FINRA Investor Education FOUNDATION | NORC at the University of Chicago

Consumer Insights: Money & Investing

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The Impact of Pandemic-Related Volatility on Stock Market Expectations and Participation

Despite dramatic financial market volatility in the first half of 2020 and perceptions of market unfairness, many Americans remain interested in investing.

Summary

During the first half of 2020, the COVID-19 pandemic and associated market and income volatility dramatically altered the financial well-being of many U.S. households. To measure awareness of, and reactions to, these events, the FINRA Investor Education Foundation and NORC at the University of Chicago surveyed 1,795 households from NORC's probability-based AmeriSpeak Panel©, including oversamples of African-American and Hispanic/Latino households.[1] The survey was fielded between May 29, 2020, and June 16, 2020.[2]

Respondents were grouped into one of three categories:

- Non-investors who had no investments in the stock market or accounts where they could choose how their money was invested (29 percent);
- Retirement-only investors who held investments in retirement accounts but no other types of accounts (27 percent); and
- Taxable account investors who held investments in non-retirement accounts (and may have also held investments in retirement accounts) (43 percent).

1. While this report touches on some important results related to race and ethnicity, please also see the companion report, *African-American and Hispanic/Latino Responses to Pandemic-Related Volatility in the Stock Market*.
2. Sample characteristics can be found in the Appendices.

The study found widespread awareness of stock market volatility during the first half of 2020 among investors and non-investors, but respondents made few transactions in response. Trades were not prevalent, and most households did not report strong negative emotions or high levels of pessimism about the market's ability to return to pre-pandemic levels. While some respondents reported less willingness to take financial risk in the wake of market turmoil, objective comparisons with pre-pandemic measures indicated very little change in risk tolerance for most households. Respondents reported low levels of confidence in the fairness of financial markets to the average investor, particularly among investors reporting larger losses in the market downturn in early 2020. A lack of confidence in the fairness of markets was related to decreased purchase behavior, but not with increased purchase behavior.

Background

While the scale and velocity of market disruption resulting from the COVID-19 pandemic in the first half of 2020 were remarkable, extreme market fluctuations are not new. Research on the 2008/09 financial crisis indicates that investor perceptions—including willingness to take risk and expectations for returns—were impacted early in the crisis, but changes in perceptions abated over time (Hoffman, Post, & Pennings, 2012). And research on individual investor reactions to Black Monday in 1987 supports the idea that market volatility impacts investors' perceptions, but has less impact on changes in holdings (Shiller, 1987). Given the unique events of early 2020, the current study sought to identify the relationship between pandemic-related stock market volatility and investment perceptions among households with and without investment accounts.

Widespread Awareness of the Pandemic-Related Stock Market Volatility

News of stock market volatility in early 2020 was hard to avoid. Fifty-five percent of all respondents indicated they were following the stock market at least somewhat closely in early 2020. Eighty percent of those surveyed characterized the market during this time as somewhat, very, or extremely volatile. Not surprisingly, there was a strong relationship between closely following the market and characterizing the market as volatile, with respondents who followed the market more closely characterizing the market as somewhat to extremely volatile.

Figure 1: Awareness of Pandemic-Related Market Volatility

How would you characterize the stock market since the beginning of 2020?

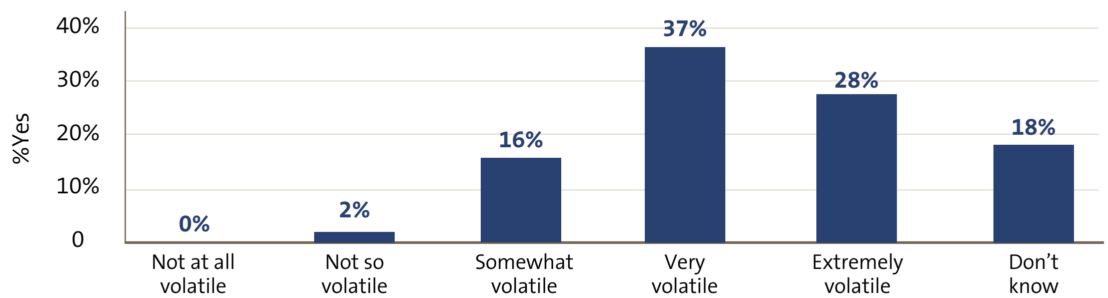
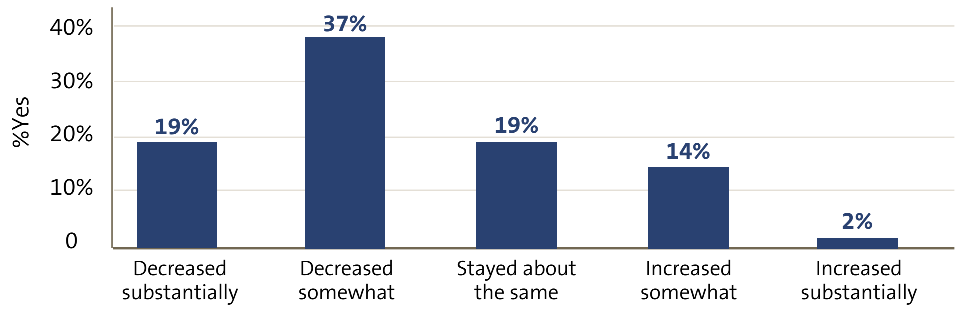


Figure 2: Investor Perceptions of the Impact of Pandemic-Related Volatility

Since the beginning of 2020, has the value of your personal investments in the stock market increased, decreased, or stayed about the same?



Respondents who followed the markets and characterized it as having greater levels of volatility also tended to have taxable investment accounts, higher levels of education, and higher income. They were also older and more frequently male. In addition, we found dramatic differences in investment knowledge for those respondents who followed the market closely and reported greater levels of volatility. For example, while 92 percent of (investor and non-investor) respondents who achieved the highest score on an investment knowledge battery followed the market, only 18 percent of those with the lowest levels of investment knowledge did so. Even among non-investors, those with higher investment knowledge scores more frequently reported following the market.

Although many respondents reported that their investments had been affected by pandemic-related market volatility, not all households were affected negatively. Nineteen percent of households with investments (in taxable and/or retirement accounts) reported their investment values had decreased substantially, while 17 percent reported a slight or substantial increase. Not surprisingly, investors who reported substantial decreases to their investments also indicated a greater awareness of market volatility. Eight percent of all investors indicated they did not know how the pandemic-related volatility had impacted their investments, suggesting that investors in this segment do not monitor their portfolios. The vast majority (80 percent) of these households owned retirement accounts only.

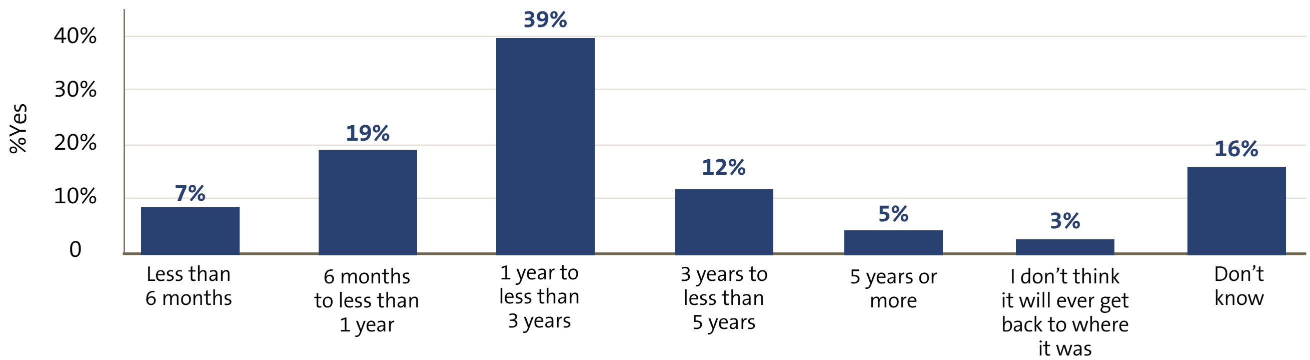
Several demographic characteristics were related to more closely following the market and characterizing it as having greater levels of volatility, including educational attainment, income, age, and race/ethnicity. However, when investor categories were examined, many of these relationships disappeared, indicating volatility awareness is related to investor status, rather than demographic characteristics.

Generally Optimistic Market Expectations

In spite of the pandemic-related volatility, respondents were generally optimistic about market recovery. The vast majority of respondents (82 percent) anticipated the stock market would return to its pre-2020 value at some point, with only three percent indicating they did not expect the market to ever recover. Almost half (47 percent) of respondents expected positive stock market returns in the coming twelve months, and a quarter (26 percent) believed the market would return to its January 2020 peak within the next twelve months.

Figure 3: Recovery Expectations

How long do you think it will take for the stock market to get back to where it was in January of 2020?



Despite negative impacts from the pandemic-related market volatility, investors (retirement-only and taxable account) had greater levels of optimism in the market compared to non-investors. Most taxable account investors expected the market to rebound in the next twelve months (57 percent), while non-investors reported the least positive expectations, with only 30 percent anticipating the market to rise in that time period. Investors (retirement-only and taxable account) whose portfolios had substantially decreased more frequently expected the market to improve in the next year; 64 percent of investors whose portfolios had substantially decreased expected markets to improve in the next year, compared to only 52 percent of investors whose portfolios had not substantially decreased.

Increased Interest in Investing

While the negative stock market returns in the first quarter of 2020 impacted many investors, interest in investing remained high. Two out of every five respondents in the study (40 percent) reported that now is a good time to invest, while only 24 percent viewed it as a bad time to invest. This finding was primarily driven by households with taxable investment accounts, half (50 percent) of whom believed now is a good time to invest (compared to 41 percent of retirement-only investors, and 24 percent of non-investors).

Although falling stock prices may lower the value of investments for those already invested in the market, it may provide attractive buying opportunities. When asked whether their interest in investing in the stock market had increased, decreased or remained the same, roughly one-fifth (21 percent) of all respondents (investors and non-investors) indicated their interest had substantially or somewhat increased since the beginning of 2020, compared to one-quarter (24 percent) who indicated their interest had decreased.

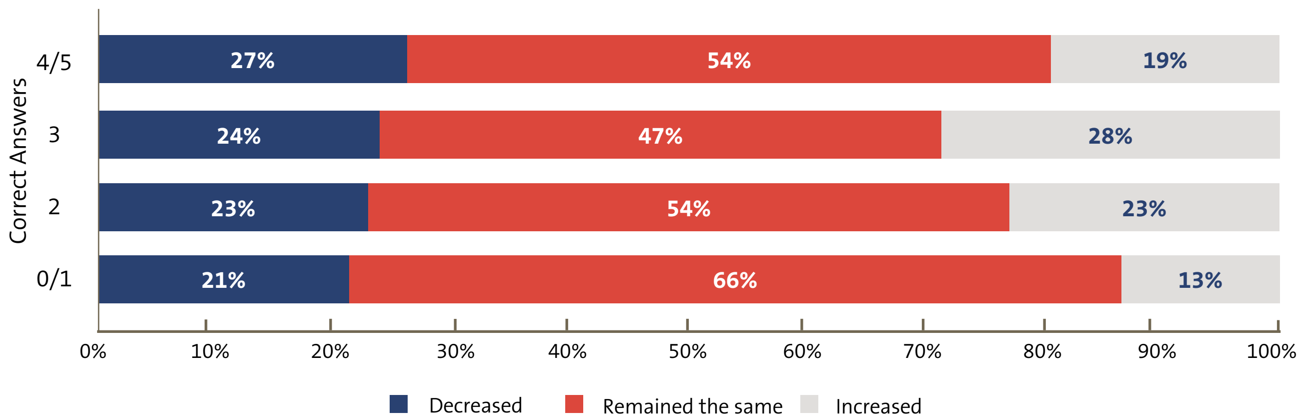
Those with increased interest in investing included:

- **Households with taxable investment accounts.** More than twice as many taxable account investors (29 percent) reported an increased interest in investing compared to retirement-only investors (13 percent). Eighteen percent of non-investors reported increased interest.
- **Younger individuals.** Interest decreased with age; twice as many respondents under the age of 30 (32 percent) reported increased interest in investing, compared to those over the age of 60 (15 percent). Respondents aged 45 – 59 had the greatest proportion of individuals reporting a decreased interest in investing (28 percent).
- **Higher income households.** Those with annual incomes over $60,000 more frequently reported an increased interest in investing.

- **Asian, African-American, and Hispanic/Latino households.** Asian respondents reported increased interest in investing at more than twice the rate of white respondents (49 percent vs. 19 percent). African-American and Hispanic/Latino respondents (both 24 percent) also reported increased interest in investing at rates greater than white respondents.
- **Employed individuals.** Employed (including self-employed) respondents more frequently (26 percent) reported an increased interest in investing compared to those not working (16 percent).
- **Have confidence in the fairness of financial markets.** Respondents with greater confidence in the fairness of financial markets more often indicated an increased interest in investing (23 percent), compared to those who perceived markets as being less fair (18 percent).
- **Less financially impacted by pandemic-related volatility.** Investors (retirement-only and taxable account) who reported substantial decreases in their portfolio values reported decreased interest at almost twice the rate of investors whose portfolios did not lose substantial value (41 percent vs. 22 percent). Conversely, investors without substantial losses more frequently reported increased interest in investing (25 percent vs. 15 percent).

Respondents with the highest levels of investment knowledge most frequently reported their interest in investing had decreased, compared to those with lower levels of investment knowledge. Increased interest in investing was greatest (28 percent) among respondents who correctly answered only three of the five investment knowledge questions. This suggests that those respondents whose interest in investing has increased the most may not have the knowledge to make good investment decisions.

Figure 4: Changes in Interest in Investing by Investment Knowledge

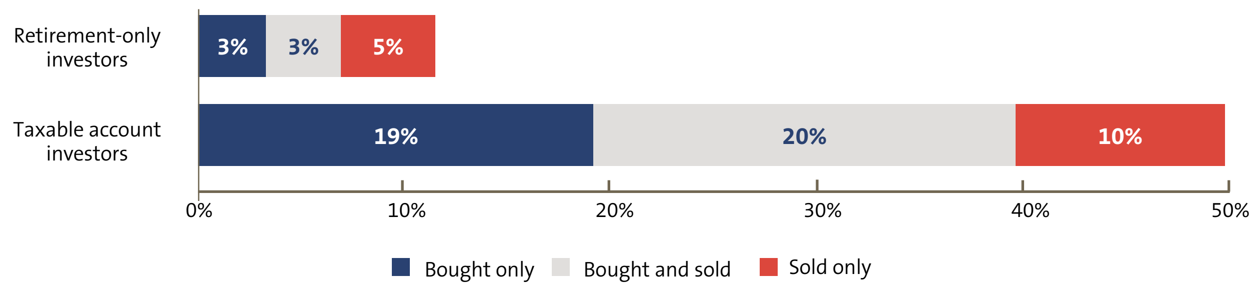


Limited Pandemic-Related Trading Activity

As a result of the pandemic-related market volatility, only about one-third (34 percent) of all investors (retirement-only and taxable account) reported making a trade of some kind (either buying or selling) in their portfolios. While most investors (retirement-only and taxable account) reported they neither sold nor bought investments, more investors (retirement-only and taxable account) bought (26 percent) than sold (21 percent), with considerably more trades in taxable accounts compared to retirement accounts.

Figure 5: Transactions as a Result of Pandemic-Related Market Volatility

As a result of the stock market volatility we've experienced since early 2020, have you done any of the following?



Of the 67 percent of investors (retirement-only and taxable) who did not make a trade, just over one-third (35 percent) considered buying investments, while only 11 percent considered selling.

Other Responses to Market Volatility

Objective and Subjective Risk Tolerance

The majority of all respondents in the sample (52 percent) reported they were willing to take average financial risks expecting to earn average returns. Thirty-six percent of respondents either somewhat or strongly agreed with the statement, "I prefer investments with little or no fluctuation in value."

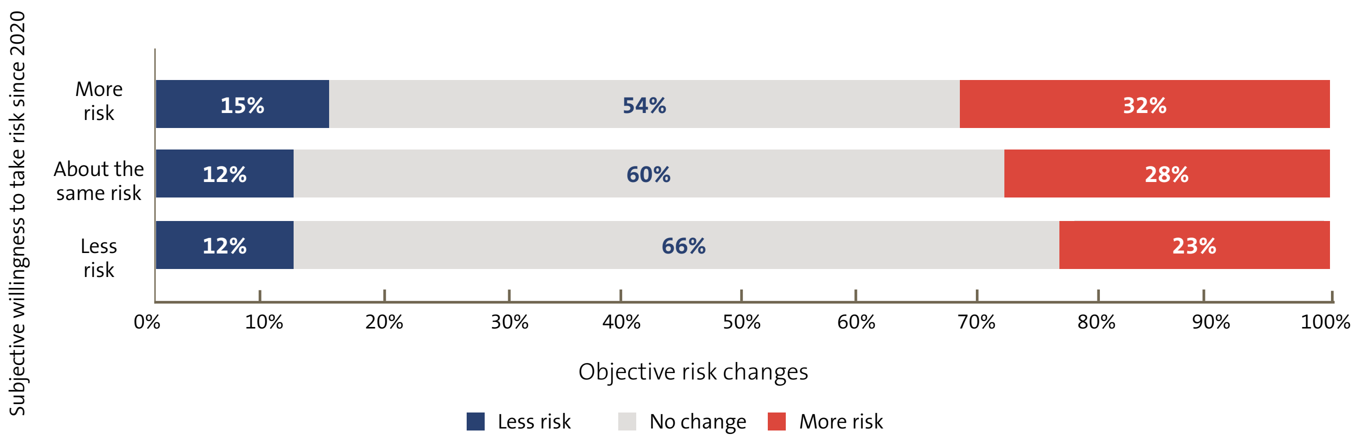
With the increased levels of market volatility in the first half of 2020, we may see changes in peoples' willingness to take financial risk, although previous research into changes in risk tolerance during times of increased market volatility suggests change may be minimal (Rabbani, Grable, Heo, Nobre & Kuzniak, 2017). When asked if they were willing to take more or less financial risk since the beginning of 2020, 42 percent of respondents reported they were willing to take less risk, while 39 percent reported that they were willing to take about the same level of risk as before the market volatility of early 2020. Although this measure provides insight in to how people believe their willingness to take financial risk has changed, it may not reflect genuine changes to risk tolerance.

To assess changes in objective risk tolerance, we compared responses to a four-item risk tolerance question from the Survey of Consumer Finances collected from our study of participants in 2018 and 2019 with responses collected in the recent survey. Negative scores indicate a decreased willingness to take risk, and positive numbers indicate an increased willingness to take risk, with larger numbers representing a greater difference between 2018/2019 and 2020. For example, a respondent who indicated willingness to take average risk (3) in 2018/2019 and no financial risk (4) in 2020 would receive a score of -1. Unlike subjective reports of changes in willingness to take financial risk, the majority of all respondents (62 percent) showed no change in their objective risk tolerance as a result of the pandemic-related market volatility. In total, a quarter of all respondents exhibited an increased risk tolerance (albeit generally by one category), and only 12 percent of respondents exhibited lower levels of risk tolerance.

Our analysis suggests that while respondents may believe their willingness to take risk decreased since the market volatility of 2020, little has changed in their objective risk tolerance.

Among respondents who reported their willingness to take financial risk was *lower* than before, 66 percent had no change to their objective risk tolerance, and almost one in four (23 percent) experienced an increase. Our analysis suggests that while respondents may believe their willingness to take risk decreased since the market volatility of 2020, little has changed in their objective risk tolerance.

Figure 6: Perceived (Subjective) vs Real (Objective) Changes in Willingness to Take Risk since the Beginning of 2020



Emotional Responses

In addition to attitudes about risk, we investigated the emotional responses, both positive and negative, to the pandemic-related market volatility of 2020. When asked to think about the stock market performance since the beginning of 2020 and how frequently they had felt any one of nine different emotions, respondents most frequently reported feeling "indifferent" (21 percent), "optimistic" (20 percent), and "fearful" (20 percent) either fairly often or very often. Emotion frequency differed among taxable account investors, retirement-only investors, and non-investors. Investors (both taxable account and retirement-only) reported feeling negative emotions such as "fearful" and "angry" more frequently than non-investors. Further, investors (both taxable account and retirement-only) whose portfolios had substantially decreased reported more than twice as many negative emotions as investors whose portfolios had not substantially decreased.

Not surprisingly, emotions were related to increased (among those with more positive emotions) and decreased (among those with more negative emotions) interest in investing. Respondents who indicated they had little confidence in the fairness of markets (see next section) reported twice as many negative emotions as those with greater perceptions of fairness.

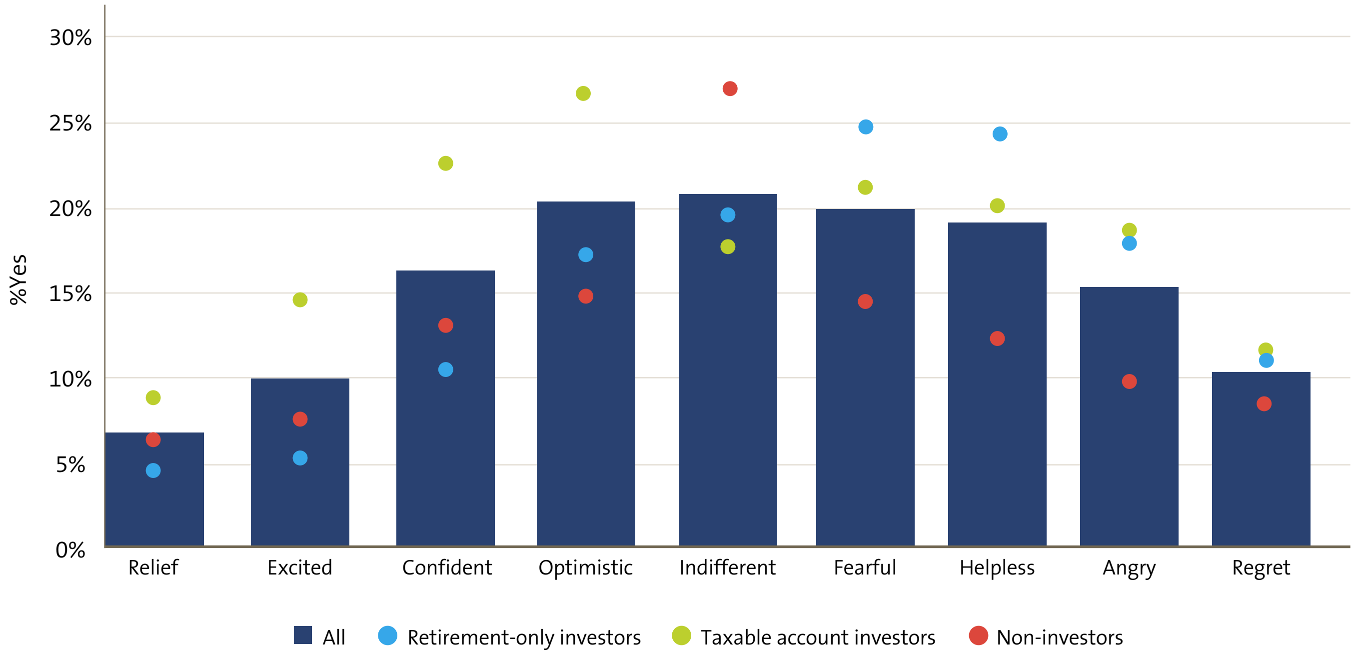
Perceptions of Fairness

Dramatic movements in stock market prices, particularly downward, and recent high-profile accusations of insider trading may leave investors and potential investors questioning the fairness of financial markets in the U.S. for the average investor. In fact, our analysis indicates low levels of confidence that U.S. financial markets are fair to the average investor. Only 11 percent of respondents indicated they were extremely or very confident that financial markets are fair to the average investor, and 33 percent were not at all or not very confident in the fairness of financial markets.

The proportion of respondents with confidence in the fairness of financial markets was slightly higher among taxable account investors compared to retirement-only investors and non-investors, but there appeared to be few other demographic or financial differences among those who believed markets are more or less fair. However, perceptions of fairness differed based on respondents' interest in investing and the extent to which investor portfolios were impacted by pandemic-related market volatility. Respondents whose interest in investing had decreased since the market volatility of 2020 more frequently reported a lack of confidence in the fairness of markets (45 percent), along with investors (retirement-only and taxable account) whose portfolios had decreased in value (41 percent).

Figure 7: Emotions Felt Often by Investors and Non-Investors

Thinking about the stock market since the beginning of 2020, how frequently have you felt the following?



Conclusion

The COVID-19 pandemic and associated market volatility have had far-reaching effects on the financial well-being of many households. To investigate the awareness of, and reactions to, recent events, the FINRA Foundation and NORC at the University of Chicago conducted a study with a nationally representative sample of U.S. households.

This study indicates that, while some investors reported substantial negative impacts to their investment portfolios in early 2020, optimism about investing and belief in the resilience of the stock market remain high, with one in five Americans indicating an increased interest in investing. This increased interest in investing may well benefit these households, but a lack of investment knowledge may result in suboptimal investment decisions. As new investors enter the stock market, it will be important to make educational opportunities readily and widely available to help them understand risks and manage market volatility.

Our research into risk tolerance found that 42 percent of respondents reported a decreased subjective willingness to take risk. Yet two-thirds of these respondents—66 percent—in fact had no change to their objective risk tolerance, suggesting that while respondents believed their willingness to take risk had decreased, their objective risk tolerance remained unchanged. This mismatch points to the possibility that many investors may not adequately assess or understand their own risk tolerance. During periods of volatility, this may weigh on the decision-making and market outlook of investors who are especially attentive to market swings.

While this report provides an overview of the investor and non-investor reactions to market volatility associated with the COVID-19 pandemic, it is critically important to understand any differential impacts among sub-segments of U.S. households. This is the topic of a companion report, *African-American and Hispanic/Latino Responses to Pandemic-Related Volatility in the Stock Market*, based on the same research study.

Appendices

Demographic Characteristics of the Sample by Investor Type

Characteristic	Total	Non-investors	Retirement-only investors	Taxable account investors
Gender (%)				
Male	51%	45%	50%	56%
Female	49%	55%	50%	44%
Age (mean; SD)	**50 (16.75)**	**47 (15.67)**	**50 (14.33)**	**52 (18.88)**
Race/ethnicity (%)				
White	64%	52%	68%	70%
Hispanic/Latino	16%	25%	14%	12%
African-American	12%	18%	12%	8%
Asian	4%	2%	3%	6%
Two or more	3%	2%	3%	3%
Other	1%	2%	1%	1%
Education (%)				
No HS diploma	7%	12%	3%	6%
HS grad/GED	23%	38%	22%	14%
Some college	30%	32%	31%	27%
BA or above	40%	17%	44%	53%
Income (%)				
Less than $35,000	26%	51%	18%	15%
$35,000–$59,999	22%	23%	20%	22%
$60,000–$99,999	29%	19%	37%	30%
$100,000 or more	23%	7%	26%	33%
Region (%)				
Northeast	18%	12%	25%	18%
Midwest	20%	20%	20%	20%
South	37%	40%	34%	36%
West	25%	27%	21%	26%
Metro (%)				
Non-metro area	17%	16%	17%	17%
Metro area	84%	84%	83%	83%
Housing (%)				
Homeowner	70%	51%	76%	79%
Renter	28%	45%	22%	20%
Other	2%	4%	2%	1%

About the Data

This study uses data collected between May 29, 2020, and June 16, 2020, using the AmeriSpeak® Panel. Funded and operated by NORC at the University of Chicago, AmeriSpeak is a probability-based panel designed to be representative of the U.S. household population. Randomly selected U.S. households are sampled using area probability and address-based sampling, with a known, non-zero probability of selection from the NORC National Sample Frame. These sampled households are then contacted by U.S. mail, telephone, and field interviewers (face to face). The panel provides sample coverage of approximately 97 percent of the U.S. household population. Those excluded from the sample include people with P.O. Box only addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings. While most AmeriSpeak households participate in surveys by web, non-internet households can participate in AmeriSpeak surveys by telephone. Households without conventional internet access but having web access via smartphones are allowed to participate in AmeriSpeak surveys by web. AmeriSpeak panelists participate in NORC studies or studies conducted by NORC on behalf of governmental agencies, academic researchers, and media and commercial organizations.

1,795 U.S. adults ages 18 and older participated in the study, including oversamples of African-American and Hispanic/Latino households. The study was fielded in English only, and was administered online. Individuals were considered eligible for the study if they were either the primary decision-maker or shared in the decision-making related to finances in the household, and completed a set of screening questions that classified them as investors (retirement-only or taxable account) or non-investors. The screener completion rate was 47.5 percent. 80.5 percent of screened respondents were eligible for the study, and 98.9 percent of eligible respondents completed the survey. The final AAPOR response rate (RR3) for the study was 9.4 percent, and the margin of error was 3.37 percentage points.

Weighting

Statistical weights for the study-eligible respondents were calculated using panel-base sampling weights to start. The base sampling weights are further adjusted to account for unknown eligibility and nonresponse among eligible housing units. The household-level nonresponse adjusted weights are then post-stratified to external counts for number of households obtained from the Current Population Survey. Then, these household-level post-stratified weights are assigned to each eligible adult in every recruited household. Furthermore, a person-level nonresponse adjustment accounts for nonresponding adults within a recruited household. Finally, panel weights are raked to external population totals associated with age, sex, education, race/Hispanic ethnicity, housing tenure, telephone status, and Census Division. The external population totals are obtained from the Current Population Survey. Study-specific base sampling weights are derived using a combination of the final panel weight and the probability of selection associated with the sampled panel member. The screener nonresponse adjusted weights for the study are adjusted via a raking ratio method to general population age 18 and older population totals associated with the following socio-demographic characteristics: age, sex, education, race/Hispanic ethnicity, and Census Division.

About FINRA and the FINRA Foundation

The Financial Industry Regulatory Authority (FINRA) is a not-for-profit organization dedicated to investor protection and market integrity. It regulates one critical part of the securities industry — brokerage firms doing business with the public in the United States. FINRA, overseen by the Securities and Exchange Commission, writes rules, examines for and enforces compliance with FINRA rules and federal securities laws, registers broker-dealer personnel and offers them education and training, and informs the investing public. In addition, FINRA provides surveillance and other regulatory services for equities and options markets, as well as trade reporting and other industry utilities. FINRA also administers a dispute resolution forum for investors and brokerage firms and their registered employees. For more information, visit *www.finra.org*.

The FINRA Investor Education Foundation supports innovative research and educational projects that give underserved Americans the knowledge, skills, and tools to make sound financial decisions throughout life. For more information about FINRA Foundation initiatives, visit *www.finrafoundation.org*.

About NORC at the University of Chicago

NORC at the University of Chicago is an independent research institution that delivers reliable data and rigorous analysis to guide critical programmatic, business, and policy decisions. Since 1941, NORC has conducted groundbreaking studies, created and applied innovative methods and tools, and advanced principles of scientific integrity and collaboration. Today, government, corporate, and nonprofit clients around the world partner with NORC to transform increasingly complex information into useful knowledge.

Acknowledgements

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References

Hoffman, A.O.I., Post, T., Pennings, J.M.E. (2012). Individual investor perceptions and behavior during the financial crisis. Journal of Banking and Finance, 37(1), pp. 60–74.

Rabbani, A.G., Grable, J.E., Heo, W., Nobre, L., Kuzniak, S. (2017). Stock market volatility and changes in financial risk tolerance during the Great Recession. Journal of Financial Counseling and Planning, 28(1), pp. 140–154.

Shiller, R.J. (1987). Investor behavior in the October 1987 stock market crash; Survey evidence. (NBER Working Paper No. 2446). Retrieved from: https://cowles.yale.edu/sites/default/files/files/pub/d08/d0853.pdf

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