

Income Imputations in the National Study of Caregiving

Mengyao Hu
Vicki A. Freedman
Judith D. Kasper

August 2020

Suggested citation: Hu, Mengyao, Vicki A. Freedman, Judith D. Kasper. 2020. Income Imputations in the National Study of Caregiving. NHATS Technical Paper #25. Baltimore: Johns Hopkins Bloomberg School of Public Health. Available at www.nhats.org. This technical paper was prepared with funding from the National Institute on Aging (U01AG032947; R01AG054004; R01AG062477)

Contents

Overview	3
Extent of Missing Data for Total Income	3
Imputation Approach.....	4
Data Preparation for Imputation	4
Variables Used in Imputation.....	5
Income Imputation Process	7
Income Imputation Variables in NSOC.....	8
Descriptive Statistics for Income	9
Using the Five Versions of Income in Analyses.....	10
References	11

Overview

The National Study of Caregiving (NSOC) asks caregivers to report their total income (and their spouses' or partners' income if the caregiver is married or lives with a partner) for the prior calendar year. For those who do not know the exact value, information is collected in broad categories. Spouses of NHATS participants skip these questions, but have their income collected or imputed in NHATS [see DeMatteis, Freedman, Kasper (2012; 2015; 2016; 2018) for details].

After bringing over information from NHATS for spouses, exact income values are available for about three-fourths of participants. In order to facilitate use of the income data by researchers, we have developed a set of imputed values for those with missing or categorical income information. We provide five sets of imputed values to enable data users to use multiple imputation variance estimators and analysis techniques (see, for example, Rubin 1996).

This technical paper describes the income imputation methodology used in NSOC I, II and III. These values were included in the enhanced data NSOC files released in 2020.

Extent of Missing Data for Total Income

Table 1 shows the extent and type of missing data for each round. After bringing over information on spouse caregivers' income from NHATS (either reported or imputed), exact values are available for 71%-77% of NSOC respondents. About 5% - 10% of caregivers reported categorical values for their income, and about 17% - 19% of NSOC respondents have no income information, including 2%-3% that reported zero income in a given round.

Table 1. Percentages of respondents who reported income questions or have missing income.

	NSOC I	NSOC II	NSOC III Cross-sectional	NSOC III Longitudinal
% with reported income in NSOC or reported or imputed income in NHATS	71.2	77.1	71.6	72.1
% reported income category	9.5	5.2	7.5	6.8
% missing income value and category*	19.3	17.7	19.4	16.9
% did not help last month or in last month of life**	-	-	1.5	4.2
Total n	2,007	2,204	2,652	1,453

* In NSOC and NHATS, a small proportion of cases (2%-3%) reported their income as 0. We believe the majority of these cases are refusals/don't knows; we therefore impute income for these cases.

**In NSOC III, respondents who did not help last month or in the last month of life skipped the income questions. These cases are not imputed and are set to -4. The numbers for the remaining cases are 2612 (NSOC III cross-sectional) and 1392 (NSOC III longitudinal).

Imputation Approach

Each round, log income was imputed five times (and then transformed back to income). For respondents who provided no income values (or in rare cases a value of 0), we used multiple imputation by chained equations (MICE) to impute missing income and missing covariates. We used interval regression to impute income, which fills in the missing values of partially observed (censored) income. For all three rounds, we ran separate models for three groups: non-spouse/partner, non-breakoffs; spouse/partners; and breakoffs (who have fewer covariates available). For Round 7, we also imputed income for a fourth group: caregivers to deceased NHATS Sample Persons. We used Stata for all analyses.

Data Preparation for Imputation

Prior to estimating the imputations, we prepared the samples to be used to estimate the imputation models as follows:

- Step 1. For spouses/partners of living NHATS Sample Persons whose income was not asked in NSOC, we used their income reported or imputed in NHATS to fill in the missing (i.e., “-1 Inapplicable”) information in NSOC:
- Among these respondents, if their income was reported in NHATS, their reported income (ia#totinc, where # = round number) was used to fill in the missing in NSOC.
 - Among these respondents, if their income was imputed in NHATS, the average of the five imputed income variables in NHATS (ia#toincim1-ia#toincim5) was used to fill in the missing information in NSOC¹.

We examined the distributions of income (reported or imputed) of spouse/partner caregivers and identified three respondents with very high income imputed in NHATS. Given that income of these three respondents are extreme outliers in the NSOC income distribution, we decided to re-impute income for these three respondents in NSOC. A small number of spouse/partner caregivers who reported zero income in NHATS also were imputed.

- Step 2. We generated the upper and lower income limit variables as follows:
- For respondents with exact income values (reported in NSOC or for spouse caregivers reported or imputed in NHATS), the income value is specified as both lower and upper limits, indicating that these responses are definite and do not need imputation.

¹ To capture the effects of imputation for spouses/partners of SP whose income were imputed in NHATS, one could also use the five sets of imputed values from NHATS to impute the five sets of imputed values in NSOC. Given the small number of missing cases among spouses/partners of SP, statistics of the imputed variables for the two approaches did not vary much.

- For respondents with categorical information, their brackets (that is, lower and upper values) are used as their income limits. Those with only an upper limit (e.g., income < \$10,800) received zero as their lower limit. Those with only a lower limit (e.g., income > \$10,800) received a missing value for their upper limit, which can take any positive value.
- For other respondents being imputed (missing income, reports of zero income, spouse/partner outliers), their lower limit was specified as 0, and an upper limit was set as missing, which can take any positive number.

Step 3. We then log transformed the upper and lower income limit variables. Prior to transformation, we added one to the limit variables.

Variables Used in Imputation

Table 3 below indicates covariates included in imputation for each subgroup. All missing values were imputed using the imputed chain procedure, beginning with the least missing. Variables were included as follows:

- For all groups, models include: caregiver's characteristics (e.g., age, gender, education, race / ethnicity, number of other people in the household, spouse/partner's education) and geographic indicators of the NHATS Sample Person (census division and metro / non-metro residence).
- For all groups except spouse/partner caregivers we also include: relationship of caregiver to sample person, sample person's income from NHATS and whether the caregiver lives with the SP in the current round (the latter is omitted for the R7 longitudinal LML sample because it is not available for all as of R7).
- For all groups except breakoffs we also include: insurance coverage (private insurance, Medicaid enrollment) and assets (e.g., whether the CG and their spouse/partner have a checking account, savings account, certificate of deposit, retirement plan, and stocks or mutual funds).
- For non-break off caregivers to living SPs we also include employment variables (own business/farm and work for pay last week).
- Finally, for the R7 NSOC longitudinal sample only, income from R5 NSOC was included.

Table 3. Covariates used to impute income in NSOC for each subgroup.

	R1			R5			R7				R7 long			
	1 Non-S	2 S	3 BF	1 Non-S	2 S	3 BF	1 Non-S	2 S	3 BF	4 LML	1 Non-S	2 S	3 BF	4 LML
Age	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Race / ethnicity	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gender	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Number of other people live in the household	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CG education	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CG spouse/partner's education	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SP census division	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SP Metro / non-metro residence	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Relationship to SP	Y		Y	Y		Y	Y		Y	Y	Y		Y	Y
SP's income from NHATS	Y		Y	Y		Y	Y		Y	Y	Y		Y	Y
CG in household with SP	Y		Y	Y		Y	Y		Y	Y	Y		Y	
CG has private insurance coverage	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
CG has Medicaid coverage	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
CG owns home	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
CG has checking acct	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
CG has savings account	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
CG has cert of deposit	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
CG has retirement plan	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
CG has stocks mutual funds	Y	Y		Y	Y		Y	Y		Y	Y	Y		Y
Work for pay last week	Y	Y		Y	Y		Y	Y			Y	Y		
Own farm business	Y	Y		Y	Y		Y	Y			Y	Y		
Income from round 5											Y	Y	Y	Y
N (model sample size)	1,562	422	1,585	1,711	471	1,733	1,819	517	1,845	2,095	792	275	799	1,117
Number imputed	548	8	23	480	3	22	591	19	26	77	54	1	7	70

Note: Non-S: non-spouses/partners of SP; S: spouses/partners of SP; BF: breakoff respondents; LML: caregivers to deceased SPs.

Income Imputation Process

We created multiple imputations by chained equations (MICE) to impute missing covariates and income. Interval regression was used to impute income. We incorporated the NSOC survey design as follows (Reiter 2006). NSOC weights were included in the imputation model (using a pweight statement). To account for strata and cluster variables in imputation, we included variables for the SP's census division and a metro / non-metro residence indicator in the model.²

In each imputation, we specified 20 burn-in iterations (i.e., the number of iterations before the first set of imputed values is drawn). The steps for conducting the imputation are summarized below in two steps:

- Step 1. Impute missing covariates and income using MICE sequentially for each subgroup. The order of imputation is consistent with the column order specified in Table 3 (e.g., for NSOC I, non-spouses/partners of SP were imputed first, then spouses/partners, and finally breakoff respondents). For NSOC III, we imputed the cross-sectional samples before the longitudinal samples. Imputed values for income for earlier groups were averaged and used in subsequent models estimated for later groups; remaining values were independently imputed five times.
- Step 2. Transform income values back to a dollar scale. Final imputed variables were constructed with either reported values repeated five times or the five distinct imputed income values (from either NSOC or NHATS). Flags were created to indicate which values were imputed.

Imputation model results for income can be found in the appendix.

² We considered other approaches – e.g. adding a variable for each strata by cluster combination or imputing separately by each unique cluster (Heeringa, West & Berglund, 2017). However, the NHATS' complex sample design has too many cluster/strata combinations to implement these approaches (56 strata and two clusters per stratum).

Income Imputation Variables in NSOC

The following imputed variables are included in each round of NSOC.

Table 4. Imputed variables included in NSOC

Variable name	Label	Description
<i>NSOC I: 2010 Total Income Value</i>		
chi1income	C1 HI10 INCOME LAST YEAR	Actual reported \$ amount
chi1incimf	C1 F IMPUTED INCOME LAST YEAR FLG	Flag indicating imputation
chi1incim1-chi1incim5	C1 HI10 IMPUTED INCOME LAST YEAR INC1-INC5	Includes reported \$ amount, imputed values 1-5 for missing \$ amounts and reported bracket amounts
<i>NSOC II: 2014 Total Income Value</i>		
chi5income	C5 HI10 INCOME LAST YEAR	Actual reported \$ amount
chi5incimf	C5 F IMPUTED INCOME LAST YEAR FLG	Flag indicating imputation
chi5incim1-chi5incim5	C5 HI10 IMPUTED INCOME LAST YEAR INC1-INC5	Includes reported \$ amount, imputed values 1-5 for missing \$ amounts and reported bracket amounts
<i>NSOC III Cross-sectional sample: 2016 Total Income Value</i>		
chi7income	C7 HI10 INCOME LAST YEAR	Actual reported \$ amount
chi7incimf	C7 F IMPUTED INCOME LAST YEAR FLG	Flag indicating imputation
chi7incim1-chi7incim5	C7 HI10 IMPUTED INCOME LAST YEAR INC1-INC5	Includes reported \$ amount, imputed values 1-5 for missing \$ amounts and reported bracket amounts
<i>NSOC III Longitudinal sample: 2016 Total Income Value</i>		
lchi7income	C7 HI10 INCOME LAST YEAR	Actual reported \$ amount
lchi7incimf	C7 F IMPUTED INCOME LAST YEAR FLG	Flag indicating imputation
lchi7incim1-lchi7incim5	C7 HI10 IMPUTED INCOME LAST YEAR INC1-INC5	Includes reported \$ amount, imputed values 1-5 for missing \$ amounts and reported bracket amounts

Descriptive Statistics for Income

Table 5 presents the weighted mean and median values for income by imputation category (as indicated by chi#incimf or lchi#incimf) and for all groups combined. Means and medians for “Imputed in NSOC”, “Imputed in NHATS” and “All groups combined” are computed based on averages of the five imputed variables.

Table 5. Weighted mean and median income by NSOC round

	Round 1			Round 5			Round 7 cross-sectional ^{1,2}			Round 7 longitudinal ¹		
	n	Mean	Median	n	Mean	Median	n	Mean	Median	n	Mean	Median
Reported in NSOC	1,014	57,740	45,000	1,231	61,999	47,000	1,228	69,913	50,000	772	55,580	40,000
Reported in NHATS	252	50,675	36,000	281	62,618	40,000	298	94,033	55,000	180	65,640	55,000
Imputed in NSOC	579	54,907	31,693	505	56,361	37,221	621	64,572	41,897	348	62,465	41,207
Imputed in NHATS	162	45,920	33,800	187	56,467	36,800	177	91,519	54,000	92	56,005	46,600
All groups	2,007	55,132	40,000	2,204	60,373	42,000	2,324	73,514	50,000	1,392	58,461	42,000

¹ Excludes those who did not help last month or in the last month of life.

² To facilitate comparisons with Rounds 1 and 5, caregivers who helped deceased SP during their last month of life (n=288) are excluded from the Round 7 cross-sectional estimates.

As shown in Table 5, the Round 7 cross-sectional sample has a higher mean and median income than Round 1 or 5. This difference appears to be driven by higher reported and imputed income for spouse/partner caregivers whose values come from Round 7 NHATS. These higher values are consistent with the observation that caregiving spouse/partners have higher completed education levels in Round 7 than in earlier rounds.

Using the Five Versions of Income in Analyses

For each round, five sets of imputed variables were generated.

To adjust coefficients and standard errors for the variability between imputations following the combination rules by Rubin (1987), users can use the “mi estimate” command in Stata to run estimations on the imputed dataset.

Below is some example code to estimate unweighted and weighted mean income using NSOC I.

```
*generate a reported income variable which includes only reported income values from either NHATS or NSOC
```

```
gen chi1incim = chi1incim1  
replace chi1incim = . if chi1incimf == 3  
replace chi1incim = . if chi1incimf == 4
```

```
*save it to a new dataset  
save newdataset, replace
```

```
*use this new dataset for analysis  
use newdataset, clear
```

```
*use mi import to import data that include reported income and additional imputed income variables  
mi import wide, imputed (chi1incim=chi1incim1 chi1incim2 chi1incim3 chi1incim4 chi1incim5) drop  
mi set wide
```

```
*estimate unweighted mean income of NSOC I  
mi estimate: mean chi1incim
```

```
*estimate weighted mean income of NSOC I  
recode c1varstrat (54=55)3  
mi svyset c1varunit [pweight=w1cgfinwgt0], strata(c1varstrat)  
mi estimate: svy: mean chi1incim
```

³ For NSOC I only, users should first recode c1varstrat=54 to c1varstrat=55 because c1varstrat=54 has no cases in cluster 1.

References

- Berglund, P., & Heeringa, S. G. (2014). *Multiple imputation of missing data using SAS*. SAS Institute.
- DeMatteis Jill M., Freedman Vicki A., and Kasper, Judith D. 2012. National Health and Aging Trends Study Round 1 Income Imputation. *NHATS Technical Paper #3*. Johns Hopkins University School of Public Health. Available at www.NHATS.org.
- DeMatteis Jill M., Freedman Vicki A., and Kasper, Judith D. 2015. National Health and Aging Trends Study Round 3 Income Imputation. *NHATS Technical Paper #10*. Johns Hopkins University School of Public Health. Available at www.NHATS.org.
- DeMatteis Jill M., Freedman Vicki A., and Kasper, Judith D. 2016. National Health and Aging Trends Study Round 5 Income Imputation. *NHATS Technical Paper #15*. Johns Hopkins University School of Public Health. Available at www.NHATS.org.
- DeMatteis Jill, Freedman Vicki A., and Kasper, Judith D. 2018. National Health and Aging Trends Study Round 7 Income Imputation. *NHATS Technical Paper #21*. Johns Hopkins University School of Public Health. Available at www.NHATS.org.
- Freedman, Vicki A., Skehan, Maureen E., Wolff, Jennifer, Kasper, Judith D. 2019. *National Study of Caregiving I-III User Guide*. Baltimore: Johns Hopkins Bloomberg School of Public Health. Available at www.nhats.org.
- Heeringa, S. G., West, B. T., & Berglund, P. A. (2017). *Applied survey data analysis 2nd edition*. CRC press.
- Reiter, J. P., Raghunathan, T. E., & Kinney, S. K. (2006). The importance of modeling the sampling design in multiple imputation for missing data. *Survey Methodology*, 32(2), 143.
- Rubin, D. B. 1987. *Multiple Imputation for Nonresponse in Surveys*. New York: Wiley
- Rubin, D.B. 1996. Multiple imputation after 18+ years. *Journal of the American Statistical Association*, 91(434), 473-489.

Appendix 1. Imputation model results for Round 1.

Table A1. Imputation model for non-spouses of SP and non-breakoff respondents in NSOC I.

	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.11	0.07	0.119	0.11	0.07	0.119	0.11	0.07	0.111	0.10	0.07	0.119	0.11	0.07	0.113
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	-0.26	0.07	<0.001	-0.27	0.07	<0.001	-0.25	0.08	0.001	-0.26	0.08	0.001	-0.26	0.08	0.001
Retired/Don't work anymore	-0.29	0.12	0.020	-0.29	0.12	0.017	-0.27	0.13	0.034	-0.26	0.13	0.042	-0.27	0.13	0.034
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.11	0.15	0.456	0.12	0.15	0.425	0.12	0.15	0.427	0.11	0.15	0.454	0.12	0.15	0.414
Some college	0.31	0.13	0.018	0.32	0.14	0.017	0.32	0.13	0.016	0.31	0.13	0.020	0.32	0.13	0.015
College and above	0.51	0.14	<0.001	0.52	0.14	<0.001	0.52	0.14	<0.001	0.51	0.14	<0.001	0.52	0.14	<0.001
Number of other people in household	-0.01	0.02	0.825	-0.01	0.02	0.555	-0.02	0.02	0.403	-0.02	0.03	0.333	-0.02	0.03	0.365
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.22	0.09	0.009	0.23	0.09	0.008	0.24	0.09	0.006	0.24	0.09	0.006	0.24	0.09	0.006
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.44	0.09	<0.001	0.44	0.09	<0.001	0.44	0.09	<0.001	0.45	0.09	<0.001	0.44	0.09	<0.001
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.26	0.16	0.105	-0.22	0.16	0.156	-0.26	0.16	0.107	-0.23	0.16	0.156	-0.26	0.16	0.108
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.69	0.13	<0.001	0.69	0.13	<0.001	0.74	0.14	<0.001	0.70	0.13	<0.001	0.74	0.14	<0.001
High school	0.60	0.10	<0.001	0.61	0.10	<0.001	0.61	0.10	<0.001	0.61	0.10	<0.001	0.60	0.10	<0.001
Some college	0.73	0.09	<0.001	0.73	0.09	<0.001	0.74	0.09	<0.001	0.72	0.08	<0.001	0.72	0.08	<0.001
College and above	0.78	0.08	<0.001	0.77	0.08	<0.001	0.77	0.08	<0.001	0.79	0.08	<0.001	0.77	0.08	<0.001
Age	0.01	0.00	0.011	0.01	0.00	0.015	0.01	0.00	0.032	0.01	0.00	0.068	0.01	0.00	0.037
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	0.02	0.06	0.777	0.02	0.06	0.775	0.02	0.06	0.773	0.02	0.06	0.763	0.02	0.06	0.763
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.34	0.08	<0.001	-0.33	0.09	<0.001	-0.34	0.08	<0.001	-0.34	0.08	<0.001	-0.34	0.08	<0.001

Non-relatives	-0.29	0.13	0.022	-0.30	0.13	0.017	-0.28	0.13	0.027	-0.28	0.13	0.026	-0.28	0.13	0.027
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	-0.17	0.14	0.220	-0.17	0.13	0.214	-0.17	0.14	0.211	-0.18	0.14	0.196	-0.18	0.14	0.204
3 East North Central Division	-0.12	0.15	0.404	-0.12	0.15	0.420	-0.14	0.15	0.355	-0.13	0.15	0.378	-0.13	0.15	0.379
4 West North Central Division	-0.08	0.11	0.488	-0.08	0.11	0.485	-0.08	0.11	0.480	-0.08	0.11	0.480	-0.08	0.11	0.466
5 South Atlantic Division	-0.18	0.11	0.082	-0.18	0.11	0.088	-0.19	0.11	0.071	-0.19	0.10	0.074	-0.19	0.11	0.071
6 East South Central Division	-0.35	0.14	0.014	-0.36	0.14	0.013	-0.37	0.14	0.011	-0.36	0.14	0.011	-0.36	0.14	0.011
7 West South Central Division	-0.15	0.12	0.193	-0.15	0.12	0.188	-0.16	0.12	0.170	-0.16	0.11	0.169	-0.16	0.12	0.166
8 Mountain Division	-0.13	0.13	0.297	-0.14	0.13	0.287	-0.14	0.13	0.294	-0.13	0.13	0.306	-0.13	0.13	0.302
9 Pacific Division	-0.16	0.12	0.184	-0.16	0.12	0.180	-0.16	0.12	0.178	-0.16	0.12	0.176	-0.16	0.12	0.186
Race / ethnicity															
White, non-Hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-Hispanic	0.15	0.07	0.038	0.15	0.07	0.037	0.16	0.08	0.029	0.16	0.08	0.034	0.16	0.08	0.031
Others	0.02	0.09	0.857	0.02	0.09	0.827	0.02	0.09	0.833	0.02	0.09	0.827	0.02	0.09	0.842
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.31	0.12	0.011	0.31	0.12	0.011	0.31	0.12	0.010	0.30	0.12	0.012	0.30	0.12	0.011
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.17	0.08	0.027	0.17	0.08	0.030	0.16	0.08	0.034	0.17	0.08	0.029	0.17	0.08	0.030
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	-0.03	0.14	0.850	-0.04	0.14	0.797	-0.02	0.13	0.888	-0.02	0.13	0.866	-0.02	0.13	0.858
Missing	-0.25	0.32	0.442	-0.26	0.31	0.411	-0.24	0.31	0.433	-0.25	0.30	0.404	-0.27	0.31	0.378
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.10	0.08	0.176	0.10	0.08	0.181	0.11	0.08	0.175	0.11	0.08	0.168	0.11	0.08	0.174
Missing	-0.04	0.34	0.914	-0.03	0.35	0.934	0.00	0.34	0.997	0.03	0.35	0.939	0.01	0.34	0.981
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.14	0.06	0.020	0.14	0.06	0.023	0.14	0.06	0.019	0.14	0.06	0.023	0.14	0.06	0.021
Missing	0.15	0.38	0.693	0.14	0.39	0.723	0.15	0.38	0.705	0.12	0.39	0.764	0.14	0.38	0.708
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.31	0.08	<0.001	0.31	0.08	<0.001	0.32	0.08	<0.001	0.32	0.08	<0.001	0.32	0.08	<0.001
Missing	0.03	0.38	0.935	0.03	0.39	0.928	0.01	0.39	0.972	0.05	0.38	0.891	0.02	0.39	0.966
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	

YES	0.09	0.06	0.133	0.10	0.06	0.126	0.10	0.06	0.111	0.10	0.06	0.120	0.10	0.06	0.098
Missing	0.09	0.13	0.461	0.10	0.13	0.428	0.11	0.13	0.401	0.10	0.13	0.426	0.11	0.13	0.394
SP's income from NHATS	0.03	0.02	0.276	0.03	0.02	0.270	0.03	0.02	0.302	0.03	0.02	0.304	0.02	0.02	0.318
Constant	8.27	0.37	<0.001	8.27	0.38	<0.001	8.37	0.36	<0.001	8.42	0.36	<0.001	8.40	0.36	<0.001
/Insigma	-0.25	0.08	0.001	-0.25	0.08	0.001	-0.25	0.08	0.001	-0.25	0.08	0.001	-0.25	0.08	0.001
sigma	0.78	0.06		0.78	0.06		0.78	0.06		0.78	0.06		0.78	0.06	

Table A2. Imputation models for spouses in NSOC I.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.30	0.09	0.002	0.29	0.09	0.002	0.28	0.10	0.003	0.29	0.09	0.002	0.29	0.09	0.002
Some college	0.26	0.09	0.005	0.26	0.09	0.005	0.26	0.09	0.005	0.26	0.09	0.004	0.27	0.09	0.003
College and above	0.51	0.12	<0.001	0.51	0.12	<0.001	0.52	0.12	<0.001	0.51	0.12	<0.001	0.52	0.12	<0.001
Age	-0.01	0.00	0.035	-0.01	0.00	0.046	-0.01	0.00	0.024	-0.01	0.00	0.032	-0.01	0.00	0.033
Number of other people in household	-0.02	0.05	0.727	-0.01	0.04	0.806	-0.01	0.05	0.770	-0.01	0.05	0.843	-0.01	0.05	0.793
Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.12	0.09	0.192	0.16	0.09	0.082	0.13	0.09	0.155	0.10	0.09	0.274	0.12	0.09	0.169
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	0.06	0.09	0.460	0.06	0.09	0.521	0.11	0.09	0.207	0.04	0.09	0.682	0.08	0.09	0.341
Retired/Don't work anymore	0.00	0.10	0.996	0.00	0.10	0.976	0.04	0.10	0.671	-0.03	0.10	0.797	0.02	0.10	0.829
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.10	0.06	0.116	0.10	0.06	0.101	0.08	0.06	0.185	0.08	0.06	0.201	0.09	0.06	0.172
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.11	0.12	0.380	-0.11	0.12	0.367	-0.10	0.12	0.403	-0.11	0.12	0.370	-0.11	0.12	0.383
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.10	0.08	0.187	0.12	0.08	0.133	0.12	0.08	0.128	0.13	0.08	0.095	0.11	0.08	0.151
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.08	0.10	0.464	0.10	0.11	0.354	0.08	0.10	0.417	0.09	0.11	0.372	0.13	0.11	0.229
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.14	0.07	0.060	0.12	0.07	0.096	0.14	0.07	0.044	0.14	0.07	0.062	0.13	0.07	0.067
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.43	0.07	<0.001	0.45	0.07	<0.001	0.44	0.07	<0.001	0.43	0.07	<0.001	0.44	0.07	<0.001
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	-0.01	0.07	0.884	-0.02	0.07	0.746	-0.02	0.07	0.796	-0.01	0.07	0.940	-0.01	0.07	0.861
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	0.05	0.06	0.449	0.04	0.06	0.519	0.06	0.06	0.375	0.05	0.06	0.412	0.04	0.06	0.518
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	-0.36	0.20	0.068	-0.38	0.20	0.054	-0.38	0.20	0.059	-0.37	0.20	0.064	-0.37	0.20	0.064
3 East North Central Division	-0.31	0.20	0.125	-0.33	0.20	0.111	-0.32	0.21	0.119	-0.31	0.21	0.133	-0.32	0.21	0.116
4 West North Central Division	-0.12	0.20	0.539	-0.14	0.20	0.491	-0.14	0.21	0.492	-0.12	0.20	0.552	-0.14	0.20	0.499
5 South Atlantic Division	-0.30	0.20	0.129	-0.29	0.20	0.142	-0.31	0.20	0.127	-0.29	0.20	0.142	-0.30	0.20	0.133
6 East South Central Division	-0.43	0.20	0.034	-0.44	0.20	0.029	-0.47	0.21	0.027	-0.41	0.20	0.042	-0.45	0.21	0.033
7 West South Central Division	-0.33	0.20	0.091	-0.33	0.20	0.094	-0.37	0.20	0.067	-0.34	0.20	0.092	-0.34	0.20	0.089

8 Mountain Division	-0.43	0.24	0.077	-0.49	0.24	0.044	-0.44	0.25	0.070	-0.47	0.25	0.054	-0.47	0.24	0.055
9 Pacific Division	-0.12	0.20	0.535	-0.13	0.20	0.518	-0.13	0.20	0.520	-0.11	0.20	0.568	-0.13	0.20	0.521
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	-0.21	0.12	0.092	-0.22	0.12	0.063	-0.20	0.12	0.096	-0.21	0.12	0.084	-0.21	0.12	0.079
Others	-0.29	0.11	0.008	-0.28	0.11	0.007	-0.29	0.11	0.007	-0.28	0.11	0.008	-0.28	0.11	0.008
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.10	0.06	0.116	0.11	0.06	0.091	0.12	0.06	0.055	0.10	0.06	0.121	0.09	0.06	0.136
CG spouse's education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.15	0.09	0.086	0.15	0.09	0.071	0.14	0.09	0.100	0.14	0.09	0.103	0.14	0.09	0.096
Some college	0.11	0.08	0.199	0.11	0.08	0.197	0.10	0.08	0.210	0.10	0.08	0.218	0.11	0.08	0.203
College and above	0.40	0.10	<0.001	0.38	0.10	<0.001	0.37	0.10	<0.001	0.38	0.10	<0.001	0.38	0.10	<0.001
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	-0.24	0.20	0.230	-0.15	0.22	0.482	-0.18	0.21	0.397	-0.20	0.21	0.343	-0.21	0.21	0.311
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.01	0.09	0.905	-0.01	0.09	0.921	-0.01	0.09	0.950	0.00	0.09	0.976	0.00	0.09	0.992
missing	0.12	0.15	0.420	0.12	0.15	0.411	0.13	0.15	0.400	0.14	0.15	0.360	0.13	0.15	0.381
cons	10.51	0.31	<0.001	10.46	0.31	<0.001	10.49	0.31	<0.001	10.49	0.31	<0.001	10.45	0.31	<0.001
/Insigma	-0.66	0.05	<0.001	-0.67	0.05	<0.001	-0.66	0.05	<0.001	-0.66	0.05	<0.001	-0.66	0.05	<0.001
sigma	0.52	0.03		0.51	0.03		0.52	0.03		0.52	0.03		0.52	0.03	

Table A3. Imputation models for breakoff respondents in NSOC I.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Number of other people in household	-0.01	0.02	0.528	-0.02	0.02	0.410	-0.01	0.02	0.442	-0.02	0.02	0.427	-0.02	0.02	0.425
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.42	0.10	<0.001	0.39	0.11	<0.001	0.42	0.10	<0.001	0.39	0.11	<0.001	0.40	0.11	<0.001
Some college	0.75	0.09	<0.001	0.73	0.09	<0.001	0.75	0.09	<0.001	0.73	0.09	<0.001	0.73	0.09	<0.001
College and above	1.14	0.10	<0.001	1.12	0.10	<0.001	1.14	0.10	<0.001	1.11	0.10	<0.001	1.11	0.10	<0.001
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.82	0.12	<0.001	0.77	0.12	<0.001	0.77	0.12	<0.001	0.76	0.12	<0.001	0.76	0.12	<0.001
High school	0.83	0.08	<0.001	0.86	0.08	<0.001	0.85	0.08	<0.001	0.84	0.08	<0.001	0.85	0.08	<0.001
Some college	0.98	0.08	<0.001	0.98	0.08	<0.001	0.97	0.08	<0.001	0.98	0.08	<0.001	0.99	0.08	<0.001
College and above	1.08	0.07	<0.001	1.09	0.07	<0.001	1.08	0.07	<0.001	1.10	0.07	<0.001	1.10	0.07	<0.001
Age	0.02	0.00	<0.001	0.02	0.00	<0.001	0.02	0.00	<0.001	0.02	0.00	<0.001	0.02	0.00	<0.001
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.42	0.08	<0.001	-0.42	0.08	<0.001	-0.42	0.08	<0.001	-0.42	0.08	<0.001	-0.42	0.08	<0.001
Non-relatives	-0.37	0.10	<0.001	-0.37	0.10	<0.001	-0.37	0.10	<0.001	-0.37	0.10	<0.001	-0.36	0.10	<0.001
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	0.01	0.06	0.924	0.00	0.06	0.999	0.00	0.06	0.936	0.00	0.06	0.941	0.00	0.06	0.943
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	-0.15	0.11	0.185	-0.17	0.12	0.153	-0.16	0.12	0.152	-0.16	0.12	0.175	-0.16	0.12	0.179
3 East North Central Division	-0.10	0.11	0.383	-0.10	0.11	0.378	-0.09	0.11	0.425	-0.10	0.11	0.394	-0.10	0.11	0.385
4 West North Central Division	-0.08	0.09	0.372	-0.09	0.09	0.324	-0.09	0.09	0.333	-0.09	0.09	0.352	-0.08	0.10	0.374
5 South Atlantic Division	-0.22	0.09	0.016	-0.21	0.09	0.018	-0.21	0.09	0.017	-0.22	0.09	0.015	-0.21	0.09	0.018
6 East South Central Division	-0.38	0.12	0.002	-0.39	0.13	0.002	-0.38	0.13	0.002	-0.38	0.13	0.003	-0.38	0.13	0.002
7 West South Central Division	-0.11	0.10	0.288	-0.12	0.10	0.265	-0.11	0.10	0.279	-0.12	0.10	0.246	-0.13	0.10	0.224
8 Mountain Division	-0.15	0.12	0.231	-0.15	0.12	0.215	-0.15	0.12	0.219	-0.14	0.12	0.236	-0.14	0.12	0.235
9 Pacific Division	-0.15	0.10	0.112	-0.15	0.10	0.110	-0.15	0.10	0.123	-0.15	0.10	0.114	-0.16	0.10	0.110
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	0.02	0.06	0.804	0.02	0.06	0.766	0.02	0.06	0.756	0.01	0.06	0.818	0.02	0.06	0.738
Others	-0.06	0.09	0.483	-0.06	0.09	0.493	-0.06	0.09	0.510	-0.06	0.09	0.514	-0.05	0.09	0.550
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.30	0.10	0.002	0.30	0.10	0.002	0.29	0.10	0.002	0.29	0.10	0.003	0.29	0.10	0.003
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.35	0.07	<0.001	0.34	0.07	<0.001	0.35	0.07	<0.001	0.35	0.07	<0.001	0.36	0.07	<0.001
SP's income from NHATS															
cons	7.80	0.28	<0.001	7.83	0.26	<0.001	7.83	0.26	<0.001	7.87	0.26	<0.001	7.89	0.25	<0.001
/Insigma	-0.20	0.06	<0.001	-0.20	0.06	<0.001	-0.20	0.06	<0.001	-0.20	0.06	<0.001	-0.20	0.06	<0.001
sigma	0.82	0.05		0.82	0.05		0.82	0.05		0.82	0.05		0.82	0.05	

Appendix 2. Imputation model results for Round 5.

Table A4. Imputation models for non-spouses in NSOC II.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.10	0.06	0.089	0.10	0.06	0.087	0.11	0.06	0.074	0.10	0.06	0.090	0.10	0.06	0.081
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	-0.18	0.06	0.005	-0.18	0.06	0.004	-0.18	0.06	0.005	-0.17	0.06	0.006	-0.18	0.06	0.004
Retired/Don't work anymore	-0.26	0.07	<0.001	-0.26	0.07	<0.001	-0.26	0.07	<0.001	-0.26	0.07	<0.001	-0.26	0.07	<0.001
Number of other people in household	0.05	0.03	0.061	0.05	0.03	0.057	0.05	0.03	0.060	0.05	0.03	0.062	0.05	0.03	0.061
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.20	0.07	0.005	0.20	0.07	0.005	0.20	0.07	0.005	0.20	0.07	0.005	0.20	0.07	0.005
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	-0.08	0.13	0.552	-0.09	0.13	0.503	-0.08	0.14	0.547	-0.08	0.13	0.549	-0.08	0.13	0.542
Some college	0.13	0.12	0.254	0.13	0.12	0.277	0.13	0.12	0.255	0.13	0.12	0.246	0.13	0.12	0.268
College and above	0.29	0.12	0.019	0.28	0.12	0.024	0.28	0.12	0.021	0.29	0.12	0.018	0.28	0.12	0.022
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	-0.09	0.05	0.073	-0.10	0.05	0.044	-0.09	0.05	0.074	-0.10	0.05	0.063	-0.11	0.05	0.032
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.53	0.10	<0.001	0.52	0.11	<0.001	0.56	0.10	<0.001	0.53	0.10	<0.001	0.55	0.10	<0.001
High school	0.81	0.07	<0.001	0.81	0.07	<0.001	0.81	0.07	<0.001	0.81	0.07	<0.001	0.81	0.07	<0.001
Some college	0.71	0.07	<0.001	0.70	0.07	<0.001	0.70	0.07	<0.001	0.71	0.07	<0.001	0.71	0.07	<0.001
College and above	0.83	0.07	<0.001	0.83	0.07	<0.001	0.83	0.07	<0.001	0.83	0.07	<0.001	0.83	0.07	<0.001
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.17	0.06	0.010	0.16	0.06	0.014	0.17	0.06	0.010	0.17	0.06	0.010	0.16	0.06	0.015
Age	0.01	0.00	0.027	0.01	0.00	0.031	0.01	0.00	0.032	0.00	0.00	0.044	0.00	0.00	0.036
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.08	0.07	0.230	-0.08	0.07	0.211	-0.08	0.07	0.223	-0.08	0.07	0.212	-0.09	0.07	0.205
Non-relatives	-0.20	0.09	0.018	-0.20	0.09	0.018	-0.20	0.09	0.019	-0.21	0.09	0.018	-0.20	0.09	0.021
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.03	0.14	0.835	0.03	0.14	0.836	0.03	0.14	0.837	0.03	0.14	0.838	0.03	0.14	0.836
3 East North Central Division	0.01	0.13	0.931	0.01	0.13	0.932	0.02	0.13	0.905	0.01	0.13	0.917	0.01	0.13	0.928
4 West North Central Division	-0.04	0.12	0.775	-0.04	0.12	0.737	-0.04	0.12	0.777	-0.03	0.12	0.786	-0.03	0.12	0.783
5 South Atlantic Division	-0.15	0.13	0.239	-0.15	0.13	0.246	-0.15	0.13	0.240	-0.15	0.13	0.236	-0.15	0.13	0.241
6 East South Central Division	-0.12	0.14	0.394	-0.12	0.14	0.392	-0.12	0.14	0.394	-0.12	0.14	0.390	-0.12	0.14	0.388
7 West South Central Division	-0.06	0.14	0.679	-0.06	0.14	0.680	-0.05	0.14	0.692	-0.06	0.14	0.679	-0.06	0.14	0.675
8 Mountain Division	-0.18	0.18	0.319	-0.16	0.18	0.388	-0.18	0.18	0.323	-0.18	0.18	0.328	-0.18	0.18	0.324
9 Pacific Division	-0.09	0.14	0.540	-0.09	0.14	0.549	-0.09	0.15	0.546	-0.09	0.14	0.538	-0.09	0.15	0.547
Race / ethnicity															
White, non-Hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-Hispanic	0.12	0.07	0.102	0.12	0.07	0.103	0.12	0.07	0.108	0.12	0.07	0.101	0.12	0.07	0.098

Others	0.07	0.08	0.380	0.07	0.08	0.412	0.07	0.08	0.387	0.07	0.08	0.387	0.07	0.08	0.377
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.17	0.07	0.016	0.16	0.07	0.018	0.17	0.07	0.016	0.17	0.07	0.016	0.17	0.07	0.015
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.11	0.06	0.078	0.11	0.06	0.082	0.11	0.06	0.074	0.11	0.06	0.078	0.11	0.06	0.084
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.21	0.13	0.096	0.21	0.13	0.090	0.21	0.13	0.092	0.21	0.13	0.095	0.21	0.13	0.092
Missing	1.15	0.51	0.024	1.19	0.50	0.017	1.17	0.50	0.019	1.16	0.50	0.020	1.19	0.50	0.017
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.20	0.06	0.002	0.20	0.06	0.001	0.20	0.06	0.002	0.20	0.06	0.002	0.20	0.06	0.002
Missing	-0.57	0.34	0.097	-0.57	0.34	0.096	-0.58	0.34	0.086	-0.57	0.34	0.096	-0.58	0.34	0.084
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.02	0.05	0.744	0.02	0.05	0.662	0.02	0.05	0.704	0.02	0.05	0.696	0.02	0.05	0.710
Missing	-0.19	0.14	0.175	-0.19	0.14	0.172	-0.19	0.14	0.181	-0.19	0.14	0.172	-0.20	0.14	0.158
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.38	0.06	<0.001	0.38	0.06	<0.001	0.38	0.06	<0.001	0.38	0.06	<0.001	0.38	0.06	<0.001
Missing	0.11	0.16	0.503	0.10	0.16	0.520	0.11	0.16	0.488	0.10	0.16	0.518	0.11	0.16	0.497
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.19	0.05	<0.001	0.19	0.05	<0.001	0.19	0.05	<0.001	0.19	0.05	<0.001	0.19	0.05	<0.001
Missing	0.30	0.15	0.040	0.30	0.15	0.037	0.30	0.15	0.040	0.31	0.15	0.039	0.31	0.15	0.036
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.41	0.10	<0.001	-0.41	0.10	<0.001	-0.41	0.10	<0.001	-0.41	0.10	<0.001	-0.41	0.10	<0.001
Missing	-0.07	0.18	0.691	-0.07	0.19	0.689	-0.08	0.18	0.681	-0.07	0.18	0.693	-0.08	0.19	0.676
SP's income from NHATS	0.05	0.03	0.064	0.05	0.03	0.064	0.05	0.03	0.065	0.05	0.03	0.065	0.06	0.03	0.061
cons	8.28	0.41	<0.001	8.30	0.41	<0.001	8.29	0.41	<0.001	8.30	0.41	<0.001	8.30	0.41	<0.001
/Insigma	-0.42	0.05	<0.001	-0.42	0.05	<0.001	-0.42	0.05	<0.001	-0.42	0.05	<0.001	-0.42	0.05	<0.001
sigma	0.66	0.03		0.66	0.03		0.66	0.03		0.66	0.03		0.66	0.03	

Table A5. Imputation models for spouses in NSOC II.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Age	-0.01	0.01	0.364	-0.01	0.01	0.362	-0.01	0.01	0.453	-0.01	0.01	0.440	-0.01	0.01	0.361
CG spouse's education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.09	0.12	0.443	0.07	0.13	0.609	0.08	0.12	0.495	0.10	0.12	0.421	0.07	0.13	0.609
Some college	0.10	0.18	0.563	0.06	0.21	0.754	0.09	0.18	0.591	0.10	0.18	0.591	0.07	0.21	0.731
College and above	0.31	0.16	0.043	0.28	0.17	0.099	0.33	0.16	0.037	0.34	0.16	0.029	0.29	0.17	0.086
Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.25	0.14	0.083	0.25	0.14	0.087	0.22	0.15	0.132	0.22	0.15	0.142	0.25	0.14	0.084
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.04	0.16	0.790	0.06	0.16	0.697	0.07	0.16	0.649	0.07	0.17	0.686	0.08	0.16	0.626
Some college	-0.11	0.17	0.516	-0.09	0.17	0.616	-0.07	0.17	0.682	-0.08	0.18	0.649	-0.10	0.17	0.568
College and above	0.33	0.15	0.033	0.36	0.15	0.017	0.38	0.15	0.015	0.38	0.16	0.017	0.35	0.15	0.019
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.25	0.22	0.250	-0.23	0.21	0.275	-0.19	0.22	0.378	-0.18	0.22	0.417	-0.27	0.21	0.212
Number of other people in household	0.02	0.05	0.682	0.02	0.05	0.734	0.01	0.05	0.777	0.01	0.05	0.824	0.02	0.05	0.699
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.48	0.12	<0.001	0.48	0.12	<0.001	0.46	0.12	<0.001	0.46	0.12	<0.001	0.47	0.12	<0.001
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.08	0.09	0.383	-0.06	0.09	0.496	-0.09	0.09	0.347	-0.07	0.09	0.416	-0.08	0.09	0.349
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.20	0.08	0.014	0.21	0.08	0.011	0.23	0.09	0.009	0.22	0.08	0.008	0.23	0.08	0.008
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.27	0.19	0.138	0.27	0.18	0.137	0.27	0.18	0.136	0.28	0.20	0.151	0.26	0.18	0.147
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.25	0.14	0.086	0.25	0.14	0.080	0.24	0.15	0.104	0.23	0.14	0.094	0.26	0.15	0.082
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	-0.10	0.10	0.310	-0.11	0.10	0.257	-0.12	0.10	0.246	-0.12	0.10	0.214	-0.10	0.10	0.303
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	-0.37	0.20	0.069	-0.39	0.20	0.051	-0.33	0.21	0.115	-0.34	0.21	0.109	-0.38	0.20	0.060
3 East North Central Division	-0.35	0.26	0.174	-0.37	0.25	0.138	-0.33	0.26	0.193	-0.35	0.25	0.163	-0.35	0.26	0.176
4 West North Central Division	-0.11	0.21	0.607	-0.13	0.21	0.531	-0.10	0.21	0.622	-0.11	0.21	0.611	-0.09	0.21	0.668
5 South Atlantic Division	-0.22	0.20	0.283	-0.24	0.20	0.244	-0.21	0.21	0.305	-0.22	0.21	0.294	-0.21	0.21	0.306
6 East South Central Division	-0.32	0.20	0.107	-0.33	0.20	0.101	-0.31	0.20	0.123	-0.31	0.20	0.120	-0.32	0.20	0.108
7 West South Central Division	-0.25	0.26	0.336	-0.26	0.26	0.317	-0.23	0.26	0.374	-0.24	0.26	0.356	-0.25	0.26	0.341
8 Mountain Division	-0.03	0.20	0.876	-0.05	0.20	0.793	-0.03	0.20	0.891	-0.04	0.20	0.839	-0.02	0.20	0.911
9 Pacific Division	-0.11	0.21	0.614	-0.14	0.21	0.516	-0.09	0.21	0.669	-0.10	0.21	0.648	-0.09	0.21	0.655

Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	-0.01	0.15	0.931	-0.01	0.15	0.953	0.00	0.16	0.978	0.00	0.15	0.983	-0.01	0.15	0.934
Others	-0.16	0.30	0.588	-0.15	0.30	0.615	-0.16	0.30	0.602	-0.18	0.30	0.555	-0.14	0.30	0.636
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.13	0.14	0.339	0.13	0.13	0.339	0.13	0.14	0.349	0.13	0.13	0.337	0.14	0.14	0.313
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.36	0.16	0.026	0.31	0.16	0.055	0.41	0.14	0.004	0.38	0.15	0.015	0.39	0.15	0.013
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.25	0.13	0.059	0.26	0.13	0.057	0.26	0.13	0.054	0.26	0.14	0.061	0.25	0.14	0.065
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	0.27	0.18	0.130	0.27	0.18	0.123	0.24	0.18	0.171	0.24	0.18	0.181	0.27	0.18	0.127
Retired/Don't work anymore	0.12	0.18	0.526	0.12	0.18	0.511	0.10	0.19	0.602	0.08	0.18	0.671	0.12	0.18	0.506
missing	0.35	0.42	0.406	0.41	0.42	0.331	0.42	0.43	0.327	0.40	0.43	0.345	0.32	0.41	0.434
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.33	0.70	0.638	0.32	0.71	0.655	0.32	0.70	0.646	0.34	0.69	0.624	0.32	0.71	0.653
Missing	0.81	0.75	0.282	0.72	0.75	0.333	0.78	0.75	0.298	0.82	0.76	0.283	0.81	0.76	0.287
cons	9.94	0.62	<0.001	9.97	0.64	<0.001	9.86	0.63	<0.001	9.87	0.64	<0.001	9.95	0.64	<0.001
/Insigma	-0.12	0.18	0.483	-0.12	0.18	0.483	-0.12	0.18	0.488	-0.12	0.17	0.483	-0.12	0.18	0.484
sigma	0.88	0.16		0.88	0.16		0.88	0.16		0.88	0.15		0.88	0.16	

Table A6. Imputation models for breakoff respondents in NSOC II.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	-0.10	0.06	0.062	-0.10	0.06	0.073	-0.10	0.06	0.071	-0.10	0.06	0.082	-0.11	0.06	0.052
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.57	0.12	<0.001	0.56	0.12	<0.001	0.56	0.12	<0.001	0.57	0.12	<0.001	0.56	0.12	<0.001
High school	1.07	0.07	<0.001	1.06	0.07	<0.001	1.06	0.07	<0.001	1.04	0.07	<0.001	1.07	0.07	<0.001
Some college	1.09	0.06	<0.001	1.09	0.06	<0.001	1.09	0.06	<0.001	1.08	0.06	<0.001	1.09	0.06	<0.001
College and above	1.25	0.06	<0.001	1.25	0.06	<0.001	1.25	0.06	<0.001	1.24	0.06	<0.001	1.25	0.06	<0.001
Number of other people in household	0.03	0.02	0.259	0.03	0.02	0.300	0.02	0.02	0.304	0.03	0.02	0.267	0.03	0.02	0.298
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.24	0.11	0.039	0.21	0.12	0.065	0.21	0.11	0.070	0.23	0.12	0.048	0.21	0.11	0.066
Some college	0.51	0.10	<0.001	0.49	0.10	<0.001	0.49	0.10	<0.001	0.50	0.10	<0.001	0.49	0.10	<0.001
College and above	0.85	0.10	<0.001	0.82	0.10	<0.001	0.82	0.10	<0.001	0.84	0.10	<0.001	0.83	0.10	<0.001
Age	0.01	0.00	<0.001	0.01	0.00	<0.001	0.01	0.00	<0.001	0.01	0.00	<0.001	0.01	0.00	<0.001
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.23	0.12	0.047	0.23	0.12	0.050	0.24	0.12	0.041	0.23	0.12	0.048	0.24	0.12	0.043
3 East North Central Division	0.16	0.11	0.139	0.18	0.11	0.102	0.17	0.11	0.105	0.18	0.11	0.104	0.17	0.11	0.120
4 West North Central Division	0.18	0.11	0.097	0.18	0.11	0.092	0.19	0.11	0.087	0.18	0.11	0.093	0.18	0.11	0.091
5 South Atlantic Division	0.05	0.11	0.655	0.07	0.11	0.530	0.07	0.11	0.528	0.06	0.11	0.561	0.06	0.11	0.550
6 East South Central Division	0.01	0.11	0.953	0.01	0.11	0.917	0.02	0.11	0.868	0.01	0.11	0.896	0.01	0.11	0.907
7 West South Central Division	0.14	0.11	0.214	0.14	0.11	0.226	0.14	0.11	0.220	0.14	0.11	0.218	0.13	0.11	0.238
8 Mountain Division	-0.04	0.15	0.760	-0.04	0.15	0.782	-0.07	0.15	0.646	-0.04	0.15	0.806	-0.04	0.15	0.775
9 Pacific Division	-0.02	0.12	0.872	-0.02	0.12	0.877	-0.02	0.12	0.896	-0.02	0.12	0.872	-0.02	0.12	0.883
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	-0.09	0.06	0.172	-0.10	0.06	0.108	-0.09	0.06	0.170	-0.09	0.06	0.141	-0.09	0.06	0.171
other	0.06	0.07	0.389	0.07	0.07	0.376	0.07	0.07	0.353	0.07	0.07	0.354	0.07	0.07	0.353
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.17	0.07	0.013	0.18	0.07	0.008	0.18	0.07	0.009	0.17	0.07	0.013	0.18	0.07	0.010
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.21	0.07	0.002	0.22	0.07	0.001	0.22	0.07	0.001	0.22	0.07	0.001	0.21	0.07	0.002
SP's income from NHATS	0.07	0.03	0.016	0.06	0.03	0.019	0.06	0.03	0.020	0.07	0.03	0.018	0.07	0.03	0.017
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.22	0.07	0.001	-0.22	0.07	0.001	-0.22	0.07	0.001	-0.22	0.06	0.001	-0.22	0.07	0.001
Non-relatives	-0.39	0.08	<0.001	-0.38	0.08	<0.001	-0.38	0.08	<0.001	-0.39	0.08	<0.001	-0.38	0.08	<0.001
cons	8.01	0.36	<0.001	8.06	0.36	<0.001	8.05	0.36	<0.001	8.03	0.36	<0.001	8.04	0.36	<0.001
/Insigma	-0.30	0.04	<0.001	-0.30	0.04	<0.001	-0.30	0.04	<0.001	-0.30	0.04	<0.001	-0.30	0.04	<0.001
sigma	0.74	0.03		0.74	0.03		0.74	0.03		0.74	0.03		0.74	0.03	

Appendix 3. Imputation model results for Round 7 cross-sectional sample.

Table A7. Imputation models for non-spouses in NSOC III cross-sectional sample.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.20	0.06	0.001	0.20	0.06	0.001	0.20	0.06	0.001	0.20	0.06	0.001	0.20	0.06	0.001
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	-0.23	0.05	<0.001	-0.23	0.05	<0.001	-0.23	0.05	<0.001	-0.23	0.05	<0.001	-0.23	0.05	<0.001
Retired/Don't work anymore	-0.22	0.08	0.003	-0.22	0.07	0.003	-0.22	0.07	0.003	-0.21	0.07	0.004	-0.22	0.07	0.003
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.21	0.05	<0.001	0.21	0.05	<0.001	0.18	0.05	<0.001	0.21	0.05	<0.001	0.21	0.05	<0.001
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.30	0.08	<0.001	-0.30	0.08	<0.001	-0.30	0.08	<0.001	-0.30	0.08	<0.001	-0.31	0.08	<0.001
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.28	0.07	<0.001	0.29	0.07	<0.001	0.28	0.07	<0.001	0.29	0.07	<0.001	0.29	0.07	<0.001
Number of other people in household	-0.01	0.02	0.568	-0.01	0.02	0.545	-0.02	0.02	0.393	-0.01	0.02	0.481	-0.02	0.02	0.378
Age	0.01	0.00	0.020	0.01	0.00	0.018	0.01	0.00	0.018	0.01	0.00	0.025	0.01	0.00	0.020
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
male	0.10	0.05	0.032	0.11	0.05	0.030	0.10	0.05	0.032	0.10	0.05	0.032	0.11	0.05	0.030
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.18	0.06	0.003	-0.17	0.06	0.003	-0.18	0.06	0.003	-0.17	0.06	0.003	-0.17	0.06	0.004
Non-relatives	-0.10	0.07	0.173	-0.10	0.07	0.165	-0.10	0.07	0.174	-0.09	0.07	0.202	-0.09	0.07	0.185
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.13	0.12	0.300	0.13	0.12	0.293	0.13	0.12	0.295	0.13	0.12	0.298	0.13	0.12	0.282
3 East North Central Division	0.01	0.12	0.948	0.01	0.12	0.939	0.01	0.12	0.921	0.01	0.12	0.941	0.01	0.12	0.927
4 West North Central Division	0.03	0.12	0.809	0.03	0.12	0.793	0.03	0.12	0.769	0.03	0.12	0.805	0.03	0.12	0.788
5 South Atlantic Division	0.02	0.11	0.891	0.02	0.11	0.879	0.02	0.11	0.863	0.01	0.11	0.901	0.02	0.11	0.867
6 East South Central Division	-0.14	0.14	0.334	-0.13	0.14	0.342	-0.14	0.14	0.327	-0.14	0.14	0.328	-0.14	0.14	0.332
7 West South Central Division	-0.02	0.13	0.876	-0.01	0.13	0.925	-0.01	0.13	0.953	-0.01	0.12	0.917	-0.01	0.13	0.929
8 Mountain Division	0.11	0.14	0.419	0.12	0.14	0.390	0.13	0.14	0.369	0.12	0.14	0.394	0.12	0.14	0.403
9 Pacific Division	0.11	0.11	0.334	0.11	0.11	0.320	0.11	0.11	0.315	0.12	0.11	0.301	0.11	0.11	0.316
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	-0.01	0.06	0.856	-0.01	0.06	0.899	-0.01	0.06	0.860	-0.01	0.06	0.891	-0.01	0.06	0.891
Others	-0.11	0.08	0.181	-0.11	0.08	0.190	-0.11	0.08	0.201	-0.11	0.08	0.185	-0.11	0.08	0.199
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.07	0.06	0.222	0.07	0.06	0.228	0.07	0.06	0.231	0.07	0.06	0.209	0.07	0.06	0.216
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.02	0.06	0.665	0.02	0.06	0.688	0.02	0.06	0.716	0.02	0.06	0.754	0.02	0.06	0.755

CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.24	0.09	0.010	0.23	0.09	0.011	0.24	0.09	0.010	0.23	0.09	0.011	0.23	0.09	0.011
Missing	-0.04	0.15	0.819	-0.04	0.15	0.788	-0.05	0.15	0.766	-0.05	0.15	0.767	-0.04	0.15	0.770
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.11	0.06	0.080	0.11	0.06	0.083	0.12	0.06	0.070	0.12	0.06	0.072	0.11	0.06	0.086
Missing	0.00	0.24	0.984	0.01	0.24	0.982	0.04	0.24	0.859	0.02	0.24	0.938	0.01	0.24	0.968
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.19	0.05	0.001	0.19	0.05	<0.001	0.19	0.05	<0.001	0.19	0.05	<0.001	0.19	0.05	<0.001
Missing	-0.22	0.20	0.259	-0.22	0.20	0.259	-0.25	0.20	0.211	-0.22	0.20	0.255	-0.22	0.20	0.257
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.39	0.06	<0.001	0.39	0.06	<0.001	0.39	0.06	<0.001	0.39	0.06	<0.001	0.39	0.06	<0.001
Missing	0.04	0.13	0.764	0.04	0.13	0.781	0.05	0.13	0.680	0.03	0.13	0.802	0.03	0.13	0.788
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.18	0.05	0.001	0.18	0.05	0.001	0.18	0.05	<0.001	0.18	0.05	0.001	0.18	0.05	0.001
Missing	0.82	0.20	<0.001	0.83	0.20	<0.001	0.83	0.20	<0.001	0.82	0.20	<0.001	0.82	0.20	<0.001
SP's income from NHATS	0.02	0.01	0.200	0.02	0.01	0.191	0.02	0.01	0.206	0.02	0.01	0.195	0.02	0.01	0.195
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	-0.04	0.13	0.777	-0.04	0.13	0.781	-0.03	0.13	0.809	-0.04	0.13	0.759	-0.04	0.13	0.771
Some college	0.11	0.13	0.410	0.11	0.13	0.408	0.11	0.13	0.387	0.11	0.13	0.421	0.11	0.13	0.406
College and above	0.24	0.14	0.083	0.24	0.14	0.083	0.25	0.14	0.076	0.24	0.14	0.084	0.24	0.14	0.082
missing	-0.80	0.29	0.005	-0.83	0.29	0.004	-0.87	0.30	0.003	-0.95	0.31	0.002	-0.84	0.29	0.003
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.47	0.12	<0.001	0.47	0.12	<0.001	0.48	0.12	<0.001	0.48	0.12	<0.001	0.48	0.12	<0.001
High school	0.56	0.07	<0.001	0.57	0.07	<0.001	0.58	0.07	<0.001	0.56	0.07	<0.001	0.57	0.07	<0.001
Some college	0.60	0.05	<0.001	0.60	0.06	<0.001	0.62	0.06	<0.001	0.60	0.05	<0.001	0.61	0.05	<0.001
College and above	0.79	0.06	<0.001	0.79	0.06	<0.001	0.80	0.06	<0.001	0.79	0.06	<0.001	0.80	0.06	<0.001
missing	1.02	0.24	<0.001	1.02	0.25	<0.001	1.02	0.25	<0.001	0.98	0.25	<0.001	1.02	0.24	<0.001
cons	8.74	0.32	<0.001	8.72	0.32	<0.001	8.73	0.32	<0.001	8.75	0.32	<0.001	8.74	0.32	<0.001
/Insigma	-0.51	0.05	<0.001	-0.51	0.05	<0.001	-0.51	0.05	<0.001	-0.51	0.05	<0.001	-0.51	0.05	<0.001
sigma	0.60	0.03		0.60	0.03		0.60	0.03		0.60	0.03		0.60	0.03	

Table A8. Imputation models for spouses in NSOC III cross-sectional sample.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Age	0.00	0.01	0.971	0.00	0.01	0.993	0.00	0.01	0.904	0.00	0.01	0.719	0.00	0.01	0.797
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.19	0.27	0.481	0.14	0.27	0.601	0.16	0.28	0.558	0.19	0.27	0.488	0.17	0.28	0.549
High school	0.37	0.22	0.087	0.33	0.21	0.106	0.36	0.21	0.089	0.39	0.23	0.086	0.36	0.21	0.086
Some college	0.64	0.21	0.002	0.63	0.20	0.002	0.64	0.21	0.002	0.66	0.22	0.002	0.65	0.20	0.001
College and above	0.01	0.05	0.837	0.01	0.04	0.905	0.00	0.05	0.971	0.03	0.05	0.547	0.00	0.04	0.950
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.06	0.11	0.551	0.06	0.11	0.581	0.06	0.10	0.533	0.06	0.11	0.603	0.07	0.10	0.483
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.16	0.29	0.574	0.17	0.30	0.584	0.17	0.30	0.563	0.15	0.28	0.598	0.18	0.29	0.544
Some college	0.21	0.26	0.410	0.23	0.27	0.395	0.23	0.25	0.376	0.21	0.24	0.397	0.23	0.26	0.373
College and above	0.66	0.28	0.020	0.66	0.29	0.024	0.67	0.28	0.019	0.65	0.27	0.016	0.67	0.28	0.017
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.28	0.18	0.109	-0.29	0.18	0.101	-0.30	0.17	0.074	-0.29	0.16	0.074	-0.30	0.17	0.089
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	-0.02	0.10	0.838	-0.02	0.10	0.847	-0.02	0.10	0.800	-0.01	0.10	0.935	-0.02	0.10	0.865
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	-0.12	0.20	0.553	-0.11	0.20	0.582	-0.12	0.21	0.544	-0.13	0.20	0.516	-0.12	0.20	0.538
3 East North Central Division	0.09	0.21	0.682	0.11	0.21	0.598	0.10	0.21	0.641	0.10	0.21	0.636	0.11	0.21	0.590
4 West North Central Division	0.02	0.16	0.909	0.04	0.17	0.825	0.03	0.17	0.844	0.03	0.17	0.852	0.04	0.17	0.813
5 South Atlantic Division	-0.17	0.19	0.392	-0.15	0.19	0.442	-0.16	0.20	0.409	-0.17	0.20	0.403	-0.16	0.20	0.412
6 East South Central Division	0.01	0.15	0.934	0.02	0.15	0.900	0.01	0.15	0.941	0.01	0.15	0.970	0.02	0.15	0.920
7 West South Central Division	-0.01	0.17	0.961	0.00	0.17	0.992	-0.01	0.17	0.953	-0.01	0.17	0.939	-0.01	0.17	0.972
8 Mountain Division	0.06	0.23	0.799	0.07	0.23	0.774	0.06	0.23	0.787	0.04	0.24	0.854	0.06	0.23	0.793
9 Pacific Division	0.15	0.17	0.397	0.16	0.17	0.344	0.14	0.17	0.415	0.14	0.17	0.415	0.14	0.18	0.433
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	0.22	0.20	0.262	0.21	0.20	0.281	0.24	0.20	0.225	0.20	0.19	0.311	0.21	0.19	0.275
Others	0.32	0.15	0.038	0.33	0.15	0.028	0.29	0.15	0.055	0.29	0.15	0.062	0.28	0.15	0.056
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.14	0.11	0.224	0.12	0.11	0.277	0.12	0.11	0.290	0.14	0.11	0.201	0.12	0.11	0.272
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.03	0.17	0.868	0.04	0.17	0.798	0.04	0.17	0.825	0.04	0.16	0.805	0.09	0.17	0.601
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	-0.42	0.16	0.010	-0.43	0.17	0.010	-0.42	0.16	0.011	-0.40	0.17	0.017	-0.41	0.17	0.013
Retired/Don't work anymore															
missing	-0.55	0.25	0.026	-0.55	0.25	0.026	-0.55	0.25	0.027	-0.52	0.25	0.039	-0.54	0.25	0.028

Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.39	0.14	0.006	0.38	0.14	0.006	0.37	0.14	0.007	0.38	0.14	0.006	0.37	0.14	0.008
missing	0.41	0.14	0.003	0.39	0.15	0.008	0.37	0.16	0.019	0.39	0.15	0.010	0.37	0.16	0.018
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.33	0.11	0.002	0.32	0.11	0.003	0.32	0.11	0.003	0.33	0.11	0.002	0.32	0.11	0.003
missing	0.25	0.24	0.306	0.25	0.25	0.313	0.23	0.25	0.354	0.21	0.26	0.426	0.24	0.25	0.325
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.03	0.11	0.780	0.05	0.11	0.657	0.04	0.12	0.710	0.03	0.11	0.784	0.04	0.11	0.697
missing	-0.02	0.18	0.923	-0.04	0.17	0.828	-0.01	0.18	0.940	-0.01	0.17	0.938	-0.06	0.17	0.726
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.18	0.10	0.070	0.17	0.10	0.088	0.18	0.10	0.081	0.18	0.10	0.067	0.18	0.10	0.079
missing	0.20	0.19	0.271	0.22	0.19	0.249	0.22	0.19	0.239	0.21	0.19	0.264	0.22	0.19	0.230
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.09	0.10	0.371	0.09	0.10	0.373	0.10	0.10	0.309	0.09	0.10	0.385	0.10	0.10	0.314
missing	-0.14	0.76	0.854	-0.23	0.77	0.769	-0.15	0.77	0.850	-0.10	0.76	0.897	-0.14	0.76	0.852
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	-0.25	0.18	0.164	-0.21	0.18	0.238	-0.25	0.18	0.176	-0.23	0.19	0.207	-0.25	0.18	0.167
Missing	-0.58	0.30	0.057	-0.47	0.30	0.117	-0.57	0.30	0.061	-0.59	0.31	0.058	-0.57	0.31	0.062
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.22	0.13	0.096	0.20	0.13	0.119	0.20	0.14	0.152	0.20	0.13	0.130	0.20	0.14	0.135
Missing	0.30	0.38	0.422	0.31	0.37	0.400	0.27	0.39	0.482	0.31	0.39	0.429	0.30	0.39	0.442
cons	10.22	0.53	<0.001	10.20	0.55	<0.001	10.29	0.52	<0.001	10.33	0.49	<0.001	10.33	0.50	<0.001
/Insigma	-0.18	0.17	0.266	-0.18	0.17	0.264	-0.18	0.17	0.265	-0.18	0.17	0.266	-0.19	0.17	0.264
sigma	0.83	0.14		0.83	0.14		0.83	0.14		0.83	0.14		0.83	0.14	

Table A9. Imputation models for breakoff respondents in NSOC III cross-sectional sample.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Number of other people in household	-0.02	0.02	0.260	-0.03	0.02	0.188	-0.02	0.02	0.330	-0.02	0.02	0.243	-0.02	0.02	0.301
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.43	0.10	<0.001	0.45	0.10	<0.001	0.36	0.11	0.001	0.41	0.10	<0.001	0.40	0.11	<0.001
Some college	0.60	0.10	<0.001	0.62	0.10	<0.001	0.56	0.10	<0.001	0.59	0.10	<0.001	0.57	0.10	<0.001
College and above	0.95	0.11	<0.001	0.97	0.11	<0.001	0.90	0.11	<0.001	0.94	0.11	<0.001	0.91	0.11	<0.001
Age	0.01	0.00	<0.001	0.01	0.00	<0.001	0.01	0.00	<0.001	0.01	0.00	<0.001	0.01	0.00	<0.001
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	0.06	0.05	0.194	0.06	0.05	0.183	0.06	0.05	0.228	0.06	0.05	0.200	0.06	0.05	0.219
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.29	0.12	0.014	0.29	0.12	0.014	0.30	0.12	0.011	0.30	0.12	0.010	0.30	0.12	0.012
3 East North Central Division	0.17	0.11	0.136	0.17	0.12	0.152	0.17	0.11	0.146	0.17	0.12	0.139	0.17	0.11	0.147
4 West North Central Division	0.21	0.12	0.065	0.20	0.12	0.077	0.21	0.12	0.072	0.21	0.12	0.069	0.20	0.12	0.085
5 South Atlantic Division	0.18	0.11	0.098	0.18	0.11	0.107	0.18	0.11	0.107	0.18	0.11	0.099	0.17	0.11	0.111
6 East South Central Division	0.13	0.14	0.368	0.12	0.14	0.401	0.12	0.14	0.369	0.12	0.14	0.370	0.13	0.14	0.360
7 West South Central Division	0.14	0.12	0.246	0.14	0.12	0.252	0.14	0.12	0.239	0.14	0.12	0.236	0.14	0.12	0.234
8 Mountain Division	0.30	0.17	0.074	0.29	0.17	0.090	0.29	0.17	0.088	0.29	0.17	0.092	0.29	0.17	0.086
9 Pacific Division	0.23	0.11	0.038	0.23	0.11	0.042	0.24	0.11	0.036	0.24	0.11	0.035	0.24	0.11	0.034
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	-0.21	0.06	<0.001	-0.20	0.06	<0.001	-0.20	0.06	<0.001	-0.21	0.06	<0.001	-0.20	0.06	<0.001
Others	-0.22	0.07	0.004	-0.23	0.07	0.002	-0.24	0.07	0.002	-0.23	0.07	0.002	-0.23	0.08	0.003
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.08	0.06	0.156	0.08	0.06	0.146	0.07	0.06	0.190	0.07	0.06	0.204	0.08	0.06	0.173
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.20	0.06	<0.001	0.19	0.06	0.001	0.21	0.06	<0.001	0.20	0.06	<0.001	0.20	0.06	<0.001
SP's income from NHATS	0.04	0.01	0.004	0.04	0.01	0.005	0.04	0.01	0.005	0.04	0.01	0.004	0.04	0.01	0.005
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.32	0.06	<0.001	-0.31	0.06	<0.001	-0.32	0.06	<0.001	-0.32	0.06	<0.001	-0.32	0.06	<0.001
Non-relatives	-0.28	0.07	<0.001	-0.28	0.07	<0.001	-0.27	0.07	<0.001	-0.28	0.07	<0.001	-0.29	0.07	<0.001
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.51	0.13	<0.001	0.52	0.13	<0.001	0.49	0.13	<0.001	0.51	0.13	<0.001	0.51	0.13	<0.001
High school	0.82	0.07	<0.001	0.83	0.07	<0.001	0.83	0.07	<0.001	0.83	0.07	<0.001	0.82	0.07	<0.001
Some college	0.93	0.06	<0.001	0.94	0.06	<0.001	0.93	0.06	<0.001	0.93	0.06	<0.001	0.94	0.06	<0.001
College and above	1.19	0.06	<0.001	1.20	0.06	<0.001	1.20	0.06	<0.001	1.19	0.06	<0.001	1.20	0.06	<0.001
missing	0.97	0.16	<0.001	0.97	0.16	<0.001	0.84	0.19	<0.001	0.95	0.17	<0.001	0.84	0.18	<0.001
cons	8.36	0.26	<0.001	8.37	0.26	<0.001	8.44	0.26	<0.001	8.37	0.26	<0.001	8.39	0.26	<0.001
/Insigma	-0.38	0.04	<0.001	-0.38	0.04	<0.001	-0.38	0.04	<0.001	-0.38	0.04	<0.001	-0.38	0.04	<0.001
sigma	0.68	0.02		0.68	0.02		0.69	0.02		0.68	0.02		0.69	0.02	

Table A10. Imputation models for caregivers of deceased SPs in NSOC III cross-sectional sample.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
SP's income from NHATS	0.02	0.01	0.053	0.02	0.01	0.065	0.02	0.01	0.051	0.02	0.01	0.051	0.02	0.01	0.062
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.19	0.04	<0.001	0.18	0.04	<0.001	0.20	0.04	<0.001	0.20	0.04	<0.001	0.20	0.04	<0.001
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.35	0.06	<0.001	-0.33	0.07	<0.001	-0.33	0.06	<0.001	-0.34	0.06	<0.001	-0.35	0.07	<0.001
Number of other people in household	-0.01	0.02	0.607	-0.01	0.02	0.405	-0.02	0.02	0.290	-0.01	0.01	0.329	-0.01	0.02	0.369
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.27	0.05	<0.001	0.29	0.05	<0.001	0.30	0.05	<0.001	0.30	0.05	<0.001	0.28	0.05	<0.001
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	-0.05	0.09	0.609	-0.01	0.09	0.918	0.01	0.09	0.926	0.04	0.09	0.632	-0.02	0.09	0.790
Some college	0.13	0.10	0.169	0.18	0.10	0.060	0.21	0.09	0.028	0.22	0.10	0.023	0.16	0.09	0.082
College and above	0.25	0.10	0.016	0.32	0.10	0.002	0.34	0.10	0.001	0.36	0.10	0.001	0.29	0.10	0.003
Age	0.00	0.00	0.024	0.00	0.00	0.019	0.01	0.00	0.007	0.00	0.00	0.016	0.00	0.00	0.054
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	0.11	0.04	0.004	0.11	0.04	0.005	0.12	0.04	0.002	0.12	0.04	0.002	0.11	0.04	0.003
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.22	0.05	<0.001	-0.22	0.05	<0.001	-0.20	0.04	<0.001	-0.21	0.05	<0.001	-0.23	0.05	<0.001
Non-relatives	-0.13	0.05	0.017	-0.12	0.05	0.029	-0.14	0.05	0.009	-0.12	0.05	0.016	-0.12	0.05	0.019
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.19	0.09	0.046	0.17	0.09	0.074	0.17	0.09	0.064	0.18	0.09	0.052	0.18	0.09	0.056
3 East North Central Division	0.04	0.10	0.640	0.04	0.10	0.696	0.03	0.10	0.773	0.04	0.10	0.685	0.03	0.10	0.741
4 West North Central Division	0.07	0.09	0.434	0.07	0.09	0.470	0.06	0.09	0.518	0.07	0.09	0.474	0.06	0.09	0.496
5 South Atlantic Division	0.05	0.09	0.579	0.04	0.09	0.665	0.03	0.09	0.711	0.05	0.09	0.608	0.03	0.09	0.711
6 East South Central Division	0.01	0.11	0.905	0.00	0.11	0.964	-0.01	0.11	0.939	-0.01	0.11	0.963	-0.01	0.11	0.924
7 West South Central Division	0.06	0.10	0.570	0.05	0.10	0.608	0.05	0.10	0.653	0.06	0.10	0.581	0.05	0.10	0.623
8 Mountain Division	0.18	0.12	0.133	0.17	0.12	0.143	0.16	0.12	0.174	0.18	0.12	0.133	0.17	0.12	0.166
9 Pacific Division	0.19	0.09	0.038	0.18	0.09	0.041	0.17	0.09	0.060	0.18	0.09	0.047	0.18	0.09	0.047
Race / ethnicity															
White, non-Hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-Hispanic	-0.03	0.04	0.431	-0.03	0.04	0.541	-0.03	0.04	0.540	-0.03	0.04	0.543	-0.02	0.04	0.641
Others	-0.12	0.06	0.056	-0.12	0.06	0.069	-0.10	0.06	0.102	-0.11	0.06	0.083	-0.12	0.06	0.052
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.10	0.05	0.029	0.10	0.05	0.037	0.10	0.05	0.034	0.09	0.05	0.038	0.10	0.05	0.038
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.04	0.05	0.363	0.03	0.05	0.543	0.02	0.05	0.734	0.02	0.05	0.633	0.02	0.05	0.601
CG has checking acct															

NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.22	0.07	0.002	0.20	0.07	0.004	0.19	0.07	0.005	0.20	0.07	0.005	0.21	0.07	0.003
Missing	-0.27	0.13	0.030	-0.26	0.12	0.034	-0.24	0.12	0.042	-0.28	0.12	0.016	-0.31	0.12	0.008
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.11	0.05	0.046	0.11	0.05	0.047	0.10	0.05	0.059	0.10	0.05	0.054	0.11	0.05	0.045
Missing	0.25	0.11	0.023	0.23	0.10	0.024	0.23	0.10	0.026	0.25	0.11	0.019	0.26	0.10	0.009
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.22	0.04	<0.001	0.22	0.04	<0.001	0.22	0.04	<0.001	0.22	0.04	<0.001	0.23	0.04	<0.001
Missing	-0.30	0.10	0.004	-0.30	0.10	0.003	-0.30	0.10	0.003	-0.32	0.10	0.002	-0.32	0.10	0.002
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.39	0.05	<0.001	0.38	0.05	<0.001	0.38	0.05	<0.001	0.38	0.05	<0.001	0.38	0.05	<0.001
Missing	0.10	0.14	0.443	0.12	0.13	0.376	0.10	0.13	0.434	0.10	0.14	0.456	0.11	0.14	0.442
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.17	0.04	<0.001	0.17	0.04	<0.001	0.17	0.04	<0.001	0.17	0.04	<0.001	0.17	0.04	<0.001
Missing	0.79	0.13	<0.001	0.80	0.13	<0.001	0.79	0.12	<0.001	0.80	0.13	<0.001	0.81	0.13	<0.001
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.46	0.13	<0.001	0.48	0.12	<0.001	0.48	0.12	<0.001	0.48	0.12	<0.001	0.47	0.12	<0.001
High school	0.60	0.05	<0.001	0.61	0.05	<0.001	0.60	0.05	<0.001	0.60	0.05	<0.001	0.61	0.05	<0.001
Some college	0.61	0.05	<0.001	0.62	0.05	<0.001	0.61	0.05	<0.001	0.61	0.05	<0.001	0.62	0.05	<0.001
College and above	0.85	0.05	<0.001	0.85	0.05	<0.001	0.84	0.05	<0.001	0.84	0.05	<0.001	0.86	0.05	<0.001
missing	0.52	0.18	0.003	0.63	0.18	0.001	0.63	0.17	<0.001	0.60	0.18	0.001	0.55	0.18	0.002
cons	8.74	0.22	<0.001	8.72	0.22	<0.001	8.67	0.22	<0.001	8.68	0.22	<0.001	8.79	0.22	<0.001
/Insigma	-0.58	0.05	<0.001	-0.58	0.05	<0.001	-0.59	0.05	<0.001	-0.59	0.05	<0.001	-0.58	0.05	<0.001
sigma	0.56	0.03		0.56	0.03		0.56	0.03		0.56	0.03		0.56	0.03	

Appendix 4. Imputation model results for Round 7 longitudinal sample.

Table A11. Imputation models for non-spouses in NSOC III longitudinal sample.

Imputation model	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.08	0.07	0.235	0.08	0.07	0.212	0.09	0.07	0.203	0.08	0.07	0.247	0.09	0.07	0.188
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.20	0.06	0.001	0.19	0.06	0.001	0.20	0.06	0.001	0.19	0.06	0.001	0.21	0.06	<0.001
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	-0.30	0.06	<0.001	-0.32	0.06	<0.001	-0.29	0.06	<0.001	-0.32	0.06	<0.001	-0.30	0.06	<0.001
Retired/Don't work anymore	-0.33	0.08	<0.001	-0.34	0.08	<0.001	-0.31	0.08	<0.001	-0.34	0.08	<0.001	-0.31	0.08	<0.001
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.06	0.07	0.414	0.06	0.07	0.404	0.06	0.07	0.370	0.06	0.07	0.345	0.06	0.07	0.364
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.27	0.08	0.001	-0.26	0.08	0.001	-0.27	0.08	0.001	-0.28	0.08	<0.001	-0.25	0.08	0.002
Number of other people in household	-0.01	0.02	0.533	-0.01	0.02	0.518	-0.02	0.02	0.319	-0.01	0.02	0.546	-0.02	0.02	0.307
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	-0.22	0.11	0.040	-0.10	0.11	0.359	-0.17	0.11	0.103	-0.23	0.11	0.028	-0.01	0.11	0.931
Some college	-0.13	0.11	0.257	-0.01	0.12	0.941	-0.11	0.12	0.360	-0.16	0.12	0.182	0.00	0.12	0.990
College and above	-0.10	0.12	0.409	0.02	0.12	0.859	-0.08	0.12	0.511	-0.12	0.12	0.328	0.06	0.12	0.648
CG has checking account															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.31	0.13	0.021	0.29	0.14	0.042	0.30	0.14	0.032	0.30	0.15	0.042	0.29	0.15	0.049
CG has savings account															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.10	0.08	0.194	-0.12	0.08	0.116	-0.11	0.08	0.171	-0.11	0.08	0.182	-0.11	0.08	0.167
Age	0.00	0.00	0.310	0.00	0.00	0.176	0.00	0.00	0.700	0.00	0.00	0.166	0.00	0.00	0.423
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	-0.01	0.05	0.827	-0.01	0.05	0.902	-0.01	0.05	0.895	0.00	0.05	0.996	0.00	0.05	0.973
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.01	0.07	0.841	-0.03	0.07	0.724	-0.04	0.07	0.564	-0.02	0.07	0.776	-0.03	0.07	0.640
Non-relatives	-0.07	0.06	0.290	-0.08	0.06	0.228	-0.06	0.06	0.333	-0.07	0.07	0.290	-0.07	0.06	0.276
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.33	0.12	0.008	0.34	0.12	0.005	0.32	0.12	0.009	0.35	0.12	0.004	0.32	0.12	0.007
3 East North Central Division	0.34	0.09	<0.001	0.35	0.09	<0.001	0.32	0.09	0.001	0.34	0.09	<0.001	0.34	0.09	<0.001
4 West North Central Division	0.33	0.10	0.001	0.34	0.10	0.001	0.32	0.10	0.002	0.33	0.10	0.001	0.33	0.10	0.001
5 South Atlantic Division	0.24	0.09	0.011	0.26	0.09	0.005	0.24	0.09	0.011	0.25	0.09	0.008	0.25	0.09	0.006
6 East South Central Division	0.21	0.14	0.118	0.22	0.13	0.104	0.19	0.13	0.148	0.21	0.13	0.112	0.20	0.13	0.122
7 West South Central Division	0.28	0.11	0.009	0.30	0.11	0.005	0.27	0.11	0.012	0.29	0.11	0.006	0.28	0.11	0.007

8 Mountain Division	0.22	0.12	0.058	0.22	0.12	0.062	0.18	0.12	0.132	0.20	0.12	0.093	0.19	0.12	0.118
9 Pacific Division	0.23	0.11	0.035	0.23	0.11	0.032	0.21	0.11	0.053	0.22	0.11	0.046	0.21	0.11	0.046
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	-0.07	0.07	0.290	-0.08	0.07	0.239	-0.08	0.07	0.266	-0.08	0.07	0.227	-0.07	0.07	0.281
Others	-0.13	0.08	0.090	-0.14	0.08	0.071	-0.16	0.08	0.045	-0.14	0.08	0.069	-0.13	0.08	0.109
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.10	0.05	0.052	0.11	0.05	0.037	0.10	0.05	0.050	0.09	0.05	0.065	0.12	0.05	0.025
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.01	0.06	0.917	0.02	0.06	0.804	0.02	0.07	0.808	0.02	0.07	0.739	0.00	0.07	0.948
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.09	0.06	0.141	0.09	0.06	0.133	0.09	0.06	0.133	0.08	0.06	0.157	0.08	0.06	0.157
Missing	-0.35	0.13	0.009	-0.37	0.14	0.006	-0.39	0.14	0.005	-0.38	0.14	0.005	-0.39	0.14	0.004
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.21	0.08	0.006	0.21	0.08	0.006	0.21	0.08	0.007	0.22	0.08	0.005	0.21	0.08	0.007
Missing	-0.20	0.18	0.264	-0.21	0.19	0.258	-0.22	0.18	0.227	-0.21	0.19	0.263	-0.22	0.18	0.236
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.12	0.05	0.019	0.11	0.05	0.023	0.12	0.05	0.018	0.11	0.05	0.029	0.11	0.05	0.025
Missing	0.97	0.24	<0.001	0.93	0.26	<0.001	0.91	0.25	<0.001	0.91	0.26	<0.001	0.93	0.25	<0.001
SP's income from NHATS	0.05	0.01	0.001	0.05	0.02	<0.001	0.05	0.01	0.002	0.05	0.02	0.001	0.05	0.02	0.002
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.28	0.16	0.083	0.28	0.16	0.080	0.29	0.16	0.070	0.28	0.16	0.089	0.28	0.16	0.080
High school	0.36	0.08	<0.001	0.36	0.08	<0.001	0.35	0.08	<0.001	0.35	0.08	<0.001	0.34	0.08	<0.001
Some college	0.45	0.08	<0.001	0.43	0.07	<0.001	0.43	0.08	<0.001	0.44	0.07	<0.001	0.44	0.08	<0.001
College and above	0.50	0.07	<0.001	0.50	0.07	<0.001	0.50	0.07	<0.001	0.50	0.07	<0.001	0.50	0.07	<0.001
Missing	-0.08	0.26	0.748	-0.04	0.27	0.880	-0.06	0.26	0.817	-0.05	0.24	0.823	-0.05	0.29	0.855
Income from round 5	0.34	0.06	<0.001	0.33	0.05	<0.001	0.34	0.06	<0.001	0.34	0.06	<0.001	0.34	0.06	<0.001
cons	5.71	0.60	<0.001	5.62	0.58	<0.001	5.75	0.59	<0.001	5.69	0.59	<0.001	5.61	0.60	<0.001
/Insigma	-0.71	0.08	<0.001	-0.71	0.08	<0.001	-0.70	0.08	<0.001	-0.71	0.07	<0.001	-0.70	0.08	<0.001
sigma	0.49	0.04		0.49	0.04		0.49	0.04		0.49	0.04		0.50	0.04	

Table A12. Imputation models for spouses in NSOC III longitudinal sample.

	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	-0.15	0.27	0.570	-0.16	0.27	0.545	-0.17	0.27	0.538	-0.16	0.27	0.558	-0.16	0.28	0.556
Some college	0.00	0.17	0.981	0.00	0.17	0.988	-0.02	0.18	0.907	-0.01	0.17	0.970	-0.01	0.18	0.947
College and above	0.07	0.23	0.770	0.08	0.24	0.723	0.07	0.24	0.770	0.08	0.24	0.748	0.07	0.24	0.766
CG spouse's education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.40	0.36	0.267	0.39	0.36	0.276	0.40	0.36	0.262	0.40	0.36	0.261	0.41	0.36	0.262
Some college	0.46	0.34	0.170	0.44	0.33	0.177	0.47	0.34	0.163	0.46	0.33	0.166	0.47	0.34	0.163
College and above	0.65	0.34	0.053	0.63	0.33	0.056	0.66	0.34	0.052	0.65	0.33	0.051	0.66	0.34	0.051
Work for pay last week															
Yes	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
No	0.34	0.18	0.053	0.32	0.17	0.063	0.35	0.18	0.048	0.34	0.18	0.053	0.34	0.18	0.053
Retired/Don't work anymore	0.46	0.25	0.065	0.44	0.24	0.070	0.46	0.25	0.064	0.46	0.25	0.063	0.46	0.25	0.063
Age	-0.01	0.01	0.090	-0.01	0.01	0.088	-0.01	0.01	0.083	-0.01	0.01	0.082	-0.01	0.01	0.104
Own farm business															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.28	0.17	0.101	0.27	0.17	0.116	0.29	0.17	0.086	0.29	0.17	0.093	0.27	0.17	0.109
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.08	0.10	0.448	0.07	0.10	0.456	0.08	0.10	0.437	0.07	0.10	0.477	0.09	0.10	0.409
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.42	0.18	0.022	-0.38	0.18	0.037	-0.44	0.18	0.015	-0.43	0.18	0.019	-0.34	0.19	0.073
Number of other people in household	0.04	0.06	0.517	0.04	0.06	0.509	0.05	0.06	0.418	0.05	0.06	0.374	0.04	0.06	0.513
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.15	0.12	0.203	0.15	0.13	0.234	0.15	0.12	0.213	0.15	0.12	0.228	0.15	0.12	0.207
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.33	0.15	0.030	0.33	0.16	0.036	0.33	0.15	0.031	0.33	0.15	0.030	0.31	0.15	0.042
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.04	0.12	0.753	0.03	0.12	0.807	0.02	0.12	0.852	0.03	0.12	0.777	0.03	0.13	0.823
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	0.03	0.10	0.737	0.04	0.10	0.706	0.03	0.10	0.730	0.03	0.10	0.738	0.03	0.10	0.746
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	-0.06	0.24	0.803	-0.07	0.24	0.780	-0.07	0.24	0.777	-0.07	0.24	0.757	-0.05	0.24	0.836
3 East North Central Division	-0.13	0.46	0.785	-0.13	0.46	0.777	-0.13	0.46	0.777	-0.13	0.46	0.777	-0.13	0.47	0.787
4 West North Central Division	-0.10	0.29	0.736	-0.09	0.29	0.745	-0.10	0.30	0.738	-0.09	0.29	0.744	-0.10	0.29	0.742
5 South Atlantic Division	0.14	0.19	0.473	0.14	0.19	0.469	0.13	0.20	0.500	0.13	0.20	0.498	0.14	0.20	0.478
6 East South Central Division	-0.10	0.23	0.670	-0.10	0.23	0.663	-0.09	0.23	0.689	-0.10	0.23	0.669	-0.09	0.23	0.698
7 West South Central Division	0.06	0.30	0.844	0.06	0.30	0.851	0.05	0.30	0.873	0.05	0.30	0.862	0.07	0.30	0.828
8 Mountain Division	0.24	0.25	0.322	0.24	0.25	0.341	0.22	0.25	0.370	0.22	0.25	0.370	0.32	0.25	0.208
9 Pacific Division	0.13	0.26	0.610	0.13	0.26	0.627	0.13	0.26	0.634	0.12	0.26	0.638	0.13	0.26	0.634

Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	0.01	0.12	0.903	0.01	0.13	0.917	0.02	0.12	0.904	0.00	0.12	0.982	0.00	0.12	0.991
Others	-0.17	0.14	0.219	-0.19	0.14	0.179	-0.17	0.14	0.230	-0.18	0.14	0.209	-0.19	0.14	0.190
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.06	0.15	0.707	0.06	0.15	0.710	0.05	0.15	0.737	0.06	0.15	0.706	0.05	0.15	0.750
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	-0.24	0.31	0.443	-0.17	0.27	0.526	-0.28	0.31	0.369	-0.23	0.29	0.436	-0.21	0.30	0.477
Income from round 5	0.18	0.09	0.039	0.18	0.09	0.040	0.18	0.09	0.040	0.18	0.09	0.039	0.18	0.09	0.039
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	-0.05	0.18	0.774	-0.04	0.18	0.830	-0.05	0.18	0.785	-0.05	0.18	0.789	-0.03	0.18	0.859
Missing	0.04	0.15	0.807	-0.01	0.14	0.941	0.07	0.16	0.646	0.05	0.16	0.751	0.06	0.15	0.711
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.19	0.14	0.171	-0.18	0.14	0.200	-0.20	0.14	0.160	-0.19	0.14	0.179	-0.18	0.14	0.190
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.01	0.39	0.969	0.00	0.39	0.993	0.02	0.38	0.961	0.01	0.39	0.985	-0.02	0.39	0.967
Missing	0.03	0.35	0.933	0.16	0.37	0.673	0.13	0.38	0.737	0.13	0.37	0.721	-0.02	0.34	0.943
cons	8.78	1.06	<0.001	8.85	1.07	<0.001	8.83	1.05	<0.001	8.82	1.06	<0.001	8.76	1.07	<0.001
/Insigma	-0.36	0.24	0.134	-0.36	0.24	0.134	-0.36	0.24	0.132	-0.36	0.24	0.133	-0.35	0.24	0.135
sigma	0.70	0.17		0.70	0.17		0.70	0.17		0.70	0.17		0.70	0.17	

Table A13. Imputation models for breakoff respondents in NSOC III longitudinal sample.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Number of other people live in the household	-0.04	0.01	0.010	-0.04	0.01	0.004	-0.04	0.01	0.004	-0.04	0.01	0.002	-0.04	0.01	0.002
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	0.09	0.10	0.368	0.00	0.10	0.963	0.10	0.09	0.285	0.00	0.10	0.966	0.01	0.10	0.935
Some college	0.15	0.11	0.174	0.08	0.11	0.471	0.16	0.11	0.136	0.09	0.11	0.429	0.09	0.11	0.406
College and above	0.27	0.11	0.017	0.19	0.12	0.093	0.27	0.11	0.015	0.20	0.11	0.081	0.21	0.12	0.067
Age	0.00	0.00	0.217	0.00	0.00	0.276	0.00	0.00	0.435	0.00	0.00	0.163	0.00	0.00	0.090
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	0.05	0.06	0.414	0.05	0.06	0.416	0.05	0.06	0.403	0.05	0.06	0.463	0.05	0.06	0.460
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.26	0.15	0.091	0.25	0.15	0.090	0.25	0.15	0.090	0.24	0.15	0.110	0.23	0.15	0.121
3 East North Central Division	0.35	0.10	<0.001	0.34	0.10	<0.001	0.34	0.10	<0.001	0.33	0.10	0.001	0.33	0.10	0.001
4 West North Central Division	0.39	0.11	<0.001	0.39	0.11	<0.001	0.39	0.11	<0.001	0.38	0.11	0.001	0.38	0.11	0.001
5 South Atlantic Division	0.30	0.10	0.002	0.30	0.10	0.002	0.30	0.10	0.002	0.29	0.10	0.003	0.29	0.10	0.003
6 East South Central Division	0.24	0.13	0.068	0.24	0.13	0.069	0.24	0.13	0.070	0.23	0.13	0.083	0.23	0.13	0.090
7 West South Central Division	0.27	0.11	0.011	0.26	0.11	0.013	0.27	0.11	0.012	0.26	0.11	0.017	0.25	0.11	0.019
8 Mountain Division	0.21	0.11	0.069	0.20	0.11	0.076	0.21	0.11	0.067	0.20	0.11	0.081	0.19	0.11	0.098
9 Pacific Division	0.20	0.12	0.090	0.20	0.12	0.090	0.20	0.12	0.092	0.19	0.12	0.107	0.18	0.12	0.115
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	-0.14	0.07	0.032	-0.15	0.07	0.024	-0.15	0.07	0.026	-0.15	0.07	0.024	-0.15	0.07	0.026
Others	-0.10	0.09	0.302	-0.10	0.09	0.266	-0.09	0.09	0.321	-0.11	0.09	0.254	-0.11	0.09	0.256
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.02	0.06	0.794	0.01	0.06	0.869	0.02	0.06	0.774	0.01	0.06	0.848	0.01	0.06	0.862
OP in household with SP															
YES	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
NO	0.03	0.07	0.692	0.03	0.07	0.689	0.02	0.07	0.734	0.03	0.07	0.713	0.03	0.07	0.708
SP's income from NHATS	0.04	0.02	0.029	0.04	0.02	0.033	0.04	0.02	0.033	0.04	0.02	0.040	0.04	0.02	0.040
Relationship to SP															
Children	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Other relatives	-0.04	0.09	0.663	-0.03	0.09	0.728	-0.03	0.09	0.744	-0.03	0.09	0.704	-0.04	0.09	0.669
Non-relatives	-0.18	0.06	0.003	-0.19	0.06	0.002	-0.19	0.06	0.002	-0.18	0.06	0.005	-0.18	0.06	0.003
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.29	0.13	0.026	0.30	0.13	0.024	0.30	0.13	0.024	0.30	0.13	0.022	0.30	0.13	0.021
High school	0.37	0.08	<0.001	0.37	0.08	<0.001	0.37	0.08	<0.001	0.38	0.08	<0.001	0.38	0.08	<0.001
Some college	0.50	0.09	<0.001	0.50	0.09	<0.001	0.50	0.09	<0.001	0.50	0.09	<0.001	0.50	0.09	<0.001
College and above	0.56	0.09	<0.001	0.57	0.09	<0.001	0.57	0.09	<0.001	0.57	0.09	<0.001	0.57	0.09	<0.001
Missing	0.15	0.32	0.630	0.15	0.32	0.628	0.20	0.31	0.513	0.18	0.30	0.547	0.17	0.30	0.578
Income from round 5	0.54	0.05	<0.001	0.53	0.05	<0.001	0.53	0.05	<0.001	0.54	0.05	<0.001	0.54	0.05	<0.001
cons	4.12	0.52	<0.001	4.21	0.53	<0.001	4.13	0.52	<0.001	4.25	0.53	<0.001	4.27	0.53	<0.001
/Insigma	-0.59	0.07	<0.001	-0.59	0.07	<0.001	-0.59	0.07	<0.001	-0.59	0.07	<0.001	-0.59	0.07	<0.001
sigma	0.56	0.04		0.56	0.04		0.56	0.04		0.55	0.04		0.55	0.04	

Table A14. Imputation models for caregivers of deceased SP NSOC III longitudinal sample.

Imputation models	1			2			3			4			5		
	est	SE	p	est	SE	p	est	SE	p	est	SE	p	est	SE	p
Own your home															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.18	0.05	0.001	0.19	0.06	0.001	0.19	0.06	0.001	0.18	0.05	0.001	0.19	0.05	0.001
Number of other people live in the household	-0.02	0.01	0.069	-0.03	0.01	0.024	-0.03	0.01	0.019	-0.03	0.01	0.047	-0.03	0.01	0.030
Private insurance coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	0.10	0.05	0.044	0.10	0.05	0.052	0.10	0.05	0.038	0.10	0.05	0.043	0.11	0.05	0.031
Medicaid coverage															
No	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Yes	-0.25	0.07	0.001	-0.24	0.07	0.001	-0.25	0.07	0.001	-0.25	0.08	0.001	-0.24	0.07	0.001
CG education															
Below high school	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
High school	-0.02	0.10	0.806	0.07	0.09	0.461	0.01	0.10	0.900	0.04	0.09	0.684	-0.07	0.10	0.444
Some college	0.04	0.10	0.677	0.09	0.10	0.356	0.08	0.10	0.418	0.09	0.10	0.373	0.00	0.10	0.987
College and above	0.11	0.10	0.305	0.17	0.10	0.095	0.15	0.10	0.156	0.15	0.10	0.146	0.06	0.11	0.555
Age	0.00	0.00	0.420	0.00	0.00	0.156	0.00	0.00	0.170	0.00	0.00	0.337	0.00	0.00	0.170
Gender															
Female	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Male	-0.02	0.05	0.663	-0.01	0.05	0.748	-0.02	0.05	0.607	-0.02	0.05	0.652	-0.02	0.05	0.676
Relationship to SP															
Spouses/partners	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Children	0.09	0.09	0.348	0.07	0.09	0.415	0.07	0.09	0.480	0.08	0.09	0.386	0.07	0.09	0.476
Other relatives	0.06	0.11	0.592	0.04	0.11	0.682	0.03	0.11	0.750	0.05	0.11	0.637	0.04	0.11	0.695
Non-relatives	-0.07	0.10	0.480	-0.08	0.10	0.433	-0.09	0.10	0.383	-0.08	0.10	0.424	-0.09	0.10	0.388
SP census division															
1 New England Division	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
2 Middle Atlantic Division	0.15	0.11	0.160	0.15	0.11	0.154	0.14	0.11	0.181	0.15	0.11	0.163	0.15	0.11	0.160
3 East North Central Division	0.16	0.09	0.063	0.16	0.08	0.061	0.15	0.09	0.070	0.16	0.09	0.065	0.15	0.09	0.078
4 West North Central Division	0.13	0.09	0.163	0.13	0.09	0.152	0.13	0.09	0.162	0.13	0.09	0.160	0.12	0.09	0.191
5 South Atlantic Division	0.05	0.09	0.568	0.05	0.09	0.544	0.05	0.09	0.593	0.05	0.09	0.578	0.04	0.09	0.658
6 East South Central Division	-0.02	0.12	0.849	-0.03	0.12	0.811	-0.03	0.12	0.809	-0.02	0.12	0.845	-0.03	0.12	0.788
7 West South Central Division	0.02	0.10	0.880	0.02	0.10	0.879	0.01	0.10	0.911	0.02	0.10	0.865	0.00	0.10	0.986
8 Mountain Division	0.13	0.15	0.382	0.13	0.15	0.395	0.13	0.15	0.401	0.13	0.15	0.377	0.13	0.15	0.405
9 Pacific Division	0.10	0.10	0.326	0.09	0.10	0.367	0.09	0.10	0.343	0.09	0.10	0.343	0.08	0.10	0.411
Race / ethnicity															
White, non-hispanic	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Black, non-hispanic	0.03	0.06	0.610	0.03	0.06	0.609	0.03	0.06	0.615	0.03	0.06	0.602	0.03	0.06	0.598
Others	-0.08	0.07	0.296	-0.07	0.07	0.354	-0.07	0.07	0.299	-0.07	0.07	0.301	-0.08	0.07	0.287
Metro / non-metro residence															
Not metropolitan	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Metropolitan	0.05	0.05	0.332	0.05	0.05	0.262	0.05	0.05	0.291	0.05	0.05	0.275	0.04	0.05	0.331
CG has checking acct															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.32	0.14	0.022	0.31	0.14	0.024	0.31	0.14	0.027	0.31	0.14	0.025	0.32	0.14	0.019

Missing	-0.39	0.20	0.056	-0.37	0.19	0.055	-0.38	0.19	0.048	-0.40	0.20	0.044	-0.35	0.19	0.071
CG has savings account															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	-0.07	0.07	0.346	-0.07	0.07	0.317	-0.07	0.07	0.314	-0.07	0.07	0.304	-0.06	0.07	0.392
Missing	0.51	0.24	0.030	0.51	0.23	0.028	0.51	0.23	0.027	0.49	0.23	0.034	0.51	0.23	0.025
CG has cert of deposit															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.08	0.05	0.113	0.08	0.05	0.104	0.09	0.05	0.092	0.08	0.05	0.100	0.08	0.05	0.101
Missing	-0.18	0.11	0.101	-0.19	0.11	0.084	-0.17	0.11	0.112	-0.18	0.11	0.101	-0.17	0.11	0.111
CG has retirement plan															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.26	0.06	<0.001	0.26	0.06	<0.001	0.25	0.06	<0.001	0.26	0.06	<0.001	0.26	0.06	<0.001
Missing	-0.04	0.16	0.787	-0.04	0.16	0.782	-0.05	0.16	0.736	-0.05	0.16	0.780	-0.05	0.16	0.762
CG has stocks mutual funds															
NO	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
YES	0.06	0.05	0.191	0.07	0.05	0.158	0.07	0.05	0.159	0.07	0.05	0.164	0.07	0.05	0.159
Missing	0.63	0.25	0.011	0.64	0.25	0.010	0.64	0.25	0.010	0.63	0.25	0.011	0.64	0.25	0.009
SP's income from NHATS	0.05	0.01	0.001	0.05	0.01	0.001	0.04	0.01	0.002	0.05	0.01	0.002	0.05	0.01	0.001
CG spouse's education															
No spouse	0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)		0.00	(empty)	
Below high school	0.30	0.12	0.010	0.31	0.12	0.010	0.31	0.12	0.009	0.31	0.12	0.010	0.30	0.12	0.013
High school	0.32	0.07	<0.001	0.31	0.07	<0.001	0.33	0.06	<0.001	0.32	0.07	<0.001	0.32	0.07	<0.001
Some college	0.43	0.07	<0.001	0.42	0.07	<0.001	0.43	0.07	<0.001	0.43	0.07	<0.001	0.42	0.07	<0.001
College and above	0.52	0.06	<0.001	0.52	0.07	<0.001	0.52	0.06	<0.001	0.53	0.06	<0.001	0.52	0.07	<0.001
Missing	0.00	0.30	0.990	0.02	0.29	0.937	0.03	0.29	0.922	0.05	0.30	0.873	0.03	0.27	0.903
Income from round 5	0.37	0.05	<0.001	0.37	0.05	<0.001	0.37	0.05	<0.001	0.37	0.05	<0.001	0.37	0.05	<0.001
cons	5.38	0.51	<0.001	5.39	0.52	<0.001	5.47	0.51	<0.001	5.37	0.51	<0.001	5.50	0.52	<0.001
/Insigma	-0.65	0.06	<0.001	-0.65	0.06	<0.001	-0.66	0.06	<0.001	-0.65	0.06	<0.001	-0.66	0.06	<0.001
sigma	0.52	0.03		0.52	0.03		0.52	0.03		0.52	0.03		0.52	0.03	