

Asset Decumulation or Asset Preservation? What Guides Retirement Spending?

By Sudipto Banerjee, Employee Benefit Research Institute

AT A GLANCE

The Employee Benefit Research Institute (EBRI) undertook a study examining the extent to which the non-housing assets of certain retirees changed during their first 20 years of retirement (or until death, if earlier). The study relied on income and asset data from the Health and Retirement Study (HRS), the most comprehensive survey of older Americans in the country, and on spending data from the Consumption and Activities Mail Survey (CAMS), a supplement to HRS. All numbers are measured in 2015 dollars.

- The study shows that retirees generally exhibit very slow decumulation of assets.
- More specifically, within the first 18 years of retirement, individuals with less than \$200,000 in non-housing assets immediately before retirement had spent down (at the median) about one-quarter of their assets; those with between \$200,000 and \$500,000 immediately before retirement had spent down 27.2 percent. Retirees with at least \$500,000 immediately before retirement had spent down only 11.8 percent within the first 20 years of retirement at the median.
- While some retirees do spend down most of their assets in the first eighteen years following retirement, about one-third of all sampled retirees had *increased* their assets over that period.
- Pensioners were much less likely to have spent down their assets than non-pensioners. During the first 18 years of retirement, the median non-housing assets of pensioners (who started retirement with much higher levels of assets) had gone down only 4 percent, compared to 34 percent for non-pensioners.
- The median ratio of household spending to household income for retirees of all ages hovered around one, inching slowly upward with age. This suggests that majority of retirees had limited their spending to their regular flow of income and had avoided drawing down assets, which explains why pensioners, who had higher levels of regular income, were able to avoid asset drawdowns better than others.

Sudipto Banerjee served as a research associate at the Employee Benefit Research Institute (EBRI). This *Issue Brief* was written with assistance from the Institute’s research and editorial staffs. Any views expressed in this report are those of the author, and should not be ascribed to the officers, trustees, or other sponsors of EBRI, Employee Benefit Research Institute-Education and Research Fund (EBRI-ERF), or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

Copyright Information: This report is copyrighted by the Employee Benefit Research Institute (EBRI). It may be used without permission but citation of the source is required.

Recommended Citation: Sudipto Banerjee, “Asset Decumulation or Asset Preservation? What Guides Retirement Spending?” *EBRI Issue Brief*, no. 447 (Employee Benefit Research Institute, April 3, 2018).

Report availability: This report is available on the internet at www.ebri.org

Table of Contents

Introduction	4
Data	4
Change In Non-Housing Assets After Retirement.....	5
Change in Non-Housing Assets of Those Who Started Retirement With Less Than \$200,000	5
Change in Non-Housing Assets of Those Who Started Retirement With Assets Between \$200,000 and \$500,000	6
Change in Non-Housing Assets of Those Who Started Retirement With Assets at Least \$500,000	7
Discussion.....	7
What Percentage of Assets Remain at Different Points in Retirement? Results for Group A Retirees (less than \$200,000).....	8
What Percentage of Assets Remain at Different Points in Retirement? Results for Group B Retirees (between \$200,000 and \$500,000)	8
What Percentage of Assets Remain at Different Points in Retirement? Results for Group C Retirees (at least \$500,000)	8
Do Retirees With Pension Income Spend Down Their Assets Faster than Others?	9
Do Retirees Limit Their Spending to Their Income?	10
Conclusion	11
References.....	12

Figures

Figure 1A, Mean and Median Non-Housing Assets Before and After Retirement for Households with Non-Housing Assets less than \$200k (when last observed before retirement)	6
Figure 1B, Mean and Median Non-Housing Assets Before and After Retirement for Households with Non-Housing Assets between \$200k and \$500k (when last observed before retirement)	6

Figure 1C, Mean and Median Non-Housing Assets Before and After Retirement for Households with Non-Housing Assets of at least \$500k (at any point during the observation period of 1992 - 2014)	7
Figure 2A, Percentage of Retired Households with A Given Proportion of Starting Assets (assets in first two years of retirement) Remaining at Different Points in Retirement (for households with preretirement non-housing assets less than \$200k)	8
Figure 2B, Percentage of Retired Households with A Given Proportion of Starting Assets (assets in first two years of retirement) Remaining at Different Points in Retirement (for households with preretirement non-housing assets between \$200k and \$500k)	9
Figure 2C, Percentage of Retired Households with A Given Proportion of Starting Assets (assets in first two years of retirement) Remaining at Different Points in Retirement (for households with preretirement non-housing assets of at least \$500k).....	9
Figure 3, Median Non-Housing Assets Before and After Retirement for Households With and Without Pension Income	10
Figure 4, Median Ratio of Household Spending to Household Income from 2001 - 2013, By Age Group.....	11

Asset Decumulation or Asset Preservation? What Guides Retirement Spending?

By Sudipto Banerjee, Employee Benefit Research Institute

Introduction

One of the assumptions underlying many models used to measure retirement income adequacy is that retirees will spend down their accumulated assets to fund their retirement needs. While this may make sense in theory, do people actually behave like this?

There are several reasons to expect that many retirees do not behave in ways consistent with the assumption of asset decumulation. For example, retirees face several risks - uncertain life span, uncertain medical expenses, uncertain market returns - that might cause many to spend their retirement assets more slowly. In addition, throughout their working lives, many people develop a saving habit. Is it possible to suddenly change or reverse such a habit? How easily can people adjust to decreasing account balances after they have focused on increasing their balances for most of their lives?

This study reviews data reflecting how retirees actually use their assets after retirement. Understanding how retirees make such save-or-spend decisions is crucial to measuring retirement income adequacy and to developing products and advice to help retirees manage their retirement assets better.

In 2015, the Society of Actuaries (SOA) interviewed a group of retirees who had been retired for at least 15 years and had investable assets between \$50,000 and \$350,000. They were asked several questions about how they managed their finances. The study concluded, "A key goal of almost all focus group retirees is to maintain or increase their asset level ... In general, those who have been able to maintain their asset levels have done so through significant cuts in spending." Another focus group study conducted by SOA in 2013 yielded similar conclusions. Of course, these conclusions were based on only anecdotal evidence, but still the conclusions were striking.

Poterba, Venti, and Wise (2017) used data from the HRS, and analyzed how assets changed in the last two decades of the lives of retirees. Their results showed that for most retirees, the value of assets observed in the year before death were similar to the value of assets observed when they were first included in the survey (up to 20 years prior). In the HRS cohort (born between 1931 and 1941), among those with assets between \$1- \$50,000 in the last year before death, 81 percent had assets less than \$100,000 in the first year of observation.

Instead of looking at the last few years of life, the Employee Benefit Research Institute (EBRI) study looks at how retirees' assets change in the years immediately following their retirement. In addition to asset changes, the study also compares income and spending of retirees of different ages to better understand how retirees make spending decisions.

Data

The income and asset data for this study came from the Health and Retirement Study (HRS), the most comprehensive survey of older Americans in the country. Every two years, beginning in 1992, HRS has surveyed a nationally representative sample of U.S. households with individuals over age 50 on topics such as health, assets, income, and labor-force status in detail. The initial sample consisted of individuals born between 1931–1941 and their spouses, regardless of their birth year. Younger cohorts have been added in following years. HRS is sponsored by the National Institute on Aging (NIA) and the Social Security Administration (SSA) and is administered by the Institute for Social Research (ISR) at the University of Michigan.

The spending data came from the Consumption and Activities Mail Survey (CAMS). CAMS, which was initiated in 2001, as a supplement to the HRS. Every year following the main HRS survey, the CAMS questionnaire has been sent to a

subset of randomly selected households from the HRS participants to collect spending information on 36 categories to arrive at a measure of total household spending. In couple households, the questionnaire has been sent randomly to one of the two spouses. Since 2001, CAMS has been conducted every two years, with 2015 being the latest round of available data.

All numbers have been measured in 2015 dollars.

Change In Non-Housing Assets After Retirement

The EBRI study tracks the change in non-housing assets for three different groups of retirees who entered retirement with different levels of non-housing assets. The asset levels used to distinguish between the three groups are the assets last observed before these households entered retirement.

- Group A: retirees with pre-retirement non-housing assets less than \$200,000
- Group B: retirees with pre-retirement non-housing assets between \$200,000 and \$500,000
- Group C: retirees with pre-retirement non-housing assets at least \$500,000 in assets

Definition of Retirement: A primary worker is identified for each household. For couples, the spouse with higher Social Security earnings is the assigned primary worker as he/she has higher average lifetime earnings. Self-reported retirement (month and year) for the primary worker in 2014 (latest survey) is used as the retirement (month and year) for the household.

Definition of Non-Housing Assets: Non-housing assets include any real estate other than primary residence; net value of vehicles owned; individual retirement accounts (IRAs), stocks and mutual funds, checking, savings and money market accounts, certificates of deposit (CDs), government savings bonds, Treasury bills, bonds and bond funds; and any other source of wealth *minus* all debt (such as consumer loans).

Non-housing assets do not include assets in an employer-provided retirement plan such as a 401(k), which could be a significant portion of savings. According to the Survey of Consumer Finances (2016), among families headed by individuals ages 65 and older, 13.8 percent of individual assets were in current-employer's plans, 11.4 percent of individual assets were in previous-employer's plans and 74.8 percent of their individual assets were in IRA or Keogh plans. The sample analyzed for this study is retired and by definition has no assets in current-employer plans. So, the sample should have a higher proportion of individual assets in IRA or Keogh plans. However, some of the individual assets will be missing for the analyzed sample, and the decumulation of those assets will not be captured in the study.

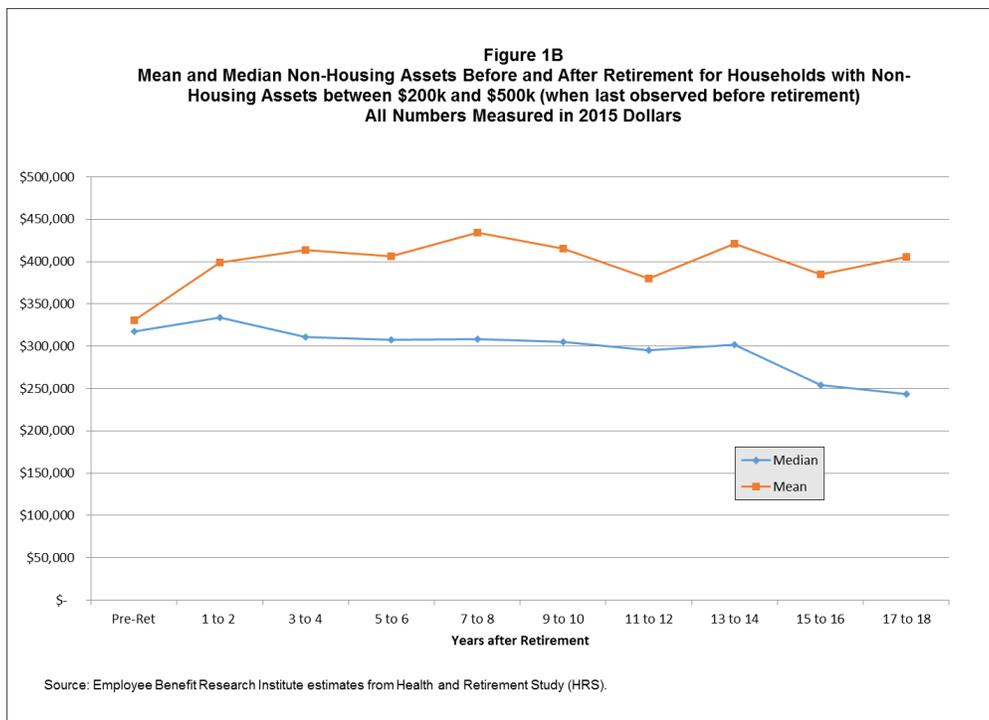
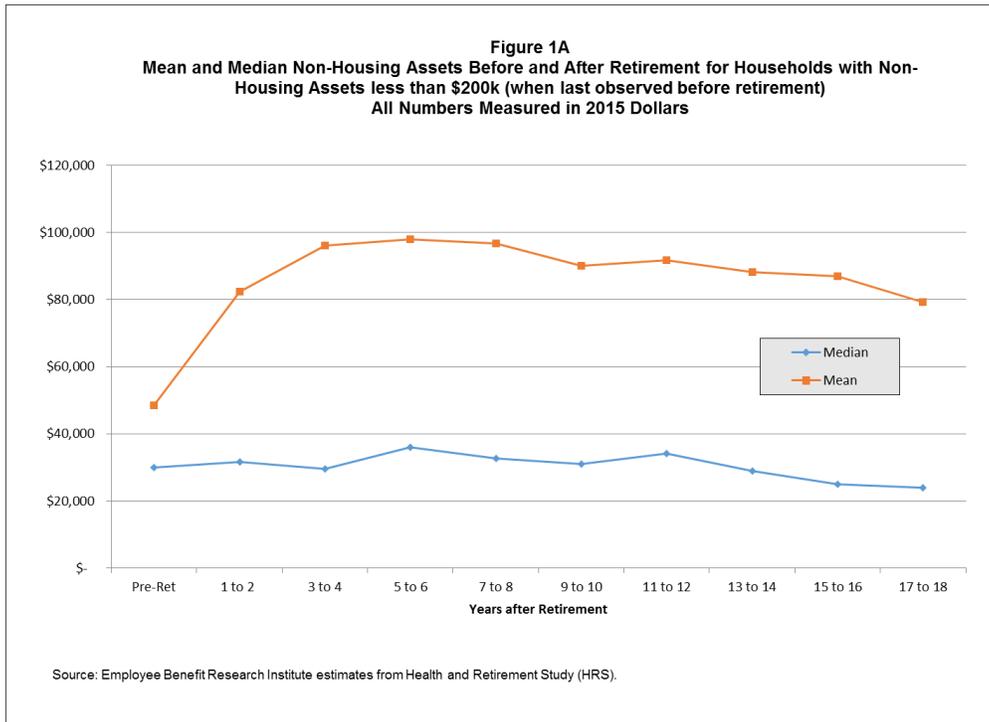
Change in Non-Housing Assets of Those Who Started Retirement With Less Than \$200,000

Figure 1A shows how non-housing assets changed for Group A – those entering retirement with less than \$200,000 in non-housing assets -- over the 18 year period after retirement. First, the preretirement, non-housing asset median for this group was only \$29,975. The mean was \$48,552. In the first four years of retirement, the mean increased (to a large part due to IRA rollovers), but the median remained more or less the same. This is understandable because in Group A, IRA rollovers were generally limited to people with higher assets and with access to employer plans.

Over the 18-year period, there was a very small drop in the median assets of this group, from \$31,740 (after 1- 2 years of retirement) to \$24,000 (after 17 - 18 years of retirement). This was only a 24.4 percent drop. Such a rate of asset decumulation was definitely much lower than what has been traditionally assumed by most retirement models. But intuitively, such behavior was not confounding. These households had very few assets and they faced a lot of uncertainties. So, it was not "irrational" for them to have held on to their assets as long as possible.

It is important to note that the value of non-housing assets may go down even when retirees are not spending down these assets. For example, a year of negative returns could also result in lower assets. But since the data show much lower drops in assets than predicted by economic theories or retirement models, this is not a particular concern. In the case of negative returns, the data would suggest people are spending down even less. But, if the assets appreciate and

people spend down only the return on their assets, then the level of assets would not change. In fact, this is a very likely scenario. The results below point toward the fact that people might be willing to spend down the income from their assets, but are reluctant to spend down the “principal.”



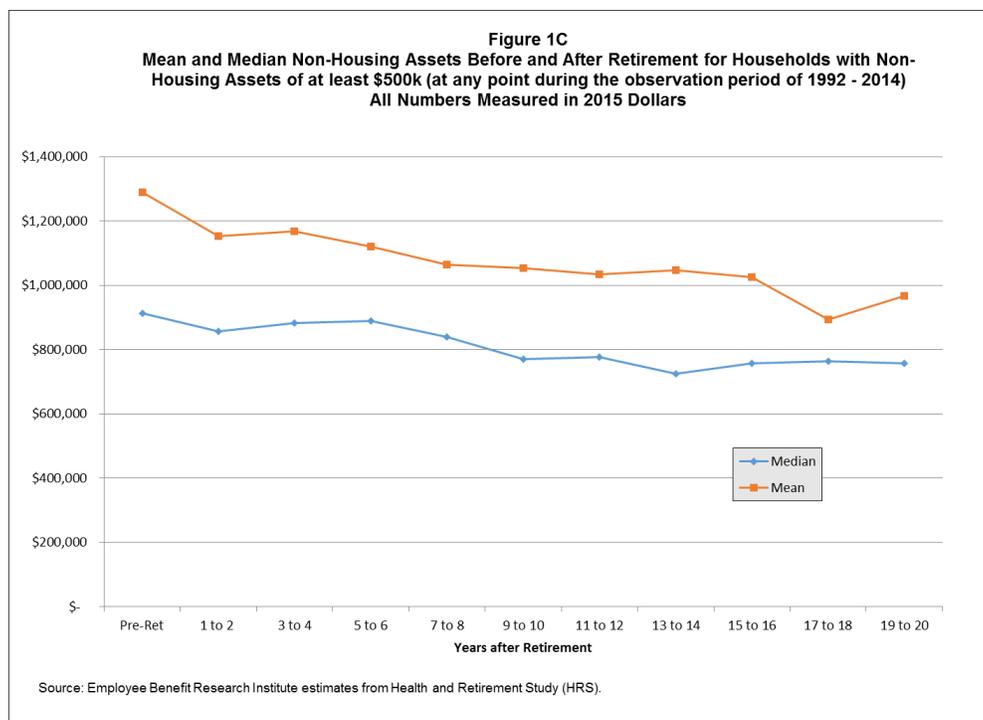
Change in Non-Housing Assets of Those Who Started Retirement With Assets Between \$200,000 and \$500,000

Figure 1B shows how the assets changed for Group B – those entering retirement with non-housing assets of at least \$200,000 but less than \$500,000 -- in the 18 years after retirement. The trends were very similar to trends seen for Group A. In the first two years of retirement, the non-housing asset median for Group B was \$333,940. After 13-14

years of retirement the median was still above \$300,000 (at \$301,620). By the 17th-18th year of retirement, the non-housing asset median was \$243,070, a 27.2 percent drop compared to the asset median in the first two years. So, in this group as well, retirees did not spend down their assets as quickly as retirement models would generally predict.

Change in Non-Housing Assets of Those Who Started Retirement With Assets at Least \$500,000

Figure 1C shows how the assets changed for Group C – those entering retirement with at least \$500,000 in non-housing assets -- in the 20 years after retirement. The asset decumulation rate was even slower for this group. The non-housing asset median for retirees in this group was \$857,450 in the first two years of retirement. After 19-20 years of retirement, the median dropped to \$756,300 – an 11.8 percent drop. So, the group with the highest level of assets had the lowest rate of asset spend down.



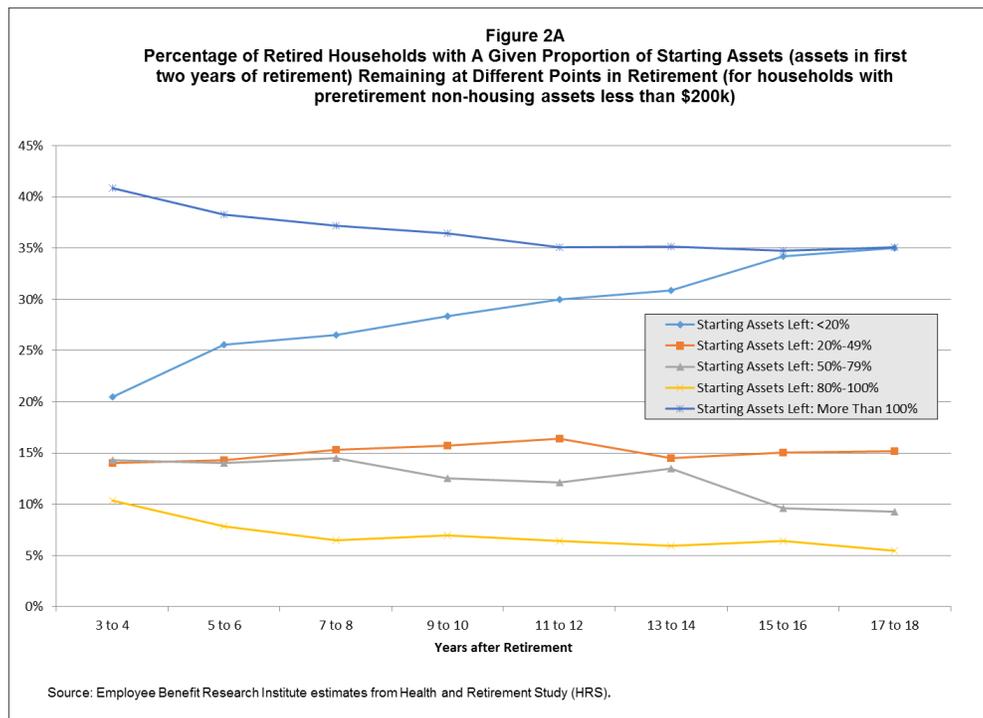
Discussion

Why are retirees not spending down their assets? There are probably a number of reasons. First, there are the uncertainties. People don't know how long they are going to live or how long they have to fund their retirement from these assets. Then there are uncertain medical expenses that could be catastrophic if someone has to stay in a long-term care facility for a prolonged period. Of course, if people have to self-insure against these uncertainties, they need to hold onto their assets. Second, some of these assets are likely to be passed on to their heirs as bequests. But, what percentage of actual bequests are planned vs. accidental is an open question. Third, another possible reason for this slow asset decumulation rate could be lack of financial sophistication, or in other words, people don't know what is a safe rate for spending down their assets. So, they are erring on the side of caution. Finally, some of it could be just a behavioral impediment. After building a saving habit throughout their working lives, people find it challenging to shift into spending mode. They continue to build up their assets or hold on to their assets as long as possible.

Do these results mean no one is running out of money in retirement? No. Some retirees are running out of money in retirement (as shown in section 3 below). At the same time, instead of spending down, a large number of retirees are continuing to accumulate assets throughout retirement.

What Percentage of Assets Remain at Different Points in Retirement? Results for Group A Retirees (less than \$200,000)

Figure 2A shows the percentage of retirees in Group A that had a given proportion of their starting assets (assets in the first two years of retirement) left at different points in retirement. By the third to fourth year of retirement one-in-five retirees in this group had less than 20 percent of their starting assets left. By the 17th-18th year of retirement, more than one-in-three (35.1 percent) retirees in this group had less than 20 percent of their starting assets left. Given that the starting assets of this group were very low (median of \$31,740), this means a significant number of retirees (Group A constitutes about two-thirds of the entire sample) had very few assets left by the 17th-18th year of their retirement. On the other hand, by the end of the 17th-18th year, 35.1 percent of retirees in this group had more than 100 percent of their starting assets left. That means more than one-in-three retirees in this group had grown their assets throughout the first two decades of their retirement. This is in sharp contrast with the predictions of models used to measure retirement security.



What Percentage of Assets Remain at Different Points in Retirement? Results for Group B Retirees (between \$200,000 and \$500,000)

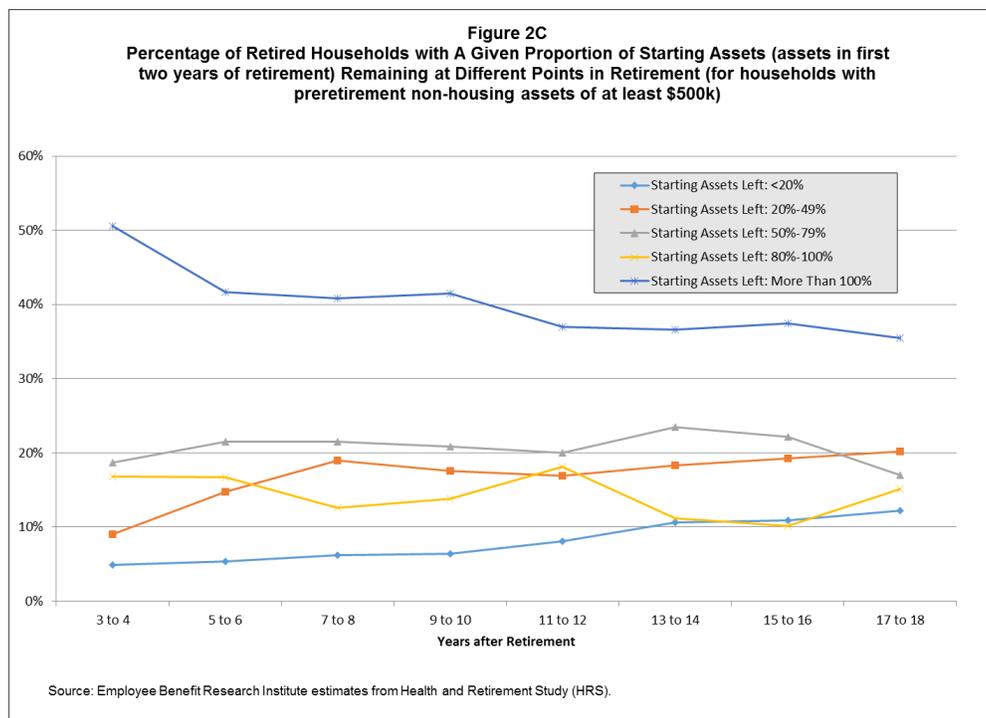
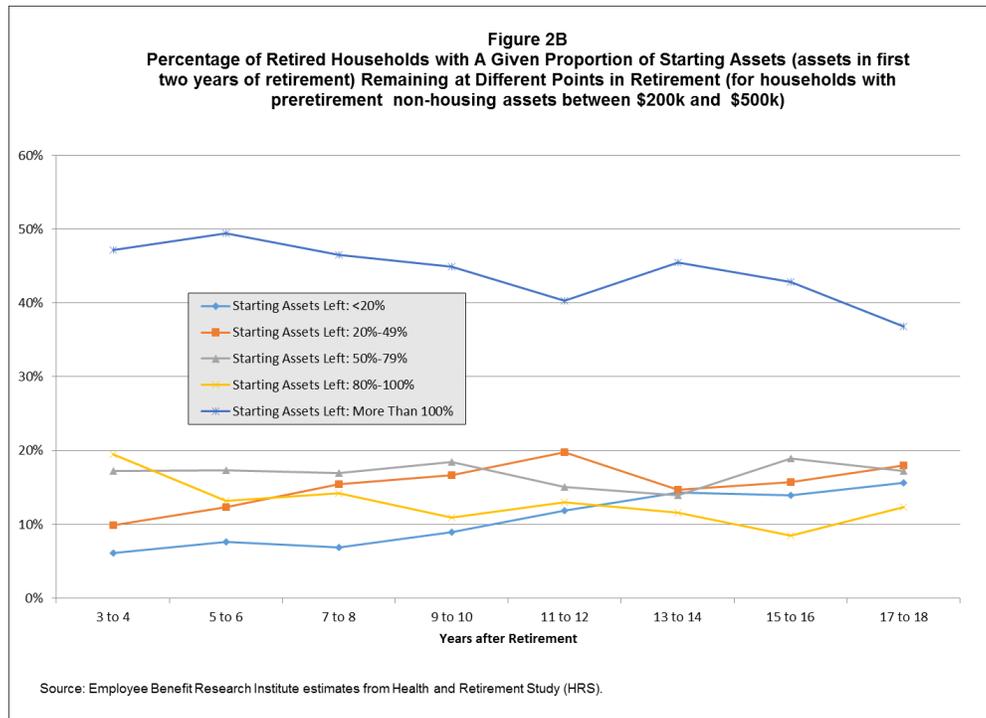
Figure 2B shows the percentage of retirees in Group B that had a given proportion of their starting assets (assets in the first two years of retirement) left at different points in retirement. By the 17th-18th year of retirement, 15.7 percent of retirees in this group had less than 20 percent of their starting assets left. On the other hand, by the 17th-18th year, another 36.8 percent of retirees in this group had more than 100 percent of their starting assets left. That means, similar to Group A retirees, more than one-in-three Group B retirees had grown their assets throughout the first two decades of their retirement.

What Percentage of Assets Remain at Different Points in Retirement? Results for Group C Retirees (at least \$500,000)

Figure 2C shows the percentage of retirees in Group C that had a given proportion of their starting assets (assets in the first two years of retirement) left at different points in retirement. By the 17th-18th year of retirement, about one-in-eight (12.2 percent) retirees in this group had less than 20 percent of their starting assets left. So, even among those who started retirement with a sizable amount of assets, some ended up spending most of their assets within the first

two decades of retirement. On the other hand, by the end of the 17th-18th year, another 35.5 percent of retirees in this group had more than 100 percent of their starting assets left.

So, while a significant number of retirees had spent most of their assets within the first two decades of retirement—many had not. Indeed, about one-in-three retirees, irrespective of their level of starting assets, had actually continued to grow their assets in retirement.



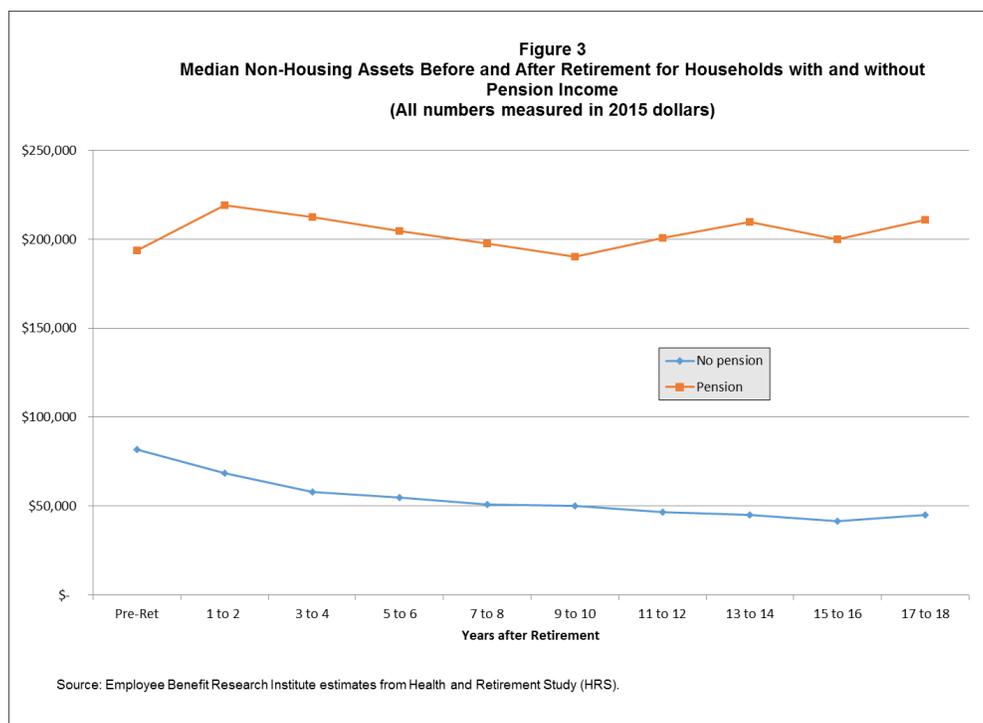
Do Retirees With Pension Income Spend Down Their Assets Faster than Others?

If the reluctance to spend down assets is due to the fear of running out of money at the end of life, then should people with lifetime pension income spend down their assets more freely? This seems like a reasonable prediction but is not supported by the data.

Figure 3 shows how the median non-housing assets changed for retirees with and without pension income in the two decades after retirement. First, pensioners started retirement with much higher levels of assets. In the first two years, the median non-housing assets for pensioners and non-pensioners were \$219,120 and \$68,500 respectively. After 17-18 years of retirement, the median non-housing assets for pensioners was \$210,991 – a drop of about 4 percent.

In comparison, during the same period, median non-housing assets of retirees without pensions dropped from \$68,500 to \$45,000 – a drop of about 34 percent.

So, pensioners are much less likely to spend down their assets. This suggests a better explanation for such asset-preserving behavior is that people spend the money that comes in as a regular income flow (such as a pension or Social Security income), and try to preserve their assets for uncertainties or bequest. Because pensioners have more regular income than non-pensioners, they are able to stick to such behavior more closely.

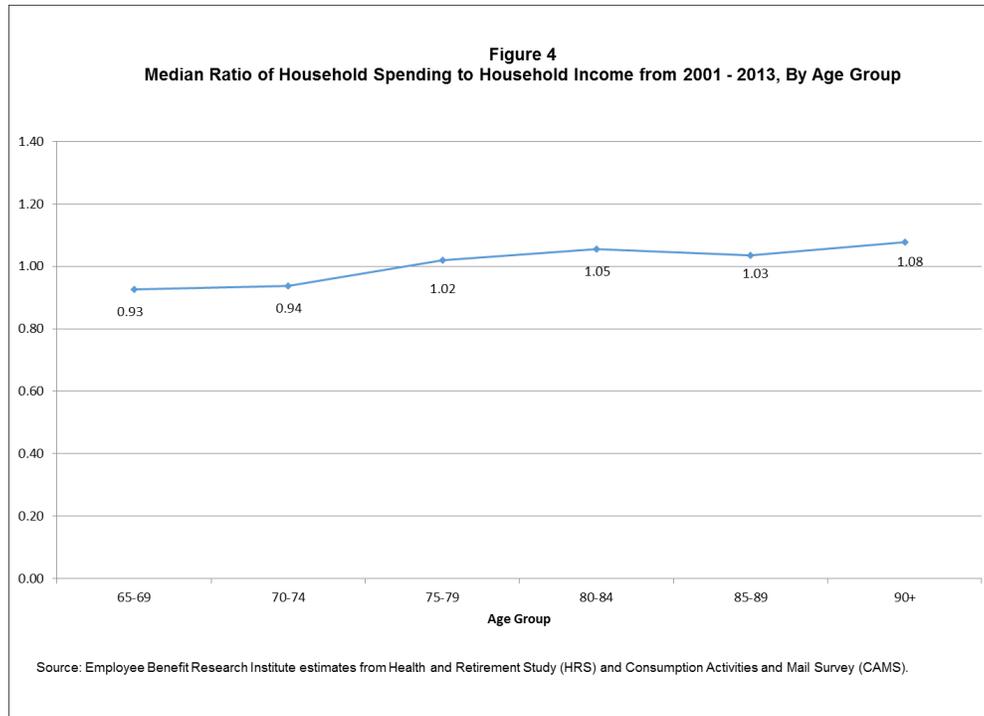


Do Retirees Limit Their Spending to Their Income?

Definition of Household Income: Income includes wages and labor earnings; capital earnings; defined benefit pensions; annuities; Social Security Disability Insurance; Social Security retirement benefits; unemployment compensation; and government transfers and other sources of income such as alimony, lump sums from insurance, pensions, or inheritance, or anything else. Income measure is used from the RAND HRS data file and does not include distributions from IRAs, 401(k)s, brokerage accounts, or savings accounts.

Definition of Household Spending: Household spending includes spending in 36 categories broadly measuring home and home-related spending, health, food, transportation, clothing, entertainment, and any other spending. Total spending is calculated by the author using CAMS data.

Figure 4 shows the median of the ratio of household spending to household income among retirees of different ages. Household spending and household income are defined above. As Figure 4 shows, the median ratio of spending to income remains very close to one for all age groups, slowly inching higher for older retirees. So, for the majority of retirees, spending tracks their income very closely. Because income does not include drawdowns from tax-advantaged (IRAs or 401(k)s) accounts, this means the majority of retirees limit their spending to income that excludes tax-advantaged account drawdowns.



Conclusion

Life-cycle theory suggests that workers accumulate assets during their working lives and spend those assets during retirement. Most retirement models and much of the advice provided to retirees are based on this assumption. While there is enough evidence that workers accumulate assets during their working years, there is much less evidence to show that retirees systematically spend down their accumulated assets during retirement. Do retirees want to spend down their assets or do they simply want to hold on to their assets as a financial cushion?

This EBRI study shows that the majority of retirees do not spend down their assets in the first two decades of their retirement. This behavior is not limited to those with lower levels assets. In fact, those with the highest level of assets show the lowest rates of spending down.

Also, having guaranteed income for life, such as a pension, doesn't make retirees more likely to spend down their assets either. To the contrary, of all the subgroups studied, pensioners have the lowest asset spend-down rates. This suggests that if the goal is to avoid spending down assets, pensioners are best suited to do so. In other words, if retirees seek to limit their spending to their regular flow of income (such as pension, Social Security income, or other annuity income), then pensioners are indeed best suited to avoid asset decumulation, as they have more regular income than others.

When household income of retirees is compared to household spending, the study finds that majority of households indeed limit their spending to their income.

If retirees are determined to preserve their assets and not to spend them down, this creates important implications--ranging from the type of retirement products offered to how retirement preparedness is assessed. However, if such

drawdown patterns are the consequence of behavioral biases (e.g., inability to switch from accumulation to decumulation mode) or lack of education on how to spend down retirement savings, this has quite different implications when it comes to necessary tools and support for retirees as they seek to manage their assets in retirement.

References

"What Determines End-of-Life Assets? A Retrospective View," in D. Wise, ed., *Insights in the Economics of Aging* (Chicago, University of Chicago Press, 2017), 127-157. (with S. Venti and D. Wise).

Society of Actuaries. "The Decision to Retire and Post-Retirement Financial Strategies: A Report on Eight Focus Groups" (2013)

Society of Actuaries. "Post-Retirement Experiences of Individuals Retired for 15 Years or More:

A Report on Twelve Focus Groups and Fifteen In-depth Interviews in the United States and Canada" (2015)

EBRI Issue Brief is registered in the U.S. Patent and Trademark Office. ISSN: 0887-137X/90 0887-137X/90 \$.50+.50

© 2018, Employee Benefit Research Institute—Education and Research Fund. All rights reserved.