

# Investors in the United States: The Changing Landscape

*A Report of the FINRA Foundation National Financial Capability Study*

December 2022

## Authors:

Judy T. Lin, Christopher Bumcrot  
*FGS Global*

Gary Mottola, Olivia Valdes, Gerri Walsh  
*FINRA Investor Education Foundation*

## Acknowledgements:

The FINRA Investor Education Foundation would like to thank the following individuals for their valuable help and insightful comments:

Adam Bloomfield  
Robert Ganem  
Ira Gluck  
Rory Hatfield  
Christine Kieffer  
Jeremy Ko  
Anna Lusardi  
Brian Mulford  
Vy Nguyen  
Paul Rothstein  
Elena Schlickemaier  
Amy Sochard  
Jeanette Wingler  
Jacob Yunger

## Recommended Citation:

Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., and Walsh, G. (2022). *The Changing Landscape of Investors in the United States: A Report of the National Financial Capability Study*. FINRA Investor Education Foundation.  
[www.FINRAFoundation.org/Investor-Report2021](http://www.FINRAFoundation.org/Investor-Report2021)

Corresponding Author:  
Gary Mottola  
[gary.mottola@finra.org](mailto:gary.mottola@finra.org)

All results, interpretations and conclusions expressed are those of the research team alone and do not necessarily represent the views of FINRA, the FINRA Investor Education Foundation, or any of its affiliated companies.

## Table of Contents

Introduction.....	1
Highlights .....	1
Survey Findings.....	3
Characteristics of Investors .....	3
Investment Vehicles.....	5
Investing Practices .....	9
Investment Fees .....	11
Attitudes Toward Investing.....	12
Disclosure and Regulation .....	17
Information Sources .....	19
Investor Knowledge .....	22
Conclusion .....	27
Background & Methodology.....	27

## Introduction

This report outlines findings from the Investor Survey component of the FINRA Foundation's 2021 National Financial Capability Study (NFCS). As in 2018 and 2015, we conducted a separate follow-up survey of investors as part of the 2021 NFCS to provide a more in-depth exploration of investing-related topics than is possible in the main State-by-State Survey. In addition to core measures, such as investment vehicles, attitudes towards investing, and investor knowledge, the 2021 Investor Survey has been updated to include new or expanded topics, such as use of social media for investment information, motivations for investing, and so-called "meme stocks."

## Highlights

- ▶ A substantial proportion of investors joined the market relatively recently. The percentage of investors who began investing within the two years prior to the 2021 NFCS is nearly as large as the percentage who began in the preceding eight years (21 percent and 25 percent, respectively).
- ▶ Younger investors are more likely to engage in riskier investment behaviors. Thirty-six percent of investors under 35 report trading options, compared to 21 percent of those ages 35 to 54, and 8 percent of those 55 and older. Nearly a quarter (23 percent) of investors under 35 report making purchases on margin, compared to 12 percent of those 35 to 54, and 3 percent of those 55 and older.
- ▶ The percentage of investors considering cryptocurrencies has increased to 33 percent, and 27 percent are already invested, up from 18 percent and 12 percent, respectively, in 2018. Among investors under 35 and those with less than two years' experience, more than half are invested in cryptocurrencies.
- ▶ Eighteen percent of investors report trading shares of GameStop, AMC, or Blackberry (which were popular "meme stocks" in early 2021). Among investors under 35, nearly two in five report buying or selling shares of these stocks, compared to about one in five of those ages 35 to 54, and only 4 percent of those 55 and older.
- ▶ Online trading through a website is the most common method for placing trades (62 percent), followed by mobile app (44 percent) and contacting a financial professional (44 percent). Use of mobile apps is up considerably from 30 percent in 2018. Younger respondents and newer investors are much more likely to use a mobile app for placing trades than older respondents or more experienced investors.
- ▶ The main motivation for nearly all investors is to make money over the long term (96 percent). However, large majorities also want to make money in the short term (72 percent) and learn about investing (65 percent). Younger respondents are much more likely than older respondents to invest for reasons other than long-term profits, such as social responsibility, entertainment, and social activity.
- ▶ When making investment decisions, investors most often rely on research and tools provided by brokerage firms, business and finance articles, financial professionals, and friends, family or colleagues. A majority of younger investors (60 percent) also use social media as a source of investment information, compared to 35 percent of those ages 35 to 54, and only 8 percent of those 55 and older. YouTube is the most popular social media channel for investment information. Over half of investors under 35 use YouTube (56 percent), and 41 percent use Reddit.
- ▶ Many investors are unaware of or confused about various fees they may pay for investing. Over one in five investors (21 percent) do not think they pay any kind of fee for investing, and 17 percent say they do not know how much they pay. Among mutual fund owners, nearly two in five (38 percent) believe they do not pay mutual fund fees or expenses.

- ▶ Email (38 percent) has overtaken physical mail (30 percent) as the most widely preferred method for receiving disclosures. Preference for email has increased since 2015, while preference for physical mail has decreased.
- ▶ Investor knowledge is low. On the ten-question investing quiz, the average number answered correctly is 4.7. More than two in five respondents (44 percent) think that the past performance of an investment is a good indicator of future results. Less than a third (29 percent) understand that the main advantage of index funds over actively managed funds is generally lower fees and expenses.

Maintaining the same methodological approach as previous waves, the 2021 Investor Survey consists of 2,824 respondents<sup>1</sup> who completed the [2021 State-by-State Survey](#) and indicated that they have investments held in non-retirement accounts (that is, outside of retirement accounts such as 401(k)s and IRAs).<sup>2</sup>

All the data we collected in this survey are self-reported by the respondents themselves and are not independently checked or corroborated by other sources (such as account statements or follow-up interviews with third parties). Therefore, while the survey can be reasonably assumed to present an accurate reflection of investors' opinions, beliefs, knowledge, and attitudes, it does not necessarily present a precise reflection of behaviors or of the valuations of assets and liabilities.

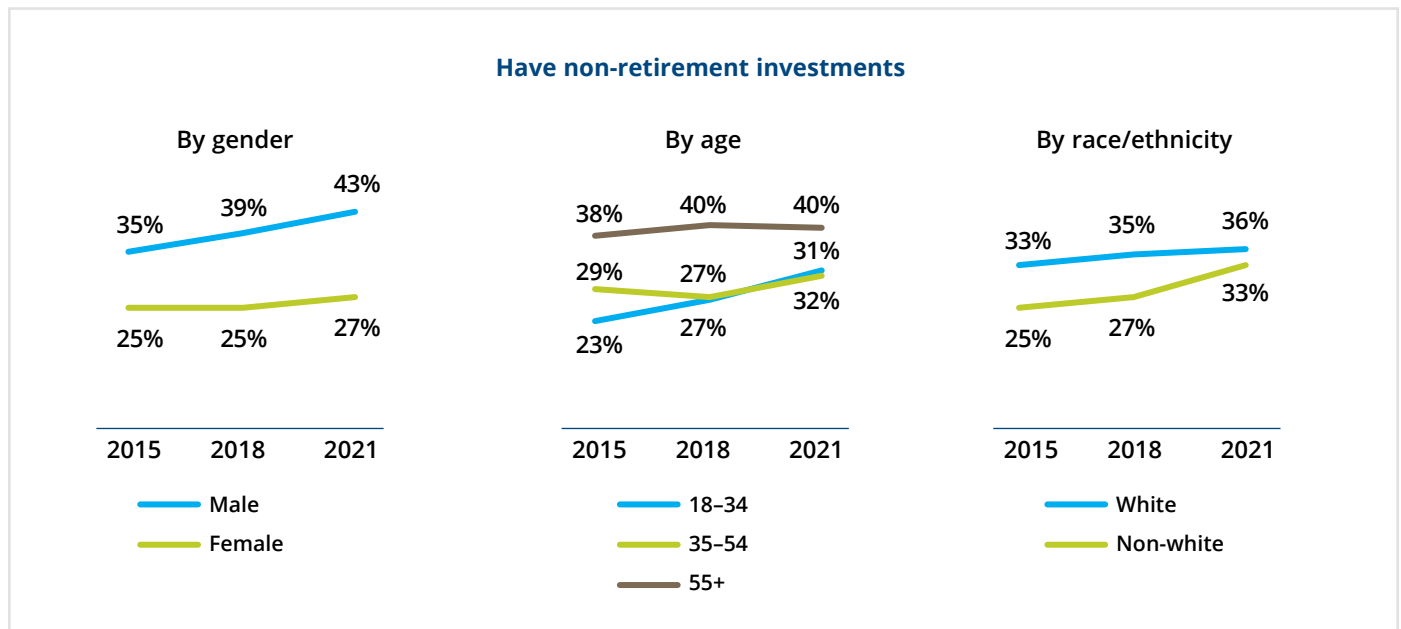
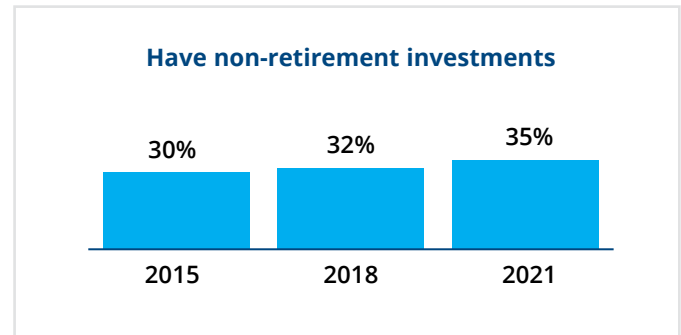
Percentages shown in this report may not always add up to 100 percent due to rounding and/or "Don't know" and missing responses.

## Survey Findings

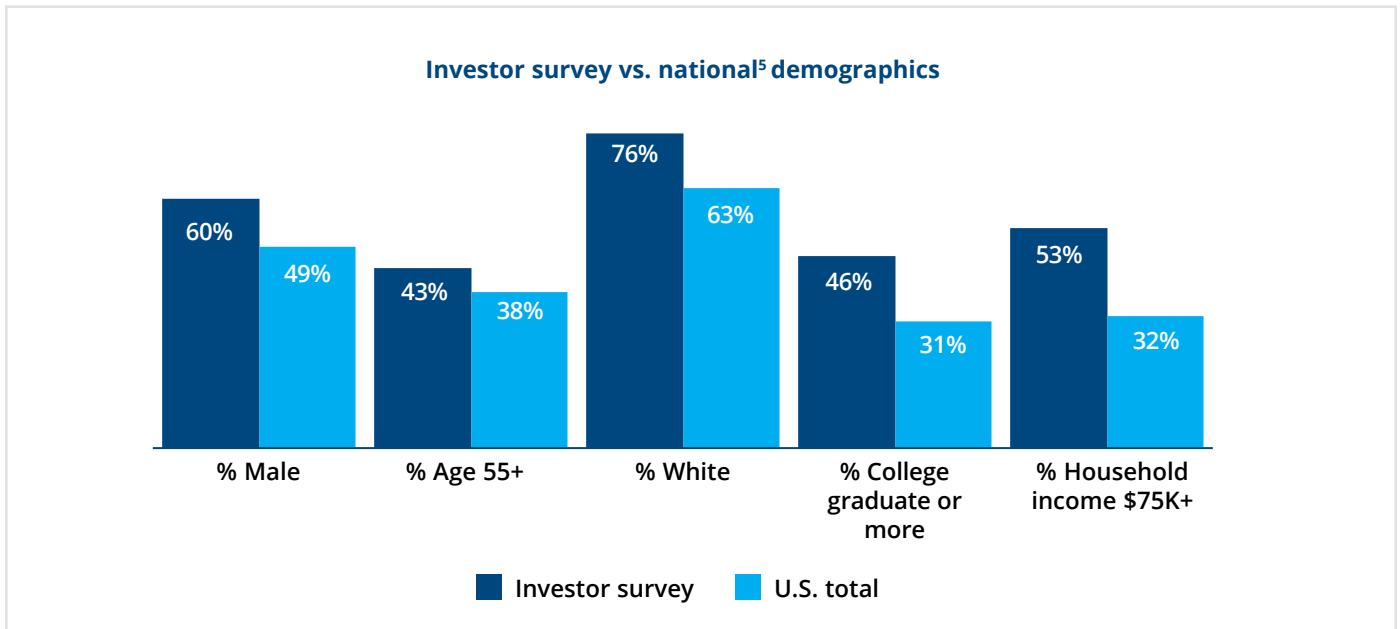
### Characteristics of Investors

In 2021, just over a third (35 percent) of the national population had investments in stocks, bonds, mutual funds, exchange-traded funds (ETFs), or other securities outside of retirement accounts.<sup>3</sup> There has been a slight upward trend in the percentage of investors since 2015.

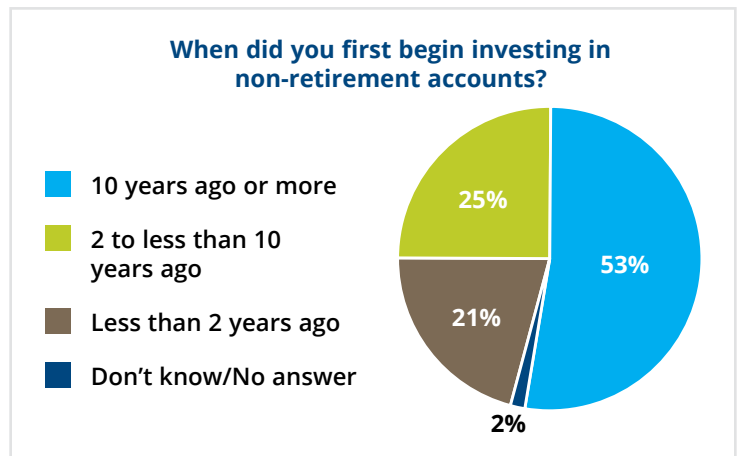
- ▶ The increase in prevalence of non-retirement investments was concentrated in certain demographic groups. Among men, the percentage of those who have investments in non-retirement accounts grew by eight points since 2015, while the percentage among women did not appreciably change. Similarly, the proportion of investors increased by nine percentage points among those under 35, and eight percentage points among respondents who do not identify as white<sup>4</sup>, while remaining fairly steady among those 35 and older and among white respondents.



- ▶ Despite these gains among younger demographic groups and persons who do not identify as white, investors were still much more likely than the general population to be older and white. They were also more likely to be male, college educated, and have higher household incomes.

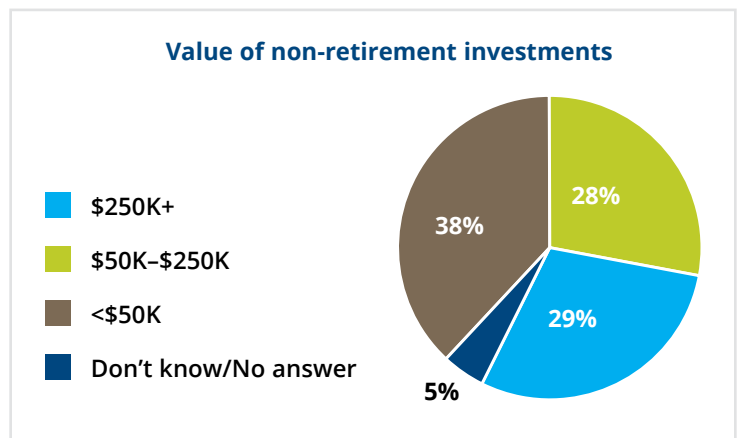


The majority (53 percent) of respondents in the Investor Survey have been investing for more than 10 years. However, it is notable that more than one in five were relatively new investors with less than two years of experience. The percentage who began investing within the two years prior to the 2021 NFCS is nearly as large as the percentage who began in the preceding eight years (21 percent and 25 percent, respectively).



**It is notable that more than one in five were relatively new investors with less than two years of experience**

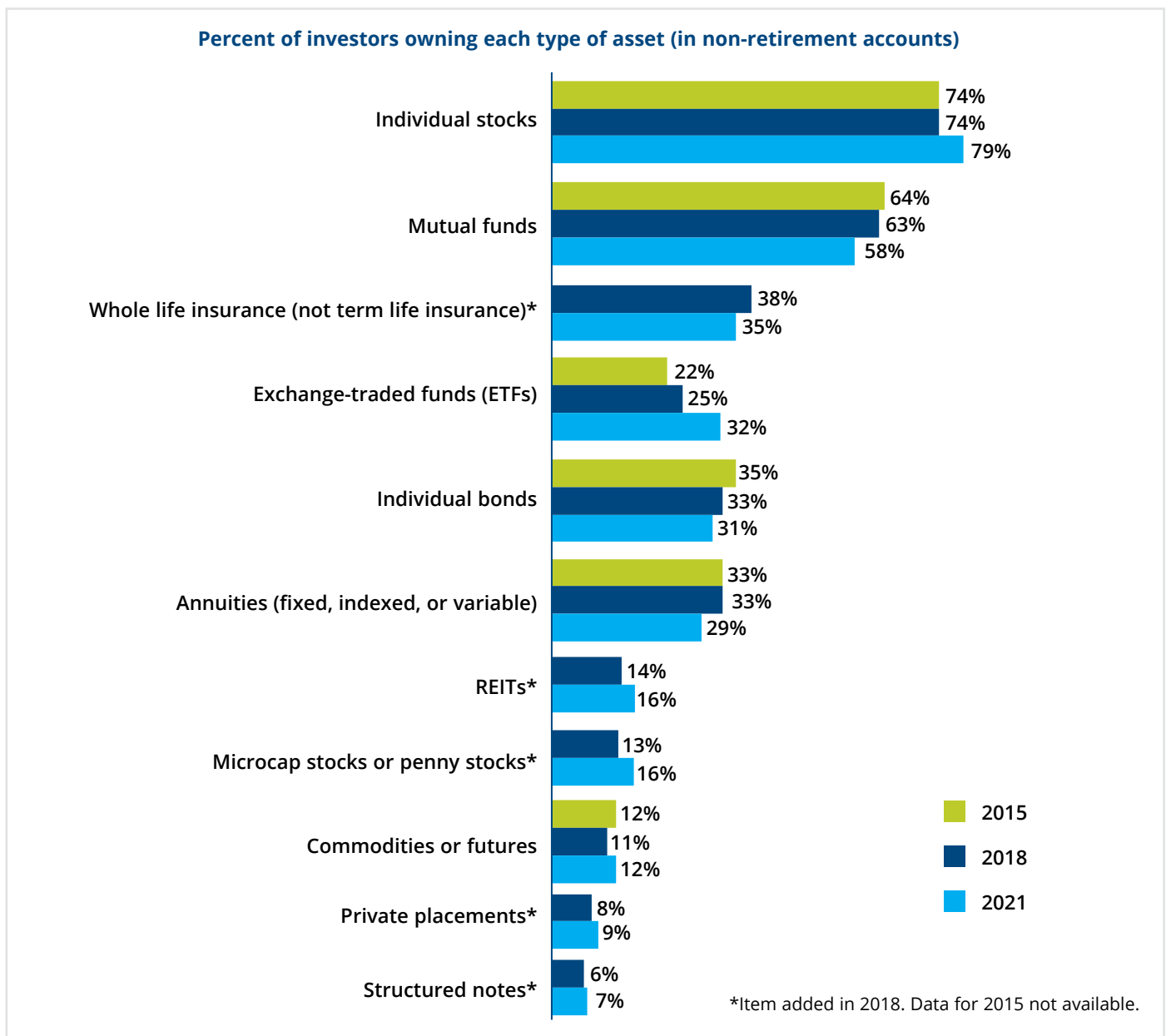
The value of assets held in non-retirement accounts varied widely. Thirty-eight percent of respondents reported having less than \$50,000 in non-retirement investments, 28 percent between \$50,000 and \$250,000, and 29 percent more than \$250,000.



## Investment Vehicles

Individual stocks were by far the most commonly held investments in non-retirement accounts, followed by mutual funds. The percent of investors owning stocks increased by five points since 2018, while the percent owning mutual funds decreased by the same amount.

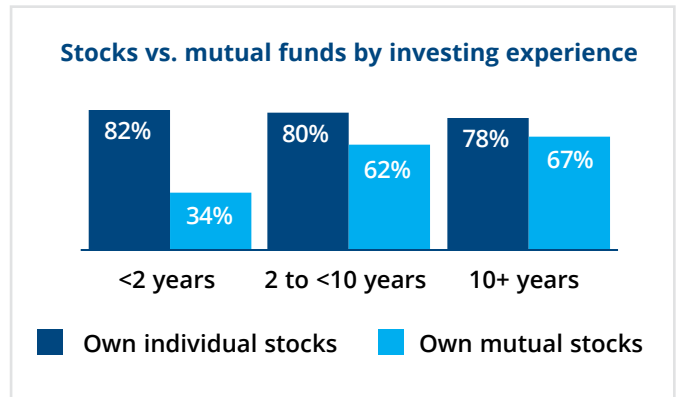
- ▶ Ownership of ETFs grew to nearly a third of investors, representing an increase of 10 percentage points relative to 2015.
- ▶ Relatively few investors reported owning real estate investment trusts (REITs), penny stocks, commodities or futures, private placements, or structured notes.





- ▶ New investors (with less than two years of experience) were more likely to own individual stocks than mutual funds by a wide margin (82 percent versus 34 percent). This gap closes considerably among those who have been investing for more than two years.

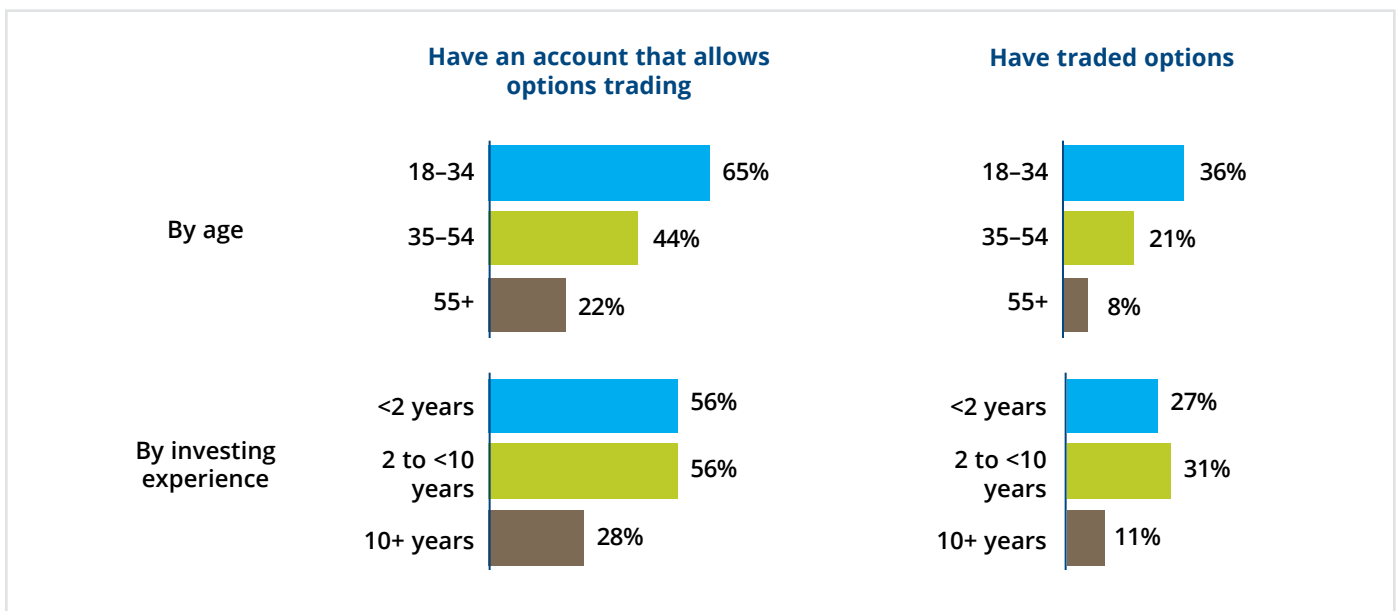
In terms of the amount of exposure to stocks, 47 percent of respondents reported that stocks or stock funds constituted more than half of their non-retirement portfolio, while 40 percent reported that less than half or none of their portfolio contained stocks.



How much of your non-retirement portfolio is invested in stocks or mutual funds/ETFs that contain stocks?	Total
More than half	47%
Less than half	33%
None	7%
Don't know/No answer	13%

Forty percent of investors reported having an account that allows options trading, but about one-third (34 percent) were unsure. About one in five investors (19 percent) have purchased or sold options.

- ▶ Younger investors were much more likely than older investors to have an options account and to have traded options, as were those with less than 10 years' investing experience.
- ▶ Men were more likely than women to have an options account (45 percent versus 33 percent) and to have traded options (22 percent versus 16 percent).

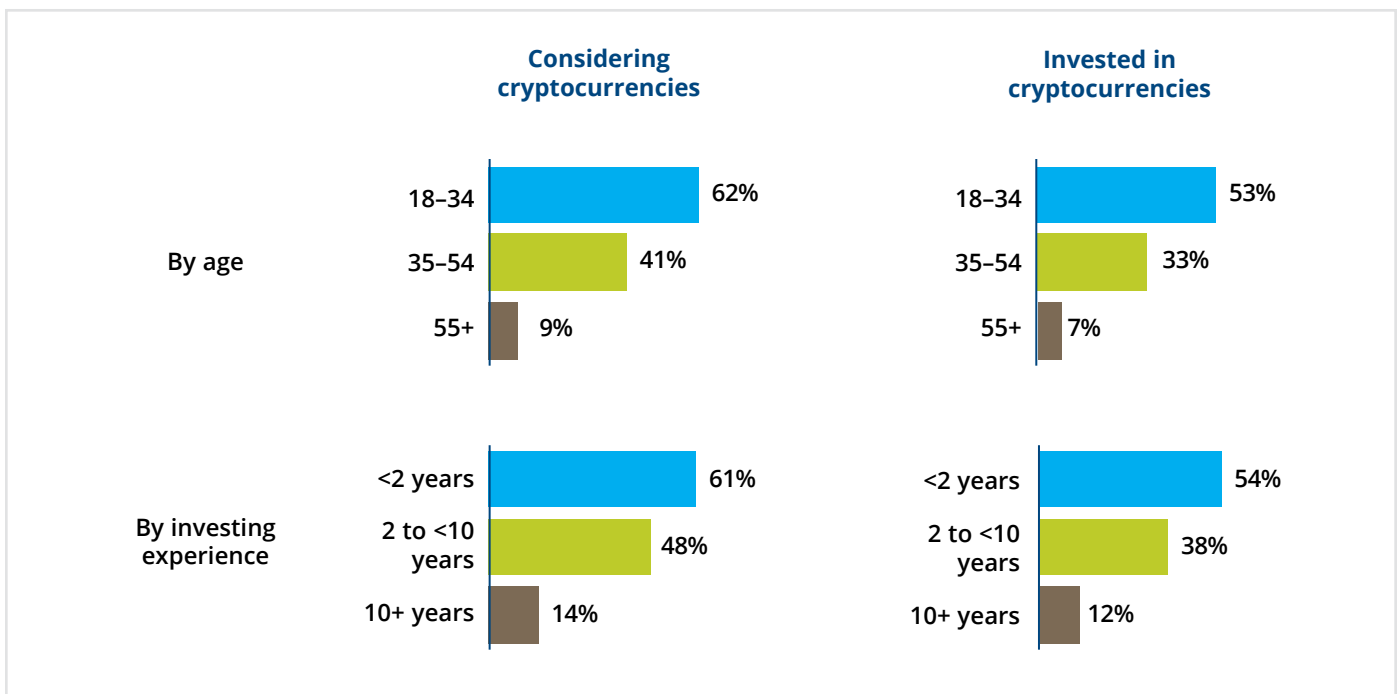


**While cryptocurrency awareness changed little relative to 2018, there were double-digit increases in the percentage of respondents considering or already invested in cryptocurrencies**

A large majority of investors have heard of cryptocurrencies. While cryptocurrency awareness changed little relative to 2018, there were double-digit increases in the percentage of respondents considering or already invested in cryptocurrencies.<sup>6</sup>

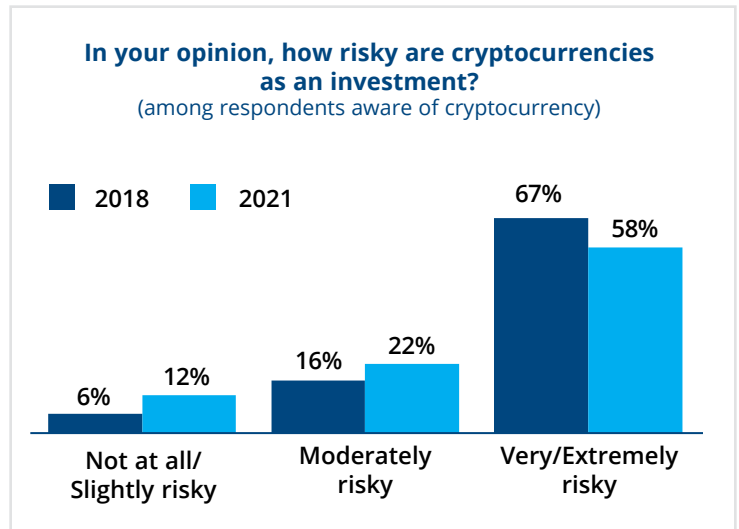
Cryptocurrency investments	2018	2021
Aware of	85%	88%
Considering	18%	33%
Invested in	12%	27%

- ▶ Despite no meaningful differences in awareness levels, there were striking differences by age in investors' likelihood to consider or invest in cryptocurrency. Sixty-two percent of investors under 35 years old reported considering cryptocurrency investments, and more than half (53 percent) were already invested, compared to 9 percent and 7 percent respectively among investors 55 and older. Similarly, newer investors, particularly those with less than two years' experience, were more likely to consider or invest in cryptocurrency.
- ▶ Men were more likely than women to consider (38 percent versus 23 percent) or invest in (32 percent versus 19 percent) cryptocurrency.



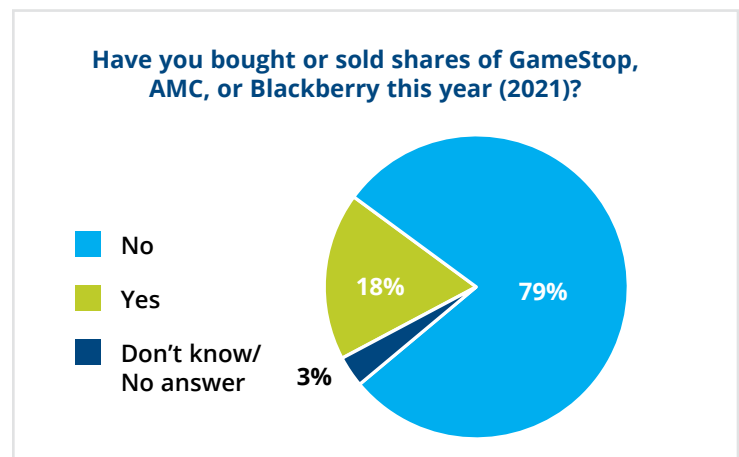
As a growing number of people invest in or consider investing in cryptocurrencies, fewer view it as a very risky investment. Among those aware of cryptocurrencies, the percentage who rated it extremely or very risky decreased by nine percentage points since 2018 (though still a majority).

- ▶ Perceptions of cryptocurrency risk varied greatly by age and portfolio value.<sup>7</sup> Fewer than half of investors 34 and younger (42 percent) rated investing in cryptocurrencies as extremely or very risky, compared to 71 percent of those ages 55 and older. Similarly, 48 percent of those with portfolio values under \$50,000 considered cryptocurrency to be a risky investment, compared to 70 percent among those with \$250,000 or more in their portfolios.

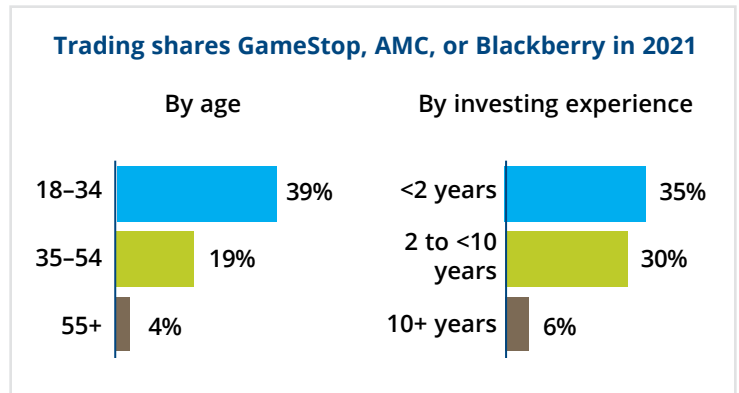


	Age			Portfolio value		
	18-34	35-54	55+	<\$50K	\$50K-\$250K	\$250K+
Consider cryptocurrencies extremely or very risky	42%	54%	71%	48%	58%	70%

The emergence of several so-called “meme stocks” in early 2021 attracted a great deal of attention among investors, regulators, and the media. Recognizing that respondents may not be familiar with the term “meme stock,” and because the category itself is ever-shifting, the NFCS Investor Survey sought to assess this activity by asking respondents directly about a few examples that were prominent during early 2021. Overall, 18 percent of respondents reported trading shares of GameStop, AMC, or Blackberry in 2021.



- ▶ Similar to cryptocurrencies, trading shares of GameStop, AMC, or BlackBerry was inversely correlated with age. Nearly two in five investors under 35 reported buying or selling shares of these stocks in 2021, compared to about one in five of those ages 35 to 54, and only 4 percent of those 55 and older. Trading shares of GameStop, AMC, or BlackBerry was also more common among those with less than 10 years of investing experience.
- ▶ In addition, men were more likely than women to report trading shares of these stocks in 2021 (21 percent vs. 13 percent).



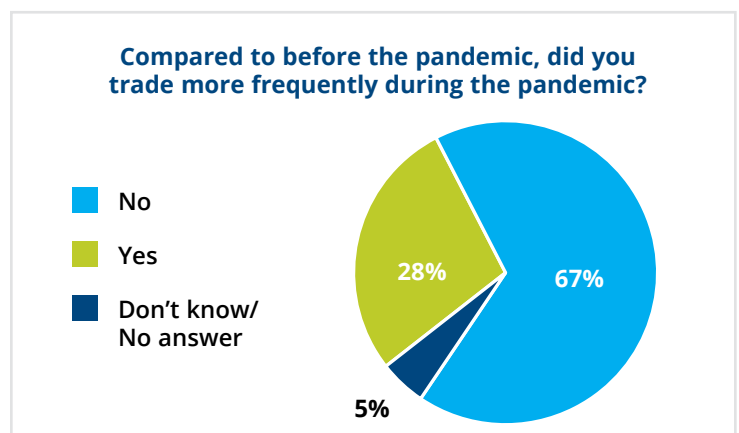
### Investing Practices

Trading frequency varied considerably among investors. Thirty-eight percent of respondents reported making four or more trades in the past year, 30 percent traded one to three times, and 24 percent did not make any trades. Overall, trading frequencies have not changed substantially compared to 2015 and 2018 levels.

In the past 12 months, how many times have you bought or sold investments in non-retirement accounts?	2015	2018	2021
None	29%	30%	24%
1 to 3 times	30%	31%	30%
4 or more times	35%	33%	38%

Most investors (67 percent) reported that they did not trade more frequently during the pandemic, but over a quarter of respondents reported that they did.

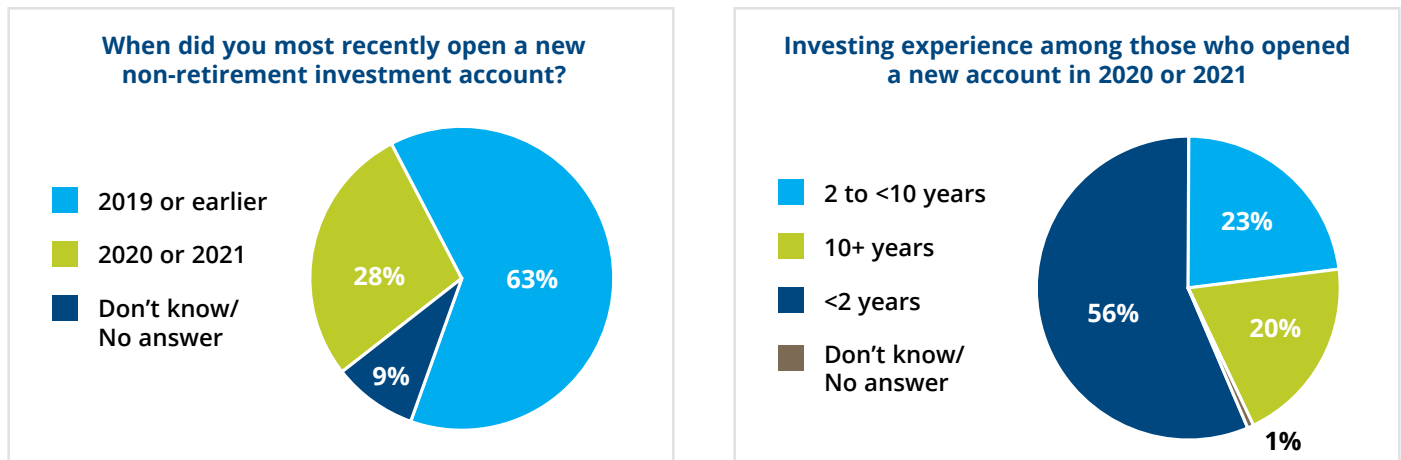
- ▶ Men and younger investors were more likely to trade frequently, and to report their trading increased during the pandemic.



	Gender		Age		
	Male	Female	18-34	35-54	55+
Made 4 or more trades	46%	28%	47%	47%	27%
Traded more frequently during the pandemic than before	31%	24%	53%	30%	10%

Over a quarter of investors indicated that they opened a new non-retirement account during the pandemic.

- ▶ Not surprisingly, the majority of these new account owners were also new investors (less than two years' experience) who were likely opening their first account. However, a substantial proportion (43 percent) were investors with a longer history of investing.

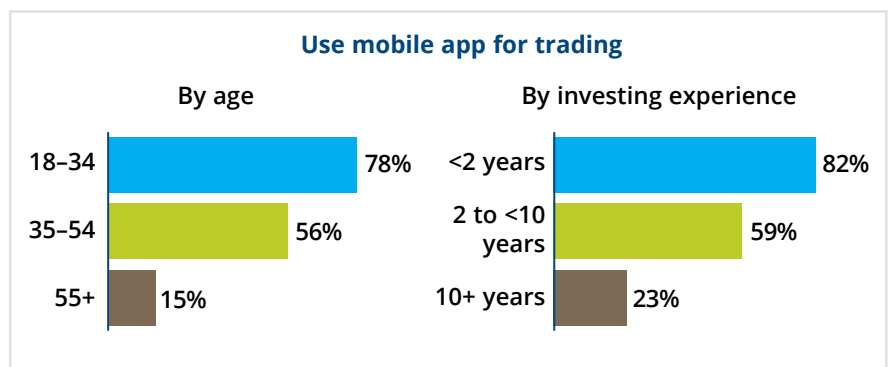


Investors reported using multiple methods to place trades. Online trading through a website was the most commonly cited method (62 percent), followed by using a mobile app (44 percent) and contacting a financial professional (44 percent). There is considerable overlap in trading methods. For example, among those who traded on a website, 61 percent also traded through a mobile app.

- ▶ Use of mobile apps increased substantially relative to 2018. There was an increase in website trading as well. In contrast, the proportion of investors trading through a financial professional decreased.

Methods for placing trades	2018	2021
Website	55%	62%
Mobile app	30%	44%
Financial professional (specific person)	53%	44%
Financial professional (any available representative at financial firm)	43%	38%

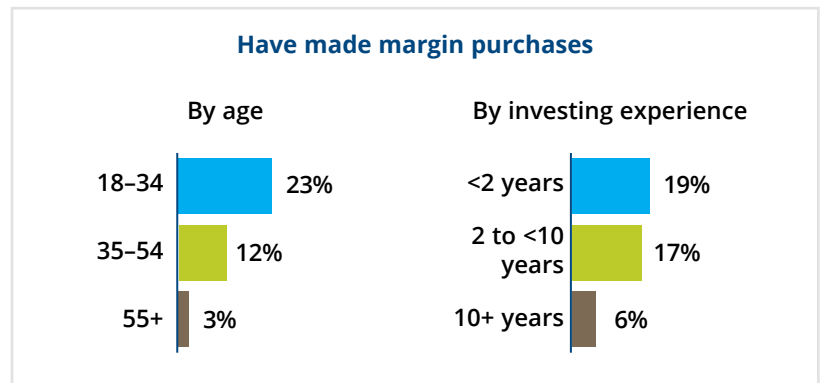
- ▶ Younger respondents and newer investors were much more likely to trade on a mobile app.
- ▶ Respondents with lower portfolio values were also more likely to use a mobile app (62 percent among those with less than \$50,000 in their portfolios, compared to 40 percent among those with \$50,000 to \$250,000, and 28 percent among those with \$250,000 or more).



Roughly three in ten investors reported having accounts that permit purchasing on margin, and one in ten have made a margin purchase. While the prevalence of margin accounts has remained fairly steady over the past three waves, margin purchases have decreased somewhat. Seven percent of investors have had a margin call, unchanged from 2018.

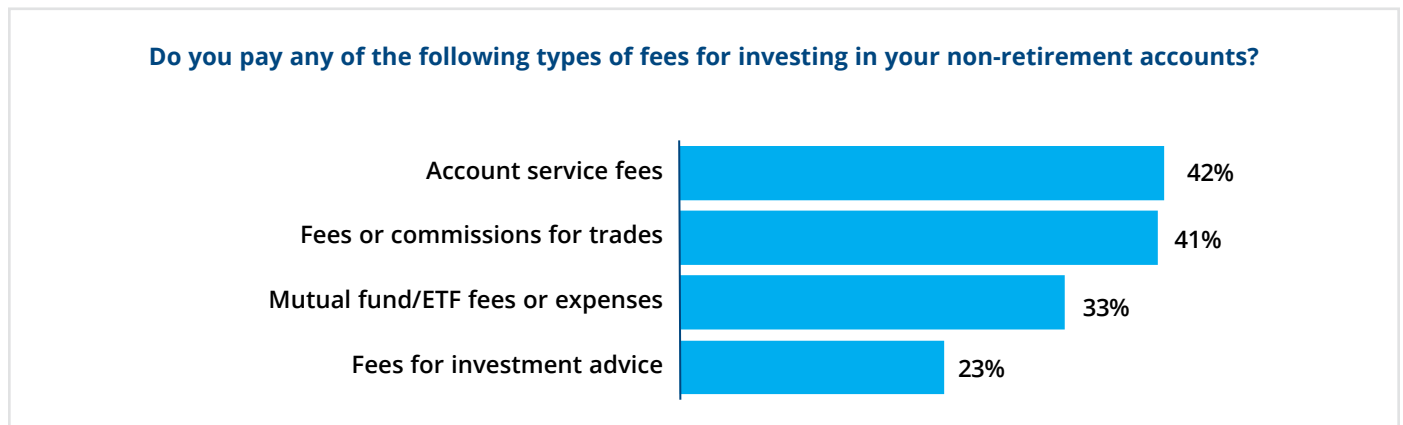
	2015	2018	2021
Have investment account that allows margin purchases	33%	30%	29%
Have made purchases on margin	17%	14%	11%

- ▶ Younger respondents and newer investors were more likely to have made purchases on margin.
- ▶ Investors with between \$50,000 and \$250,000 in their portfolios were more likely than both those with lower and higher portfolio values to have made margin purchases (18 percent, compared to 9 percent each among those with less than \$50,000 and more than \$250,000).



### Investment Fees

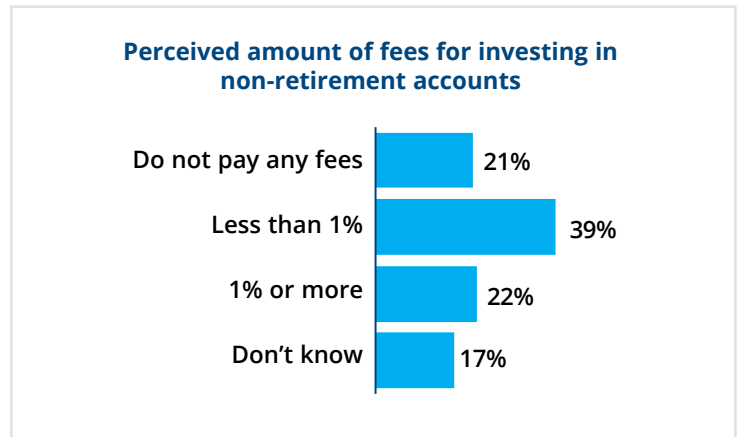
When asked what types of fees they paid for their non-retirement accounts, investors most commonly believed they were paying account service fees (42 percent) and fees or commissions on trades (41 percent), though fewer than half thought that they paid either of these types of fees. Fewer than a quarter of investors reported paying fees for investment advice (23 percent).



- ▶ Additional analyses suggest that it is unclear to investors what types of fees they pay for their non-retirement accounts. For example, fewer than half of mutual fund owners (47 percent) reported paying mutual fund fees or expenses, while 38 percent appeared to be unaware that they pay these fees, and 15 percent did not know.

Furthermore, 21 percent of respondents did not think that they paid any fees, and 17 percent did not know how much they paid in fees. A plurality of respondents (39 percent) thought they paid less than 1 percent annually in fees for their non-retirement accounts.

- ▶ The proportion of investors reporting they do not pay any fees ticked up slightly to 21 percent from 14 percent in 2018.
- ▶ Those with portfolio values of less than \$50,000 were more likely than those with higher portfolio values to think they do not pay any fees.



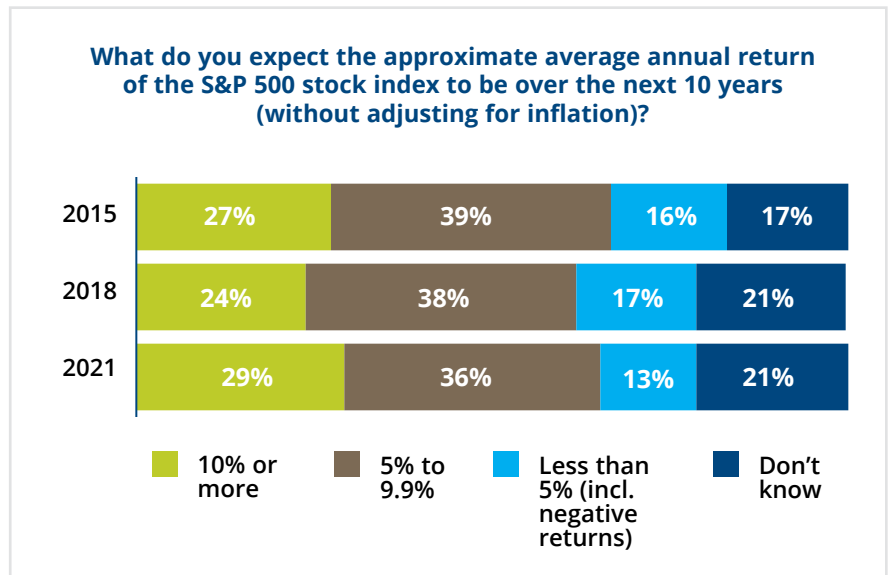
	Portfolio value		
	<\$50K	\$50K-\$250K	\$250K+
Do not pay any fees	29%	16%	15%

Among respondents who provided an estimate of their annual fees (including those who said “no fees” but excluding those who answered “don’t know”), the majority (65 percent) were confident that their estimate was correct.

### Attitudes Toward Investing

The plurality of investors (36 percent) expected the average annual return of the S&P 500 to be between 5 percent and 9.9 percent over the next ten years. While this figure has changed little from previous waves, it is interesting to note that the percentage of respondents expecting 10 percent or more average returns ticked up slightly, suggesting that investors were somewhat more optimistic in 2021 than in 2018.

Most investors (61 percent) expected their portfolio to do as well as the market, 28 percent thought they would outperform the market, and only 4 percent thought they would underperform.



- ▶ Men, younger respondents, and newer investors were more likely to believe they would outperform the market.

	Gender		Age			Investing experience		
	Male	Female	18-34	35-54	55+	<2 years	2 to <10 years	10+ years
Expect portfolio to perform better than the market as a whole	31%	24%	37%	29%	22%	39%	30%	23%

When asked what level of financial risk they would be comfortable taking, nearly half of investors (48 percent) described themselves as willing to take average risks in exchange for average returns. Less than a third (29 percent) said they were willing to take above average risks, and 12 percent reported being willing to take substantial risks in pursuit of substantial returns.



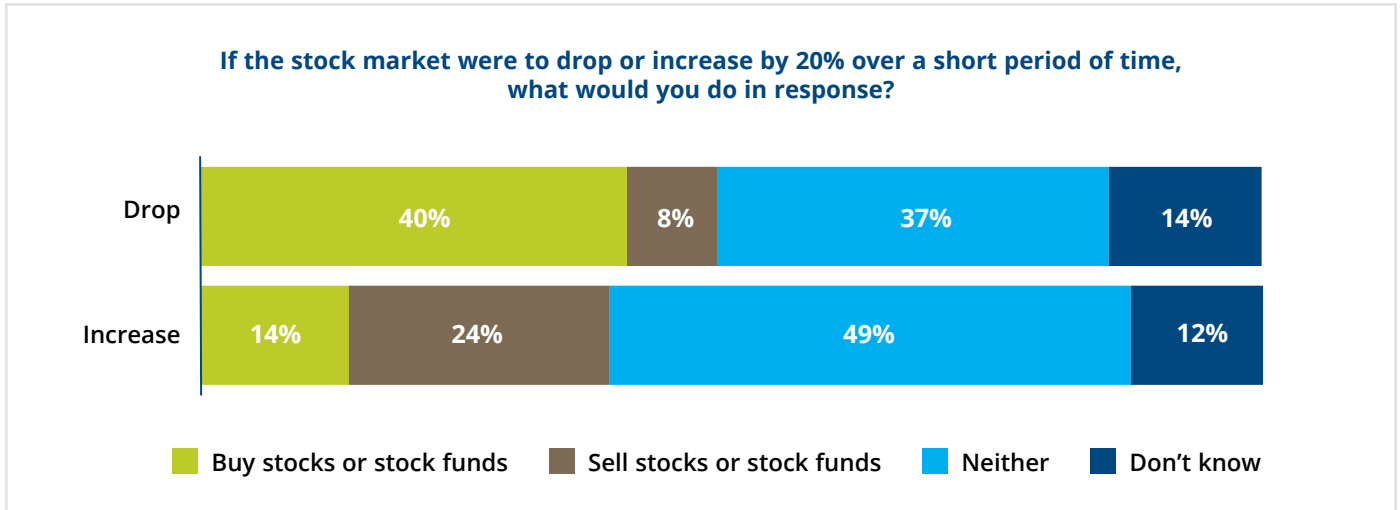
- ▶ Willingness to take substantial financial risks was inversely correlated with age. Similarly, investors with less than 10 years' experience were more willing to take risks than those with 10 or more years' experience.



- ▶ In addition, men were more likely than women to be willing to take substantial risks (14 percent versus 8 percent, respectively).



The plurality of investors (40 percent) anticipated that they would buy stocks if the market were to drop by 20 percent suddenly. Nearly the same proportion (37 percent) would make no change. Only a small minority (8 percent) would sell stocks during a precipitous market drop. Conversely, if the market were to increase sharply, roughly half of respondents (49 percent) would not make a change, while around a quarter would sell stocks, and 14 percent would buy.

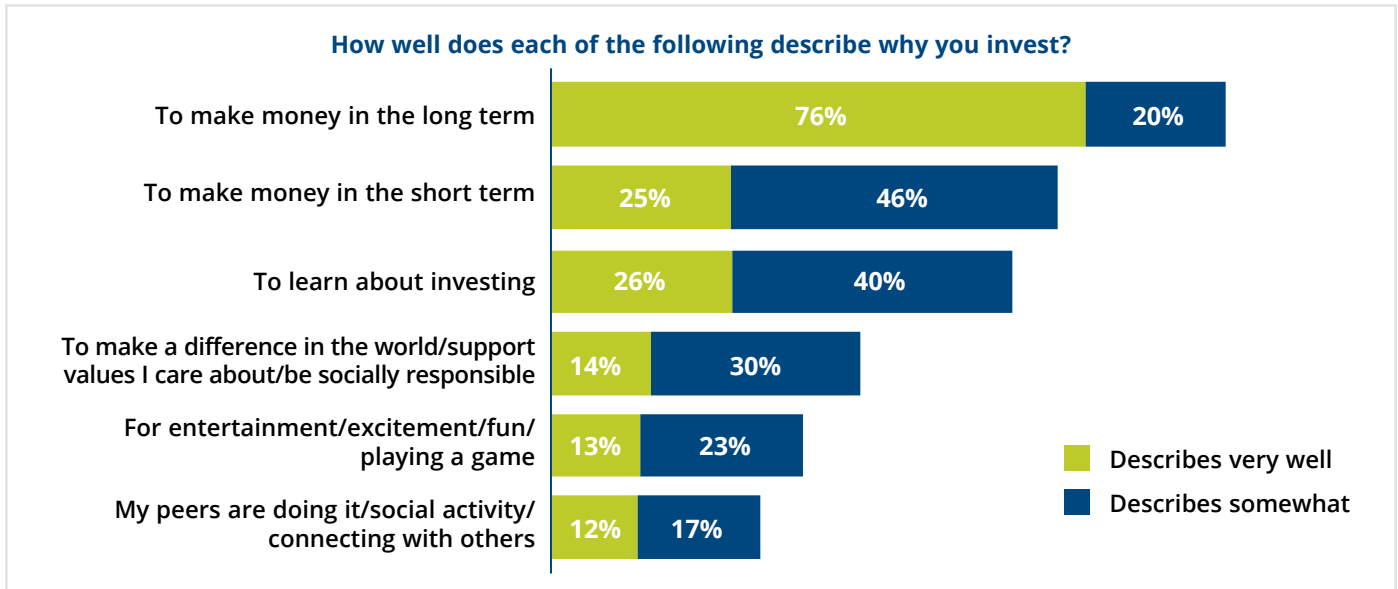


- ▶ Investors comfortable with above average or more risk were more likely than those less comfortable with risk to say they would buy in the event of a market drop (54 percent versus 30 percent) and sell in the event of a market increase (31 percent versus 20 percent).

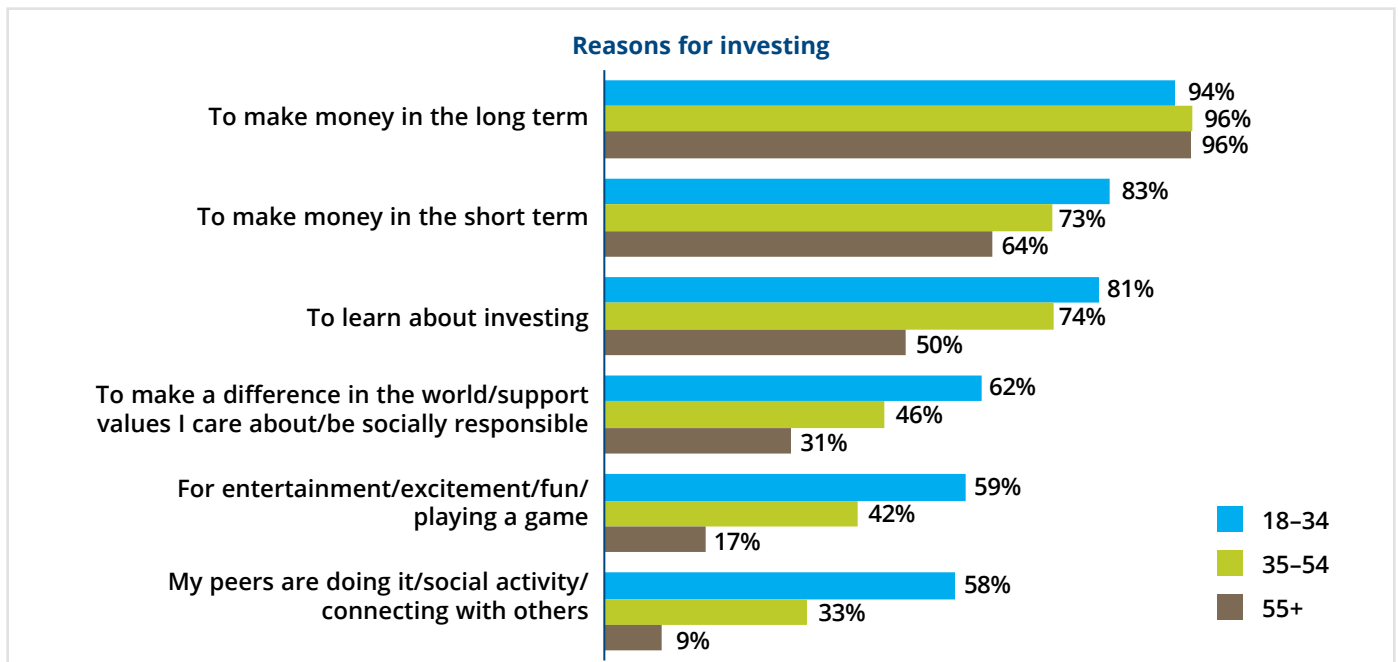
Just under half of investors (47 percent) felt that U.S. securities markets are a good long-term investment, but fewer than a third (29 percent) reported feeling confident that U.S. financial markets are fair to all investors.

Confident that U.S. financial markets...	Total
Offer good long-term opportunities for investors	47%
Are fair to all investors	29%

Individuals may choose to invest for a variety of reasons. Making money over the long term appears to be a nearly universal goal, cited by 96 percent of investors. However, nearly three-quarters of investors also indicated that they want to make money in the short term, and almost two-thirds mentioned learning about investing as a motivation.



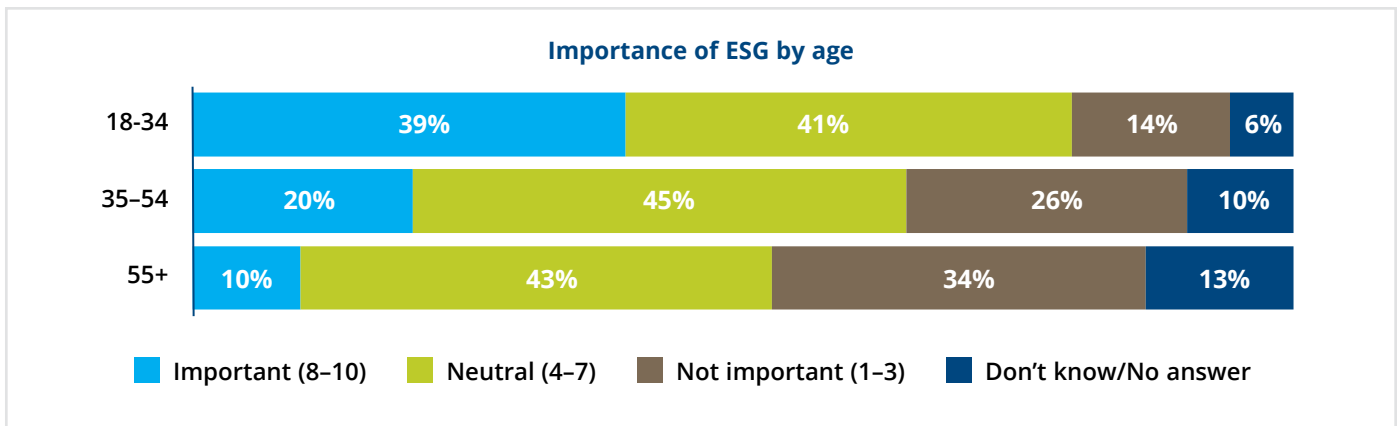
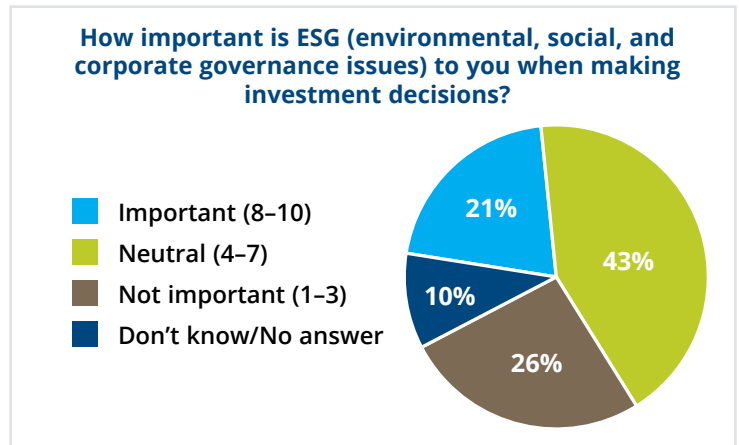
- ▶ Younger respondents were much more likely than older respondents to invest for reasons other than long-term profits. Majorities of those under 35 reported investing for social responsibility, entertainment, and social activity reasons.



- ▶ Among those who traded shares of GameStop, AMC, or Blackberry in 2021, 71 percent cited entertainment and 66 percent mentioned social activity as reasons for investing.

Overall, the plurality of investors (43 percent) expressed neutral views regarding the importance of ESG (environmental, social, and corporate governance issues) when making investment decisions. Twenty-one percent rated ESG considerations as important, and 26 percent as unimportant.<sup>8</sup>

- ▶ The perceived importance of ESG was negatively correlated with age. Roughly two in five investors under 35 considered ESG important in investment decisions, compared to one in five investors ages 35 to 54, and one in 10 investors 55 and older.

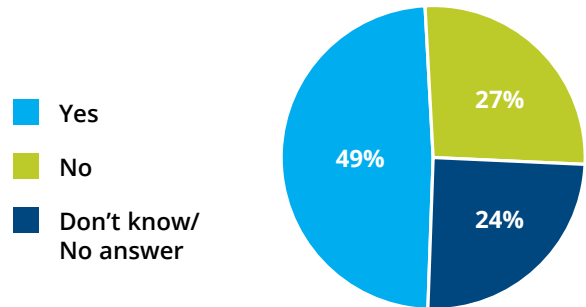


### Disclosure and Regulation

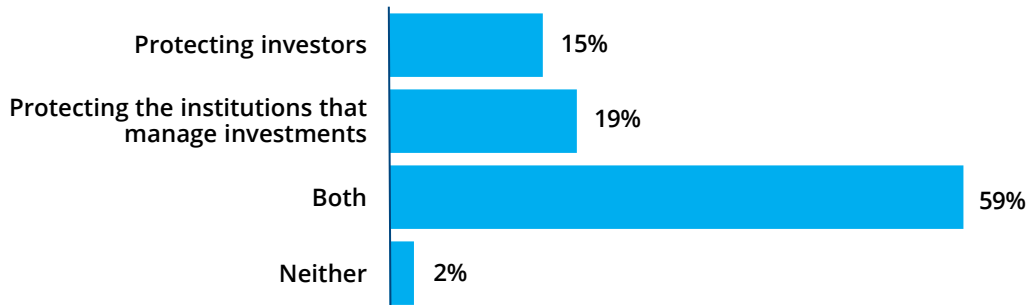
Investors' opinions were mixed regarding the adequacy of investment industry disclosures. Almost half (49 percent) perceived them as sufficient, but about a quarter disagreed (27 percent) or did not know (24 percent).

A majority of respondents (59 percent) indicated that they believe the purpose of disclosures is to protect both investors and institutions managing investments.

**Do you feel that investment industry disclosures regarding topics such as fees, risks of investing, and potential conflicts of interest are adequate?**

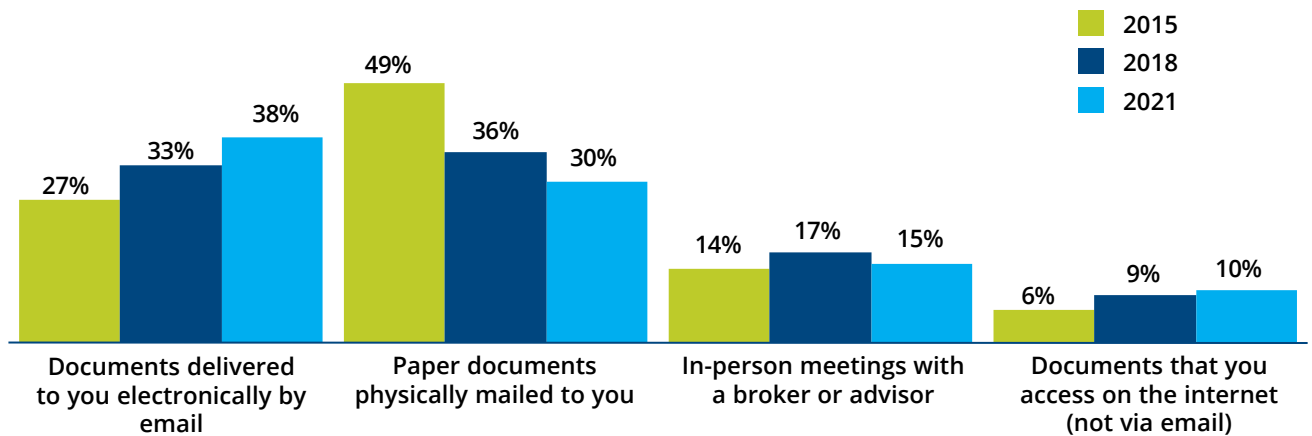


**What do you believe is the purpose of disclosures?**

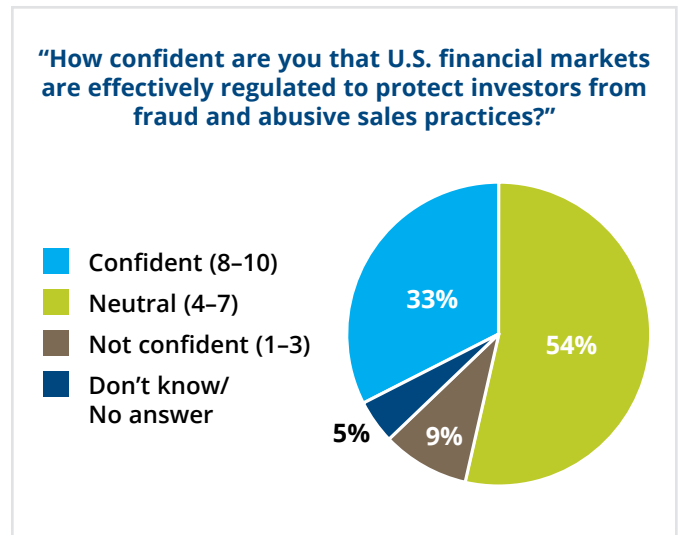


Email (38 percent) has overtaken physical mail (30 percent) as the most widely preferred method for receiving disclosures. Preference for email has trended upwards since 2015, while preference for mail has decreased.

**Preferred method of receiving disclosures**



About three in 10 investors reported being concerned about losing money due to investment fraud, though over four in 10 were unconcerned. When asked to rate how confident they are that the markets are effectively regulated to protect investors against fraud, the majority gave neutral responses, and only about one in 10 indicated they were not confident.



Thirty-eight percent of respondents reported authorizing a trusted contact for their investment accounts, while the majority (56 percent) did not. These percentages have not changed meaningfully since 2018. Separately, 22 percent of respondents indicated they have been named as a trusted contact for someone else's account.

Have you authorized a trusted contact for any of your investment accounts?	2018	2021
Yes	36%	38%
No	58%	56%
Don't know	5%	5%

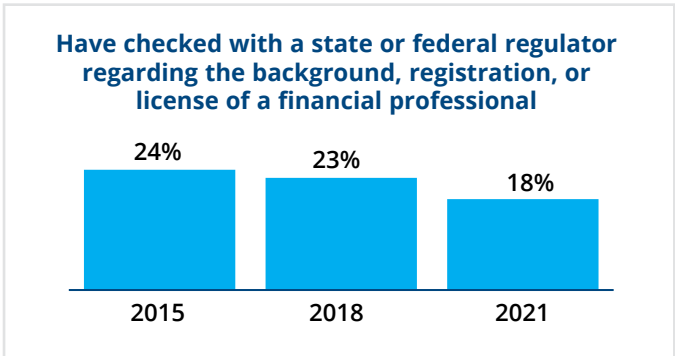
Have you been named as a trusted contact for someone else's investment account(s)? <sup>9</sup>	2021
Yes	22%
No	71%
Don't know	6%

Just over half of investors (54 percent) reported having a will. Older investors and those with higher portfolio values were much more likely to have a will.

	Age			Portfolio value		
	18-34	35-54	55+	<\$50K	\$50K-\$250K	\$250K+
Have a will	33%	43%	76%	31%	62%	76%

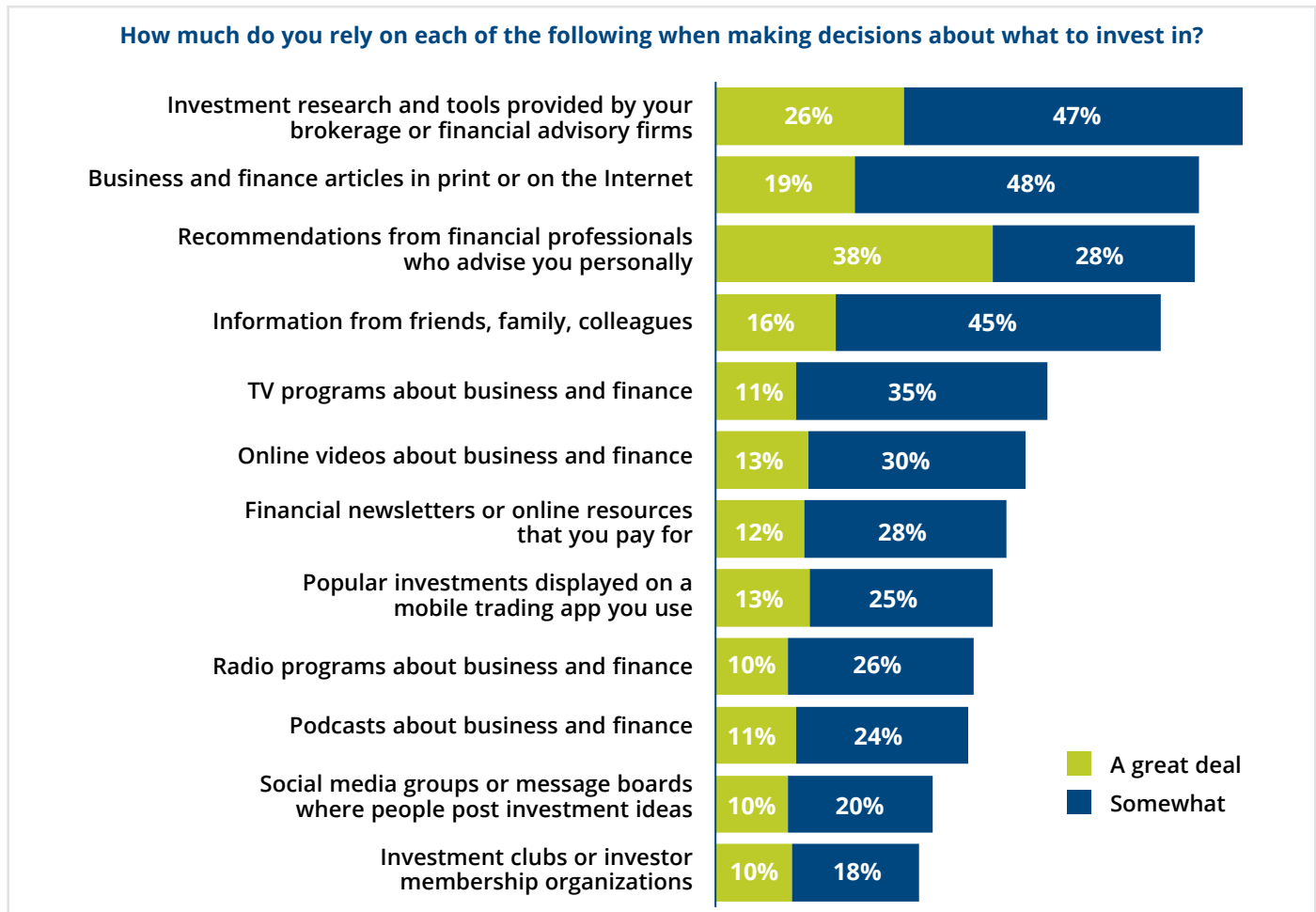
The percentage of investors saying they have checked with a regulator regarding the background of a financial professional ticked down slightly from 2018.

- ▶ Respondents who frequently make trades through their financial professional or someone at their firm were more likely than those who frequently trade via website or mobile app to have checked the background of a financial professional (46 percent versus 24 percent, respectively; note that these groups are not mutually exclusive).

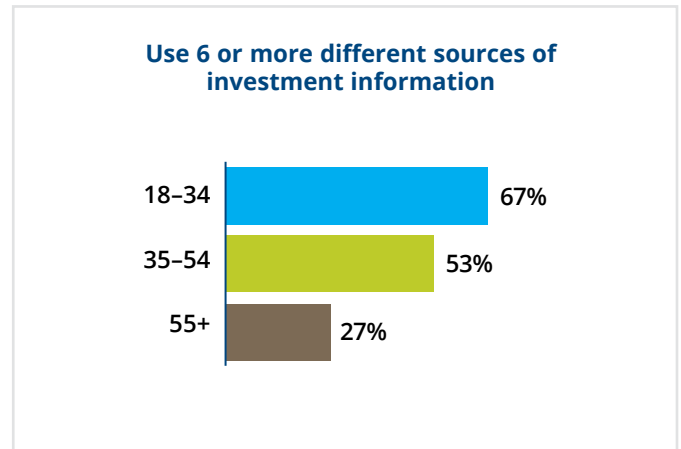
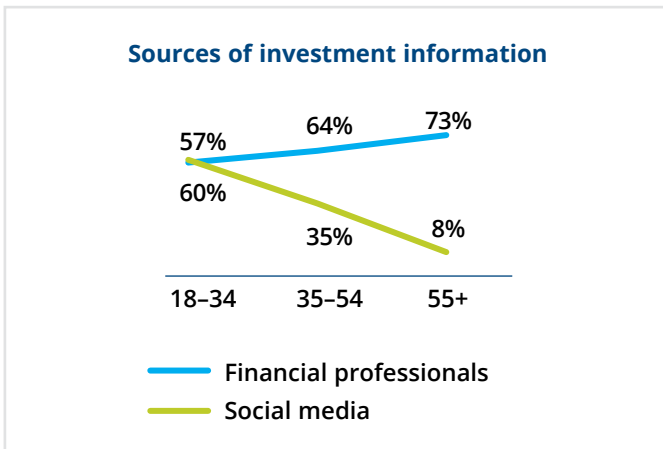


### Information Sources

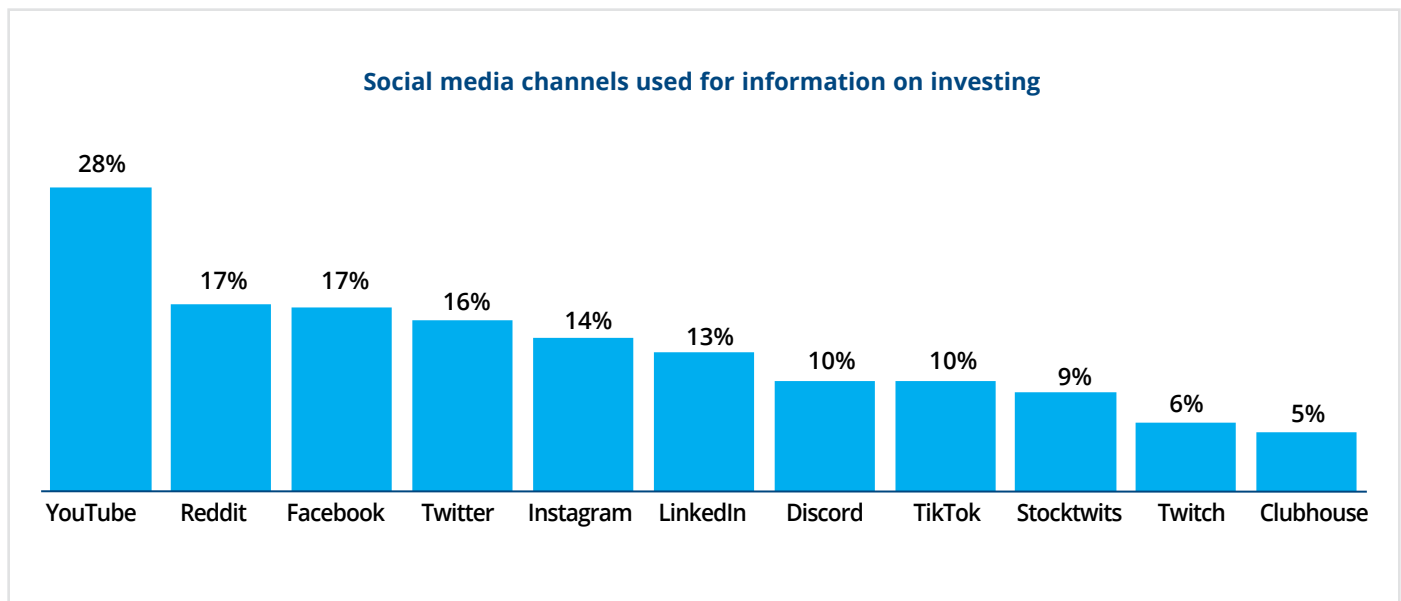
In terms of sources of information when making investment decisions, investors most often reported using research and tools provided by brokerage firms, business and finance articles, financial professionals, as well as friends, family, and colleagues. Relatively fewer investors said they rely on investment clubs or social media groups.



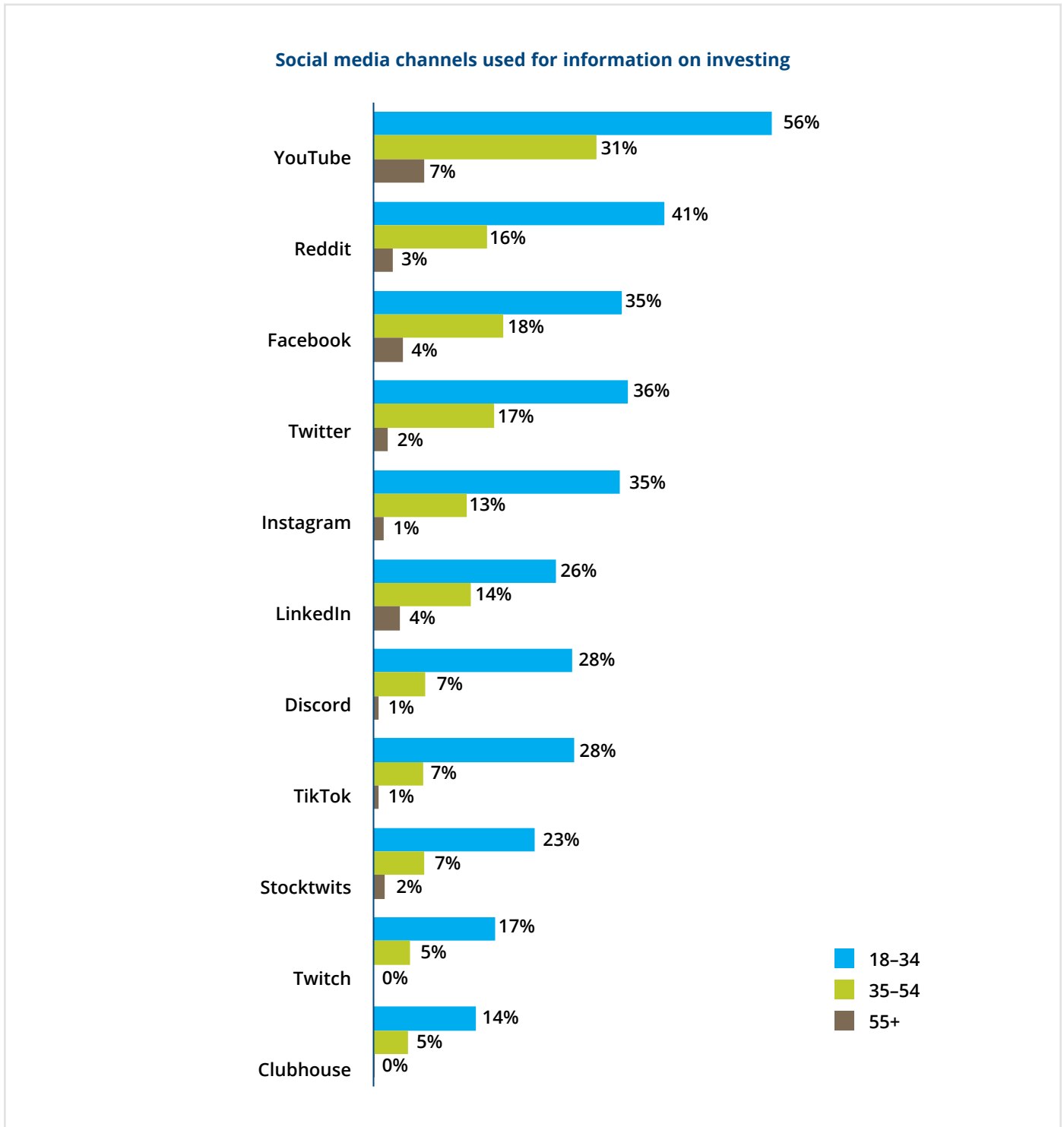
- ▶ Among investors who reported trading shares of GameStop, AMC, or Blackberry in 2021, 75 percent indicated they rely on investments displayed on their mobile trading app, and 69 percent on social media groups (note that these findings are correlational and not necessarily causal).
- ▶ Younger investors were less likely to use financial professionals and more likely to use social media as a source of investment information than older investors.
- ▶ Younger investors were also much more likely to use multiple sources of information. Two-thirds of investors under 35 reported using at least six different sources, compared to just over half of investors ages 35 to 54, and about a quarter of investors 55 and older.



Among the social media channels investors used for investment information, YouTube was most popular, followed by Reddit, Facebook, and Twitter.



- ▶ Over half of investors under 35 reported using YouTube, and two in five claimed to use Reddit for investment information. As expected, usage of all social media channels correlated inversely with age.





## Investor Knowledge

To assess their level of investment knowledge, we presented respondents with ten multiple choice “quiz” questions covering various investment-related topics and concepts.

If you buy a company's stock...	
<b>You own a part of the company</b>	<b>73%</b>
You have lent money to the company	11%
You are liable for the company's debts	2%
The company will return your original investment to you with interest	6%
Don't know	6%
In general, investments that are riskier tend to provide higher returns over time than investments with less risk.	
<b>True</b>	<b>73%</b>
False	15%
Don't know	12%
If you buy a company's bond...	
You own a part of the company	9%
<b>You have lent money to the company</b>	<b>62%</b>
You are liable for the company's debts	4%
You can vote on shareholder resolutions	5%
Don't know	20%
Over the last 20 years in the U.S., the best average returns have been generated by:	
<b>Stocks</b>	<b>55%</b>
Bonds	6%
CDs	2%
Money market accounts	6%
Precious metals	6%
Don't know	25%
If a company files for bankruptcy, which of the following securities is most at risk of becoming virtually worthless?	
The company's preferred stock	12%
<b>The company's common stock</b>	<b>48%</b>
The company's bonds	14%
Don't know	26%

The past performance of an investment is a good indicator of future results.	
True	44%
<b>False</b>	<b>44%</b>
Don't know	11%
Which of the following best explains why many municipal bonds pay lower yields than other government bonds?	
Municipal bonds are lower risk	28%
There is a greater demand for municipal bonds	10%
<b>Municipal bonds can be tax-free</b>	<b>31%</b>
Don't know	30%
What is the main advantage that index funds have when compared to actively managed funds?	
Index funds are generally less risky in the short term	18%
<b>Index funds generally have lower fees and expenses</b>	<b>29%</b>
Index funds are generally less likely to decline in value	13%
Don't know	39%
Which is the best definition of “selling short”?	
Selling shares of a stock shortly after buying it	11%
Selling shares of a stock before it has reached its peak	17%
Selling shares of a stock at a loss	21%
<b>Selling borrowed shares of a stock</b>	<b>28%</b>
Don't know	22%
You invest \$500 to buy \$1,000 worth of stock on margin. The value of the stock drops by 50%. You sell it. Approximately how much of your original \$500 investment are you left with in the end?	
\$500	19%
\$250	32%
<b>\$0</b>	<b>23%</b>
Don't know	24%

Correct answers shown in **bold** text.

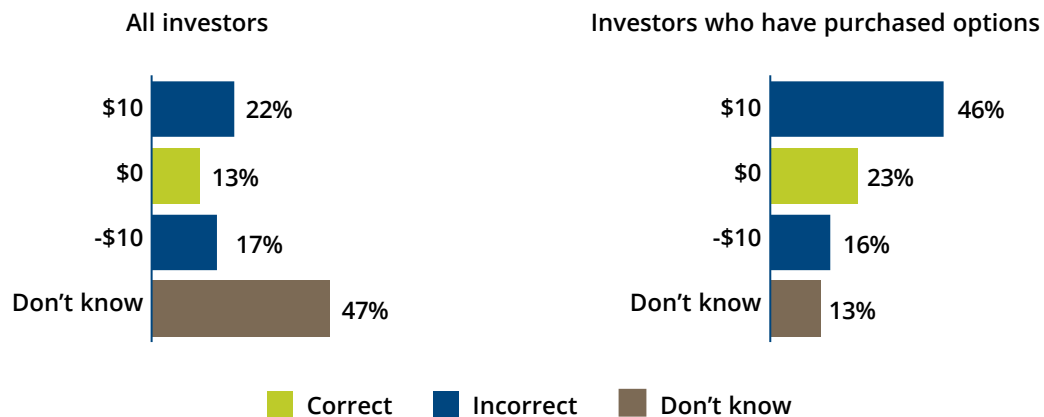
- ▶ Correct answers to individual quiz questions ranged from 73 percent for the stock definition question to 23 percent for the question about buying on margin. The margin and short selling questions received the most incorrect answers, with about half of respondents answering each incorrectly (51 percent and 49 percent, respectively). Among those who have made purchases on margin, more than three-quarters (76 percent) answered the margin question incorrectly.

**Among those who have made purchases on margin, more than three-quarters (76 percent) answered the margin question incorrectly.**

The survey also included a “bonus” question on call options, which is not counted as part of the main 10-question quiz. Only 13 percent of respondents answered the call option question correctly, and nearly half (47 percent) indicated they did not know the answer.

- ▶ Investors who have traded options were much more likely to answer incorrectly (62 percent, compared to 39 percent among all investors), illustrating the maxim that a little bit of knowledge can be dangerous.

**If you own a call option with a strike price of \$50 on a security that is priced at \$40, and the option is expiring today, which of the following is closest to the value of that option?**

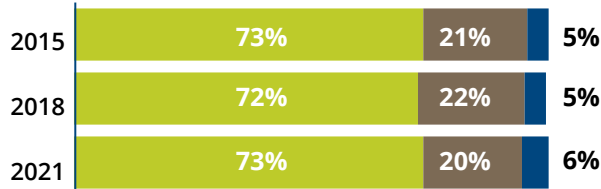


Among the ten main quiz questions, the percentage of correct and incorrect answers has for the most part remained consistent with previous waves. However, it appears that the percentage of respondents answering “don't know” has trended upwards for several of the quiz questions.

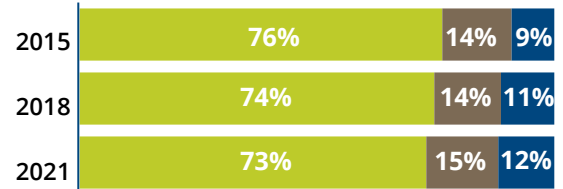
- ▶ The percentage of respondents who correctly answered the short selling question ticked up slightly from 22 percent in 2018 to 28 percent in 2021, perhaps due to the widespread coverage of short squeezes in early 2021 and their aftermath.

Quiz questions by year

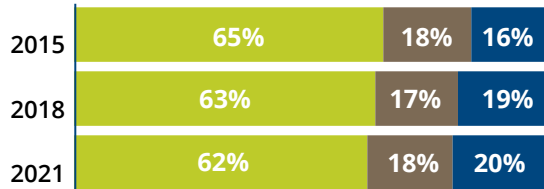
Definition of stocks



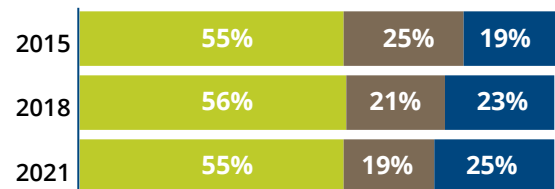
Risk and return



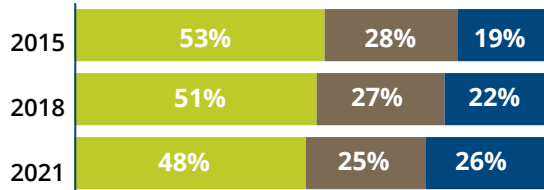
Definition of bonds



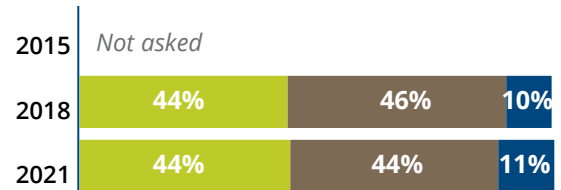
Asset class with best average return



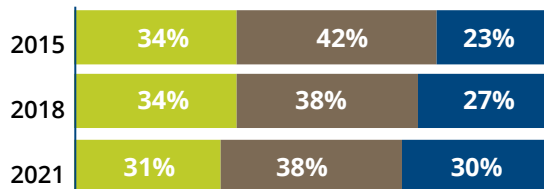
Bankruptcy



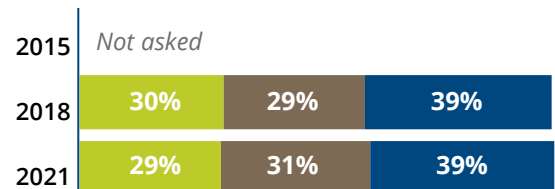
Past performance as an indicator



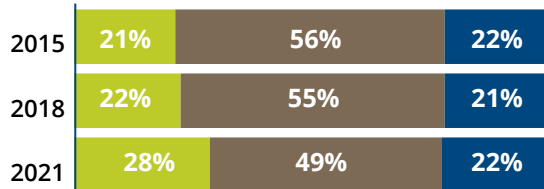
Municipal bonds vs. government bonds



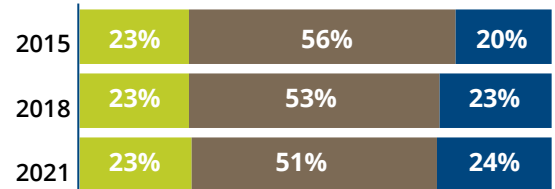
Index funds vs. actively managed funds



Definition of selling short



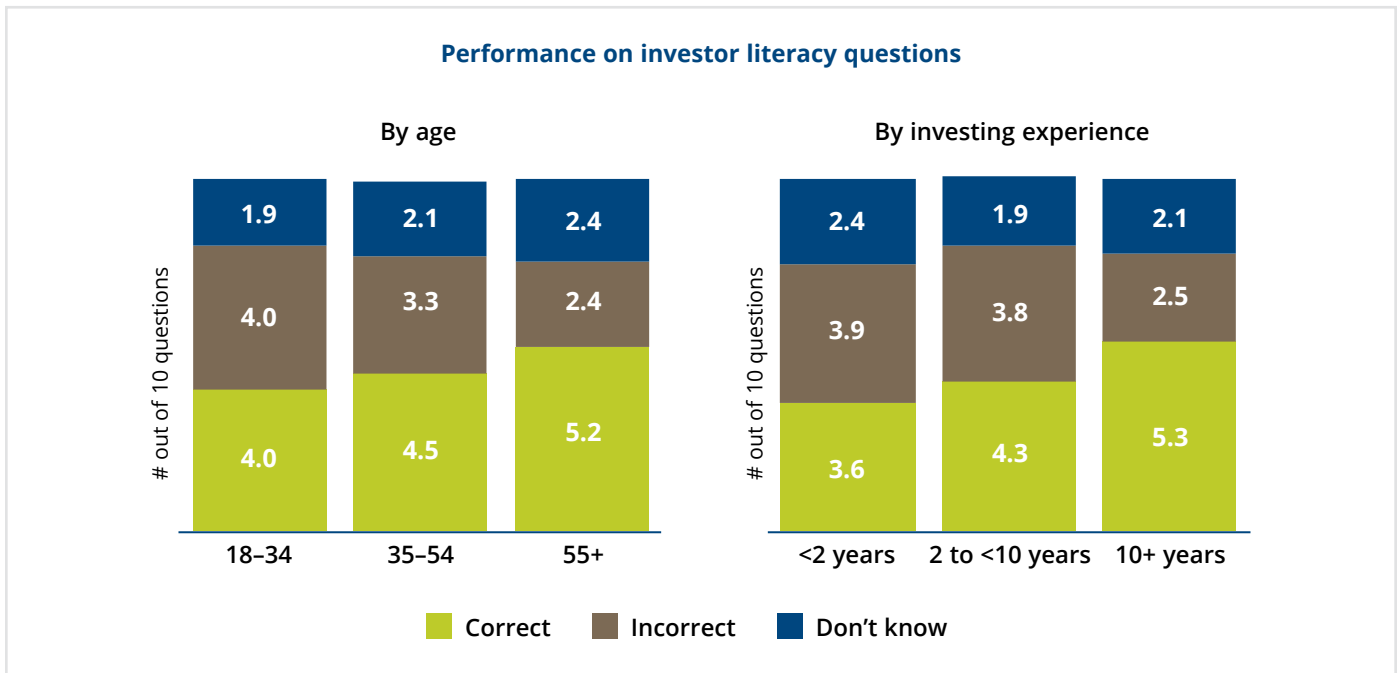
Buying on margin



Correct Incorrect Don't know

On average, respondents were able to answer 4.7 of the 10 questions correctly, unchanged from 2018.

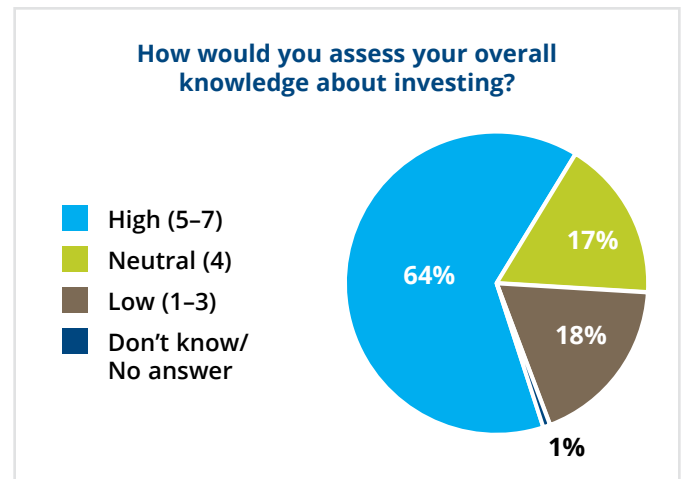
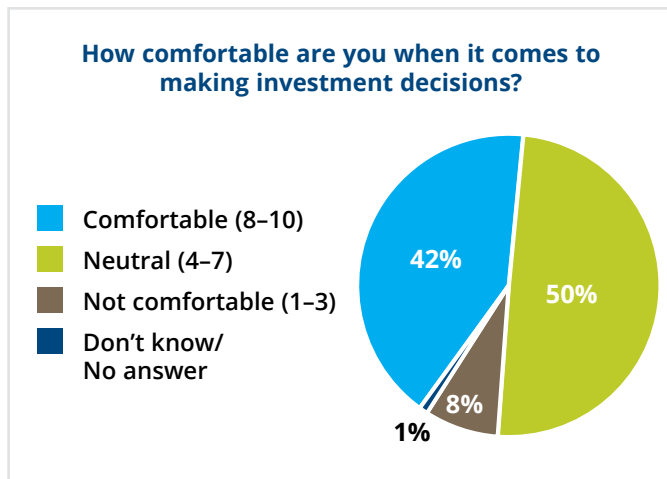
- ▶ Performance on the quiz questions was correlated with age and investing experience. Younger respondents and newer investors were less likely to answer correctly, and more likely to answer incorrectly (as opposed to indicating that they did not know the answer).
- ▶ In addition, it is noteworthy that among investors under 35 and those with less than two years' experience, the number of incorrect answers equaled or exceeded the number of correct answers, in contrast to other groups.



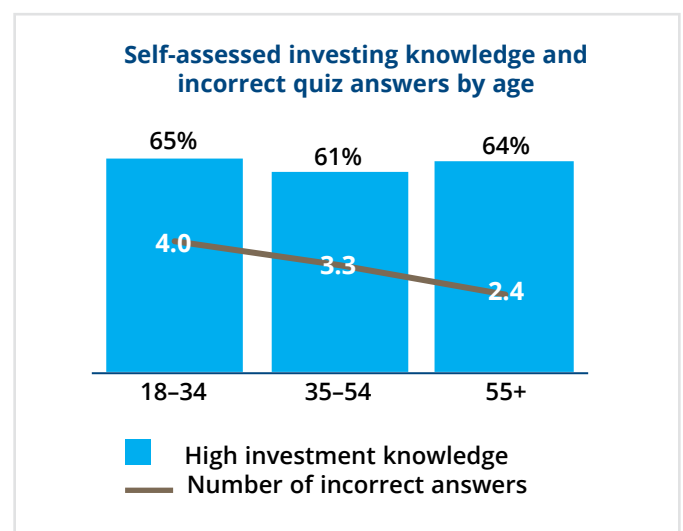
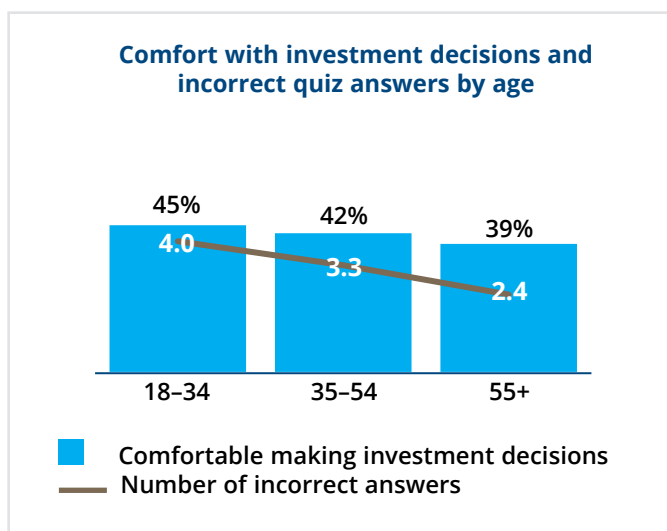
- ▶ Consistent with previous waves, men and those with higher portfolio values also tended to do better on the quiz questions.

Number out of 10 questions	Gender		Portfolio value		
	Male	Female	<\$50K	\$50K-\$250K	\$250K+
Correct	5.2	3.9	4.1	4.8	5.3
Incorrect	3.0	3.2	3.3	3.4	2.7
Don't know	1.7	2.8	2.5	1.7	1.9

More than two in five respondents indicated a high degree of comfort making investment decisions (8 to 10 on a 10-point scale), while half gave themselves neutral ratings. Investors seemed to have positively biased perceptions of their own knowledge, with almost two-thirds of respondents (64 percent) rating themselves highly (5 to 7 on a 7-point scale).



Younger respondents were slightly more likely than older respondents to feel comfortable making investment decisions, and just as likely as older respondents to rate themselves highly on investing knowledge. Considering that, as shown earlier, younger respondents provided more incorrect answers to the quiz questions (in addition to fewer correct answers), these findings suggest that many younger investors are not simply uninformed, but potentially misinformed.



Men were also more likely than women to rate themselves highly on comfort with investment decisions (49 percent versus 31 percent) and knowledge of investing (72 percent versus 52 percent). However, unlike age differences, gender differences in self-perceptions appeared to correspond to actual knowledge as demonstrated on the investing quiz.

## Conclusion

The Investor Survey component of the FINRA Investor Education Foundation's 2021 National Financial Capability Study provides updated information on investing-related topics of interest to researchers, educators, policy makers, the media, and financial industry stakeholders.

Findings reveal a new generation of younger and less experienced investors that is vastly different from older generations in their investment behaviors and attitudes. Younger investors are more likely than older investors to be investing for reasons other than long-term gains, such as social responsibility, entertainment, or social activity. They are more likely than older investors to use mobile trading apps and to engage in riskier investments such as cryptocurrencies, options, so-called "meme stocks," and margin purchases. A majority of younger investors use social media as a source of investment information.

In addition, some younger investors may be less well-equipped to take on the risks they are carrying. They perceive themselves as knowledgeable about investing, despite having both fewer correct answers and more incorrect answers on the investor knowledge quiz than those 35 and older.

As the markets evolve, it will be imperative for policy makers, regulators, and educators to rethink the tools and channels they use to educate and protect both long-time investors and the rising generation of new investors.

## Background & Methodology

In 2009, the FINRA Investor Education Foundation commissioned the first national study of the financial capability of U.S. adults. The overarching research objectives of the NFCS were to benchmark key indicators of financial capability and evaluate how these indicators vary with underlying demographic, behavioral, attitudinal, and financial literacy characteristics.

Since then, the NFCS has been conducted at three-year intervals to continue tracking core measures from previous waves, while also incorporating new questions to address timely and relevant topics in each wave.

The 2021 NFCS consists of two linked surveys, replicating the 2018 and 2015 studies:

- ▶ **State-by-State Survey:** A state-by-state online survey of 27,118 U.S. adults (roughly 500 per state, plus the District of Columbia)
- ▶ **Investor Survey:** An online survey of 2,824 U.S. adults who have investments outside of retirement accounts

The survey instruments were designed by a multidisciplinary team of researchers, policy makers, and practitioners in the financial capability field. All surveys were funded by the FINRA Investor Education Foundation and conducted by FGS Global.

This report outlines the findings of the 2021 Investor Survey administered to respondents between July and December 2021. Data are weighted to be representative of investors with non-retirement investments in terms of age and education, based on the 2021 NFCS State-by-State Survey. However, breakdowns of sub-populations may not necessarily be representative.

More information about the NFCS, including survey instruments, data sets, and detailed methodological information, can be found at [www.FINRAFoundation.org/NFCS](http://www.FINRAFoundation.org/NFCS).

## Endnotes

- 1 We also present selected findings for sub-samples (such as by age, portfolio value). In all such cases, each sub-sample consists of at least 100 respondents.
- 2 A large majority of these respondents (85 percent) also have investments in retirement accounts, though retirement investments are not specifically addressed in the Investor Survey.
- 3 The percentage of individuals with non-retirement investments is based on data from the FINRA Foundation's [2021 National Financial Capability State-by-State Survey](#).
- 4 Includes respondents who self-identified as Black/African American, Hispanic/Latino, Asian/Pacific Islander, American Indian/Alaska Native, Other, or two or more ethnicities. Additional information on ethnicity and investing will be released in a separate report.
- 5 Source: 2021 NFCS State-by-State Survey.
- 6 Note that these groups are not mutually exclusive.
- 7 Note that the survey was fielded prior to the sharp drop in cryptocurrency prices in 2022.
- 8 Additional information on investors' attitudes and behaviors related to ESG investing can be found in a March 2022 issue brief published by the FINRA Foundation and NORC at the University of Chicago titled [Investors say they can change the world, if they only knew how: Six things to know about ESG and retail investors](#).
- 9 Question added in 2021. Data for 2018 not available.

