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Decoding the "Gen-COVID" Investor

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Decoding the "Gen-COVID" Investor

- Throughout the COVID-19 pandemic we saw a surge of interest in stock market trading by retail customers, along with the emergence of “meme” stocks, TikTok investment advice, and the gamification of trading by startup brokerages. There are, however, no detailed, reliable data on who the new investors are and on what motivates them.
- We use a unique, random, anonymous engagement approach among the US Web-using public in the first half of 2021 to reach over 1,600 first-time investors and almost 2,500 established investors. This approach ensures broad reach amongst those not typically or sufficiently included in traditional surveys, including young people.
- The resulting data confirm that new investors tend to be younger and lower income, and that they tend to make riskier investments, have a shorter-term investment horizon, and get their investment information from non-standard sources including social media such as Reddit.
- Our data also challenge conventional wisdom and raise concerns about these next-generation investors. While the focus of the public discussion tends to be on younger investors, these data show that new investors in the over-35 years old age group are particularly susceptible to engage in riskier behavior and obtain information from non-standard sources.
- This study could be extended to see how first-time investor behavior changes over time, and to evaluate whether this phenomenon holds true in other key global markets.

The Rise of First Time Traders

The year 2021 has seen the rise of so called “meme investing”: trading in companies that seem objectively doomed by a changing product marketplace and yet their stock prices rise in defiance of all fundamental analysis.

The most cited example is GameStop (NYSE: GME), a strip mall-centric retail chain that sells computer games and accessories and that competes in a marketplace where games can be downloaded and streamed. GameStop’s market capitalization rose by a factor of 50 over just a few weeks in January 2021. Another example is AMC (NYSE: AMC), a chain of movie theatres that had essentially no business for much of 2020 and 2021 due to the COVID-19 pandemic and now face the prospect of movie viewers switching to an online-only experience. Its market

valuation rose ten-fold in January 2021 from \$2 to \$20 and, later, ramped up to over \$60 in June 2021.

Much of this phenomenon has been attributed by observers to new investors entering the marketplace, drawn in by easily accessible and gamified mobile device trading tools and zero-commission trading provided by upstart retail brokers such as Robinhood (NASDAQ: HOOD) or Webull. These newly minted day traders allegedly base their decisions not on sell-side analyst reports but on discussion forums on Reddit, social media apps like Discord and Telegram, and on TikTok videos.

However, there are few hard facts and evidence that establish whether there is truth to this line of observation. Data scraping of Reddit or other sites, a traditional survey, the internal analysis of brokerage data, or social media analysis would not capture the full universe of these investors.¹ With this paper, we are trying to fill this gap. We use a random, anonymous engagement approach among the US web-using public to reach over 1,600 first time investors and almost 2,500 established investors.

Our goal in this study is to understand the characteristics of the new investors that invested in the stock market for the first time. Our survey was in field throughout early 2021. We asked investors about their experiences in the last six months, thus covering their experience in the fourth quarter of 2020 and first quarter of 2021. We seek to establish demographic differences between new and established investors, and we want to understand whether new investors¹ have different views on investing and² behave differently compared to established investors.

Regulators, policymakers, market strategists, and other financial market players need to understand who these new investors are and how they might behave and influence the market in the coming months and years. Fundamental analysis and diversification strategies are the

¹ A few other recent studies have examined this phenomenon using some of these methods. [Eaton, Green, Roseman, and Wu \(2021\)](#) used Web traffic analysis to establish that a significant share of Robinhood traders in 2020 were young, inexperienced, and unsophisticated “noise traders” compared with other investors. [Charles Schwab](#) surveyed 1,000 Americans and an augmented sample of 200 new investors in February 2020 using a traditional survey method. Of the 1,000 respondents surveyed, 476 respondents invested in the stock market, including 70 new investors and 406 established investors. The results indicated that these new investors, on average, tended to be younger, more optimistic about the US stock market, and planned to spend more time and invest more in the stock market compared with established investors. [Aramonte and Avalos](#) (2021) analyze the rising influence of retail investors by examining patterns in equity trading volumes and stock price movements and find that retail investors source information from social media platforms and speculate on individual companies via leverage and options, and that these actions amplify market volatility.

foundation of sound investing and lessen the likelihood of costly mistakes. Regulators and those with advisory roles such as banks need to consider whether this new group of investors might create new systematic risks and whether these new investors merit some form of special protection. To do so, they need to first understand the new investors better.

We are particularly interested in whether new investors are more likely than established investors to:

- Use non-traditional discount brokerages;
- Base their investment decisions on non-traditional sources such as social media;
- Trade riskier or more complex securities such as options and cryptocurrencies;
- Invest in special purpose acquisition companies (SPACs);
- Have a more positive investment outlook; and
- Trade a larger fraction of their March 2021 stimulus check.

Methodology and Sample Horizon

There is a fair bit of speculation but little reliable detailed information on who the new investors are - specifically the “fast money” investor who buys on margin and is driven to invest by Reddit boards.

We take a different approach. To get a reliable measure of the share of Web users that are first time investors, and of the share of those that are looking for fast money, we used [RIWI technology](#) to hear from random cohorts of the US Web-using public on a continuous basis from January 22nd, 2021 to May 27th, 2021. We asked whether respondents were stock market investors and, if yes, we then ask whether they recently (in the past six months) had invested for the first time. We then asked a sequence of questions about their trading habits and socio-economic background. We collected some of our data after the March 17, 2021 US stimulus check which allowed us to determine whether investors used their stimulus funds in their trading.

We use a random, anonymous engagement approach in order to ensure broad reach across the US Web-using public, including amongst those who are typically under-reflected in Web or other surveys. Survey participants are accessed on all Web-enabled devices, such as desktop computers, tablets, and smartphones. RIWI research shows that more than one in four RIWI respondents in the US self-report that they have never answered a survey. This approach results

in data representative of the online population in the US. The random engagement method also taps into the views of young people who are otherwise hard to reach using typical survey methods², and who are particularly important for this topic. Also, in collecting data from a unique random cohort every day, we can see if the same results are repeated day after day, and if so, we can invest more confidence in the reliability of these results.

RIWI collected these data. RIWI technology autodetects and reports geolocation of respondents, however RIWI does not gather any personally identifiable information such as email addresses or phone numbers. As a result, no response is traceable to an individual, ensuring respondent privacy and safety. Re-identification of respondents using machine learning tools is not possible. This approach also has the advantage of maximizing the chances that people report their preferences honestly. Typical surveys include information linking the respondent's personal identifiers to their responses. This could mean that respondents may be less inclined to share their authentic views on their investment preferences, motivations, and financial decisions.

RIWI respondents are also un-incentivized, meaning that they answer because the questions seem interesting; they do not benefit in any way by responding, eliminating incentive bias. RIWI also uses continuous bot-filtering and anomaly detection to ensure answers are authentic human responses.

In total, 9,523 randomly engaged and unique respondents in the US Web-using population answered the initial question about whether they invest in the stock market. Of these, 4,142 respondents reported investing in the stock market. Of these, 1,666 reported investing for the first time with 2,476 long time investors. Since RIWI does not incentivize respondents to complete surveys, respondents could leave at any time. As such, 6,081 respondents answered the entire question set, of which 913 were first time investors and 1,424 established investors. 552 first time investors completed the entire question set pre-stimulus and 361 completed the survey post-stimulus.

² See [this study](#), for example, which shows how the random engagement method resulted in hearing from disengaged young people who stayed home and were a key part of the difference between what the polls predicted and the actual outcome of the Brexit referendum.

Summary Statistics of Survey Respondents' Demographics

Of the 9,523 survey respondents, 4,142 indicated that they invest in the stock market. In this report, we discuss the findings from those that indicate they have invested in the market.

Of the investors, 40 percent indicate that they have recently invested for the first time. The data confirm common wisdom that new investors tend to be younger and have less income. Figure 1 highlights that 50 percent of the new investors in our sample are 34 years old or younger and only 18 percent are 55 and older. The distribution of established investors is more even. We note that our survey methodology is based on random engagement among the Web-using population which would naturally engage more young people.

Figure 1: Age Distribution of New vs. Established Investors

Established investors | New investors

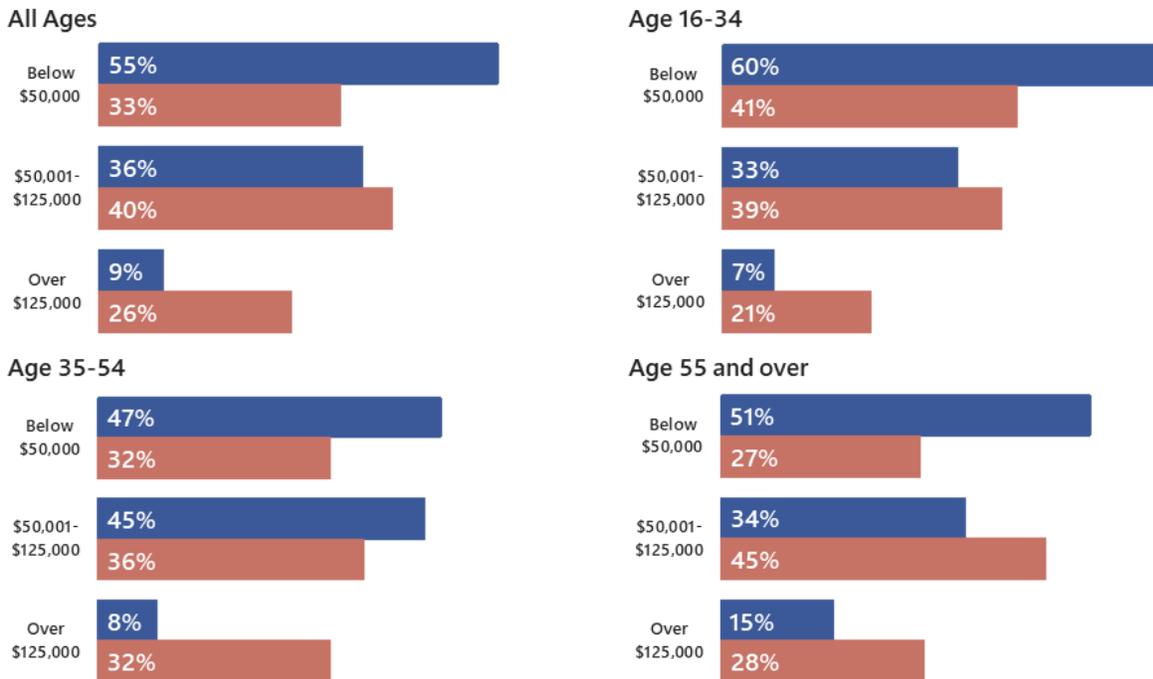


Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

We further asked respondents to indicate their income and education level. New investors tend to be lower income, an expected result given that income usually rises with age. Many of those under 35 years old may still be in high school or university. Figure 2 displays the income distribution by age groups showing that new investors are more concentrated in lower income brackets. Furthermore, even among the investors aged 55 and over, new investors had significantly lower income.

Figure 2: Household Income of New vs. Established investors by Age Groups

New investors | Established investors

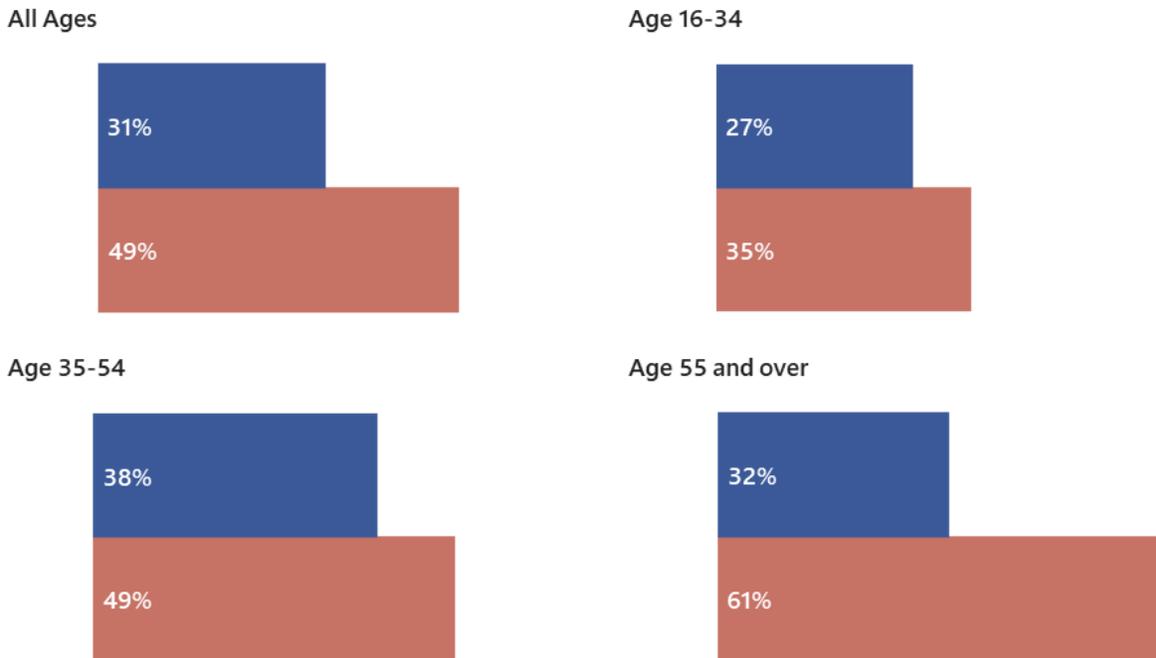


Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

To ensure that our conclusions do not simply reflect respondents' age, we continued to break up our remaining results by age group. Figure 3 displays the differences in education for new vs. established investors by age group. The figure shows that new investors are less likely than established investors to have completed a university bachelor's degree. This finding is true among all age groups, and in particular among older investors, among whom new investors are 30 percent less likely to have obtained a university degree.

Figure 3: New vs. Established Investors by Age Groups for Those With Bachelors’ Degrees or Above

New investors | Established investors



Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

Result on Differences in Investor Behavior

We organized our analysis along eight questions that relate to investment behavior.

Question 1: What type of broker do you use?

We asked survey participants about the type of institution that they chose to invest with. The question differentiated between:

- next-generation discount brokerages and startup platforms (we provided Robinhood, Webull, SoFi and Coinbase as examples),
- traditional and full-service brokerages such as Charles Schwab, TD Ameritrade, Fidelity Interactive Brokers, and a financial advisor.³

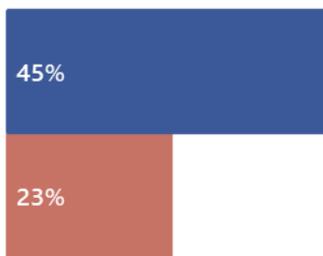
³ Technically, some of the brokers that we list as traditional are considered to be discount brokerages in the industry. Our view is, however, these are by now established and therefore traditional institutions in the eyes of retail investors whereas upstarts such as Robinhood are “the new thing”.

Our findings summarized in Figure 4 highlight those that select a next-generation online brokerage (option 1 above). They show that *new investors are twice as likely to use a next-generation online brokerage compared to established investors*. Notably, however, a large number of established investors indicate usage of Robinhood-style brokerages. Moreover, the data show that there are new investors who use established investment channels. This underlines the importance of obtaining a broad view of the investing public across the different channels and that a broker’s analysis based on internal data may not provide the whole picture.

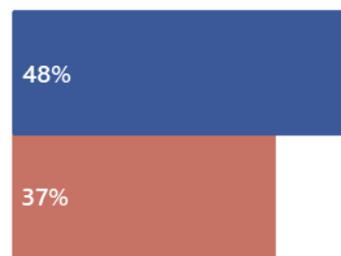
Figure 4: New vs. Established Investors by Age Groups for Those Who Prefer Discount Brokerages or Startup Platforms

New investors | Established investors

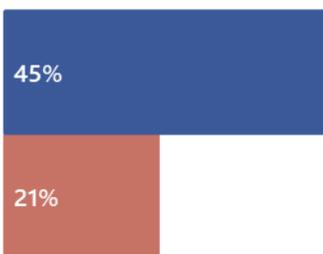
All Ages



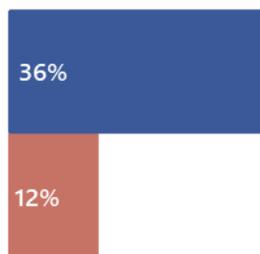
Age 16-34



Age 35-54



Age 55 and over



Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

Question 2: Where do you get your information?

We asked respondents whether and how they do their stock market research by asking them to indicate the main source of information. We differentiate between:

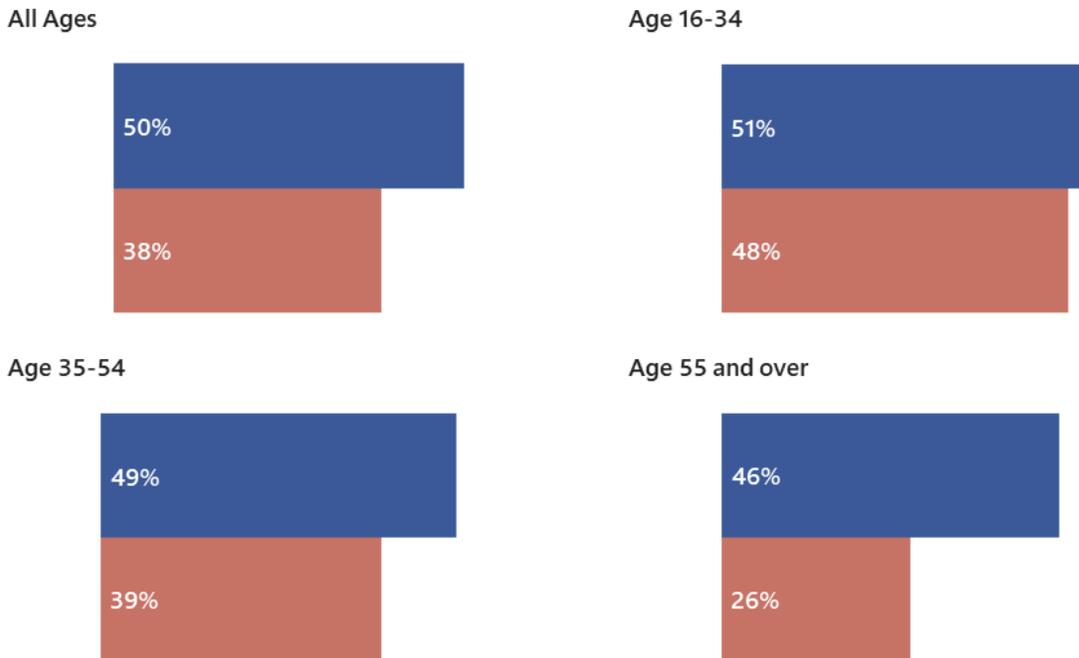
- social media sites (Facebook/Twitter/Youtube/Tiktok/ etc.),
- public forums (Reddit boards),
- investor-specific sites (Motley Fool/Seeking Alpha/Zacks/etc.),
- financial news (CNBC/Bloomberg/WSJ/ etc.),
- the investor's brokerage's website or app,
- word of mouth, and
- no research

Thirteen percent of respondents indicated that they do no research at all (we discuss these individuals further below). For those who conduct some research, we group investor sites, financial news, and their brokerages as “traditional” and the remainder as “alternative”.

We find that new investors are significantly more likely to use alternative forms of research. It is, however, striking that *the “meme” or alternative approach is prevalent not just among young new investors but also among older investors, the 35-54 cohort and especially the 55+ year-olds.* Strikingly, 46 percent of new investors aged 55+ years old use alternative information sources, compared with 26 percent of established investors. Among the young, the difference is only 3%. In other words, it appears wrong to say that social media research only drives the behavior of new young investors -- *new investors among the older Millennials, Gen X, and Boomers use these sites to a much greater extent relative to their same age counterparts and their usage almost matches that of the youngest generation studied.*

Figure 5: New vs. Established Investors by Age Groups for Those Who Prefer to Research via Social Media, Word of Mouth or Public Forums

New investors | Established investors



Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

Question 3: How often do you monitor your portfolio?

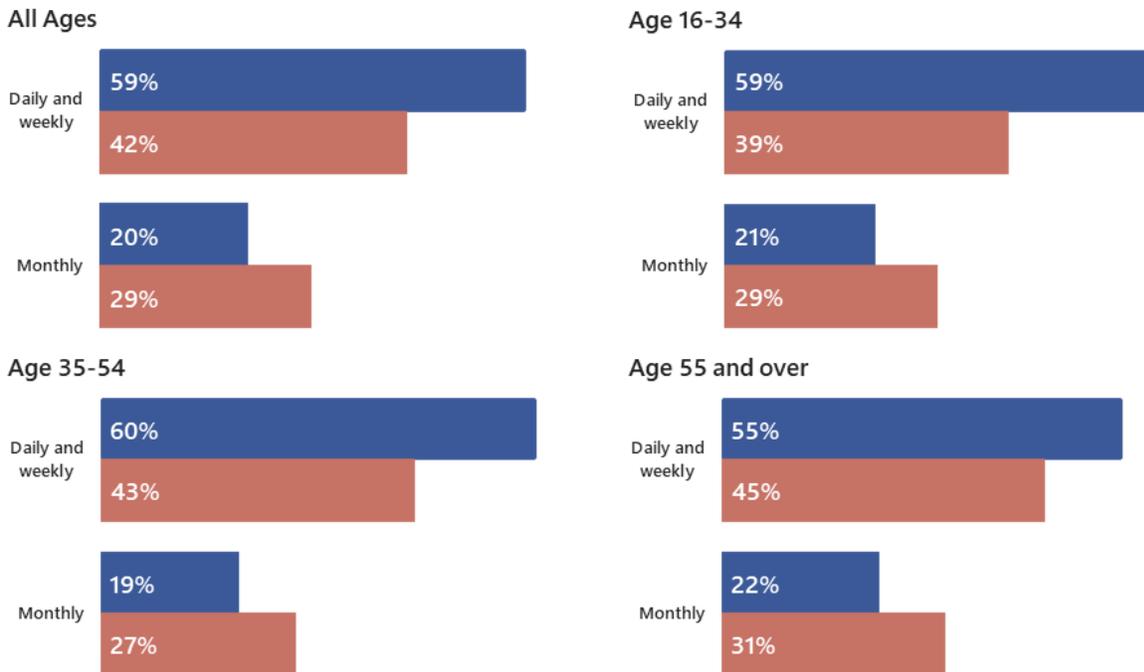
In the next step of our data collection we wanted to know from investors how often they monitor their portfolio -- daily, weekly, monthly, or annually. The data show that new investors monitor their portfolio at a higher frequency, and this is true across all age groups compared to established investors.⁴

The lack of attention by established investors could either be a deliberate strategy (“invest for the long run and forget”), it could be that new investors are more captivated by the novelty of the experience, or it could be that the new types of brokers are better at engaging investors across the board. More research on this question is needed.

⁴ In this report, we focus on summary statistics; we leave a full statistical analysis for future work.

Figure 6: Portfolio Monitoring Frequency of New vs. Established Investors by Age Groups

New investors | Established investors



*Those who monitor their portfolios annually are included in the calculation but are not displayed in the figure.

Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

Question 4: Do you invest for the long-run?

Our next set of questions relates to the respondents' investment strategies. We gave respondents a number of options to describe how they typically traded such as by engaging in:

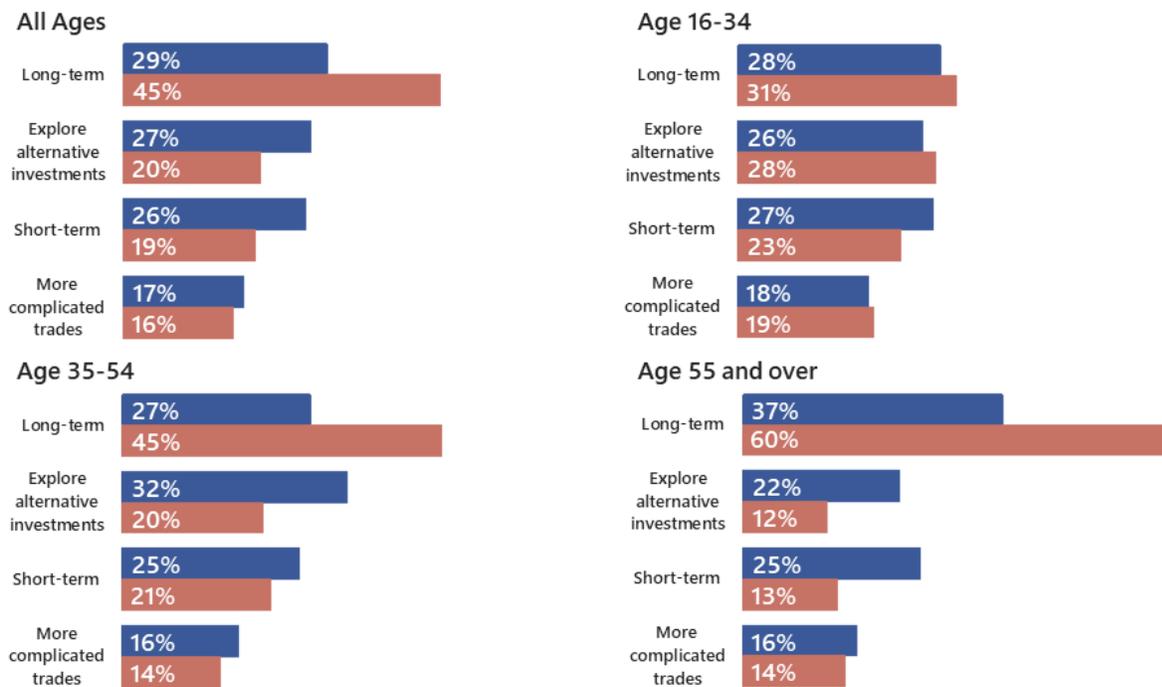
- more complicated trades (examples given are trading on margin or options),
- short term trading (examples include daytrading),
- alternative investments such as cryptocurrencies, or
- traditional, long term investments (such as blue chips or mutual funds).

Figure 7 summarizes our findings. Both groups report about the same propensity to engage in more complex trading. Established investors are, however, much more likely to invest for the long-term, and they are much less likely to explore alternative or short-term strategies. Broken down

by age, the differences are minor for investors under age 35 whereas investors 35+ years of age show similar patterns as the full sample. One insight is that *new, over-35 years old investors report a much lower propensity to invest in the long run compared to established investors of the same age*. This indicates that this group may have different motives to join the ranks of investors than investors who take a more traditional approach to investment. Since this group is lower income compared to their same-age peers, there is a significant concern that in a down market this group loses money that it does not have.

Figure 7: Investment Strategies of New vs. Established Investors by Age Groups

New investors | Established investors



Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

Question 5: Have you invested in Special Purpose Acquisition Companies (SPACs)?

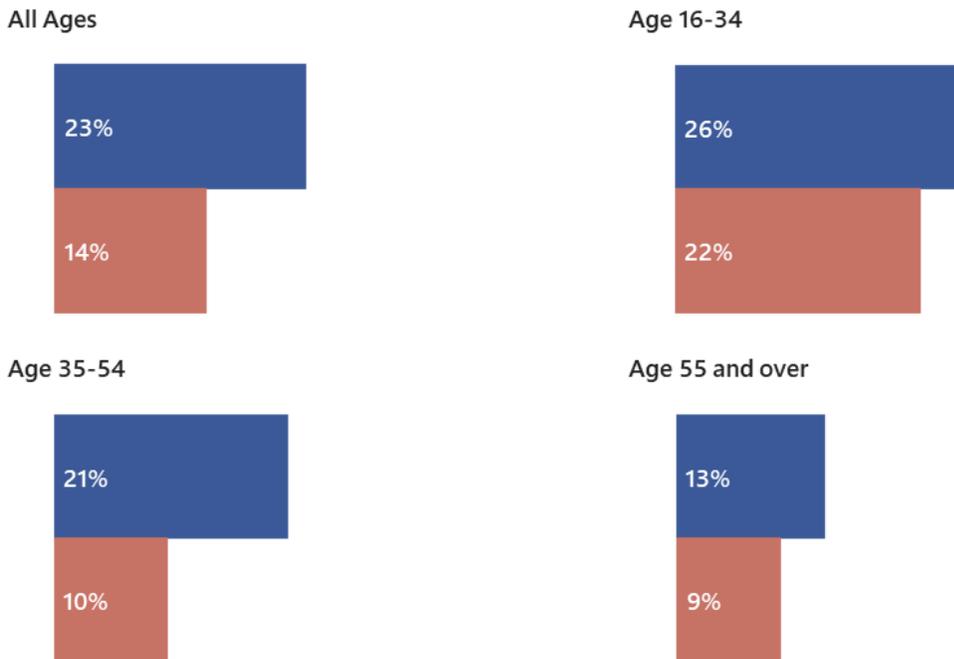
In our next question we asked specifically about the role of a new phenomenon in the investment world, the investment in so-called Special Purpose Acquisition Companies or SPACs. When going public, a SPAC is a publicly traded company created for the express purpose of acquiring or merging with an existing company or companies. Compared to a standard IPO (or an established public company), investors have much less information to guide their decision and a SPAC investment

is thus considered more risky. Although the concept has been around for a while, the number of newly-issued SPACs shot up dramatically since mid-2020 with over 300 newly issued SPACs between July 2020 and April 2021.

We therefore asked a subset of respondents (new and established investors who responded after April 7th, 2021) whether or not they have invested in an SPAC. Although only few respondents invest in SPACs, the number among the new investors is significantly higher, 23% vs. 16%. The difference is particularly prevalent among 35-54 year olds (21% vs. 10%).

Figure 8: New vs. Established Investors by Age Groups for Those Who Invest in SPACs

New investors | Established investors



Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

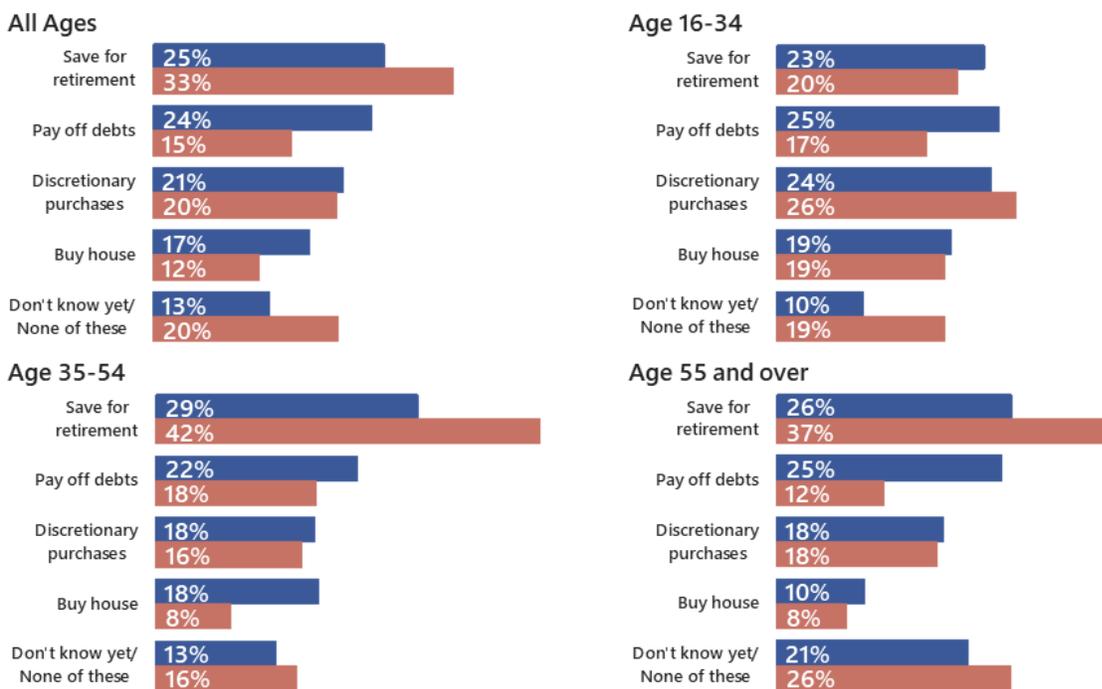
Question 6: What is your investment goal and how do you plan on using investment gains?

To better understand their investment behavior, we asked respondents how they were planning to use their investment gains (should there be any). Answer options were: discretionary spending on cars, electronics or travel, paying off debt, saving for real estate, and saving for retirement.

The largest observed difference is in savings for retirement which was the most cited usage for established investors and for which the difference was largest (8% more likely). New investors, by contrast, were more likely than established investors to invest for interim goals such as paying off existing debt or buying real estate. The older new investors see their investing as a way to pay off debt much more than same-aged established investors. Combined with their propensity to seek riskier investments, their lower income, and their usage of the less-established sources of information, this raises the concern that these investors enter the market, “bet the house” to get out of debt, and are not prepared for downside risk.

Figure 9: Profit Usage of New vs. Established Investors by Age Groups

New investors | Established investors



Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

Question 7: Did you use your March 2021 stimulus check for investment?

As a final question to understand investment behavior, we wanted to know from respondents whether they invested some portion of their March 2021 stimulus check in the stock market. There are a few provisos and disclaimers that are necessary for this answer. Likely not all respondents

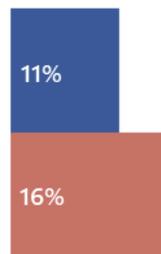
were eligible for a stimulus check: neither those in retirement nor those under 18 would have received funds. In reporting our results, we eliminated those respondents who indicated that they were not eligible for a stimulus check.

Our results indicate that established investors are more likely to use a significant fraction (more than half) of their stimulus check for investment. Among the respondents, this answer is particularly prevalent among the 55+ demographic. At first blush, one may have expected that new investors -- these being investors who tell us they seek out more risk -- are using this windfall income to speculate. However, new investors are generally lower income, in particular in the older demographic, and it is therefore likely that these investors needed the stimulus funds for more immediate purposes. Conversely, established investors are wealthier and it is therefore reasonable to believe that they could use these extra funds to bolster their portfolio and that they did not need these funds for sustenance.

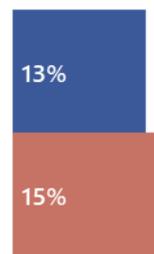
Figure 10: New vs. Established Investors by Age Groups for Those Who Invested More Than Half of Their Stimulus Check in the Market

New investors | Established investors

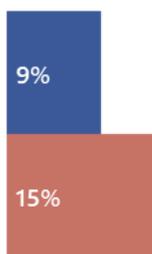
All Ages



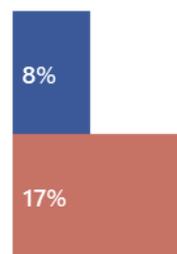
Age 16-34



Age 35-54



Age 55 and over



Source: RIWI First-Time Investor Dataset, Jan 22-May 27, 2021, respondents randomly and anonymously engaged from the US Web-using population.

Summary / Conclusion

The Winter of 2020/21 saw the rise of the meme investor: some GenZ kids became TikTok stars who shared dubious investment advice, “mobs” of retail investors ganged up on short-seller hedge funds in Reddit forums and allegedly caused institutional investors millions in losses, and Robinhood, a new type of brokerage, drew the ire of established industry insiders, regulators, and policy makers by allegedly gamifying the investment process. However, all these phenomena also added a new dynamic to capital markets, and they attracted new investors. The big question is: who are these new investors, and are they different from established investors demographically or in their outlook on investment behavior and strategy? Prior to our research there was little hard evidence and data available to answer this question.

Our findings confirm the common wisdom that new investors are younger, lower income and obtain their information from non-standard sources such as social media and public discussion forums. New investors also make riskier investments, including in SPACs, and they concern themselves less with a long-run strategy.

Our data also uncovers some possible worrying behavior: the new investors among the over 35 year olds are particularly susceptible to engage in riskier behavior, they obtain information from non-standard sources, and they state that they seek short-term gains. Combined with their lower income, these investors may well be taking on excessive risk both in terms of their strategy and also in terms of the share of income that they put at risk. A core investment philosophy to enable financial security is that one should save for a rainy day and invest for retirement, ideally starting before the age of 35. Those that are new investors at an advanced age are arguably already not on track in terms of their financial planning. It is good to see that people from this demographic have the capacity to join the ranks of investors, but it is worrying when they engage in possibly excessively risky behavior. They likely have fewer resources already and less runway to recover from investment losses.

These data suggest that the investment services community should take a hard look at whether the middle-aged demographic as well as this group may well be most at risk.

We now have baseline data. Tracking these investors over a longer period of time would help us understand if this is a new and permanent form of such behavior. Although financial markets have seen abrupt, herd behavior since their inception, information flows today are much faster and go through new, ever-changing channels, so it will be important to track this on an ongoing basis and in other countries.

To learn more about and access the data in this study, please contact [Danielle Goldfarb](#).

RIWI

RIWI collects data using patented, machine-learning technology in order to reach the broadest possible set of potential survey respondents continuously, drawing in populations otherwise not included in data collection. Anyone using the Web could be randomly exposed to a RIWI survey. This is unlike typical surveys that draw on habitual, incentivized survey respondents. Also unlike typical surveys, RIWI surveys are anonymous, continuous, and do not collect personally identifiable information. These RIWI measures increase the likelihood that respondents will answer in an authentic manner. RIWI collects information in 229 countries and territories and in over 80 languages. RIWI leverages its technology to conduct scientific surveys and impactful digital campaigns. Visit us at <https://riwi.com>. Please reach out to daniellegoldfarb@riwi.com if you would like access to the data in this study or you are interested in extending data collection on this topic in the US or in any country.

About the authors

Andreas Park is a Professor of Finance at the University of Toronto, appointed to the Rotman School of Management and the Department of Management at UTM. He currently serves as the Research Director at the FinHub, Rotman's Financial Innovation Lab, he is the co-founder of the LedgerHub, the University of Toronto's blockchain research lab, a lab economist for the Blockchain stream at the Creative Destruction Lab, and a consultant to the OSC and IIROC. Andreas teaches courses on payments innovation, decentralized finance, and financial market trading, and his current research focuses on the economic impact of technological transformations such as blockchain technology. He recently co-authored a design proposal for a central-bank issued digital currency, commissioned by the Bank of Canada. Andreas received his doctorate from the University of Cambridge. His work has been published in top journals in economics and finance including *Econometrica*, the *Journal of Finance*, the *Journal of Financial Economics*, and the *Journal of Financial and Quantitative Analysis*.

Danielle Goldfarb is Head of Global Research at RIWI. RIWI collects opinion and behavioural data from a wider range of people than do conventional methods by using a technology that randomly draws from the full global online population. Danielle focuses on developing more reliable measures of emerging economic and financial trends, in both emerging and developed

economies. Danielle's [Tedx talk](#) is on the smartest way to predict the future. Before joining RIWI, Danielle held senior roles at several economic policy think tanks where her research focused on global trade and the global digital economy.

Jason Cho is the head of data operations at RIWI.

Tianshuo Yang is a data analyst at RIWI.

Data appendix: Summary of data

		New investors						New investors total		Established investors						Established investors total	
		16-34		35-54		55+		Count	% of total	16-34		35-54		55+		Count	% of total
		Count	% of total	Count	% of total	Count	% of total			Count	% of total	Count	% of total	Count	% of total		
Age distribution		828	50%	536	32%	302	18%	1666	100%	856	35%	749	30%	871	35%	2476	100%
Household income	Below 50000	195	60%	82	47%	56	51%	333	55%	136	41%	84	32%	101	27%	321	33%
	50001-125000	105	33%	78	45%	37	34%	220	36%	129	39%	96	36%	165	45%	390	40%
	Over 125000	23	7%	14	8%	17	15%	54	9%	69	21%	84	32%	103	28%	256	27%
Brokerage preferences	Discount brokerages/startup platforms	214	48%	117	45%	55	36%	386	45%	158	37%	78	21%	59	12%	295	23%
	Traditional brokerages	235	52%	142	55%	97	64%	474	55%	273	63%	286	79%	418	88%	977	77%
Research method	Traditional	260	49%	155	51%	91	54%	506	50%	253	52%	227	61%	314	74%	794	62%
	Alternative	268	51%	149	49%	79	46%	496	50%	231	48%	143	39%	110	26%	484	38%
Stock monitoring frequency	Frequent	328	59%	197	60%	112	55%	637	59%	213	39%	203	43%	256	45%	672	42%
	Medium	115	21%	62	19%	44	22%	221	20%	159	29%	126	27%	177	31%	462	29%
	Infrequent	109	20%	69	21%	47	23%	225	21%	170	31%	140	30%	142	25%	452	29%
Investment strategies	Long-term	155	28%	86	27%	73	37%	314	30%	166	31%	205	45%	338	60%	709	45%
	Explore alternative	141	26%	103	32%	44	22%	288	27%	150	28%	91	20%	67	12%	308	20%
	Short-term	149	27%	81	25%	50	25%	280	26%	124	23%	96	21%	75	13%	295	19%
	More complicated trades	100	18%	53	16%	32	16%	185	17%	103	19%	63	14%	81	14%	247	16%
SPAC investment	No	118	74%	75	79%	39	87%	232	77%	102	78%	114	90%	145	91%	361	86%
	Yes	42	26%	20	21%	6	13%	68	23%	29	22%	13	10%	15	9%	57	14%
Profit usage	Save for retirement	121	23%	92	29%	48	26%	261	25%	100	20%	185	42%	201	37%	486	33%
	Pay off debts	129	25%	71	22%	46	24%	246	24%	83	17%	77	18%	64	12%	224	15%
	Discretionary purchases	125	24%	56	18%	34	18%	215	21%	132	26%	70	16%	96	18%	298	20%
	Buy house	101	19%	57	18%	18	10%	176	17%	93	19%	36	8%	42	8%	171	12%
	Don't know yet/None of these	50	10%	42	13%	39	21%	131	13%	93	19%	68	16%	140	26%	301	20%
Stimulus usage	Half or less	214	87%	138	91%	73	92%	425	89%	184	85%	168	85%	188	83%	540	84%
	More than half	32	13%	14	9%	6	8%	52	11%	32	15%	29	15%	39	17%	100	16%

Appendix: Survey questions and auto-detected data

Auto-detected data

Region/ city

Respondent device type

Operating system and version

Survey questions

Q0 - What is your gender?

Male

Female

Q1- What is your age?

Only respondents with age 16+ are eligible for subsequent questions

Q2- Which of these best describes your willingness to engage in normal activities today?

Only staying home is safe

Only small gatherings (such as local activities and restaurants) are safe

Large gatherings such as sporting events are safe, international travel is not safe

No restrictions of any kind are needed

Q3 - Do you trade/ invest in the stock market?

I have never invested before

I recently invested for the first time

I am a long-time/ regular investor

Q4 - In the next month, will you change the amount of money you invest into the stock market?

Yes, I will invest more than now

No change

No, I will invest less than now

Q5 - Do you expect the stock market to go up or down in the next month?

Up

Down

Don't know/ I don't follow the stock market

Q6 - Right now, what do you think is the best sector to invest in?

Technology

Pharma/ Health

Communications

Banks/ financials

Oil/ energy

Consumer discretionary (non-essentials)

Consumer staples

Industrials/ Materials

Real estate

(If Q3 = recently invested or long-time/ regular investor, respondents were shown the full set of questions, whereas those who reported never investing were only shown Q12, Q14, Q16-22.)

Q7 - How do you typically trade in the market?

I execute more complicated trades (trading on margin/ options/ etc.)

Invest for the long term (Mutual funds/ ETF's/ Indices/ Blue Chip/ etc.)

Trade short term (Day trading, Swing trading)

Explore alternative investments (Bitcoin/ Cryptocurrencies/ DeFi products/ etc.)

Q8 - Where do you usually go to research stock trading?

Social media (Facebook/ Twitter/ Youtube/ Tiktok/ etc.)

Investor sites (Motely Fool/ Seeking Alpha/ Zacks/ etc.)

Financial news (CNBC/ Bloomberg/ WSJ/ etc.)

My Brokerage's website/ App

Word of mouth

Public forums (Reddit)

I don't usually do any research

Q9 - What do you plan to do with most of your profit/gains?

Make discretionary purchases (Electronics/ Cars, Entertainment/ Travel and vacation)

Buy a house/ apartment

Pay off my debts

Save for retirement

Don't know yet/ None of these

Q10 - Right now, if the entire stock market crashed and fell more than 20% you should:

Buy more/ Average down

Sell/ Trim some holdings

Sell all holdings/ Exit the market

Hold/ do nothing

Q11 - How often do you monitor the performance of your stocks/holdings?

Daily

Weekly

Monthly

Yearly

Almost never

Q12 - How would you describe your ability to invest money compared to your family/friends?

Much better

Somewhat better

About the same

Somewhat worse

Much worse

Q13 - Who do you primarily trade with?

Discount/ Startup platforms (Robinhood/ Webull/ Coinbase/ SoFi/ etc.)

Traditional/ Full-service brokers (Schwab/ TD Ameritrade/ Fidelity/ IBKR/ etc.)

My financial advisor

Q14 - If you recently got or expect to get a stimulus check from the IRS, how much of it are you planning to use towards stocks/investments?

- None, not using it for investing
- Less than half of it
- About half of it
- Almost all of it
- All of it
- I do not expect a stimulus check

Q15 - Have you ever bought or traded a SPAC? (Special Purpose Acquisition Company)

- Yes
- No

Q16 - Approximately how much is your household income every year? (Before taxes)

- Under \$20,000
- \$20,000 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$125,000
- \$125,001 - \$250,000
- Over \$250,000

Q17- What is the highest level of education you have completed?

- Less than high school
- High school
- Associate's degree/ vocational training
- Bachelor's degree
- Master's degree or higher

Q18- Are you currently employed?

- Yes, working full-time
- Yes, working part-time
- No, I am looking for work
- No, I am not looking for work
- Student
- Retired

Q19 – What is your marital status?

Single/ never married

Married or domestic partnership

Divorced/ separated

Widowed

Q20 - Including yourself, how many people live in your home?

1 person

2 persons

3 persons

4 persons

5 persons

6 or more persons

Q21- Where do you live?

Large city

Suburb

Rural area/ farm

Q22 – Would you describe yourself as:

White

African American or Black

Hispanic or Latino

Asian, or South Asian or Pacific Islander

Native American or American Indian

Other race

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