

# FINANCIAL FRAUD in THE UNITED STATES

## LEARN TO PROTECT YOURSELF

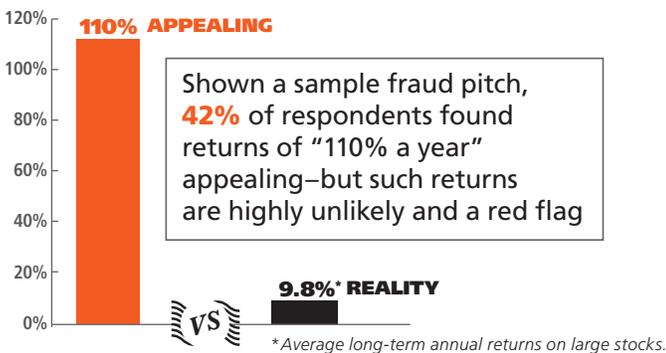


**\$50 BILLION**  
per year lost to fraud

More than  
**8 in 10**  
solicited for  
potentially fraudulent offers



Part of the problem is that many Americans have **unrealistic expectations of market returns.**



**Americans age 65 and older are more likely to be targeted** and 34% more likely to lose money once targeted than respondents in their 40s.



**BE SURE TO ASK and CHECK.**



**ASK** if the person is licensed to sell you the investment and if the investment is registered.



**CHECK** the answers with FINRA or the SEC. You can use FINRA's BrokerCheck and the SEC's EDGAR database.

Fraudsters use many tactics to get to your money.

**WHAT DO THESE OFFERS LOOK LIKE?**

**67%** of survey respondents received an email offering a large amount of money but required an initial deposit or fee.



**64%** were invited to an "educational" investment meeting that was likely a sales pitch.

**36%** received a letter stating they had won the lottery in another country.



**VISIT [SAVEANDINVEST.ORG](http://SAVEANDINVEST.ORG) FOR MORE INFORMATION.**

Source: FINRA Investor Education Foundation research report, *Financial Fraud and Fraud Susceptibility in the United States* (2013). Study and methodology available online at [www.SaveAndInvest.org](http://www.SaveAndInvest.org).

**SaveAndInvest.org**

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**FINANCIAL FRAUD AND FRAUD SUSCEPTIBILITY  
IN THE UNITED STATES**

**RESEARCH REPORT  
FROM A  
2012 NATIONAL SURVEY**

*Prepared for the*

**FINRA INVESTOR EDUCATION FOUNDATION**

*By*

**APPLIED RESEARCH & CONSULTING LLC**

**SEPTEMBER 2013**

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## EXECUTIVE SUMMARY

### 1. **The ubiquity of fraud solicitations, coupled with the inability of many people to recognize the red flags of fraud, place a large number of Americans at risk of losing money to scams—with older Americans at greatest risk.**

- *Financial fraud solicitations are commonplace.* A new survey by the FINRA Investor Education Foundation found that more than 8 in 10 respondents were solicited to participate in a potentially fraudulent offer. And 11% of all respondents lost a significant amount of money after engaging with an offer.
- *Many Americans cannot identify the classic red flags of fraud.* Even though fraud solicitations are widespread, many Americans are vulnerable because they don't know what to look for when engaging in a financial activity. For example, many lack an understanding of reasonable returns on investments, leaving them vulnerable to fraudulent pitches promising unrealistic or guaranteed returns. In fact, over 4 in 10 respondents found an annual return of 110% for an investment appealing and 43 percent found “fully guaranteed” investments to be appealing—even though annual returns over 100% are highly improbable, virtually no investment is riskless and inflated returns and guarantees are common pitches of fraudsters.
- *Older Americans are particularly vulnerable.* Americans age 65 and older are more likely to be targeted by fraudsters and more likely to lose money once targeted. Upon being solicited for fraud, older respondents were 34% more likely to lose money than respondents in their forties.

### 2. **The inability of researchers and policy makers to obtain an accurate measure of financial fraud constrains our understanding of the problem.**

- *Under-reporting is a concern.* Although 11% of respondents lost money in a likely fraudulent activity, only 4% admitted to being a victim of fraud when asked directly—an estimated under-reporting rate of over 60%.
- *Several reasons for under-reporting.* A small group of respondents who admitted to investing in a fraudulent investment, but did not report the fraud, indicated that reporting would not have made a difference, they did not know where to report it or they were too embarrassed.

## KEY FINDINGS

Fraud researchers typically find that a very small percentage of survey respondents self-report that they have been victims of financial fraud. This phenomenon is hard to reconcile with the volume of fraud seen by regulators and law enforcement agencies. This study was designed to identify and measure the potential under-reporting of financial fraud through an innovative combination of direct and indirect questioning, assess the size of the population that is exposed to fraudulent offers, and examine demographic, psychographic and behavior characteristics associated with fraud—or what is sometimes referred to as “fraud susceptibility.”

Although the term “fraud susceptibility” is used in this study, it is important to keep in mind that there is no single, agreed upon definition of the term. For the purposes of this Study, however, it is viewed broadly as the likelihood of involvement with any aspect of fraud—including being contacted to participate in a fraudulent activity, engaging with a fraudster or losing money in a fraud. From previous research, an individual's likelihood of being defrauded is related to several demographic and psychographic factors—including but not limited to age, income, the ability to spot red flags, retirement status and exposure to fraudulent pitches. In this view, fraud susceptibility is the result of a constellation of factors, many of which are examined in this study.

To measure the incidence of financial fraud, respondents were asked directly (as in past studies) whether they had ever been defrauded. But they were also asked a series of questions about their personal experience of and engagement with various types of financial offers that are known to be common fraud techniques. They were asked about their experiences with 11 different types of financial offers, all of which are known to be rife with fraud, but which were not identified as fraudulent in the questions. These offers included “419” frauds (*i.e.*, Nigerian email fraud), lottery scams, penny stock sales, boiler room calls, pyramid schemes and free lunch seminars that turn out to be sales pitches. For each of the 11 types, respondents were asked whether they had ever been solicited with such an offer, whether they had engaged with the offer (*e.g.*, made an investment, responded to the email, attended the seminar) and whether they had made an investment in response to the offer that led to the loss of all or most of the money they invested.

This research approach has yielded a richer view of the possible extent of fraud susceptibility and fraud victimhood in the population as a whole and among specific demographic and psychographic segments of the population.

- When questioned directly about whether they had ever been *asked* to put money in a fraudulent investment (defined as someone intentionally giving them false

- information to encourage the investment), 14% of respondents said yes and 9% said they were not sure. More than three quarters (78%) said no.<sup>1</sup>
- When asked directly whether they had ever *participated* in a fraudulent investment, only 4% said yes and 2% said they were not sure.
  - By contrast, 84% of respondents reported being solicited with at least one of the 11 types of potentially fraudulent offers.
    - 67% said they had received an email from another country offering a large amount of money in exchange for an initial deposit or fee.
    - 64% had been invited to an “educational” investment meeting that turned out to be a sales pitch.
    - 36% had received a letter stating they had won a lottery in another country, including a cashier’s check as an advance payment.
    - 30% had received recommendations to purchase a penny stock.
    - 24% had been cold-called by a stranger offering an investment opportunity.
    - 18% had been asked to participate in an investment that offered a commission for referring other investors.
  - At least 16% of all respondents invested money in response to at least one of the likely fraudulent offers. Eleven percent of all respondents acknowledged making an investment in response to one of these offers that turned out to be worth much less than they had been led to believe (and/or led to them losing all or most of their money in the investment). The range between 11% and 16%, arrived at through indirect questioning, is probably a much more realistic indication of the prevalence of fraud victimhood in the population than the directly self-reported 4%. And even that range may understate the problem since it is only based on 11 specific fraud scenarios and relies on respondents’ recollections. Analyses from the Financial Fraud Research Center found victimization rates ranging from 4% to 17%.<sup>2</sup>
  - Many Americans lack an understanding of reasonable returns on investments, leaving them vulnerable to fraudulent investment pitches promising unrealistic returns or guarantees of returns.
    - Nearly half of respondents found a daily rate of return of over 2% appealing.

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<sup>1</sup> Note: Percentages may not add up to 100% due to rounding.

<sup>2</sup> Financial Fraud Research Center. Scams Schemes & Swindles: A Research Review of Consumer Financial Fraud, 2011.

- Claims of achieving “typical” returns of 110% per year were found appealing by 42% of respondents.
- A majority found a statement in an investment pitch that guaranteed the safety of the principal of an investment to be appealing.
- Susceptibility to investment fraud appears to be positively associated with one’s ability and willingness to take on investment risk.
- Willingness and the ability to take investment risk are highly correlated with household income. Willingness to take on investment risk is also associated with other demographic measures, including gender, age, race and education:
  - Males are more willing to take on investment risk than females.
  - Hispanics and Asians were more likely to take on risk than Whites/Caucasians. African-Americans were not statistically more or less likely to take on risk than other races.
  - Willingness to take risk appears to be positively correlated with education and negatively correlated with age.
- Susceptibility to *affinity* fraud does not appear to be associated with risk tolerance, and strikes those of lower income and African-Americans disproportionately.
- Findings also suggest that personality traits, in particular “openness,” may be a driver of fraud susceptibility.

## IMPLICATIONS

Susceptibility to being defrauded is often clouded in both stereotypes and inconsistent or conflicting findings from fraud-related research.

Fraud susceptibility is not limited to specific demographic or psychographic segments. It is a more pervasive phenomenon than previous research has suggested. In the age of the Internet, the costs of entry for fraudulent investment enterprises are significantly lower and, at the same time, the ability to reach millions of potential victims quickly is significantly higher. By overlooking the potential pitfalls of many investment opportunities, investors (particularly those without a realistic grasp of reasonable investment promises and those with a propensity for taking risks) stand to lose substantial amounts of money to fraud.

Findings from this study suggest that effective fraud prevention must be broad in scope, fighting fraud at its sources while equipping all citizens with the capability to recognize red flags.

## **BACKGROUND**

A research review conducted by the Financial Fraud Research Center—a collaboration of the FINRA Investor Education Foundation (FINRA Foundation) and the Stanford Center on Longevity—estimated that fraud cost Americans over \$50 billion a year.<sup>3</sup> This number does not include the money allocated for its prevention or the social and emotional cost fraud imposes on Americans every year.

In 2007, the FINRA Foundation, working alongside AARP, commissioned Applied Research & Consulting (ARC) to conduct a telephone survey of investors between the ages of 55 and 64, including a supplemental sample of respondents pre-identified as prior victims of investment fraud. This survey measured susceptibility to fraud in several ways:

- gauging interest in risky classes of investments;
- measuring responses to investment sales messages;
- profiling approaches to learning about and choosing advisers and specific investments; and
- measuring relevant attitudes and self-evaluations.

The survey linked high levels of fraud susceptibility to specific behaviors and attitudes toward investing.<sup>4</sup>

More recent research commissioned for the British Columbia Securities Commission found that a lack of understanding of risk and return was also a driver of fraud susceptibility.<sup>5</sup>

In the five years since the FINRA Foundation's initial fraud survey was conducted, the financial markets and the economy have undergone crises that have put enormous economic and emotional stress on Americans of all ages, making them potentially more susceptible to fraud. Over the same period, practitioners of fraud have adapted rapidly to the rise of Internet usage among middle-aged and older Americans, using Web-based scams in addition to traditional tactics and tricks.

This FINRA Foundation study contributes to a deeper understanding of the problem of financial fraud by gauging exposure and response to traditional and Internet-based scams, and the relationships between susceptibility to fraud and personality, demographics and financial capability.

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<sup>3</sup> Financial Fraud Research Center. *Scams Schemes & Swindles: A Research Review of Consumer Financial Fraud*, 2011.

<sup>4</sup> FINRA Foundation. *Senior Fraud Risk Survey*, August 2007.

<sup>5</sup> British Columbia Securities Commission. *National Investment Fraud Vulnerability Report*, March 2012.

## RESEARCH METHODOLOGY

- This study was funded by the FINRA Investor Education Foundation and conducted by Applied Research and Consulting between September 28 and October 4, 2012.
- A core sample of 2,000 respondents 40 and older was recruited to reflect 2010 Census distribution for Census region, age, and ethnicity. In order to have adequate sample for analysis of specific ethnicities, African-Americans and Hispanics (age 40 and older) were oversampled—bringing the total sample size to 2,364. For analysis purposes, the total sample was weighted to match 2010 Census distributions for ethnicity and gender.
- Respondents were surveyed online and were drawn using non-probability quota sampling from two established online panels consisting of millions of individuals who have been recruited to join the panel, and who are offered incentives in exchange for participating in the surveys. Survey Sampling International and EMI were the two online panel companies used in this study.
- A pure probability sample of this size would have an estimated margin of error of +/- 2 percentage points calculated at a 95 percent confidence level, and the margin of error would increase somewhat for sub-groupings of the sample.
- As in all survey research, there are possible sources of error—such as coverage, nonresponse and measurement error—that could affect the results.
- Nearly two thousand respondents in the dataset had previously participated in FINRA Foundation’s 2012 National Financial Capability Study (NFCS), so the dataset from this study can be combined with data from the NFCS—allowing additional research questions to be addressed. Datasets and weights are available from the FINRA Foundation upon request.

## DETAILED FINDINGS

### FRAUD SUSCEPTIBILITY

The following is a detailed description of findings and analysis of the survey measures concerned with investment attitudes and behaviors, receptivity to investment pitches, recognition of red flags, and self-reported experience of various types of fraud.

#### *Investment Attitudes*

When asked to rate their answer to the following question, “When thinking of your financial investments, how willing are you to take risks,” respondents gave an average rating of 4.23 on a 10-point scale. One-quarter of respondents (25%) gave the lowest rating of 1, meaning “not at all willing,” compared to 3% giving a rating of 10, meaning “very willing.”

Additionally:

- Female respondents (mean risk-willingness rating 3.85) were more risk-averse than men (mean risk-willingness rating: 4.61).
- Whites (mean risk-willingness rating 4.10) were more risk-averse than surveyed Hispanics (mean risk-willingness rating 4.62) and Asians (mean risk-willingness rating 4.80). African-Americans (mean risk-willingness rating 4.43) were not statistically more or less risk-averse than other races.
- Risk-aversion appears to increase with age.
- Risk-aversion decreases among those with higher income and education.

| When thinking of your financial investments, how willing are you to take risks? <i>Mean ratings on a 10-point scale</i> |                   |                  |                    |                     |                      |                |
|---|-------------------|------------------|--------------------|---------------------|----------------------|----------------|
|   | Gender            |                  |                    | Age                 |                      |                |
|   | Total<br>(n=2364) | Male<br>(n=1164) | Female<br>(n=1200) | 40 to 49<br>(n=643) | 50 to 64<br>(n=1130) | 65+<br>(n=591) |
| <b>Mean ratings</b>   | 4.23              | 4.61             | 3.85               | 4.90                | 4.12                 | 3.72           |

| When thinking of your financial investments, how willing are you to take risks? <i>Mean ratings on a 10-point scale</i> |                   |                   |                  |                     |                  |
|---|-------------------|-------------------|------------------|---------------------|------------------|
|   | Race/Ethnicity    |                   |                  |                     |                  |
|   | Total<br>(n=2364) | White<br>(n=1638) | Black<br>(n=258) | Hispanic<br>(n=267) | Asian<br>(n=106) |
| <b>Mean ratings</b>   | 4.23              | 4.10              | 4.43             | 4.62                | 4.80             |

| When thinking of your financial investments, how willing are you to take risks?<br>Mean ratings on a 10-point scale |                   |                   |                           |                            |                             |                    |
|---|-------------------|-------------------|---------------------------|----------------------------|-----------------------------|--------------------|
|   | Income            |                   |                           |                            |                             |                    |
|   | Total<br>(n=2364) | <\$25K<br>(n=620) | \$25K-<br><50K<br>(n=684) | \$50K-<br>\$75K<br>(n=500) | \$75K-<br>\$100K<br>(n=271) | \$100K+<br>(n=288) |
| <b>Mean ratings</b>   | 4.23              | 3.00              | 4.00                      | 4.46                       | 5.17                        | 5.40               |

| When thinking of your financial investments, how willing are you to take risks?<br>Mean ratings on a 10-point scale |                   |                           |                            |                            |                         |
|---|-------------------|---------------------------|----------------------------|----------------------------|-------------------------|
|   | Education         |                           |                            |                            |                         |
|   | Total<br>(n=2364) | High<br>School<br>(n=804) | Some<br>College<br>(n=803) | College<br>Grad<br>(n=501) | Post<br>Grad<br>(n=256) |
| <b>Mean ratings</b>   | 4.23              | 3.72                      | 4.17                       | 4.65                       | 5.13                    |

In a separate question, respondents were asked how much risk they are willing to take with their investments in order to meet their retirement needs. More than half (53%) stated that they would not make riskier investments regardless of their financial situation. Four out of 10 respondents (41%) stated they would consider some riskier investments, but only to a limited extent. Only 6% stated that they would make riskier investments in order to potentially get higher returns. The 47% who are willing to consider riskier investments are again more likely to be younger, males with higher incomes and education levels. Hispanics (54% willing to consider riskier investments) and Asians (61% willing to consider riskier investments) are also more risk-tolerant than Whites (46% willing to consider riskier investments) and African-Americans (42% willing to consider riskier investments).

### ***Investment Opportunity Solicitation***

Respondents are most likely to receive solicitations to invest via the mail or the Internet.

|                                       | Method of Solicitation           |                       |             |                              |
|---------------------------------------|----------------------------------|-----------------------|-------------|------------------------------|
|                                       | In person<br>(word-of-<br>mouth) | Over the<br>telephone | In the mail | Via email or<br>the Internet |
| <b>Occasionally or<br/>Frequently</b> | 16%                              | 17%                   | 41%         | 43%                          |

Those 65 and older are more likely than those who are younger to receive solicitations in the mail (53%) and over the telephone (21%) occasionally or frequently.

### ***Investment Scam Pitches***

Respondents in the survey were asked to rate the following two statements in terms of appeal as an investment opportunity.

[PITCH 1]

*My friends informed me about a very reliable high-yield investment program I've been extremely impressed with. The program pays from 2% to 3.4% daily depending on the investment plan you choose. The minimum term of investment is 180 days, after which you can either recover the sum of your initial investment or continue further participation in the project. You can also invest on a compound basis and get huge returns. It guarantees the safety of the invested amount and even pays a 5% referral commission.*

[PITCH 2]

*We are a highly regarded and profitable Investment Management Company specializing in the foreign exchange market, futures, options, commodities, stocks, bonds, real estate, business startup, and many other investments. We promise to invest your deposits and deliver returns as stated in a professional and courteous manner. We guarantee you will not lose your principle [sic] investment with our company. We promise to deliver excellent customer service and answer any questions you may have regarding our business and your deposits will be invested*

*with us in a timely manner. We promise to give you a positive experience with our company and deliver on all promises we make and as stated on our website.*<sup>6</sup>

*"[Firm X] has created a revolutionary investment system that is incorporating short term and long term investments into an around the clock profit generating machine. [Firm X] Systems are truly unique and revolutionary." – [Employee Y], Senior Financial Analyst, [Company Z]*

These statements were taken from websites pitching questionable investments and contain many of the “red flags” associated with investment fraud — for example, a guarantee that you will not lose your money and a promise of very high returns.

Pitch 1 received an average appeal rating of 5.60 on a 10-point scale. One in 6 (17%) felt that the fraudulent investment pitch was “not at all appealing,” giving it the lowest possible score of 1, while 9% felt the same pitch was “very appealing,” rating the pitch a 10. Additionally:

- respondents between the ages of 40 and 49 (mean appeal rating 6.35) were more interested than older respondents; and
- respondents with household incomes under \$25k were less interested in the pitch (mean rating 4.88) than higher-income households.

Pitch 2 received an average appeal rating of 5.37. Nearly 1 in 5 (19%) felt the fraudulent investment pitch was “not at all appealing,” giving it the lowest possible score of 1, while 9% felt the same pitch was “very appealing,” rating the pitch a 10 on a 10-point scale. Additionally:

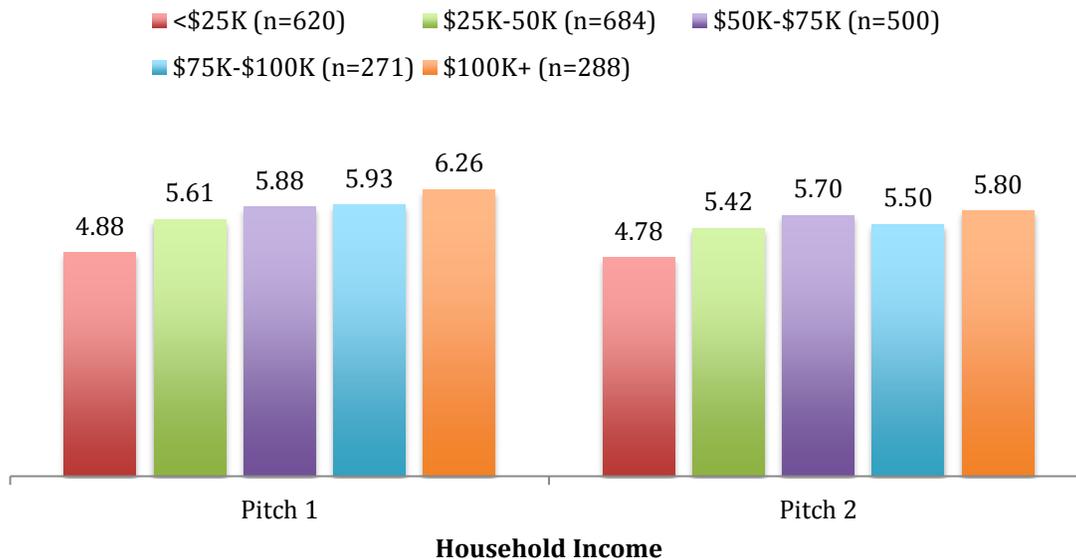
- appeal of this pitch was negatively correlated with the respondent’s age; and
- respondents with household income under \$25k were less interested in the pitch (mean rating 4.78) than higher-income households.

| Overall, how appealing do you find this potential investment opportunity/company? |                   |                     |                      |                |
|---|-------------------|---------------------|----------------------|----------------|
| Mean ratings on a 10-point scale  |                   |                     |                      |                |
|   |                   | Age                 |                      |                |
|   | Total<br>(n=2364) | 40 to 49<br>(n=643) | 50 to 64<br>(n=1130) | 65+<br>(n=591) |
| <b>Pitch 1 Appeal Mean ratings</b>  | 5.60              | 6.35                | 5.40                 | 5.16           |
| <b>Pitch 2 Appeal Mean ratings</b>  | 5.37              | 6.10                | 5.21                 | 4.88           |

<sup>6</sup> Entity names have been redacted.

**Overall, how appealing do you find this potential investment opportunity/company?**

*Mean ratings by household income*



After rating each pitch in its entirety, respondents were then asked to describe each individual sentence from the pitch as either “appealing,” “unappealing” or “neither appealing nor unappealing.”

For Pitch 1, a majority (52%) found the unrealistic red-flag statement “It guarantees the safety of the invested amount and even pays a 5% referral commission” appealing, with fewer than 1 in 6 finding that statement unappealing. It is likely that not only is this investment opportunity a scam, but the referral commission suggests that this could also be a Ponzi-style or pyramid-style scheme.

Nearly half (48%) found that the statement “the program pays from 2% to 3.4% daily depending on the investment plan you choose” appealing, despite not being credible. This suggests that a significant portion of the population does not understand what realistic returns for secure investments should be.<sup>7</sup>

<sup>7</sup> It could be argued that respondents who find the statement appealing are not taking into account the possibility that the statement could be fraudulent. However, the identification of any “red-flag” statement as appealing leaves the person susceptible to fraud.

| How appealing do you find each of the following statements?, n=2364  |           |         |             |
|--|-----------|---------|-------------|
|  | Appealing | Neutral | Unappealing |
| <b>It guarantees the safety of the invested amount and even pays a 5% referral commission.</b>   | 52%       | 32%     | 16%         |
| <b>The program pays from 2% to 3.4% daily depending on the investment plan you choose.</b>   | 48%       | 36%     | 16%         |
| <b>The minimum term of investment is 180 days, after which you can either recover the sum of your initial investment or continue further participation in the project.</b> | 43%       | 38%     | 19%         |
| <b>You can also invest on a compound basis and get huge returns.</b>   | 42%       | 40%     | 18%         |
| <b>My friends informed me about a very reliable high-yield investment program I've been extremely impressed with.</b>  | 27%       | 50%     | 23%         |

For Pitch 2, again the most appealing sentence is the one that offers a guarantee: “We guarantee you will not lose your principle [sic] investment with our company,” with 59% finding the sentence appealing. Only 15% found the sentence unappealing.

| How appealing do you find each of the following statements?, n=2364  |           |         |             |
|--|-----------|---------|-------------|
|  | Appealing | Neutral | Unappealing |
| <b>We guarantee you will not lose your principle investment with our company.</b>  | 59%       | 26%     | 15%         |
| <b>We promise to deliver excellent customer service and answer any questions you may have regarding our business and your deposits will be invested with us in a timely manner.</b>  | 49%       | 39%     | 12%         |
| <b>We promise to give you a positive experience with our company and deliver on all promises we make and as stated on our website.</b>   | 45%       | 41%     | 14%         |
| <b>We promise to invest your deposits and deliver returns as stated in a professional and courteous manner.</b>  | 43%       | 43%     | 14%         |
| <b>We are a highly regarded and profitable Investment Management Company specializing in the foreign exchange market, futures, options, commodities, stocks, bonds, real estate, business startup, and many other investments.</b> | 29%       | 51%     | 19%         |

|   |     |     |     |
|---|-----|-----|-----|
| <i>[REDACTED] has created a revolutionary investment system that is incorporating short term and long term investments into an around the clock profit generating machine. The [REDACTED] Systems are truly unique and revolutionary. "[REDACTED], Senior Financial Analyst, [REDACTED]</i> | 28% | 54% | 18% |
|---|-----|-----|-----|

To gauge this audience’s susceptibility to scarcity tactics, respondents were asked the following question: “Assume that someone you know told you about an investment opportunity, but in order to take advantage of the opportunity, you had to invest quickly, before you had a chance to investigate further.”

When presented with this hypothetical, only 5% stated that they would invest without investigating the investment opportunity. Another 17% stated that they did not know or were not sure if they would invest or not. Younger respondents were more likely to state that they would invest than older respondents.

One might think that most of the individuals who stated that they would take advantage of the investment opportunity were the most risk-tolerant. However, over a quarter (26%) of the 108 individuals who said they would invest also stated that “they would not make riskier investments regardless of my financial needs.”

**Assume that someone you know told you about an investment opportunity, but in order to take advantage of the opportunity, you had to invest quickly, before you had a chance to investigate further. Would you invest?**

|                   | Gender            |                  |                    | Age                 |                      |                |
|-------------------|-------------------|------------------|--------------------|---------------------|----------------------|----------------|
|                   | Total<br>(n=2364) | Male<br>(n=1164) | Female<br>(n=1200) | 40 to 49<br>(n=643) | 50 to 64<br>(n=1130) | 65+<br>(n=591) |
| <b>Yes</b>        | 5%                | 5%               | 4%                 | 10%                 | 3%                   | 1%             |
| <b>No</b>         | 78%               | 80%              | 76%                | 68%                 | 78%                  | 90%            |
| <b>Don’t know</b> | 17%               | 15%              | 19%                | 22%                 | 18%                  | 10%            |

### **Red-Flag Persuasion Tactics**

Similar to FINRA Foundation fraud research conducted in 2007, this survey included a list of statements that should be considered red flags in terms of investment pitches and tested the appeal of each statement.

Outperforming the Dow Jones Industrial Average was the most appealing red-flag statement (mean rating: 6.27 on a 10-point scale) followed by promises of at least 50% annual returns. Several of the statements were found highly appealing (8, 9 or 10 on a 10-point scale) by 40% or more of respondents.

| <b>Mean ratings and top three box rating of appeal on Red Flag Statements (n=2364)</b>  |  |                               |
|---|--|-------------------------------|
| <b>Red Flag Statements</b>  | <b>Appeal<br/>(Mean ratings on a<br/>10-point scale)</b> | <b>Appeal<br/>(Top 3 box)</b> |
| <b>This stock has outperformed the Dow Jones Industrial Average each year for the last 5 years.</b>                                       | 6.27   | 40%                           |
| <b>The lowest return you could possibly get on this investment is 50% annually, but most investors are making upwards of 110% a year.</b> | 6.15   | 42%                           |
| <b>There is no way to lose on this investment – it is fully guaranteed.</b>   | 6.12   | 43%                           |
| <b>This investment is for a company with excellent management and in a high growth industry.</b>  | 5.88   | 32%                           |
| <b>This investment made hundreds of people extremely wealthy.</b>   | 5.40   | 30%                           |
| <b>This is an opportunity to get in on the ground floor of a company that is about to roll out a revolutionary new technology.</b>        | 5.14   | 25%                           |

### ***Fraud Exposure Assessment***

Respondents were shown a series of 11 descriptions of potentially fraudulent financial opportunities. For each opportunity, respondents were asked whether they recalled the following:

- receiving a solicitation to invest in such an opportunity (solicited);
- placing money in such an investment or engaging with the solicitor (engaged)<sup>8</sup>; or
- losing a substantial amount of money participating in such an investment (lost money).

A complete breakdown of the Fraud Exposure Assessment with fraud descriptions can be found in Appendix A.

Email investment solicitations were the most widely recalled form of solicitation (67% recall being solicited), followed by offers for a free lunch seminar (64% recall). Free lunch seminars, however, were by far the most successful in convincing people to engage, with 32% of all respondents stating they had attended a meeting that offered a free meal and educational information for investments that turned out to be a sales pitch. Four percent of surveyed respondents stated a purchase made after such a meeting turned out to be worth much less than they were led to believe.

| <b>Levels of exposure/engagement with potentially fraudulent financial opportunities (n=2364)</b> |                  |                |                   |
|---|------------------|----------------|-------------------|
| <b>Statement sentences</b>  | <b>Solicited</b> | <b>Engaged</b> | <b>Lost Money</b> |
| <b>Email Scam</b>   | 67%              | 3%             | <1%               |
| <b>Free Lunch Sales Pitch</b>   | 64%              | 32%            | 4%                |
| <b>Lottery Scam</b>   | 36%              | 2%             | 1%                |
| <b>Penny Stock</b>  | 30%              | 5%             | 3%                |
| <b>Cold Call</b>  | 24%              | 1%             | 1%                |
| <b>Multi-level Marketing</b>  | 18%              | 2%             | 1%                |
| <b>Oil &amp; Gas</b>  | 14%              | 3%             | 2%                |
| <b>Pre-IPO</b>  | 9%               | 3%             | 1%                |
| <b>High-Yield Investment Program (HYIP)</b>   | 6%               | 1%             | 1%                |
| <b>Promissory Note Scam</b>   | 4%               | 1%             | 1%                |
| <b>Digital Currency Purchase</b>  | 3%               | 1%             | 1%                |
| <b>At least one potentially fraudulent offer</b>  | <b>84%</b>       | <b>39%</b>     | <b>11%</b>        |

<sup>8</sup> The Email scam and free lunch sales pitches did not include investment of money in order to “engage.” Engaging in the email scam involved responding to the solicitor’s email. Engaging in the free lunch seminar involved only attending the seminar. While these are risky behaviors, the respondent may not have actually ever risked losing money in a potential fraud.

Of the 11 potentially fraudulent opportunities, engagement with 9 of them included investment of money. At least 16% stated they actually invested money in at least one of these 11 potentially fraudulent opportunities.<sup>9</sup>

| Percentage engaging and investing money in a potentially fraudulent investment opportunity. (n=2364) |            |
|--|------------|
| Form of engagement   | Percentage |
| Engaged  | 39%        |
| Invested   | 16%        |

Respondents age 65 and over were more likely to be solicited (93%), more likely to engage (49%) and more likely to have lost money (16%) than younger respondents. In fact, relative to respondents in their forties, respondents age 65 and older were 34% more likely to lose money once solicited.<sup>10</sup>

Male respondents were more likely to be solicited (87%), more likely to engage (42%) and more likely to lose money (14%) in a potentially fraudulent activity than female respondents.

| Percentage of respondents who were targeted, engaged or lost money in a potentially fraudulent investment. |                |               |                 |                  |                   |             |
|--|----------------|---------------|-----------------|------------------|-------------------|-------------|
|  | Gender         |               |                 | Age              |                   |             |
|  | Total (n=2364) | Male (n=1164) | Female (n=1200) | 40 to 49 (n=643) | 50 to 64 (n=1130) | 65+ (n=591) |
| <b>Solicited</b>   | 84%            | 87%           | 81%             | 78%              | 83%               | 93%         |
| <b>Invested</b>  | 39%            | 42%           | 36%             | 31%              | 39%               | 49%         |
| <b>Lost money</b>  | 11%            | 14%           | 8%              | 10%              | 10%               | 16%         |

Likelihood to be solicited and to invest in a potentially fraudulent investment is positively correlated with household income.

<sup>9</sup> It is assumed that all respondents who admit to sending money to the email scam lost money. While only 4% admit to losing money due to a free lunch sales pitch, that is only a lower-bound estimate of the percentage who made purchases in response to such pitches.

<sup>10</sup> The likelihood of someone 40 to 49 to lose money if solicited =  $(10\%/78\%) = 12.8\%$ ; the likelihood of someone 65 or older to lose money if solicited =  $(16\%/93\%) = 17.2\%$ ; 17.2% is 34% higher than 12.8%.

| Percentage of respondents who were targeted, engaged or lost money in a potentially fraudulent investment. |          |         |                |                 |                  |         |
|--|----------|---------|----------------|-----------------|------------------|---------|
|  | Income   |         |                |                 |                  |         |
|  | Total    | <\$25K  | \$25K-<br><50K | \$50K-<br>\$75K | \$75K-<br>\$100K | \$100K+ |
|  | (n=2364) | (n=620) | (n=684)        | (n=500)         | (n=271)          | (n=288) |
| <b>Solicited</b>   | 84%      | 77%     | 83%            | 86%             | 92%              | 92%     |
| <b>Invested</b>  | 39%      | 29%     | 38%            | 43%             | 48%              | 49%     |
| <b>Lost money</b>  | 11%      | 8%      | 10%            | 12%             | 16%              | 14%     |

Respondents with higher education were more likely to be solicited, more likely to invest and more likely to lose money in a potentially fraudulent investment.

| Percentage of respondents who were targeted, engaged or lost money in a potentially fraudulent investment. |           |             |              |              |           |
|--|-----------|-------------|--------------|--------------|-----------|
|  | Education |             |              |              |           |
|  | Total     | High School | Some College | College Grad | Post Grad |
|  | (n=2364)  | (n=804)     | (n=803)      | (n=501)      | (n=256)   |
| <b>Solicited</b>   | 84%       | 76%         | 86%          | 90%          | 91%       |
| <b>Invested</b>  | 39%       | 29%         | 42%          | 44%          | 54%       |
| <b>Lost money</b>  | 11%       | 7%          | 12%          | 14%          | 17%       |

### *Financial Exploitation and Affinity Fraud*

Respondents were asked if they had ever been taken advantage of by a family member in a way that had resulted in a significant financial loss. One-in-six (16%) stated they had been.

- African-Americans (21%) are significantly more likely than other races to state they had been taken advantage of by a family member.
- Those with a household income less than \$75K are more likely to state they have been taken advantage of by a family member.

Respondents were also asked if a friend had ever taken advantage of them in a way that resulted in a significant financial loss.

- Fifteen percent overall stated this has happened to them.
- Respondents with household incomes less than \$50K are more likely to be victims (18%) than those with household income greater than \$50k (11%)

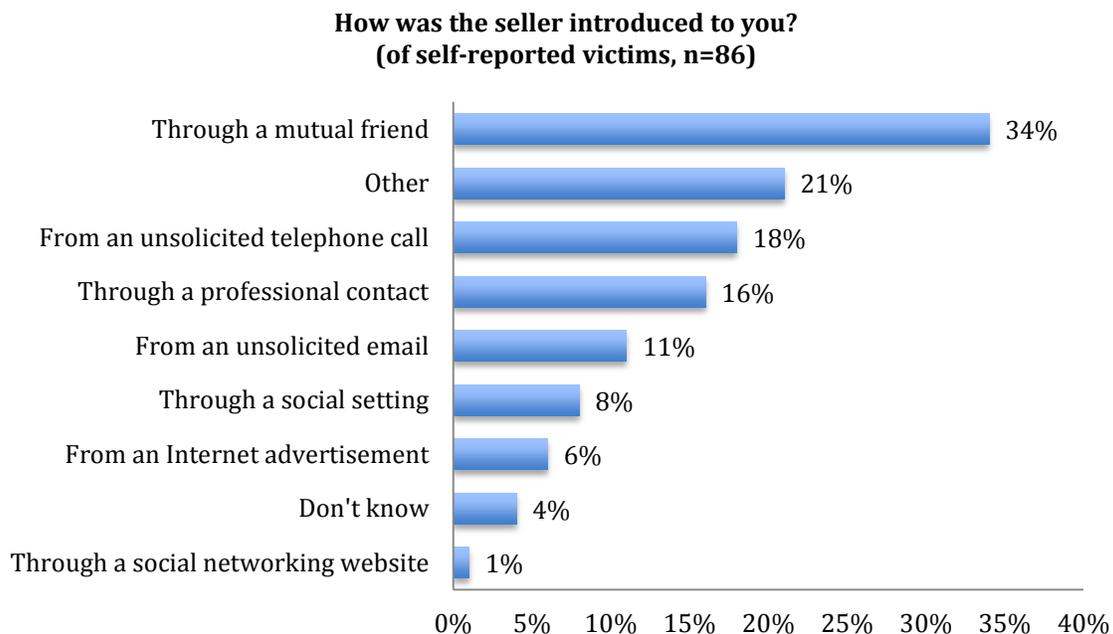
Respondents were presented with the following definition of investment fraud:

*Investors gain and lose money all the time in financial markets for a variety of legitimate reasons. However, the following question is about investment fraud – that is, where someone knowingly misleads an investor on the basis of false information or in violation of securities laws.*

*So, in this case, we mean a “fraud” occurs when someone intentionally gives you false information to encourage you to make an investment.*

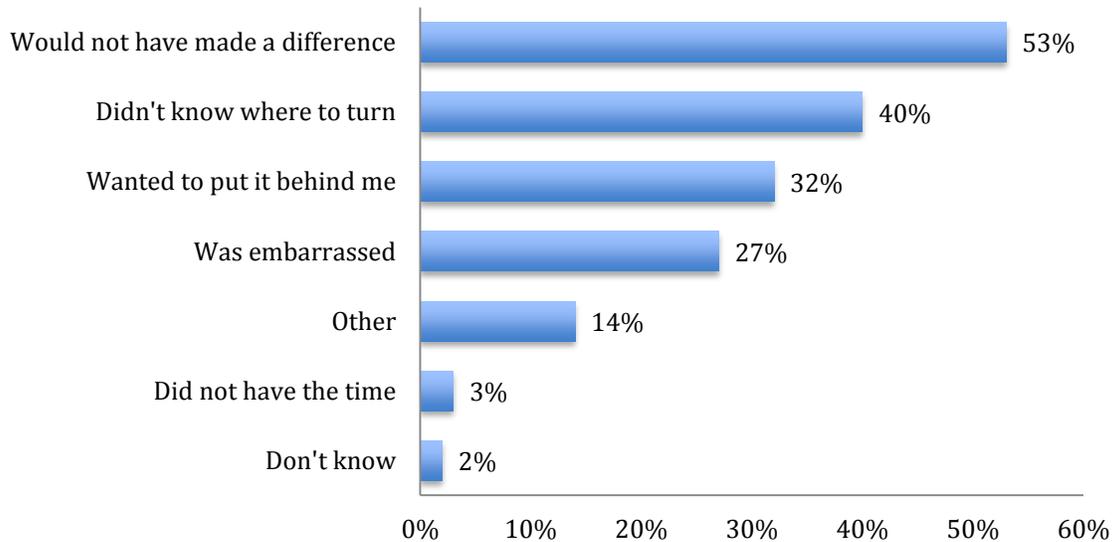
When asked if they have ever been asked to invest money in a fraudulent investment, 14% stated yes, with another 9% who were unsure (78% replied no.).

When asked if they had ever invested money in a fraudulent investment, only 4% stated yes, with another 2% being unsure (95% replied no). Among the respondents who indicated that they had participated in a fraudulent investment, 34% were introduced to the seller through a friend and 8% were introduced to the seller in a social setting.

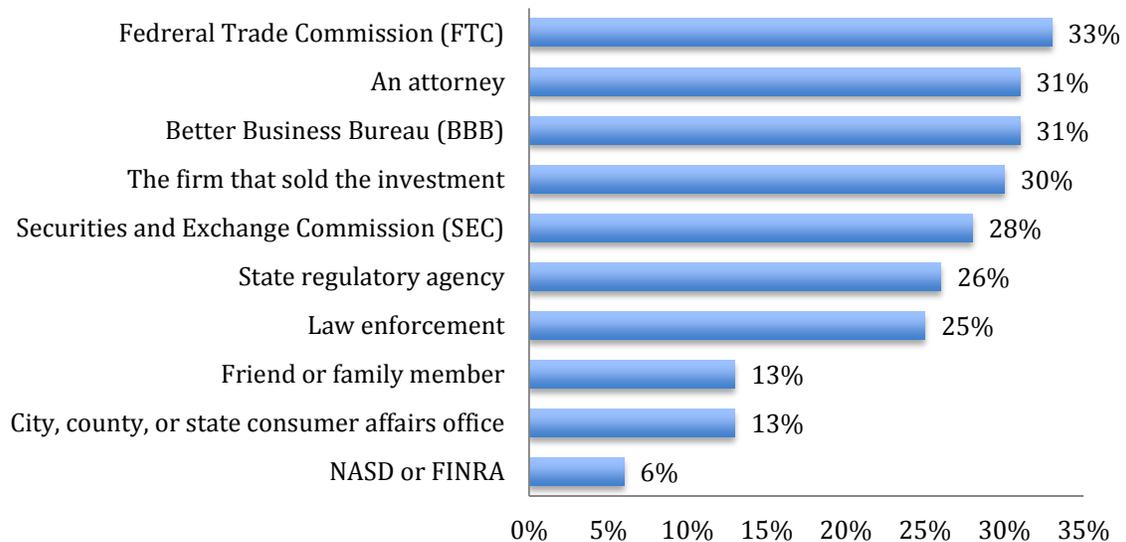


Of those who admitted to being defrauded, 45% stated they reported the fraud to someone. When asked why fraud victims did not report the fraud, the most cited reply was “would not have made a difference” (53%) followed by “didn’t know where to turn” (40%).

**Why didn't you report this?  
(of victims who did not report the fraud n=46)**



**To whom did you report it?  
(of victims who reported the fraud, n=39)**



## PERSONALITY & FRAUD SUSCEPTIBILITY

### *Personality Assessments*

The study also explored associations among personality traits and fraud victimization. To do this, all respondents in the survey were given a 10-question Big Five Inventory (BFI-10), a condensed version of a widely used tool designed to measure five dimensions of personality—extraversion, agreeableness, conscientiousness, neuroticism and openness to experience.<sup>11</sup> Definitions for each dimension follow, and the questions used to assess the dimensions can be found in Appendix A.<sup>12</sup>

- *Extraversion*. An orientation of one’s interests and energies toward the outer world of people and things rather than the inner world of subjective experience; characterized by positive affect and sociability.
- *Agreeableness*. The tendency to act in a cooperative, unselfish manner.
- *Conscientiousness*. The tendency to be organized, responsible and hardworking.
- *Neuroticism (Emotional Stability)*. Neuroticism is a chronic level of emotional instability and proneness to psychological distress. Emotional stability is predictability and consistency in emotional reactions, with absence of rapid mood changes.
- *Openness to Experience (Intellect)*. The tendency to be open to new aesthetic, cultural or intellectual experiences.

Mean scores for the respondents are as follows:

| Mean ratings of the Big Five Traits (n=2364) |                  |
|--|------------------|
| Big Five Trait                               | Mean Trait Score |
| Extraversion                                 | 3.04             |
| Agreeableness                                | 3.82             |
| Conscientiousness                            | 4.12             |
| Neuroticism                                  | 2.52             |
| Openness                                     | 3.41             |

<sup>11</sup> Rammstedt B, John O.P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*. 41:203–212.

<sup>12</sup> Definitions pulled verbatim from Almlund, M., Duckworth, A. L., Heckman, J., & Kautz, T. (2011). Personality psychology and economics. In E.A. Hanushek, S. Machin & L. Woessmann (Eds.), *Handbook of the Economics of Education* (pp. 1-181). Amsterdam: Elsevier.

### Personality and Fraud Susceptibility

Self-reported victims of investment fraud were not found to have any differentiating personality traits from non-victims of investment fraud. However, victims of affinity fraud tended to have higher neuroticism scores and higher openness scores than non-victims.

| Big Five Trait Means Scores among victims of affinity fraud and non-victims |                                |                      |
|---|--------------------------------|----------------------|
| Big Five Trait  | Affinity Fraud Victims (n=545) | Non-victims (n=1778) |
| Extraversion  | 3.06                           | 3.04                 |
| Agreeableness   | 3.73                           | 3.85                 |
| Conscientiousness   | 4.11                           | 4.13                 |
| Neuroticism   | 2.59                           | 2.49                 |
| Openness  | 3.49                           | 3.39                 |

Respondents who engaged in potentially fraudulent investments had higher extraversion ratings (3.11), conscientiousness ratings (4.17) and openness ratings (3.49). Respondents who stated they lost a significant amount of money in a potentially fraudulent investment had higher openness ratings (3.53) than those who had not invested (3.37).

| Big Five Trait Means Scores by level of engagement with a potentially fraudulent investment offer. |                    |                       |                  |                       |                    |                             |
|--|--------------------|-----------------------|------------------|-----------------------|--------------------|-----------------------------|
| Big Five Trait   | Solicited (n=1986) | Not Solicited (n=360) | Invested (n=926) | Not Invested (n=1438) | Lost Money (n=260) | Did Not Lose Money (n=2104) |
| Extraversion   | 3.05               | 3.00                  | 3.11             | 3.00                  | 3.12               | 3.03                        |
| Agreeableness  | 3.83               | 3.76                  | 3.84             | 3.81                  | 3.86               | 3.81                        |
| Conscientiousness  | 4.15               | 3.98                  | 4.17             | 4.09                  | 4.20               | 4.11                        |
| Neuroticism  | 2.48               | 2.73                  | 2.44             | 2.57                  | 2.49               | 2.52                        |
| Openness   | 3.44               | 3.29                  | 3.49             | 3.37                  | 3.53               | 3.40                        |

To provide a reference point for interpreting the personality differences between fraud victims and non-victims, as well as additional insight into how personality traits vary with demographic characteristics, the following table contains personality ratings by age and gender.

Women score higher in extraversion (3.11), agreeableness (3.76) and neuroticism (2.66), while Men have higher openness scores (4.47).

Those 65 and over score higher in extraversion (3.13) and agreeableness (3.92). Those between the ages of 40 to 49 have lower conscientiousness scores. Neuroticism appears to be negatively correlated with age, while agreeableness appears positively correlated with age.<sup>13</sup>

| Big Five Trait Means Scores among victims of affinity fraud and non-victims |                   |                  |                    |                     |                      |                |
|---|-------------------|------------------|--------------------|---------------------|----------------------|----------------|
| Big Five Trait  | Gender            |                  |                    | Age                 |                      |                |
|   | Total<br>(n=2364) | Male<br>(n=1164) | Female<br>(n=1200) | 40 to 49<br>(n=643) | 50 to 64<br>(n=1130) | 65+<br>(n=591) |
| <b>Extraversion</b>   | 3.04              | 2.97             | 3.11               | 2.99                | 3.03                 | 3.13           |
| <b>Agreeableness</b>  | 3.82              | 3.76             | 3.87               | 3.76                | 3.80                 | 3.92           |
| <b>Conscientiousness</b>  | 4.12              | 4.09             | 4.15               | 4.03                | 4.15                 | 4.17           |
| <b>Neuroticism</b>  | 2.52              | 2.37             | 2.66               | 2.67                | 2.52                 | 2.34           |
| <b>Openness</b>   | 3.41              | 3.33             | 3.43               | 3.37                | 3.38                 | 3.39           |

<sup>13</sup> Findings from academic research corroborate these correlations of age and gender differences and Big Five Traits. See Soto, C.J., John, O.P., Gosling, S.D., Potter, J. (2011). Age Differences in Personality Traits from 10 to 65: Big Five Domains and Facets in a Large Cross-Sectional Sample. *Journal of Personality and Social Psychology*, 100, 330-438.

## APPENDIX A

### SURVEY QUESTIONNAIRE

#### DEMOGRAPHICS & CLASSIFICATION QUESTIONS

# stateq) [RECORD STATE]

# A3) What is your gender?

Male..... 1  
Female ..... 2

# A3aw) What is your age?

[TERMINATE IF AGE OVER 40]

# A4) Which of the following best describes your race or ethnicity? (check all that apply)

White or Caucasian ..... 1  
Black or African-American ..... 2  
Hispanic or Latino/a ..... 3  
Asian/Pacific Islander ..... 4  
Native American or Alaska Native ..... 5  
Other ..... 6  
Prefer not to say ..... 99

|   |     |  |    |
|---|-----|--|----|
| # | A5) | What was the last year of education that you completed?  |    |
|   |     | Did not complete high school .....   | 1  |
|   |     | High school graduate – regular high school diploma .....   | 2  |
|   |     | High school graduate – GED or alternative credential.....  | 6  |
|   |     | Some college .....   | 3  |
|   |     | College graduate.....  | 4  |
|   |     | Post graduate education.....   | 5  |
|   |     | Prefer not to say .....  | 99 |
| # | A6) | What is your marital status?   |    |
|   |     | Married .....  | 1  |
|   |     | Single.....  | 2  |
|   |     | Separated .....  | 3  |
|   |     | Divorced.....  | 4  |
|   |     | Widowed/widower .....  | 5  |
|   |     | Prefer not to say .....  | 99 |
| # | A7) | Which of the following describes your current living arrangements?   |    |
|   |     | I am the only adult in the household .....   | 1  |
|   |     | I live with my spouse/partner/significant other .....  | 2  |
|   |     | I live in my parents’ home .....   | 3  |
|   |     | I live with other family, friends, or roommates .....  | 4  |
|   |     | Prefer not to say .....  | 99 |
| # | A8) | What is [your/your household’s] approximate annual income, including wages, tips, investment income, public assistance, income from retirement plans, etc.? Would you say it is... |    |
|   |     | Less than \$15,000.....  | 1  |
|   |     | At least \$15,000 but less than \$25,000.....  | 2  |
|   |     | At least \$25,000 but less than \$35,000.....  | 3  |
|   |     | At least \$35,000 but less than \$50,000.....  | 4  |
|   |     | At least \$50,000 but less than \$75,000.....  | 5  |
|   |     | At least \$75,000 but less than \$100,000.....   | 6  |
|   |     | At least \$100,000 but less than \$150,000.....  | 7  |
|   |     | \$150,000 or more .....  | 8  |
|   |     | Don’t know .....   | 98 |
|   |     | Prefer not to say .....  | 99 |

|   |      |   |    |
|---|------|---|----|
| # | A9)  | Which of the following best describes your current employment or work status?   |    |
|   |      | Self employed.....  | 1  |
|   |      | Work full-time for an employer.....   | 2  |
|   |      | Work part-time for an employer.....   | 3  |
|   |      | Homemaker.....  | 4  |
|   |      | Full-time student.....  | 5  |
|   |      | Permanently sick, disabled, or unable to work.....  | 6  |
|   |      | Unemployed or temporarily laid off.....   | 7  |
|   |      | Retired.....  | 8  |
|   |      | Prefer not to say.....  | 99 |
|   |      | [IF MARRIED/PARTNERED, ASK; OTHERWISE SKIP TO Q.A11]  |    |
| # | A10) | Which of the following best describes your [spouse/partner]’s current employment or work status?  |    |
|   |      | Self employed.....  | 1  |
|   |      | Work full-time for an employer.....   | 2  |
|   |      | Work part-time for an employer.....   | 3  |
|   |      | Homemaker.....  | 4  |
|   |      | Full-time student.....  | 5  |
|   |      | Permanently sick, disabled, or unable to work.....  | 6  |
|   |      | Unemployed or temporarily laid off.....   | 7  |
|   |      | Retired.....  | 8  |
|   |      | Prefer not to say.....  | 99 |
| # | A11) | How many children do you have who are financially dependent on [you/you or your [spouse/partner]]? Please include children not living at home, and step-children as well. |    |
|   |      | 1.....  | 1  |
|   |      | 2.....  | 2  |
|   |      | 3.....  | 3  |
|   |      | 4 or more.....  | 4  |
|   |      | No financially dependent children.....  | 5  |
|   |      | Do not have any children.....   | 6  |
|   |      | Prefer not to say.....  | 99 |

**Big Five Inventory**

# BFI) Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please indicate the extent that you agree or disagree with the following statements.

| I see myself as Someone who...     | Disagree strongly | Disagree a little | Neither agree nor disagree | Agree a little | Agree strongly |
|------------------------------------|-------------------|-------------------|----------------------------|----------------|----------------|
| 1. is reserved                     | 1                 | 2                 | 3                          | 4              | 5              |
| 2. is generally trusting           | 1                 | 2                 | 3                          | 4              | 5              |
| 3. tends to be lazy                | 1                 | 2                 | 3                          | 4              | 5              |
| 4. is relaxed, handles stress well | 1                 | 2                 | 3                          | 4              | 5              |
| 5. has few artistic interests      | 1                 | 2                 | 3                          | 4              | 5              |
| 6. is outgoing, sociable           | 1                 | 2                 | 3                          | 4              | 5              |
| 7. tends to find fault with others | 1                 | 2                 | 3                          | 4              | 5              |
| 8. does a thorough job             | 1                 | 2                 | 3                          | 4              | 5              |
| 9. gets nervous easily             | 1                 | 2                 | 3                          | 4              | 5              |
| 10. has an active imagination      | 1                 | 2                 | 3                          | 4              | 5              |

## Retirement Planning

|   |     |  |    |
|---|-----|--|----|
| # | B1) | Do you currently have savings set aside for retirement?  |    |
|   |     | Yes .....  | 1  |
|   |     | No .....   | 2  |
|   |     | Don't know .....   | 3  |
| # | B2) | Have you invested any of your retirement savings in stocks or stock mutual funds?  |    |
|   |     | Yes .....  | 1  |
|   |     | No .....   | 2  |
|   |     | Don't know .....   | 98 |
| # | B3) | Not including retirement accounts, [do you/does your household] have any investments in stocks, bonds, mutual funds, or other securities?          |    |
|   |     | Yes .....  | 1  |
|   |     | No .....   | 2  |
|   |     | Don't know .....   | 98 |
|   |     | Prefer not to say .....  | 99 |
| # | B4) | Are you worried about running out of money during your retirement?   |    |
|   |     | Yes .....  | 1  |
|   |     | No .....   | 2  |
| # | B5) | Thinking about all the possible sources of income for funding your retirement, which of the following do you expect to use? Select all that apply. |    |
|   |     | Social security income .....   | 1  |
|   |     | Pension income from your employer .....  | 2  |
|   |     | Part-time or occasional work .....   | 3  |
|   |     | Income from your or your household's investments .....   | 4  |
|   |     | Money obtained by cashing in your or your household's investments .....  | 5  |
|   |     | Money obtained by selling a home or borrowing against the value of a home .....  | 6  |
|   |     | Money from an inheritance .....  | 7  |
|   |     | Money from family or children .....  | 8  |
|   |     | Income from a spouse or partner who continues to work .....  | 9  |
|   |     | Some other source .....  | 10 |
|   |     | Don't know .....   | 98 |

|   |     |   |    |
|---|-----|---|----|
| # | J3) | Over the <u>past year</u> , would you say your household spending was less than, more than, or about equal to your households income? Please do not include the purchase of a new house or car, or other big investments you may have made. |    |
|   |     | Spending <b>less</b> than income .....  | 1  |
|   |     | Spending <b>more</b> than income .....  | 2  |
|   |     | Spending about <b>equal</b> to income.....  | 3  |
|   |     | Don't know.....   | 98 |
|   |     | Prefer not to say.....  | 99 |
| # | J4) | In a <u>typical month</u> , how difficult is it for you to cover your expenses and pay all your bills?  |    |
|   |     | Very difficult .....  | 1  |
|   |     | Somewhat difficult .....  | 2  |
|   |     | Not at all difficult .....  | 3  |
|   |     | Don't know.....   | 98 |
|   |     | Prefer not to say.....  | 99 |

**Investment Attitudes**

# C1) Overall, thinking of your assets, debts and savings, how satisfied are you with your current personal financial condition? Please use a 10-point scale, where 1 means “Not At All Satisfied” and 10 means “Extremely Satisfied.”

| Not At All Satisfied |   |   |   |   |   |   |   |   |    | Extremely Satisfied | Don't know | Prefer not to say |
|----------------------|---|---|---|---|---|---|---|---|----|---------------------|------------|-------------------|
| 1                    | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 98                  | 99         |                   |

# C2) When thinking of your financial investments, how willing are you to take risks? Please use a 10-point scale, where 1 means “Not At All Willing” and 10 means “Very Willing.”

| Not At All Willing |   |   |   |   |   |   |   |   |    | Very Willing | Don't know | Prefer not to say |
|--------------------|---|---|---|---|---|---|---|---|----|--------------|------------|-------------------|
| 1                  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 98           | 99         |                   |

# C3) In general the higher the potential return, the higher the risk of losing all or a portion of the amount invested. How much risk are you willing to take with your investments in order to meet your retirement needs?

- I would make riskier investments in order to potentially get higher returns ..... 1
- I would consider some riskier investments, but only to a limited extent ..... 2
- I would not make riskier investments regardless of my financial situation ..... 3

# C4) If a friend, family member, co-worker or member of a group you are associated with recommended an investment to you that offered high returns, which of the following best describes what you would do?

- I would invest before the opportunity disappeared.....1
- I would do more research on the investment .....2
- I would ask my financial advisor about it.....3
- I would not invest in anything that I heard about this way .....4

### Investment Scam Pitches

Please read the following statement in its entirety:

*Pitch 1*

My friends informed me about a very reliable high-yield investment program I’ve been extremely impressed with. The program pays from 2% to 3.4% daily depending on the investment plan you choose. The minimum term of investment is 180 days, after which you can either recover the sum of your initial investment or continue further participation in the project. You can also invest on a compound basis and get huge returns. It guarantees the safety of the invested amount and even pays a 5% referral commission.

# Pitch1a) Overall, how appealing do you find this potential investment opportunity? Please use a 10-point scale, where 1 means “Not At All Appealing” and 10 means “Very Appealing.”

| Not At All Appealing |   |   |   |   |   |   |   |   |    | Very Appealing | Don’t know | Prefer not to say |
|----------------------|---|---|---|---|---|---|---|---|----|----------------|------------|-------------------|
| 1                    | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 98             | 99         |                   |

# Pitch1b) Here is the same statement. Please highlight the sentences you find appealing (i.e. make you interested in the offer) by clicking once. Please highlight sentences that you find unappealing (i.e. make you less interested in the offer) by clicking twice on the sentence.

| Statement sentences   | Appealing | Neutral | Unappealing |
|---|-----------|---------|-------------|
| My friends informed me about a very reliable high-yield investment program I’ve been extremely impressed with.  | 1         | 2       | 3           |
| The program pays from 2% to 3.4% daily depending on the investment plan you choose.   | 1         | 2       | 3           |
| The minimum term of investment is 180 days, after which you can either recover the sum of your initial investment or continue further participation in the project. | 1         | 2       | 3           |
| You can also invest on a compound basis and get huge returns.   | 1         | 2       | 3           |
| It guarantees the safety of the invested amount and even pays a 5% referral commission.   | 1         | 2       | 3           |

Please read the following statement in its entirety:

*Pitch 2*

We are a highly regarded and profitable Investment Management Company specializing in the Foreign Exchange market, Futures, Options, Commodities, Stocks, Bonds, Real estate, Business startup, and many other investments. We promise to invest your deposits and deliver returns as stated in a professional and courteous manner. We guarantee you will not lose your principle investment with our company. We promise to deliver excellent customer service and answer any questions you may have regarding our business and your deposits invested with us in a timely manner. We promise to give you a positive experience with our company and deliver on all promises we make and as stated on our website.

*"Redford Investment Management Company has created a revolutionary investment system that is incorporating short term and long term investments into an around the clock profit generating machine. The Redford Systems are truly unique and revolutionary." – Richard Seguin, Senior Financial Analyst, FX Daily Tribune*

# Pitch2a) Overall, how appealing do you find this potential investment opportunity? Please use a 10-point scale, where 1 means “Not At All Appealing” and 10 means “Very Appealing.”

| Not At All Appealing |   |   |   |   |   |   |   |   |    | Very Appealing | Don't know | Prefer not to say |
|----------------------|---|---|---|---|---|---|---|---|----|----------------|------------|-------------------|
| 1                    | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 98             | 99         |                   |

# Pitch2b) Here is the same statement. Please highlight the sentences you find appealing (i.e. make you interested in the offer) by clicking once. Please highlight sentences that you find unappealing (i.e. make you less interested in the offer) by clicking twice on the sentence.

| Statement sentences   | Appealing | Neutral | Unappealing |
|---|-----------|---------|-------------|
| We are a highly regarded and profitable Investment Management Company specializing in the Foreign Exchange market, Futures, Options, Commodities, Stocks, Bonds, Real estate, Business startup, and many other investments. | 1         | 2       | 3           |
| We promise to invest your deposits and deliver returns as stated in a professional and courteous manner.  | 1         | 2       | 3           |
| We guarantee you will not lose your principle investment with our company.  | 1         | 2       | 3           |
| We promise to deliver excellent customer service and answer any   | 1         | 2       | 3           |

|  |   |   |   |
|--|---|---|---|
| questions you may have regarding our business and your deposits invested with us in a timely manner.   |   |   |   |
| We promise to give you a positive experience with our company and deliver on all promises we make and as stated on our website.  | 1 | 2 | 3 |
| <i>"Redford Investment Management Company has created a revolutionary investment system that is incorporating short term and long term investments into an around the clock profit generating machine. The Redford Systems are truly unique and revolutionary." – Richard Seguin, Senior Financial Analyst, FX Daily Tribune</i> | 1 | 2 | 3 |

### Red Flag Persuasion Tactics

Now I'd like to read some statements that are often made by brokers or financial advisors when they are describing a potential investment opportunity. After hearing each, tell me how interested you would be in the investment on a scale of 1 to 10, where 1 means that statement would NOT make you at all interested in hearing more and 10 means it would make you extremely interested in hearing more.

| [ROTATE OPTIONS] |  | Not At All Interested |   |   |   |   |   |   |   |   |    | Extremely Interested |
|------------------|--|-----------------------|---|---|---|---|---|---|---|---|----|----------------------|
|                  |  | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                      |
| Flag1)           | This investment made hundreds of people extremely wealthy  | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                      |
| Flag2)           | There is no way to lose on this investment – it is fully guaranteed  | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                      |
| Flag3)           | This is an opportunity to get in on the ground floor of a company that is about to roll out a revolutionary new technology         | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                      |
| Flag4)           | The lowest return you could possibly get on this investment is 50% annually, but most investors are making upwards of 110% a year. | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                      |
| Flag5)           | This stock has outperformed the Dow Jones Industrial Average each year for the last 5 years  | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                      |
| Flag6)           | This investment is for a company with excellent management and in a high growth industry.  | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                      |

**Fraud Exposure Assessment [RANDOMIZE BLOCKS]**

*Cold Call Scam*

|   |              |   |    |
|---|--------------|---|----|
| # | Risk1)       | Have you ever been called on the phone by someone you did not know who offered you an investment opportunity? |    |
|   |              | Yes .....   | 1  |
|   |              | No .....  | 2  |
|   |              | Don't know .....  | 98 |
|   | [IF YES ASK] |   |    |
| # | Risk1a)      | Have you ever invested money in an opportunity that was introduced to you in such a phone call?               |    |
|   |              | Yes .....   | 1  |
|   |              | No .....  | 2  |
|   |              | Don't know .....  | 98 |
|   | [IF YES ASK] |   |    |
| # | Risk1b)      | Did any of those investments turn out to be worth much less than you were led to believe?                     |    |
|   |              | Yes .....   | 1  |
|   |              | No .....  | 2  |
|   |              | Don't know .....  | 98 |

*Email Scam*

|   |              |  |    |
|---|--------------|--|----|
| # | Risk2)       | Have you ever received an email from a stranger in another country offering you a large amount of money, but first requesting that you send them a deposit or fee? |    |
|   |              | Yes .....  | 1  |
|   |              | No .....   | 2  |
|   |              | Don't know .....   | 98 |
|   | [IF YES ASK] |  |    |
| # | Risk2a)      | Have you ever replied to such an email?  |    |
|   |              | Yes .....  | 1  |
|   |              | No .....   | 2  |
|   |              | Don't know .....   | 98 |
|   | [IF YES ASK] |  |    |
| # | Risk2b)      | Did you ever send money in response to such an email?  |    |
|   |              | Yes .....  | 1  |
|   |              | No .....   | 2  |
|   |              | Don't know .....   | 98 |

*Free Lunch Seminar*

|   |        |  |  |
|---|--------|--|--|
| # | Risk3) | Have you ever been invited to a meeting that offered a free meal and “educational” information for some sort of investment (such as a vacation timeshare or an annuity product) that turned out to be a sales pitch? |  |
|---|--------|--|--|

|                             |   |    |
|-----------------------------|---|----|
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| [IF YES ASK]                |   |    |
| # Risk3a)                   | Have you ever attended such a meeting?  |    |
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| [IF YES ASK]                |   |    |
| # Risk3b)                   | Did you ever make a purchase or investment after such a meeting that turned out to be worth much less than you were led to believe? |    |
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| <i>Oil &amp; Gas Scam</i>   |   |    |
| # Risk4)                    | Have you ever been asked to participate in an investment that involved oil or gas exploration?                                      |    |
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| [IF YES ASK]                |   |    |
| # Risk4a)                   | Did you ever put money in an investment that involved oil or gas exploration?   |    |
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| [IF YES ASK]                |   |    |
| # Risk4b)                   | Did any of those investments ever turn out to be worth much less than you were led to believe?                                      |    |
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| <i>Promissory Note Scam</i> |   |    |
| # Risk5)                    | Have you ever been asked to participate in an investment that involved a promissory note?   |    |
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| [IF YES ASK]                |   |    |
| # Risk5a)                   | Did you ever put money in an investment that involved a promissory note?  |    |
|                             | Yes .....   | 1  |
|                             | No .....  | 2  |
|                             | Don't know .....  | 98 |
| [IF YES ASK]                |   |    |

|   |         |  |    |
|---|---------|--|----|
| # | Risk5b) | Did any of those investments ever turn out to be worth much less than you were led to believe? |    |
|   |         | Yes .....  | 1  |
|   |         | No .....   | 2  |
|   |         | Don't know .....   | 98 |

*Pump & Dump*

|   |        |  |    |
|---|--------|--|----|
| # | Risk6) | Have you ever received a recommendation to purchase a penny stock? |    |
|   |        | Yes .....  | 1  |
|   |        | No .....   | 2  |
|   |        | Don't know .....   | 98 |

[IF YES ASK]

|   |         |  |    |
|---|---------|--|----|
| # | Risk6a) | Did you ever purchase a recommended penny stock? |    |
|   |         | Yes .....  | 1  |
|   |         | No .....   | 2  |
|   |         | Don't know .....                                 | 98 |

[IF YES ASK]

|   |         |   |    |
|---|---------|---|----|
| # | Risk6b) | Did you ever lose all or most of your money in an investment that involved a recommended penny stock? |    |
|   |         | Yes .....   | 1  |
|   |         | No .....  | 2  |
|   |         | Don't know .....  | 98 |

*Pre-IPO Scam*

|   |        |  |    |
|---|--------|--|----|
| # | Risk7) | Have you ever been asked to invest in exclusive shares of a company before that company's initial public offering (IPO)? |    |
|   |        | Yes .....  | 1  |
|   |        | No .....   | 2  |
|   |        | Don't know .....   | 98 |

[IF YES ASK]

|   |         |  |    |
|---|---------|--|----|
| # | Risk7a) | Did you ever purchase exclusive pre-IPO shares of a company? |    |
|   |         | Yes .....  | 1  |
|   |         | No .....   | 2  |
|   |         | Don't know .....   | 98 |

[IF YES ASK]

|   |         |  |    |
|---|---------|--|----|
| # | Risk7b) | Did you ever lose all or most of your money in such an investment? |    |
|   |         | Yes .....  | 1  |
|   |         | No .....   | 2  |
|   |         | Don't know .....   | 98 |

*High-Yield Investment Program Scam*

|              |         |  |    |
|--------------|---------|--|----|
| #            | Risk8)  | Have you ever been asked to participate in an investment that guaranteed a daily rate of return of over 10%? |    |
|              |         | Yes .....  | 1  |
|              |         | No .....   | 2  |
|              |         | Don't know .....   | 98 |
| [IF YES ASK] |         |  |    |
| #            | Risk8a) | Have you ever paid money to participate in such an investment?   |    |
|              |         | Yes .....  | 1  |
|              |         | No .....   | 2  |
|              |         | Don't know .....   | 98 |
| [IF YES ASK] |         |  |    |
| #            | Risk8b) | Did any of those investments ever turn out to be worth much less than you were led to believe? .....         |    |
|              |         | No .....   | 2  |
|              |         | Don't know .....   | 98 |

*Multi-level Marketing*

|              |         |   |    |
|--------------|---------|---|----|
| #            | Risk9)  | Have you ever been asked to participate in an investment that offered a commission if you referred other people to participate in the investment? |    |
|              |         | Yes .....   | 1  |
|              |         | No .....  | 2  |
|              |         | Don't know .....  | 98 |
| [IF YES ASK] |         |   |    |
| #            | Risk9a) | Have you ever paid money to participate in such an investment?  |    |
|              |         | Yes .....   | 1  |
|              |         | No .....  | 2  |
|              |         | Don't know .....  | 98 |
| [IF YES ASK] |         |   |    |
| #            | Risk9b) | Did you or those you might have referred ever lose all or most of their money in such an investment?  |    |
|              |         | Yes .....   | 1  |
|              |         | No .....  | 2  |
|              |         | Don't know .....  | 98 |

*Digital Currency Purchase*

|              |         |  |    |
|--------------|---------|--|----|
| #            | Risk10) | Have you ever been asked to participate in an investment that required you to pay using a digital or e-currency such as Bitcoin or e-Gold? |    |
|              |         | Yes .....  | 1  |
|              |         | No .....   | 2  |
|              |         | Don't know .....   | 98 |
| [IF YES ASK] |         |  |    |

|   |          |  |    |
|---|----------|--|----|
| # | Risk10a) | Have you ever used digital or e-currency in order to participate in an investment? |    |
|   |          | Yes .....  | 1  |
|   |          | No .....   | 2  |
|   |          | Don't know .....   | 98 |

[IF YES ASK]

|   |          |   |    |
|---|----------|---|----|
| # | Risk10b) | Did any of those investments turn out to be worth much less than you were led to believe? |    |
|   |          | Yes .....   | 1  |
|   |          | No .....  | 2  |
|   |          | Don't know .....  | 98 |

*Lottery Scam*

|   |         |   |    |
|---|---------|---|----|
| # | Risk11) | Have you ever received a letter in the mail stating that you had won a lottery or sweepstakes in another country, and included a cashier's check advance payment on those winnings? |    |
|   |         | Yes .....   | 1  |
|   |         | No .....  | 2  |
|   |         | Don't know .....  | 98 |

[IF YES ASK]

|   |          |   |    |
|---|----------|---|----|
| # | Risk11a) | Have you ever deposited a check like this at your bank or credit union, and then asked to wire money to another party to pay the taxes on the winnings? |    |
|   |          | Yes .....   | 1  |
|   |          | No .....  | 2  |
|   |          | Don't know .....  | 98 |

[IF YES ASK]

|   |          |  |   |
|---|----------|--|---|
| # | Risk11b) | Did the lottery or sweepstakes winnings turn out to be much less than you were led to believe? |   |
|   |          | Yes .....  | 1 |
|   |          | No .....   | 2 |

**Affinity Fraud**

|   |            |   |    |
|---|------------|---|----|
| # | Affinity1) | Has a family member ever taken advantage of you in a way that has resulted in a significant financial loss? |    |
|   |            | Yes .....   | 1  |
|   |            | No .....  | 2  |
|   |            | Don't know .....  | 98 |

|   |            |  |    |
|---|------------|--|----|
| # | Affinity2) | Has a friend ever taken advantage of you in a way that has resulted in a significant financial loss? |    |
|   |            | Yes .....  | 1  |
|   |            | No .....   | 2  |
|   |            | Don't know .....   | 98 |

**Victimization**

Investors gain and lose money all the time in financial markets for a variety of legitimate reasons. However, the following question is about investment fraud – that is, where someone knowingly misleads an investor on the basis of false information or in violation of securities laws.

|   |       |  |    |
|---|-------|--|----|
| # | Vic1) | So, in this case, we mean a “fraud” occurs when someone intentionally gives you false information to encourage you to make an investment. Do you think you have ever <b>been asked to invest money in a fraudulent investment?</b> |    |
|   |       | Yes .....  | 1  |
|   |       | No .....   | 2  |
|   |       | Don’t know .....   | 98 |
| # | Vic2) | Do you think you have ever invested money in a fraudulent investment?  |    |
|   |       | Yes .....  | 1  |
|   |       | No .....   | 2  |
|   |       | Don’t know .....   | 98 |
|   |       | [IF “yes” to Vic2, else SKIP to INFO1]   |    |
| # | Vic3) | How was the seller introduced to you?  |    |
|   |       | Through a mutual friend .....  | 1  |
|   |       | Through a social setting such as a place of worship or school .....  | 2  |
|   |       | Through a professional contact .....   | 3  |
|   |       | From an unsolicited telephone call .....   | 4  |
|   |       | From an unsolicited email .....  | 5  |
|   |       | From an Internet advertisement (including Craigslist) .....  | 6  |
|   |       | Though a social networking website (Facebook, LinkedIn, Twitter, Google+) .....  | 7  |
|   |       | Other (please specify) _____ .....   | 8  |
|   |       | Don’t know .....   | 98 |
| # | Vic4) | Did you report this to anyone?   |    |
|   |       | Yes .....  | 1  |
|   |       | No .....   | 2  |
|   |       | Don’t know .....   | 98 |
|   |       | [IF “no” to Vic4, else SKIP to INFO1]  |    |
| # | Vic5) | Why didn’t you report this?  |    |
|   |       | Didn’t know where to turn .....  | 1  |
|   |       | Would not have made a difference .....   | 2  |
|   |       | Did not have the time .....  | 3  |
|   |       | Wanted to put it behind me .....   | 4  |
|   |       | Was embarrassed .....  | 5  |
|   |       | Other (Please specify) _____ .....   | 6  |
|   |       | Don’t know .....   | 98 |
| # | Vic6) | To whom did you report it?   |    |
|   |       | The securities firm that sold the investment .....   | 1  |
|   |       | The city, county or state Consumer Affairs office .....  | 2  |

|  |    |
|--|----|
| NASD or FINRA.....                       | 3  |
| State regulatory agency .....            | 4  |
| Securities and Exchange Commission ..... | 5  |
| Police.....                              | 6  |
| FBI.....                                 | 7  |
| The Attorney General .....               | 8  |
| Federal Trade Commission.....            | 9  |
| Better Business Bureau .....             | 10 |
| Friend or family member .....            | 11 |
| An attorney .....                        | 12 |
| Other.....                               | 13 |

**Investor Information Resources**

|   |        |   |    |
|---|--------|---|----|
| # | Info1) | People use many sources of information when they make financial decisions. Please think of the last time you made a major investment decision and the sources of information you used. Before you made that investment decision, did you: [ACCEPT MULTIPLE] |    |
|   |        | Consult a financial planner or an accountant .....  | 1  |
|   |        | Consult a stock broker.....   | 2  |
|   |        | Read investment books or magazines .....  | 3  |
|   |        | Go online and search for information about the investment .....   | 4  |
|   |        | Read materials you received in the mail .....   | 5  |
|   |        | Consider information given to you over the phone by a person that you may not have previously known.....  | 6  |
|   |        | Watch a television program.....   | 7  |
|   |        | Listen to a radio program .....   | 8  |
|   |        | Go to a free investment seminar.....  | 9  |
|   |        | Rely on tips from family members, friends, business associates or church members .....  | 10 |
|   |        | Read unsolicited email .....  | 11 |
| # | Info2) | Which of the following agencies do you think insures consumers against losses in the stock market. Please select all that apply. [ROTATE SELECTIONS][ACCEPT MULTIPLE]   |    |
|   |        | The Federal Deposit Insurance Corporation.....  | 1  |
|   |        | The Financial Industry Regulatory Authority .....   | 2  |
|   |        | The Securities and Exchange Commission .....  | 3  |
|   |        | The Securities Investor Protection Corporation .....  | 4  |
|   |        | All of the above .....  | 5  |
|   |        | None of the above .....   | 6  |
|   |        | Don't know/not sure.....  | 98 |
| # | Info3) | As best you know, are all claims made in advertisements for any consumer product that appear in newspapers or on television reviewed and approved by a government agency?   |    |
|   |        | Yes .....   | 1  |

|   |        |   |    |
|---|--------|---|----|
|   |        | No .....  | 2  |
|   |        | Don't know .....  | 98 |
| # | Info4) | How many credit cards do you have? Please include store and gas station credit cards but NOT debit cards. |    |
|   |        | 1 .....   | 1  |
|   |        | 2-3 .....   | 2  |
|   |        | 4-8 .....   | 3  |
|   |        | 9-12 .....  | 4  |
|   |        | 13-20 .....   | 5  |
|   |        | More than 20 .....  | 6  |
|   |        | No credit cards .....   | 7  |
|   |        | Don't know .....  | 98 |
|   |        | Prefer not to say .....   | 99 |
| # | Info5) | Are you signed up on the Do Not Call list?  |    |
|   |        | Yes .....   | 1  |
|   |        | No .....  | 2  |
|   |        | Don't know .....  | 98 |