, or topics to follow closely, at present.

Signals of Change: Phenomena including specific events and technologies which have been determined to be sufficiently capable of creating observable impact in the world in the future.

Critical Uncertainties: Ambiguities which make it difficult to determine exactly how signals of change will evolve over time.

Future Scenarios: Illustrated views of alternative versions of the future, determined by the different possible outcomes of critical uncertainties and their different combinations.

Abstract

The dual trends of retail investing and social media's role as a channel for investing advice are on the rise. The objective of this study is to determine the forces that shape retail investors' trust (or lack thereof) in financial institutions, and conversely the forces that shape trust in social media platforms and content creators as alternative sources of financial and investing advice. Understanding retail investors' behaviours and perceptions toward these sources of investing advice sets the foundation for retail investors to be more informed and equipped with areas of further exploration in the current and future investing landscapes.

This study approaches the research objective through a combination of primary research with retail investors who leverage social media as a source of advice, a supplementary literature review to explore emerging themes and perceptions further, and a foresight exercise which illustrates alternative futures and alternative ways in which key signals of change evolve.

Following the analysis of findings for each methodology and subsequent synthesis, this study identifies that financial institutions face less of a crisis of trust, but more so one of faith in favourable outcomes. Institutions must grapple with (particularly younger) retail investors' lack of faith that the perceived-general level of advice, combined with the cost of services, will facilitate their wealth goals. Social media platforms are not seen as necessarily more trustworthy, but more capable of delivering timely, targeted advice to retail investors. Signals of change in the financial industry and marketplaces point toward hyper-personalized investing services, aggressive increases in personal financial data sharing and segmentation to deliver services, and a pronounced emphasis on ESG-forward investing options. In futures where ESG-related advice is orchestrated and better standardized, social media-delivered advice stands at risk of obsolescence in the face of more empowered and surgical retail investors.

Acknowledgements

Investigating the forces that shape retail investors' perceptions, behaviour, and decision-making in an increasingly social media-fueled and institutionally-skeptical world has been made possible by the passion, patience, guidance, and generosity of my MRP Supervisor, Helen Kerr. Through Helen's determination to work together and hold the work to a high standard, the quality of the study has been brought to a level where I am genuinely proud of the breadth and depth of its ability to understand what's happening now, and what could happen in the future, and ultimately what this means for an increasingly-influential segment of the financial industry.

Additionally, the encouragement and investment of my close friends, work colleagues, and fellow Strategic Foresight and Innovation cohort members has ensured that this study has always felt valued to my broader network. Their shared interest and attention to the progress of this work has sustained my motivation and my resolve throughout the lifecycle of exploration, research, making sense of information, widening my aperture for sources of information, and articulating valued takeaways for the next generation of retail investors.

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Introduction – What is Retail Investing?

With more and more frequency, individuals are taking a new level of responsibility and agency for their investments and their progress toward achieving financial security and prosperity. Rather than working with a financial advisor or a financial institution, individuals known as retail investors make investments and trade shares themselves. Retail investors' ability to conduct these buying, selling, and trading behaviours is often enabled by digital apps such as Robinhood, or WealthSimple. (Marketwired 2017) While the number of retail investors continues to grow, the presence and perspective of investors who underscore the crucial supportive role played by financial advisors and institutions remains. The story of 'the role of the individual versus the role of the advisor' reflects a larger conversation across services, where an increasing number of activities within services are being converted to self-serve and self-directed pathways, where once they may have relied on a representative to perform these duties for or on behalf of the client. While some of these changes may seem benign, others signal a move away from advisors and institutions being the epicentre of trust and advice in the prosperity industry.

What does the Rise of Retail Investing Mean?

People around the world are increasingly tying the concept of economic prosperity to their own ability to earn, manage, and grow their money, rather than the institution-reliant approaches to investing and saving which ruled the realm as the 'smart' approach of decades past. (Robson & Loucks 2018, p.34) The world is experiencing simultaneously 1) an erosion of faith in financial institutions and the value of growth through employment, and 2) a proliferation of digital apps and platforms which, in an almost-poetically direct response, have enabled the same disillusioned and strained earners to take their finances and the impact of investing behaviour into their own two hands. (Walsh and Lim 2020, p.12) With particular emphasis on younger populations, historic definitions of concepts like 'retirement' have come under question, and more broadly the notion of being 'taken care of' financially by employers and institutions is evaporating. (Kangethe, 2020 and Robson and Loucks, 2018, p.21) More and more financial management is being conducted on the personal level, and in lock-step, education and advice is sought from sources outside the established financial and investment magnates.

A very concrete signal of the growing impact of retail investing on the wider industry comes from the interactions surrounding the company GameStop, including its retail and larger institutional investors. Culminating most fulsomely in early 2021, the shares of this struggling video game company went from $4 per share the prior summer to upwards of $350 per share once communities of retail investors reacted to the observed trends of major hedge funds' shorting of the company's stock. Tensions ran high as major trading platforms 'froze' the ability to trade on these shares temporarily. Where retail investors stood to make immense gains, larger firms and funds were "literally billions in the hole." (Reddit, 2021) While activity surrounding this event was largely consolidated in early 2021, it has had lasting impacts on retail investor communities and their perceptions of trust in larger institutions and regulatory bodies. One author quotes a post from the r/wallstreetbets Reddit channel: "They have had this game rigged for over a 100 years … Pay back is a b---. You think we all forgot what these a------ elitists did during 2008 and the sweet bailouts they got while the rest of us suffered?" (Olen, 2021)

Service platforms are also taking the retail investing model and expanding this self-directed agency to offer their retail investing clients additional ways to manage their financial futures themselves. One of the foremost Canadian personal investment and trading platforms, WealthSimple, has recently launched a ‘Pension Plan’ addition to its service, offering users the ability to manage their own pension-inspired long-term financial planning experience. (Wealthsimple, n.d.).

When Trends Collide – Investing, New Behaviour, and the Digital Realm

Individuals (particularly millennials and younger) are demonstrating a significant change in financial behaviour and world views compared to those of prior generations. We are seeing a positive correlation between the adoption of app-based retail investing & trading and the ‘financial volatility and pressure’ characteristic of many younger individuals. (Walsh and Lim 2020) These challenges are co-opted by sentiments of hopelessness in leveraging traditional economic behaviour to build toward prosperity, where ‘putting savings in low-interest bank accounts and low-risk investments is a losing battle against inflation (PR Newswire 2021).’ In India, personal investor and trading accounts increased to 10.4 million users in 2020, whereas only 3.7% of the population of 1.36 billion reported investing through equities. (Hoffower, 2021) Bentley and Bogan (2019) reference an earlier study which concludes that only 19% of millennials (18-34) are considered “financially capable, or owning a savings account and having received a financial education.” (Friedline and West, 2015) Sources cite a lower rate of ‘financial literacy’ among younger populations, though others assert that industry professionals should avoid conflating a lack of financial literacy and education with the reality that millennials are receiving education and guidance, but not from the traditional sources: ‘Millennials are getting their information from Reddit and TikTok where as baby-boomers favor Grant's Interest Observer … [and millennials] favor thematic investing in long-term disruptive trends whereas baby-boomers [favour] fundamental investing.’ (Fox 2021) These are also signals of a much larger, industry-agnostic shift in the way that individuals receive advice, and in whom they trust when making decisions. Anecdotally, a quick look at the local Indigo book store serves as a great example: where once there was “Heather’s Picks”, referencing the perspective of the company CEO, the recommended book section now is titled “Trending on TikTok”.

Younger populations are increasingly looking to social media platforms and content creators for financial and investment management advice, as well as which emerging trends and technologies they should be aware of for their investments. (Fox, 2021) In addition to an increase in frequency of use, it should be noted that social media as a delivery mechanism occupies a unique space in the overall system of investment behaviour. Larger financial institutions retain a complement of advisors whose role is to provide advice, however clients’ ability to manage their assets directly is limited to ‘profile-building.’ App-based retail investing platforms (e.g. WealthSimple) allow users to manage their own assets freely, however they are bound by regulations which prevent them from providing advice on specific decision-making. Social media stands as a channel which is unencumbered by regulations (pertaining to the provision of advice), and individual content creators can boast subscribers in the millions.

With increased agency will likely come increased consequences; additional support systems may need to be created in response to individuals struggling to manage the stress and consequences of a more total control of their financial future and economic prosperity.

So What is this Study About?

Emerging generations are not only beginning to inherit the greatest transfer of wealth in history (England 2022), they are clearly growing into their financial and economic selves in more social media-enabled and self-directed ways. The objective of this Major Research Project is to achieve a layer of empathy and understanding toward retail investor perceptions of trust when it comes to the management of their investments, and how these values are impacted by the type of delivery channel for advice (traditional advisor-based versus social media). In addition, this contribution to the spaces of investing, advice, and trust aims to explore and assess the impact of the growing role played by social media platforms and their content creators on the socio-economic behaviours of retail investors.

This study and its associated research are guided by two fundamental and linked questions:

1. What motivates retail investors to look to and trust social media platforms and content creators as a source of advice?
2. How does this contrast with their perception of institutions and the investing advice they deliver?

In addition to gaining insights toward the above research questions, the study will complement this increased understanding of the present with an illustration of how these behaviours may play out in the future. A review of signals of change across the larger financial and prosperity industries is assembled, analyzed, and projected outward into the future, and offers a series of alternative ways in which retail investing may evolve and change shape as the years progress.

Burning Platform – Why Explore this Topic? What are the risks and impacts of doing Nothing?

Achieving a heightened understanding of where and why retail investors place their trust (and trust their advice) is not just an academic exercise. Advice delivered through social media platforms and content creators has unique qualities and values, particularly for retail investors. However, just like institutional approaches, it is not without risks. While social media-enabled advice can be seen as 'free' and unbound by institutional regulations and interests, retail investors are still subject to biases, motivations, and outside interests / partnerships when consuming this content for their own investing decisions and strategies. Understanding the nature of the advice conveyed through these channels and the evolving perception of institutional approaches to investing will be crucial to new retail investors being informed, empowered, and protected against biases and motivations (those of both institutions and social media content creators) in their retail investing journeys. Achieving a better understanding of where retail investors are choosing to place their trust (and what about these channels influences them the most) provides the opportunity to report back, and to illuminate for retail investors where opportunities exist to maximize their experience and expertise as someone who conducts their own investing and trading. At a broader level, this study seeks to contribute momentum to the ability for retail investors to be supported and enabled for their investment behaviour throughout their lives and through whichever management and advice delivery channels they choose to pursue, whether they are more institutionally or social media-centered.

While dedicated to improving and supporting the experiences of retail investors, this study also stands to illuminate where the broader system of prosperity can better support these stakeholders with their needs and goals. This is particularly critical given the crisis of faith in larger financial systems brought onto retail investors by events and trends such as the previously noted GameStop issue. Highlighting the level of value and trust placed by retail investors in social media platforms and their content creators represents an opportunity to surface concrete indicators for the ways in which both organizations and regulatory bodies will need to adapt in order to deliver on their mandate to support their clients and citizens, respectively.

Methodology – How will Empathy and Understanding be Achieved?

This study combines three research methods to provide perspectives, patterns, and scenarios to help better understand how retail investors may be best enabled to achieve their goals – both at present and as time and trends progress.

1 - Retail Investor Survey

Conducting primary research for this work is a crucial component of the methodology. This is because the study is less concerned with how retail investors 'perform' in the growth of their wealth compared to clients of financial institutions, and more focused on their motivations for seeking advice from one channel versus the other, as well as their overall perceptions of these channels' ability to support them in achieving their goals. As a result, the above primary research question has derived a series of more specific secondary questions (fielded in the Retail Investor Survey), which are dedicated to understanding the varying levels of 'trust' retail investors place in financial institutions and - conversely - content creators as delivered through social media platforms.

The Retail Investor Survey was primarily intended to gather qualitative responses from participants, but contains several multiple choice questions as well in an attempt to gauge motivations and behaviours at a patterned level as well as the more nuanced, personal level.

The survey targeted a very specific segment: individuals who both conduct their own investing and trading AND identify as gathering at least some level of financial advice from social media content creators; participants who do not indicate both behaviours are screened out of the Study. Participants were asked to describe their investing goals, as well as indicate the level of trust they place in financial institutions to help investors achieve their financial goals – the same questions were then asked again, but regarding their trust in social media platforms and content creators. Finally, participants were asked to describe how they perceive the main differences in the advice delivered by financial institutions compared to the advice delivered through social media content creators.

For the questions which prompted participants to provide their response in their own words, a qualitative coding method was used to thematically code, group, and detect patterns across the responses. These codes and patterns are the building blocks for the patterns and insights detected through this component of the work.

The findings coming from this method take the form of thematic insights, based on the patterns shown by the responses across the questions.

2 - Literature Review – Validating and Assessing Survey Findings

Due to the primary research component of this study being scoped to a highly-specific segment of the population, a low response rate – and therefore a small sample with which to detect patterns and draw conclusions – benefited from a supplementary literature review. The literature review aimed to assess the veracity of the research insights and determine if they are applicable beyond the small sample size (or otherwise anecdotal).

As the purpose of the review was to directly evaluate (or re-evaluate) the thematic perceptions emerging from the survey, it was guided by two main focus areas to ensure the findings from the review were as relevant as possible.

The literature review first focuses on the relationship between younger populations and their finances and the trend of retail investing. This component of the review is drawn from a mixture of scholarly and media-based sources (e.g. blog posts), in order to more organically capture both themes and sentiments. The findings from this analysis are intended to support the primary research findings which speak to how retail investors perceive and trust (or lack trust in) institutions and social media content creators.

The second focus area of the literature review seeks to bring together existing scholarly work on the relationship between social media and financial decision-making, and determine if perceptions emerging from the primary research component of the study are supplemented by wider perceptions gathered through existing research as well as correlations between social media-delivered advice and investor behaviour.

Ultimately, the literature review intends to apply support and wider context to the findings from the primary research component of the study in order to arrive at the synthesis section of the study with more momentum and confidence when discussing the broader implications of the perceptions of retail investors toward both financial institutions and social media investing advice content creators.

3 - Foresight – 2x2 Analysis and Alternative Futures

The foresight component of the study fulfills a complementary purpose to the qualitative research, namely to illustrate how any insights from this study should not be considered in a static vacuum. Understanding retail investors' motivations and relationship with social media as a delivery channel for advice will only be as valuable as the ability to detect how these critical factors are positioned to grow, change, and be impacted by the advancement of other trends in the industries of finance and prosperity.

The methodology for the foresight component of this study is anchored in the identification and investigation of signals of change relevant to the financial industry. A selection of phenomena (including specific events or technologies being developed) are identified and used as a 'baseline' of concepts. From there, each concept is evaluated to determine if connected evidence exists to suggest that this concept should be considered a strong signal of change (as opposed to something which may not evolve or will not progress in prominence any time soon), and also if it is part of a wider trend which warrants inclusion in subsequent steps of the foresight process.

Subsequently, the methodology identifies 2 'critical uncertainties' to leverage toward building 4 alternative future scenarios (each a different combination of outcomes of the critical uncertainties), in which the identified signals – as well as the perceptions of financial institutions and social media identified in the prior segment of research – can be illustrated to show divergent possibilities. The critical uncertainties are identified through an assessment of the signals of change whose potential impact is high, and for whom the certainty of exactly how they will evolve and deliver impact is low.

Beyond providing immersive views into how the industry of prosperity may evolve and shape the wider world, this foresight research method also allows for a set of insights to be generated, indicating the relationships, key factors, and sources of unpredictability to keep in mind going forward.

Findings

Retail Investor Survey

The Retail Investor Survey received a lower-than-expected response rate (6 in total). Additionally, 3 of the 6 participants were screened out due to not meeting the criteria of being both a retail investor and a user of social media-delivered advice. These outcomes will be elaborated upon in more detail in the Limitations of the Research section of the Study, but it should also be noted here that the more quantitative-leaning, multiple choice responses should not be treated as significant findings due to the very low response rate.

While the response rate fell short of expectations, the qualitative responses provided by the qualified participants yielded discrete quotations and responses for qualitative coding and analysis. As a result, the Retail Investor Survey is still able to contribute a series of findings and insights for consideration in the larger Study.

The following sections provide the findings and analysis of the qualitative responses and coding exercises; the Appendix contains the full list of responses to all questions from the Retail Investor Survey.

Screening

Of the 6 total responses, 3 participants qualified to proceed beyond the screening questions: Participants 11, 12, and 13.

Participants 11 and 13 indicated they did their own investing and trading, but also had some wealth products managed by a financial advisor or a financial institution. Participant 12 indicated they only did their own investing and trading. All 3 qualified participants indicated they used social media-based financial advice sometimes, and all 3 were also within the ages of 25-34.

Investing Goals

When asked about their goals for their investing behaviour, all 3 participants indicated that their retail investing behaviour was part of a larger financial plan (Appendix A4). When asked to describe their investing goals in their own words, participants' responses aligned on 2 key principles: investing as a means to achieve an improved lifestyle, and investing as a means to secure funds for retirement (Figure 1). It is worth noting here that all 3 participants – all of whom manage their own investing and trading – spoke to goals which traditionally financial institutions are positioned to help their clients achieve.

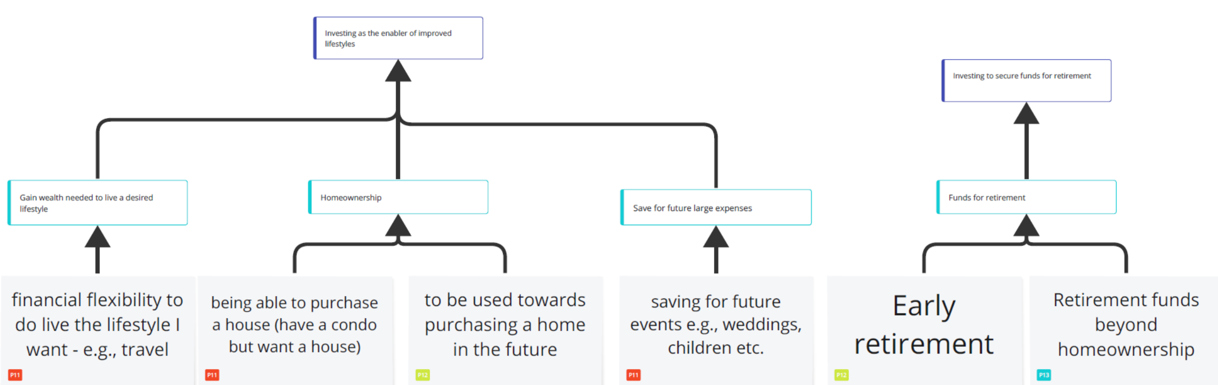

Figure 1 - Coding Analysis - Investing Goals

Perception of Financial Institutions

Participants expressed a diversity of responses when asked to indicate the extent to which they felt they could trust financial institutions, and the extent to which they felt financial institutions could help them achieve their investing goals (Appendices A6-7). Interestingly, Participant 11 indicated that they trusted financial institutions but did not feel that these companies could help them with their investing goals. Participant 12 also indicated they did not feel financial institutions could help them with their goals.

The qualitative coding applied to the participants' elaboration on these questions in their own words (Figure 2) indicates a shared skepticism regarding the role and value of financial institutions. All 3 participants disclosed beliefs that the role of financial institutions does not prioritize the wealth of their clients unless they are already wealthy. Taken together, there is a shared perception that financial institutions do not grow their clients' wealth, but rather reinforce their existing level of wealth (or lack thereof), due to wealthy clients receiving special attention and less wealthy clients being disproportionately impacted by costs and service fees.

Participants 11 and 12 disclosed similar beliefs surrounding the value for time and effort gained through doing one's own research compared to investing through institutions – unless a person has enough existing wealth to afford "VIP service", it's a better use of time, money, and effort to do one's own research and investing.

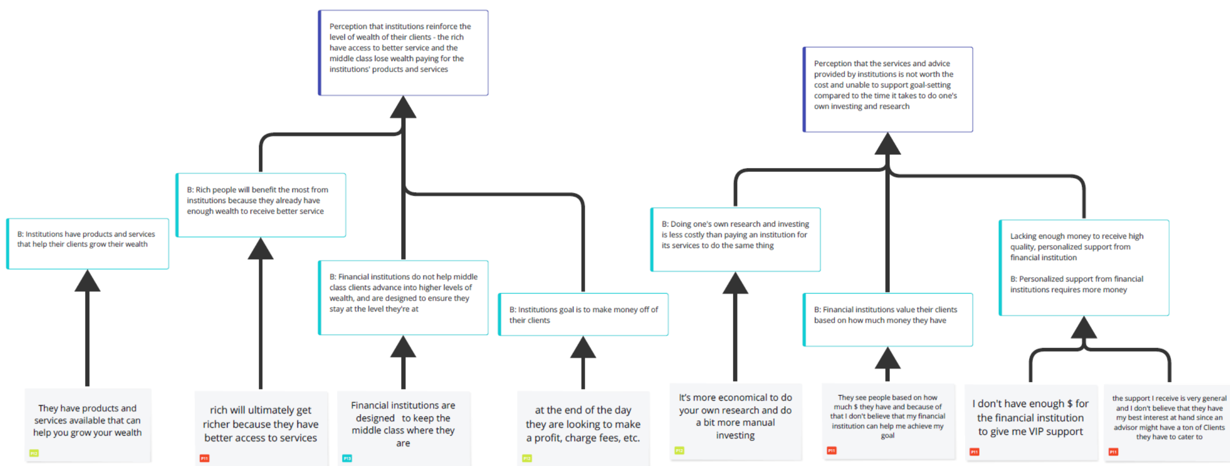

Figure 2 - Coding Analysis - Trust in Institutions

An emerging pattern across beliefs and perceptions of financial institutions' trustworthiness and capacity to facilitate investing achievements is that institutions deliver on the promise of the growth of wealth for those who are already wealthy; less so for those who are not but are looking to achieve new levels of wealth to unlock new lifestyles.

Perceptions of Social Media Advice

Questions on participants' levels of trust in social media-delivered advice and its capacity to support their investing goals was similarly met with diverse responses (Appendices A9-10). Participant 11 neither trusted social media advice nor felt it could help with their investing goals; Participant 12 felt they somewhat trusted social media advice and also felt that this advice somewhat supports their investing goals; and Participant 13 felt neutral about their trust in social media but indicated they felt this type of advice supports their achievement of their investing goals a lot.

Qualitative coding for participants' free text responses for this section (Figure 3) indicates a mix of perceived limitations and perceived values for social media (and its content creators) as a delivery mechanism for investing advice. Participants 11 and 13 both offer critical remarks on social media-based investing advice focused on information, namely being limited by both time constraints as well as the personal motivations and biases of the content creators. At the same time these same participants both speak to social media-based advice's ability to offer more unique and discontinuous advice, as well as 'leads' for interesting ideas and topics to explore further on their own.

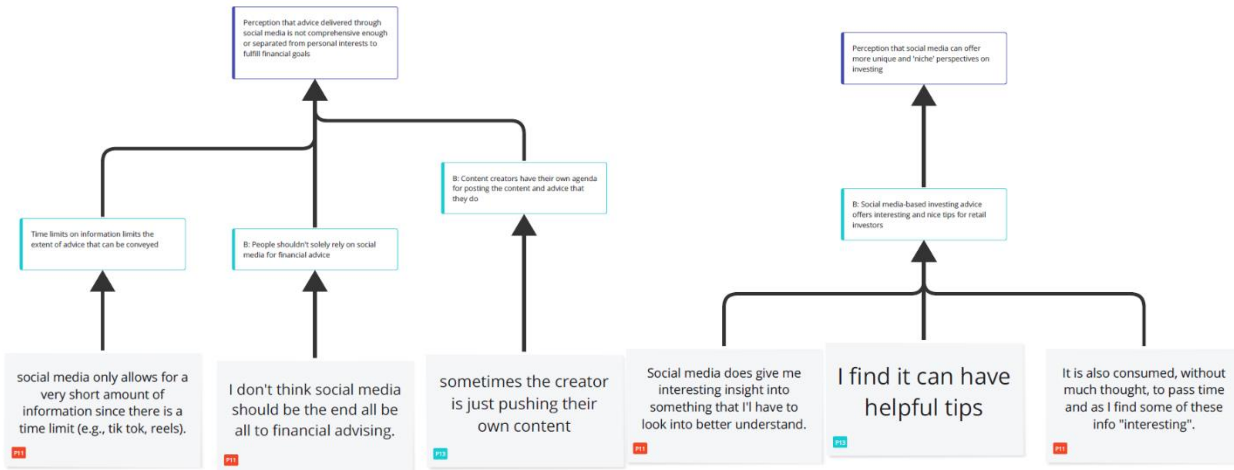

Figure 3 - Coding Analysis - Trust in Social Media

While not something which can be considered a pattern, Participant 11's responses across these questions highlight a unique quality of social media-delivered advice. Participant 11 indicated they sometimes leverage social media and content creators for investing advice, even though they also indicated they did not much trust these same content creators, nor did they feel this advice could help with their investing goals. Additionally, in their own words they indicated they found this content "interesting" and that it provided them with "interesting insight into something [they'll] need to look into better to understand."

Taken together, and building off of the emerging themes from the prior section, social media-based investing advice may not be perceived as a consistently reliable source of intelligence, and may not necessarily hold the trust that institutions lack, but does excel in surfacing new topics for retail investors to explore going forward.

Comparing Advice Channels

In providing perspectives on the main differences between the institutional and social media-based channels of investing advice delivery, participants offered a number of qualities for each type of advice which they felt distinguished it from the other (Appendix A14 and Figure 4).

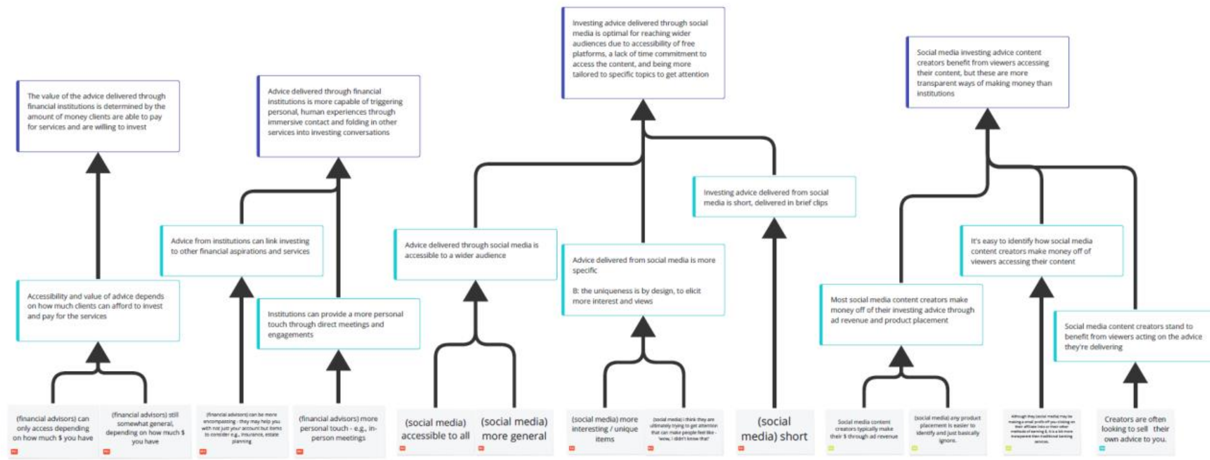

Figure 4 - Coding Analysis - Comparison for Institutions and Social

Some of Participant 11's perspective on why institutional advice is distinct is that its value grows the more wealth a client is able to provide up-front. Additionally, institutional investing advice is seen as a vehicle for more immersive and engaging discussions and holistic experiences, due to the ability to not only connect with people in-person, but to broaden the discussion to a wider level to tackle broader financial planning. Conversely, the perceived distinguishing traits of social media-based advice are accessibility (both due to being free and having a much lower time commitment) as well as being more specific and nuanced in terms of subject matter. A perceived distinguishing quality of social media-based advice, one shared by both Participants 12 and 13, is the transparency regarding how the 'owner' of the advice stands to gain and profit from retail investors engaging with them, where "any product placement is easy to identify and just ignore" and "although social media platforms may be making a small profit off you … it is a bit more transparent than traditional banking services."

Analysis – Bringing it all Together

Detecting patterns across participants and across the various questions and responses allows for the creation of several contributing insights toward the research questions, which ask after the motivations of retail investors to seek investing advice from social media platforms and how these motivations measure against their perception of financial institutions. The perspectives of participants on the main distinguishing qualities of these two channels for advice offer some insight into how retail investors more broadly perceive and manage their trust in these ecosystem actors.

Based on the responses and patterns shown through participants' responses, **the following statements can represent an initial view of how retail investors see financial institutions:**

1. Financial Institutions support growth in wealth for those who are already wealthy, because they are less impacted by the fees for investing services and advice
2. Financial Institutions have a disproportionate interest and level of advice reserved for their client segments who are wealthy and are willing and able to make large investments
3. Financial Institutions provide predictable, general advice to less wealthy clients
4. Financial Institutions are capable of providing more immersive investing experiences

For Social Media-based Advice, **these statements similarly can serve as an initial indication of how retail investors' perception of its trustworthiness and value:**

1. Social Media Advice requires time and effort to explore and digest, but this offsets the costs paid to financial institutions to do the same
2. Social Media Advice is more specific and can touch on more discrete, 'interesting' topics
3. Social Media Advice is transparent in how its content creators benefit from its consumption

With these perceptions in mind, the motivations of investors managing investments by themselves – and seeking advice through social media rather than traditional advisor / institutional channels – becomes more deliberate. The lack of a direct cost to retail investors when it comes to gaining advice and guidance through social media content creators provides a less-impeded trajectory toward meeting their goals of increasing their wealth. Where financial institutions ask retail investors for money in return for wealth, all that social media content requires is their time. More broadly, retail investors associate financial institutions as agents of stasis, while they associate social media advice and its content creators as agents of change. Given that retail investors' goals for investing include ascending to levels of wealth where staples such as retirement, homeownership, and traveling the world are desired but clearly not yet in reach, it becomes more clear why retail investors trust and place value in a channel which they feel supports their means and their goals, whereas financial institutions will just keep them where they are.

Literature Review – Evaluating the Veracity of the Primary Research Findings

While the literature review has been conducted for the purpose of assessing the veracity of the findings from the primary research, the review has adopted a scope broader than the specific initial statements generated by the primary research. Rather, the focus areas of millennials' adoption of retail investing and the relationship between retail investing and social media have driven the review as guiding concepts, and have facilitated the creation of additional findings which are subsequently correlated and assessed for their capacity to support, supplement, or challenge the primary research findings.

A - The first component of the literature review, which focuses on younger populations' relationship with their finances and traditional institutional approaches to financial management, yields a series of themes which provide further veracity and colour to the emerging statements on retail investor perception of financial institutions which have emerged from the primary research.

Investing Behaviour – a Consequence of Capability and Education

A sub-section of the literature review explored millennials' relationship with financial institutions and decision-making through the lens of 'financial literacy.' In their investigation of the impact that parental coresidence (i.e. living with one's parents) has on millennials' investing behaviour, Bentley and Bogan (2019) reference an earlier study which concludes that only 19% of millennials (18-34) are considered "financially capable, or owning a savings account and having received a financial education." (Friedline and West, 2015) Statistics like the aforementioned occur on a regular basis throughout the literature, and reflect an approach to understanding 'how millennials are doing' through the lens of their access (or lack thereof) to financial education and investment practices (e.g. owning a savings account). Among other findings, Robson and Loucks' study shows lower rates of 'planning ahead' and cultivation of 'nest egg' savings among millennials. (2018, p.34) Under this same lens, it is suggested that technological or app-based solutions which offer younger investors "some level of financial education" not only experience more positive investor performance but also product success, citing a 93% agreement to the statement that the 'app + education' mix leads to improved millennial investing behavior. (Marketwired, 2017). Overall, the studies identified in this section offer a more traditional method-biased, and arguably outdated, lens through which to view millennials' relationship with their finances: through the possession of formal financial education and the ownership of savings accounts. This reflects a more institutional and older generational view.

It should be noted that the literature examined in this thematic area speaks to the concepts of literacy and education, rather than younger populations' perception of the trustworthiness and value of financial institutions. However, these sources do indicate that younger populations are not seeking financial education in the way that traditional methods are positioned to offer, and instead are looking to the education provided through digital applications which can also be used for investing and trading.

Investing Behaviour – a Consequence of Volatility

In almost stark opposition to the lens of financial education and literacy as shown above, another driver of investing perceptions and behaviour surfaces throughout the sources; one which is less focused on the nature of millennials' knowledge assets and more so a factor of broader employment and economic circumstances affecting millennials around the globe. These sources cite poor to nonexistent rates of retirement savings behaviour (a form of investment) among millennials as related to low levels of income, and volatile frequencies of income. (Kangethe, 2020) This raises an important distinction, that of the difference between financial literacy, and financial health. Across sources, a trend is noted which shows a decline in retirement savings among millennials; this is tied in these same sources to the volatility inherent in millennials' financial realities. The 'gig economy' (short, flexible contracts with lower and inconsistent pay) is flagged as one of the main threats to intergenerational mobility (the ability for a person's average income to be higher than their parents' income when they were that age), as this economic trend has led to uncertainty about take-home income from one month to the next. (Robson and Loucks, 2018, p.21) A recent study conducted by TD Bank indicates that millennials comprise a significant proportion of their larger statistic showing 37% of Canadians reporting severe month-over-month volatility in their income. (TD Bank, 2017) Considering the adoption of app-based personal finance management technology as a category of investment behaviour, Walsh and Lim find that there exists a "significant, positive association" between millennials' adoption of personal investing and trading apps and financial volatility and pressure. (2020, p.12) While certainly a disproportionately-scaled example, one of the foremost factors tied to the significant uptake in millennial investing in India are the efforts on the part of millennials to "[boost] returns rocked by one of the worst inflation rates in Asia." (Sircar 2022) The more "risky" retail investing behaviour is justified due to traditional means of wealth management, such as bank savings, being incapable of offsetting the volatility of inflation: "At this point in time, a bank fixed deposit is the worst investment for any individual because inflation adjusted returns are negative." (2022)

The volatility referenced in this component of the literature review supports the primary research responses from participants regarding their use of retail investing as a supplement for traditional financial milestones such as retirement savings and savings for large purposes – reflecting both an inability for existing means to help retail investors achieve those financial goals, and an inability for these means to adequately support individuals in the short-term, where forces like inflation actively cause traditional savings and investments to lose out on returns. Ultimately, a combined viewpoint exists that traditional means of saving are insufficient to combat larger forces like inflation; retail investing is both enticing from a short-term goal perspective but also as a means of investing that doesn't represent losing money in either the short or long term.

Investing Behaviour – a Vote of No Confidence

Another key sentiment emerging from the literature in-part grapples with the volatile income circumstances in which many millennials find themselves, but most importantly provides the added layer of millennials' declaration of a lack of faith in the existing principles of what are considered 'literate' and correct investments. Sources speak of the struggle of millennials' investment behaviour in terms of combat, citing how "putting savings in low-interest bank accounts and low-risk investments is a losing battle against inflation." (PR Newswire, 2021) Kangethe draws this relationship explicitly by connecting the "unpredictability" of millennials' lifestyles to a disinterest in traditional financial and investment behaviour, such as investing in pension funds, which are more pre-disposed to wage earners who are able to have a longer-term 'plan.' (2020) Similarly, a recent article compares Indian millennials' alleged willingness to take market risks, rather than invest more traditionally in bank deposits and physical assets such as real estate, because those approaches represent insurance policies and retirement plans "in a country that lacks robust social welfare systems or widespread access to formal credit." (Hoffower, 2021) Collectively, these sources have offered an explanation of millennials' investing behaviour as a consequence of a loss of faith in the appropriateness of existing financial models and best practices for their present circumstances. Kangethe asserts that this is played out in the struggle of pension funds seeking to convince millennials to invest in retirement savings, citing a 2019 report showing that "only 25 percent of millennial workers expect their primary source of retirement income to come from Social Security or a pension. Instead, 45 percent of millennials say their future retirement will be funded by personal savings." (2020) This 'vote of no confidence' is argued to be millennials' answer to the failure of economic models and welfare systems to adequately adapt to new trends such as "the rise of the gig economy, automation, [and] financialization", which have become part of the 21st Century reality. (Robson and Loucks, 2018, p.21)

These concepts strongly support the sentiments emerging from the primary research regarding retail investors' perceptions toward financial institutions, which are seen as actors which cannot help them achieve their goals. The examined literature speaks to the growing number of younger investors who rely on their own means to achieve their goals, and reflect the survey participants' views that the advice offered by financial institutions isn't necessarily untrustworthy, but rather is designed for wealthier clients and those who can 'afford' for benefits to be realized much further down the road.

Investing Behaviour – a Force of Nature and Disruption

Perhaps the most recurring and charged sentiment among the reviewed news articles and op-ed pieces is the disruptive nature of millennials' relationship with investing. While the term 'disruption' is often applied very liberally, it rings appropriately in this section, where the literature references entirely new paradigms for decision-making in investing. The previous section concluded with sentiments from sources which spoke to a 'vote of no confidence' in the existing financial and investment models. The sentiments in this section, conversely, indicate a growing belief that millennials' investing behaviours speak to a growing trend of bypassing these existing models completely. From articles indicating that "millennials in India are driving the country's stock market", (Hoffower, 2021) to the almost threatening introductory note that "millennials are coming for baby-boomer investors", and that investors must be prepared for an "imminent regime change", (Fox, 2021) a clearly-prevailing opinion is that millennial investors and traders are "very critical thinkers, thoughtful and cost conscious, with habits so different from GenX and Baby Boomers, that this is going to upend how many industries operate." (2021) Beyond the over-use of 'disruption' to imply 'new and innovative', sources sampled here refer to millennials' imminent disruption of the stock market to be on par with "the disruption of hotels by AirBnB and taxi services by Uber." (Fox, 2021) It is cited that, in India, personal investor and trading accounts increased to 10.4 million users in 2020, whereas only 3.7% of the population of 1.36 billion reported investing through equities. (Hoffower, 2021) While the cited case of Indian millennials' break-neck-paced insertion into stock markets reflects a wider trend and response to the shortcomings of traditional methods of investing and savings, it should be noted that the exact extent to which this is happening in India is disproportionately wider and larger than other countries, with "the sheer number of individuals pouring money into new and lightly controlled assets [setting] India apart" and more than 43 million equity account having been created in India since the start of 2021. (Sircar et al 2022)

Coupled with the sheer number of millennials joining the stock market as personal investors and traders, sources also focus on where millennials are getting their information and their inspiration for their investments. Fox offers that industry professionals should avoid conflating a lack of financial literacy an education with the reality that millennials are receiving education and guidance, but not from the traditional sources: "Millennials are getting their information from Reddit and TikTok where as baby-boomers favor Grant's Interest Observer … [and millennials] favor thematic investing in long-term disruptive trends whereas baby-boomers [favor] fundamental investing." (2021)

Ultimately, the reviewed sources' commentary on this thematic bucket speak to a world view wherein millennials' financial literacy and financial health (regarding income and employment stability / volatility) have little to no bearing on their ability to reshape stock markets across the globe, in their image.

There are clear bases in the literature for the patterns and perceptions detected in the primary research. Younger populations are steadily increasing their usage of personal investing and trading mechanisms in lock-step with declining faith that traditional, institutional approaches to financial management are capable of supporting them and their financial goals. Beyond these changes occurring uniformly, the combination of the primary and secondary research indicate a direct link between these trends, with increased retail investing behaviour being driven as in-part a consequence of traditional services struggling to demonstrate value and progression to particularly younger audiences and investors.

B – The second portion of the literature review takes a specific focus on scholarly publications regarding the relationship between social media and financial decision-making and perceptions. The outcomes of this part of the review go beyond assessing the veracity of the perceptions of the role of social media in investing as identified through the primary research, and instead identify a more fulsome characterization of social media as a critical and disruptive actor in the financial and investment industries. This does not mean that the perceptions identified through the primary research should be considered invalid, but rather supported through the wider aperture offered by the literature review.

Social Media as a Coordination Platform – Not just an Advice Delivery Channel

A key notion emerging from the literature is one which challenges the way in which social media has been identified (perhaps incorrectly) by works including this study. Social media, insofar as its relationship to retail investing, is more than just a delivery channel for investing advice. Rather it also fulfills the role of a platform for coordination amongst retail investors. Social media offers investing advice from content creators, but also allows retail investors to benefit from the commentary and discussion amongst fellow retail investors consuming the created content. (Cogent Research 2013) A study conducted by Rakowski et al finds that “Twitter activity is a unique and meaningful source of investor attention” and that this translates to both trading volume and asset prices due to the social media platform’s ability to “facilitate the diffusion of information among investors” in a collaborative way not possible through traditional means of investing and provision of advice. (Rakowski 2021, p.34) This capacity is framed through the comparison between institutional “curated, top-down providers” and social media as a “more democratized setting.” (p.3-4) Similarly, Semenova and Winkler examine the role that Reddit’s WallStreetBets channel increasingly plays in supporting retail investors’ “regaining a spotlight on the (virtual) trading floor”, citing both the internet and this particular subreddit itself as a mechanism for providing a “coordination platform on an unprecedented scale.” (Semenova and Winkler 2022, p.2) Given that the sampled sources also speak to this collaborative quality’s capacity to drive observable outcomes in the stock market and the prices of assets, the perceptions emerging from the primary research regarding the cost-effectiveness of social media-based retail investing can be seen as indicative of a wider perception shared by retail investors more broadly. Retail investors benefit from more than just the advice created by content creators; they also benefit from the commentary, discussion, and collaboration that these platforms provide.

Correlation between Stock Price Volatility and Popularity on Social Media

The sampled literature finds that a positive correlation exists between the dissemination of investing advice via social media channels and the volatility of stock prices of the stocks referenced by content creators. While retail investors are sometimes perceived as “noise traders who move randomly and invest relatively little professional knowledge in advanced fundamental analysis”, it is found that social media as a retail investors’ haven “is informative and not only explains the market but also affects financial markets.” (Yoon and Oh 2022, p.3) In their study, Semenova and Winkler confirm their hypothesis that “a stock price’s volatility increases when it becomes more popular or when consensus emerges on WSB.” (Semenova and Winkler 2022, p.27) Rakowski et al take a focus on ‘penny stocks’ in particular, due to low institutional investor involvement given their nature as “small, volatile, and difficult to arbitrage” – attributing this lack of involvement in these stocks to the “impediments-to-trade hypothesis”, their study concludes that the combined forces of retail investors and social media platforms capitalize on this absence which in turn leads to more pronounced deviations in prices from “more fundamental values.” (Rakowski et al, p.34) Finally, Antweiler presents evidence on social media’s capacity to drive a factor identified as “abnormal information creation activity.” (Antweiler 2004, p.15) Evidence from the study suggests a relationship between the creation of “abnormal information” and the prevalence of “herding behaviour” amongst retail investors – while this same type of information (when delivered through social media) negatively affects institutional investors, it is shown to drive the activity and involvement of retail investors. (p.15) While this emerging theme does not directly address the perception retail investors hold toward social media as an advice channel, it does contribute weight to the perception that the content delivered through social media channels translates to real, observable change in stock prices and markets.

The Presence of Peers and Popular Personalities on Social Media Platforms impact Retail Investor Behaviour

Similar to social media’s role as an orchestrator of collaboration and discussion amongst retail investors, it acts as a catalyst for retail investors and their decision-making to be impacted by both their peers and prominent individuals and content creators. Investing advice delivered through social media is found to drive “investor herding behaviour” (Antweiler 2004, p.15) A more recent study corroborates that financial markets are jointly determined by “herding behaviour [and] imitating actions mutually or following the decision-making of others.” (Yoon and Oh 2022, p.3) Semenova and Winkler establish a causal relationship between the decisions of retail investors and those of their peers, noting that “individuals … tend to focus their attention on stocks that others are discussing, underscoring a contagion mechanism.” (Semenova and Winkler 2022, p. 31-32) Additionally, a study conducted to assess the efficacy of financial knowledge dissemination and retention provides an analysis which shows that “emotional connections and familiarity with media personalities certainly play a role in motivating knowledge and behaviour change.” (Berg 2013, p.24) Further, the analysis notes that “incorporating messages through mainstay actors … or scheduling regular appearances of external characters could lead to greater retention and continuation of impact.” (p.24) Overall, this collection of assertions on social media as a conduit for the influence of peers and personalities on individual retail investors’ decision-making does not correspond to the sentiments shared in the primary research. However, this theme does offer supplemental consideration toward the feelings and motivations of retail investors who continue to look to social media-delivered advice for support and fulfillment.

Social Media’s Unique Attention-capturing Qualities

Perhaps best considered an off-shoot of the above thematic findings, several sampled sources speak to social media’s distinct ability – due to its multi-faceted role as diffusor of information, convenor of discussion, and source of entertainment – to capture the attention of retail investors in ways which traditional financial institutions are not (yet) capable. As mentioned above, Semenova and Winkler detect “the presence of a contagion mechanism on WSB”, which points to the retail investor behaviour of focusing attention on stocks which others are discussing. (p. 31-32) Similarly, Rakowski speaks to Twitter’s capacity to capture the attention of retail investors “in ways that are not captured by traditional measures of attention.” (p.34) In their study, Berg finds that media-based methods for delivering financial advice “[show] significant and favorable impacts on financial knowledge and behavior”, and more broadly ties this to the assertion that “entertainment media has the power to capture the attention of individuals unlike any other medium.” (Berg 2013, p.24) While the attention-capturing qualities of social media-delivered investing advice is not acknowledged explicitly through the perceptions emerging from the primary research regarding the trustworthiness and value of this type of advice, it can offer a degree of explanation for the emerging perceptions and thus speak to a wider applicability beyond the surveyed participants. Where participants indicated that they accessed social media-delivered advice but did not consistently perceive social media-delivered advice to be highly trustworthy or valuable, the ability to capture attention can be seen as a driving force which ensures retail investors continue to leverage this advice channel regardless of perceived trustworthiness or value.

Social Media’s Rapid Dissemination of Investing Information

A significant thematic quality of social media-based investing advice is its ability to disseminate relevant information to its consuming retail investors at a much faster pace than traditional channels. Twitter’s ability to impact trading volumes and asset prices is found to be driven in-part by the platform’s role to “facilitate the diffusion of information among investors.” (Rakowski 2021, p.34) The efficacy of social media’s role as a disseminator of investing information is further explained by the notion that “social media content is updated at an unprecedented speed and provides first-hand information to investors ahead of other sources.” (Lo 2019, p.3) In the case of penny stocks, a lack of timely and sufficient information accessible through traditional, institutional means – as well as these stocks’ quality as an “opportunity [which] may need to be captured quickly for potential profits” – are factors which help explain the attention provided to them on social media both by retail investors and content creators, and why social media channels are uniquely positioned to deliver value to retail investors for this type of stock. (p.26-27) Rakowski’s study similarly concludes that stocks which are “small, volatile, and difficult to arbitrage” tend to be absent from the attention of institutional investors and thus are strategically-capable of being acted upon through social media channels, due to both the lack of attention paid by other stakeholders as well as these platforms’ ability to provide necessary updates quickly. (p.35) It should be noted that, particularly in the case of Twitter but also more broadly across social media platforms, the decisions and changes to the platforms themselves can impact the degree to which this information can be diffused as quickly and effectively as attested. By way of example, Elon Musk’s acquisition of Twitter in late 2022 has led to a series of design and experiential changes to the platform, including the promotion of content outside of users’ requested parameters. (Conger 2023) Decisions such as these can impact the speed and efficacy with which investing advice is diffused and consumed. The literature contributing to this thematic bucket offers a quality of social media-delivered advice which resonates with a core perception identified in the primary research, namely the belief that social media-based advice is uniquely capable of providing more targeted, specific advice to its retail investors.

Additional Considerations Identified

While the following concepts should not be considered thematic findings such as the categories above, they have been included as noteworthy considerations in the examination of the impact of social media on retail investors. A study conducted by Ismail et al, focused on determining social perception of the usefulness of social media towards investing behaviour across various populations segments based on demographic features, finds that – more than other factors – “generational differences play a vital role and cause variations.” (Ismail et al 2018, p.150) A connection to draw between this finding and the primary research is that all participants who qualified for the survey (in part by indicating that they leveraged at least some degree of social media advice for their retail investing) were from the millennial, 25-34 age bracket. A second noteworthy concept identified for consideration comes from Semenova and Winkler, referencing the topic of misinformation and the power of popular figures. They ask if governments have the right (or, further, the mandate) to “penalize the spread of misinformation about asset prices on social media”, and proceed to suggest that regulatory structures within the financial system should be revisited as they currently “closely monitor financial institutions and large players, but overlook smaller investors.” (Semenova and Winkler, p.34)

Conclusions from the Literature Review

The literature review conducted for this study has pulled thematic findings which focus on two main concepts: younger populations’ relationship with financial institutions and their perception of traditional means of investing, and the unique ways in which social media plays a role in the experiences and perceptions of retail investors.

The findings from the initial concept area strongly reflect the perceptions of institutional trust and value identified in the primary research component of the study, demonstrating that retail investors (particularly those in the millennial age bracket) generally lack faith in financial institutions and traditional means of investing toward achieving their investing goals and progressing their wealth to new levels. Between the primary research and literature sampled, a reliance on institutions for support and progression toward prosperity simulates a game which is, by design, stacked against millennials and retail investors.

The literature assembled to better understand how retail investors perceive and are impacted by social media-delivered advice had set out to assess the veracity of the emerging perceptions on the trustworthiness and value of social media-based advice. While little in the literature directly addresses the perceptions held by retail investors themselves, the assembled thematic areas have yielded more information regarding the unique qualities possessed by social media as a source of investing advice. Being able to more fully appreciate the unique roles and qualities of social media as a source of investing advice is a productive complement to the emerging perceptions of social media-based advice, as a more targeted, cost-effective, and accessible means to increase wealth.

Ultimately, the supplementary literature review has both validated the emerging perceptions of both institutions and social media as delivery channels for investing advice, and also taken the study a step further toward a more vivid understanding of the millennial retail investor and social media interaction landscapes.

Foresight – Scanning and Assessing Signals of Change

The emerging perceptions of trust and value placed by retail investors on financial institutions and social media articulated above should not be considered in a vacuum. Identifying and analyzing current phenomena (be they discrete events or wider trends) impacting the financial industry allows the study to place the emerging retail investor perceptions in the context of current events and changes in the financial industry, and also combine the phenomena which represent the strongest signals of change with the emerging perceptions to illustrate how the experience of retail investors leveraging social media may drastically change in different ways in the future.

A horizon scan for phenomena poised to impact or disrupt the financial industry has yielded a list of technologies, concepts, and larger movements which the study has assessed for impact. The scanned concepts are provided here:

1. Open Banking
2. Investing with ESG in Mind
3. Sustainable Lending
4. Central Bank Digital Currencies (CBDCs)
5. The Great Wealth Transfer
6. Custom Indexing
7. AI-driven Segmentation
8. Decentralizing Stocks and Digital Securities Exchange Processes

Each concept identified above has subsequently been investigated and assessed to determine the strength of its role as a signal of real change in the financial industry and the experiences of stakeholders within. This analysis has been conducted by further scanning the environment for evidence regarding real-world implementations or changes that have occurred as a result of the given concept. This analysis is used to determine which concepts / signals of change are to be used in subsequent steps in the foresight methodology.

Open Banking

Open Banking refers to banks partnering with digital banking / financial apps or other digital platforms, integrating with their systems, and offering the users of these applications the ability to interact with and manage their bank-based financial information through these services. This concept is made possible through advancements in application programming interface (API) technology and software protocols, as well as changes to regulations and requirements surrounding secure and authorized exposure of client data across systems. (Mallick et al, n.d.)

Evidence demonstrates that Open Banking is a lively trend and goes beyond ideas and potential. Part of this is rooted in legislation such as the European Central Bank's second Payment Services Directive (PSD2) which lays out mandates for both increased security of banking information access and transfer, as well as the need to allow banking information to be securely accessed by other systems and services to improve customer experiences. (European Central Bank, 2023) This shows that Open Banking as an experience is being rooted in government legislation and an emerging baseline of financial customer experience. A widely-discussed Open Banking implementation and veritable 'success story' has been Nude's leveraging of Open Banking to support its customer base – first-time home buyers – with personalized savings strategies, fueled by their real-time financial records. The app's "Explore" and "Ideas" features allow it to leverage open banking data exchange protocols to access a user's income and spending data to provide personalized savings advice which bridges the gap between finances and lifestyle. (Pavy 2023)

Investing with ESG in Mind

This concept describes the increased factoring of Environment Sustainability and Governance (ESG) into both the investing decisions of retail investors as well as the wealth products and investment decisions offered by financial institutions and investment firms. A recent study which surveyed global retail investors finds that 82% "are interested in investing in companies that value social and environmental progress." (Coulter 2021) Leading into 2022, assessments indicated more than $330 billion in assets under management in ESG funds, with continued increase into the later parts of 2022 and into 2023. (Norman and Toms 2022) Further, it is predicted that ESG investments will surpass $50 trillion globally by 2025, comprising 1/3rd of all assets under management. (Henze and Boyd 2022)

ESG-based investing plays a particularly prominent role for emerging populations, such as millennials and Generation Z. A large part of this is due to the link between the concept of ESG and concerning trends including climate change, affordable housing, and aging populations internationally – all of which will disproportionately impact younger populations and the generations after them. RBC Wealth Management commissioned a study which finds that 76% of younger generations in the UK indicate that it is "increasingly important to consider ESG factors when investing"; this sentiment is shared by only 37% of older generations." (RBC Wealth Management, 2020) In the context of the United States, a recent study conducted by Pew Research corroborates these numbers, finding that (unlike older generations) "Gen Zers and Millennials are *talking* more about the need for action on climate change; among social media users, they are *seeing* more climate change content online; and they are *doing* more to get involved with the issue through activities such as volunteering and attending rallies and protests." (Tyson et al 2021)

Additional sources reviewed on the topics of ESG investing and its relationship with retail investors speak to the concept of ESG playing a prominent role in investing and portfolio allocation decision-making. A recent study conducted by Li et al, on the importance of ESG for retail investors and the topic's discussion on media channels as a catalyst, finds that "retail investors treat ESG factors as an important component of their portfolio allocation decisions – [consistent] with retail investors paying attention to ESG-related news, they trade more when these events elicit greater attention from the media and other market participants." (p.26) It is interesting to note, however, that this same study finds that retail investors only trade based on these ESG factors when they are able to identify them as "financially material to a company's stock performance." (p.26) This suggests that, while ESG is definitively playing a role in the lives of retail investors and the larger financial industry, financial performance of stocks continues to rank higher than ESG performance. Kerins et al note that the proliferation of "low-cost retail trading platforms" have made it much easier for retail investors to invest with ESG in mind, but that the proliferation of "hundreds of rating agencies [competing] to build a superior set of standards, initiatives, and frameworks to measure impact more effectively" presents a major barrier to retail investor comfort in these decisions and, consequently, the rationality of investments. (Kerins et al 2022) While the concept of ESG-based investing is certainly qualified as a signal of change (by the statistics for adoption and asset management composition alone), its strength and future are uncertain, and appear to be predicated on the ability to achieve a more unified and accessible definition and measure of 'impact', and on the correlation between impact ratings and financial performance.

Sustainable Lending

Banks holding sustainable lending as a priority may limit or refuse to support customers with poor ESG scorecards in favour of customers and prospects with higher ESG performance and potential. This practice aims to steer larger companies toward doing their part to address climate change, but also affords banks the ability to demonstrate concerted efforts to promote and support sustainable economies around the world. From 2017 to 2020, sustainability-based lending is reported to have increased from $5 billion to $120 billion (S&P Global Ratings 2021)

In assessing this concept for its role as a strong signal of change for incorporation into subsequent steps of the foresight exercise, similar factors persist and raise questions on the pace and impact of the ESG Investing and Sustainable Lending concepts: the wide proliferation of standards and measurements of ESG scoring and impact make it challenging to confidently prioritize across customers. BankTrack's analysis of banks worldwide finds 50 of the 60 assessed as falling behind in adoption of sustainable financing. (2021) Innig et al supplement low adoption rates with factors such as "lack of regulation and standards" and "concerns about … risk assessment and customer maturity." (Innig et al 2021) However, regulatory and governmental groups are executing on legislation to help (both directly and indirectly) make up ground toward more pronounced and stringent banking approaches to sustainable lending. The European Banking Authority (EBA) provides a 2021 resolution that banks across the European Union should be publishing and promoting a "green asset ratio" to assist with the transparency and systematicity of assessing institutions' ESG commitments and ratings. (European Banking Authority 2021) Further, a report from McKinsey indicates that "well-coordinated and strategically targeted green bank financing could advance environmental justice through investment in disadvantaged communities." (Buehler et al 2023) Referred to as "green bank financing", this report illustrates how sustainable lending can catalyze the support and allocation of "hundreds of billions in investment dollars" toward net-zero greenhouse gas emissions by 2050 – accomplished chiefly through investment in 11 technologies across three thematic areas: "household and community decarbonization, business decarbonization, and energy system transformation." (Buehler et al 2023) Sustainable lending should be considered as an emerging signal of change, however similar to ESG investing it should be noted that its impact and time horizon remain uncertain. Present lack of common definitions and priorities for ESG impact remain a barrier, but if more banks and legislature are able to align around technologies and thematic areas as common priorities the world may see observable progress and impact through targeted lending and financing across the world over multi-year periods.

Bitcoin Contenders: Central Bank Digital Currencies (CBDCs)

Having accepted that digital currencies such as Bitcoin and Ethereum are now staples of the economy, countries and their central banks across the world are looking to establish their own central bank digital currencies (CBDCs). The strength of this concept as a candidate signal of change rests on the concurrent "normalization of digital wallets and digital currency" as well as financial institutions and ecosystem actors consistently "joining the race to build future money and payment systems." (Volpi et al 2021) As of 2023, 114 countries (more than 95% of the global GDP) are exploring CBDCs, a massive increase from the 35 countries as recently as 2020. (Atlantic Council 2023) Further, 11 countries have fully launched their digital currency, with front-runners such as China on track to expand to the majority of the country in 2023. (Atlantic Council 2023)

Both sources at Accenture and Professor Martin Schmalz of the University of Oxford agree that the evolution of CBDCs is less a question of if, but rather when. (Volpi et al 2021 and Schmalz 2022) There exists skepticism that traditional currencies will be "dethroned" soon, however the concept of citizens of developing nations putting their money into a "US dollar stablecoin" is seen as a potentially effective way to save. (Schmalz 2022) A confounding factor regarding the pace of advancement of CBDCs is one of the foundational consequences of all cryptocurrencies: their carbon footprint and impact on the environment. The mining of bitcoin and other digital currencies consumes "vast amounts of electricity to solve complex problems" and as a result "has a carbon footprint to rival Finland or Chile." (Schmalz 2022) As a result, countries' stances and actions toward impacts on the environment and climate change will in fact determine the pace or the outcome of their journey toward digital currencies. While the exact timelines and precise outcomes of international adoption and rollout of CBDCs are uncertain as of yet, the pace of change is sufficiently consistent and pronounced to warrant this concept's inclusion as a signal of change for subsequent steps in the foresight exercise.

The Great Wealth Transfer

Similarly to the rest of the phenomena assembled for this analysis, the Great Wealth Transfer has been included due to the consistency of its occurrence as well as its direct relevance to the means and behaviour of younger retail investors. However, the Great Wealth Transfer should not be considered a signal of change. This is because of its alternate role as a megatrend – a global change occurring over time, whose growth is certain even if the manifestations and exact outcomes of its growth are not. As such, this phenomena is more effective as a given backdrop of subsequent future scenarios, rather than a signal whose outcome is uncertain.

The 'Great Wealth Transfer' refers to the estimated $84 trillion being transferred from parents and grandparents to their primarily Generation Y and Z children over the next 20 years. (Sha 2023) The assets which make up the wealth being 'transferred' over the coming years exists in a number of different forms, including "real estate and pension entitlements" as well as "mutual funds, ETFs, SMAs, or even direct ownership of stocks and bonds." (Boraiah and Burke 2023)

While not strictly a signal of change, awareness of the Great Wealth Transfer has triggered significant questions and considerations regarding changes to the landscape of the financial industry. This is particularly the case for the relationship between financial advisors and younger investors. England notes that the Great Wealth Transfer should be seen as a warning to financial advisors who are not proactively building relationships with younger generations of investors, noting that fewer than 20% of advisors are targeting younger investors. (England 2022) Sources refer to the Great Wealth Transfer in different ways, and emphasize different components and potential impacts, but collectively appear to consider it as an ecosystem-level process of ‘organizational restructuring.’ Boraiah and Burke claim that “roughly 70%, that is really two out of every three investors who inherit the wealth, actually end up firing their financial advisor.” (2023) Deloitte supplements this assertion, albeit with an even higher number: “Historically wealth transfers from one generation to the next have resulted in 90% of heirs changing advisors.” (Gauthier et al 2015, p.12) Ultimately, the Great Wealth Transfer as both a phenomenon and a megatrend will not be considered a signal of change alongside the other phenomena assembled for consideration and analysis, but will certainly still be factored into the subsequent analysis as an underlying, global force of change which runs underneath the rest of the concepts.

Custom Indexing

This technology-enabled phenomenon reflects the growing precision and personalization capabilities in the financial industry. Where standard investment indexes offered through traditional models are 'one size fits all', and have one rule-set which determines what they own and how they rebalance, custom indexes have a methodology for investing and rebalancing based on an individual investor's circumstances, preferences, and their changing needs. This new form of personalized investing is made possible by the technological nature of Custom Indexes: they are implemented through separate accounts, meaning that investors are able to own a customized mix of individual stocks and bonds. This is a different model than with mutual funds and ETFs, where the investor is indirectly owning positions through the collection of funds and ETFs. (O’Shaughnessy 2020) The use of custom indexing as a method for investment is set to outpace the growth of ETFs (exchange traded funds), mutual funds, and SMAs (separately managed accounts) over the next 5 years. (2020)

In assessing the growth trajectory and impact of custom indexing, and ultimately its candidacy as a signal of change, a noteworthy quality to consider is its ability to allow investors to exercise control over the specific companies and industries that comprise their investment portfolio; with traditional index funds, even if they declare themselves to be socially-conscious, investors have no control over which companies and stocks the fund invests. (Barve 2023) Accordingly, the rise in ESG investing behaviour serves as a vehicle for the continued proliferation of custom indexing behaviour and platforms across the industry: “The combination of digitizing the value chain of the investment management industry, ESG taking center stage in the investment process and investors’ need to customize their index strategies serve as the perfect storm for investors.” (Leveau 2021, p.4)

Custom indexing offers a clear and significant contribution to the changing landscape of the financial industry through the increased personalization it offers investors when building and maintaining their portfolios. However, the impact of this hyper-personalized approach to investing is not yet clear. More unclear still is the technology’s impact on the relationship between investors and advisors; custom indexing may make it easier and preferable for investors to build and manage their portfolios on their own, or it may bring advisors and younger, digitally-native investors closer together.

Personalization: Data/AI-driven Segmentation

Currently, investor (i.e. customer) segmentation conducted by financial institutions tends to use factors such as risk tolerance and household wealth and age to distinguish the differing needs of their customer base. This is to ensure that their products and services are either aimed at the right people, or are capable of covering a wide enough range of needs and experiences. Naturally, these segmenting factors are meant to be interpreted at a 'summary' level, as they reflect only a very high-level snapshot of the target population. With the influx of both richer data, AI-based software, improved computing power, and improved solutions for interpreting more granular and complex inputs, the practice of segmentation has the potential to evolve toward acting on investor needs and experiences at an increasingly granular level. (England 2022) Beyond making better use of existing data for more precise segmentation, AI-based segmentation solutions are also capable of leveraging entirely new sources of data. This includes unstructured data, such as “social media posts, customer reviews, and call centre transcripts.” (Frackiewicz 2023) Rather than understanding investors segments as an aggregate, individual investors’ experiences and needs can be leveraged and incorporated into services, both digital and institutional.

AI-driven Segmentation appropriately signals a future financial industry with far more targeted and personalized approaches to supporting investors. This signal not only reflects the custom indexing signal’s underlying theme of increased personalization, but also the lack of certainty around the ultimate impact that these innovations will achieve. That said, evidence exists to suggest that AI-driven investor and customer segmentation will increasingly become a household practice across banks and other financial institutions. Digalaki notes that “75% of banks with over $100 billion in assets say they're currently implementing AI strategies, compared with 46% at banks with less than $100 billion in assets.” (Digalaki 2022)

Decentralizing Stocks & Securities Exchange Processes in Crypto / Digital Markets

Where groups such as the New York Stock Exchange (NYSE) and Nasdaq act as centralized, third-party players that work to ensure a fair and transparent process for publishing prices and orders, cryptocurrency developers are making it possible for investors to trade with one another outside of this centralized exchange framework using automated market maker (AMM) algorithms; these protocols are what underlay the relevant financial transactions, known as decentralized exchanges (DEXs). (England 2022) Likely the most transparent benefit of DEXs and their application to individual investors and traders is the concept’s ability to facilitate “faster, potentially cheaper and frictionless transactions driven by disintermediation and automation.” (OECD 2022) In terms of the proliferation of this technology and its supporting applications, the yearly trading volume for decentralized exchanges has gone from roughly $2.5 billion to an excess of $6 billion in 2020, with 2021 monthly trading volume for DEXs exceeding $100 billion every single month across “more than 200 active decentralized exchange protocols.” (Alsever et al 2022) While it is evident that implementation and usage of DEXs has increased sharply over the last several years, an even more qualifying factor for this technology’s role as a signal of change is the potential for this technology to catalyze the broader, underlying force of financial decentralization (the gradual moving away from a small collection of financial record keeping institutions and asset holders). (OECD 2022) Where reluctance still exists regarding the DEXs is around its inherent anonymity regarding the identity of those involved in transactions. This anonymity extends to both identity and location, leading to uncertainties around the intentions, legality, and governability of decentralized transactions. (2022)

Decentralized stocks and securities exchanges (DEXs) qualify as a strong signal of change due to their proliferation as well as their potential to fundamentally alter the system of financial and stock markets. Additionally, the nature of their evolution should be flagged as uncertain, in large part due to their wide potential to enact significant change.

Summary of Signals Assessment

Having reviewed each of the identified phenomena as potential signals of change, all warrant inclusion as signals for the subsequent step of the foresight methodology. Based on the analysis of available evidence, the signals have been arranged below to indicate their ranking along the criteria of impact and uncertainty. The one exception regarding inclusion as signals of change is the Great Wealth Transfer, which qualifies more so as a megatrend. As such, it has been included as an underlying force which exists regardless of the other signals and their maturity.

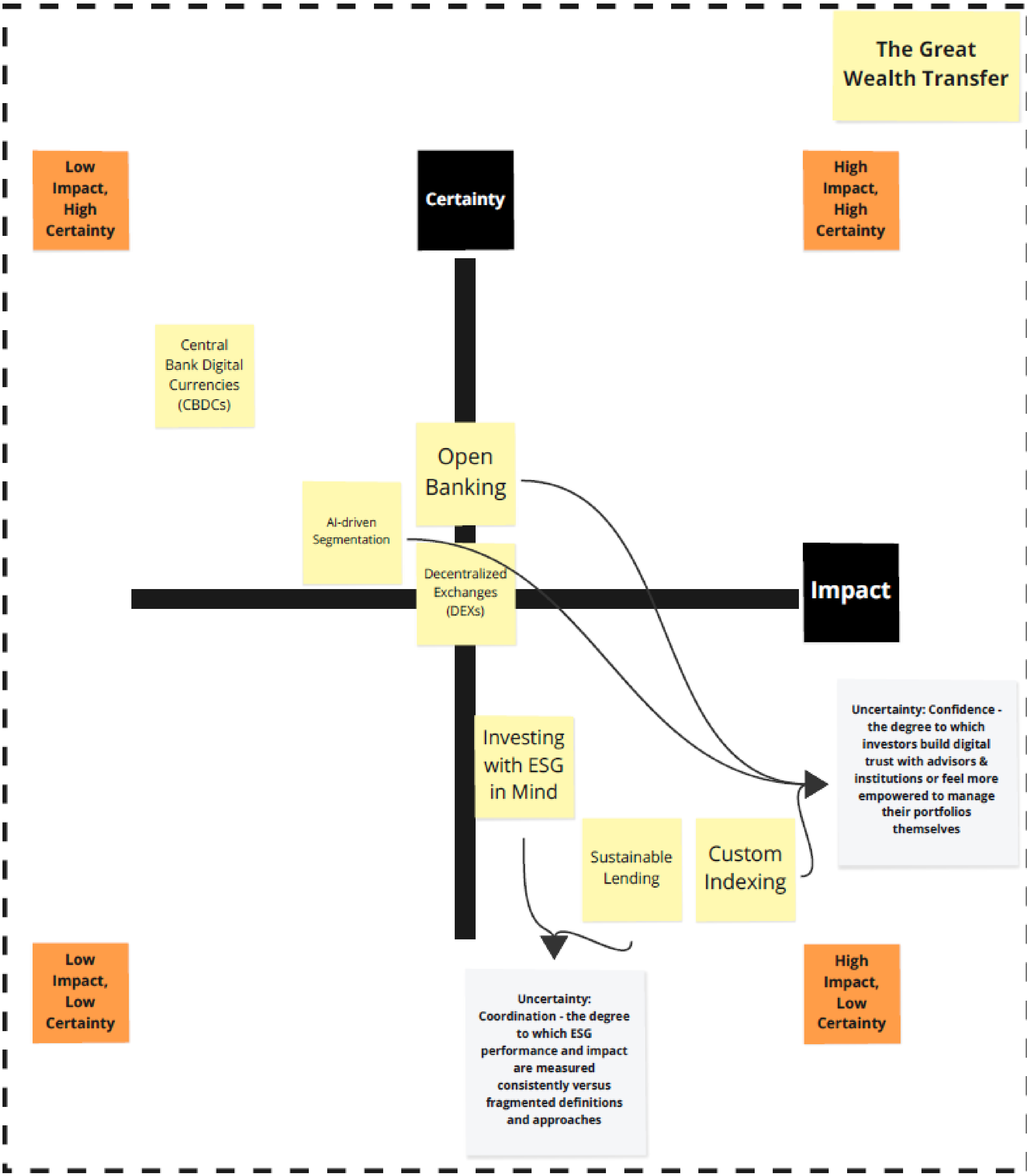

Figure 5 - Foresight Analysis - Signals and Critical Uncertainties

Foresight – Identifying Critical Uncertainties

In consideration of the more impactful and uncertain signals of change identified in the prior section, 2 critical uncertainties have been distilled for the purpose of building plausible but divergent alternative future scenarios for this foresight component of the study. The highest impact and lowest certainty signals have been used as the starting point for the critical uncertainty distillation process. Looking at the Custom Indexing signal, and considering it in relation to the study's guiding concepts of retail investors' trust in institutions and social media, the uncertainty in the signal's evolution has been framed as ambiguity to which custom indexing will restore faith in institutions and advised models, or conversely embolden retail investors to leave these traditional models behind completely. Similarly, the signals of Sustainable Lending and Investing with ESG in Mind have been cross-referenced with the study's focus area, ultimately resulting in the uncertainty as to whether retail investors will have access to coordinated advice or fragmented versions; the analysis of both phenomena indicates the existing challenge of offering systematic and agreed-upon ESG measures. The 2 critical uncertainties are displayed in Figure 5 as mapped to their relevant signals of change, but have also been listed and elaborated upon here for ease of viewing and reference:

Contributing Signals of Change	Critical Uncertainty
1. Open Banking 2. AI-driven Segmentation 3. Custom Indexing	**Confidence [External/Internal]:** The degree to which investors build digital trust with advisors and institutions and their ability to deliver more personalized services and care, or feel more empowered to manage their portfolios themselves
1. ESG Investing 2. Sustainable Lending	**Coordination [Orchestrated/Federated]:** The degree to which ESG performance and impact are measured consistently or using more diverse and competitive definitions and approaches

Figure 6 - Mapping Signals to Critical Uncertainties

Leveraging the critical uncertainties of Confidence and Coordination – and their divergent outcomes – allows for the creation of 4 distinct alternative futures in which the experiences of (primarily younger) retail investors and their relationships and perceptions of financial institutions and social media can be illustrated and compared.

Foresight – Future Scenarios

The 4 Foresight Scenarios generated for this study are as follows:

1. Generation ESG: Confidence is Internal, Coordination is Orchestrated
2. Sustainability as a Service: Confidence is External, Coordination is Orchestrated
3. Wild Wild Invest: Confidence is Internal, Coordination is Federated
4. Non-green Precision: Confidence is External, Coordination is Federated

These 4 Foresight Scenarios represent 4 alternative futures, made possible depending on the progression of the 2 critical uncertainties as they and their signals of change mature over time. These scenarios have been integrated with both the signals of change used to generate the scenarios themselves, as well as retail investors' experiences and perceptions toward both financial institutions and social media as advice delivery mechanisms, based on the analysis and findings from the previous sections of this study. Ultimately, these scenarios demonstrate how retail investors, their perceptions, experiences, and surrounding phenomena may evolve differently across alternative futures.

The following figures illustrate how each alternative future determines the evolution of key signals of change and key retail investor experiences and behaviours in distinct ways.

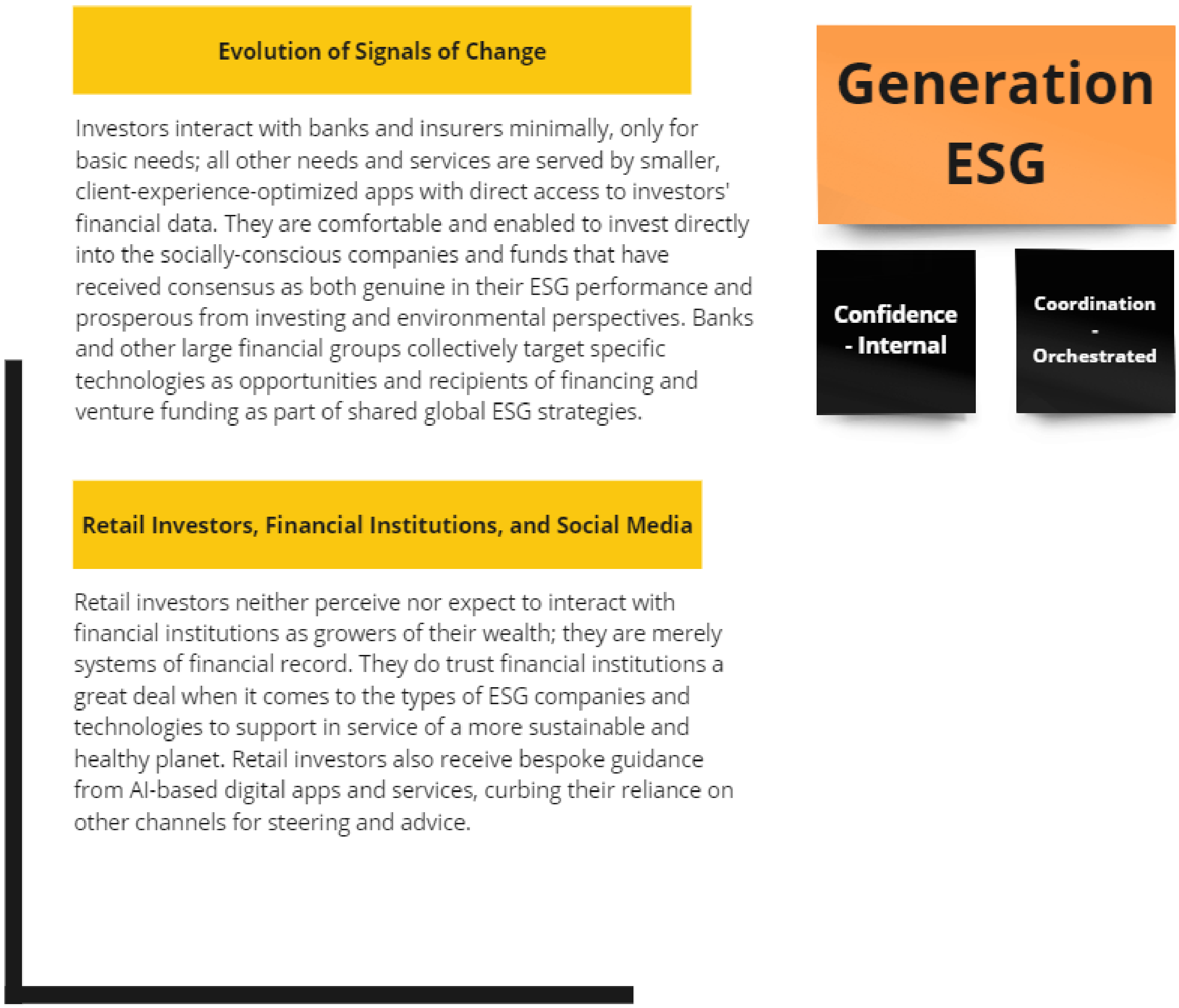

Figure 7 - Foresight Scenario - Generation ESG

Evolution of Signals of Change

Renewed trust in banks and other financial institutions triggers a surge in the progress of these institutions toward becoming the core financial 'hubs' in large networks of holistic health and wealth services. Investors' information is shared seamlessly and securely, but the desire remains to do business directly through these financial institutions' digital services. Advisors, both trusted and equipped with incredibly-precise AI-fueled insights about their client base, are able to connect with younger, digitally-native clients on core ESG topics and offer direct investment options toward supporting the causes, technologies, and global outcomes that matter most to them. Between the rising ability for institutional actors to meet the precise needs and expectations of a new generation of investors, and the normalization of both national digital currencies and decentralized exchanges of digital currency, trading apps experience a sharp decline in usage as their users opt for faster and more mainstream methods.

Sustainability as a Service

Confidence - External

Coordination - Orchestrated

Retail Investors, Financial Institutions, and Social Media

Retail investors are a rare breed of investor. Unlike prior years and generations, investors pay both their attention and their assets toward financial institutions. Institutions and advisors' demonstration of their precise digital capabilities - as well as their ability to both contribute to and profit from ESG investments - inject faith into the prospect of mutually-beneficial relationships. Due to investors relying less on their own decision-making but also trusting the coordinative efforts of cause-based investment scholarship and measurement, social media as a delivery mechanism for investing advice remains an enticing pass-time and a source of discontinuous inspiration for the digital clients of the future.

Figure 8 - Foresight Scenario - Sustainability as a Service

Wild Wild Invest

Confidence - Internal

Coordination - Federated

Evolution of Signals of Change

Investors rely heavily on an ecosystem of digital apps for managing their investments in conjunction with other aspects of their lives. Their banks and financial institutions are largely focused on acting as a system of record and maintaining their wealth and insurance products. Mandated open APIs provide investors' various apps and digital services with a wealth of information and detail toward leveraging their information across domains and offering truly holistic advice. However, younger and emerging investors remain cynical about any ESG-related advice as standards for measurement and impact are so varied that financial success cannot be consistently realized as a core need. Investors' general imperative to manage their financial futures themselves paves the way for the increased normalization of alternative, decentralized exchanges of various forms of digital currency.

Retail Investors, Financial Institutions, and Social Media

Retail investors are pushed (perhaps begrudgingly) toward their chosen vocation more than ever before. Lacking clear direction from larger ecosystem actors, the growing imperative to support ESG-aligned technologies and companies is left to retail investors themselves to discern impactful versus negligible investments, both in terms of their returns as well as impact to the environment. This drives a significant spike in social media usage for perspective and advice, as retail investors leverage the collaborative and disseminative qualities of social media platforms to attempt to achieve alignment and progress.

Figure 9 - Foresight Scenario - Wild Wild Invest

Figure 10 - Foresight Analysis - Non-green Precision

Foresight – Insights

The illustration of the variations in signal evolution and maturation across the 4 alternative future scenarios not only offers a series of potential outcomes of signals of change observed today, but also demonstrates how these signals and their fates are connected in the financial system and industry. Further, illustrating how retail investors' perceptions of (and relationships with) financial institutions and social media may evolve differently in each of these scenarios offers an added layer of analysis, showing how retail investors' current perceptions, behaviours, and worldviews may change in large part due to the outcome of the critical uncertainties used to generate the alternative future scenarios. Interestingly, the critical uncertainties identified through signal identification and analysis are reflective of the observed stresses and conflicts within retail investors themselves, namely a crisis of where to put one's trust (in themselves or others) and the reliability of information and advice (cohesive and coordinated or fragmented and subjective).

Generation ESG is an alternative future where retail investors are not only empowered, but trust the information available on ESG-based portfolios and companies. As a result, in this future their reliance on social media stands to be less pronounced due to having faith in both themselves and the saliency of the ESG advice provided by their personalized digital services. In this future, social media is less valuable in its role as a coordinator and orchestrator of communities of retail investors. Even though retail investors in Generation ESG are not relying on advisors or institutions for advice and support, the precision of investing technology (offered competitively through a marketplace of apps and client-facing platforms) and their confidence in their abilities to make sense of the information and services as digital natives makes social media-delivered advice – an alternative to institutionally-offered advice – increasingly obsolete.

Conversely, retail investors in the Wild Wild Invest alternative future are not supported with consistent and reliable information about where to place their ESG investments. Combined with a preference to harness precision investing technology's ability to invest directly and understand their needs at a n=1 level by themselves (rather than consume this as a service offered by advisors or institutions), retail investors in this alternative future will still find themselves driven to social media for support and answers as they seek clearer paths forward toward achieving their wealth goals and supporting the 'right' ESG-focused companies and technologies.

Overall, the 4 alternative future scenarios underscore the role played by social media for retail investors today: its advice, content creators, and platforms fill a crucial set of gaps for retail investors. These gaps include the ability to benefit from consensus when making investment decisions and strategies, as well as being able to receive 'precise' and targeted advice and options from institutions. Should the onset of the future hold personalized, precision investing tools and methods, as well as globally standardized and coordinated approaches to supporting impactful and profitable ESG-focused ventures, the strategic role and value of social media as a delivery mechanism for investing advice will be challenged.

Synthesis – What does all this mean for the current state and future of retail investing and social media?

One of the anticipated distinguishing values of this Study is its commitment to synthesizing retail investor empathy from the present with possibilities and uncertainties from the future. Both approaches yield insights, but when taken together it is possible to provide perspectives on how retail investors may think, feel, act, and what their unmet needs may be in the coming decades.

This study has identified a series of statements which are positioned to represent the ways in which retail investors perceive financial institutions, social media content creators, and the advice that both actors offer. The perceptions drawn from the qualitative analysis suggests that retail investors are not necessarily distrustful of financial institutions, but do not believe that they exist to serve the wealthy, and as such are not designed in such a way to actually support retail investors with their goals of growing their wealth and achieving significant, wealth-enabled milestones in life. This is due in large part to the perceived zero-sum outcome of paying institutions to provide investing services and general advice that effectively has less-wealthy clients 'breaking even.' Conversely, the perception toward social media-based content creators and advice is that they are not necessarily more trustworthy, but interestingly are in a better position to support retail investors' investing goals of growing their wealth toward their stated achievements and milestones. This perception stems from social media-delivered advice's attributes of being highly-accessible – in terms of being 'free', asynchronous, and consumable in short, discrete intervals – and also of possessing more niche, targeted subject matter for its audience.

The comprehensive literature review – conducted across the topics of 1) younger populations' investing behaviour and perceptions of traditional means of wealth management, and 2) the impact made by social media platforms and advice on retail investors and the larger financial system – serves the dual-purpose of adding depth and detail to how retail investors are currently experiencing both institutions and social media as they navigate their decisions and goals, and also supporting the validity of the perceptions emerging from the primary research. Taken together, the primary research and the literature review display a landscape where particularly younger retail investors are experiencing a pronounced lack of faith in traditional methods of wealth management and financial institutions to support them and their needs and goals. As such, the trend of retail investing represents a push-back against forces which feel designed to limit younger populations from progressing their wealth. While retail investors may not feel that social media-delivered investing advice is a critical asset in their investing behaviour, the primary research and literature review are in agreement that social media offers retail investors with more specific and accessible support for their investments than institutions. While not detected as a perception from the primary research, the literature review surfaces a critical functionality of social media as an enabler of retail investing behaviour and success: the ability for investors to collaborate, provide commentary on investing content, and align around consensus in ways that top-down institutional models are not designed to provide. This allows for retail investors to perceive and approach social media as a tool for 'cutting through the noise' when setting out on their own to manage their investments and grow their wealth.

Applying foresight research as an analytical and illustrative methodology provides a lens through which the disruption of the above, present-day perceptions and interactions can be observed and discussed. The onset of digital-first and direct approaches to investing, as well as API-based means to weave investing and finance into the rest of investors' ecosystem of apps and services, may be a threshold after which retail investors (particularly younger investors continually inheriting funds throughout the Great Wealth Transfer) find common and mutually-beneficial ground with financial advisors and financial institutions, and begin a new era of advised wealth generation and management. However, these same events may be the trigger for retail investor ranks to swell and gain the confidence to leave the institutional approaches to investing and wealth management behind completely. These alternative futures also help illustrate the tenuous role of social media as a support mechanism if more transparent and objective measures of impact and ESG benefits are established.

Conclusion and Recommendations – If you are a Retail Investor, what should you do?

In summary, this study has delivered on its intent to achieve a deeper understanding of the motivations of retail investors to seek investing advice through social media, rather than through institutional means. Additionally, the study has identified a set of concepts which aim to empower the perceptive and decisive compasses held by retail investors as they continue to take their financial future into their own hands (in increasing numbers). These actors should monitor the evolution of concepts such as Custom Indexing and advancements in the orchestration of ESG investment measurements and financing strategies; leaders in adoption of these technological and strategic initiatives will likely be more capable of supporting their needs and reflecting their values, should they decide to explore investment strategies beyond seeking advice from social media or financial advisors. Discrete and personalized advice and investment options will continue to become more widespread, across all delivery channels; retail investors should not feel they need to seek advice from one channel or another based purely on cost and detail. Ecosystems actors, be they financial institutions or more digitally-driven financial services software and platforms, which do not support the blending of precise advice on specific companies and technologies (as investment options) with the ability to hold space for collaboration and orchestration on common approaches to investments risk diminishing their capacity to support the needs of retail investors. To better align to – and support the needs of – emerging generations of retail investors, financial institutions must ensure that they are not relying solely on their distribution force and advised models to deliver excellent client experiences; digital-first solutions which wrap around clients in holistic ways not only preserve individuality, but also pave the way for new models of community-driven relationships to exist under the organization's domain. Lacking available services through institutions, retail investors should instead prioritize their interactions with services which not only support the investment of funds into specific companies, but also possess functionality and features which can place the cause-based components of these investing goals into a wider and shared context. Retail investors can rest more assured that their investing behaviour is directly connected to ESG-based strategies which stretch across companies, technologies, and countries to help make the world a better, healthier, and happier place.

Limitations of the Study & Opportunities for Further Exploration

The primary limitations for the study relate to the target segment for the primary research component of the Study being highly-specific and thus yielding a very low response rate. Even among the responses received, half were screened out due to not meeting the criteria for the survey. As a result, the survey yielded very few qualitative responses with which to conduct a qualitative coding analysis. While patterns and insights were still detected and presented, the insights gained served to direct more literature review rather than standing on their own. A larger group of responses likely would have added more empathy and nuance to the overall findings.

While the above limitations and shortcomings of the Study translate to gaps in the work's ability to contribute to broader conversation on retail investing, they also identify more targeted areas to explore in future work. These opportunities include a deeper exploration and perspective-gathering initiative focused on social media-based content creators themselves. This would help better understand their motivations for creating and delivering investing advice through social media. A content creator-focused study would also yield an opportunity to understand from a different stakeholder how financial institutions are perceived.

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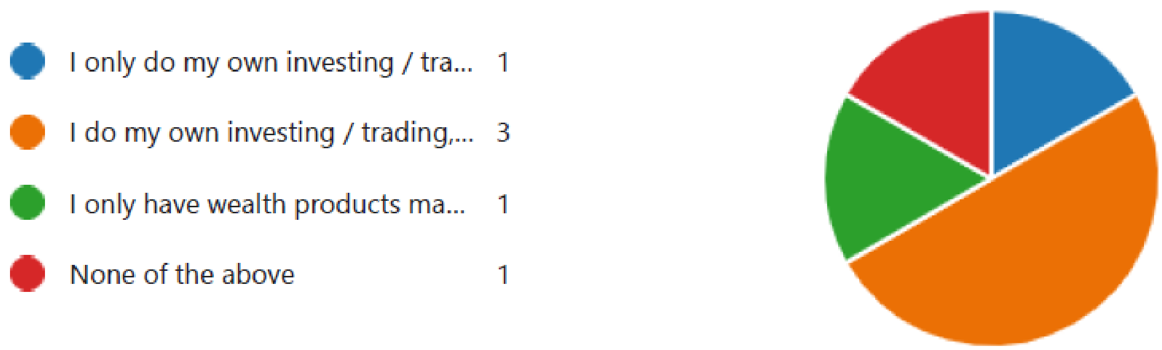
Appendix

Appendix A – Retail Investor Survey

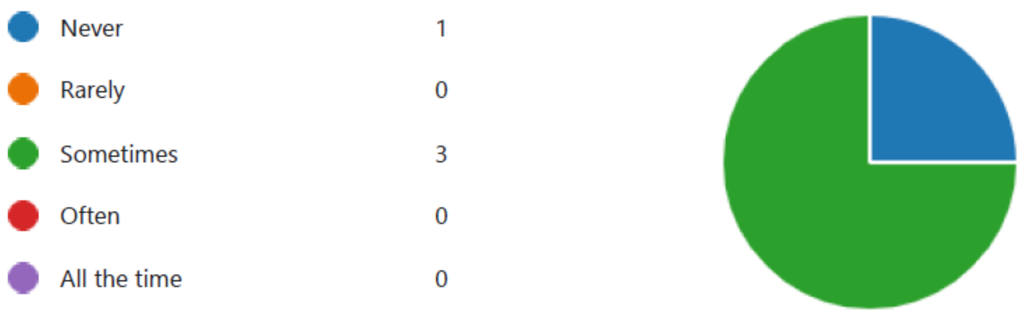
A1 – Method of Investing

1. Please indicate which of the following statements applies to you:



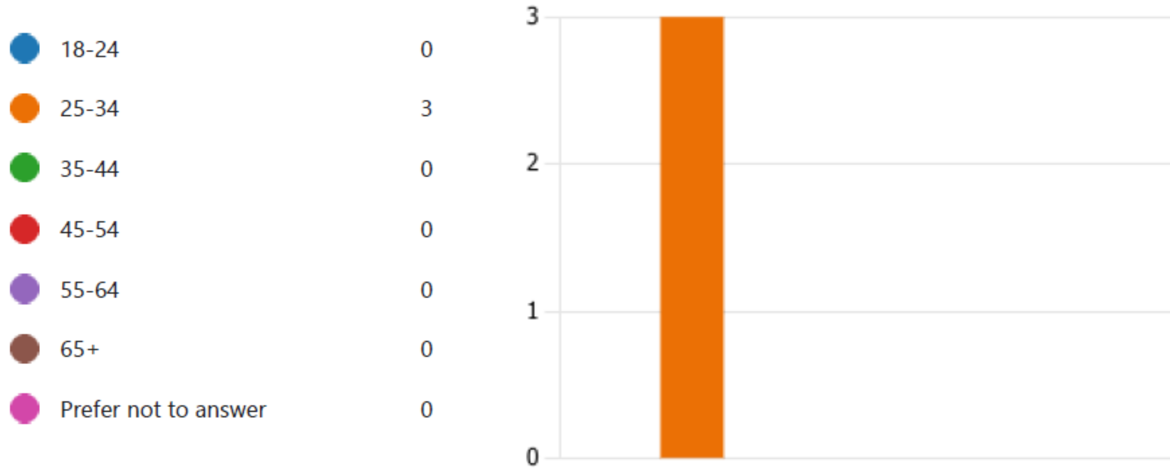
A2 – Social Media Usage

2. Please indicate the frequency of your usage of social media for advice for investing:



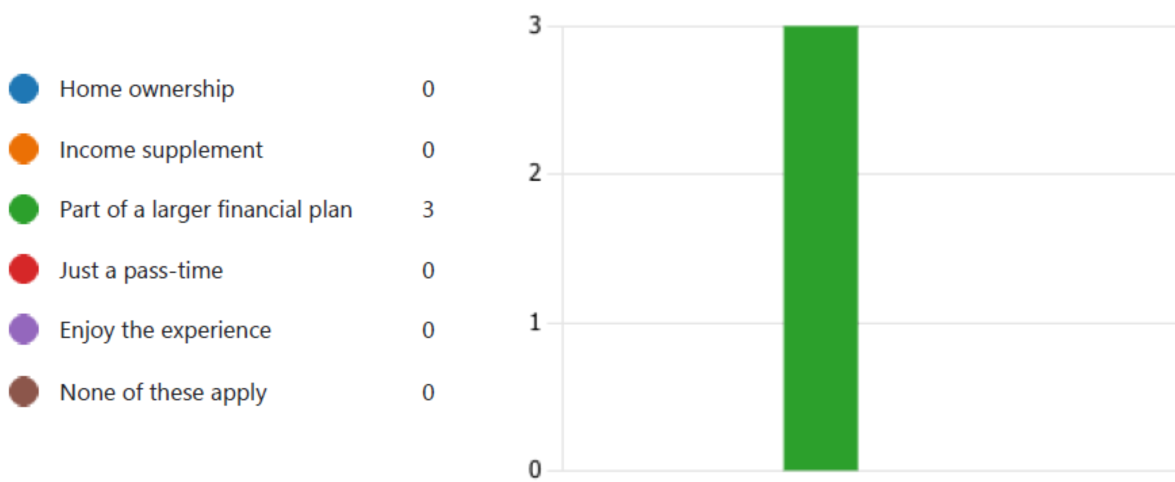
A3 – Age

3. Please indicate your age:



A4 – Investing Objectives

4. What are your objectives for your investments? Please choose the answer that best applies, or is the strongest motivator among multiple motivators:



A5 – Investing Objectives – Qualitative

Participant ID	**Q4: What are your objectives for your investments?**	**Q5: If you are comfortable, please describe your investing goals in your own words**
11	Part of a larger financial plan	- being able to purchase a house (have a condo but want a house) - financial flexibility to do live the lifestyle I want - e.g., travel - saving for future events e.g., weddings, children etc.

Participant ID	Q4: What are your objectives for your investments?	Q5: If you are comfortable, please describe your investing goals in your own words
12	Part of a larger financial plan	Early retirement, also to be used towards purchasing a home in the future.
13	Part of a larger financial plan	Retirement funds beyond home ownership

A6 – Trust in Financial Institutions

6. To what extent do you trust financial institutions?

Not at all	0
Not much	1
Neutral	1
Somewhat	0
A lot	1

A7 – Financial Institutions and Investing Goals

7. To what extent do you believe that financial institutions can help you achieve your investing goals?

Not at all	0
Not much	2
Neutral	1
Somewhat	0
A lot	0

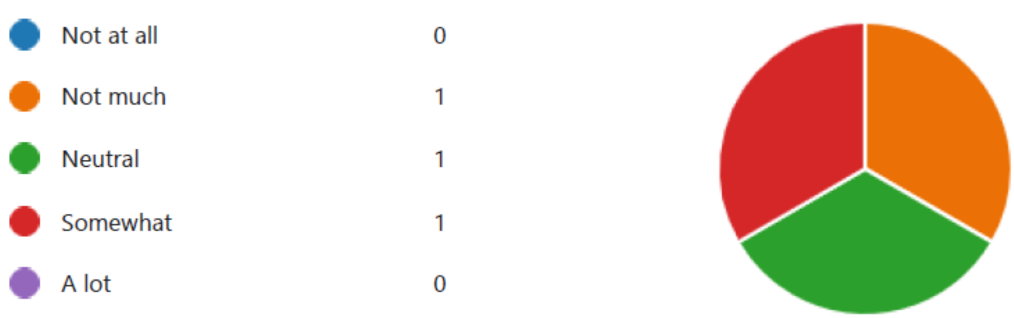
A8 – Perceptions of Institutions for Trust and Goal Achievement – Qualitative

Participant ID	Q6: To what extent do you trust financial institutions?	Q7: To what extent do you believe that financial institutions can help you achieve your investing goals?	Q8: If you are comfortable, please tell us a bit more about your responses to questions 6 and 7
11	A lot	Not much	I don't have enough $ for the financial institution to give me

Participant ID	Q6: To what extent do you trust financial institutions?	Q7: To what extent do you believe that financial institutions can help you achieve your investing goals?	Q8: If you are comfortable, please tell us a bit more about your responses to questions 6 and 7
			VIP support. So the support I receive is very general and I don't believe that they have my best interest at hand since an advisor might have a ton of Clients they have to cater to. They see people based on how much $ they have and because of that I don't believe that my financial institution can help me achieve my goal - rich will ultimately get richer because they have better access to services
12	Neutral	Not much	They have products and services available that can help you grow your wealth, but at the end of the day they are looking to make a profit, charge fees, etc. It’s more economical to do your own research and do a bit more manual investing
13	Not much	Neutral	Financial institutions are designed to keep the middle class where they are

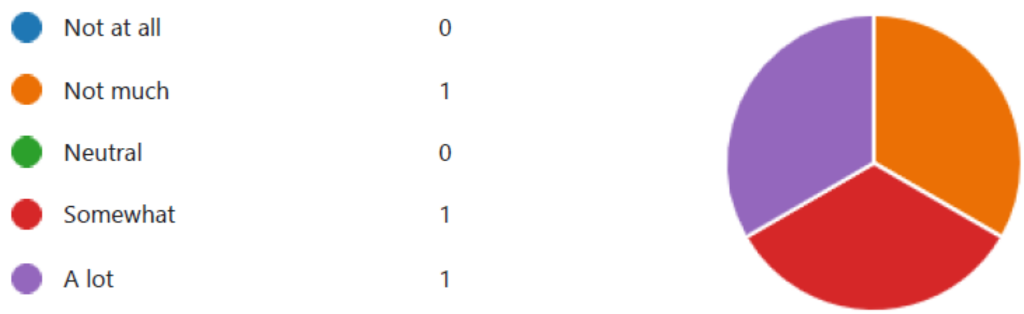
A9 – Trust in Social Media

9. To what extent do you trust social media and its investing-related content creators regarding the delivery of investing advice?



A10 – Social Media and Investing Goals

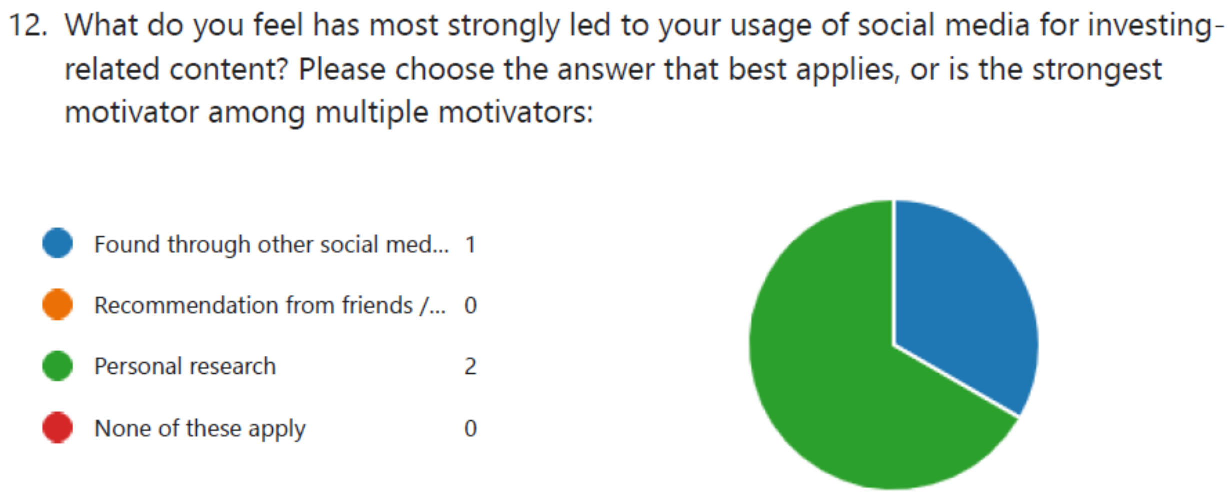
10. To what extent do you believe that social media and its investing-related content creators can help you achieve your investing goals?



A11 – Perceptions of Social Media for Trust and Goal Achievement – Qualitative

Participant ID	Q9: To what extent do you trust social media and its investing-related content creators regarding the delivery of investing advice?	Q10: To what extent do you believe that social media and its investing-related content creators can help you achieve your investing goals?	Q11: If you are comfortable, please tell us a bit more about your responses to questions 9 and 10
11	Not much	Not much	social media only allows for a very short amount of information since there is a time limit (e.g., tik tok, reels). I don't think social media should be the end all be all to financial advising. Social media does give me interesting insight into something that I'l have to look into better understand. It is also consumed, without much thought, to pass time and as I find some of these info "interesting".
12	Somewhat	Somewhat	
13	Neutral	A lot	I consume some investment media on YouTube and Instagram. I find it can have helpful tips but sometimes the creator is just pushing their own content

A12 – Drivers for Social Media Usage



A13 – Drivers for Social Media Usage – Qualitative

Participant ID	Q13 Response
11	It popped up on my homepage - I didn't personally search and look into it
12	
13	The algorithm on the platform pushed the content to me.

A14: Perceptions in Differences between Institutional and Social Media Advice

Participant ID	Q14 Response
11	Social media - accessible to all - more general - more interesting/unique items - i think they are ultimately trying to get attention that can make people feel like - 'wow, I didn't know that' - short financial advisors - can only access depending on how much $ you have - still somewhat general, depending on how much $ you have - can be more encompassing - they may help you with not just your account but items to consider e.g., insurance, estate planning - more personal touch - e.g., in-person meetings
12	Social media content creators typically make their $ through ad revenue, and any product placement is easier to identify and just basically ignore. Although they may be making a small profit off you clicking on their affiliate links or their other methods of earning $, it is a bit more transparent then traditional banking services.
13	Creators are often looking to sell their own advice to you.