# UnderStandingAmericaStudy 

UAS 120: FINANCIAL PRODUCTS AND INVESTMENT RETURNS


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## 1 INTRODUCTION

This UAS panel survey, titled "UAS120: Financial Products And Investment Returns" asks respondents about investments. This survey is no longer in the field. Respondents were paid $\$ 13$ to complete the survey.

### 1.1 Topics

This survey contains questions (among others) on the following topics: Financial Literacy, Subjective Expectations. A complete survey topic categorization for the UAS can be found here,

### 1.2 Experiments

This survey includes experiment(s) of the following type(s): Auxiliary Randomization. Please refer to explanatory comments in the Routing section for detailed information. A complete survey experiment categorization for the UAS can be found here.

### 1.3 Citation

Each publication, press release or other document that cites results from this survey must include an acknowledgment of UAS as the data source and a disclaimer such as, 'The project described in this paper relies on data from survey(s) administered by the Understanding America Study, which is maintained by the Center for Economic and Social Research (CESR) at the University of Southern California. The content of this paper is solely the responsibility of the authors and does not necessarily represent the official views of USC or UAS.' For any questions or more information about the UAS, contact Tania Gutsche, Project and Panel Manager, Center for Economic and Social Research, University of Southern California, at tgutsche@usc.edu.

## 2 SURVEY RESPONSE AND DATA

### 2.1 Sample selection and response rate

The sample selection for this survey was:
All active English speaking respondents from the nationally representative sample who participated in UAS121 and not in UAS117.

As such, this survey was made available to 411 UAS participants. Of those 411 participants, 107 completed the survey and are counted as respondents. Of those who are not counted as respondents, 21 started the survey without completing and 283 did not start the survey. The overall response rate was $26.03 \%$.

Note: We are unable to provide sample weights for a small number of UAS members (see the Sample weighting section below for details). If they completed the survey, these members are included in the data set with a weight of zero, but accounted for in the computation of total sample size and survey response rate.\%.

The detailed survey response rate is as follows:

| UAS120 - Response Overview |  |
| :--- | ---: |
| Size of selected sample | 411 |
| Completed the survey | 107 |
| Started but did not complete the survey | 21 |
| Did not start the survey | 283 |
| Response rate | $26.03 \%$ |

### 2.2 Timings

The survey took respondents an average of 18 minutes, and the full distribution of survey response times is available in the figure below. Times per question are available upon request.

Distribution of Respondents' Survey Response Times


### 2.3 Weighting

Weights are not (yet) available for this survey. Please contact UAS staff with any questions.

## 3 STANDARD VARIABLES

Each Understanding America Study data contains a series of standard variables, consisting of individual, household and sample identifiers, language indicator, time stamps and a rating by the respondent of how much he or she liked the survey:

- uasid: the identifier of the respondent. This identifier is assigned to a respondent at recruitment and stays with the respondent throughout each and every survey he/she participates in. When analyzing data from multiple surveys, the 'uasid' can be used to merge data sets.
- uashhid: the household identifier of the respondent. Every member is assigned a household identifier, stored in the variable 'uashhid'. For the primary respondent this identifier equals his or her 'uasid'. All other eligible members of the primary respondent's household (everyone who is 18 or older in the household) who become UAS respondents receive the 'uasid' of the primary respondent as their household identifier. The identifier 'uashhid' remains constant over time for all respondents. Thus it is always possible to find the original UAS household of an UAS panel member (even after they, for example, have moved out to form another household).
- survhhid: uniquely identifies the household a UAS panel member belongs to in a given survey. For instance, if the primary respondent and his/her spouse are both UAS members at the time of a given survey, they both receive the same 'survhhid' identifier for that survey. If they subsequently split, they receive two different 'survhhid' in subsequent surveys. They, however, always share the same 'uashhid'. The identifier 'survhhid' is set to missing (.) if no other household members are UAS panel members at the time of the survey. Since individuals can answer the same survey at different points in time (which can be relatively far apart if the survey is kept in the field for a prolonged time), it may be possible that, within the same data set, household members have different 'survhhid' reflecting different household compositions at the time they answered the survey. For instance, suppose that the primary respondent and his/her spouse are both UAS members. If the primary respondent answers the survey when he/she is living with the spouse, but the spouse answers the survey when the couple has split, they receive different 'survhhid'. Hence, the variable 'survhhid' identifies household membership of UAS panel members, at the time the respondent answers the survey. Note: in the My Household survey 'survhhid' is set to unknown (.u) for respondents who last participated in the My Household survey prior to January 21, 2015.
- uasmembers: is the number of other household members who are also UAS panel members at the time of the survey. Since individuals can answer the same survey at different points in time (which can be relatively far apart is the survey is kept in the field for a prolonged time), it may be possible that, within the same data set, the primary respondent of a household has a value of ' 0 ', whereas the second UAS household respondent has a value of ' 1 '. Therefore 'uasmembers' should be interpreted as the
number of household and UAS panel members at the time the respondent answers the survey. Note: in the My Household survey 'uasmembers' is set to unknown (.u) for respondents who last participated in the My Household survey prior to January 21, 2015.
- sampleframe: indicates the sampling frame from which the household of the respondent was recruited. All UAS recruitment is done through address based sampling (ABS) in which samples are acquired based on postal records. Currently, the variable 'sampleframe' takes on four values reflecting four distinct sample frames used by the UAS over the year (in future data sets the number of sample frames used for recruitment may increase if additional specific populations are targeted in future recruitment batches):

1. U.S. National Territory: recruited through ABS within the entire U.S.
2. Areas high concentration Nat Ame: recruited through ABS in areas with a high concentration of Native Americans in the zip-code. Within these batches, individuals who are not Native Americans are not invited to join the UAS.
3. Los Angeles County: recruited through ABS within Los Angeles County.
4. California: recruited through ABS within California.

Note: prior to March 6, 2024 this variable was called sampletype and had the following value labels for the above list in UAS data sets:

1. Nationally Representative Sample: recruited through ABS within the entire U.S.
2. Native Americans: recruited through ABS in areas with a high concentration of Native Americans. Within these batches, individuals who are not Native Americans are not invited to join the UAS.
3. LA County: recruited through ABS within Los Angeles County.
4. California: recruited through $A B S$ within California.

- batch: indicates the batch from which the respondent was recruited. Currently, this variable takes the following values (in future data sets the number of batches may increase as new recruitment batches are added to the UAS):

1. ASDE 2014/01
2. ASDE 2014/01
3. ASDE 2014/01
4. Public records 2015/05
5. MSG 2015/07
6. MSG 2016/01
7. MSG 2016/01
8. MSG 2016/01
9. MSG 2016/02
10. MSG 2016/03
11. MSG 2016/04
12. MSG 2016/05
13. MSG 2016/08
14. MSG 2017/03
15. MSG 2017/11
16. MSG 2018/02
17. MSG 2018/08
18. MSG 2019/04
19. MSG 2019/05
20. MSG 2019/11
21. MSG 2020/08
22. MSG 2020/10
23. MSG 2021/02
24. MSG 2021/08
25. MSG 2021/08
26. MSG 2022/02
27. MSG 2022/02
28. MSG 2022/08
29. MSG 2022/11
30. MSG 2022/11
31. MSG 2023/01
32. MSG 2023/06
33. MSG 2023/09
34. MSG 2023/10

Note: prior to March 6, 2024 this variable had the following value labels for the above list in UAS data sets:

1. ASDE 2014/01 Nat.Rep.
2. ASDE 2014/01 Native Am.
3. ASDE 2014/11 Native Am.
4. LA County 2015/05 List Sample
5. MSG 2015/07 Nat.Rep.
6. MSG 2016/01 Nat.Rep. Batch 2
7. MSG 2016/01 Nat.Rep. Batch 3
8. MSG 2016/01 Nat.Rep. Batch 4
9. MSG 2016/02 Nat.Rep. Batch 5
10. MSG 2016/03 Nat.Rep. Batch 6
11. MSG 2016/04 Nat.Rep. Batch 7
12. MSG 2016/05 Nat.Rep. Batch 8
13. MSG 2016/08 LA County Batch 2
14. MSG 2017/03 LA County Batch 3
15. MSG 2017/11 California Batch 1
16. MSG 2018/02 California Batch 2
17. MSG 2018/08 Nat.Rep. Batch 9
18. MSG 2019/04 LA County Batch 4
19. MSG 2019/05 LA County Batch 5
20. MSG 2019/11 Nat. Rep. Batch 10
21. MSG 2020/08 Nat. Rep. Batch 11
22. MSG 2020/10 Nat. Rep. Batch 12
23. MSG 2021/02 Nat. Rep. Batch 13
24. MSG 2021/08 Nat. Rep. Batch 15
25. MSG 2021/08 Nat. Rep. Batch 16
26. MSG 2022/02 Nat. Rep. Batch 17 (priority)
27. MSG 2022/02 Nat. Rep. Batch 17 (regular)
28. MSG 2022/08 Nat. Rep. Batch 18
29. MSG 2022/11 LA County Batch 6
30. MSG 2022/11 Nat. Rep. Batch 20
31. MSG 2023/01 Nat. Rep. Batch 21
32. MSG 2023/06 Nat. Rep. Batch 22
33. MSG 2023-09 Native Am. Batch 3
34. MSG 2023-10 Nat. Rep. Batch 23

- primary_respondent: indicates if the respondent was the first person within the household (i.e. to become a member or whether $\mathrm{s} / \mathrm{he}$ was added as a subsequent member. A household in this regard is broadly defined as anyone living together with the primary respondent. That is, a household comprises individuals who live together, e.g. as part of a family relationship (like a spouse/child/parent) or in context of some other relationship (like a roommate or tenant).
- hardware: indicates whether the respondent ever received hardware or not. Note: this variable should not be used to determine whether a respondent received hardware at a given point in time and/or whether s/he used the hardware to participate in a survey. Rather, it indicates whether hardware was ever provided:

1. None
2. Tablet (includes Internet)

- language: the language in which the survey was conducted. This variable takes a value of 1 for English and a value of 2 for Spanish.
- start_date (start_year, start_month, start_day, start_hour, start_min, start_sec): indicates the time at which the respondent started the survey.
- end_date (end_year, end_month, end_day, end_hour, end_min, end_sec): indicates the time at which the respondent completed the survey.
- Cs_001: indicates how interesting the respondent found the survey.


## 4 BACKGROUND DEMOGRAPHICS

Every UAS survey data set includes demographic variables, which provide background information about the respondent and his/her household. Demographic information such as age, ethnicity, education, marital status, work status, state of residence, family structure is elicited every quarter through the "My Household" survey. The demographic variables provided with each survey are taken from the most recent 'MyHousehold' survey answered by the respondent. If at the time of a survey, the information in "My Household" is more than three months old, a respondent is required to check and update his or her information before being able to take the survey.

The following variables are available in each survey data set:
gender: the gender of the respondent.
dateofbirth_year: the year of birth of the respondent.

- age: the age of the respondent at the start of the survey.
- agerange: if the respondent's age cannot be calculate due to missing information, 'agerange' indicates the approximate age. Should a value for both the 'age' and 'agerange' be present, then 'age' takes precedence over 'agerange'.
- citizenus: indicates whether the respondent is a U.S. citizen.
- bornus: indicates whether the respondent was born in the U.S.
- stateborn: indicates the state in which the respondent was born. This is set to missing (.) if the respondent was not born in the U.S.
- countryborn: indicates the country in which the respondent was born. This is set to missing (.) if the respondent was born in the U.S.
- countryborn_other: indicates the country of birth if that country is not on the drop down list of countries shown to the respondent'.
- statereside: the state in which the respondent is living.
- immigration_status: indicates whether the respondent is an immigrant. It takes one of the following values: 0 Non-immigrant, 1 First generation immigrant (immigrant who migrated to the U.S), 2 Second generation immigrant (U.S.-born children of at least one foreign-born parent), 3 Third generation immigrant (U.S.-born children of at least one U.S.-born parent, where at least one grandparent is foreign-born), or 4 Unknown immigrant status.
- maritalstatus: the marital status of the respondent.
- livewithpartner: indicates whether the respondent lives with a partner.
- education: the highest level of education attained by the respondent.
- hisplatino: indicates whether the respondent identifies him or herself as being Hispanic or Latino. This variable is asked separately from race.
- hisplatinogroup: indicates which Hispanic or Latino group a respondent identifies him or herself with. This is set to missing (.) if the respondent does not identify him or herself as being Hispanic or Latino.
- white: indicates whether the respondent identifies him or herself as white (Caucasian).
- black: indicates whether the respondent identifies him or herself as black (AfricanAmerican).
- nativeamer: indicates whether the respondent identifies him or herself as Native American (American Indian or Alaska Native).
- asian: indicates whether the respondent identifies him or herself as Asian (AsianAmerican).
- pacific: indicates whether the respondent identifies him or herself as Native Hawaiian or Other Pacific Islander.
- race: indicates the race of the respondent as singular (e.g., '1 White' or '2 Black') or as mixed (in case the respondent identifies with two or more races). The value '6 Mixed' that the respondent answered 'Yes' to at least two of the single race categories. This variable is generated based on the values of the different race variables (white, black, nativeamer, asian, pacific). This composite measure is not conditional on hisplatino, so an individual may identify as Hispanic or Latino, and also as a member of one or more racial groups.
- working; indicates whether the respondent is working for pay.
- sick leave: indicates whether the respondent is not working because sick or on leave.
- unemp_layoff: indicates whether the respondent is unemployed or on lay off.
- unemp_look: indicates whether the respondent is unemployed and looking for a job.
- retired: indicates whether the respondent is retired.
- disabled indicates whether the respondent has a disability.
- If_other: specifies other labor force status.
- laborstatus: indicates the labor force status of the respondent as singular (e.g., '1 Working for pay' or ' 2 On sick or other leave') or as mixed (in case the respondent selects two or more labor statuses). The value '8 Mixed' indicates that the respondent answered 'Yes' to at least two of the single labor force status variables. This variable is generated based on the values of the different labor status variables (working, sick_leave, unempl_layoff, unempl_look, retired, disabled, If_other).
- employmenttype: indicates the employment type of the respondent (employed by the government, by a private company, a nonprofit organization, or self-employed). This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- workfullpart indicates whether the respondent works full or part-time. This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- hourswork: indicates the number of hours the respondent works per week. This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- hhincome: is the total combined income of all members of the respondent's household (living in their household) during the past 12 months.
- anyhhmember: indicates whether there were any members in the respondent's household at the time he/she answered the survey as reported by the respondent.
- hhmembernumber: indicates the number of household members in the respondent's household at the time of the survey as reported by the respondent. It may be that 'anyhhmember' is 'Yes', but 'hhmembernumber' is missing if the respondent did not provide the number of household members at the time of the survey.
- hhmemberin_\#; indicates whether a household member is currently in the household as reported by the respondent. Household members are never removed from the stored household roster and their information is always included in survey data sets. The order of the roster is the same order in which household members were specified by the respondent in the 'MyHousehold' survey. The order is identified by the suffix _\# (e.g., _1 indicates the first household member, _2 the second household member, etc.).

As an example, if the first household member is in the household at the time of the survey, 'hhmemberin_1' is set to ' 1 HH Member 1 is in the HH '; if he/she has moved out, 'hhmemberin_1' is set to ' 0 HH member 1 is no longer in the HH '. Since information of other household members (stored in the variables listed below) is always included in survey data sets, information about 'hhmemberin_1' is available whether this person is still in the household or has moved out.

- hhmembergen_\# indicates the gender of another household member as reported by the respondent.
- hhmemberage_\#; indicates the age of another household member. The age is derived from the month and year of birth of the household member as reported by the respondent.
- hhmemberrel_\#, indicates the relationship of the respondent to the other household member as reported by the respondent.
- hhmemberuasid_\#F is the 'uasid' of the other household member if this person is also a UAS panel member. It is set to missing (.) if this person is not a UAS panel member at the time of the survey. Since this identifier is directly reported by the respondent (chosen from a preloaded list), it may differ from the actual (correct) 'uasid' of the UAS member it refers to because of reporting error. Also, this variable should not be used to identify UAS members in a given household at the time of the survey. This is because the variables 'hhmemberuasid_\#' are taken from the most recent 'My Household' and changes in household composition involving UAS members may have occurred between the time of the respondent answered 'My Household' and the time the respondent answers the survey. To follow UAS members of a given household, it is advised to use the identifiers 'uashhid' and 'survhhid'.
- lastmyhh_date: the date on which the demographics variables were collected through the 'My Household' survey.


## 5 MISSING DATA CONVENTIONS

Data files provide so-called clean data, that is, answers given to questions that are not applicable anymore at survey completion (for example because a respondent went back in the survey and skipped over a previously answered question) are treated as if the questions were never asked. In the data files all questions that were asked, but not answered by the respondent are marked with (.e). All questions never seen by the respondent (or any dirty data) are marked with (.a). The latter may mean that a respondent did not view the question because s/he skipped over it; or alternatively that s/he never reached that question due to a break off. If a respondent did not complete a survey, the variables representing survey end date and time are marked with (.c). Household member variables are marked with (.m) if the respondent has less household members (e.g. if the number of household members is 2 , any variables for household member 3 and up are marked with (.m).

UAS provides data in STATA and CSV format. Stata data sets come with include variable labels that are not available in the CSV files. Value labels are provided for singleresponse answer option. In STATA these labels will include the labels 'Not asked' and 'Not answered' for (.a) and (.e), and will show in tabulations such as 'tab q1, missing'. For multiple-response questions a binary variable is created for each answer option indicating whether the option was selected or not. A summary variable is also provided in string format reflecting which options were selected and in which order. For example, if a question asked about favorite animals with options cat, dog, and horse, then if a respondent selected horse and then cat, the binary variables for horse and cat will be set to yes, while the overall variable would have a string value of '3-1'. If no answer was given, all binary variables and the summary variable will be marked with '.e'.

Questions that are asked multiple times are often implemented as so-called array questions. Supposing the name of such question was Q1 and it was asked in 6 different instances, your data set would contain the variables Q1_1_ to Q1_6_. To illustrate, if a survey asked the names of all children, then child_1_ would contain the name of the first child the respondent named and so on.

More information about the UAS data in general can be found on the UAS Data Pages web site.

## 6 ROUTING SYNTAX

The survey with routing presented in the next section includes all of the questions that make up this survey, the question answers when choices were provided, and the question routing. The routing includes descriptions of when questions are grouped, conditional logic that determines when questions are presented to the respondent, randomization of questions and answers, and fills of answers from one question to another.

If you are unfamiliar with conditional logic statements, they are typically formatted so that if the respondent fulfills some condition (e.g. they have a cellphone or a checking account), then they are presented with some other question or the value of some variable is changed. If the respondent does not fulfill the condition (e.g. they are not a cellphone adopter or they do not have a checking account), something else happens such as skipping the next question or changing the variable to some other value. Some of the logic involved in the randomization of questions or answers being presented to the respondent is quite complex, and in these instances there is documentation to clarify the process being represented by the routing.

Because logic syntax standards vary, here is a brief introduction to our syntax standards. The syntax used in the conditional statements is as follows: ' $=$ ' is equal to, ' $<$ ' is less than, ' $>$ ' is greater than, and '! ' is used for does not equal. When a variable is set to some number N , the statement looks like 'variable := N'.

The formatting of the questions and routing are designed to make it easier to interpret what is occurring at any given point in the survey. Question ID is the bold text at the top of a question block, followed by the question text and the answer selections. When a question or variable has associated data, the name links to the appropriate data page, so you can easily get directly to the data. Text color is used to indicate the routing: red is conditional logic, gold is question grouping, green is looping, and orange is used to document randomization and other complex conditional logic processes. The routing is written for a computer to parse rather than a human to read, so when the routing diverges significantly from what is displayed to the respondent, a screenshot of what the respondent saw is included.

The name of the randomization variables are defined in proximity to where they are put into play, and like the question ID the names of the randomization variables can be used to link directly to the associated data page.

## 7 SURVEY WITH ROUTING

## introduction1 (Section Brands)

On the next few pages, you will be asked to answer some questions about various brands and products. For each question, please select the response that best reflects your opinion. There are no right or wrong answers; we are interested in your opinions.

Start of section Brands

## brand_intro (Section Brands)

We are going to start this survey by asking a few questions about mutual funds and mutual fund companies. On each screen, we will ask you the same questions about a DIFFERENT company or set of funds.
/* Respondents are asked their opinions about different brands in random order per brand_order variables taking one of six values:

- 1 Vanguard
- 2 Fidelity
- 3 BlackRock
- 4 Wells Fargo
- 5 Putnam
- 6 Franklin Templeton
*/

IF sizeof(brand_order) $=0$ THEN
|brand_order := shuffleArray (array $(1 \rightarrow 1,2 \rightarrow 2,3 \rightarrow 3,4 \rightarrow 4,5 \rightarrow 5,6 \rightarrow 6)$ )
END OF IF
LOOP FROM 1 TO 6
GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN
br001 (how familiar brand in section Brands)
Please answer these questions about ((cnt)).
How familiar are you with ((cnt)) mutual funds?
11 Very unfamiliar
22
33

```
4
55
6
7 Very familiar
br002 (how knowledgeable brand in section Brands)
I consider myself knowledgeable about ((cnt)) mutual funds.
11 Strongly disagree
2
3 
4
5
6
7 7 \text { Strongly agree}
br003 (how informed brand in section Brands)
I consider myself informed about ((cnt)) mutual funds.
11 Strongly disagree
2
3 
4
5
6
7 7 \text { Strongly agree}
br004 (how good brand in section Brands)
((cnt)) mutual funds are...
11 Bad
2
3 3
4
5
6
7 Good
br005 (how favorable brand in section Brands)
11 Unfavorable
2
3 3
4
5
6
7 Favorable
br006 (how positive brand in section Brands)
```

11 Negative
22
33
44
55
66
77 Positive
br007 (how quality brand in section Brands)
11 Low quality
22
33
44
55
66
77 High quality
br008 (how dependable brand in section Brands)
I feel that ((cnt)) is...
11 Very undependable
22
33
44
55
66
77 Very dependable
br009 (how competent brand in section Brands)
11 Very incompetent
22
33
44
55
66
77 Very competent
br010 (how integrity brand in section Brands)
11 Of low integrity
22
33
44
55
66
77 Of high integrity

Figure 1: Example
Please answer these questions about Wells Fargo.
How familiar are you with Wells Fargo mutual funds?

| $1$ <br> Very unfamiliar | 2 | 3 | 4 | 5 | 6 | $7$ <br> Very familiar |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I consider myself knowledgeable about Wells Fargo mutual funds. |  |  |  |  |  |  |
| Strongly disagree | 2 | 3 | 4 | 5 | 6 | 7 <br> Strongly agree |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I consider myself informed about Wells Fargo mutual funds. |  |  |  |  |  |  |
| Strongly disagree | 2 | 3 | 4 | 5 | 6 | 7 <br> Strongly agree |
| - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| $\begin{gathered} 1 \\ \text { Unfavorable } \end{gathered}$ | 2 | 3 | 4 | 5 | 6 | $7$ <br> Favorable |
| - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 1 Negative | 2 | 3 | 4 | 5 | 6 | $\begin{gathered} 7 \\ \text { Positive } \end{gathered}$ |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| $1$ <br> Low quality | 2 | 3 | 4 | 5 | 6 | $\begin{gathered} 7 \\ \text { High quality } \end{gathered}$ |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

## I feel that Wells Fargo is

| Very undependable | 2 | 3 | 4 | 5 | 6 | 7 <br> Very dependable |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Very incompetent | 2 | 3 | 4 | 5 | 6 | 7 <br> Very competent |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| $1$ <br> Of low integrity | 2 | 3 | 4 | 5 | 6 | $7$ <br> Of high integrity |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

| END OF GROUP
END OF LOOP

## End of section Brands

Start of section Distributions
di_intro (video intro in section Distributions)
For this next section, we will give you examples of various retirement investments and ask you how much you think each investment will be worth in one year. We will give you a range of possible future values in a chart to choose from.

To help you with this task, we will show you a short instructional video at this time. Please turn on your sound to hear the video.

## di_intro2 (Section Distributions)

## GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

di001 (growth mutual fund in section Distributions)
Click here if you would like to review the video instructions
Suppose you have $\$ 100,000$ in retirement savings that you can invest. How much do you think the $\$ 100,000$ could be worth after one year if it is invested in a GROWTH mutual fund?

Many different outcomes are possible, with some outcomes more probable than others. Use the ball and bin chart below to indicate how likely you think each outcome is. Each ball represents a 1 in 100 chance that outcome will occur.
popup (Section Distributions)
Video
Close
Figure 2: Example

Click here if you would like to review the video instructions
Suppose you have $\$ 100,000$ in retirement savings that you can invest. How much do you think the $\$ 100,000$ could be worth after one year if it is invested in a GROWTH mutual fund?

Many different outcomes are possible, with some outcomes more probable than others. Use the ball and bin chart below to indicate how likely you think each outcome is.
Each ball represents a 1 in 100 chance that outcome will occur


| Number of balls to add/remove: | 1 |
| :--- | :--- | (100 left)

END OF GROUP
di001_sum := array_sum(explode("", di001))
IF di001_sum = EMPTY OR di001_sum < 100 THEN
checkBalls (Section Distributions)
You did not allocate all 100 balls. Please go back to complete your answer.
END OF IF

## GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

di002 (income mutual fund in section Distributions)
Click here if you would like to review the video instructions
Suppose you have $\$ 100,000$ in retirement savings that you can invest. How much do you think $\$ 100,000$ could be worth after one year if it is invested in an INCOME mutual fund?

Many different outcomes are possible, with some outcomes more probable than others. Use the ball and bin chart below to indicate how likely you think each outcome is.

```
Each ball represents a 1 in 100 chance that outcome will occur.
popup (Section Distributions)
Video
Close
END OF GROUP
di002_sum := array_sum(explode(">", di002))
IF di002_sum = EMPTY OR di002_sum < 100 THEN
checkBalls(Section Distributions)
You did not allocate all }100\mathrm{ balls. Please go back to complete your answer.
END OF IF
```


## GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

```
di001_graph (Section Distributions)
Now we would like to ask you some questions about the ball and bin charts you just
made. This page relates specifically to your response to the GROWTH fund question.
The chart you made is below for your reference.
di001 confident (how confident growth in section Distributions)
How confident are you in your answer?
1 1 \text { Not confident}
2
3
4
5
6
7 7 \text { Very confident}
di001_why (why distribution growth in section Distributions)
Please explain why you placed the balls where you did for the GROWTH fund?
STRING
di001 intro (Section Distributions)
Click the types of investments that you think are included in GROWTH funds.
If you are not sure what one or more of the investments are in the list below, click
the not sure box in the last column.
SUBGROUP OF QUESTIONS
```

```
di001_stocks(Stocks growth in section Distributions)
Stocks
1 Included in fund
2 Not included in fund
3 Not sure what this investment is
di001_bonds (Bonds growth in section Distributions)
Bonds
1 Included in fund
2 Not included in fund
3 Not sure what this investment is
di001_short (Short Term Reserves growth in section Distributions)
Short Term Reserves
1 Included in fund
2 Not included in fund
3 Not sure what this investment is
di001_cash (Cash growth in section Distributions)
Cash
1 Included in fund
2 Not included in fund
3 Not sure what this investment is
di001_cds (CDs growth in section Distributions)
CDs
1 Included in fund
2 Not included in fund
3 Not sure what this investment is
di001_real (Real Estate growth in section Distributions)
Real Estate
1 Included in fund
2 Not included in fund
3 Not sure what this investment is
di001_money (Money Market Fund growth in section Distributions)
Money Market Fund
1 Included in fund
2 Not included in fund
3 Not sure what this investment is
```

END OF SUBGROUP

Figure 3: Example


Click the types of investments that you think are included in GROWTH funds.
If you are not sure what one or more of the investments are in the list below, click the not sure box in the last column

|  | Included in fund | Not included in fund | Not sure what this investment is |
| :---: | :---: | :---: | :---: |
| Stocks | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Bonds | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Short Term Reserves | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Cash | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| CDs | $\bigcirc$ | $\bigcirc$ | 0 |
| Real Estate | $\bigcirc$ | - | $\bigcirc$ |
| Money Market Fund | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN
di002_graph (Section Distributions)
Now we would like to ask you some questions about the ball and bin charts you just

```
made. This page relates specifically to your response to the INCOME fund question.
The chart you made is below for your reference.
di002_confident(how confident income in section Distributions)
How confident are you in your answer?
11 Not confident
2
3
4
5
6
7 Very confident
di002_why (why distribution income in section Distributions)
Please explain why you placed the balls where you did for the INCOME fund?
STRING
di002 intro (Section Distributions)
Click the types of investments that you think are included in INCOME funds.
If you are not sure what one or more of the investments are in the list below, click
the not sure box in the last column.
SUBGROUP OF QUESTIONS
di002_stockS(Stocks income in section Distributions)
    Stocks
    1 \text { Included in fund}
    2 Not included in fund
    3 Not sure what this investment is
    di002_bonds (Bonds income in section Distributions)
    Bonds
    1 Included in fund
    2 Not included in fund
    3 Not sure what this investment is
    di002_short (Short Term Reserves income in section Distributions)
    Short Term Reserves
    1 Included in fund
    2 Not included in fund
    3 Not sure what this investment is
    di002_cash (Cash income in section Distributions)
    Cash
```

```
    1 \text { Included in fund}
    2 Not included in fund
    3 Not sure what this investment is
    di002_cds(CDs income in section Distributions)
    CDs
    1 Included in fund
    2 Not included in fund
    3 Not sure what this investment is
    di002_real (Real Estate income in section Distributions)
    Real Estate
    1 Included in fund
    2 Not included in fund
    3 Not sure what this investment is
    di002_money(Money Market Fund income in section Distributions)
    Money Market Fund
    1 Included in fund
    2 Not included in fund
    3 Not sure what this investment is
END OF SUBGROUP
END OF GROUP
di003 (how difficult in section Distributions)
How difficult was this ball and bins task?
11 Not difficult
2
3
4
5
6
7 7 \text { Very difficult}
di004 (what most difficult in section Distributions)
What parts of the ball and bins task did you find the most difficult?
STRING
```

di005 (what type of information would have helped in section Distributions)
What type of additional information would have helped you complete the ball and bin task
with more confidence?
STRING

Start of section Ranking
/* Respondents are asked about one of three randomly assigned aspects per variable randomizer_type:

- 1 Return exercise
- 2 Risk exercise
- 3 Likely invest exercise
*/

IF randomizer_type = EMPTY THEN
| randomizer_type := mt_rand( 1,3 )
END OF IF
IF randomizer_type $=1$ THEN
ra_intro1 (Section Ranking)
The following questions ask you about investment funds for retirement accounts.
In each scenario, please consider the funds shown then tell us:Which fund do you think will have the HIGHEST average return?Which fund do you think will have the LOWEST average return?This task may seem repetitive, but this exercise is very important for us to fully understand what you think about investment funds.

If you are unsure how to rank the funds, please make your best guess.
ELSEIF randomizer_type $=2$ THEN
ra_intro2 (Section Ranking)
The following questions ask you about investment funds for retirement accounts.
In each scenario, please consider the funds shown then tell us:Which fund do you think will have the HIGHEST risk? Which fund do you think will have the LOWEST risk?This task may seem repetitive, but this exercise is very important for us to fully understand what you think about investment funds.

If you are unsure how to rank the funds, please make your best guess.
ELSE
ra_intro3 (Section Ranking)
The following questions ask you about investment funds for retirement accounts.
In each scenario, please consider the funds shown then tell us:Which fund you would be MOST LIKELY to choose to invest your retirement savings inWhich fund you
would be LEAST LIKELY to choose to invest your retirement savings in. This task may seem repetitive, but this exercise is very important for us to fully understand what you think about investment funds.

If you are unsure how to rank the funds, please make your best guess.
END OF IF
/* Respondents are presented with 20 scenarios in random order. Each scenario asks about four funds per scenario and respondents rate those funds based on the aspect to which they were assigned per variable randomizer_type. The order of the scenarios is captured in the scenario_order variables:

- 1 Fund 25, 8, 14
- 2 Fund 1, 5, 6, 7
- 3 Fund 5, 9, 12, 16
- 4 Fund 4, 5, 11, 15
- 5 Fund 3, 5, 10, 13
- 6 Fund 1, 2, 3, 4
- 7 Fund 2, 6, 9, 11
- 8 Fund 2, 7, 13, 16
- 9 Fund 2, 10, 12, 15
- 10 Fund 1, 8, 9, 10
- 11 Fund 6, 8, 13, 15
- 12 Fund 4, 7, 8, 12
- 13 Fund $3,8,11,16$
- 14 Fund 1, 14, 15, 16
- 15 Fund 3, 6, 12, 14
- 16 Fund $7,10,11,14$
- 17 Fund 4, 9, 13, 14
- 18 Fund 1, 11, 12, 13
- 19 Fund 4, 6, 10, 16
- 20 Fund 3, 7, 9, 15

The fund numbers correspond to the following funds:

- 1 Income
- 2 Growth
- 3 Capital Preservation
- 4 Inflation Protection
- 5 Vanguard Income
- 6 Vanguard Growth
- 7 Vanguard Capital Preservation
- 8 Vanguard Inflation Protection
- 9 Wells Fargo Income
- 10 Wells Fargo Growth
- 11 Wells Fargo Capital Preservation
- 12 Wells Fargo Inflation Protection
- 13 Non-U.S. Equity
- 14 U.S. Large-Cap Equity
- 15 U.S. Small Mid Cap Equity
- 16 U.S. Core Plus Bond
*/
IF sizeof(scenario_order) $=0$ THEN
scenario_order := shuffleArray(array $(1 \rightarrow 1,2 \rightarrow 2,3 \rightarrow 3,4 \rightarrow 4,5 \rightarrow 5,6 \rightarrow 6,7 \rightarrow 7,8 \rightarrow 8$, $9 \rightarrow 9,10 \rightarrow 10,11 \rightarrow 11,12 \rightarrow 12,13 \rightarrow 13,14 \rightarrow 14,15 \rightarrow 15,16 \rightarrow 16,17 \rightarrow 17,18 \rightarrow 18$, $19 \rightarrow 19,20 \rightarrow 20$ ))
END OF IF
LOOP FROM 1 TO 20
Fill code of question FLFunds executed
IF randomizer_type $=1$ THEN
GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN
ra001_intro (average return in section Ranking)
In the table below, please consider the funds shown then tell us:Which fund do you think will have the HIGHEST average return? Which fund do you think will have the LOWEST average return?

SUBGROUP OF QUESTIONS
ra001a (highest average return in section Ranking)
HIGHEST average return
1 (Income)
2 (Growth)
3 (Capital Preservation)
4 (Inflation Protection)
5 (Vanguard Income)
6 (Vanguard Growth)
7 (Vanguard Capital Preservation)
8 (Vanguard Inflation Protection)
9 (Wells Fargo Income)
10 (Wells Fargo Growth)
11 (Wells Fargo Capital Preservation)
12 (Wells Fargo Inflation Protection)
13 (Non-U.S. Equity)
14 (U.S. Large-Cap Equity)
15 (U.S. Small \& Mid Cap Equity)
16 (U.S. Core Plus Bond)
17 ()
18 ()
19 ()
20 ()
ra001b (lowest average return in section Ranking)
LOWEST average return
1 (Income)
2 (Growth)
3 (Capital Preservation)
4 (Inflation Protection)
5 (Vanguard Income)
6 (Vanguard Growth)
7 (Vanguard Capital Preservation)
8 (Vanguard Inflation Protection)
9 (Wells Fargo Income)
10 (Wells Fargo Growth)
11 (Wells Fargo Capital Preservation)
12 (Wells Fargo Inflation Protection)
13 (Non-U.S. Equity)

```
14 (U.S. Large-Cap Equity)
```

15 (U.S. Small \& Mid Cap Equity)
16 (U.S. Core Plus Bond)
17 ()
18 ()
19 ()
20 ()

END OF SUBGROUP
Figure 4: Example
In the table below, please consider the funds shown then tell us:

- Which fund do you think will have the HIGHEST average return?
- Which fund do you think will have the LOWEST average return?

|  | HIGHEST average return | LOWEST average return |
| :--- | :---: | :---: |
| Income | 0 | e |
| Vanguard Income | 0 |  |
| Vanguard Growth | 0 |  |
| Vanguard Capital Preservation | 0 | 0 |

## END OF GROUP

IF ra001a(scenario_order(cnt)) = RESPONSE AND ra001b(scenario_order(cnt)) = RESPONSE AND ra001a(scenario_order(cnt)) = ra001b(scenario_order(cnt)) THEN
checkDouble (Section Ranking)
Please select different funds for the ones you think will have the HIGHEST and LOWEST average return.

END OF IF
ELSEIF randomizer_type $=2$ THEN
GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN
ra002_intro (risk in section Ranking)
In the table below, please consider the funds shown then tell us:Which fund do you think will have the HIGHEST risk?Which fund do you think will have the LOWEST risk?

SUBGROUP OF QUESTIONS
ra002a (highest risk in section Ranking)
HIGHEST risk
1 (Income)

```
    2 (Growth)
    3 (Capital Preservation)
    4 (Inflation Protection)
    5 (Vanguard Income)
    6 \text { (Vanguard Growth)}
    7 (Vanguard Capital Preservation)
    8 (Vanguard Inflation Protection)
    9 (Wells Fargo Income)
    10 (Wells Fargo Growth)
    1 1 \text { (Wells Fargo Capital Preservation)}
    1 2 \text { (Wells Fargo Inflation Protection)}
    13 (Non-U.S. Equity)
    14 (U.S. Large-Cap Equity)
    15 (U.S. Small & Mid Cap Equity)
    16 (U.S. Core Plus Bond)
    17 ()
    18()
    19 ()
    20()
    ra002b (lowest risk in section Ranking)
    LOWEST risk
    1 (Income)
    2 (Growth)
    3 (Capital Preservation)
    4 (Inflation Protection)
    5 (Vanguard Income)
    6 \text { (Vanguard Growth)}
    7 (Vanguard Capital Preservation)
    8 (Vanguard Inflation Protection)
    9 (Wells Fargo Income)
    10 (Wells Fargo Growth)
    1 1 \text { (Wells Fargo Capital Preservation)}
    1 2 \text { (Wells Fargo Inflation Protection)}
    13 (Non-U.S. Equity)
    14 (U.S. Large-Cap Equity)
    15 (U.S. Small & Mid Cap Equity)
    16 (U.S. Core Plus Bond)
    17 ()
    18()
    19 ()
    20 ()
END OF SUBGROUP
```


## END OF GROUP

IF ra002a(scenario_order(cnt)) = RESPONSE AND ra002b(scenario_order(cnt)) = RESPONSE AND ra002a(scenario_order(cnt)) = ra002b(scenario_order(cnt)) THEN
checkDouble2 (Section Ranking)
Please select different funds for the ones you think will have the HIGHEST and LOWEST risk.

END OF IF

ELSE
GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN
ra003_intro (risk in section Ranking)
In the table below, please consider the funds shown then tell us:Which fund you would be MOST LIKELY to choose to invest your retirement savings inWhich fund you would be LEAST LIKELY to choose to invest your retirement savings in

SUBGROUP OF QUESTIONS
ra003a (most likely in section Ranking)
MOST LIKELY to choose
1 (Income)
2 (Growth)
3 (Capital Preservation)
4 (Inflation Protection)
5 (Vanguard Income)
6 (Vanguard Growth)
7 (Vanguard Capital Preservation)
8 (Vanguard Inflation Protection)
9 (Wells Fargo Income)
10 (Wells Fargo Growth)
11 (Wells Fargo Capital Preservation)
12 (Wells Fargo Inflation Protection)
13 (Non-U.S. Equity)
14 (U.S. Large-Cap Equity)
15 (U.S. Small \& Mid Cap Equity)
16 (U.S. Core Plus Bond)
17 ()
18 ()
19 ()
20 ()

```
ra003b}\mathrm{ (least likely in section Ranking)
LEAST LIKELY to choose
1 (Income)
2 (Growth)
3 (Capital Preservation)
4 (Inflation Protection)
5 (Vanguard Income)
6 \text { (Vanguard Growth)}
7 (Vanguard Capital Preservation)
8(Vanguard Inflation Protection)
9 (Wells Fargo Income)
1 0 \text { (Wells Fargo Growth)}
1 1 \text { (Wells Fargo Capital Preservation)}
1 2 \text { (Wells Fargo Inflation Protection)}
13 (Non-U.S. Equity)
14 (U.S. Large-Cap Equity)
15 (U.S. Small & Mid Cap Equity)
1 6 \text { (U.S. Core Plus Bond)}
17()
18()
19 ()
20 ()
END OF SUBGROUP
END OF GROUP
IF ra003a(scenario_order(cnt)) = RESPONSE AND ra003b(scenario_order(cnt)) =
RESPONSE AND ra003a(scenario_order(cnt)) = ra003b(scenario_order(cnt)) THEN
checkDouble3 (Section Ranking)
Please select different funds for the ones you think you are MOST LIKELY and LEAST
LIKELY to choose to invest your retirement savings in.
END OF IF
END OF IF
END OF LOOP
End of section Ranking
Start of section Closing
```


## notice (Section Closing)

This study was an attempt to understand how various attributes of mutual funds influence individuals' investment decisions. Thank you for your participation!

CS_001(HOW PLEASANT INTERVIEW in section Closing)
Could you tell us how interesting or uninteresting you found the questions in this interview?
1 Very interesting
2 Interesting
3 Neither interesting nor uninteresting
4 Uninteresting
5 Very uninteresting

## CS_003 (comments in section Closing)

Do you have any other comments on the interview? Please type these in the box below. (If you have no comments, please click next to complete this survey.)
STRING

End of section Closing
/* Please note that although question CS_003 is listed in the routing, the answers are not included in the microdata in the event identifiable information is captured. Cleaned responses are available by request. */

