SUPPLEMENTARY MATERIAL

To "Tail and Center Rounding of Probabilistic Expectations in the Health and Retirement Study"

Supplementary Appendix to Section 3

SA3 Exploratory Analysis of Response Patterns Across Questions and Waves in the HRS

Since 2002 the HRS has devoted an entire section of its core questionnaire to measurement of respondents' expectations in the domains of personal health, personal finances, and general economic conditions. Table S1 shows the questions, organized by domain and the waves in which they were asked.

The number of questions per wave ranges between 22 in 2002 and 38 in 2006. Most questions are in the personal finances domain (between 11 and 23 per wave, 31 overall), followed by the personal health domain (between 3 and 9 per wave, 10 overall), and the domain of general economic conditions (between 2 and 7 per wave, 12 overall). A subset of 12 questions across the three domains were asked in all waves.

As documented in Table S2, the number of responses varies across questions and waves, ranging from about 5,000 to 30,000 responses per question in each wave. The variation across questions stems from the fact that the HRS makes extensive use of skip sequencing. Thus, whether a respondent is asked a specific question depends on the previous answers given by the respondent and on whether the event specified by the question is relevant to the respondent.

The total number of responses generated by a question across the seven waves varies because questions have been added and removed over time. It also varies due to changes in sample composition across waves. The HRS sample has periodically been augmented with new cohorts of respondents who joined the study in specific waves. Respondents exit the study due to attrition or death.

SA3.1 Temporal Stability of Response Tendencies

We start by investigating the empirical distributions of responses to each of the questions listed in Table S1 above separately for each wave between 2002 and 2014. To reduce length, in Table S3 we present the response patterns for a subset of 9 questions in different domains. We focus on questions that were asked in at least 4 waves.

For each of the 9 questions selected and for each of the waves in which those questions were posed, the columns of Table S3 show the fractions of respondents: who do not respond (NR); who respond 0, 50, or 100; who respond with any other multiple of 10 percent that is not 0, 50, or 100; who respond with any multiple of 5 percent that is not a multiple of 10 percent; and who respond in two ranges of multiples of 1 percent that are not multiples of 5 or 10 percent (i.e., in 1-4 and in 96-99). In the column "Other" we report the residual fraction of respondents who respond with a multiple of 1 percent that does not lie in the 1-4 or 96-99 range.

By and large, HRS expectations questions feature low rates of item nonresponse in the personal health and personal finances domains (below 0.05) and higher rates of item nonresponse in the general economic conditions domain (typically between 0.05 and 0.10), with peaks of 0.25-0.30 rates of nonresponse to specific questions eliciting respondents' expectations of future performance of the stock market (e.g., see question P47 in Table S3).

The rates of 0, 50, and 100 vary across questions. For example, the fraction of 50 percent responses tends to be higher in the general economic conditions domain, where they range between 0.20 and 0.30, than in the remaining domains. Among the 9 questions shown in Table S3, the fractions of 0 and 100 are highest for specific questions belonging to the personal finances and personal health domains. For example, the fraction of 0 ranges between 0.35 and 0.50 for P14 (probability of losing own job during the next year) and for P32 (probability of moving to a nursing home in 5 years); whereas the fraction of 100 percent is highest for P5 (probability of leaving an inheritance of at least $10K), ranging between 0.324 and 0.447 across waves.

The high rates of 0, 50, and 100 in response to specific questions do not suggest any particular degree of rounding. For example, responses of 50 percent are consistent with any degree of rounding. Respondents who answered P47 (probability that the mutual fund will increase in value in the next year) might genuinely believe that it is equally likely that the stock market will increase or decrease in value in a 1-year time; they might mean that the chances that the stock market will go up are between 40 and 60 percent; or they might have epistemic uncertainty, using 50 percent to indicate a complete lack of knowledge.

Consistently high fractions of responses across questions and waves are multiples of 10 percent and, to a lesser extent, of 5 percent. For the 9 questions shown in Table S3, the fractions of responses that are multiples of 10 and 5 percent (but not 0, 50, or 100) range respectively between 0.20 and 0.45 and between 0.05 and 0.15 across questions and waves. On the other hand, the fractions of cases where the response takes the value 1-4 or 96-99 are substantially smaller and range respectively between 0.002 and 0.035 and between 0.000 and 0.010 across questions and waves. Responses in the "Other" category occur even more infrequently and usually constitute 0.006 or less of cases.

The main takeaway from Table S3 is that the basic patterns found by Manski and Molinari (2010) using the 2006 data are confirmed for the remaining waves as well. Hence, these patterns are stable across waves.

Table S4, corresponding to Table 1 in the main text, shows the fractions of respondents displaying each of seven mutually exclusive and exhaustive response patterns, progressing left to right from the most rounded to the least rounded. Column 3 gives the fraction of respondents who respond to no questions in the wave, coded in the HRS as "Don't know" or "Refuse." Column 4 gives the fraction of respondents who, when they respond, only use the values 0 and 100 in the corresponding wave. Column 5 gives the fraction who only use the values (0, 50, 100). Columns 6 and 7 give the fractions of respondents who answer at least one question with a multiple of 10 other than (0, 50, 100) and with a multiple of 5 percent that is not a multiple of 10 respectively. Column 8 gives the fraction of respondents who respond to at least one question with a non-round value in 1-4 or 96-99. Column 9, labelled "Some other," gives the fraction who respond at least once with a non-round value in 6-94.

The set of expectations questions varies across waves. The top panel of Table S4 presents a version of the statistics where respondents are classified into one of the seven response patterns using only the twelve questions that were asked in all seven waves. The bottom panel uses the responses to all questions asked in a wave.

A very small fraction of respondents answers none of the questions posed to them. This fraction ranges between 0.009 and 0.027, depending on the set of questions used to classify respondents. Between 0.019 and 0.101 of respondents uses only the values (0, 100). Similar fractions of respondents use only the values (0, 50, 100). Most respondents give at least one answer that is a multiple of 10 different from (0, 50, 100) or a multiple of 5 that is not a multiple of 10. The fraction of respondents who give at least one answer that is a multiple of 10 different from (0, 50, 100) ranges between 0.263 and 0.337 across waves when all questions asked in a wave are used for classification and between 0.392 and 0.458 when only the questions common to all waves are used. Similarly, the fraction of respondents who give at least one answer that is a multiple of 5 but not of 10 ranges between 0.427 and 0.513 when all questions are used for classification and between 0.295 and 0.353 when only the common set is used.

The fractions of respondents who give at least one response in the outer tails (1-4 or 96-99) or non-rounded values in 6-94 are sizeable but considerably smaller, especially the latter. The former fraction ranges between 0.101 and 0.144 when all questions are used for classification and between 0.054 and 0.092 when only the common set is used. The latter fraction ranges between 0.022 and 0.042 or between 0.011 and 0.020, depending on the set of questions used.

SA3.2 Pooling Data across Waves to Probe More Deeply into Response Tendencies

Having established the temporal stability of rounding practices, we pool the HRS data across waves and analyzes response patterns separately by question domain. This greatly increases the number of expectations responses observed per respondent. As shown in Table S5, the average number of responses per respondent across all questions and waves is 106.8. By question domain, this figure ranges from 19.1 for personal health to 66 for personal finances.

In addition to allowing heterogeneous rounding across domains, we now pay particular attention to the location of responses inside the 0-100 scale and learn important features of respondents' response patterns in specific domains**.** To do so, we partition the 0-100 percent-chance scale as described in Table S6. We define the center (C) of the percent-chance scale to be values in the range 26-74 and the tails (T) to be values in the ranges 0-24 and 76-100. The values 25 and 75 form the boundary between the tail and center. We group responses into nine categories, defined by their presence in T or C and by their degree of granularity. The categories are: V1-T ≡ values in 1-24 or 76-99 that are not multiples of 5; V1-C ≡ values in 26-74 that are not multiples of 5; V5-T ≡ {5, 15, 85, 95}; V5-C ≡ {35, 45, 55, 65}; V10-T ≡ {10, 20, 80, 90}; V10-C ≡ {30, 40, 60, 70}; V25 ≡ {25, 75}; V100 ≡ {0, 100}; V50 ≡ {50}.

With this categorization, Table S7 shows the distribution of responses across respondents for all expectation questions asked between 2002 and 2014. Comparison of the frequencies of V25 responses (in column 5) with the frequencies of the remaining V5 responses (V5-C in column 9 and V5-T in column 8) reveals that the fraction of {25, 75} responses is always higher than the fraction of responses ending in 5 in the center of the scale ({35, 45, 55, 65}). For most questions across the three domains, the fraction of {25, 75} responses is higher than the fraction of responses ending in 5 in the tails of the scale ({5, 15, 85, 95}). Even more striking is comparison of the frequencies of responses in the tails versus those in the center. The fractions of V10, V5, and V1 responses in the tails are higher than the corresponding fractions in the center for nearly all questions in Table S7 (but P47 and P190).

Supplementary Appendix to Section 4

SA4.1 Determination of Respondent Rounding Types

Table S8 presents in a formal and compact way the complete algorithm used to determine a respondent's rounding type in the center of the 0-100 scale (panel A) and in its tails (panel B) within a given question domain. Specifically, Table S8A maps all logically possible response tendencies that may be observed in the center of the 0-100 scale into corresponding center rounding types. Table S8B maps all logically possible response tendencies that may be observed in the tails of the 0-100 scale into corresponding tail rounding types. For each question domain, each respondent is assigned a bivariate (tails, center) rounding type belonging to the cross product of the tail and center rounding types listed in the two panels of Table S8. Both panels make use of the partition of the 0-100 scale described in Table S7.

In Sub-section 4.1, we present an example where a respondent is observed to answer four expectations questions in the domain of personal finances. The respondent's answers are {5, 30, 60, 85}. As the set includes 2 multiples of 5 percent in the tails and 2 multiples of 10 percent in the center, the respondent is classified as rounding to the nearest 5 percent *or finer degree* in the tails ($\boldsymbol{\mathcal{M}}$5-T) and to the nearest 10 percent *or finer degree* in the center ($\boldsymbol{\mathcal{M}}$10-C).

We now discuss additional cases to further illustrate the logic of our proposed algorithm. Let us first consider an alternative scenario where the respondent is asked an additional question in the domain of personal finances and answers it with a value in the center that is either a multiple of 10 percent or 50 percent. Under this scenario, our conclusion about the respondent's rounding type in the center for the finances domain does not change. If, on the other hand, the respondent were to answer the additional question with a multiple of 5 percent in the center, our conclusion might change as it would depend on the respondent's response pattern in the two domains other than personal finances. For example, if in a second domain (say personal health), the respondent gave at least one center response that is a multiple of 5 percent or finer (i.e., a multiple of 1 percent), then the respondent would be classified as rounding to the nearest 5 percent (rather than 10 percent) in the center within the personal finances domain.

Moving now to the tails, let us imagine that the respondent is asked an additional question in the class of personal finances and answers it with a value in the tails that is a multiple of 5 percent, a multiple of 10 percent, or a focal response of 0 or 100. In this case, our conclusion about the respondent's rounding type in the tails for the finances domain does not change. If, on the other hand, the respondent were to answer the additional question with a multiple of 1 percent in the tails, our conclusion might change depending on the respondent's response pattern in the other two domains. Specifically, if in a second domain (say general economic conditions), the respondent gave at least one response — either in the tails or in the center — that is a multiple of 1 percent, then the respondent would be classified as rounding to the nearest 1 percent in the tails within the personal finances domain.

SA4.2 Variation of Rounding Types with Respondent Characteristics

Before describing how probability intervals are formed based on respondents' point responses and their inferred rounding types, we investigate whether the latter vary systematically by respondents' characteristics. To this end, in Section 4.2 we estimate three bivariate ordered probit models, one per question domain, where the outcome variables are the respondent's bivariate vectors of tail and center rounding categories in the corresponding domains and the predictors are respondent's gender, age, educational attainment, race, and cognitive score.

Here we provide additional estimates from a specification that excludes cognitive scores. These estimates are shown in Table S10. We do so as we believe that this part of our analysis may yield useful information about likely characteristics of respondents that are associated with coarser or more refined rounding behavior to researchers who analyze survey expectations but do not have access to: (a) a sufficiently large number of expectations questions per respondent to directly apply our method; (b) a sufficiently rich or specialized set of relevant covariates as in the HRS.

The main patterns are analogous to those observed in the specification including cognitive scores. In particular, higher levels of educational attainment are still unambiguously and statistically significantly associated with a tendency to give more refined responses (less rounding) across all scale segments and question domains. Similarly, the dummies continue to display a non-linear effect. Respondents belonging to the oldest cohort category (80+) have a statistically significant tendency to give more rounded responses than respondents belonging to the youngest one (50-59) across all scale segments and questions domains. On the other hand, respondents in the two intermediate cohort groups (i.e., 60-69 and 70-79) belong to rounding categories that may be more refined, coarser, or statistically indistinguishable from those characterizing respondents from younger cohorts, depending on the specific domain or scale segment. Gender and race continue to features a somewhat mixed pattern. As before, rounding tendencies are positively correlated across scale segments. Hence, respondents who give coarser responses in the tails are more likely to do so in the center and viceversa.

SA4.3 Using Survey Responses and Rounding Types to Form Expectations Intervals

Table S11 (making use of the partition of the 0-100 scale described in Table S7) presents in a formal and compact way the complete portion of the algorithm used to assign intervals to observed point responses in the scale tails (panel A) and in its center (panel B) within a given domain. Specifically, Table S11A maps all logically possible rounding types and responses that may be observed in the tails of the 0-100 scale into corresponding tail intervals. Similarly, Table S11B maps all logically possible rounding types and responses that may be observed in the center of the 0-100 scale into corresponding center intervals.

We apply the algorithm described in Table S11 to all responses by HRS respondents who responded to at least one expectations question in any question domain and in any wave between 2002 and 2014. For the purpose of constructing the intervals, respondents who were classified as rounding more coarsely in the tails than in the center are now treated as respondents who were classified as rounding to the same degree in the tails and in the center.

Building on the example introduced in Sub-section 4.1, in Sub-section 4.3 we explain how to assign probability intervals to the respondents' point responses. Here we discuss additional cases to further illustrate the logic of our algorithm, particularly the application of the boundary conditions in construction of the intervals.

Let us first consider a case where the respondent is asked an additional question (relative to the example discussed in Section 4.1) and were observed to answer with a multiple of 1 percent in the tails (say 2 percent). The respondent is still classified as $\boldsymbol{\mathcal{M}}$5-T in the tails, as long as they did not use any multiple of 1 percent to answer questions in the remaining domains. Under this scenario, construction of the interval around 2 percent requires a "boundary condition," whereby the lower bound of the assigned interval cannot be smaller than 0 percent. Hence, if the respondent were observed to respond with 2 percent to one question in the finances domain, while still being classified as $\boldsymbol{\mathcal{M}}$5-T, 2 percent would be assigned the interval [0, 4.5] or [max(0, 2 - 2.5), 2 + 2.5]. In the right tail of the scale, a response of 98 percent would be handled symmetrically and would be assigned a range of [95.5, 100] or [98 - 2.5, min(100, 98 + 2.5)].

Let us now consider an alternative scenario where the respondent is asked two additional questions in the personal finances domain and is observed to answer both of them with a multiple of 1 percent in the tails (say 2 percent and 98 percent). We now classify the respondent as $\boldsymbol{\mathcal{M}}$1-T. Under this scenario, all of the respondent's tail answers in the personal finances domain are taken at face value. Hence, 2 percent is assigned the range [2, 2], 5 percent is assigned the range [5, 5], and so on. Finally, regardless of the respondent's rounding type, any NR is assigned an interval of [0, 100].

Let us now entertain a final situation where the respondent's highest response in the left tail is 24 percent. In this case, the boundary condition to the left of 30 might bind, depending on the respondent's rounding type in the tails. Specifically, if the respondent is still $\boldsymbol{\mathcal{M}}$5-T — as it would happen if 24 percent were the only multiple of 1 percent (but not of 5 percent) used by the respondent in any domain — then the boundary condition to the left of 30 percent would bind, since 24 + 2.5 > 30 – 5. In this case, the probability interval assigned to the response of 30 percent in the center would be [26.5, 35] instead of [25, 35]. On the other hand, if the respondent were classified to be $\boldsymbol{\mathcal{M}}$1-T — as it would happen if they gave a second response, in addition to 24 percent, that is a multiple of 1 percent (but not of 5 percent) in any domain — then the boundary condition to the left of 30 percent would not bind, since 24 < 30 – 5.

Table S12 reports the distributions of interval width for the responses given in wave 2014 to the following three questions: the percent chance that the respondent will live to be 75 or older (P28), the percent chance that the respondent will work full time past age 62 (P17), and the percent chance that a mutual fund will increase in value within the next year (P47).

The distribution of interval width for the probability of working past 62 displayed in the middle column of the table displays higher frequencies at lower width values than the distributions shown in the remaining columns, consistent with the pattern shown in Table 3 of the main text.

SA4.4 Validation of the Algorithm

The specific criteria for consistency of the 2016 response with the inferred type is as follows.

- **Validity in the Tails** V100 responses are consistent with all rounding types but $\mathcal{U}$ndetermined-T. V10-T responses are consistent with all rounding types in {$\mathcal{M}$10-T, $\mathcal{M}$5-T, $\mathcal{M}$1-T}. V5-T responses are consistent with rounding types $\mathcal{M}$5-T and $\mathcal{M}$1-T. V1-T responses are consistent with rounding type $\mathcal{M}$1-T.
- **Validity in the Center** V50 responses are consistent with all rounding types but $\mathcal{U}$ndetermined-C. V25 responses are consistent with all rounding types in {$\mathcal{M}$25, $\mathcal{M}$10-C, $\mathcal{M}$5-C, $\mathcal{M}$1-C}. V10-C responses are consistent with all rounding types in {$\mathcal{M}$10-C, $\mathcal{M}$5-C, $\mathcal{M}$1-C}. V5-C responses are consistent with rounding types $\mathcal{M}$5-C and $\mathcal{M}$1-C. V1-T responses are consistent with rounding type $\mathcal{M}$1-C.

Each panel of Tables 6 and S13 displays the cross-tabulation between the granularity of the response observed in 2016 (by row) and the respondent's response type inferred by the algorithm for the domain to which the question belongs and the scale location in which the response falls (by column). Each cell reports the absolute frequency for the corresponding granularity-type combination. The cells corresponding to the valid cases are marked in green, while the cells corresponding to invalid cases are marked in red.

We find that 93.39% of tail responses and 88.25% of center responses to the survival question in 2016 are consistent with the predictions generated by our algorithm based on the 2002-2014 data (see Table 6). The corresponding figures for the working question are 97.05% and 95.71%. And those for the stock market question are 94.29% and 95.9%. These figures are shown in Table S13.

To further understand the properties of our algorithm, we investigate how the share of valid type-assignments for the survival question varies with the number of questions that respondents answered over the 2002-2014 time period. To do so, we divide the sample among individuals who answered no more than 6 questions (11.57% of the sample), exactly 7 questions (62.12% of the sample), and at least 8 questions (26.31% of the sample). We find, respectively for the three subsamples, that 85%, 93.43%, 97.11% of tail responses and 73.38%, 86.76%, 97.02% of center responses are consistent with the predictions generated by our algorithm, thereby indicating a positive association with number of questions answered. These figure are reported in Table S14.

Supplementary Appendix to Section 5

SA5.1 Derivation of Sharp Bounds with Exclusion Restrictions

Here we derive the sharp bounds with exclusion restrictions reported at the end of Section 5.1.

Let v denote an individual's subjective expectation, and let $[v^L, v^U]$ denote that individual's interval delivered by our algorithm. Let z denote a random variable with support equal to $\mathcal{Z}$. Assume:

$$\boldsymbol{Assumption\ A.1}: \qquad P(v|v^L, v^U, z) = P(v|v^L, v^U), \qquad \forall\, z \in \mathcal{Z}, \qquad (v^L, v^U) - a.s.$$

Here for simplicity we omit additional covariates x, but the analysis could condition on those throughout.

The object of interest is $E(v|z = z_0) - E(v|z = z_1)$, with $z_0, z_1 \in \mathcal{Z}$. Sharp bounds on this quantity are provided in the following proposition.

Proposition A.1. Assume that $P(v \in [v^L, v^U]) = 1$, that Assumption A.1 holds, and that v, v^L, v^U have finite support $\mathcal{V}$. Then the sharp bounds on $E(v|z = z_0) - E(v|z = z_1)$ are $[LB, UB]$, with

LB=$\sum_{\{v_\ell, v_u \in \mathcal{V} \cap A_{\{z_0,z_1\}}: v_\ell \leq v_u\}} v_\ell\, [P(v^L = v_\ell, v^U = v_u|z = z_0) - P(v^L = v_\ell, v^U = v_u|z = z_1)] +$
$\sum_{\{v_\ell, v_u \in \mathcal{V} \cap A^C_{\{z_0,z_1\}}: v_\ell \leq v_u\}} v_u\, [P(v^L = v_\ell, v^U = v_u|z = z_0) - P(v^L = v_\ell, v^U = v_u|z = z_1)]$,

and

UB=$\sum_{\{v_\ell, v_u \in \mathcal{V} \cap A_{\{z_0,z_1\}}: v_\ell \leq v_u\}} v_u\, [P(v^L = v_\ell, v^U = v_u|z = z_0) - P(v^L = v_\ell, v^U = v_u|z = z_1)] +$
$\sum_{\{v_\ell, v_u \in \mathcal{V} \cap A^C_{\{z_0,z_1\}}: v_\ell \leq v_u\}} v_\ell\, [P(v^L = v_\ell, v^U = v_u|z = z_0) - P(v^L = v_\ell, v^U = v_u|z = z_1)]$,

where $A_{\{z_0,z_1\}} = \{v_\ell, v_u: [P(v^L = v_\ell, v^U = v_u|z = z_0) - P(v^L = v_\ell, v^U = v_u|z = z_1)] > 0\}$, and $A^C_{\{z_0,z_1\}}$ is the complement of $A_{\{z_0,z_1\}}$.

Proof. To obtain the result, use the Law of Iterated Expectations to write

$$E(v|z=z_0) - E(v|z=z_1)$$

$$= \sum_{\{(v_\ell,v_u)\in\mathcal{V}: v_\ell \le v_u} E(v|v^L = v_\ell, v^U = v_u, z = z_0) P(v^L = v_\ell, v^U = v_u | z = z_0)$$

$$- \sum_{\{(v_\ell,v_u)\in\mathcal{V}: v_\ell \le v_u} E(v|v^L = v_\ell, v^U = v_u, z = z_1) P(v^L = v_\ell, v^U = v_u | z = z_1).$$

Using Assumption A.1, we obtain that the above quantity equals

$$\sum_{\{(v_\ell,v_u)\in\mathcal{V}: v_\ell \le v_u} E(v|v^L = v_\ell, v^U = v_u)[P(v^L = v_\ell, v^U = v_u | z = z_0) - P(v^L = v_\ell, v^U = v_u | z = z_1)].$$

This quantity is minimized by setting $E(v|v^L = v_\ell, v^U = v_u) = v_\ell$ when

$$P(v^L = v_\ell, v^U = v_u | z = z_0) - P(v^L = v_\ell, v^U = v_u | z = z_1) > 0,$$

and $E(v|v^L = v_\ell, v^U = v_u) = v_u$ when

$$P(v^L = v_\ell, v^U = v_u | z = z_0) - P(v^L = v_\ell, v^U = v_u | z = z_1) \le 0.$$

The opposite assignments yield the upper bound.

Tables and Figures Appendix

Table S1: Probabilistic Expectations Questions in the HRS (Section P, Waves 2002-2014)

#	Question	Wave						
		2002	2004	2006	2008	2010	2012	2014
	PERSONAL HEALTH (3-9 Qs in each wave, 10 across waves)							
P19	Health limit work during next 10 years	Y	-	-	-	-	-	-
P28	**Live to be 75 or more**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P29	**Live to be age X or more**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P32	**Move to nursing home ever (if age<65) / in the next 5 years (if age >= 65)**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P103	Live independently at 75	-	-	Y	Y	-	-	-
P104	Free of serious mental problems at 75	-	-	Y	Y	-	-	-
P106	Live independently at X	-	-	Y	Y	-	-	-
P107	Free of serious problems in thinking/reasoning at X	-	-	Y	Y	-	Y	Y
P108	Same health in 4 years	-	-	Y	Y	-	-	-
P109	Worse health in 4 years	-	-	Y	Y	-	-	-
	PERSONAL FINANCES (11-23 Qs in each wave, 31 across waves)							
P4	Income keep up inflation for next 5 years	Y	Y	Y	-	-	-	-
P5	**Leave inheritance >=$10,000**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P6	**Leave inheritance >=$100,000**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P7	**Leave any inheritance**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P8	Receive inheritance during next 10 years	Y	Y	Y	-	-	-	-
P14	Lose job next year	Y	Y	Y	-	Y	Y	Y
P15	Finding a job in few month in case of job-loss	Y	Y	Y	-	Y	Y	Y
P16	**Working for pay in the future**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P17	**Working full time after age 62**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P18	**Working full time after age 65**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P20	**Finding a job in few months if unemployed**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P30	Give $5,000 to others over next 10 years	Y	Y	Y	-	-	-	-
P31	Receive $5,000 from others over next 10 years	Y	Y	Y	-	-	-	-
P59	**Leave inheritance >=$500,000**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P70	Medical expenses use up savings in next 5 years	-	Y	Y	Y	-	-	-
P71	Give $1,000 to others during next 10 years	-	Y	Y	-	-	-	-
P72	Give $10,000 to others during next 10 years	-	Y	Y	-	-	-	-
P73	Give $20,000 to others during next 10 years	-	Y	Y	-	-	-	-
P74	Receive $2,500 from others over next 10 years	-	Y	Y	-	-	-	-
P75	Receive $1,000 from others over next 10 years	-	Y	Y	-	-	-	-
P76	Receive $10,000 from others over next 10 years	-	Y	Y	-	-	-	-
P111	Soc. Sec. will be worse over next 10 years - current own benefits	-	-	Y	Y	Y	Y	Y
P112	Soc. Sec. will be worse over next 10 years - future own benefits	-	-	Y	Y	Y	Y	Y
P166	Home worth more by next year	-	-	-	-	Y	Y	Y
P168	Home worth more/less by random "X" by next year	-	-	-	-	Y	Y	Y
P175	Out-of-pocket medical expense >$1,500 during next year	-	-	-	-	Y	Y	Y
P176	Out-of-pocket medical expense >$500 during next year	-	-	-	-	Y	Y	Y
P177	Out-of-pocket medical expense >$3,000 during next year	-	-	-	-	Y	Y	Y
P178	Out-of-pocket medical expense >$8,000 during next year	-	-	-	-	Y	Y	Y
P181	Any work after age 70	-	-	-	-	-	Y	Y
P182	Working full time after age 70	-	-	-	-	-	Y	Y
	GENERAL ECONOMIC CONDITIONS (2-7 Qs in each wave, 12 across waves)							
P34	U.S. have economic depression during next 10 years	Y	Y	Y	Y	-	-	-
P47	**Mutual funds increase in value by next year**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
P110	Social Security in general will become worse in next 10 years	Y	-	Y	Y	Y	Y	-
P114	Mutual funds increase more than the cost of living over next 10 years	-	-	Y	-	-	-	-
P115	Mutual funds increase 8% more than the cost of living over next 10 years	-	-	Y	-	-	-	-
P116	Cost of living increases more than 5% over next 10 years	-	-	Y	Y	-	-	-
P150	Mutual funds increase by 20% (10%, or a random X%) by next year	Y	-	-	Y	Y	Y	Y
P180	Mutual funds decrease by 20% by next year	-	-	-	-	Y	Y	Y
P183	Medicare less generous in next 10 years	-	-	-	-	-	Y	Y
P190	Stock Market increase in value in 12 months of today	-	-	-	-	-	-	Y
P192	Stock Market increse by 20% (in 12 months)	-	-	-	-	-	-	Y
P193	Stock Market decrease by 20% (in 12 months)	-	-	-	-	-	-	Y
	Total N of Questions	**22**	**26**	**38**	**25**	**25**	**29**	**31**

Table S2: Number of Waves, Observations, and Respondents by Question

Question: percent chance that…	N waves asked	N total obs. (across waves)	N Rs asked (across waves)
		Personal Health	
P19: Health limit work next 10 years	1	5,475	5,475
P28: Live to be age 75 or more	7	56,497	17,868
P29: Live to be age X or more	7	118,404	27,638
P32: Move to nursing home in 5 y	7	74,696	26,095
P103: Live independently at 75	2	7,590	5,693
P104: Free of serious mental… at 75	2	7,590	5,693
P106: Live independently at X	2	15,291	13,228
P107: Free of serious think/reason…	4	33,518	15,599
P108: Same health in 4 years	2	16,253	12,509
P109: Worse health in 4 years	2	16,232	12,512
		General Economic Conditions	
P34: U.S. have economic depression	4	50,661	19,598
P47: Mutual funds up /next y	7	105,714	27,279
P110: SS in general will be worse	5	71,770	24,868
P114: Mutual fund up /more than living	1	16,680	16,680
P115: Mutual fund up 8% /more than…	1	16,652	16,652
P116: Cost living up /more than 5%	2	32,431	17,781
P150: Mutual funds up by 20/10/ X%	5	42,092	20,051
P180: Mutual funds down by 20%	3	31,658	17,826
P183: Medicare less generous in 10 y	2	36,524	19,938
P190: Stock market up by next year	1	8,615	8,615
P192: Stock market up by 20%	1	5,430	5,430
P193: Stock market down by 20%	1	5,306	5,306

NOTE: N of total observations includes all answers by any respondent in any wave to the corresponding question, including don't know/refuse. The set of questions each respondent is asked and observed to answer may vary across waves as a function of aspects of survey design such as the decision of designers to introduce new questions or to eliminate existing ones, the respondent's time-varying characteristics used for skip logic, etc. Additionally, new cohorts of respondents have been added over time, while a portion of respondents from the initial cohorts have left the study due to death or other reasons.

Table S2 (Continued): Number of Waves, Observations, and Respondents by Question

Question: percent chance that…	N waves asked	N total obs. (across waves)	N Rs asked (across waves)
		Personal Finances	
P4: Income keep up inflation in 5 y	3	51,559	20,852
P5: Leave inheritance ≥ $10K	7	116,769	28,252
P6: Leave inheritance ≥ $100K	7	95,625	25,360
P7: Leave any inheritance	7	19,716	9,426
P8: Receive inheritance in 10 y	3	51,559	20,852
P14: Lose job next year	6	32,743	12,220
P15: Find job in few months/loss	6	32,727	12,220
P16: Work for pay in the future	7	66,855	20,902
P17: Work full time after age 62	7	36,603	13,325
P18: Work full time after age 65	7	37,062	13,158
P20: Find job in few months/unemployed	7	8,206	5,182
P30: Give $5K to others in 10 y	3	50,528	20,633
P31: Receive $5K… in 10 y	3	50,528	20,633
P59: Leave inheritance ≥ $500K	7	73,872	21,339
P70: Med expenses use up savings	3	50,478	19,583
P71: Give $1K to others in 10 y	2	21,024	13,717
P72: Give $10K to others in 10 y	2	12,904	8,981
P73: Give $20K to others in 10 y	2	11,155	7,838
P74: Receive $2.5K… in 10 y	2	30,644	18,014
P75: Receive $1K… in 10 y	2	30,397	17,924
P76: Receive $10K… in 10 y	2	3,270	2,786
P111: SS worse/current own benefits	5	51,023	16,477
P112: SS worse/future own benefits	5	26,753	10,599
P166: Home worth more next year	3	28,067	11,422
P168: Home worth more/less by X	3	26,394	11,168
P175: OP med exp ≥ $1.5K next year	3	56,760	21,771
P176: OP med exp ≥ $500 next year	3	10,962	7,482
P177: OP med exp ≥ $3K next year	3	44,022	19,526
P178: OP med exp ≥ $8K next year	3	36,369	17,453
P181: Any work after age 70	2	17,057	9,915
P182: Work full time after age 70	2	10,384	6,856

NOTE: N of total observations includes all answers by any respondent in any wave to the corresponding question, including don't know/refuse. The set of questions each respondent is asked and observed to answer may vary across waves as a function of aspects of survey design such as the decision of designers to introduce new questions or to eliminate existing ones, the respondent's time-varying characteristics used for skip logic, etc. Additionally, new cohorts of respondents have been added over time, while a portion of respondents from the initial cohorts have left the study due to death or other reasons.

Table S3: Responses by Question and Wave in the 2002-2014 HRS

Question: percent chance that…	Wave	N	Fraction of responses equal to or in:								
			NR	0	1-4	50	96-99	100	Multiple* of 10	Multiple** of 5	Other
P5: leave inheritance ≥ $10,000 (personal finances)	2002	16,119	0.050	0.154	0.004	0.074	0.007	0.443	0.205	0.060	0.002
	2004	18,249	0.037	0.162	0.004	0.083	0.008	0.404	0.241	0.059	0.002
	2006	17,191	0.053	0.159	0.004	0.067	0.008	0.447	0.209	0.052	0.001
	2008	16,060	0.050	0.153	0.004	0.067	0.010	0.431	0.236	0.046	0.002
	2010	20,397	0.037	0.172	0.007	0.080	0.009	0.344	0.296	0.053	0.003
	2012	19,359	0.039	0.170	0.007	0.085	0.009	0.329	0.306	0.053	0.003
	2014	17,647	0.037	0.167	0.006	0.086	0.008	0.324	0.319	0.050	0.003
P14: lose job during next year (personal finances)	2002	4,220	0.022	0.479	0.021	0.122	0.002	0.018	0.244	0.091	0.002
	2004	5,629	0.013	0.450	0.021	0.128	0.000	0.019	0.277	0.091	0.001
	2006	4,797	0.020	0.461	0.026	0.107	0.001	0.018	0.274	0.090	0.003
	2010	6,785	0.018	0.323	0.028	0.141	0.001	0.022	0.356	0.106	0.004
	2012	6,093	0.017	0.322	0.033	0.140	0.001	0.022	0.363	0.099	0.002
	2014	5,219	0.015	0.323	0.035	0.126	0.001	0.018	0.376	0.103	0.003
P15: find equally good job (personal finances)	2002	4,220	0.022	0.183	0.009	0.165	0.006	0.142	0.353	0.120	0.001
	2004	5,629	0.013	0.176	0.012	0.158	0.003	0.138	0.387	0.112	0.002
	2006	4,797	0.017	0.173	0.014	0.152	0.004	0.143	0.383	0.112	0.003
	2010	6,769	0.013	0.188	0.022	0.148	0.004	0.069	0.435	0.118	0.004
	2012	6,093	0.014	0.166	0.018	0.164	0.003	0.076	0.447	0.108	0.003
	2014	5,219	0.014	0.141	0.016	0.166	0.002	0.083	0.463	0.112	0.003
P17: work full time after age 62 (personal finances)	2002	3,219	0.012	0.194	0.005	0.139	0.005	0.220	0.312	0.111	0.001
	2004	4,528	0.007	0.161	0.008	0.156	0.004	0.163	0.387	0.112	0.003
	2006	5,238	0.011	0.299	0.011	0.133	0.004	0.142	0.305	0.093	0.002
	2008	3,870	0.026	0.160	0.012	0.134	0.006	0.202	0.357	0.099	0.004
	2010	7,828	0.008	0.152	0.014	0.151	0.006	0.143	0.415	0.108	0.004
	2012	6,647	0.010	0.148	0.016	0.147	0.005	0.136	0.434	0.098	0.005
	2014	5,294	0.006	0.147	0.015	0.142	0.005	0.137	0.443	0.099	0.005

NOTE: N = sample size, NR = nonresponse, * = multiple of 10 but not (0, 50, 100), ** = multiple of 5 but not of 10.

Table S3 (Continued): Responses by Question and Wave in the 2002-2014 HRS

Question: percent chance that…	Wave	N	Fraction of responses equal to or in: NR	0	1-4	50	96-99	100	Multiple* of 10	Multiple** of 5	Other
P28: live to be 75 or more	2002	7200	0.048	0.038	0.002	0.223	0.005	0.178	0.359	0.144	0.003
(personal health)	2004	9037	0.035	0.049	0.003	0.230	0.004	0.165	0.372	0.139	0.002
	2006	6713	0.040	0.053	0.004	0.222	0.005	0.152	0.375	0.144	0.004
	2008	5567	0.038	0.041	0.004	0.207	0.005	0.156	0.394	0.148	0.006
	2010	10498	0.041	0.059	0.005	0.206	0.006	0.143	0.402	0.133	0.006
	2012	9482	0.035	0.064	0.006	0.221	0.006	0.135	0.406	0.124	0.004
	2014	8084	0.029	0.064	0.006	0.226	0.006	0.136	0.414	0.115	0.004
P32: move to nursing home in 5 years	2002	9177	0.082	0.491	0.014	0.111	0.001	0.006	0.207	0.088	0.002
(personal health)	2004	12629	0.063	0.444	0.012	0.144	0.001	0.008	0.232	0.095	0.002
	2006	10044	0.075	0.463	0.021	0.101	0.000	0.007	0.231	0.100	0.002
	2008	10106	0.061	0.433	0.020	0.089	0.000	0.007	0.281	0.106	0.002
	2010	15512	0.045	0.393	0.025	0.130	0.001	0.016	0.284	0.103	0.003
	2012	9870	0.046	0.402	0.023	0.120	0.000	0.012	0.289	0.105	0.003
	2014	9367	0.037	0.400	0.028	0.113	0.000	0.013	0.304	0.102	0.003
P34: U.S. have economic depression	2002	184	0.103	0.054	0.016	0.299	0.000	0.082	0.359	0.071	0.016
(general economic conditions)	2004	17996	0.069	0.084	0.005	0.264	0.002	0.056	0.384	0.134	0.003
	2006	16754	0.078	0.066	0.006	0.238	0.002	0.060	0.404	0.142	0.004
	2008	15727	0.060	0.044	0.005	0.194	0.006	0.137	0.409	0.141	0.004
P110: Social Security will be less generous	2006	16754	0.065	0.048	0.003	0.231	0.005	0.120	0.387	0.139	0.002
(general economic conditions)	2008	15727	0.064	0.049	0.002	0.223	0.006	0.111	0.395	0.147	0.003
	2010	20208	0.046	0.048	0.005	0.191	0.010	0.187	0.379	0.130	0.005
	2012	19081	0.043	0.051	0.004	0.210	0.008	0.175	0.387	0.118	0.004
P47: mutual fund increase in value	2002	7260	0.206	0.079	0.004	0.239	0.000	0.040	0.306	0.122	0.003
(general economic conditions)	2004	17996	0.148	0.058	0.004	0.264	0.001	0.041	0.359	0.121	0.004
	2006	16754	0.240	0.042	0.003	0.231	0.001	0.036	0.339	0.106	0.003
	2008	15727	0.197	0.057	0.004	0.216	0.001	0.028	0.374	0.119	0.004
	2010	20208	0.111	0.062	0.006	0.238	0.001	0.037	0.420	0.122	0.005
	2012	19081	0.119	0.058	0.005	0.271	0.000	0.033	0.401	0.108	0.005
	2014	8828	0.097	0.052	0.007	0.273	0.000	0.041	0.414	0.109	0.006

Table S4: Response Tendencies in the 2002-2014 HRS

Wave	N	Response pattern						
		All NR	All 0 or 100	All 0, 50, or 100	Some multiple of 10*	Some multiple of 5**	Some 1-4 or 96-99	Some other
Based on the 12 questions asked in all waves								
2002	16032	0.022	0.101	0.101	0.392	0.320	0.054	0.011
2004	18250	0.015	0.062	0.084	0.418	0.353	0.056	0.013
2006	17191	0.027	0.072	0.077	0.409	0.336	0.065	0.014
2008	16060	0.021	0.068	0.063	0.417	0.340	0.072	0.018
2010	20400	0.010	0.053	0.050	0.426	0.350	0.092	0.020
2012	19360	0.015	0.051	0.058	0.445	0.328	0.083	0.020
2014	17647	0.012	0.065	0.062	0.458	0.295	0.090	0.018
Based on all questions asked in each wave								
2002	16032	0.014	0.023	0.039	0.324	0.459	0.119	0.022
2004	18250	0.010	0.019	0.032	0.337	0.467	0.108	0.026
2006	17191	0.025	0.019	0.023	0.263	0.513	0.117	0.039
2008	16060	0.021	0.025	0.019	0.290	0.511	0.101	0.033
2010	20400	0.009	0.029	0.022	0.316	0.442	0.144	0.038
2012	19360	0.014	0.027	0.021	0.317	0.443	0.139	0.038
2014	17647	0.012	0.026	0.022	0.329	0.427	0.142	0.042

NOTE: N = sample size, NR = nonresponse, * ≡ {10, 20, 30, 40, 60, 70, 80, 90}, ** ≡ {5, 15, 25, 35, 45, 55, 65, 75, 85, 95}. The following 12 questions were asked in all HRS waves between 2002 and 2014: P47: mutual fund increase in value; P28: live to be 75 or more; P29: live to be X or more; P5: leave inheritance ≥ $10,000; P6: leave inheritance ≥ $100,000; P59: leave inheritance ≥ $500,000; P7: leave any inheritance; P16: work for pay in the future; P17: work full time after age 62; P18: work full time after age 65; P32: move to nursing home in 5 years; P20: finding a job in few months if unemployed.

Table S5: Numbers of Questions Asked and Answered by Wave and Question Domain

Wave Question Domain	2002	2004	2006	2008	2010	2012	2014	All Waves
				Number of Questions				
personal finances	14	21	23	11	18	20	20	127
personal health	4	3	9	9	3	4	4	36
gen. economic cond.	3	2	6	5	4	5	7	32
Total	21	28	38	25	25	29	31	197
				Average Number of Questions Asked				
personal finances	8	12.4	13.2	5.6	9	9.7	9.7	67.6
personal health	2.3	2.1	3.5	5.1	2.2	2.4	2.5	20.1
gen. economic cond.	1	2	5.8	4.6	3.3	4.2	3.3	24.2
Total	11.3	16.5	22.5	15.3	14.5	16.3	15.5	111.9
				Average Number of Questions Answered				
personal finances	7.8	12.1	12.8	5.4	8.9	9.5	9.5	66
personal health	2.2	2	3.3	4.8	2.1	2.3	2.4	19.1
gen. economic cond.	0.8	1.8	4.8	4.2	3	4	3.1	21.7
Total	10.8	15.9	20.9	14.4	14	15.8	15	106.8

Table S6: Partition of the 0-100 Percent Chance Scale in Two Symmetric Tails and a Center

	LT (Left Tail)	RT (Right Tail)	T (Tail)	C (Center)	Union
(V100, V50)	{ 0 }	{ 100 }	V100-LT ∪ V100-RT	{ 50 }	V100 ∪ V50
V25	∅	∅	∅	{ 25, 75 }	V25
V10	{ 10, 20 }	{ 80, 90 }	V10-LT ∪ V10-RT	{ 30, 40, 60, 70 }	V10-T ∪ V10-C
V5	{ 5, 15 }	{ 85, 95 }	V5-LT ∪ V5-RT	{ 35, 45, 55, 65 }	V5-T ∪ V5-C
V1	1-4 ∪ 6-9 ∪ 11-14 ∪ 16-19 ∪ 21-24	76-79 ∪ 81-84 ∪ 86-89 ∪ 91-94 ∪ 96-99	V1-LT ∪ V1-RT	26-29 ∪ 31-34 ∪ 36-39 ∪ 41-44 ∪ 46-49 ∪ 51-54 ∪ 56-59 ∪ 61-64 ∪ 66-69 ∪ 71-74	V1-T ∪ V1-C
Union	V100-LT ∪ V10-LT ∪ V5-LT ∪ V1-LT	V100-RT ∪ V10-RT ∪ V5-RT ∪ V1-RT	V100 ∪ V10-T ∪ V5-T ∪ V1-T	V50 ∪ V25 ∪ V10-C ∪ V5-C ∪ V1-C	0-100 (entire scale)

Table S7: Responses by Question and across Waves in the 2002-2014 HRS

Question: percent chance that…	N total obs.	NR	V50	V100	V25	V10 T	V10 C	V5 T	V5 C	V1 T	V1 C
		Percentage of responses in:									
Personal Health											
P19: Health limit work next 10 years	5475	0.044	0.311	0.153	0.087	0.217	0.144	0.031	0.007	0.005	0.001
P28: Live to be age 75 or more	56497	0.038	0.219	0.204	0.082	0.270	0.120	0.042	0.010	0.013	0.001
P29: Live to be age X or more	118404	0.050	0.211	0.191	0.075	0.236	0.156	0.049	0.013	0.018	0.001
P32: Move to nursing home in 5 y	74696	0.059	0.120	0.426	0.039	0.206	0.062	0.060	0.003	0.023	0.001
P103: Live independently at 75	7590	0.031	0.190	0.136	0.115	0.292	0.152	0.056	0.016	0.012	0.001
P104: Free of serious mental… at 75	7590	0.034	0.210	0.099	0.130	0.259	0.183	0.052	0.020	0.011	0.002
P106: Live independently at X	15291	0.060	0.219	0.144	0.100	0.234	0.166	0.046	0.015	0.015	0.001
P107: Free of serious think/reason…	33518	0.062	0.227	0.135	0.088	0.229	0.179	0.049	0.014	0.016	0.001
P108: Same health in 4 years	16253	0.048	0.226	0.151	0.097	0.263	0.151	0.044	0.009	0.010	0.001
P109: Worse health in 4 years	16232	0.069	0.228	0.146	0.077	0.272	0.143	0.043	0.008	0.014	0.001
General Economic Conditions											
P34: U.S. have economic depression	50661	0.069	0.234	0.148	0.083	0.228	0.170	0.041	0.014	0.011	0.001
P47: Mutual funds up /next y	105714	0.157	0.247	0.093	0.076	0.185	0.193	0.025	0.014	0.008	0.001
P110: SS in general will be worse	71770	0.054	0.212	0.200	0.087	0.235	0.151	0.035	0.011	0.014	0.001
P114: Mutual fund up/more than living	16680	0.281	0.182	0.096	0.063	0.178	0.157	0.026	0.010	0.006	0.001
P115: Mutual fund up 8%/more than…	16652	0.307	0.162	0.076	0.061	0.187	0.150	0.033	0.010	0.012	0.001
P116: Cost living up /more than 5%	32431	0.077	0.151	0.210	0.089	0.252	0.152	0.045	0.010	0.013	0.001
P150: Mutual funds up by 20/10/ X%	42092	0.034	0.156	0.090	0.070	0.314	0.237	0.063	0.017	0.018	0.002
P180: Mutual funds down by 20%	31658	0.019	0.179	0.098	0.061	0.318	0.225	0.064	0.017	0.016	0.002
P183: Medicare less generous in 10 y	36524	0.039	0.219	0.216	0.075	0.246	0.150	0.032	0.008	0.014	0.001
P190: Stock market up by next year	8615	0.077	0.335	0.090	0.058	0.185	0.202	0.026	0.011	0.016	0.001
P192: Stock market up by 20%	5430	0.021	0.151	0.108	0.054	0.342	0.199	0.084	0.012	0.028	0.001
P193: Stock market down by 20%	5306	0.013	0.183	0.115	0.048	0.314	0.210	0.076	0.012	0.026	0.002

NOTE: V50 ≡ {50}, V100 ≡ {0, 100}, V25 ≡ {25, 75}, V10-T ≡ {10, 20, 80, 90}, V10-C ≡ {30, 40, 60, 70}, V5-T ≡ {5, 15, 85, 95}, V5-C ≡ {35, 45, 55, 65}, V1-T ≡ non-round values in 1-24 or 76-99, V1-C ≡ non-round values in 26-74.

Table S7 (Continued): Responses by Question and across Waves in the 2002-2014 HRS

Question: percent chance that…	N total obs.	NR	V50	V100	V25	V10 T	V10 C	V5 T	V5 C	V1 T	V1 C
		Percentage of responses in:									
Personal Finances											
P4: Income keep up inflation in 5 y	51559	0.066	0.196	0.226	0.069	0.249	0.136	0.036	0.007	0.015	0.001
P5: Leave inheritance ≥ $10K	116769	0.046	0.083	0.518	0.028	0.228	0.051	0.028	0.001	0.017	0.000
P6: Leave inheritance ≥ $100K	95625	0.014	0.100	0.490	0.037	0.228	0.072	0.035	0.002	0.022	0.000
P7: Leave any inheritance	19716	0.020	0.053	0.763	0.013	0.098	0.021	0.020	0.001	0.012	0.000
P8: Receive inheritance in 10 y	51559	0.032	0.043	0.755	0.016	0.091	0.024	0.023	0.001	0.014	0.000
P14: Lose job next year	32743	0.017	0.129	0.405	0.028	0.261	0.060	0.067	0.003	0.031	0.000
P15: Find job in few months/loss	32727	0.015	0.158	0.276	0.056	0.287	0.128	0.053	0.004	0.022	0.000
P16: Work for pay in the future	66855	0.018	0.055	0.672	0.021	0.139	0.037	0.035	0.001	0.021	0.000
P17: Work full time after age 62	36603	0.011	0.144	0.333	0.055	0.268	0.120	0.043	0.006	0.020	0.001
P18: Work full time after age 65	37062	0.011	0.144	0.280	0.058	0.282	0.130	0.057	0.008	0.028	0.001
P20: Find job in few months/unemployed	8206	0.012	0.211	0.184	0.061	0.277	0.174	0.050	0.012	0.019	0.001
P30: Give $5K to others in 10 y	50528	0.024	0.120	0.505	0.050	0.187	0.065	0.035	0.002	0.011	0.000
P31: Receive $5K… in 10 y	50528	0.023	0.047	0.674	0.020	0.143	0.026	0.047	0.001	0.019	0.000
P59: Leave inheritance ≥ $500K	73872	0.011	0.090	0.490	0.034	0.216	0.073	0.046	0.003	0.037	0.000
P70: Med expenses use up savings	50478	0.060	0.141	0.316	0.060	0.246	0.109	0.048	0.006	0.014	0.000
P71: Give $1K to others in 10 y	21024	0.007	0.097	0.551	0.044	0.186	0.060	0.041	0.002	0.013	0.000
P72: Give $10K to others in 10 y	12904	0.011	0.212	0.322	0.072	0.219	0.124	0.026	0.006	0.007	0.001
P73: Give $20K to others in 10 y	11155	0.011	0.152	0.334	0.061	0.265	0.100	0.057	0.005	0.015	0.000
P74: Receive $2.5K… in 10 y	30644	0.004	0.021	0.723	0.019	0.134	0.023	0.053	0.001	0.022	0.000
P75: Receive $1K… in 10 y	30397	0.003	0.042	0.686	0.024	0.141	0.031	0.051	0.001	0.021	0.000
P76: Receive $10K… in 10 y	3270	0.015	0.243	0.321	0.052	0.198	0.134	0.022	0.009	0.006	0.001
P111: SS worse/current own benefits	51023	0.036	0.246	0.197	0.080	0.246	0.138	0.037	0.007	0.012	0.001
P112: SS worse/future own benefits	26753	0.020	0.205	0.186	0.085	0.255	0.179	0.040	0.014	0.014	0.001
P166: Home worth more next year	28067	0.030	0.202	0.165	0.045	0.361	0.146	0.033	0.005	0.011	0.001
P168: Home worth more/less by X	26394	0.035	0.112	0.259	0.029	0.348	0.120	0.070	0.004	0.024	0.000
P175: OP med exp ≥ $1.5K next year	56760	0.031	0.143	0.340	0.051	0.261	0.109	0.043	0.004	0.017	0.000
P176: OP med exp ≥ $500 next year	10962	0.017	0.114	0.642	0.025	0.126	0.043	0.020	0.001	0.012	0.000
P177: OP med exp ≥ $3K next year	44022	0.012	0.132	0.235	0.058	0.318	0.126	0.082	0.006	0.033	0.000
P178: OP med exp ≥ $8K next year	36369	0.009	0.079	0.260	0.037	0.327	0.092	0.120	0.005	0.071	0.000
P181: Any work after age 70	17057	0.010	0.118	0.374	0.042	0.259	0.101	0.058	0.005	0.034	0.000
P182: Work full time after age 70	10384	0.003	0.100	0.264	0.038	0.323	0.108	0.097	0.007	0.060	0.000

NOTE: V50 ≡ {50}, V100 ≡ {0, 100}, V25 ≡ {25, 75}, V10-T ≡ {10, 20, 80, 90}, V10-C ≡ {30, 40, 60, 70}, V5-T ≡ {5, 15, 85, 95}, V5-C ≡ {35, 45, 55, 65}, V1-T ≡ non-round values in 1-24 or 76-99, V1-C ≡ non-round values in 26-74.

Table S8A: Portion of the Algorithm Determining the Rounding Type of Respondent j in the Center for Questions of Domain l

START: **IF** / **AND** $\exists$ domain $l' \neq l$ s.t.	$\#(\Upsilon_{l'} \cap$ V1-C) ≥ 1	$\#(\Upsilon_{l'} \cap$ V1-C) $= 0$	$\#(\Upsilon_{l'} \cap$ V5-C) ≥ 1	$\#(\Upsilon_{l'} \cap$ V5-C) $= 0$	$\#(\Upsilon_{l'} \cap$ V10-C) ≥ 1	$\#(\Upsilon_{l'} \cap$ V10-C) $= 0$	$\#(\Upsilon_{l'} \cap$ V25) ≥ 1	$\#(\Upsilon_{l'} \cap$ V25) $=0$	$\#(\Upsilon_{l'} \cap$ V50) ≥ 1	$\#(\Upsilon_{l'} \cap$ V50) $= 0$	All NR
$\#(\Upsilon_l \cap$ V1-C) ≥ 2	j is $\mathcal{M}$1-C										
$\#(\Upsilon_l \cap$ V1-C)=1	$\mathcal{M}$1-C	IF j is still UNCLASSIFIED, GO to the NEXT row									
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C}) ≥ 2	j is $\mathcal{M}$5-C										
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C})=1	$\mathcal{M}$5-C		$\mathcal{M}$5-C	IF j is still UNCLASSIFIED, GO to the NEXT row							
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C $\cup$ V10-C}) ≥ 2	j is $\mathcal{M}$10-C										
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C $\cup$ V10-C})=1	$\mathcal{M}$10-C		$\mathcal{M}$10-C		$\mathcal{M}$10-C	IF j is still UNCLASSIFIED, GO to the NEXT row					
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C $\cup$ V10-C $\cup$ V25}) ≥ 2	j is $\mathcal{M}$25										
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C $\cup$ V10-C $\cup$ V25})=1	$\mathcal{M}$25		$\mathcal{M}$25		$\mathcal{M}$25		$\mathcal{M}$25	IF j is still UNCLASSIFIED, GO to the NEXT row			
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C $\cup$ V10-C $\cup$ V25 $\cup$ V50}) ≥ 2	j is $\mathcal{M}$50										
$\#(\Upsilon_l \cap$ {V1-C $\cup$ V5-C $\cup$ V10-C $\cup$ V25 $\cup$ V50})=1	$\mathcal{M}$50		$\mathcal{M}$50		$\mathcal{M}$50		$\mathcal{M}$50		$\mathcal{M}$50	j type is $\mathcal{U}$ndetermined, END	
All NR	j type is $\mathcal{U}$ndetermined, END										

NOTE: Υ_l is the set of responses given by a hypothetical respondent j in domain l. V1-C, V5-C, V10-C, V25, and V50 are sets partitioning the center of the 0-100 scale, defined in Table S7. $\mathcal{M}$1-C, $\mathcal{M}$5-C, $\mathcal{M}$10-C, $\mathcal{M}$25, $\mathcal{M}$50, and '$\mathcal{U}$ndetermined' denote rounding types in the center. $\mathcal{M}$1-C denotes a respondent who rounds to the nearest 1 percent in the center, $\mathcal{M}$5-C denotes a respondent who rounds to the nearest 5 percent or finer in the center, and so on. $\mathcal{U}$ndetermined denotes respondents who could not be classified to belong to any of the preceding center types.

Table S8B: Portion of the Algorithm Determining the Rounding Type of Respondent *j* in the Tails for Questions of Domain *l*

START: IF / **AND** ∃ domain $l' \neq l$ s.t.	$\#(\Upsilon_{l'} \cap$ {V1-T ∪ V1-C}) ≥ 1	$\#(\Upsilon_{l'} \cap$ {V1-T ∪ V1-C})= 0	$\#(\Upsilon_{l'} \cap$ {V5-T ∪ V5-C}) ≥ 1	$\#(\Upsilon_{l'} \cap$ {V5-T ∪ V5-C})= 0	$\#(\Upsilon_{l'} \cap$ {V10-T ∪ V10-C}) ≥ 1	$\#(\Upsilon_{l'} \cap$ {V10-T ∪ V10-C})= 0	$\#(\Upsilon_{l'} \cap$ V25) ≥ 1	$\#(\Upsilon_{l'} \cap$ V25) = 0	$\#(\Upsilon_{l'} \cap$ {V100 ∪ V50}) ≥ 1	$\#(\Upsilon_{l'} \cap$ {V100 ∪ V50})= 0	All NR
$\#(\Upsilon_l \cap$ V1-T) ≥ 2	*j* is **𝓜**1-T										
$\#(\Upsilon_l \cap$ V1-T)=1	**𝓜**1-T	IF *j* is still UNCLASSIFIED, GO to NEXT row									
$\#(\Upsilon_l \cap$ {V1-T ∪ V5-T}) ≥ 2	*j* is **𝓜**5-T										
$\#(\Upsilon_l \cap$ {V1-T ∪ V5-T})=1	**𝓜**5-T		**𝓜**5-T	IF *j* is still UNCLASSIFIED, GO to NEXT row							
$\#(\Upsilon_l \cap$ {V1-T ∪ V5-T ∪ V10-T}) ≥ 2	*j* is **𝓜**10-T										
$\#(\Upsilon_l \cap$ {V1-T ∪ V5-T ∪ V10-T })=1	**𝓜**10-T		**𝓜**10-T		**𝓜**10-T	IF *j* is still UNCLASSIFIED, GO to NEXT row					
$\#(\Upsilon_l \cap$ {V1-T ∪ V5-T ∪ V10-T ∪ V25 ∪ V100}) ≥ 2	*j* is **𝓜**100										
$\#(\Upsilon_l \cap$ {V1-T ∪ V5-T ∪ V10-T ∪ 𝕄25 ∪ V100)}=1	**𝓜**100		**𝓜**100		**𝓜**100		**𝓜**100		**𝓜**100	*j* type is **𝓤**ndetermined, END	
All NR	*j* type is **𝓤**ndetermined, END										

NOTE: Υ_l is the set of responses given by a hypothetical respondent *j* in domain *l*. V1-T, V5-T, V10-T, and V100 are sets partitioning the tails of the 0-100 scale, defined in Table S7. **𝓜**1-T, **𝓜**5-T, **𝓜**10-T, **𝓜**100, and '**𝓤**ndetermined' denote rounding types in the tails. **𝓜**1-T denotes a respondent who rounds to the nearest 1 percent in the tails, **𝓜**5-T denotes a respondent who rounds to the nearest 5 percent or finer in the tails, and so on. **𝓤**ndetermined denotes respondents who could not be classified to belong to any of the preceding t types.

Table S9: Distribution of Rounding Types by Domain

(Tails, Center) Rounding Type	Percent Personal Health	Percent Personal Finances	Percent General Economic Conditions
(𝓜1-T, 𝓜1-C)	0.17	0.33	0.26
(𝓜1-T, 𝓜5-C)	**1.07**	**3.03**	**1.22**
(𝓜1-T, 𝓜10-C)	**6.08**	**15.84**	**5.73**
(𝓜1-T, 𝓜25)	**1.33**	**1.72**	**0.80**
(𝓜1-T, 𝓜50)	**1.27**	**1.31**	**0.86**
(𝓜1-T, None/𝓤ndet.)	1.02	0.50	0.42
(𝓜5-T, 𝓜1-C)	*0.07*	*0.08*	*0.11*
(𝓜5-T, 𝓜5-C)	2.60	2.97	3.65
(𝓜5-T, 𝓜10-C)	**16.05**	**23.47**	**16.98**
(𝓜5-T, 𝓜25)	**3.20**	**2.95**	**2.29**
(𝓜5-T, 𝓜50)	**2.53**	**1.75**	**1.35**
(𝓜5-T, None/𝓤ndet.)	1.39	0.53	0.55
(𝓜10-T, 𝓜1-C)	*0.13*	*0*	*0.16*
(𝓜10-T, 𝓜5-C)	*1.84*	*0.73*	*2.47*
(𝓜10-T, 𝓜10-C)	25.92	22.75	32.51
(𝓜10-T, 𝓜25)	**5.91**	**5.09**	**5.24**
(𝓜10-T, 𝓜50)	**7.98**	**5.88**	**5.93**
(𝓜10-T, None/𝓤ndet.)	4.35	2.36	2.70
(𝓜100, 𝓜1-C)	*0*	*0*	*0.01*
(𝓜100, 𝓜5-C)	*0.16*	*0.03*	*0.14*
(𝓜100, 𝓜10-C)	*2.89*	*1.04*	*1.96*
(𝓜100, 𝓜25)	*1.62*	*1.01*	*1.08*
(𝓜*100*, 𝓜50)	3.90	2.45	2.32
(𝓜*100*, None/𝓤ndet.)	4.74	3.42	2.47
(None/Undet., 𝓜1-C)	0.01	0	0.01
(None/Undet., 𝓜5-C)	0.20	0.01	0.24
(None/Undet., 𝓜10-C)	1.27	0.01	2.50
(None/Undet., 𝓜25)	0.47	0	0.92
(None/Undet., 𝓜50)	0.92	0	2.06
(None/Undet., None/𝓤ndet.)	0.91	0.74	3.06
Total	100	100	100
Sample size	28044	28252	28172
Tails finer than center	**45.42**	**61.03**	**40.40**
Tails same as center	32.60	28.49	38.73
Tails coarser than center	*6.71*	*2.90*	*5.94*
No/𝓤ndet. T and/or C	15.27	7.58	14.93

NOTE: For each domain (T=tail and C= center), 𝓜1 denotes a respondent who rounds to the nearest 1 percent in that domain, 𝓜5 denotes a respondent who rounds to the nearest 5 percent or finer in that domain, and so on. 𝓤ndetermined denotes respondents who could not be classified to belong to any of the preceding types.

Table S10: Bivariate Ordered Probit of (Tail, Center) Rounding Categories on Respondent's Characteristics, by Question Domain

	Personal Health		Personal Finances		Gen. Econ. Conditions	
	Tail Type	Center Type	Tail Type	Center Type	Tail Type	Center Type
Male	0.0306	-0.0203	0.0321	0.0166	0.0137	-0.0346
	(0.0146)	(0.0152)	(0.0139)	(0.0149)	(0.0147)	(0.0154)
Aged 60-69 cohort	-0.1860	-0.1343	-0.0062	0.0217	-0.1064	-0.0962
	(0.0177)	(0.0191)	(0.0171)	(0.0186)	(0.0182)	(0.0192)
Aged 70-79 cohort	-0.1409	0.0784	0.1732	0.2271	-0.7937	0.0562
	(0.0196)	(0.0203)	(0.0187)	(0.0201)	(0.0196)	(0.0205)
Aged 80+ cohort	0.1768	0.5320	0.5862	0.6615	0.2228	0.4162
	(0.0257)	(0.0252)	(0.0237)	(0.0248)	(0.0258)	(0.0257)
High school	-0.1749	-0.1996	-0.2507	-0.2776	-0.1250	-0.2324
	(0.0210)	(0.0206)	(0.0194)	(0.0203)	(0.0211)	(0.0210)
Some college	-0.1607	-0.2081	-0.2969	-0.3290	-0.1289	-0.2820
	(0.0346)	(0.0359)	(0.0326)	(0.0351)	(0.0347)	(0.0367)
Bachelor	-0.3400	-0.4218	-0.4566	-0.4950	-0.2714	-0.4588
	(0.0264)	(0.0276)	(0.0253)	(0.0271)	(0.0268)	(0.0277)
Graduate	-0.4362	-0.5580	-0.5459	-0.5586	-0.3513	-0.5527
	(0.0290)	(0.0311)	(0.0281)	(0.0306)	(0.0294)	(0.0313)
Black	0.0846	0.1947	-0.0548	0.0212	-0.0036	0.0477
	(0.0211)	(0.0216)	(0.0193)	(0.0209)	(0.0209)	(0.0217)
Other race	0.1586	0.2031	0.1264	0.0897	0.1220	0.1128
	(0.0296)	(0.0315)	(0.0280)	(0.0302)	(0.0306)	(0.0312)
Rho	0.2698		0.3799		0.2985	
	(0.0086)		(0.0073)		(0.0092)	
N	22,821		25,016		22,983	

NOTES: (i) Respondents whose tail or center rounding category is undetermined are excluded from this analysis. (ii) Omitted dummies are 'Female,' 'Aged 50-59 cohort,' 'No degree,' and 'White.' 'Rho' is the parameter capturing the correlation between the error terms of the tail and center latent equations. (iii) Standard errors are reported in parentheses.

Table S11A: Portion of the Algorithm Assigning Probability Intervals, $\left[\upsilon^{T}_{jktL},\upsilon^{T}_{jktU}\right]$, to Point Responses in the Tails by Respondent j to Questions in Domain l, υ^{T}_{jkt}, by Rounding Type

Tails Type \ Center Type	$\mathcal{M}$1-C	$\mathcal{M}$5-C	$\mathcal{M}$10-C	$\mathcal{M}$25	$\mathcal{M}$50	No or $\mathcal{U}$ndetermined center type
$\mathcal{M}$1-T	υ^{T}_{jkt}	υ^{T}_{jkt}	υ^{T}_{jkt}	υ^{T}_{jkt}	υ^{T}_{jkt}	υ^{T}_{jkt}
$\mathcal{M}$5-T	SAME AS ($\mathcal{M}$1-T, $\mathcal{M}$1-C)	$[\max(0,\upsilon^{T}_{jkt}-2.5),$ $\min(\upsilon^{T}_{jkt}+2.5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-2.5),$ $\min(\upsilon^{T}_{jkt}+2.5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-2.5),$ $\min(\upsilon^{T}_{jkt}+2.5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-2.5),$ $\min(\upsilon^{T}_{jkt}+2.5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-2.5),$ $\min(\upsilon^{T}_{jkt}+2.5,100)]$
$\mathcal{M}$10-T	SAME AS ($\mathcal{M}$1-T, $\mathcal{M}$1-C)	SAME AS ($\mathcal{M}$5-T, $\mathcal{M}$5-C)	$[\max(0,\upsilon^{T}_{jkt}-5),$ $\min(\upsilon^{T}_{jkt}+5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-5),$ $\min(\upsilon^{T}_{jkt}+5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-5),$ $\min(\upsilon^{T}_{jkt}+5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-5),$ $\min(\upsilon^{T}_{jkt}+5,100)]$
$\mathcal{M}$100	SAME AS ($\mathcal{M}$1-T, $\mathcal{M}$1-C)	SAME AS ($\mathcal{M}$5-T, $\mathcal{M}$5-C)	SAME AS ($\mathcal{M}$10-T, $\mathcal{M}$10-C)	$[\max(0,\upsilon^{T}_{jkt}-12.5),$ $\min(\upsilon^{T}_{jkt}+12.5,100)]$	$[\max(0,\upsilon^{T}_{jkt}-25),$ $\min(\upsilon^{T}_{jkt}+25,100)]$	$[\max(0,\upsilon^{T}_{jkt}-50),$ $\min(\upsilon^{T}_{jkt}+50,100)]$
No or $\mathcal{U}$ndet. tail type	SAME AS ($\mathcal{M}$1-T, $\mathcal{M}$1-C)	SAME AS ($\mathcal{M}$5-T, $\mathcal{M}$5-C)	SAME AS ($\mathcal{M}$10-T, $\mathcal{M}$10-C)	SAME AS ($\mathcal{M}$100, $\mathcal{M}$25)	SAME AS ($\mathcal{M}$100, $\mathcal{M}$50)	$[0,100]$
All NR responses regardless of type	$[0,100]$	$[0,100]$	$[0,100]$	$[0,100]$	$[0,100]$	$[0,100]$

NOTE: $\mathcal{M}$1-T, $\mathcal{M}$5-T, $\mathcal{M}$10-T, $\mathcal{M}$100, and '$\mathcal{U}$ndetermined' denote rounding types in the tails. υ^{T}_{jkt} denotes a hypothetical response respondent j gave in the tails of the 0-100 scale when answering a question in domain l. $\left[\upsilon^{T}_{jktL},\upsilon^{T}_{jktU}\right]$ denotes the probability interval assigned to the point response by the algorithm. The boundary conditions ensure that the lower and upper bounds of the probability interval lie in the tails of the 0-100 scale.

Table S11B: Portion of the Algorithm Assigning Probability Intervals, $\left[\upsilon^{C}_{jktL},\upsilon^{C}_{jktU}\right]$, to Point Responses in the Center by Respondent *j* to Questions in Domain *l*, υ^{C}_{jkt}, by Rounding Type

Center Type / Tails Type	$\mathcal{M}$1-C	$\mathcal{M}$5-C	$\mathcal{M}$10-C	$\mathcal{M}$25	$\mathcal{M}$50	No or $\mathcal{U}$ndet. center type or any NR
$\mathcal{M}$1-T	υ^{C}_{jkt}	$[\max(\max\Upsilon^{LT}_{j},\upsilon^{C}_{jkt}-2.5),$ $\min(\upsilon^{C}_{jkt}+2.5,\min\Upsilon^{RT}_{j})]$	$[\max(\max\Upsilon^{LT}_{j},\upsilon^{C}_{jkt}-5),$ $\min(\upsilon^{C}_{jkt}+5,\min\Upsilon^{RT}_{j})]$	$[\max(\max\Upsilon^{LT}_{j},\upsilon^{C}_{jkt}-12.5),$ $\min(\upsilon^{C}_{jkt}+12.5,\min\Upsilon^{RT}_{j})]$	$[\max(\max\Upsilon^{LT}_{j},\upsilon^{C}_{jkt}-25),$ $\min(\upsilon^{C}_{jkt}+25,\min\Upsilon^{RT}_{j})]$	$[0,100]$
$\mathcal{M}$5-T	AS ($\mathcal{M}$1T, $\mathcal{M}$1C)	$[\max(\max\Upsilon^{LT}_{j}+2.5,\upsilon^{C}_{jkt}-2.5),$ $\min(\upsilon^{C}_{jkt}+2.5,\min\Upsilon^{RT}_{j}-2.5)]$	$[\max(\max\Upsilon^{LT}_{j}+2.5,\upsilon^{C}_{jkt}-5),$ $\min(\upsilon^{C}_{jkt}+5,\min\Upsilon^{RT}_{j}-2.5)]$	$[\max(\max\Upsilon^{LT}_{j}+2.5,\upsilon^{C}_{jkt}-12.5),$ $\min(\upsilon^{C}_{jkt}+12.5,\min\Upsilon^{RT}_{j}-2.5)]$	$[\max(\max\Upsilon^{LT}_{j}+2.5,\upsilon^{C}_{jkt}-25),$ $\min(\upsilon^{C}_{jkt}+25,\min\Upsilon^{RT}_{j}-2.5)]$	$[0,100]$
$\mathcal{M}$10-T	AS ($\mathcal{M}$1T, $\mathcal{M}$1C)	SAME AS ($\mathcal{M}$5-T, $\mathcal{M}$5-C)	$[\max(\max\Upsilon^{LT}_{j}+5,\upsilon^{C}_{jkt}-5),$ $\min(\upsilon^{C}_{jkt}+5,\min\Upsilon^{RT}_{j}-5)]$	$[\max(\max\Upsilon^{LT}_{j}+5,\upsilon^{C}_{jkt}-12.5),$ $\min(\upsilon^{C}_{jkt}+12.5,\min\Upsilon^{RT}_{j}-5)]$	$[\max(\max\Upsilon^{LT}_{j}+5,\upsilon^{C}_{jkt}-25),$ $\min(\upsilon^{C}_{jkt}+25,\min\Upsilon^{RT}_{j}-5)]$	$[0,100]$
$\mathcal{M}$100	AS ($\mathcal{M}$1T, $\mathcal{M}$1C)	SAME AS ($\mathcal{M}$5-T, $\mathcal{M}$5-C)	SAME AS ($\mathcal{M}$10-T, $\mathcal{M}$10-C)	$[\upsilon^{C}_{jkt}-12.5,\upsilon^{C}_{jkt}+12.5]$	$[\max(25,\upsilon^{C}_{jkt}-25),$ $\min(\upsilon^{C}_{jkt}+25,75)]$	$[0,100]$
No or $\mathcal{U}$ndet. tail type	AS ($\mathcal{M}$1T, $\mathcal{M}$1C)	SAME AS ($\mathcal{M}$5-T, $\mathcal{M}$5-C)	SAME AS ($\mathcal{M}$10-T, $\mathcal{M}$10-C)	SAME AS ($\mathcal{M}$100, $\mathcal{M}$25)	SAME AS ($\mathcal{M}$100, $\mathcal{M}$50)	$[0,100]$

NOTE: $\mathcal{M}$1-C, $\mathcal{M}$5-C, $\mathcal{M}$10-C, $\mathcal{M}$50, and '$\mathcal{U}$ndetermined' denote rounding types in the tails. υ^{C}_{jkt} denotes a hypothetical response respondent *j* gave in the center of the 0-100 scale when answering a question in domain *l*. $\left[\upsilon^{C}_{jktL},\upsilon^{C}_{jktU}\right]$ denotes the probability interval assigned to the point response by the algorithm. The boundary conditions ensure that the lower and upper bounds of the probability interval lie in the center of the 0-100 scale. Υ^{LT}_{j} denotes the set of responses respondent *j* gave in the left tail (i.e., in 0-24) when answering questions in domain *l*. Υ^{RT}_{j} denotes the set of respondent *j*'s responses in the right tail (i.e., in 76-100).

Table S12: Distribution of Range Size for Specific Expectations Questions in the 2014 HRS

Range Size	Percent Live to be 75 or older (P28 in Personal Health)	Percent Work full time past age 62 (P17 in Personal Finances)	Percent Mutual funds increase in value (P47 in General Economic Conditions)
0	7.17	20.95	6.04
2.5	3.71	9.05	2.02
3.5	0.09	0.09	0
4.5	0.04	0.08	0.02
5	27.72	31.72	23.82
6	0.01	0.02	0
7.5	0.99	1.38	1.55
9	0.02	0.02	0
10	42.96	32.58	48.11
12.5	1.53	0.34	0.77
15	0.38	0.19	0.36
17.5	0.06	0.13	0.11
20	0.05	0.02	0.02
22.5	0.06	0.11	0.09
25	4.40	1.57	3.77
27.5	0.02	0	0
30	0.02	0.02	0.01
32.5	0	0.02	0
35	0.01	0	0
40	0	0	0.02
42.5	0.01	0	0
50	7.71	1.1	3.56
60	0.01	0	0
100	2.99	0.62	9.72
Total	100	100	100
Sample size	8,084	5,294	8,828

Table S13 Validation: Working and Stock Market Expectations

Panel A. Percent Chance of Working Full-Time After Age 62, Tail Responses – Absolute frequencies

	Inferred tail rounding type in health domain based on algorithm and 2002-2014 data					
Granularity of tail response to working past 62 in 2016		$\mathcal{M}$1-T	$\mathcal{M}$5-T	$\mathcal{M}$10-T	$\mathcal{M}$50-T	$\mathcal{U}$ndet-T
	Multiple of 1	63	23	15	1	0
	Multiple of 5	86	70	29	0	0
	Multiple of 10	326	405	285	6	0
	0 or 100	282	410	485	21	0

NOTES: Sub-sample size = 2,507. Percentage of consistent cases in the tails = 97.05% (green-colored cells).

Panel B. Percent Chance of Working Full-Time After Age 62, Center Responses – Absolute frequencies

	Inferred center rounding type in health domain based on algorithm and 2002-2014 data						
Granularity of center response to working past 62 in 2016		$\mathcal{M}$1-C	$\mathcal{M}$5-C	$\mathcal{M}$10-C	$\mathcal{M}$25	$\mathcal{M}$50-C	$\mathcal{U}$ndet-C
	Multiple of 1	0	1	1	0	0	0
	Multiple of 5	0	4	11	0	0	0
	Multiple of 10	6	61	339	12	9	5
	25 or 75	3	17	97	24	5	1
	50	3	34	414	36	32	3

NOTES: Sub-sample size = 1,118 (after dropping 1 observation for which rounding type missing). Percentage of consistent cases in the center = 95.71% (green-colored cells).

Panel C. Percent Chance Mutual Funds Increase in Value by Next Year, Tail Responses – Abs. freq.

	Inferred tail rounding type in health domain based on algorithm and 2002-2014 data					
Granularity of tail response to stock market goes up in 1 year to in 2016		$\mathcal{M}$1-T	$\mathcal{M}$5-T	$\mathcal{M}$10-T	$\mathcal{M}$50-T	$\mathcal{U}$ndet-T
	Multiple of 1	71	59	58	2	0
	Multiple of 5	73	131	104	7	0
	Multiple of 10	371	968	1163	31	0
	0 or 100	191	335	887	122	0

NOTES: Sub-sample size = 4,573, (after dropping 14 observations for which rounding type missing). Percentage of consistent cases in the tails = 94.29% (green-colored cells).

Panel D. Percent Chance Mutual Funds Increase in Value by Next Year, Center Responses – Abs. freq.

	Inferred center rounding type in health domain based on algorithm and 2002-2014 data						
Granularity of center response to stock market goes up in 1 year in 2016		$\mathcal{M}$1-C	$\mathcal{M}$5-C	$\mathcal{M}$10-C	$\mathcal{M}$25	$\mathcal{M}$50-C	$\mathcal{U}$ndet-C
	Multiple of 1	4	4	4	1	0	0
	Multiple of 5	6	75	95	4	4	1
	Multiple of 10	24	412	2214	96	109	26
	25 or 75	8	118	599	110	33	5
	50	32	425	3212	428	389	34

NOTES: Sub-sample size = 8,472 (after dropping 10 observations for which rounding type missing). Percentage of consistent cases in the center = 96.39% (green-colored cells).

Table S14 Validation: Percent Chance of Living to Be 75 or More, by Number of Questions Answered

Panel A. Respondents with Number of Questions Answered ≤ 6 (11.57%)

Tail responses – *Absolute frequencies reported in each cell*

	Inferred tail rounding type in health domain based on algorithm and 2002-2014 data					
Granularity of tail response to survival past 75 in 2016		M1-T	M5-T	M10-T	M50-T	Indet-T
	Multiple of 1	0	1	12	1	0
	Multiple of 5	1	5	17	5	0
	Multiple of 10	10	29	107	21	0
	0 or 100	7	18	78	68	0

Notes: Sub-sample size = 380. Percentage of consistent cases in the tails = 85% (green-colored cells).

Center responses – *Absolute frequencies reported in each cell*

	Inferred center rounding type in health domain based on algorithm and 2002-2014 data						
Granularity of center response to survival past 75 in 2016		M1-C	M5-C	M10-C	M25	M50-C	Indet-C
	Multiple of 1	0	0	0	1	0	0
	Multiple of 5	0	0	3	4	0	0
	Multiple of 10	0	4	29	6	17	8
	25 or 75	0	4	25	8	9	5
	50	1	2	80	15	36	21

Notes: Sub-sample size = 278. Percentage of consistent cases in the center = 73.38% (green-colored cells).

Panel B. Respondents with Number of Questions Answered = 7 (62.12%)

Tail responses – *Absolute frequencies reported in each cell*

	Inferred tail rounding type in health domain based on algorithm and 2002-2014 data					
Granularity of tail response to survival past 75 in 2016		M1-T	M5-T	M10-T	M50-T	Indet-T
	Multiple of 1	23	12	25	2	0
	Multiple of 5	26	77	54	3	0
	Multiple of 10	106	243	651	44	0
	0 or 100	74	146	452	193	0

Notes: Sub-sample size = 2,131. Percentage of consistent cases in the tails = 93.43% (green-colored cells).

Center responses – *Absolute frequencies reported in each cell*

	Inferred center rounding type in health domain based on algorithm and 2002-2014 data						
Granularity of center response to survival past 75 in 2016		M1-C	M5-C	M10-C	M25	M50-C	Indet-C
	Multiple of 1	1	2	1	0	1	1
	Multiple of 5	0	7	21	1	3	0
	Multiple of 10	0	54	305	28	70	16
	25 or 75	4	18	136	49	27	7
	50	1	27	461	108	185	29

Notes: Sub-sample size = 1,563. Percentage of consistent cases in the center = 86.76% (green-colored cells).

Panel C. Respondents with Number of Questions Answered ≥ 8   (26.31%)

Tail responses – *Absolute frequencies reported in each cell*

	Inferred tail rounding type in health domain based on algorithm and 2002-2014 data					
Granularity of tail response to survival past 75 in 2016		M1-T	M5-T	M10-T	M50-T	Indet-T
	Multiple of 1	14	7	2	0	0
	Multiple of 5	19	37	10	0	0
	Multiple of 10	57	220	186	5	0
	0 or 100	36	91	138	9	0

Notes: Sub-sample size = 831 (after dropping 8 observations for which rounding type missing). Percentage of consistent cases in the tails = 97.11% (green-colored cells).

Center responses – *Absolute frequencies reported in each cell*

	Inferred center rounding type in health domain based on algorithm and 2002-2014 data						
Granularity of center response to survival past 75 in 2016		M1-C	M5-C	M10-C	M25	M50-C	Indet-C
	Multiple of 1	0	1	0	0	0	0
	Multiple of 5	1	11	7	1	1	0
	Multiple of 10	2	26	178	2	7	1
	25 or 75	3	31	90	7	1	1
	50	3	40	271	30	23	0

Notes: Sub-sample size = 738 (after dropping 3 observations for which rounding type missing). Percentage of consistent cases in the center = 97.02% (green-colored cells).