

Expenditure Patterns of Older Americans, 2001–2009

By *Sudipto Banerjee, Employee Benefit Research Institute*

PRE- AND POSTRETIREMENT EXPENSES: Before retirement, people pay FICA taxes, incur work-related expenses, and set aside money for retirement. But after retirement, most people have different financial obligations, and, as a result, retirees may still be able to maintain their level of preretirement well-being with very different income levels. Studying income, expenditures, and wealth-holding patterns together provides a more complete idea of how people are doing in terms of being able to afford retirement than arbitrary estimates such as income replacement ratios.

UNIQUE DATA: This *Issue Brief* examines the expenditure patterns of the older section of the population. It uses data from the Consumption and Activities Mail Survey (CAMS), a supplement to the Health and Retirement Study (HRS), conducted by the Institute for Social Research at the University of Michigan, contains detailed expenditure data on 32 categories, and follows the same group of individuals over eight years. In addition, the income and wealth data available in the HRS are used to establish the financial standing of older households.

DECLINING EXPENSES: Household expenses steadily decline with age. With the age 65 expenditure as a benchmark, household expenditure falls by 19 percent by age 75, 34 percent by age 85, and 52 percent by age 95.

HOME EXPENSES: Home and home-related expenses remain the single largest spending category for older Americans. On average, those over age 50 spend around 40–45 percent of their budget on home and home-related items.

RISING HEALTH CARE EXPENSES: Health-related expenses are the second-largest component in the budget of older Americans. It is the only component which steadily increases with age. Health care expenses capture around 10 percent of the budget for those between 50–64, but increase to about 20 percent for those age 85 and over.

DEMOGRAPHIC GROUPS: Singles, blacks, and high school dropouts do not have a sound financial standing in retirement. Their expenditures exceed their income and they hold very little financial wealth. The bottom income quartile, which includes mostly these demographic groups, has the weakest financial standing in retirement.

LONG-TERM CARE AND PRIVATE HEALTH INSURANCE: Long-term care and some form of private health insurance coverage have a significant effect on increased spending by older households.

Sudipto Banerjee is a research associate at the Employee Benefit Research Institute. 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, EBRI-ERF, or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

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Introduction

According to economic theory, “well-being” is measured better by consumption rather than by income. Furthermore, pre- and postretirement spending requirements are very different: Before retirement, people pay FICA¹ taxes, incur work-related expenses, and set money aside for retirement. But none of these savings or tax requirements exist postretirement. As a result, even with very different post-retirement income levels retirees may still be able to afford the consumption expenses needed to maintain their level of preretirement well-being.

The study of consumption or expenditure patterns provides a better sense of retirees’ well-being than arbitrary estimates such as “replacement ratios.”² And if income, expenditures, and wealth-holding patterns can be studied together, this can provide a more complete idea of how people are doing in terms of being able to afford retirement.

This *Issue Brief* examines the consumption pattern of the older section of the U.S. population. The majority of the households studied here have either reached retirement age or are on the cusp of retirement. The data come from the Health and Retirement Study (HRS) and the Consumption and Activities Mail Survey (CAMS), which is a supplement of the HRS (described below). CAMS contains detailed spending information on 26 nondurable and six durable categories, and it follows the same group of people over eight years. Using this information coupled with the income, wealth, health, and labor-market information available in the HRS, this study attempts to summarize the consumption behavior of the American elderly. It has three primary objectives:

- To examine how consumption patterns evolve with age, income, and other demographic characteristics.
- To study the income, expenditures, and wealth-holding patterns of the elderly to get a sense of how they are managing their finances and if they are at risk of outliving their assets.
- To determine if long-term care (LTC) insurance and private health insurance affect the elderly’s consumption behavior.

Data

Two sources of data are used for this study. First is the Health and Retirement Study (HRS), which is a study of a nationally representative sample of U.S. households with individuals over age 50. It is the most comprehensive survey of older Americans in the nation and covers topics like health, assets, income, and labor-force status in detail. It is a biennial longitudinal survey with questionnaire waves in even-numbered years beginning in 1992. The initial sample consisted of individuals born between 1931 and 1941 and their spouses, regardless of their birth year. Newer cohorts have been added in the following years. The study is sponsored by the National Institute of Aging (NIA) and the Social Security Administration (SSA) and administered by the Institute for Social Research (ISR) at the University of Michigan.

But the crucial part of the data used in this study come from the Consumption and Activities Mail Survey (CAMS), which was started in 2001 as a supplement to the HRS. From the participants in the 2000 HRS, 5,000 households were selected at random and mailed the CAMS questionnaire. In couples households, the questionnaire was sent randomly to one of the two spouses. Since 2001, CAMS has been conducted every two years, with 2009 the latest round of available data. For those between ages 55–64, the aggregate expenditure in each of 32 categories (six durable and 26 non-durable items) of CAMS are very close to the same categories in the Consumer Expenditure Survey (CEX), which is the benchmark survey on household consumption in the United States. However, CAMS reports higher consumption expenditures for older households (Hurd and Rohwedder, 2011).

The household income and wealth measures are taken from the RAND version of HRS data because it provides consistent measures of income and wealth across all waves.

“Expenditures” Defined

- **Home-related expenses** include mortgage, property taxes, homeowner’s or renter’s insurance, rent, utilities, home repairs, home furnishings, housecleaning supplies, housekeeping and laundry services, gardening and yard supplies, and gardening and yard services.
- **Food expenses** include food and drink, including alcoholic beverages that are bought in grocery and other stores. Dining out is not included .
- **Health expenses** include out-of-pocket (uninsured) health insurance costs, including Medicare supplemental insurance; out-of-pocket costs on prescription and nonprescription drugs; out-of-pocket cost of hospital care, doctor services, lab tests, eye, dental, and nursing home care; and out-of-pocket costs for medical supplies.
- **Transportation expenses** include car payments (principal and interest), vehicle insurance, vehicle maintenance, and gas.
- **Clothing expenses** include clothing and apparel (including jewelry) and also personal care products and services.
- **Entertainment expenses** include trips and vacations, tickets to movies, sporting, or performing arts events; hobbies and leisure equipment (photography, reading, camping, etc.); dining out in restaurants, cafes, and diners; and take-out food.
- **Other expenses** include contributions to religious, educational, charitable, or political organizations, and cash and gifts to family and friends outside the household (including alimony and child-support payments).

Expenditure Pattern Across Ages

Figure 1 plots the median (the midpoint—half above and half below) total household annual expenditure (in 2010 dollars) across ages. It clearly shows that household expenditure steadily declines with age.³ The decline is almost linear, indicating that expenditure falls at a constant rate with age. With age 65 spending as a benchmark, household expenditure falls by 19 percent by age 75, 34 percent by age 85, and 52 percent by age 95. Future retirement income adequacy studies should explicitly take account of this declining expenditure pattern as done in Hurd and Rohwedder (2011).

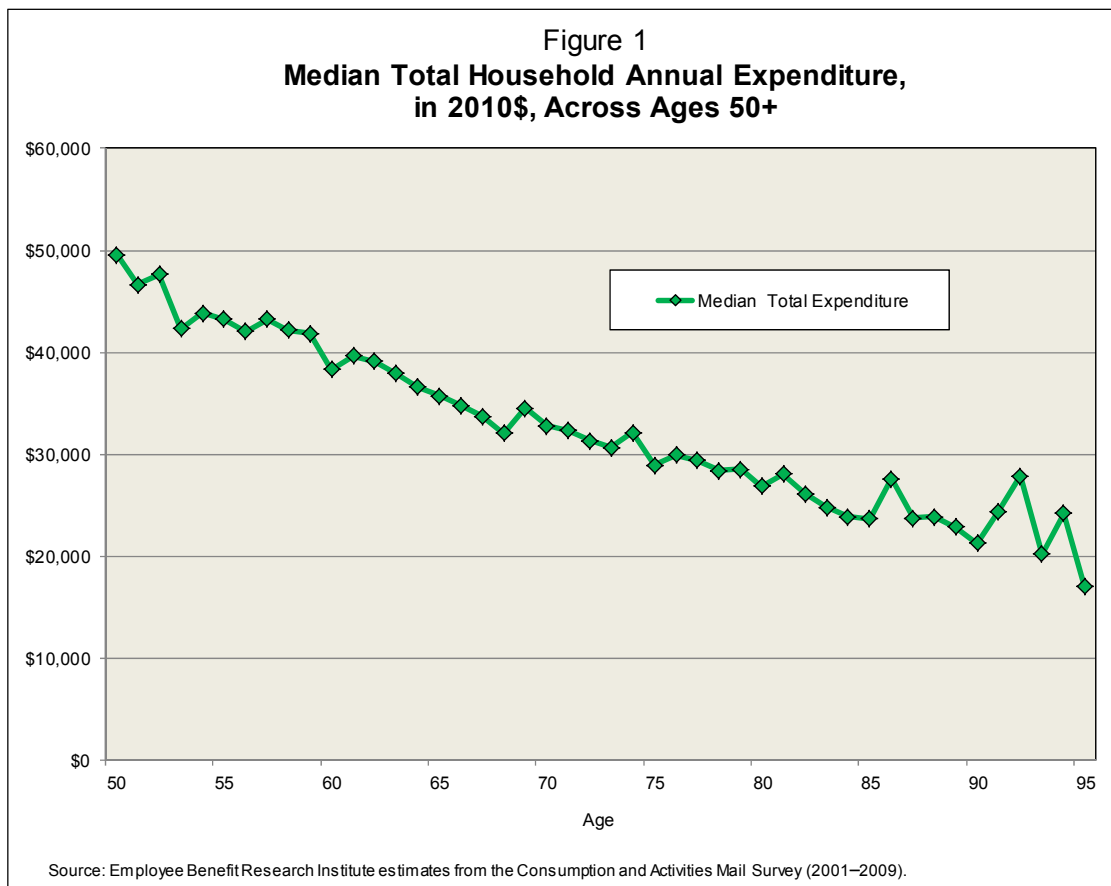
Figure 2 takes a closer look at the expenditure pattern across ages, both by breaking total household expenditure into different categories and also by separating it into different age groups. The reported numbers are the medians (in 2010 dollars) and percentage share of each category in total spending. The different categories are described above.

Some immediate patterns emerge from Figure 2. First, as in previous studies (Butrica, Goldwyn and Johnson, 2005; Butrica and Mermin, 2006), it was found that home and home-related expenses remain the largest spending category for every age group. In any given year, the percentage of total expenditures spent on home-related items remain almost the same for every age group. Second, health expenses increase steadily with age. In 2009, people between ages 50–64 spent 9 percent of their total budget on health items, while those age 85 or over spent twice as much (18 percent) of their budget on health items. Health-related expenses are the second-largest share of total expenditure for those over age 75.

This is not surprising, even if everyone in these age groups is covered by Medicare, since Medicare coverage is not comprehensive. Specifically, it caps the numbers of days covered during a nursing-home stay and excludes long-term care costs, particularly those incurred for custodial services. As a result, the health expenses shown here may still be conservative. Selden et al. (2001) show that 13 percent of out-of-pocket health expenditures arise from nursing-home stays. The HRS sample is selected from the noninstitutionalized population, but respondents are kept in the sample if they are institutionalized after the initial interview, so the proportion of the HRS sample ever admitted to a nursing home or long-term care facility is rather small. In the CAMS sample used for this study, only 3.65 percent reported spending at least one night in a nursing home or a long-term care facility in the two years preceding their 2008 HRS interview. Given that nursing-home stays can be long and very expensive, undersampling the institutionalized population may underestimate the actual health-care expenses. Also, the distribution of health expenditure is generally very skewed, so the median may not show the entire picture of health expenses. For example, in 2009, for households

with at least one member age 65 or over, the median health expenditure was \$3,150, but the mean was \$4,894, and at the 90th percentile of expenses it was \$10,262.

The two components of expenditure which do show a declining pattern across age groups are transportation expenses and entertainment expenses. Again, this is expected. With retirement, daily transportation needs (such as commuting to work) fall to a great extent, and with increasing age and declining health people become more restricted to the indoors, which cuts entertainment expenses. Food and clothing expenses (as a share of total expenditure) remain more or less flat across different age groups.



Expenditure Patterns of Retired and Working Households

Figure 3 uses a sample of 1,094 individuals (a subset of the original HRS sample) who were observed both before and after retirement. In this sample, 66.5 percent of the respondents anticipated their spending to drop in retirement, and 65.9 percent actually experienced a drop in retirement spending. On the other hand, Figure 4 shows that, while only 8.9 percent of the respondents anticipated their retirement spending to rise, 15.8 percent of the households actually experienced higher retirement spending.

Figure 5 shows the median household income and median household spending in 2010 dollars for working and retired households age 50 or over. This figure uses four rounds of CAMS data (2001–2007). The income data come from the HRS, which asks respondents to report their income during the last calendar year. (The 2002 HRS data have the income information for 2001, and so on.) The 2009 round of CAMS data could not be used for this figure or any of the other figures where income and expenditure are compared, because the 2010 round of the HRS provided by RAND was not available when this study was done. “Income” includes wages and labor earnings, public or private pensions, annuities, government transfers, and lump-sum distributions from pensions or insurance and inheritance (see next

Figure 2
Median Spending, in 2010\$, in Each Category and Mean Percentage Share of Each Category in Total Spending, 2001–2009, by Age Groups

Category	50–64		65–74		75–84		85+	
	\$ Amount	% of total expenses	\$ Amount	% of total expenses	\$ Amount	% of total expenses	\$ Amount	% of total expenses
2001								
Home	\$13,486	38%	\$9,449	36%	\$7,529	35%	\$6,155	39%
Food	4,432	13	3,457	13	2,881	13	2,122	12
Health	2,954	11	3,314	14	3,570	18	3,415	22
Transport	4,247	14	2,927	12	2,091	10	936	7
Clothing	739	4	616	4	369	3	185	3
Entertainment	3,484	12	2,364	12	1,530	10	638	7
Other	1,600	8	1,477	9	1,354	11	985	11
Total Spending	37,712		30,805	0	26,121		20,023	
2003								
Home	\$15,287	40%	\$11,173	39%	\$9,444	40%	\$7,798	43%
Food	4,622	12	3,697	13	2,844	12	2,157	10
Health	3,105	10	3,288	12	3,679	15	4,337	21
Transport	5,636	16	3,574	13	2,390	11	1,005	5
Clothing	1,304	5	1,007	5	830	4	622	4
Entertainment	3,715	11	2,749	11	1,725	8	748	6
Other	1,593	7	1,538	9	1,422	10	853	10
Total Spending	44,153		36,007		27,833		23,783	
2005								
Home	\$18,267	44%	\$11,869	41%	\$10,213	40%	\$8,698	44%
Food	4,313	12	3,555	12	3,081	14	2,370	12
Health	2,844	9	3,259	12	3,746	16	3,427	20
Transport	6,593	16	3,828	14	2,489	10	1,511	8
Clothing	1,138	4	830	4	640	3	569	3
Entertainment	3,555	10	2,370	10	1,434	8	756	6
Other	1,304	6	1,259	8	1,084	8	711	7
Total Spending	46,876		34,187		26,953		24,300	
2007								
Home	\$18,903	45%	\$13,622	42%	\$10,666	42%	\$11,376	46%
Food	4,622	11	3,564	13	3,309	13	2,465	11
Health	2,853	9	3,117	11	3,445	14	3,377	15
Transport	6,612	16	4,323	14	2,785	10	1,533	7
Clothing	1,185	4	830	4	711	4	593	5
Entertainment	3,579	9	2,714	10	1,687	8	924	7
Other	1,185	6	1,185	7	1,197	9	912	9
Total Spending	48,515		35,779		32,420		28,348	
2009								
Home	\$18,828	47%	\$14,471	44%	\$11,755	42%	\$9,533	43%
Food	4,622	12	3,896	12	3,555	13	2,844	12
Health	2,844	9	3,504	12	3,692	15	3,006	18
Transport	5,759	14	3,887	13	2,712	10	1,511	8
Clothing	1,043	3	830	3	622	3	533	5
Entertainment	3,022	9	2,417	9	1,506	8	889	6
Other	1,185	5	1,185	7	1,197	8	711	9
Total Spending	46,213		37,647		31,728		25,765	

Source: Employee Benefit Research Institute estimates from the Consumption and Activities Mail Survey (2001-2009).

section for details). “Expenditures” are the total of expenditures in all categories defined earlier. Finally, a household is considered retired if either the respondent or the spouse reports being retired. The median annual *income* of retired households is \$30,480, which is around 57 percent of working households’ median annual income of \$53,548. The median annual *expenditure* of retired households is \$31,365, which is around 80 percent of the working households’ median expenditure of \$39,945.⁴

However, this 80 percent *consumption replacement* should not be equated with an 80 percent *income replacement*: Pre- and postretirement spending requirements are very different. Preretirement, people pay FICA taxes, incur work-related expenses, and save for retirement. But none of these savings or tax requirements exists postretirement. So even if retirees’ postretirement *income* is less than 80 percent of their preretirement income (which it is in aggregate), they may still maintain 80 percent of their preretirement *consumption*, provided they have saved for retirement; in fact, this study’s results show that the median household in this group of retirees is doing well in retirement. But there are some demographic groups that are facing a difficult retirement. Also, it should be emphasized that the older population faces high uncertainty regarding health expenses. For example, long nursing-home stays or prolonged use of long-term care services could deplete the accumulated wealth rapidly. Thus, even if retirees hold enough wealth to finance their regular expenses, this analysis cannot quantify what would happen in the face of such large health expenditure shocks, and they are not included in the calculations provided here.

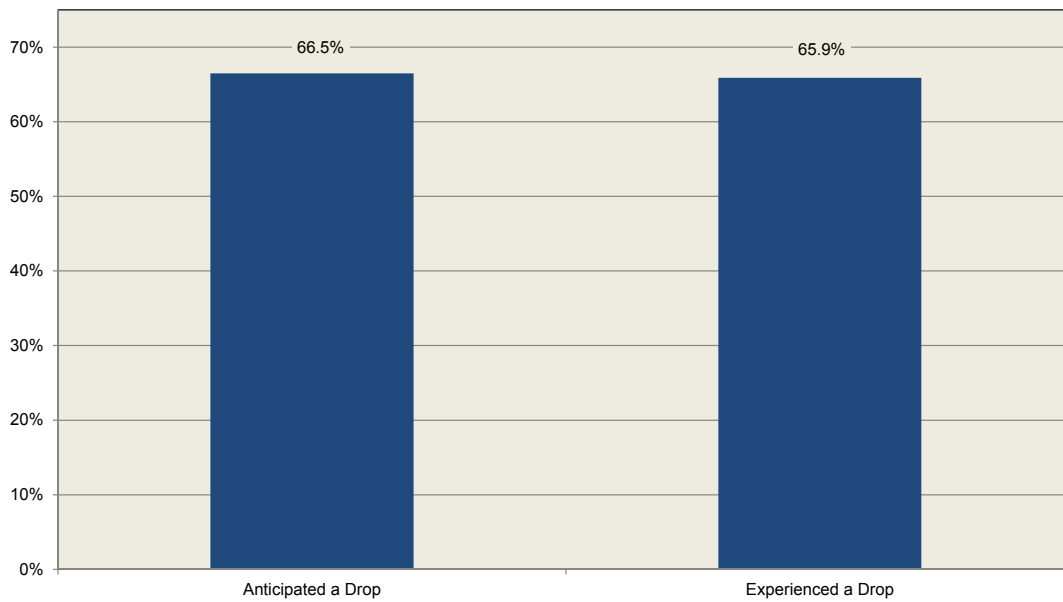
Income, Expenditure, and Wealth Comparisons

The following section discusses the income, expenditure, and wealth-holding patterns of households with at least one member age 65 or over. This simple comparison can give a sense of how retirees are doing in retirement and if they are in danger of outliving their assets. Figures 6–10 use the same measures of income, expenditures, nonhousing wealth, and total household wealth. These measures are described below.

- **Income** represents total household income, i.e., for couples households, it is the sum of respondent and spouse income. It includes wages and labor earnings; capital earnings; defined benefit pensions, annuities, and income from other retirement savings such as 401(k)-type plans and individual retirement accounts (IRAs); 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.
- **Expenditure** is total expenditure on all categories (home, food, health, transportation, clothing, entertainment, and other expenses combined).
- **Net nonhousing wealth** includes any real estate other than primary residence; net value of vehicles owned; IRAs, stocks and mutual funds, checking, savings and money market accounts, CDs, government savings bonds, Treasury bills, bonds and bond funds; and any other source of wealth *minus* all debts (such as consumer loans).
- **Net total wealth** includes net nonhousing wealth *plus* value of primary residence *minus* mortgage and other home loans. It does not include income.

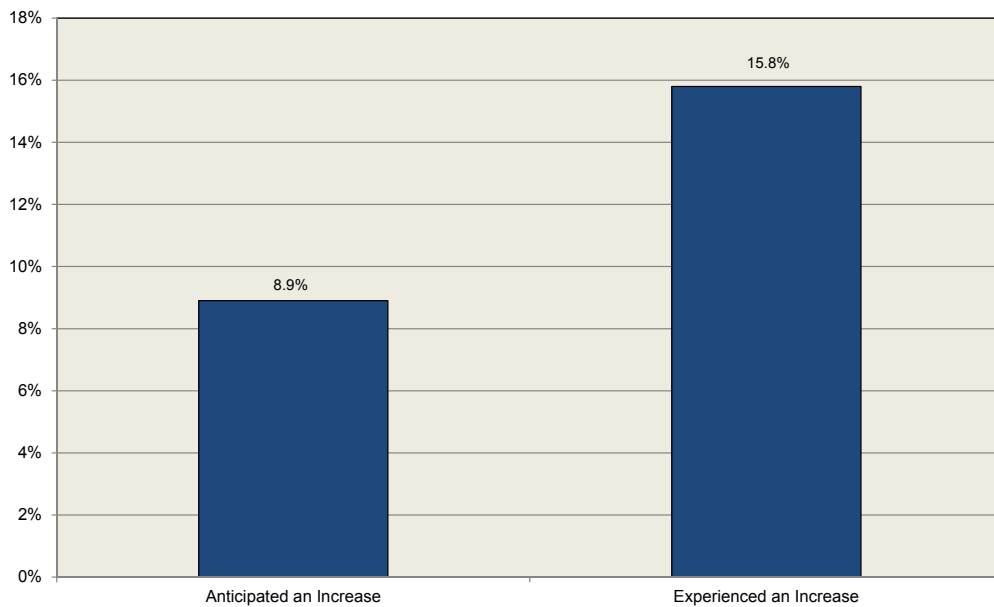
Generally, defined benefit pensions and withdrawals from 401(k)s are counted as income and are measured by separate variables not included in the wealth measure. Thus, a retirement plan balance accumulated before retirement is not considered as a part of household wealth. But upon retirement, if a person rolls over his or her pension, 401(k), or defined contribution (DC) retirement account balance into an individual retirement account (IRA) or takes a lump-sum distribution from a pension, 401(k) or other DC account plan and invests it in stocks, bonds, mutual funds, money market accounts, certificates of deposit (CDs), Treasury bills, etc., it is included in the wealth measure. The summary table (below) shows how these accounts are treated in the construction of the income and wealth measures in RAND HRS data.

Figure 3
Percentage of Population Who Anticipated a Drop in Spending in Retirement vs. Percentage of Population Who Actually Experienced a Drop, 2001–2009



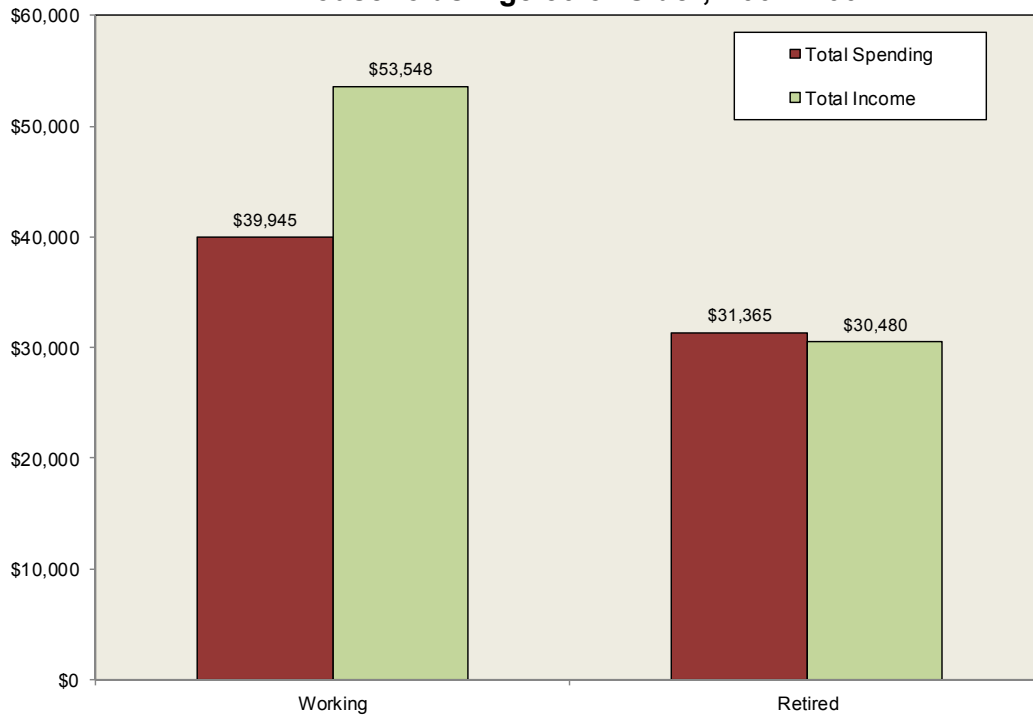
Source : Employee Benefit Research Institute estimates from the Consumption and Activities Mail Survey (2001–2009).

Figure 4
Percentage of Population Who Anticipated an Increase in Spending in Retirement vs. Percentage of Population Who Actually Experienced an Increase, 2001–2009



Source : Employee Benefit Research Institute estimates from the Consumption and Activities Mail Survey (2001–2009).

Figure 5
Median Household Spending and Median Household Income (in 2010\$) for Working and Retired Households Age 50 or Older, 2001–2007



Source : Employee Benefit Research Institute estimates from Health and Retirement Study and Consumption and Activities Mail Survey.

Treatment of Defined Benefit (DB), Defined Contribution (DC), and Individual Retirement Account (IRA) Assets in Income and Wealth Measures in the RAND HRS

DB:

Preretirement—Not included in either income or wealth.

Postretirement—Monthly payments from the pension are included in income.

DC:

Preretirement—Not included in either income or wealth.

Postretirement—Regular withdrawals are included in income, but the account balance is not included in wealth. However, if the account balance is rolled over into an IRA or distributed as a lump sum from the DC account and invested in stocks, bonds, mutual funds, money market accounts, CDs, Treasury bills etc., then it is included in wealth.

IRA:

Preretirement—Account balance is included in wealth.

Postretirement—Regular withdrawals are included in income, and the current account balance is included in wealth.

Figure 6A shows how the median household in the bottom half of the income distribution in every age group is doing in retirement in terms of balancing their income and expenses. In each of the four survey years between 2001 and 2007, almost every age group had expenditures that exceed their income. In all other survey years except 2001, the 50–64 age group shows this dissaving pattern. This could be concerning because those close to retirement might be expected to be saving more to “catch up” with their retirement savings. Also, their liquid and total wealth holdings are not large enough to support them in case of large expenditure shocks.

Figure 6B shows the same numbers for the top half of the income distribution. Here it is clear that in all years and at all ages, respondents’ earnings are sufficient to cover their expenses. As expected, the margin between income and expenditure shrinks for the more advanced age groups. Their liquid and total wealth holdings are high enough to absorb large expenditure shocks. However, this does not mean that no one in the top half of the income distribution faces the risk of running short of wealth in the case of unexpected large expenditure shocks. One thing to note from Figure 6 (particularly 6B) is the discrete jump in nonhousing (or financial) wealth between the age groups 50–64 and 65–74. As explained above, generally, pensions are not included in the wealth measures. But, upon retirement, if someone rolls over his or her 401(k) or DC account balance into an IRA or takes a lump-sum distribution and invests it in other forms of wealth, it will be included in the wealth measure. This may explain the measurable jump in financial wealth for the 65–74 age group.

Comparing Income, Expenditure, and Wealth Across Different Marital, Racial, and Educational Groups

Figure 7 shows income, expenditure, and wealth-holding patterns of different marital groups for those age 65 or over. It is apparent that couples are doing better than those single or widowed. They have enough income to support their expenses, and they also hold high levels of liquid and other forms of wealth to support themselves through periods of large expenditure shocks.

For example, in 2007, the median income of couples households exceeded their median expenditure by \$10,592, and their median nonhousing and net total wealth was \$216,149 and \$418,733, respectively. In contrast, singles (which include separated, divorced, and never married persons) don’t have enough income to cover their expenses, and their wealth holdings are relatively low. Widows, on the other hand, hold moderate levels of wealth, but don’t have enough current income to cover their expenses. Further analysis (results shown in Appendix C and D) shows that among singles and widows, men are doing better than women.

Figure 8 takes a closer look at different racial groups age 65 or over and shows that whites are doing better than other racial groups. Their median income exceeds their median expenditure, and they hold large amount of nonhousing and net wealth to fund their retirement. In 2007, nonhousing wealth of whites was slightly more than 20 times the nonhousing wealth of blacks. The income of blacks has been less than their expenditures in all years except 2007, and they hold low levels of wealth. Also, if the median black household experiences any large expenditures arising out of catastrophic health shocks, it can run short of funds in a very short time. Hispanics are also not doing very well in retirement, although better than blacks: In 2007, Hispanics’ nonhousing wealth was almost three times larger and total net worth was more than twice that of blacks.

Figure 9 shows the income, expenditure, and wealth holdings for different educational groups age 65 or over. As expected, people who attended college are doing better than those who did not: In all years surveyed, their income exceeds their expenditure and they hold high levels of both nonhousing and total net wealth. The data also show that high school graduates are generally doing well in retirement: Their income covers their expenses, and they hold significant amount of both nonhousing and total net wealth to support their retirement. The lowest-education group is mainly high school dropouts, who do not have income sufficient to support all their expenses, and wealth holdings that are also insufficient to guarantee a comfortable retirement. For example, in 2007, their median expenditure exceeded their median income by \$3,518 and they had only \$13,355 in nonhousing or liquid assets. Their net total wealth in 2007 was \$92,542, which includes housing wealth. With falling housing prices and real estate values, it is likely that they have experienced a decline in net wealth and will need additional funds for a comfortable retirement.

Figure 6A

Median Household Income, Household Spending, Household Nonhousing Wealth, Household Total Wealth (Housing and Nonhousing), in 2010\$, for the Bottom half of the Income Distribution of Different Age Groups

	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
<u>2001</u>					
50-64	\$28,845	\$27,230	\$1,615	\$27,781	\$95,449
65-74	20,912	23,060	-2,147	32,014	102,553
75-84	15,922	18,688	-2,767	28,405	105,335
85+	12,010	15,368	-3,358	18,655	49,547
<u>2003</u>					
50-64	\$27,248	\$29,496	-\$2,248	\$29,627	\$114,213
65-74	22,821	26,474	-3,653	32,780	116,395
75-84	17,871	20,477	-2,606	32,566	123,855
85+	11,071	17,064	-5,993	22,130	48,419
<u>2005</u>					
50-64	\$28,080	\$29,895	-\$1,816	\$18,401	\$74,558
65-74	22,411	24,251	-1,840	27,318	120,078
75-84	17,940	19,573	-1,633	21,863	96,787
85+	13,483	15,167	-1,684	14,386	68,422
<u>2007</u>					
50-64	\$29,854	\$31,094	-\$1,240	\$18,465	\$84,975
65-74	22,080	25,973	-3,893	21,740	119,778
75-84	18,837	22,360	-3,523	31,367	136,238
85+	14,082	18,629	-4,547	15,969	47,108

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000-2008) and the Consumption and Activities Mail Survey (2001-2007).

Figure 6B

Median Household Income, Household Spending, Household Nonhousing Wealth, Household Total Wealth (Housing and Nonhousing), in 2010\$, for the Top Half of the Income Distribution of Different Age Groups

	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
<u>2001</u>					
50-64	\$95,718	\$49,338	\$46,379	\$221,628	\$372,664
65-74	64,080	41,240	22,840	304,251	483,744
75-84	45,639	32,885	12,754	231,676	403,580
85+	29,958	24,011	5,947	125,790	267,636
<u>2003</u>					
50-64	\$94,645	\$57,413	\$37,232	\$206,965	\$367,821
65-74	66,553	45,149	21,405	284,773	457,498
75-84	47,006	38,281	8,725	205,535	398,860
85+	34,912	27,456	7,456	115,873	246,477
<u>2005</u>					
50-64	\$106,175	\$60,604	\$45,570	\$195,954	\$384,511
65-74	68,371	44,753	23,618	221,241	460,994
75-84	45,550	40,410	5,141	245,569	453,185
85+	42,780	28,291	14,489	133,900	271,864
<u>2007</u>					
50-64	\$113,123	\$64,945	\$48,178	\$200,288	\$432,863
65-74	70,776	47,838	22,938	239,919	475,332
75-84	53,227	43,066	10,161	326,774	554,358
85+	39,620	34,377	5,243	175,600	365,644

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000-2008) and the Consumption and Activities Mail Survey (2001-2007).

Figure 10 shows the median income, median expenditure, and median wealth-holding patterns of the bottom-income quartile separately for working and retired households during the survey years of 2001–2007. Not surprisingly, data on the income gap and wealth holdings show that people in the bottom income quartile are struggling, both in their pre- and postretirement years. In all four survey years, both groups report income that is less than their expenditure. For retired households, the gap between income and expenditure seems to be rising over time, possibly because of increasing health care costs. Also, both groups hold very little wealth that could support them through large expenditure shocks. Also not surprisingly, groups that are doing less well in retirement—singles, blacks, and high school dropouts—are generally overwhelmingly represented in the low-income group.

Comparing Consumption Patterns of Different Income Groups

Figures 11A and 11B show how median spending (in 2010 dollars) in different categories varies across income quartiles for households with members ages 65–74 and 75 and over, respectively. Both figures show some expected trends. For example, median spending goes up with income, with the highest-income quartile spending almost three times the amount of those in the bottom-income quartile. Each income quartile spends the highest share of their income on home and home-related expenses, although the share of total expenses spent on home and related items decreases with higher income. The percentage share of total expenditure spent on other basic goods (like food and health) also goes down with income, but money spent on entertainment and other items (donations, gifts, etc.) rises steeply with income. On the other hand, money spent on transportation and clothing items remains roughly flat as a percentage of total expenditure across different income quartiles. Figure 11A compares the top and bottom income quartiles across all years, and shows that the bottom-income quartile of households spends almost 73 percent of their total expenditure on basic items like home, food, and health, while the top quartile spends only 58 percent of their total expenditure on similar items. For Figure 11B (those age 75 and over), the similar percentages are 77 percent and 62 percent.

Long-term Care Insurance and Private Health Insurance

As the average age of the American population increases, long-term care (LTC) insurance is a growing area of concern for retirees. According to government estimates, 12 million older Americans will need LTC by 2020. However, in most cases LTC is not covered by Medicare, and this care is expensive and can be indefinitely long or even permanent. Since this is a large and potentially catastrophic health expenditure risk, people without LTC insurance may be forced to cut their spending and save more.

Figure 12 shows the consumption patterns of those age 65 or over who are with or without LTC insurance. There are several things to note here:

- People with LTC insurance spend much more than those without it, in every category and overall. For example, in 2009, people with LTC insurance coverage had median total household spending of \$47,392, while those without LTC insurance spent only \$32,048.
- In individual categories, the differences are particularly large in health, entertainment, and other spending. In 2009, people without LTC insurance spent only 60 percent of what those with LTC insurance spent on health items. The similar number for entertainment items was less than 50 percent.
- One obvious explanation for higher health spending for those with LTC insurance is that the LTC insurance premiums are included in health spending. Otherwise, if it is assumed that relatively sick people buy LTC insurance, then this could explain the higher health spending. But that does not explain why people with LTC insurance spend more in every category. Another alternative explanation could be that only people with high income obtain LTC insurance, and they spend more money on every item (Goda, Golberstein, and Grabowski, 2010). Therefore, it is not clear whether LTC insurance has any independent effect on expenditure.

**Figure 7
Median Household Income, Household Spending,
Household Nonhousing Wealth, Household
Total Wealth (Housing and Nonhousing), in 2010\$,
for Different Marital Groups Age 65+**

	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
<u>2001</u>					
Couple	\$46,805	\$33,958	\$12,847	\$206,654	\$373,740
Single	18,780	21,800	-3,020	30,265	65,468
Widowed	19,204	21,592	-2,388	48,273	140,317
<u>2003</u>					
Couple	\$47,918	\$39,944	\$7,974	\$190,718	\$356,971
Single	16,969	20,348	-3,378	21,764	80,995
Widowed	20,920	25,498	-4,579	53,699	152,237
<u>2005</u>					
Couple	\$49,059	\$40,984	\$8,075	\$181,308	\$369,790
Single	21,783	24,378	-2,595	34,688	115,652
Widowed	22,043	22,860	-817	37,737	135,648
<u>2007</u>					
Couple	\$54,970	\$44,378	\$10,592	\$216,149	\$418,733
Single	21,749	24,065	-2,316	22,927	72,837
Widowed	22,649	26,050	-3,401	44,243	184,515

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).

**Figure 8
Median Household Income, Household Spending,
Household Nonhousing Wealth, Household Total Wealth
(Housing and Nonhousing), in 2010\$, for Different Racial Groups
Among Households Age 65+**

	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
<u>2001</u>					
White	\$32,730	\$28,837	\$3,892	\$120,864	\$244,159
Black	17,142	23,814	-6,672	2,926	28,649
Hispanic	14,683	17,997	-3,314	10,898	55,839
<u>2003</u>					
White	\$35,254	\$32,601	\$2,654	\$127,655	\$264,150
Black	22,563	26,478	-3,915	4,180	57,083
Hispanic	24,688	31,051	-6,363	15,415	95,604
<u>2005</u>					
White	\$36,444	\$31,562	\$4,882	\$117,224	\$260,107
Black	21,889	25,549	-3,660	8,957	54,923
Hispanic	26,978	21,312	5,666	21,484	139,426
<u>2007</u>					
White	\$37,391	\$34,187	\$3,203	\$136,943	\$316,558
Black	29,311	28,756	555	6,787	55,787
Hispanic	27,600	21,584	6,016	19,322	121,422

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).

Figure 9

Median Household Income, Household Spending, Household Nonhousing Wealth, Household Total Wealth (Housing and Nonhousing), in 2010\$, for Different Educational Groups Among Households Age 65+

Educational Level	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
<u>2001</u>					
HS Dropout	\$18,780	\$21,171	-\$2,391	\$18,546	\$71,720
HS Grad	30,081	26,377	3,704	92,404	206,961
College and Above	46,210	35,902	10,308	253,464	419,649
<u>2003</u>					
HS Dropout	\$21,459	\$22,150	-\$691	\$18,686	\$83,121
HS Grad	31,710	30,469	1,241	103,235	217,376
College and Above	46,344	40,482	5,862	226,832	414,871
<u>2005</u>					
HS Dropout	\$20,548	\$21,851	-\$1,303	\$15,897	\$79,640
HS Grad	32,651	28,054	4,597	91,511	237,532
College and Above	49,912	42,757	7,155	208,604	426,298
<u>2007</u>					
HS Dropout	\$20,562	\$24,080	-\$3,518	\$13,355	\$92,542
HS Grad	33,460	30,641	2,819	107,773	247,699
College and Above	53,061	45,071	7,990	234,701	446,073

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).

Figure 10

Median Household Income, Household Spending, Household Nonhousing Wealth, Household Total Wealth (Housing and Nonhousing), in 2010\$, for Households in the Bottom Income Quartile

Panel A : **Working** Households

	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
2001	\$12,541	\$19,590	-\$7,049	\$8,229	\$56,284
2003	13,800	21,387	-7,587	8,861	83,561
2005	19,430	23,163	-3,733	9,493	53,388
2007	17,940	25,442	-7,502	9,396	78,729

Panel B : **Retired** Households

	Income	Expenditure	Income Gap	Nonhousing Wealth	Total wealth
2001	\$13,019	\$16,979	-\$3,960	\$10,792	\$55,595
2003	12,498	16,398	-3,900	6,578	41,172
2005	13,248	17,708	-4,460	9,702	57,887
2007	14,531	19,516	-4,985	9,063	58,849

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).

Figure 11A
Median Spending in Each Category and Mean Percentage
Share of Each Category in Total Spending for Households
Across Different Income Quartiles and Ages 65–74

	Bottom Quartile		Second Quartile		Third Quartile		Top Quartile	
	\$ Amount	% of total expenses	\$ Amount	% of total expenses	\$ Amount	% of total expenses	\$ Amount	% of total expenses
<u>2001</u>								
Home	\$6,655	39%	\$8,794	38%	\$9,946	32%	\$13,356	35%
Food	2,807	16	3,201	13	3,841	14	4,432	9
Health	2,364	15	2,967	15	3,831	14	4,846	13
Transport	1,610	11	2,730	13	3,158	12	4,038	11
Clothing	308	4	492	3	739	4	985	3
Entertainment	764	8	1,807	10	2,954	14	5,478	15
Other	443	5	1,231	8	2,277	11	3,693	14
Total Spending	19,335		26,532		33,026		48,978	
<u>2003</u>								
Home	\$7,050	47%	\$9,282	37%	\$12,680	37%	\$17,140	34%
Food	2,465	14	3,697	13	4,266	12	4,622	11
Health	2,020	12	3,112	13	3,816	13	4,693	11
Transport	1,891	10	3,172	14	4,396	14	5,570	13
Clothing	697	5	796	4	1,185	4	1,564	4
Entertainment	853	7	2,204	10	3,437	11	5,999	14
Other	510	5	1,482	9	1,995	8	3,993	12
Total Spending	19,286		30,065		38,132		52,262	
<u>2005</u>								
Home	\$7,655	46%	\$11,459	40%	\$13,024	36%	\$21,407	40%
Food	2,465	15	3,555	13	4,266	12	5,504	10
Health	1,659	13	3,250	13	4,229	12	5,096	10
Transport	2,083	13	3,733	14	5,593	16	5,540	12
Clothing	479	4	711	3	995	3	1,600	3
Entertainment	673	6	1,979	8	3,911	12	6,512	13
Other	332	4	1,422	8	1,896	9	4,148	12
Total Spending	19,039		31,292		39,478		62,775	
<u>2007</u>								
Home	\$8,732	47%	\$12,566	39%	\$15,524	40%	\$23,935	41%
Food	2,844	15	3,555	13	4,622	12	4,835	10
Health	1,567	11	3,474	12	3,911	11	4,385	9
Transport	2,110	13	4,130	15	5,637	16	6,208	13
Clothing	524	4	711	4	1,067	4	1,509	3
Entertainment	667	7	2,356	11	3,810	11	6,233	13
Other	296	4	1,185	7	2,015	7	4,148	11
Total Spending	20,549		34,589		42,068		60,529	

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).

Figure 11B

Median Spending in Each Category and Mean Percentage Share of Each Category in Total Spending for Households Across Different Income Quartiles and Ages 75+

	Bottom Quartile		Second Quartile		Third Quartile		Top Quartile	
	\$ Amount	% of total expenses	\$ Amount	% of total expenses	\$ Amount	% of total expenses	\$ Amount	% of total expenses
<u>2001</u>								
Home	\$5,399	41%	\$6,377	37%	\$8,000	34%	\$9,778	34%
Food	1,920	16	2,216	14	2,913	11	3,570	10
Health	2,261	21	2,909	20	4,864	19	4,160	15
Transport	853	6	1,758	10	2,167	10	2,924	11
Clothing	123	3	203	3	406	3	591	3
Entertainment	295	5	953	8	1,891	10	3,538	13
Other	616	7	923	9	1,797	12	3,078	15
Total Spending	14,627		21,093		28,088		38,099	
<u>2003</u>								
Home	\$5,300	41%	\$8,344	40%	\$9,138	41%	\$13,615	40%
Food	1,849	14	2,630	12	3,019	11	3,820	11
Health	2,420	19	3,022	18	4,586	17	4,613	13
Transport	1,060	9	1,787	10	2,525	11	3,093	9
Clothing	569	5	711	5	782	3	1,422	3
Entertainment	341	6	1,043	7	1,908	8	4,236	11
Other	474	7	948	8	1,706	9	3,555	14
Total Spending	15,579		23,060		28,784		47,393	
<u>2005</u>								
Home	\$6,271	44%	\$9,732	44%	\$10,873	38%	\$13,799	36%
Food	1,914	17	2,844	13	3,555	13	4,266	11
Health	2,252	19	3,618	16	4,676	17	4,870	15
Transport	830	9	2,140	10	2,824	9	3,637	11
Clothing	388	3	593	3	770	4	982	3
Entertainment	332	4	1,043	6	1,786	9	3,655	11
Other	356	4	747	7	2,050	10	3,555	13
Total Spending	16,613		24,091		34,345		44,326	
<u>2007</u>								
Home	\$7,729	49%	\$9,421	42%	\$13,093	41%	\$17,909	39%
Food	2,157	13	2,844	13	3,697	12	4,777	10
Health	2,048	14	2,828	14	4,266	14	5,925	14
Transport	1,120	7	2,406	11	3,327	11	4,286	10
Clothing	521	6	593	4	747	3	992	4
Entertainment	364	6	1,274	7	2,331	9	3,596	11
Other	356	5	948	9	2,015	10	3,555	12
Total Spending	17,846		24,652		35,251		53,068	

Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).

To analyze this, a regression⁵ framework is used where income and other demographic characteristics can be controlled for, to see if LTC insurance has any significant additional effect on the elderly's expenditure. The next section discusses the regression results.

Although everyone age 65 or over is covered by Medicare, it is well known that Medicare coverage is not comprehensive: There are caps on the number of days spent in a nursing home that can be covered by Medicare, and there are co-payments even before hitting the cap. For Medicare Part B services,⁶ generally 80 percent of the expenses are covered by Medicare, meaning that 20 percent are the patient's responsibility, and out-of-pocket expenditures can rise very fast. People try to mitigate such health spending risks by obtaining private health insurances, generally known as Medigap policies. Also, some retirees are covered by retiree health insurance from their own or a spouse's previous employer.

Figure 13 examines whether any such form of private health insurance coverage is associated with expenditure. As with LTC insurance coverage, this figure shows that people with some form of private health care coverage spend more in every category and overall as well. Again, in 2009, the median total spending for those with some private health insurance coverage and those without were \$38,091 and \$30,117, respectively. And people with private health insurance coverage spend more on health and entertainment items as well. Again, one obvious explanation for higher health spending is that the private health insurance premiums are included in health spending, and that those who buy this kind of coverage have the income to afford it. But it might also be the case that people with private coverage utilize their coverage more by going for regular check-ups, buying preventive medicine, etc., which might cause higher out-of-pocket health spending. But looking at these simple correlations, it cannot be determined whether private health insurance coverage has any independent effect on expenditure.

Determinants of Household Expenditure: Regression Results

The last section noted that LTC insurance coverage and private health insurance coverage are highly correlated with higher spending. But since people with such insurance spend more in every category, it is hard to tell if they are simply wealthier individuals who could be expected to spend more. To find out if these factors have any independent effect on the elderly's spending, some regressions were run where controls were included for age, income, race, education, labor-force status, self-reported health status, and indicators of LTC insurance coverage and private health insurance coverage. In couples households, controls were added for spouses as well. The dependent variable is a log of total household expenditure. The control for income is also included as a log of total household income. Age and years of education enter linearly into the model while all other variables are included as categorical variables. Two separate sets of regressions were run, one without controlling for wealth and the other with log wealth as a control. Economic theory suggests that consumption is primarily a function of income. But for retired people, accumulated wealth is likely to be a more important determinant of expenditure than income. Median regression was used along with mean regression because spending can be very large for the wealthy or those who experience health or other expenditure shocks. Unlike mean regressions, median regressions are robust to outliers, so the estimates are also more robust.

Appendix A shows the regression results. First, the regressions with control for wealth show that both income and wealth are important determinants of spending at older ages. Second, both the mean and median regressions show that, apart from income, age and education are also important determinants of consumption or spending. The directions of these effects are along expected lines. While income has a strong positive effect on spending, age has a strong negative effect on spending. But the results show that among the demographic factors, health status is a very important determinant of spending. Expenditure drops significantly with every single drop in self-reported health status. However, controlling for wealth lessens the magnitude of the effect of health on spending to some extent. Butrica, Johnson, and Mermin (2009) have shown that medical conditions reduce nonhealth spending, particularly for low-income seniors who are on the cusp of retirement.

Also, the correlation between health and wealth has been documented very well in the economic literature. But the more important finding from the regressions is that LTC insurance and private health insurance continue to be important determinants of spending even after controlling for income and other factors, though once a control for

wealth is included, these effects decrease both in magnitude and in terms of statistical significance. But LTC insurance still remains an important determinant of spending. To understand the magnitude of the effect of LTC insurance (from column 1 of Appendix A), note that, while a one-year increase in education increases spending by 3 percentage points, LTC insurance coverage increases spending by 10 percentage points. The effect of private health insurance coverage is similar to that of a one-year increase in education.

Conclusion

This study attempts to document the income and expenditure patterns of Americans who are retired or close to retirement. The results show that while high-income households are managing their income and expenses well in retirement, low-income households are struggling. The high-income households maintain high levels of wealth, but whether these wealth levels will be sufficient to support them through very advanced ages or in case of catastrophic expenditure shocks is beyond the scope of this study. But for low-income households that are already struggling, such events will only make matters worse. There are several key demographic groups that are also not doing well in retirement, and they may be at risk of running short of wealth at some point in retirement. Several of the study's important findings:

- Household consumption steadily declines with age, and successive birth cohorts have higher consumption.
- Declining health limits different activities and consumption of different goods, which strongly affects the decline in total expenditure.
- Home and home-related expenses remain the largest spending category for older households.
- Health care expenditures steadily increase with age.
- On average, retired households spend about 80 percent of working households, and their earnings are about 57 percent of those of working households.
- Demographic groups such as singles, blacks, and high school dropouts are outspending their resources in retirement. Not surprisingly, the lowest-income group (bottom-income quartile) which is generally overwhelmingly represented by the above groups, appears to be struggling the most.
- Apart from the traditional determinants of spending, such as income and age, other major factors that affect the spending patterns of retired households are long-term care insurance and some form of private health insurance coverage. In particular, having long-term care insurance has a significant effect on higher spending by retired households.

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Endnotes

¹ FICA (the Federal Insurance Contributions Act) is a federally imposed payroll tax used to fund Social Security retirement, survivors, disability, and hospital insurance.

² Replacement ratio is the ratio of postretirement earnings to preretirement earnings. For a discussion on calculation of realistic replacement ratios please see VanDerhei (2006).

³ Figure 1 is based on a cross-sectional data, so the consumption path does not show the same group of people at different ages. Appendix B shows the consumption path of different cohorts over a period of seven years. In this short period, the consumption paths for different cohorts look relatively flat, but anchored at a higher level for each successive cohort. The cross-sectional diagram captures this difference in cohorts as a rapidly declining consumption path. As a result, it might overestimate the slope of the consumption path for any given cohort.

⁴ For Figure 5, the data from 2001 to 2007 are pooled as one single cross-section. Therefore, working households are generally separate from retired households. Thus, the 80 percent consumption replacement means that the retired group consumes 80 percent of the working group, which are two different groups at any point in time.

⁵ A regression analysis is a statistical tool used to investigate the relationship between two or more variables. More specifically, it is used to determine the effect of one variable on another (such as how price affects demand) keeping other variables (such as income, population etc.) fixed. The process involves computer modeling that uses data on the underlying variables and uses a statistical algorithm to estimate how much one variable affects others.

⁶ Medicare Part B is a part of Medicare which helps cover medically necessary services, such as doctors' services, outpatient care, home health services, and other medical services. Part B also covers some preventive services.

Figure 12 Median Household Spending in Each Category and Mean Percentage Share of Each Category in Total Spending for Individuals With and Without LTC Insurance, Age 65+				
	No LTC Insurance		LTC Insurance	
	\$ Amount	% of total expenses	\$ Amount	% of total expenses
<u>2001</u>				
Home	\$8,136	37%	\$9,902	33%
Food	2,954	14	3,265	9
Health	3,139	16	6,007	18
Transport	2,416	11	2,947	11
Clothing	431	3	640	4
Entertainment	1,625	10	3,102	12
Other	1,231	10	2,658	13
Total Spending	26,910		39,119	
<u>2003</u>				
Home	\$9,818	39%	\$12,441	38%
Food	3,081	13	3,555	9
Health	3,299	14	5,073	15
Transport	2,654	11	3,799	12
Clothing	877	5	1,223	4
Entertainment	1,896	9	3,496	10
Other	1,244	9	2,903	12
Total Spending	30,780		40,071	
<u>2005</u>				
Home	\$10,588	42%	\$12,280	37%
Food	3,081	14	3,555	9
Health	3,171	14	5,152	16
Transport	2,963	12	3,727	11
Clothing	711	3	957	3
Entertainment	1,602	8	3,235	10
Other	948	7	3,496	13
Total Spending	28,891		41,164	
<u>2007</u>				
Home	\$11,660	43%	\$16,092	40%
Food	3,294	13	3,555	10
Health	2,971	12	5,008	13
Transport	3,245	12	4,266	12
Clothing	711	4	1,007	3
Entertainment	1,732	9	3,293	10
Other	948	7	2,963	13
Total Spending	31,545		45,605	
<u>2009</u>				
Home	\$12,155	43%	\$15,976	40%
Food	3,555	13	3,964	10
Health	3,182	13	5,398	16
Transport	2,907	11	3,605	11
Clothing	652	4	960	3
Entertainment	1,535	8	3,275	10
Other	1,043	7	2,643	11
Total Spending	32,048		47,392	
Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).				

Figure 13
Median Household Spending in Each Category and Mean Percentage Share of Each Category in Total Spending for Individuals With and Without Private Health Insurance, Age 65+

	No Pvt. Health Insurance		Pvt. Health Insurance	
	\$ Amount	% of total expenses	\$ Amount	% of total expenses
<u>2001</u>				
Home	\$8,122	39%	\$8,584	34%
Food	2,954	15	3,201	12
Health	2,325	13	4,428	18
Transport	2,148	11	2,637	11
Clothing	369	4	517	3
Entertainment	1,280	10	2,240	11
Other	923	9	1,847	11
Total Spending	25,183		30,459	
<u>2003</u>				
Home	\$8,768	40%	\$11,189	39%
Food	3,081	14	3,413	11
Health	2,629	13	4,215	15
Transport	2,538	12	3,034	11
Clothing	830	5	984	4
Entertainment	1,725	9	2,441	10
Other	995	9	1,659	9
Total Spending	28,205		35,508	
<u>2005</u>				
Home	\$10,248	43%	\$11,558	39%
Food	3,081	14	3,200	12
Health	2,152	12	4,323	16
Transport	2,779	12	3,211	12
Clothing	682	4	754	3
Entertainment	1,410	8	2,098	9
Other	735	7	1,541	9
Total Spending	27,397		33,674	
<u>2007</u>				
Home	\$11,070	44%	\$13,912	40%
Food	3,081	13	3,555	12
Health	2,275	11	4,304	14
Transport	3,010	12	3,674	12
Clothing	687	4	815	3
Entertainment	1,422	8	2,548	10
Other	723	7	1,718	9
Total Spending	29,047		38,553	
<u>2009</u>				
Home	\$11,502	45%	\$14,238	40%
Food	3,413	14	3,697	11
Health	2,510	12	4,450	16
Transport	2,748	11	3,383	12
Clothing	640	4	741	3
Entertainment	1,304	8	2,275	9
Other	711	7	1,896	9
Total Spending	30,117		38,091	
Source: Employee Benefit Research Institute estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).				

Appendix A
Regression Results

	Regressions Without Wealth		Regressions With Wealth	
	Mean Regression	Median Regression	Mean Regression	Median Regression
	Log of Total Expenditures			
Log Income	.219*** (0.015)	.253*** (0.014)	.163*** (0.015)	.200*** (0.015)
Log Wealth	–	–	.086*** (0.007)	.075*** (0.006)
Age	-.004** (0.001)	-.005*** (0.001)	-.005*** (0.001)	-.007*** (0.001)
Race				
White (dropped)				
Black	0.046 (0.031)	.057* (0.029)	.106*** (0.032)	.098*** (0.027)
Hispanic	-0.074 (0.046)	-0.057 (0.045)	-0.061 (0.047)	-0.039 (0.049)
Years of Education	.030*** (0.003)	.028*** (0.002)	.025*** (0.003)	.025*** (0.003)
Labor Force Status				
Works full time (dropped)				
Works part time	0.01 (0.36)	0.039 (0.031)	-0.009 (0.027)	-0.002 (0.032)
Unemployed	-.347*** (0.128)	-.214* (0.123)	-.303** (0.132)	-.275** (0.139)
Partly Retired	-.053* (0.027)	-.045* (0.024)	-.081*** (0.027)	-.054** (0.023)
Retired	-0.014 (0.022)	-0.004 (0.019)	-.040* (0.022)	-0.021 (0.020)
Not in labor force	-.000 (0.031)	-0.0004 (0.027)	-0.031 (0.030)	-0.043 (0.027)
Health Status				
Excellent (dropped)				
Very good	-.050** (0.020)	-.035* (0.019)	-.047** (0.019)	-0.03 (0.020)
Good	-.078*** (0.022)	-.074*** (0.020)	-.053** (0.021)	-.049** (0.021)
Fair	-.085*** (0.025)	-.092*** (0.024)	-0.049** (0.024)	-.052** (0.023)
Poor	-.165*** (0.043)	-.130*** (0.037)	-.093** (0.041)	-.095** (0.037)
Long-term Care Insurance				
No (dropped)				
Yes	.100*** (0.027)	.067** (0.028)	.083*** (0.027)	.048* (0.027)
Private Health Insurance				
No (dropped)				
Yes	.040** (0.016)	.032* (0.017)	.032* (0.016)	0.028 (0.017)
R ² / Pseudo R ²	0.312	0.191	0.338	0.205
N	8180	8180	8180	8180

Source: Employee Benefit Research Institute Estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).

Standard errors are reported in parentheses. For mean regressions the standard errors were clustered around each household. For the median regressions the standard errors were bootstrapped with 400 repetitions.

*p<0.10, **p<0.05, ***p<0.01.

Appendix B
**Longitudinal Changes in Median Household
Income, Household Spending,
Household Nonhousing Wealth, Household
Total Wealth (Housing and Nonhousing),
for Different Age Cohorts**

(Only individuals observed in all four waves)

Age Group	2001	2003	2005	2007
50–64 in 2001				
Income	\$55,407	\$49,050	\$49,013	\$51,773
Expenditure	36,721	42,435	42,107	42,345
Financial Wealth	90,620	91,693	108,805	118,894
Total Wealth	193,138	208,647	253,667	283,463
65–74 in 2001				
Income	\$36,756	\$35,231	\$35,839	\$34,679
Expenditure	30,805	33,624	32,549	33,867
Financial Wealth	120,996	113,703	120,115	129,829
Total Wealth	244,233	255,106	287,121	299,282
75–84 in 2001				
Income	\$29,170	\$25,102	\$27,490	\$26,540
Expenditure	26,945	27,073	25,154	26,806
Financial Wealth	108,155	107,671	102,875	85,720
Total Wealth	243,660	230,842	255,781	263,050
85+ in 2001				
Income	\$17,982	\$16,574	\$17,087	\$19,994
Expenditure	18,808	17,985	15,413	22,578
Financial Wealth	46,420	33,520	30,300	21,306
Total Wealth	89,104	89,440	84,485	71,628
Source: Employee Benefit Research Institute Estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).				

Appendix C					
Median Household Income, Household Spending, Household Nonhousing Wealth, Household Total Wealth (Housing and Nonhousing), in 2010\$, for Single Males					
	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
<u>2001</u>					
Separated*	\$9,114	\$8,431	\$683	\$2,788	\$7,380
Divorced	31,437	20,767	10,670	52,410	99,131
Widowed	27,082	22,695	4,387	112,950	221,021
Never Married	19,982	31,954	-11,972	28,222	69,443
<u>2003</u>					
Separated*	\$22,023	\$21,616	\$407	\$190	\$3,220
Divorced	24,288	22,873	1,415	44,667	134,589
Widowed	33,408	27,144	6,264	143,001	260,121
Never Married*	22,540	22,368	172	40,760	81,038
<u>2005</u>					
Separated*	\$10,240	\$16,205	-\$5,965	\$12,120	\$13,029
Divorced	26,634	23,738	2,896	41,958	113,673
Widowed	25,474	25,328	146	61,767	163,976
Never Married	32,316	28,979	3,336	60,627	133,745
<u>2007</u>					
Separated*	\$26,050	\$27,563	-\$1,513	\$6,937	\$38,429
Divorced	25,107	27,445	-2,338	23,096	77,588
Widowed	33,178	33,645	-467	119,421	257,929
Never Married	29,425	24,084	5,341	25,409	174,112
Source: Employee Benefit Research Institute Estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).					
* Less than 50 observations.					

Appendix D					
Median Household Income, Household Spending, Household Nonhousing Wealth, Household Total Wealth (Housing and Nonhousing), in 2010 \$ for Single Females					
	Income	Expenditure	Income Gap	Nonhousing Wealth	Total Wealth
<u>2001</u>					
Separated	8,935	15,207	-6,272	461	461
Divorced	18,780	22,686	-3,906	19,734	55,839
Widowed	18,055	21,346	-3,290	42,982	133,096
Never Married	14,280	20,646	-6,367	11,121	20,646
<u>2003</u>					
Separated*	14,651	20,062	-5,411	485	20,020
Divorced	15,228	18,205	-2,977	12,657	48,974
Widowed	19,651	25,387	-5,736	49,214	138,737
Never Married	24,201	26,075	-1,874	253,433	317,210
<u>2005</u>					
Separated*	11,233	9,936	1,298	0	239
Divorced	19,606	24,445	-4,839	29,921	116,165
Widowed	21,349	22,052	-703	35,501	124,036
Never Married	22,025	26,479	-4,454	137,880	292,497
<u>2007</u>					
Separated*	11,827	10,108	1,719	864	864
Divorced	17,830	25,872	-8,043	33,293	67,151
Widowed	21,238	24,388	-3,150	40,237	165,003
Never Married	21,943	22,983	-1,040	16,437	94,989
Source: Employee Benefit Research Institute Estimates from the Health and Retirement Study (2000–2008) and the Consumption and Activities Mail Survey (2001–2007).					
* Less than 50 observations.					

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