Spending Change at Retirement: Collection of All Tables Generated from CAMS/HRS Data

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1 Mean and median comparisons

Three types of spending categories (e.g. total, nondurables durables, transportation, housing) are created to compare mean and median values: (1) CAMS generated by adding up individual wave spending categories (2) RAND CAMS variables that are aggregated by RAND (3) wave consistent CAMS generated by adding up spending categories from individual waves while excluding house services, yard services, personal care, and household furnishings (which effect total and nondurables).

Table 1: Mean (Standard Error) Comparison between CAMS generated, RAND CAMS, and Wave Consistent CAMS generated spending categories

| | | (1) | |
|----------------|----------------|-----------|-----------------|
| | CAMS Generated | RAND CAMS | Wave Consistent |
| total | 40,162 | 40,287 | 38,733 |
| | (34,919) | (32,454) | (33,677) |
| nondurables | 22,106 | 23,064 | 20,676 |
| | (20,159) | (19,936) | (18,895) |
| durables | 341 | 334 | 341 |
| | (798) | (713) | (798) |
| transportation | 7,809 | 8,221 | 7,809 |
| | (12,887) | (12,476) | (12,887) |
| housing | 9,907 | 8,668 | 9,907 |
| - | (13,658) | (11,095) | (13,658) |

The spending categories are defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

The wave consistent measures are CAMS generated and exclude house services, yard services, personal care, and household furnishings (which effect total and nondurables).

The housing category is significantly larger for CAMS Generated and Wave Consistent because RAND eliminates principal from mortgage spending so that only mortgage interest and charges remain.

The other differences can be explained by the lack of imputation from the CAMS generated values. These values have also been winsorized.

The number of observations is 30124.

Table 2: 10th, 25th, 50th, 75th, and 90th Percentile Comparison between CAMS generated, RAND CAMS, and Wave Consistent CAMS generated spending categories

| | | (1) | |
|----------------|----------------|----------------|-----------------|
| | CAMS Generated | RAND CAMS | Wave Consistent |
| | 10/25/50/75/90 | 10/25/50/75/90 | 10/25/50/75/90 |
| total | 10,048 | 12,183 | 9,659 |
| | 17,643 | 19,528 | 16,922 |
| | (30,544) | (31,433) | (29,500) |
| | 51,722 | 50,827 | 49,942 |
| | 80,632 | 78,180 | 77,763 |
| nondurables | 5,500 | 6,794 | 5,127 |
| | 9,773 | 11,043 | $9,\!178$ |
| | (16,791) | (17,848) | (15,794) |
| | 27,744 | 28,387 | 25,867 |
| | 43,739 | 44,330 | 40,747 |
| durables | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| | (0) | (0) | (0) |
| | 400 | 400 | 400 |
| | 1,100 | 1,100 | 1,100 |
| transportation | 0 | 0 | 0 |
| | 1,406 | 1,746 | 1,406 |
| | (3,341) | (3,659) | (3,341) |
| | 8,035 | 8,490 | 8,035 |
| | 21,886 | 23,416 | 21,886 |
| housing | 650 | 1,200 | 650 |
| - | 2,360 | 2,774 | 2,360 |
| | (5,940) | (5,817) | (5,940) |
| | 12,280 | 10,412 | 12,280 |
| | 22,384 | 17,893 | 22,384 |

The spending categories are defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

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The housing category is significantly larger for CAMS Generated and Wave Consistent because RAND eliminates principal from mortgage spending so that only mortgage interest and charges remain.

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The number of observations is 30124.

Table 3: Mean (Standard Error) Comparison between CAMS generated, RAND CAMS, and Wave Consistent CAMS generated spending categories (real adjusted)

| | | (1) | |
|----------------|----------------|-----------|-----------------|
| | CAMS Generated | RAND CAMS | Wave Consistent |
| total | 35,455 | 35,590 | 34,225 |
| | (31,097) | (28,995) | (30,095) |
| nondurables | 19,522 | 20,373 | 18,292 |
| | (18,030) | (17,844) | (17,010) |
| durables | 302 | 296 | 302 |
| | (714) | (636) | (714) |
| transportation | 6,925 | 7,291 | 6,925 |
| | (11,553) | (11,156) | (11,553) |
| housing | 8,706 | 7,630 | 8,706 |
| | (12,161) | (9,994) | (12,161) |

The spending categories are defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

The wave consistent measures are CAMS generated and exclude house services, yard services, personal care, and household furnishings (which effect total and nondurables).

The housing category is significantly larger for CAMS Generated and Wave Consistent because RAND eliminates principal from mortgage spending so that only mortgage interest and charges remain.

The other differences can be explained by the lack of imputation from the CAMS generated values. These values have also been winsorized.

The number of observations is 30124.

Table 4: 10th, 25th, 50th, 75th, and 90th Percentile Comparison between CAMS generated, RAND CAMS, and Wave Consistent CAMS generated spending categories (real adjusted)

(1) CAMS Generated RAND CAMS Wave Consistent 10/25/50/75/90 10/25/50/75/90 10/25/50/75/90 total 8,858 10,711 8,481 15,507 17,225 14,925 (26,963)(27,678)(26,017)45,582 44,797 44,009 71,445 69,275 68,963 nondurables 4,816 5,936 4,467 8,580 9,734 8,071 (14,899)(13,926)(15,835)24,526 25,037 22,950 38,513 39,069 36,083 durables 0 0 0 0 0 0 (0)(0)(0)342 343 342 987 987 987 transportation 0 0 0 1,253 1,253 1,554 (2,931)(3,210)(2,931)6,981 7,363 6,981 19,654 20,943 19,654 housing 577 577 1,085 2,080 2,454 2,080 (5,184)(5,150)(5,184)10,821 9,108 10,821 19,648 15,599 19,648

The spending categories are defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

The wave consistent measures are CAMS generated and exclude house services, yard services, personal care, and household furnishings (which effect total and nondurables).

The housing category is significantly larger for CAMS Generated and Wave Consistent because RAND eliminates principal from mortgage spending so that only mortgage interest and charges remain.

The other differences can be explained by the lack of imputation from the CAMS generated values. These values have also been winsorized.

The number of observations is 30124.

2 Average and median real spending before and after retirement/without retirement transition (Table 1 of Hurd and Rohwedder)

These tables seek to reproduce table 1 from Hurd and Rohwedder's paper on Heterogeneity in spending change at retirement. Table 1 shows the means and medians of total real spending before and after retirement and the median of the change in spending calculated over households where retirement occurred between CAMS waves.

Table 5: Average and median real spending before and after retirement

| Table 5: Average and median re | | | |
|--------------------------------|--------|-------------|-------|
| Spending | Total | Nondurables | Food |
| Means: | | | |
| Pre-retirement | 39,959 | 36,457 | 5,460 |
| Post-retirement | 39,908 | 36,302 | 5,501 |
| Percent Change in Means | -0.1 | -0.4 | 0.8 |
| 95% confidence interval | | | |
| Medians: | | | |
| Pre-retirement | 33,402 | 29,792 | 4,523 |
| Post-retirement | 31,909 | 29,448 | 4,288 |
| Percent Change in Medians | -4.5 | -1.2 | -5.2 |
| 95% confidence interval | | | |
| Median Percent Change (p10)* | -49.2 | -46.5 | -68.7 |
| Median Percent Change (p25)* | -29.8 | -25.9 | -36.6 |
| Median Percent Change (p50) | -3.2 | -2.5 | -0.7 |
| Median Percent Change (p75)* | 40.1 | 31.7 | 47.3 |
| Median Percent Change (p90)* | 174.0 | 91.0 | 174.0 |
| 95% confidence interval (p50) | | | |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 1 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement. Hurd and Rohwedder bootstrap their confidence intervals.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Retirement sample, N=919. This sample consists of households where we have panel data on actual spending pre- and post-retirement, and on the anticipations of spending change prior to retirement and recollections of spending change after retirement. The sample describes retirement transitions among 50 to 70 year-olds where the responses to the question Are you retired? indicate a transition from not retired to retired. These responses are constructed from four waves of CAMS, 2001 to 2007, yielding three panel transitions

where we observe actual spending data before and after retirement for these observations.

Table 6: Average and median real spending without retirement transition

| Spending | Total | Nondurables | Food |
|-------------------------------|--------|-------------|-----------|
| Means: | | | |
| Pre-wave | 40,733 | 36,490 | 5,508 |
| Post-wave | 39,075 | 35,204 | $5,\!412$ |
| Percent Change in Means | -4.1 | -3.5 | -1.7 |
| 95% confidence interval | | | |
| Medians: | | | |
| Pre-wave | 32,598 | 29,820 | 4,523 |
| Post-wave | 31,087 | $28,\!532$ | 4,436 |
| Percent Change in Medians | -4.6 | -4.3 | -1.9 |
| 95% confidence interval | • | | |
| Median Percent Change (p10)* | -51.1 | -46.4 | -67.2 |
| Median Percent Change (p25)* | -30.1 | -25.3 | -37.0 |
| Median Percent Change (p50) | -4.6 | -3.4 | -3.8 |
| Median Percent Change (p75)* | 30.9 | 25.0 | 40.9 |
| Median Percent Change (p90)* | 139.2 | 73.1 | 139.2 |
| 95% confidence interval (p50) | | | |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Comparison sample, N=8439. This sample consists of households whose respondents reported no retirement transition between waves (retired to retired, or not retired to not retired). The comparison sample is weighted to match the composition of the retirement sample with respect to age and marital status and wave.

This table references Table 1 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement. Hurd and Rohwedder bootstrap their confidence intervals.

3 Real spending before and after retirement with wealth tertiles (Table 2 of Hurd and Rohwedder)

These tables seek to reproduce table 2 from Hurd and Rohwedder's paper on Heterogeneity in spending change at retirement. Table 2 shows spending levels, both mean and median, by wealth quartile before and after retirement, percent changes in them, and the median of the change at the household level. These tables describe spending in wealth tertiles. The spending categories are: nondurables, durables, totals; food at home, food away from home, transportation, health, education (no spending variable in CAMS or HRS), housing, recreation, and clothing.

Table 7: Real total spending before and after retirement by wealth tertiles (CAMS category).

| Wealth_Tertiles | First | Second | Third | All |
|------------------------------|------------|------------|------------|--------|
| Wearth_Terthes | 1,1120 | Second | Tilliu | ЛП |
| Means: | | | | |
| Pre-retirement | $26,\!255$ | 40,973 | 53,493 | 39,959 |
| Post-retirement | 23,721 | 42,063 | $53,\!264$ | 39,908 |
| Percent Change in Means | -9.7 | 4.2 | -0.9 | -0.1 |
| Medians: | | | | |
| Pre-retirement | 18,791 | 35,785 | 44,144 | 33,402 |
| Post-retirement | 17,845 | $33,\!598$ | $45,\!473$ | 31,909 |
| Percent Change in Medians | -5.0 | -6.1 | 3.0 | -4.5 |
| Median Percent Change (p10)* | -0.5 | -0.5 | -0.4 | -0.5 |
| Median Percent Change (p25)* | -0.3 | -0.3 | -0.3 | -0.3 |
| Median Percent Change (p50) | 0.0 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.3 | 0.5 | 0.4 | 0.4 |
| Median Percent Change (p90)* | 1.0 | 1.2 | 0.8 | 1.0 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 8: Real durables spending before and after retirement by wealth tertiles (CAMS category).

| (CTIVIS category). | | | | |
|------------------------------|-------|--------|-------|-------|
| Wealth_Tertiles | First | Second | Third | All |
| Means: | | | | |
| Pre-retirement | 1,335 | 3,920 | 5,358 | 3,502 |
| Post-retirement | 1,747 | 4,156 | 4,864 | 3,606 |
| Percent Change in Means | 30.9 | 17.7 | -37.0 | 3.0 |
| Medians: | | | | |
| Pre-retirement | 0 | 0 | 318 | 0 |
| Post-retirement | 0 | 163 | 355 | 0 |
| Percent Change in Medians | | | 11.6 | |
| Median Percent Change (p10)* | -1.0 | -1.0 | -1.0 | -1.0 |
| Median Percent Change (p25)* | -1.0 | -1.0 | -1.0 | -1.0 |
| Median Percent Change (p50) | -1.0 | -1.0 | -1.0 | -1.0 |
| Median Percent Change (p75)* | -0.1 | 0.2 | 0.3 | 0.1 |
| Median Percent Change (p90)* | 6.0 | 12.5 | 13.1 | 12.0 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 9: Real nondurables spending before and after retirement by wealth tertiles (CAMS category).

| Wealth_Tertiles | First | Second | Third | All |
|------------------------------|--------|--------|--------|--------|
| Means: | | | | |
| Pre-retirement | 24,921 | 37,053 | 48,135 | 36,457 |
| Post-retirement | 21,974 | 37,907 | 48,400 | 36,302 |
| Percent Change in Means | -11.8 | 3.4 | 1.1 | -0.4 |
| Medians: | | | | |
| Pre-retirement | 18,194 | 31,414 | 39,404 | 29,792 |
| Post-retirement | 16,858 | 31,442 | 40,743 | 29,448 |
| Percent Change in Medians | -7.3 | 0.1 | 3.4 | -1.2 |
| Median Percent Change (p10)* | -0.5 | -0.4 | -0.4 | -0.5 |
| Median Percent Change (p25)* | -0.3 | -0.2 | -0.2 | -0.3 |
| Median Percent Change (p50) | 0.0 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.3 | 0.4 | 0.3 | 0.3 |
| Median Percent Change (p90)* | 1.0 | 1.1 | 0.6 | 0.9 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 10: Real food spending before and after retirement by wealth tertiles (Generated category).

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|------------------------------|-------|--------|-------|-------|
| $Wealth_Tertiles$ | First | Second | Third | All |
| Means: | | | | |
| Pre-retirement | 4,083 | 5,555 | 6,828 | 5,460 |
| Post-retirement | 3,868 | 5,532 | 7,020 | 5,501 |
| Percent Change in Means | -5.3 | -0.6 | 4.7 | 0.8 |
| Medians: | | | | |
| Pre-retirement | 3,044 | 4,756 | 6,241 | 4,523 |
| Post-retirement | 3,108 | 4,655 | 5,766 | 4,288 |
| Percent Change in Medians | 2.1 | -2.1 | -7.6 | -5.2 |
| Median Percent Change (p10)* | -0.8 | -0.7 | -0.6 | -0.7 |
| Median Percent Change (p25)* | -0.5 | -0.4 | -0.3 | -0.4 |
| Median Percent Change (p50) | 0.0 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.6 | 0.5 | 0.3 | 0.5 |
| Median Percent Change (p90)* | 2.4 | 1.6 | 1.0 | 1.7 |
| | | | | |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

— This spending category is defined by food/drink and dining out in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 11: Real food at home spending before and after retirement by wealth tertiles (PSID category).

| tertines (1 SIB tertisgory). | | | | |
|------------------------------|-------|--------|-------|-------|
| Wealth_Tertiles | First | Second | Third | All |
| Means: | | | | |
| Pre-retirement | 3,298 | 3,922 | 4,675 | 3,952 |
| Post-retirement | 3,108 | 3,980 | 4,780 | 3,977 |
| Percent Change in Means | -5.8 | 1.8 | 3.2 | 0.6 |
| Medians: | | | | |
| Pre-retirement | 2,446 | 3,431 | 4,142 | 3,354 |
| Post-retirement | 2,415 | 3,383 | 3,933 | 3,195 |
| Percent Change in Medians | -1.3 | -1.4 | -5.0 | -4.7 |
| Median Percent Change (p10)* | -0.8 | -0.7 | -0.6 | -0.7 |
| Median Percent Change (p25)* | -0.5 | -0.3 | -0.3 | -0.4 |
| Median Percent Change (p50) | 0.0 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.7 | 0.7 | 0.4 | 0.5 |
| Median Percent Change (p90)* | 2.2 | 1.5 | 1.4 | 1.7 |
| | | | | |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

This spending category is defined by food/drink in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

N = 896.

Table 12: Real food away from home spending before and after retirement by wealth tertiles (PSID category).

| $We alth_Tertiles$ | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 903 | 1,676 | 2,239 | 1,597 |
| Post-retirement | 834 | 1,642 | 2,333 | 1,624 |
| Percent Change in Means | -7.7 | -3.8 | 10.4 | 1.7 |
| Medians: | | | | |
| Pre-retirement | 406 | 1,039 | 1,706 | 983 |
| Post-retirement | 376 | 954 | 1,522 | 932 |
| Percent Change in Medians | -7.4 | -8.2 | -10.8 | -5.2 |
| Median Percent Change (p10)* | -1.0 | -0.8 | -0.7 | -0.9 |
| Median Percent Change (p25)* | -0.8 | -0.5 | -0.4 | -0.5 |
| Median Percent Change (p50) | -0.2 | 0.0 | 0.0 | -0.1 |
| Median Percent Change (p75)* | 0.9 | 0.6 | 0.6 | 0.7 |
| Median Percent Change (p90)* | 3.1 | 3.2 | 2.1 | 2.6 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

This spending category is defined by dining out in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

N = 893.

Table 13: Real transportation spending before and after retirement by wealth tertiles (CAMS and PSID category).

| Wealth_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-----------|-------|
| Means: | | | | |
| Pre-retirement | 5,545 | 9,645 | 10,949 | 8,673 |
| Post-retirement | 5,186 | 10,042 | 9,583 | 8,275 |
| Percent Change in Means | -6.5 | 7.2 | -24.6 | -4.6 |
| Medians: | | | | |
| Pre-retirement | 2,781 | 5,512 | 5,106 | 4,473 |
| Post-retirement | 2,471 | 5,019 | $5,\!197$ | 4,250 |
| Percent Change in Medians | -11.1 | -8.9 | 1.8 | -5.0 |
| Median Percent Change (p10)* | -0.8 | -0.8 | -0.8 | -0.8 |
| Median Percent Change (p25)* | -0.5 | -0.6 | -0.5 | -0.5 |
| Median Percent Change (p50) | -0.1 | -0.1 | -0.1 | -0.1 |
| Median Percent Change (p75)* | 0.6 | 0.8 | 0.7 | 0.7 |
| Median Percent Change (p90)* | 2.7 | 3.0 | 3.4 | 3.0 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 14: Real health spending before and after retirement by wealth tertiles (PSID category).

| Wealth_Tertiles | First | Second | Third | A11 |
|------------------------------|-----------|-----------|-------|-------|
| wearth_Tertnes | rirst | Second | Imra | All |
| Means: | | | | |
| Pre-retirement | 2,924 | 4,221 | 3,991 | 3,711 |
| Post-retirement | $2,\!536$ | $4,\!545$ | 5,075 | 4,066 |
| Percent Change in Means | -13.3 | 11.1 | 37.0 | 9.6 |
| Medians: | | | | |
| Pre-retirement | 1,152 | 2,390 | 3,267 | 2,108 |
| Post-retirement | 915 | 3,105 | 3,436 | 2,375 |
| Percent Change in Medians | -20.6 | 29.9 | 5.2 | 12.6 |
| Median Percent Change (p10)* | -1.0 | -0.8 | -0.7 | -0.8 |
| Median Percent Change (p25)* | -0.7 | -0.4 | -0.3 | -0.5 |
| Median Percent Change (p50) | -0.3 | 0.2 | 0.2 | 0.1 |
| Median Percent Change (p75)* | 1.0 | 1.6 | 1.4 | 1.3 |
| Median Percent Change (p90)* | 3.2 | 5.0 | 3.7 | 3.7 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined by health insurance, drugs, health services, and medical supplies in CAMS.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 15: Real housing spending before and after retirement by wealth tertiles (CAMS and PSID category).

| (CITIND and I DID caregory). | | | | |
|------------------------------|-------|--------|------------|--------|
| Wealth_Tertiles | First | Second | Third | All |
| Means: | | | | |
| Pre-retirement | 6,569 | 10,076 | 14,914 | 10,420 |
| Post-retirement | 5,919 | 10,666 | $13,\!461$ | 10,072 |
| Percent Change in Means | -9.9 | 9.0 | -22.1 | -3.3 |
| Medians: | | | | |
| Pre-retirement | 4,913 | 7,930 | 10,786 | 7,219 |
| Post-retirement | 4,799 | 7,665 | $9,\!559$ | 6,493 |
| Percent Change in Medians | -2.3 | -3.4 | -11.4 | -10.1 |
| Median Percent Change (p10)* | -0.8 | -0.7 | -0.7 | -0.7 |
| Median Percent Change (p25)* | -0.4 | -0.3 | -0.4 | -0.4 |
| Median Percent Change (p50) | 0.0 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.2 | 0.5 | 0.3 | 0.3 |
| Median Percent Change (p90)* | 2.3 | 2.6 | 1.5 | 2.1 |
| | | | | |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 16: Real recreation spending before and after retirement by wealth tertiles (PSID category).

| Wealth_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 966 | 2,253 | 4,011 | 2,374 |
| Post-retirement | 641 | 1,752 | 4,457 | 2,329 |
| Percent Change in Means | -33.7 | -51.9 | 46.2 | -1.9 |
| Medians: | | | | |
| Pre-retirement | 238 | 1,115 | 2,385 | 1,035 |
| Post-retirement | 164 | 1,052 | 2,859 | 1,009 |
| Percent Change in Medians | -31.4 | -5.7 | 19.9 | -2.5 |
| Median Percent Change (p10)* | -1.0 | -1.0 | -0.7 | -1.0 |
| Median Percent Change (p25)* | -0.9 | -0.7 | -0.4 | -0.6 |
| Median Percent Change (p50) | -0.3 | -0.1 | 0.1 | -0.1 |
| Median Percent Change (p75)* | 0.9 | 1.0 | 1.0 | 1.0 |
| Median Percent Change (p90)* | 3.6 | 3.4 | 3.1 | 3.4 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined by vacations, tickets, hobbies/sports, hobbies, and sports in CAMS.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 17: Real clothing spending before and after retirement by wealth tertiles (PSID category).

| (1 512 6466801)). | | | | |
|------------------------------|-------|--------|-------|-------|
| $Wealth_Tertiles$ | First | Second | Third | All |
| Means: | | | | |
| Pre-retirement | 788 | 985 | 1,176 | 979 |
| Post-retirement | 606 | 688 | 1,291 | 872 |
| Percent Change in Means | -23.1 | -37.7 | 14.6 | -10.9 |
| Medians: | | | | |
| Pre-retirement | 283 | 469 | 624 | 471 |
| Post-retirement | 213 | 400 | 509 | 392 |
| Percent Change in Medians | -24.5 | -14.8 | -18.4 | -16.9 |
| Median Percent Change (p10)* | -1.0 | -0.9 | -0.8 | -0.9 |
| Median Percent Change (p25)* | -0.8 | -0.6 | -0.6 | -0.7 |
| Median Percent Change (p50) | -0.3 | -0.2 | -0.2 | -0.2 |
| Median Percent Change (p75)* | 0.9 | 0.5 | 0.3 | 0.5 |
| Median Percent Change (p90)* | 2.4 | 2.1 | 1.5 | 1.9 |
| | | | | |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

This spending category is defined by clothing in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

N = 882.

4 Real spending before and after retirement with social security income tertiles (Table 2 of Hurd and Rohwedder)

These tables seek to reproduce table 2 from Hurd and Rohwedder's paper on Heterogeneity in spending change at retirement. Table 2 shows spending levels, both mean and median, by wealth quartile before and after retirement, percent changes in them, and the median of the change at the household level.

These tables describe spending in social security income tertiles. The spending categories are: nondurables, durables, totals; food at home, food away from home, transportation, health, education (no spending variable in CAMS or HRS), housing, recreation, and clothing.

An individuals social security income is estimated as a person's highest social security across all waves in order to protect from early claiming at a discount and 0 values. In order to impute missing values, an individual was assigned into tertiles based on the head's years of education (cutoffs at 0-11; 12-15; 16-).

Table 18: Real total spending before and after retirement by social security income tertiles (CAMS category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|------------|--------|--------|--------|
| Means: | | | | |
| Pre-retirement | 28,505 | 35,182 | 47,661 | 39,959 |
| Post-retirement | 26,857 | 33,931 | 49,293 | 39,908 |
| Percent Change in Means | -5.8 | -4.4 | 5.7 | -0.1 |
| Medians: | | | | |
| Pre-retirement | 21,568 | 28,919 | 40,383 | 33,402 |
| Post-retirement | $21,\!540$ | 26,640 | 40,726 | 31,909 |
| Percent Change in Medians | -0.1 | -7.9 | 0.8 | -4.5 |
| Median Percent Change (p10)* | -0.5 | -0.5 | -0.4 | -0.5 |
| Median Percent Change (p25)* | -0.4 | -0.3 | -0.3 | -0.3 |
| Median Percent Change (p50) | 0.0 | -0.1 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.5 | 0.3 | 0.4 | 0.4 |
| Median Percent Change (p90)* | 1.4 | 0.9 | 1.0 | 1.0 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 19: Real durables spending before and after retirement by social security income tertiles (CAMS category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 1,960 | 3,022 | 4,351 | 3,502 |
| Post-retirement | 1,927 | 3,016 | 4,609 | 3,606 |
| Percent Change in Means | -1.7 | -0.3 | 13.2 | 3.0 |
| Medians: | | | | |
| Pre-retirement | 0 | 0 | 237 | 0 |
| Post-retirement | 0 | 0 | 300 | 0 |
| Percent Change in Medians | | | 26.6 | |
| Median Percent Change (p10)* | -1.0 | -1.0 | -1.0 | -1.0 |
| Median Percent Change (p25)* | -1.0 | -1.0 | -1.0 | -1.0 |
| Median Percent Change (p50) | -1.0 | -1.0 | -1.0 | -1.0 |
| Median Percent Change (p75)* | 0.9 | -0.1 | 0.3 | 0.1 |
| Median Percent Change (p90)* | 7.6 | 12.8 | 12.0 | 12.0 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 20: Real nondurables spending before and after retirement by social security income tertiles (CAMS category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|--------|--------|--------|--------|
| Means: | | | | |
| Pre-retirement | 26,545 | 32,160 | 43,310 | 36,457 |
| Post-retirement | 24,931 | 30,915 | 44,684 | 36,302 |
| Percent Change in Means | -6.1 | -4.7 | 5.2 | -0.4 |
| Medians: | | | | |
| Pre-retirement | 21,568 | 25,912 | 36,683 | 29,792 |
| Post-retirement | 20,856 | 24,469 | 37,044 | 29,448 |
| Percent Change in Medians | -3.3 | -5.6 | 1.0 | -1.2 |
| Median Percent Change (p10)* | -0.5 | -0.5 | -0.4 | -0.5 |
| Median Percent Change (p25)* | -0.4 | -0.3 | -0.2 | -0.3 |
| Median Percent Change (p50) | -0.1 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.4 | 0.3 | 0.3 | 0.3 |
| Median Percent Change (p90)* | 1.4 | 0.8 | 0.9 | 0.9 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 21: Real food spending before and after retirement by social security income tertiles (Generated category).

| SS_{-} Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 4,572 | 4,862 | 6,318 | 5,460 |
| Post-retirement | 4,407 | 4,996 | 6,293 | 5,501 |
| Percent Change in Means | -3.6 | 2.9 | -0.6 | 0.8 |
| Medians: | | | | |
| Pre-retirement | 3,963 | 3,981 | 5,266 | 4,523 |
| Post-retirement | 2,948 | 3,933 | 5,090 | 4,288 |
| Percent Change in Medians | -25.6 | -1.2 | -3.3 | -5.2 |
| Median Percent Change (p10)* | -0.6 | -0.7 | -0.6 | -0.7 |
| Median Percent Change (p25)* | -0.5 | -0.4 | -0.3 | -0.4 |
| Median Percent Change (p50) | 0.0 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.5 | 0.5 | 0.4 | 0.5 |
| Median Percent Change (p90)* | 1.9 | 2.0 | 1.4 | 1.7 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

This spending category is defined by food/drink and dining out in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 22: Real food at home spending before and after retirement by social security income tertiles (PSID category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-----------|-------|
| Means: | | | | |
| Pre-retirement | 3,888 | 3,595 | 4,362 | 3,952 |
| Post-retirement | 3,655 | 3,776 | $4,\!261$ | 3,977 |
| Percent Change in Means | -6.0 | 4.7 | -2.6 | 0.6 |
| Medians: | | | | |
| Pre-retirement | 3,614 | 2,986 | 3,793 | 3,354 |
| Post-retirement | 2,607 | 2,972 | 3,600 | 3,195 |
| Percent Change in Medians | -27.9 | -0.5 | -5.1 | -4.7 |
| Median Percent Change (p10)* | -0.7 | -0.7 | -0.7 | -0.7 |
| Median Percent Change (p25)* | -0.5 | -0.4 | -0.3 | -0.4 |
| Median Percent Change (p50) | -0.1 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.4 | 0.6 | 0.5 | 0.5 |
| Median Percent Change (p90)* | 2.3 | 1.7 | 1.6 | 1.7 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

This spending category is defined by food/drink in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

N = 896.

Table 23: Real food away from home spending before and after retirement by social security income tertiles (PSID category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 964 | 1,357 | 1,986 | 1,597 |
| Post-retirement | 955 | 1,338 | 2,070 | 1,624 |
| Percent Change in Means | -0.9 | -1.9 | 8.7 | 1.7 |
| Medians: | | | | |
| Pre-retirement | 412 | 720 | 1,280 | 983 |
| Post-retirement | 466 | 689 | 1,242 | 932 |
| Percent Change in Medians | 13.2 | -4.4 | -2.9 | -5.2 |
| Median Percent Change (p10)* | -1.0 | -0.9 | -0.8 | -0.9 |
| Median Percent Change (p25)* | -0.8 | -0.6 | -0.5 | -0.5 |
| Median Percent Change (p50) | -0.2 | 0.0 | -0.1 | -0.1 |
| Median Percent Change (p75)* | 0.9 | 0.6 | 0.7 | 0.7 |
| Median Percent Change (p90)* | 3.2 | 2.6 | 2.5 | 2.6 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

This spending category is defined by dining out in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

N = 893.

Table 24: Real transportation spending before and after retirement by social security income tertiles (CAMS and PSID category).

| | | 0 0/ | | |
|------------------------------|-------|--------|--------|-------|
| SS_{-} Tertiles | First | Second | Third | All |
| Means: | | | | |
| Pre-retirement | 6,275 | 7,976 | 9,940 | 8,673 |
| Post-retirement | 5,432 | 7,071 | 10,208 | 8,275 |
| Percent Change in Means | -13.4 | -14.4 | 4.3 | -4.6 |
| Medians: | | | | |
| Pre-retirement | 2,515 | 3,965 | 5,201 | 4,473 |
| Post-retirement | 2,962 | 3,571 | 5,094 | 4,250 |
| Percent Change in Medians | 17.8 | -9.9 | -2.1 | -5.0 |
| Median Percent Change (p10)* | -0.9 | -0.8 | -0.8 | -0.8 |
| Median Percent Change (p25)* | -0.6 | -0.6 | -0.5 | -0.5 |
| Median Percent Change (p50) | 0.0 | -0.1 | -0.1 | -0.1 |
| Median Percent Change (p75)* | 1.4 | 0.7 | 0.7 | 0.7 |
| Median Percent Change (p90)* | 2.5 | 2.8 | 3.3 | 3.0 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 25: Real health spending before and after retirement by social security income tertiles (PSID category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 3,451 | 3,532 | 3,966 | 3,711 |
| Post-retirement | 2,207 | 3,605 | 4,956 | 4,066 |
| Percent Change in Means | -36.0 | 2.1 | 28.7 | 9.6 |
| Medians: | | | | |
| Pre-retirement | 1,247 | 1,800 | 2,641 | 2,108 |
| Post-retirement | 1,429 | 1,963 | 3,100 | 2,375 |
| Percent Change in Medians | 14.5 | 9.1 | 17.4 | 12.6 |
| Median Percent Change (p10)* | -1.0 | -0.8 | -0.7 | -0.8 |
| Median Percent Change (p25)* | -0.8 | -0.5 | -0.4 | -0.5 |
| Median Percent Change (p50) | -0.3 | 0.0 | 0.3 | 0.1 |
| Median Percent Change (p75)* | 0.8 | 1.1 | 1.6 | 1.3 |
| Median Percent Change (p90)* | 3.0 | 3.7 | 3.9 | 3.7 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined by health insurance, drugs, health services, and medical supplies in CAMS.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 26: Real housing spending before and after retirement by social security income tertiles (CAMS and PSID category).

| | 0 0 / | | | |
|------------------------------|-------|-----------|--------|--------|
| SS_Tertiles | First | Second | Third | All |
| Means: | | | | |
| Pre-retirement | 6,425 | 8,536 | 13,354 | 10,420 |
| Post-retirement | 6,085 | 8,076 | 13,133 | 10,072 |
| Percent Change in Means | -5.3 | -7.2 | -3.4 | -3.3 |
| Medians: | | | | |
| Pre-retirement | 3,466 | 5,661 | 9,555 | 7,219 |
| Post-retirement | 3,804 | $5,\!674$ | 9,220 | 6,493 |
| Percent Change in Medians | 9.8 | 0.2 | -3.5 | -10.1 |
| Median Percent Change (p10)* | -0.8 | -0.7 | -0.7 | -0.7 |
| Median Percent Change (p25)* | -0.4 | -0.4 | -0.4 | -0.4 |
| Median Percent Change (p50) | 0.0 | 0.0 | 0.0 | 0.0 |
| Median Percent Change (p75)* | 0.8 | 0.3 | 0.3 | 0.3 |
| Median Percent Change (p90)* | 4.3 | 1.7 | 2.1 | 2.1 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined in accordance with page 9 (Table 1: Variable Names Across Waves) of the RAND_CAMS_2015V2 Data Documentation file.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 27: Real recreation spending before and after retirement by social security income tertiles (PSID category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 1,006 | 2,097 | 2,958 | 2,374 |
| Post-retirement | 1,297 | 1,745 | 3,199 | 2,329 |
| Percent Change in Means | 28.9 | -34.9 | 23.9 | -1.9 |
| Medians: | | | | |
| Pre-retirement | 216 | 670 | 1,580 | 1,035 |
| Post-retirement | 319 | 668 | 1,824 | 1,009 |
| Percent Change in Medians | 47.9 | -0.3 | 15.5 | -2.5 |
| Median Percent Change (p10)* | -1.0 | -1.0 | -0.9 | -1.0 |
| Median Percent Change (p25)* | -0.6 | -0.7 | -0.5 | -0.6 |
| Median Percent Change (p50) | 0.2 | -0.2 | 0.0 | -0.1 |
| Median Percent Change (p75)* | 1.6 | 0.9 | 1.0 | 1.0 |
| Median Percent Change (p90)* | 3.2 | 3.2 | 3.5 | 3.4 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This spending category is defined by vacations, tickets, hobbies/sports, hobbies, and sports in CAMS.

Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

Table 28: Real clothing spending before and after retirement by social security income tertiles (PSID category).

| SS_Tertiles | First | Second | Third | All |
|------------------------------|-------|--------|-------|-------|
| Means: | | | | |
| Pre-retirement | 1,080 | 841 | 1,114 | 979 |
| Post-retirement | 520 | 747 | 1,080 | 872 |
| Percent Change in Means | -51.8 | -8.7 | -3.1 | -10.9 |
| Medians: | | | | |
| Pre-retirement | 327 | 400 | 515 | 471 |
| Post-retirement | 216 | 300 | 491 | 392 |
| Percent Change in Medians | -34.0 | -25.0 | -4.6 | -16.9 |
| Median Percent Change (p10)* | -1.0 | -1.0 | -0.8 | -0.9 |
| Median Percent Change (p25)* | -1.0 | -0.8 | -0.6 | -0.7 |
| Median Percent Change (p50) | -0.5 | -0.3 | -0.2 | -0.2 |
| Median Percent Change (p75)* | 0.2 | 0.4 | 0.6 | 0.5 |
| Median Percent Change (p90)* | 2.8 | 1.9 | 1.9 | 1.9 |

^{*}These values are not medians but percentiles, as indicated in the parentheses.

This table references Table 2 of Hurd and Rohwedder's paper: Heterogeneity in spending change at retirement.

This spending category is defined by clothing in CAMS.

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Mean percent change is not reported because observation error on spending can produce large outliers when spending is put in ratio form.

N = 882.