UnderStandingAmericaStudy

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Contents

1 INTRODUCTION

This UAS panel survey, titled "UAS14: Retirement Choices", asks about respondents' retirement choices. The authors aim to extend the analysis in the Goda et al. (2014) by better understanding the underlying mechanisms of how lifetime income disclosures affect retirement contributions and comparing the effects in Goda et al. (https://www.socialscienceregistry.org/trials/314) to those in a nationally-representative population. They first developed survey instruments to measure two characteristics: the level of bias in perceived retirement income from a given level of contributions, and tendencies for procrastination. Since income disclosures provide individuals a sense of the tie between current contributions and eventual retirement income, we predict the disclosures will have a larger effect among individuals with higher levels of bias in perceived income from a given level of contributions. They also predict that those with higher procrastination tendencies will be less likely to respond to income disclosures. This survey is no longer in the field. Respondents were paid $5 to complete the survey.

Note: data files for this survey were adjusted on January 29, 2019 to remove 1 unqualified respondent who was inadvertently included in the initial data files. Please contact uas-l@usc.edu with any questions.

1.1 Topics

This survey contains questions (among others) on the following topics: Financial Literacy, Income, Retirement And Pensions, Savings, Wealth. 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): Hypothetical Scenarios Experiments. 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:

A random selection of 1200 active respondents from the Nationally Representative sample excluding Spanish speakers.

As such, this survey was made available to 1198 UAS participants. Of those 1198 participants, 704 completed the survey and are counted as respondents. Of those who are not counted as respondents, 44 started the survey without completing and 450 did not start the survey. The overall response rate was 58.76%.

Note: We are unable to provide sample weights for a small number of UAS members (see the Sample and 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:

UAS14 - Response Overview	
Size of selected sample	1198
Completed the survey	704
Started but did not complete the survey	44
Did not start the survey	450
Response rate	58.76%

2.2   Timings

The survey took respondents an average of 26 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
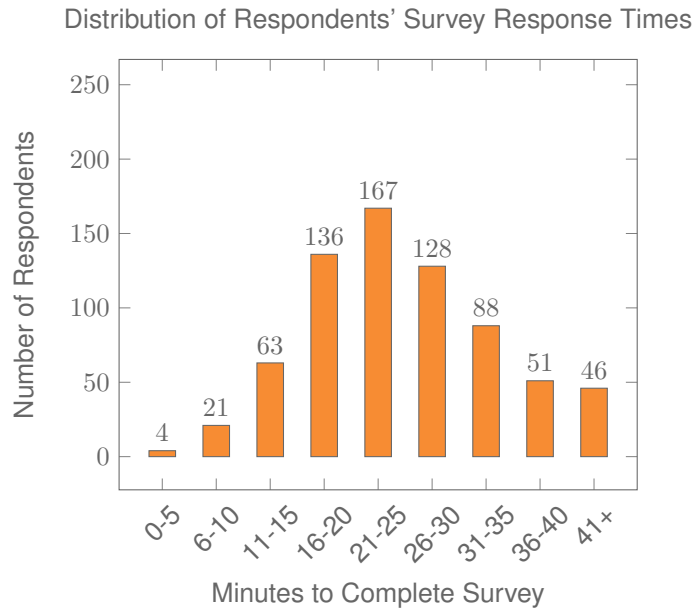
2.3   Sample & Weighting

Weights are included in the data set for this survey. This survey dataset may contain respondents with a weight of zero. These respondents belong to a small group of UAS members for whom sample weights cannot be computed due to non-probability recruitment for special projects. Hence, while they are accounted for in the total number of survey respondents, they do not contribute to any statistics using sample weights. For more details on the UAS weighing procedures please refer to the UAS Weighting Procedures V1. 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 ABS 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
35. MSG 2025/02

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 s/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 (African-American).

- **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 (Asian-American).

- **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.

- **lf_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, lf_other).

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- **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_#**: 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.

In addition, data sets created after May 8, 2025 include an urbanicity variable. It is based on panel members' current census tract of residence and the 2010 Rural-Urban Commuting Area (RUCA) codes released by the US Department of Agriculture's Economic Research Service. To preserve confidentiality, the UAS collapses the 10 primary RUCA codes to 4 levels: Metropolitan, Micropolitan, Small/Rural, and Unknown. The Metropolitan level corresponds to primary RUCA codes 1-3, the Micropolitian level corresponds to RUCA codes 4-6, and the Small/Rural UAS classification corresponds to RUCA codes 7-10.

For detailed information and definitions of the 10 primary RUCA codes, please visit the USDA ERS Rural-Urban Commuting Area Codes site. Surveys conducted completely prior to May 8, 2025 will have an urbanicity data set available on request.

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 single-response 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

intro1 (Section Base)
Thank you for participating. This survey contains three different segments. Please take this survey seriously. The last segment provides you with the opportunity to increase your UAS earnings.

Start of section **Retirement**

r_intro (Section Retirement)
Retirement Savings Scenarios

The following questions ask you to think about decisions you would make under different hypothetical scenarios pertaining to retirement benefits offered by your employer. When answering these questions, imagine that **all other aspects** of your employment and financial situation are unchanged (i.e. they are the same as you face now). If you are self-employed or not working, please imagine that you have an employer as you answer these questions.

IF maritalstatus = EMPTY THEN
  maritalstatus (R MARITAL STATUS in section Demographics)
  Are you now married, widowed, divorced, separated or never married?
  1 Married (Spouse lives with me)
  2 Married (Spouse lives elsewhere)
  3 Separated
  4 Divorced
  5 Widowed
  6 Never married
END OF IF

/* The frequence for R001 is pre-set to 'Yearly' */

IF r001_frequency = EMPTY THEN
  r001_frequency := 1
END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

r001_intro (Section Retirement)
Retirement Savings Plan

Suppose, hypothetically, that your employer offers a tax-deferred retirement savings plan (e.g., 401(k) or 403(b)) to which you can elect to regularly contribute some of

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your earnings. Your employer makes no contribution to the account and does not match your regular contributions.

How much money, if any, would you regularly contribute to this savings plan, and how frequently would you contribute?

r001_amount (amount in section Retirement)
RANGE 0.0..9223372036854775807

r001_frequency (frequency in section Retirement)
1 Every year
2 Every month
3 Every two weeks
4 Every week

Figure 1: *Respondent being asked to indicate the amount they would contribute and at what frequency*

Retirement Savings Plan

Suppose, hypothetically, that your employer offers a tax-deferred retirement savings plan (e.g., 401(k) or 403(b)) to which you can elect to regularly contribute some of your earnings. Your employer makes no contribution to the account and does not match your regular contributions.

How much money, if any, would you regularly contribute to this savings plan, and how frequently would you contribute?

Contribution Amount: $ [   ]

○ Every year
○ Every month
○ Every two weeks
○ Every week

END OF GROUP

r001_frequency_dummy := r001_frequency

/* The respondent is presented with the employer matching half or the whole of his/her contribution based on the value of match_randomizer: (1) 0.50 (half match) or (2) 1.00 (whole match). */

IF match_randomizer = EMPTY THEN
 match_randomizer := mt_rand(1,2)
END OF IF

Fill code of question FLR003 executed

IF r002_frequency = EMPTY THEN
 r002_frequency := 1

r002_intro (Section Retirement)
New Retirement Savings Plan with Matching

Now suppose your employer just changed the policy and is offering to **match** your regular contributions. For each $1.00 you contribute, your employer will **contribute an additional $(match randomizer())** to your retirement account. This money will be invested along with your regular contributions.
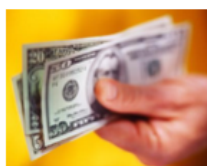
What is the value of this employer match?

Below you can see how much your regular contribution plus the employer match would be worth for the year. Enter a regular contribution amount, frequency of contribution, and click Calculate. Try as many times as you like! **Please use the calculator at least once before continuing!**

r002_amount (amount in section Retirement)
RANGE 0.0..9223372036854775807

r002_frequency (frequency in section Retirement)
1 Every year
2 Every month
3 Every two weeks
4 Every week

r002_enteredamounts (entered amounts in section Retirement)
STRING

Figure 2: *Respondent being asked to indicate the amount they would contribute and at what frequency with employer match*

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

r003_intro (Section Retirement)
New Retirement Savings Plan with Matching

(Under your employer's prior plan (i.e. no match), you stated you would contribute $r001_amount r001_frequency_dummy.)

You may wish to respond to the new **matching** contribution from your employer by changing your contributions. In order to enroll or change your contribution, you must contact an HR administrator and fill out several forms. You will specify an amount to contribute each year and designate how your contributions will be divided among investment options, including lifecycle funds that target a specific retirement date, index funds that track major asset classes, or mutual funds that pursue various investment strategies.

This entire paperwork process will take approximately **60 minutes** of your time. At the end of completing the paperwork, you can elect to make a change in your contributions, or elect to continue with your prior contribution amount by selecting, "no change."

When answering the following questions, please consider the actual constraints you face in your life, including financial (i.e. income, savings, debt obligations) and time (i.e. all the things you have to do at work that take time).

r003 (go through paperwork in section Retirement)
Based on the change to your employer's match policy, would you choose to go through the paperwork process? If so, when would you do so?
1 No
2 Yes. I'd do it today.
3 Yes. Not today, but within a week.
4 Yes. Not within a week, but some time in the future.

END OF GROUP

IF r003 > 1 THEN
  r003b (go through paperwork in section Retirement)
  New Retirement Savings Plan with Matching
  Based on the change to your employer's match policy, would you choose to change your regular contribution to the savings plan?
  1 Yes
  2 No

  IF r003b = 1 THEN
  IF r004_frequency = EMPTY THEN
    r004_frequency := 1
  END OF IF

  GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

  r004_intro (Section Retirement)
  New Retirement Savings Plan with Matching

(Under your employer's prior plan (i.e. no match), you stated you would contribute $r̂001_amount r̂001_frequency_dummy.)

What would your new regular contribution be? If you would like to see the annual value, click Calculate. Otherwise, click Next to submit your response.

r004_amount (amount in section Retirement)
RANGE 0.0..9223372036854775807

r004_frequency (frequency in section Retirement)
1 Every year
2 Every month
3 Every two weeks
4 Every week

r004_enteredamounts (entered amounts in section Retirement)
STRING

Figure 3: *Respondent being asked to indicate the amount they would contribute and at what frequency*

23

r005 (financial situation affected by change in section Retirement)
New Retirement Savings Plan with Matching

How would your financial situation be affected by the change in your regular contribution? Choose any that apply.
1 My take-home earnings or income would change.
2 My spending habits would change.
3 My contributions to other retirement investment accounts would change.
4 My contributions to my non-retirement investment accounts would change.
5 My balance in non-savings accounts (i.e. checking accounts) would change.
6 My payments to low-interest debt (e.g., mortgage, student loans, home equity line) would change.
7 My payments to high-interest debt (e.g., credit cards) would change.
8 Other, please specify:

r005_other (other financial situation affected by change in section Retirement)
STRING

END OF IF
ELSEIF r003 = 1 THEN
r006 (button change in section Retirement)
New Retirement Savings Plan with Matching

Suppose making a change in your regular contributions was as simple as clicking a button.

Based on the change to your employer's match policy, would you choose to change your regular contribution to the savings plan? If so, when would you make the change?
1 No
2 Yes. I'd do it today.
3 Yes. Not today, but within a week.
4 Yes. Not within a week, but some time in the future.

IF r006 > 1 THEN
IF r007_frequency = EMPTY THEN
r007_frequency := 1
END OF IF

r007_intro (Section Retirement)
New Retirement Savings Plan with Matching(Under your employer's prior plan (i.e. no match), you stated you would contribute $r̂001_amount r̂001_frequency_dummy.)

What would your new regular contribution be? If you would like to see the **annual value**, click Calculate. Otherwise, click Next to submit your response.

r007_amount (amount in section Retirement)
RANGE 0.0..9223372036854775807

r007_frequency (frequency in section Retirement)
1 Every year
2 Every month
3 Every two weeks
4 Every week

r007_enteredamounts (entered amounts in section Retirement)
STRING

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

r008 (financial situation affected by change in section Retirement)
New Retirement Savings Plan with Matching

How would your financial situation be affected by the change in your regular contribution? Choose any that apply.
1 My take-home earnings or income would change.
2 My spending habits would change.
3 My contributions to other retirement investment accounts would change.
4 My contributions to my non-retirement investment accounts would change.
5 My balance in non-savings accounts (i.e. checking accounts) would change.
6 My payments to low-interest debt (e.g., mortgage, student loans, home equity line) would change.
7 My payments to high-interest debt (e.g., credit cards) would change.
8 Other, please specify:

r008_other (other financial situation affected by change in section Retirement)
STRING

END OF GROUP
END OF IF
END OF IF

r009 (offer a tax-deferred retirement savings plan in section Retirement)
Your Employer's Savings Plan

Does your current employer offer a tax-deferred retirement savings plan such as a 401(k) or a 403(b)?
1 Yes
2 No
3 Don't know

IF r009 = 1 THEN
  r010 (matching contribution in section Retirement)
  Your Employer's Savings Plan

  Does your employer make a **matching** or a **non-matching** contribution to the account on your behalf? A matching contribution is a contribution that depends on your level of contribution. A non-matching contribution is a contribution that does not depend on your level of contribution.
  1 Matching contribution only.
  2 Non-matching contribution only.
  3 Both a matching and non-matching contribution.
  4 Neither
  5 Don't know

  r012 (matching contribution in section Retirement)
  Your Employer's Savings Plan

  Are you enrolled in the plan?
  1 Yes
  2 No
  3 Don't know

  IF r012 = 1 THEN
    IF r013_frequency = EMPTY THEN
      r013_frequency := 1
    END OF IF

    GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

      r013_intro (Section Retirement)
      Your Employer's Savings Plan

      Please enter your regular contribution amount and frequency of contribution.

      r013_amount (amount in section Retirement)

RANGE 0.0..9223372036854775807

r013_frequency (frequency in section Retirement)
1 Every year
2 Every month
3 Every two weeks
4 Every week

END OF GROUP
END OF IF
END OF IF

tsend_retscenarios := date("Y-m-d H:i:s")

End of section **Retirement**

Start of section **Financial**

bintro (Section Financial)
Background Information

We will now ask you a series of questions related to your income and finances to get a better understanding of your current financial situation.

b001a (total income before taxes and deduction in section Financial)
Background Information

Think about your personal **income** from all different sources in 2014, including:

Earnings and benefits: wages and salary, bonuses/tips/commission, self-employment, professional practice and trade, unemployment insurance, workers compensation, social security, welfare and food stamps, veterans benefits, etc.
Investments: rental income, dividends, interest, etc.
Other sources: gifts and inheritance, prize winnings, business income, farm income, or any others.

About how much total **income** did you receive *before* taxes and deduction from all sources?
RANGE 0.0..9223372036854775807

IF b001a = EMPTY THEN
b001b (nonresponse total income before taxes and deduction in section Financial)
Background Information**Your answers are important to us.**

Think about your personal **income** from all different sources in 2014, including:

Earnings and benefits: wages and salary, bonuses/tips/commission, self-employment, professional practice and trade, unemployment insurance, workers compensation, social security, welfare and food stamps, veterans benefits, etc.
Investments: rental income, dividends, interest, etc.
Other sources: gifts and inheritance, prize winnings, business income, farm income, or any others.

About how much total **income** did you receive *before* taxes and deduction from all sources?
1 Less than $5,000
2 $5,000 - $25,000
3 $25,000 - $50,000
4 $50,000 - $100,000
5 More than $100,000
END OF IF

IF maritalstatus = 1 OR maritalstatus = 2 THEN
b002 := YES
ELSEIF maritalstatus > 3 AND livewithpartner = 1 THEN
b002 := YES
ELSE
b002 (married or live with partner in section Financial)
Background Information

Are you married or live with a partner?
1 Yes
2 No
END OF IF

Fill code of question FLSpousePartner executed

Fill code of question FLSpouseAndPartner executed

IF b002 = YES THEN
b003a (spouse total income before taxes and deduction in section Financial)
Background Information

Think about your spouse's or partner's personal **income** from all different sources in 2014, including:

Earnings and benefits: wages and salary, bonuses/tips/commission, self-employment, professional practice and trade, unemployment insurance, workers compensation, social security, welfare and food stamps, veterans benefits, etc.

Investments: rental income, dividends, interest, etc.
Other sources: gifts and inheritance, prize winnings, business income, farm income, or any others.

About how much total **income** did your (spouse or partner/spouse or partner/spouse or partner) receive *before* taxes and deduction from all sources?
RANGE 0.0..9223372036854775807

b003b (nonresponse total income before taxes and deduction in section Financial)
Background Information

Your answers are important to us.

Think about your spouse's or partner's personal **income** from all different sources in 2014, including:

Earnings and benefits: wages and salary, bonuses/tips/commission, self-employment, professional practice and trade, unemployment insurance, workers compensation, social security, welfare and food stamps, veterans benefits, etc.
Investments: rental income, dividends, interest, etc.
Other sources: gifts and inheritance, prize winnings, business income, farm income, or any others.

About how much total **income** did your (spouse or partner/spouse or partner/spouse or partner) receive *before* taxes and deduction from all sources?
1 Less than $5,000
2 $5,000 - $25,000
3 $25,000 - $50,000
4 $50,000 - $100,000
5 More than $100,000

b004 (total personal retirement savings in section Financial)
Background Information

Think about your savings in personal **retirement accounts** from all different sources, including:

Individual Retirement Accounts (IRAs), Keogh accounts, 401(k)s, 403(b)s, etc.

About how much total personal **retirement** savings do you have from all sources?
RANGE 0.0..9223372036854775807

b005 (nonresponse total personal retirement savings in section Financial)
Background Information

Your answers are important to us.

Think about your savings in personal **retirement accounts** from all different sources, including:

Individual Retirement Accounts (IRAs), Keogh accounts, 401(k)s, 403(b)s, etc.

About how much total personal **retirement** savings do you have from all sources?
1 Less than $10,000
2 $10,000 to $25,000
3 $25,000 to $100,000
4 $100,000 to $400,000
5 More than $400,000

b006 (percent retirement savings in stocks or mutual funds in section Financial)
Background Information

About what percent of that **retirement** savings are invested in stocks or mutual funds?
1 0%
2 More than 0% but less than 50%
3 About 50%
4 More than 50% but less than 100%
5 100%

b007 (total personal non-retirement savings in section Financial)
Background Information

Think about your savings in **non-retirement accounts** from all different sources, including: checking accounts, savings accounts, CDs, government savings bonds or treasury bills, money market accounts, stocks, bonds, or mutual funds outside of retirement accounts, etc.

About how much total **non-retirement** savings do you have from all sources?
RANGE 0.0..9223372036854775807

b008 (nonresponse total personal non-retirement savings in section Financial)
Background Information

Your answers are important to us.

Think about your savings in **non-retirement accounts** from all different sources, including: checking accounts, savings accounts, CDs, government savings bonds or treasury bills, money market accounts, stocks, bonds, or mutual funds outside of retirement accounts, etc.

About how much total **non-retirement** savings do you have from all sources?
1 Less than $10,000
2 $10,000 to $25,000
3 $25,000 to $100,000
4 $100,000 to $400,000
5 More than $400,000

END OF IF

b009 (percent non-retirement savings in stocks or mutual funds in section Financial)
Background Information

About what percent of that **non-retirement** savings is invested in stocks or mutual funds?
1 0%
2 More than 0% but less than 50%
3 About 50%
4 More than 50% but less than 100%
5 100%

b010 (own primary residency in section Financial)
Background Information

Do you and your spouse or partner own your primary residence or rent?
1 Own
2 Rent

IF b010 = 1 THEN
  b011 (present value primary residency in section Financial)
  Background Information

  What is the present value of your primary residence? What would it bring if it were sold today?
  RANGE 0.0..9223372036854775807

  IF b011 = EMPTY THEN
    b012 (nonresponse present value primary residency in section Financial)
    Background Information

Your answers are important to us.

What is the present value of your primary residence? What would it bring if it were sold today?
1 Less than $15,000
2 Between $15,000 and $50,000
3 Between $50,000 and $150,000
4 Between $150,000 and $500,000
5 More than $500,000

END OF IF

b013 (value mortgages etceteras on primary residency in section Financial)
Background Information

What is the value of any outstanding mortgages, second mortgages, or any other loans that use your home as collateral?
RANGE 0.0..9223372036854775807

IF b013 = EMPTY THEN

b014 (nonresponse value mortgages etceteras on primary residency in section Financial)
Background Information

Your answers are important to us.

What is the value of any outstanding mortgages, second mortgages, or any other loans that use your home as collateral?
1 Less than $15,000
2 Between $15,000 and $50,000
3 Between $50,000 and $150,000
4 Between $150,000 and $500,000
5 More than $500,000

END OF IF
END OF IF

b015 (value on any secured debts in section Financial)
Background Information

What is the value of any **secured debts** that you have? Secured debts are those tied to assets like a car or property other than your primary residence. Do not include any outstanding mortgages on your primary residence that you may have already told us about.
1 Less than $1,000
2 Between $1,000 and $10,000

3 Between $10,000 and $50,000
4 Between $50,000 and $100,000
5 Between $100,000 and $250,000
6 $250,000 or more

b016 (value on any unsecured debts in section Financial)
Background Information

What is the value of any **unsecured debts** that you have, debts that are not tied to assets you own? Examples include: credit card debt, student loans, payday loans, medical bills, and court-ordered child support.
1 Less than $1,000
2 Between $1,000 and $10,000
3 Between $10,000 and $50,000
4 Between $50,000 and $100,000
5 Between $100,000 and $250,000
6 $250,000 or more

b018 (how much able to buy in 1 year in section Financial)
Financial Knowledge

We're now going to ask you a different type of question.

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?
1 More than today
2 Exactly the same
3 Less than today

b019 (single stock safer than mutual fund in section Financial)
Financial Knowledge

Do you think the following statement is true or false? "Buying a single company stock usually provides a safer return than a stock mutual fund."
1 True
2 False

b020 (how much in account after 1 year in section Financial)
Financial Knowledge

Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?
1 More than $102

2 Exactly $102
3 Less than $102

b023 (how much in account after 2 years in section Financial)
Financial Knowledge

Let's say you have $200 in a savings account. The account earns 10 percent interest per year. How much would you have in the account at the end of two years?

b024 (overall financial knowledge in section Financial)
Financial Knowledge

How would you assess your overall financial knowledge?
1 1 Very low
2 2
...
6 6
7 7 Very high

tsend_background := date("Y-m-d H:i:s")

End of section **Financial**

Start of section **Alpha**

pb_010 (risk question coin flip in section Alpha)
Risk Question

This question is for real stakes. **One out of ten participants** *will be randomly selected for an additional real payment that will be added to your next payment.*

The following question asks you to pick between 6 possible pairs of outcomes. If this question is selected for payment, then the computer will flip a virtual coin. There is a 50% chance it will come up "heads" and a 50% chance it will come up "tails". You will receive the amount indicated by the pair you choose.

For example, if you choose Pair 4 and the virtual coin comes up heads, you will receive $11. If you choose Pair 4 and the virtual coin comes up tails, you will receive $2.

Please select one of the following pairs:
1 Pair 1: $5 if heads, $5 if tails.
2 Pair 2: $7 if heads, $4 if tails.
3 Pair 3: $9 if heads, $3 if tails.
4 Pair 4: $11 if heads, $2 if tails.
5 Pair 5: $13 if heads, $1 if tails.

6 Pair 6: $15 if heads, $0 if tails.

```
amount1 := 1
amount2 := 2
amount3 := 3
multiplier := 1
amount1 := amount1 * multiplier
amount2 := amount2 * multiplier
amount3 := amount3 * multiplier
```

a001a (Section Alpha)
This last portion of the survey has 5 financial questions, and you can earn real money based on your answers. Each question will describe one or more financial assets and ask you about their value over time.

All additional money that you earn in this portion of the experiment will be added to your next payment. Please take these questions seriously as a considerable amount of money is at stake.

a001b (Section Alpha)
Hypothetical Investment Questions

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Example

An asset has an initial value of **$0** but its value increases by **$10** every period. What is the value of the assest after **6 periods**?

The correct answer is **$60**. Earnings for different responses are shown below.

Figure 4: Respondent being presented with the explanation for the financial questions

Hypothetical Investment Questions

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Example

An asset has an initial value of **$0** but its value increases by **$10** every period. What is the value of the asset after **6 periods**?

The correct answer is **$60**. Earnings for different responses are shown below:

Response	Below $30	$30-$44	$45-$53	$54-$66	$67-$75	$76-$90	Above $90
Earnings	$0	$1	$2	$3	$2	$1	$0

a001 (value after 20 periods in section Alpha)
The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Question 1

An asset has an initial value of **$100** and grows at an interest rate of **10%** each period. What is the value of the asset after **20 periods**?

amountwon(1) := getAmount("a001", a001)

Figure 5: Respondent being presented with financial question 1

Hypothetical Investment Questions

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Example: An asset has an initial value of $0 but its value increases by $10 every period. What is the value of the asset after 6 periods?

The correct answer is $60. Earnings for different responses are shown below:

Response	Below $30	$30-$44	$45-$53	$54-$66	$67-$75	$76-$90	Above $90
Earnings	$0	$1	$2	$3	$2	$1	$0

Question 1

An asset has an initial value of **$100** and grows at an interest rate of **10%** each period. What is the value of the asset after **20 periods**?

$ [_____]

a002 (value after 50 periods in section Alpha)

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Question 2

An asset has an initial value of **$100** and grows at an interest rate of **5%** each period. What is the value of the asset after **50 periods**?

amountwon(2) := getAmount("a002", a002)

Figure 6: Respondent being presented with financial question 2

Hypothetical Investment Questions

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Example: An asset has an initial value of $0 but its value increases by $10 every period. What is the value of the asset after 6 periods?

The correct answer is $60. Earnings for different responses are shown below:

Response	Below $30	$30-$44	$45-$53	$54-$66	$67-$75	$76-$90	Above $90
Earnings	$0	$1	$2	$3	$2	$1	$0

Question 2

An asset has an initial value of **$100** and grows at an interest rate of **5%** each period. What is the value of the asset after **50 periods**?

$ ____

a003 (value after 24 periods in section Alpha)

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Question 3

An asset has an initial value of **$100** and grows at an interest rate of **-20% in odd periods** (starting with the first), and at **25% in even periods**. What is the value of the asset after 24 periods?

amountwon(3) := getAmount("a003", a003)

Figure 7: *Respondent being presented with financial question 3*

Hypothetical Investment Questions

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Example: An asset has an initial value of $0 but its value increases by $10 every period. What is the value of the asset after **6 periods**?

The correct answer is **$60**. Earnings for different responses are shown below:

Response	Below $30	$30-$44	$45-$53	$54-$66	$67-$75	$76-$90	Above $90
Earnings	$0	$1	$2	$3	$2	$1	$0

Question 3

An asset has an initial value of **$100** and grows at an interest rate of **-20% in odd periods** (starting with the first), and at **25% in even periods**. What is the value of the asset after 24 periods?

$ _____

a004 (value after 14 periods in section Alpha)

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Question 4

An asset has an initial value of **$100** and grows at an interest rate of **-40% in odd periods** (starting with the first), and at **80% in even periods**. What is the value of the asset after **14 periods**?

amountwon(4) := getAmount("a004", a004)

Figure 8: *Respondent being presented with financial question 4*

Hypothetical Investment Questions

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Example: An asset has an initial value of $0 but its value increases by $10 every period. What is the value of the asset after 6 periods?

The correct answer is $60. Earnings for different responses are shown below:

Response	Below $30	$30-$44	$45-$53	$54-$66	$67-$75	$76-$90	Above $90
Earnings	$0	$1	$2	$3	$2	$1	$0

Question 4

An asset has an initial value of $100 and grows at an interest rate of -40% in odd periods (starting with the first), and at 80% in even periods. What is the value of the asset after 14 periods?

$ _____

a005 (value after 14 periods in section Alpha)
The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Question 5

Asset A has an initial value of **$100**, and grows at an interest rate of **8%** each period. Asset B has an initial value of **$X**, and grows at an interest rate of **8%** each period. Asset A grows for **10 periods**, and Asset B grows for **24 periods**. What value of **X** will cause the two assets to be of equal value?

amountwon(5) := getAmount("a005", a005)

Figure 9: Respondent being presented with financial question 5

Hypothetical Investment Questions

The closer your response is to the correct answer, the more you will earn. You may use whatever approaches you would like to answer these questions.

Each time your response is within 10% of the correct answer, you will receive $3; responses within 25% will receive $2; and responses within 50% will receive $1. Responses more than 50% away from the correct answer will not receive a payment for that question.

Example: An asset has an initial value of $0 but its value increases by $10 every period. What is the value of the asset after 6 periods?

The correct answer is $60. Earnings for different responses are shown below:

Response	Below $30	$30-$44	$45-$53	$54-$66	$67-$75	$76-$90	Above $90
Earnings	$0	$1	$2	$3	$2	$1	$0

Question 5

Asset A has an initial value of $100, and grows at an interest rate of 8% each period. Asset B has an initial value of $X, and grows at an interest rate of 8% each period. Asset A grows for 10 periods, and Asset B grows for 24 periods. What value of X will cause the two assets to be of equal value?

$ [ ]

totalamount_alpha := amountwon(1) + amountwon(2) + amountwon(3) + amountwon(4) + amountwon(5)

Fill code of question FLWon2 executed

max_a006 := 15 * multiplier

a006 (expected payment in section Alpha)
As was already explained, you can earn between $0 and $15 based on your answers to

the previous five questions.

Each response within 10% of the correct answer earns $3.
Each response within 25% of the correct answer earns $2.
Each response within 50% of the correct answer earns $1.

You now have a chance to earn a fixed amount of money *instead* of the amount you would have earned based on your answers. The next screen will explain how this works, but first please answer the following:

How much do you think you would earn if your payment is based on the five previous questions?
RANGE 0.0..^max_a006

Figure 10: *Respondent being asked to estimate the amount they think they earned based on their answers*

Hypothetical Investment Questions

As was already explained, you can earn between $0 and $15 based on your answers to the previous five questions.

- Each response within 10% of the correct answer earns $3.
- Each response within 25% of the correct answer earns $2.
- Each response within 50% of the correct answer earns $1.

You now have a chance to earn a fixed amount of money *instead* of the amount you would have earned based on your answers. The next screen will explain how this works, but first please answer the following:

How much do you think you would earn if your payment is based on the five previous questions?

$ [   ]

Fill code of question FLhighlight executed

Fill code of question FLhighlight2 executed

a006_confirm (confirm expected payment in section Alpha)
You indicated that you believe you would earn $(expected payment()) based on your answers to the five previous questions.

Based on this response, we have automatically filled out the following table. At the end of the survey, the computer will randomly roll a die numbered 0 through 15, and choose the row corresponding to that number. You will then receive the highlighted option in that row.

Examine each line of the table, and make sure that the option you prefer is highlighted. You may click the "Back" button to change your answer and the table will automatically adjust. When you are satisfied, click "Next" to continue.

Figure 11: *Respondent being asked to confirm their choice*

Hypothetical Investment Questions

You indicated that you believe you would earn $10 based on your answers to the five previous questions.

Based on this response, we have automatically filled out the following table. At the end of the survey, the computer will randomly roll a die numbered 0 through 15, and choose the row corresponding to that number. You will then receive the highlighted option in that row.

Examine each line of the table, and make sure that the option you prefer is highlighted. You may click the "Back" button to change your answer and the table will automatically adjust. When you are satisfied, click "Next" to continue.

	Option A	Option B
0	Earnings based on the 5 questions.	A payment of $0.00
1	Earnings based on the 5 questions.	A payment of $1.00
2	Earnings based on the 5 questions.	A payment of $2.00
3	Earnings based on the 5 questions.	A payment of $3.00
4	Earnings based on the 5 questions.	A payment of $4.00
5	Earnings based on the 5 questions.	A payment of $5.00
6	Earnings based on the 5 questions.	A payment of $6.00
7	Earnings based on the 5 questions.	A payment of $7.00
8	Earnings based on the 5 questions.	A payment of $8.00
9	Earnings based on the 5 questions.	A payment of $9.00
10	Earnings based on the 5 questions.	A payment of $10.00
11	Earnings based on the 5 questions.	A payment of $11.00
12	Earnings based on the 5 questions.	A payment of $12.00
13	Earnings based on the 5 questions.	A payment of $13.00
14	Earnings based on the 5 questions.	A payment of $14.00
15	Earnings based on the 5 questions.	A payment of $15.00

Is this correct? If so click "Next" to continue, otherwise click the "Back" button.

/* The randomizer a006_randomizer below randomly selects line in the table displayed to the respondent in a0006_confirm. Depending on the respondent's choice s/he then receives the payout earned for the five questions (Option A) or the fixed amount (Option B). */

IF (a006_randomizer = EMPTY) THEN
 a006_randomizer := mt_rand(0,15)
END OF IF

/* The snippet below determines the amount won based on the five financial questions asked. If the randomly selected amount is higher than the amount the respondent thought they would win, then the total is the randomly selected amount. Otherwise, it is the amount they thought they would win. */

IF (a006_randomizer*multiplier) > a006 THEN

| payout_alpha := a006_randomizer*multiplier

ELSE

| payout_alpha := totalamount_alpha

END OF IF

Fill code of question FLA008 executed

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

a007 (tools used in section Alpha)
These questions will not affect your payment.

Did you use any tools to help answer the 5 hypothetical investment questions? If
so, which ones? (select all that apply)
1 Pen/pencil
2 Calculator
3 Spreadsheet
4 Other tool
5 No tools used

a008 (tools used in section Alpha)
Did you receive help from anyone to answer the 5 hypothetical investment questions? If
so, who? (select all that apply)
1 (My spouse/partner/My spouse/partner/My spouse/partner)
2 Other family member
3 A friend
4 Other
5 Did not receive help from anyone

END OF GROUP

tsend_alpha := date("Y-m-d H:i:s")

End of section **Alpha**

Start of section **Closing**

cs_intro (Section Closing)
Thank you for participating. In the following screens, you will be shown the answers to
the Financial Knowledge questions and your responses, and your earnings from the Risk
Question and the Hypothetical Investment questions. If you wish to change any of your
responses, click Back. If you are satisfied with your responses, click Next. Note that once

you click Next you will not be permitted to change your answers.

f_result (Section Closing)
Earlier in this survey we asked you a few financial comprehension questions. We have listed each question below and show the correct answer to each question along with the answer you selected. If you wish to, you can see how you did on the questions. Thirty percent of Americans answer all three questions correctly.

Figure 12: Respondent being presented with the answers to the financial comprehension questions

/* The snippet below determines whether the respondent is selected to win something based on the risk question (coin toss). The respondent is only selected for this if /pb_risk_random is equal to 10. */

IF pb_risk_random = EMPTY THEN
| **pb_risk_random** := mt_rand(1,10)

| IF pb_risk_random = 10 THEN
| | **pb_selected_risk** := 1
| ELSE
| | **pb_selected_risk** := 2
| END OF IF

END OF IF

IF pb_selected_risk = 1 THEN
/* The snippet below determines what reward the respondent is selected to win based on the risk question (coin toss). */

IF pb_flip = EMPTY THEN
| **pb_flip** := mt_rand(1,2)
END OF IF

Fill code of question FLHeads executed

pb_reward := getCoinFlipReward(pb_010, pb_flip)

payout_pb := pb_reward

IF pb_reward > 0 THEN
risk_summary (Section Closing)
You have been selected as one of the participants for additional payment. The **Risk Question** has been selected which states:

The following question asks you to pick between 6 possible pairs of outcomes. If this question is selected for payment, then the computer will flip a virtual coin. There is a 50% chance it will come up "heads" and a 50% chance it will come up "tails". You will receive the amount indicated by the pair you choose.

You chose: (risk question coin flip())

The coin flipped (heads/tails). Therefore you win $(reward from coin flip question()). This will be added to your next payment.
END OF IF
END OF IF

Fill code of question alpha_fill executed

alpha_result (Section Closing)
(Lastly, in the Hypothetical Investment Questions section you answered 5 questions. You had the opportunity to earn payment based on the accuracy of your responses or based on a fixed amount according to a table. Line â006_randomizer of the table was randomly selected. You indicated for this line that you preferred "Option A: Earnings based on the 5 questions".

Figure 13: *Respondent being presented with the payout they received for answers to the financial questions*

Lastly, in the Hypothetical Investment Questions section you answered 5 questions. You had the opportunity to earn payment based on the accuracy of your responses or based on a fixed amount according to a table. Line 9 of the table was randomly selected. You indicated for this line that you preferred "Option A: Earnings based on the 5 questions". Your total earnings on the 5 questions is $1. This will be added to your next payment.

<< Back | Next >>

payout := payout_alpha + payout_pb

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

/* 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. */

IF payout > 0 AND payout < 36 THEN
 dummy := doPayout(payout)
ELSEIF payout > 35 THEN
 dummy := sendEmailNotPaid(payout)
END OF IF

End of section **Closing**