UNDERSTANDING EXPENDITURE PATTERNS IN RETIREMENT

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Abstract

Understanding the consumption needs of retirees is critical to assessing the adequacy of retirement income and the possible impact of Social Security reform on the well-being of older Americans. This study uses data from the Health and Retirement Study, including a recent supplemental expenditure survey, to analyze spending patterns and consumption needs for adults ages 65 and older. Results indicate that typical older married adults spend 84 percent of after-tax household income, and nonmarried adults spend 92 percent of after-tax income. Even at older ages individuals devote a larger share of their expenditures and income to housing than any other category of goods and services, including health care. Fully 8 percent of married adults report after-tax incomes that fall short of our estimated basic-needs threshold, consisting of housing, health care, food, and clothing. By comparison, only 3 percent of married adults have incomes below the official poverty level.

I. INTRODUCTION

Understanding expenditure patterns in later life is critical to assessing the retirement security of older Americans. Although previous studies have examined the determinants of retirement income and wealth and projected the level of resources that will likely be available to future cohorts of retirees, relatively little is known about consumption needs at older ages and how they vary across different subgroups of the population. Better information about how much income older Americans require to live comfortably in retirement is necessary before analysts can determine how well Social Security, employer-sponsored pensions, post-retirement earnings, and private savings meet the needs of the elderly population and before they can assess the possible impact of potential Social Security reforms on economic well-being.

Popular financial advice suggests that households should strive to replace between 65 and 85 percent of pre-retirement income in retirement (Uccello 2001), but there appears to be little scientific basis for this estimate. Retirees have lower consumption needs than workers because they do not incur work-related expenses. Housing costs tend to decline at older ages once homeowners pay off their mortgages. In addition, older adults no longer need to save for retirement, and they typically pay lower taxes than younger people. On the other hand, health care costs tend to rise at older ages, and many elderly people who lack private health insurance to supplement Medicare benefits face catastrophic medical expenses (Crystal et al. 2000; Goldman and Zissimopoulos 2003). The official federal poverty level establishes an absolute lower bound for consumption needs, but it is based on surveys that are now about a half-century old, and most experts do not consider the estimates to be reliable (Citro and Michael 1995). In order to develop an accurate portrait of the well-being of older Americans, it is critical that analysts understand how aged people spend their resources. For example, a very different picture emerges if older households spend much of their resources on health care than if they devote their money to expensive vacations.

This analysis represents a first step in understanding consumption needs in later life. We examine the overall level, distribution, and composition of expenditures, and measure how expenditures vary by key individual and household characteristics, including age, race, marital status, health status, and income. We also analyze the relationship between spending and

household income. Finally, we establish a minimum threshold for how much income elderly people need to live comfortably in retirement and estimate the share of the older population that is unable to satisfy these consumption needs.

II. BACKGROUND

In order to paint a complete and accurate picture of economic well-being in retirement, it is important to evaluate economic resources in relation to consumption needs. The official poverty rate is designed to measure the share of the population with insufficient income to meet basic consumption needs. The U.S. Census Bureau sets the official poverty thresholds, which vary by family size and age and change each year with the change in the price level, as measured by the Consumer Price Index (CPI). The share of the elderly population living in poverty has declined dramatically over the last half of the twentieth century. In 1959, more than one in three adults ages 65 and older received incomes below the poverty level; in 2003, only one in ten lived in poverty (U.S. Census Bureau 2004).

However, important problems plague the official poverty thresholds. They were constructed decades ago using data on food expenditure patterns that are now more than 40 years old, under the assumption that food expenditures accounted for one-third of total consumption needs. Given the tremendous technological changes that have occurred over the past 40 years, and changes in the delivery of health care, it is unlikely that these thresholds reflect the consumption needs of today's older population.

Up-to-date information on household expenditures is critical, because spending patterns at older ages appear to be changing. Out-of-pocket health care costs among older adults have been rising, in response to increases in health insurance premiums, growth in Medicare cost-sharing, declines in retiree health insurance coverage, and growth in prescription drug costs, which are not currently covered by Medicare. (Drug benefits will be added to Medicare in 2006, but beneficiaries will face substantial cost sharing requirements.) Tax burdens have also been increasing for older people. Since 1993 high-income people have had to pay federal income taxes on their Social Security benefits, but the threshold determining the taxability of benefits is

not indexed to the growth in prices or wages. As a result, the share of benefits subject to tax rises each year. Moreover, the growing popularity of defined contribution pension plans, hybrid pension plans (including cash balance plans), and Individual Retirement Accounts, all of which generally provide benefits in the form of lump sum payments instead of annuities, is likely to affect spending patterns at older ages, because people who do not annuitize their wealth may limit their spending to reduce the risk of depleting their assets before they die.

In addition to traditional retirement income and financial assets, older adults can turn to other resources to finance their consumption needs. One possibility is housing equity, the most important asset for most Americans. Most older people prefer to remain in their homes, and are reluctant to move even when they could increase their standard of living by selling their homes. In principle, reverse mortgages solve this dilemma by allowing homeowners to borrow against the equity in their homes. To date, however, very few elderly people have taken advantage of these financial instruments.

Previous Literature

A number of studies have attempted to measure the adequacy of retirement resources on the basis of income. Many of them suggest that most current retirees are doing well (Gustman and Steinmeier 1999; Haveman 2003), pre-retirees are accumulating enough wealth to finance a comfortable retirement (Easterlin 1990, 1993; Sabelhaus and Manchester 1995), and future retirees are likely to receive at least as much income as previous generations (Butrica and Uccello 2004; Butrica, Iams, and Smith 2003; Smith 2002). An important limitation of these studies, however, is that they rely solely on income and wealth measures to evaluate economic well-being, and ignore potential changes in future consumption needs.

Several studies have already examined spending patterns in retirement. One line of research has focused primarily on testing the life cycle consumption hypothesis and assessing whether expenditures decline at retirement (Ameriks, Caplan, and Leahy 2001; Banks, Blundell, and Tanner 1998; Bernheim, Skinner, and Weinberg 2001; Hamermesh 1984; Hurd and Rohwedder 2003; Paulin and Duly 2002). Another line of research is less concerned with how

expenditures change before and after retirement, and more interested in understanding differences in spending within the retired population. For example, Bahizi (2003) uses data from the Consumer Expenditure Survey (CEX) to document differences in expenditure levels and budget shares for white, black, and Hispanic retirees. Another study by Paulin (2000) examines changes in spending patterns of older adults between 1984 and 1997. But none of the studies in either area of research focuses on measuring consumption needs.

Rubin and Nieswiadomy (1997) provide a comprehensive analysis of expenditure patterns of the elderly across subgroups and over time using data from the CEX for the 1970s, 1980s, and early 1990s. Unlike most other studies, the authors are particularly concerned with understanding how economically vulnerable elderly adults allocate their expenditures to necessities, such as food, housing, and health care expenditures.

Our analysis builds on their research in several ways. First, we use relatively unexplored expenditure data from a leading survey on the income and health status of older adults. Second, we use much more recent data on expenditure patterns. Third, we use information on both expenditures and income to construct minimum needs thresholds and to estimate the share of the older population that is unable to satisfy these consumption needs.

III. DATA AND METHODOLOGY

Our data come from the Health and Retirement Study (HRS), a longitudinal survey of older Americans conducted by the Survey Research Center at the University of Michigan for the National Institute on Aging. Since 1992, the HRS has been following several cohorts of older respondents and their spouses. In 2000, the survey interviewed a nationally representative sample of 19,579 Americans ages 53 and older and their spouses. The HRS collects detailed information on a wide range of subjects, including basic demographic information, detailed health status, and comprehensive income and asset information. It oversamples African Americans, Hispanics, and Florida residents, but includes sample weights used to adjust the estimates so that they represent the underlying national population.

The HRS administered a supplemental mail survey on household expenditures to a subset of respondents in 2001. This survey, the Consumption and Activities Mail Survey (CAMS), asked respondents to report household expenditures over the past 12 months on 32 different groups of goods and services designed to capture all household spending. It also asked respondents how their spending would change if their income increased by 20 percent. Data was collected for 3,813 households. We merged the 2001 CAMS with demographic and asset information from the 2000 HRS and income information from the 2002 HRS (which collected data on income received in 2001). In combination with the information collected from the core HRS questionnaires, CAMS provides an unusually rich source of data on household spending at older ages.

Measuring Expenditures and Income

To make the analysis of household spending patterns more manageable, we group expenditures into the following categories:

- housing, which includes mortgage payments, home/renter insurance premiums, property tax payments, rent, utility costs (electricity, water, heat, phone, and cable and internet services), spending on house/yard supplies, and home maintenance costs;

- health care, consisting of out-of-pocket payments on insurance premiums, drugs, health services, and medical supplies;

- food, which includes expenditures on groceries but not spending on dining outside of the home;

- transportation expenditures, which consist of payments for automobile finance charges, automobile insurance premiums, gasoline, and automobile maintenance (but which exclude any spending on public transit);

- entertainment, consisting of spending on dining out, vacations, tickets to events, and hobbies;

- gifts, which include charity and other gifts; and

- other consumer durables, including purchases of automobiles, refrigerators, washers and dryers, dishwashers, televisions, and computers.

The analysis also relates spending to household income. We examine three different income measures: before-tax income, after-tax income, and after-tax income plus the value of annuitized assets. Before-tax household income comes directly from the HRS, which asks the financially knowledgeable respondent in each household about multiple types of income received by him or her and the spouse (if married).[1] We compute after-tax household income by subtracting estimated federal tax payments, based on the Urban-Brookings Tax Policy Center's Microsimulation Model, from before-tax income. The tax model is a detailed tax calculator that captures most features of the federal individual income tax system. Inputs into the tax model include earnings, Social Security benefits, and pension benefits. Other inputs (including interest and dividends, state and local taxes, property taxes, mortgage interest, and capital gains) are imputed from Statistics of Income (SOI) data from the Internal Revenue Service according to age, filing status, and income brackets. Finally, to capture all of the financial resources available to individuals, we estimate the annuitized value of the household's financial assets and add it to after-tax household income.[2] This last measure provides a broader estimate of the financial resources available to older people, under the assumption that they chose to consume their asset holdings evenly over the rest of their expected lifetimes.

Our analysis is based on per capita household expenditures and income. Considering only total household expenditures and income could be misleading, because spending and income both tend to increase with household size. Ignoring household size could particularly

[1] Household income includes payments from self-employment; wages and salaries; professional practices and trades; tips and bonuses; unemployment compensation; worker compensation; welfare benefits; rental income; assets, including stocks, bonds, checking accounts, and certificates of deposit; trusts; alimony support; Social Security benefits; Supplemental Security Income (SSI) benefits; veterans' benefits; Individual Retirement Account (IRA) withdrawals; pension benefits; annuities; and other income.

[2] Financial assets include IRA balances; stock and mutual fund values; bond funds; checking, savings, money market, and certificates of deposit account balances; and trusts, less unsecured debt. To measure income from financial assets, we calculate an actuarially fair annuity assuming an interest rate of 7 percent.

distort estimated age differences in spending, because older households tend to be smaller than younger households. Although we can estimate per capita household expenditures by simply dividing spending by the number of household members, we can only approximate per capita income. The HRS collects complete information on income only for the respondent and spouse, not for other adults who might live in the household. We set per capita income equal to household income for unmarried adults and to one-half of household income for married adults. This approach assumes that the income received by any other adults living in the household equals the average per capita income of the respondent and spouse. Because this assumption may not always hold, we also measure how our basic findings change when we restrict the sample to households that do not include any other adults.

For each measure of interest, most of our tables report the mean value between the 45th and 55th percentiles of the distribution. This statistic approximates the median, and better describes outcomes for typical people than the mean because it is less sensitive to extreme values. It is also a better statistic than the median, because the median value gives the breakdown for a single observation, which may not be representative of people in the center of the distribution. By using 10 percent of the sample, our statistic better describes the composition of expenditures and income for typical cases. For ease of exposition, we refer to this statistic as the median throughout the text, unless otherwise noted.

Measuring Needs

Using information on expenditures, we establish minimum consumption needs for older households. We compute the median value of expenditures on housing, health care, food, and clothing, and set our basic-needs threshold equal to the sum of these values. We compute separate thresholds for married and nonmarried adults and determine the share of those whose incomes fall short. We also consider how our results would differ under alternate definitions of minimum needs.

One way to evaluate our thresholds for minimum needs is to consider how they compare with subjective measures of well-being collected in the HRS. In each wave, the core survey asks respondents whether their retirement experience turned out to be very satisfying, moderately satisfying, or not at all satisfying. Respondents are also asked whether they have always had enough money to buy the food they need. Additionally, the CAMS survey asked respondents how they would change their spending if their income were to rise by 20 percent. Respondents can answer that they would save or invest all of it, spend or donate all of it, spend and save some, or that they are uncertain about what they would do. Those who responded that they would spend and save some were then asked to report the percentage they would spend and the percentage they would save. If they said that they would spend 50 percent or more of it, we grouped them into the spend-all-or-most category. If they said that they would save 50 percent or more of it, we grouped them into the save-all-or-most category.

We incorporate the responses from these survey questions into our analysis to assess whether our minimum-needs thresholds appear to identify economically vulnerable older adults. In general, those who report being satisfied with their retirement and who have enough money to buy food are probably meeting their consumption needs. Similarly, respondents who claim that they would save all or most of any additional income they might receive are probably able to satisfy their consumption needs with their current levels of spending (since they claim they would not increase their expenditures even if they had more resources).

Sample Criteria

Our analytic sample consists of adults ages 53 and older, although most of the analysis focuses on adults ages 65 and older. We report results at the individual level, separately for married and nonmarried adults. All expenditures and income are expressed in 2001 dollars. After dropping a few cases with missing data, our sample includes 3,636 married adults (1,894 of whom are ages 65 and older) and 1,730 nonmarried adults (1,115 of whom are ages 65 and older).

IV. RESULTS

We begin by examining how expenditure and income patterns differ between younger and older age groups. We then explore how older adults allocate their resources and differences by key individual and household characteristics. Next we assess retirement security. First we analyze the relationship between spending and household income. Then we establish a minimum threshold for how much income older people need to live comfortably in retirement and estimate the share of the older population that is unable to satisfy these consumption needs.

Overall Expenditure Patterns

Although the focus of our analysis is adults aged 65 and older, we briefly compare expenditure and income patterns for midlife and aged adults (see table 1). Among married adults, including those living with nonspouses, the median value of per capita household expenditures falls with age, declining from $17,409 at ages 53 to 64, to $15,414 at ages 65 to 74, to $13,678 at ages 75 and older. Likewise, the median value of per capita before-tax income for married people declines from $30,898 at ages 53 to 64, to $20,023 at ages 65 to 74, to $15,800 at ages 75 and older. The median level of expenditures declines by 21 percent between the youngest and oldest age groups, whereas the median value of income before taxes declines by 49 percent. The estimated decline in financial resources narrows when we account for taxes and assets. The median value of after-tax income plus annuitized assets is only 25 percent less for married adults aged 75 and older than for married adults aged 53 to 64.

Compared with married adults, nonmarried adults tend to have higher per capita expenditures (except for the youngest age group) but lower per capita incomes. In contrast to married individuals, median expenditures among nonmarried people are slightly higher at ages 65 to 74 than at ages 53 to 64, and then are lower at ages 75 and older. However, similar to married individuals, median income declines with each successive age group. Between the youngest and oldest age groups, expenditures decline by only 10 percent but after-tax income plus assets declines by 19 percent.

The allocation of expenditures across spending categories changes with age. The share of total expenditures devoted to health care costs increases between the youngest and oldest age groups for both married and nonmarried adults. This increase is offset, in part, by the decline in the share of the budget for clothing and transportation. Since quite a few of the patterns differ between married and nonmarried individuals, we explore the allocation of expenditures more closely in the next section of the paper.

Before turning to that discussion, we note that while per capita expenditures reflect the spending of all members of the household, the per capita income measure is based only on receipts by the respondent and spouse (if married), and thus excludes income received by other adult household members. Sixteen percent of the married sample and 28 percent of the nonmarried sample live with individuals other than their spouses. To test the sensitivity of our findings to these differences, we also report results that exclude those living with nonspouses. When we exclude adults living with nonspouses, we find that median expenditures increase for all age groups, median income increases for most age groups, and that budget shares remain fairly constant for those ages 65 and older.

Expenditure Patterns within Subgroups

The median value of per capita household expenditures for married adults ages 65 and older stands at $14,792 (see table 2). Housing is the largest spending category overall, followed by health care, food, transportation, entertainment and gifts, other consumer durables, and clothing. Specifically, typical married individuals devote 29 percent of their total expenditures to housing. They devote another 20 percent to health care, 13 percent to food, and 12 percent to transportation. Entertainment and gifts represent 10 percent of total expenditures. Other consumer durables, such as appliances, account for 4 percent of total spending, and clothing accounts for 2 percent. Interestingly, housing and health care alone account for close to half of total household expenditures for typical older married adults. One reason for the relatively steep housing expenditures is that the aged are increasingly likely to hold mortgages on their homes (Gist and Figueiredo 2002), which tend to raise housing costs. Indeed, our data show that 25 percent of married adults ages 65 and older are homeowners with mortgages.

For nonmarried adults, the median value of per capita expenditures is $16,178, higher than the level for married adults. Relative to married adults, nonmarried adults allocate larger shares of their spending to housing (39 percent), food (15 percent), and clothing (3 percent), but smaller shares to health care (16 percent), transportation (9 percent), entertainment and gifts (7 percent each), and other consumer durables (3 percent). Similar to married adults, housing and health care account for more than half of total household expenditures for typical nonmarried adults.

Given the attention paid to the burden of health care costs at older ages, it is somewhat surprising that health care is not the largest spending category among older adults. Earlier studies based on the Medicare Current Beneficiary Survey (MCBS) found that out-of-pocket health care costs consume about 20 percent of income for adults ages 65 and older, and up to one-third of income for those with limited financial resources (Caplan and Brangan 2004; Crystal et al. 2000; Gross et al. 1999). Our estimates imply lower burdens of health care spending, particularly for nonmarried adults (because, as we demonstrate later, typical older adults do not spend all of their incomes). The differences between our study and previous research appear to stem from the underreporting of income in the MCBS (Goldman and Smith 2001).

Not surprisingly, total expenditures increase with income. Married adults in the highest income quintile consume 2.5 times more than their counterparts in the bottom income quintile. The gap in expenditures between the highest and lowest income quintiles is even wider for nonmarried adults. Relative to high-income groups, low-income groups allocate larger shares of their budgets to health care and food, and smaller shares to entertainment and gifts. Rubin and Nieswiadomy (1997) found a similar relationship in CEX data between income and both health care and food expenditures. The authors also found that the share devoted to housing increased with income. However, we do not find a clear relationship between income and housing expenditures in the HRS.

Table 3 reports per capita expenditures for married adults by personal characteristics, and table 4 reports expenditures for nonmarried adults. There is tremendous variation in spending patterns by personal characteristics, for both married and nonmarried adults. In general, household spending varies directly with socioeconomic status, reflecting differences across groups in average income levels. Groups with the highest expenses include whites, those who completed college, those in excellent and very good health, those with employer-sponsored health insurance, homeowners with mortgages, and those living in urban settings. In contrast, groups with the lowest expenses include Hispanics, high school dropouts, those in fair or poor health, Medicaid recipients, renters, and those living in rural settings. As expected, we also find that disadvantaged groups tend to devote significantly higher shares of their total expenses to essential items, such as housing, and smaller shares to nonessential items, such as entertainment and gifts. Because the patterns do not generally differ by marital status, we restrict the discussion to married adults.

Expenditure patterns differ markedly by race and ethnicity. Married whites spend $15,189 on a per capita basis, 26 percent more than blacks ($12,024) and 113 percent more than Hispanics ($7,125). Married blacks and Hispanics allocate over 40 percent of total expenditures to housing, compared with only 27 percent for whites. Blacks also spend substantially less than whites on entertainment and other consumer durables. Hispanics, on the other hand, devote much smaller shares of their budgets to health care, food, and gifts, and larger shares to transportation. Using CEX data, Bahizi (2003) found similar differences by race. Specifically, he found that blacks spend a larger share on housing than either whites or Hispanics, and Hispanics allocate a larger percentage of their expenditures to transportation. The author also found that blacks and Hispanics allocate a larger percentage of their expenditures to food than whites. We find that nonmarried Hispanic adults devote disproportionate shares of their budgets to food, but we do not find any other race and ethnicity differences in food expenditures.

The value of median expenditures among married individuals with at least some college education is $19,211, 86 percent more than high school dropouts ($10,346) and 38 percent more than high school graduates ($13,967). Relative to those with some college education, high school dropouts and high school graduates allocate larger shares of their total expenditures to

housing, health care, and transportation, and smaller shares to entertainment, and consumer durables.

As expected, the share of total expenditures devoted to health care is relatively large for those with health problems, and the share devoted to housing is relatively large for homeowners with mortgages and renters. Specifically, typical older married adults in excellent or very good health spend $17,134, 13 percent of which they allocate to health care expenses. In contrast, those in fair or poor health consume only $12,499, but allocate 22 percent to health care. Additionally, typical older married adults with employer-sponsored health insurance spend $16,210 14 percent of which they dedicate to health care expenses. Those with private non-group insurance, however, spend only $14,533, but allocate 28 percent to health care. Finally, typical older married homeowners with mortgages consume $19,639 and spend 39 percent on housing. Although median renters consume only $13,999, they devote 34 percent of their expenditures to housing. However, even homeowners who have paid off their mortgages spend 28 percent of their total expenditures on housing-related expenses.

Budget shares for housing and entertainment, in particular, vary considerably by urbanicity. Median per capita expenditures are about $15,900 for typical older married adults living in urban and suburban areas, who spend between 28 and 30 percent of their budgets on housing and between 14 and 16 percent on entertainment. In contrast, median expenditures are only $12,600 for those living in rural areas, who spend 37 percent on housing but only 9 percent on entertainment.

Distribution of Expenditures

Table 5 examines the distribution of per capita household expenditures and the allocation of expenditures at different points in the distribution. Mean per capita expenditures for married adults increase from $6,487 between the 5^{th} and 15^{th} percentiles of the distribution to $38,749 between the 85^{th} and 90^{th} percentiles. Those with lower expenditures allocate relatively more to housing, food, and transportation. In contrast, those with higher expenditures allocate relatively more to entertainment, gifts, and other consumer durables. The share of expenditures dedicated

to health care increases between the 5th-15th and 45th-55th percentiles, and then declines. Expenditures on clothing, on the other hand, are relatively constant across the distribution.

Mean per capita expenditures for nonmarried adults increase from $5,626 between the 5th and 15th percentiles of the distribution to $46,746 between the 85th and 90th percentiles. Similar to married adults, those with lower expenditures allocate relatively more to housing and food, and less to entertainment, gifts, and other consumer durables. However, expenditures on health care, transportation, and clothing vary inconsistently across the distribution of overall expenditures.

Finally, it is worth noting that per capita expenditures are higher for married adults than for nonmarried adults through the 20th to 30th percentiles, and are lower thereafter. Also, the distribution of expenditures is much more equal for married individuals than for nonmarried individuals. For example, the ratio of mean expenditures between the 85th and 95th percentiles to mean expenditures between the 5th and 15th percentiles is 6.0 for married adults and 8.3 for nonmarried adults.

Housing Expenditures

As we have already noted, even at older ages both married and nonmarried adults devote a disproportionate share of their total expenditures to housing. In this section, we further explore the reason for relatively high housing expenses in later life. Table 6 shows that for married adults utilities represent the largest housing spending category (9 percent of total expenditures), followed by property taxes (6 percent), mortgage payments and housing maintenance (5 percent each), insurance (2 percent), and rent (1 percent). We find that the share going to mortgages declines with age, whereas the shares going to utilities and maintenance increase with age. Blacks devote a disproportionate share of their total expenditures to housing because they tend to have high mortgage payments, which represent 21 percent of total expenditures for the typical black older married adult. Hispanics, who also allocate a larger than average share of their overall expenditures to housing, devote 11 percent to mortgage payments and 7 percent to rent.

Married homeowners with mortgages, regardless of race or ethnicity, allocate 18 percent of their total expenditures to mortgage payments. In contrast, renters allocate 13 percent of their total expenditures to rent.

For nonmarried adults, utilities also represent the largest component of household spending, accounting for 13 percent of total expenditures (see table 7). Rent accounts for another 9 percent of expenditures, a much larger share than for married adults because nonmarried individuals are nearly three times more likely to rent their homes. Nonmarred adults also devote 7 percent of total spending to household maintenance, 5 percent to property tax, 3 percent to mortgage payments, and 2 percent to insurance.

Health Care Expenditures

For typical older adults, budget shares for health care expenses are second to housing costs. However, health care expenditures warrant special attention because they tend to be much more unpredictable than housing costs, especially for those without private supplemental health insurance. In this section, we break out the health care expenditures of older adults. Health insurance premiums represent the largest health care spending category (8 percent of total expenditures) for married individuals (see table 8). Additionally, they spend 6 percent on prescription drugs, 4 percent on health services, and 1 percent on medical supplies. This finding is consistent with Rubin and Nieswiadomy (1997) who found that the increase in health care expenditures between the 1980s and 1990s was driven primarily by insurance premiums, followed by drugs and medical supplies, and health services.

Older married adults in poor health allocate twice as much of their overall spending to prescription drugs than those in excellent or very good health. As expected, individuals with non-group insurance spend a larger-than-average share of their overall expenditures on health insurance premiums, but they also spend a larger-than-average share on prescription drugs. These patterns are very similar for nonmarried adults (see table 9).

Expenditures Relative to Income

In order to assess retirement security, we consider an individual's expenditures relative to his or her economic resources. Table 10 compares median expenditures, before-tax income, after-tax income, and after-tax income plus the value of annuitized assets for older married adults, by key personal characteristics. It also reports the median ratio of expenditures to income, for each measure of income. At the median, married adults consume 81 percent of their before-tax income and 84 percent of their after-tax income. If we include their annuitized financial assets in after-tax income, to better measure all of their economic resources, this share falls to only 59 percent. Not surprisingly, the ratio of expenditures to income increases with age. Typical married adults ages 65 to 74 spend 82 percent of their after-tax incomes, compared with 90 percent for those ages 75 and older.

Although expenditures are lower than average for many economically vulnerable subgroups, they tend to spend relatively large shares of their income. For example, the median value of per capita expenditures among married individuals is 26 percent higher for whites than blacks ($15,189 vs. $12,024). However, the median value of per capita after-tax income is 53 percent higher for whites than blacks ($18,513 vs. $12,250). As a result, blacks consume larger shares of their income than whites. For whites, expenditures amount to 84 percent of after-tax income and 60 percent of after-tax income plus annuitized assets. In contrast, expenditures total 92 percent of after-tax income for blacks. Because blacks tend to hold fewer financial assets than whites, their ratio of expenditures to income only drops to 83 percent after accounting for the value of annuitized financial assets. Unlike blacks, Hispanics have much lower expenditures than whites, and thus consume a lower-than-average share of their after-tax incomes (76 percent). Like blacks, however, they are less likely than whites to have financial assets. Consequently, they consume a higher-than-average share of their after-tax income plus annuitized assets (72 percent) than whites.

Similar patterns of expenditures and income are evident by education, health status, health insurance type, housing tenure, urbanicity, expenditure level, and income level, with disadvantaged groups consuming disproportionate shares of their incomes. Because

economically vulnerable groups tend to hold only limited financial assets, accounting for income from annuitized assets magnifies the subgroup differences. In particular, high school dropouts and high school graduates consume 69 and 62 percent of their after-tax income plus assets, respectively, whereas college graduates consume only 52 percent of their income plus assets. Similarly, those in fair or poor health consume 68 percent of their resources and those in good health spend 62 percent. However, those in excellent or very good health spend only 53 percent of their after-tax income plus assets. Although typical Medicaid recipients spend less than half as much as other older married adults, they consume virtually all of their after-tax incomes, because their incomes are so low. And because the median Medicaid recipient is in debt, he spends 110 percent of his after-tax income plus net assets.

We also find that both homeowners with mortgages and renters consume about three-quarters of their after-tax income plus assets. In contrast, homeowners without mortgages spend only about half of their income. Although there are suburban and rural differences in expenditures as a share of income, these mostly disappear after accounting for annuitized financial assets.

Not surprisingly, expenditures as a share of income increase with spending and decrease with income. Married adults in the lowest expenditure quintile consume only 39 percent of their income plus assets, while those in the highest quintile spend 82 percent of their income. Individuals in the lowest income quintile consume between 99 and 107 percent of their after-tax income plus annuitized assets. In contrast, those in the highest income quintile spend between 31 and 37 percent of their income.

In most cases, expenditures consume larger shares of income for nonmarried adults than for married adults (see table 11), again because nonmarried adults tend to have higher per capita expenditures and lower per capita incomes. Median nonmarried adults ages 75 and older spend nearly all of their after-tax incomes (96 percent), while those ages 65 to 74 spend 86 percent. Like married adults, never married adults tend to have higher per capita incomes than other marital groups. As a result, they consume just over half of their income plus assets, while those who are separated, divorced, or widowed consume more than two-thirds of their resources.

Consumption Needs

Using information on expenditures and income, we establish minimum consumption needs for older households and measure the share and characteristics of those who fall below these thresholds (see table 12). The first measure captures basic needs and includes expenditures on housing, health care, food, and clothing. For older married adults, the median value of per capita expenditures amounts to $3,823 for housing, $1,850 for health care, $1,560 for food, and $250 for clothing. Median expenditures on health care, food, and clothing are similar for nonmarried adults, whereas median housing costs are about $1,500 higher for older nonmarried adults than for their married counterparts. Our estimate of median food expenses is very close to the cost of food under the U.S. Department of Agriculture's Thrifty Food Plan, which the federal government uses to allocate food stamps.[3] We sum these values to construct a basic needs threshold, which amounts to $7,483 for married individuals and $8,870 for nonmarried individuals in 2001.

Although our measures of need reflect the ability of married people to live more efficiently than single people, the economies of scale in household production implied by our measures are smaller than those incorporated into the official poverty thresholds. Our estimates imply that a married individual requires 84 percent as much income to meet basic needs as a nonmarried person. By contrast, the official poverty thresholds imply that married older adults need only 63 percent as much income as nonmarried people.[4] It is not surprising, then, that only 3 percent of married individuals in our sample have incomes below the poverty threshold, but 8 percent have incomes below our basic needs threshold.[5] The estimate based on before-tax income comes closest to the Census Bureau's definition of resources since it ignores taxes and excludes potential income from assets. However, if we account for taxes and income from assets

[3] In December 2001, food costs under the USDA Thrifty Food Plan were $1,536 per person for a two-person household with members aged 51 and older. They were $1,691 for a one-person male household and $1,660 for a one-person female household (U.S. Department of Agriculture, 2002).

[4] In 2001, the poverty threshold was $10,715 for married couples (or $5,358 per person) and $8,494 for nonmarried people (U.S. Social Security Administration 2004).

[5] Official U.S. Census (2004) estimates, based on the Current Population Survey (CPS), indicate that 10 percent of adults aged 65 and older were in poverty in 2001. This statistic is higher than our estimate of 7 percent because the CPS appears to underestimate income relative to the HRS (Hurd, Juster, and Smith 2003).

in our definition of resources the share in need among older married adults declines to 6 percent. In contrast, the share of nonmarried individuals with incomes below the poverty threshold is very similar to the share with incomes below the basic needs threshold, because the two thresholds are quite similar.

What we include in the measure of need is somewhat subjective. One could argue that transportation is a necessity, particularly for those who do not live in urban areas. Adding transportation to the basket of necessary goods and services raises the threshold to $8,733 for married individuals and increases the share in need to 12 percent (based on before-tax incomes). For nonmarried individuals, the threshold increases to $10,003 and the share in need increases to 24 percent. Allowing for entertainment costs increases the threshold for married individuals by over $1,000, to $9,833, and increases the share in need to 16 percent. For nonmarried individuals, the threshold increases to $10,703 and the share in need increases to 27 percent.

One way of evaluating our thresholds for minimum needs is to consider how they compare with subjective measures of well-being collected in the HRS. We incorporate into the analysis responses to survey questions about whether respondents are satisfied with retirement, whether they have enough money to buy food, and how they would change their spending if their incomes were to rise. Overall, 68 percent of adults aged 65 and older report being very satisfied with retirement, 97 percent report having enough money to spend on food, and 39 percent report that they would save all or most of any extra money they received. Only 4 percent report being dissatisfied with retirement, 3 percent report lacking sufficient money to spend on food, 17 percent report that they would spend all or most of any additional money they received, and 44 percent report being uncertain about whether they would save or spend extra income.

Regardless of the threshold we use to define minimum needs, we find that older adults who are dissatisfied with retirement, who do not have enough money to buy food, or who would spend any extra income if they had it are more likely to be in need than other people. For example, after-tax income falls short of our estimate of basic consumption needs for 29 percent of older adults who report being dissatisfied with retirement, compared with only 6 percent of those who report being very satisfied with retirement (see table 13). Similarly, 27 percent of

those who report lacking enough money for food have insufficient financial resources to meet basic consumption needs, compared with 10 percent of those who report having enough money to buy food. Only 5 percent of older adults who say they would save all or most of any extra money they received are in need, compared with 9 percent of those who would spend all or most of it and 15 percent of those who are uncertain about what they would do.

V. CONCLUSIONS

Up-to-date information on the consumption needs of older Americans is crucial to policymakers as they consider reforms to the Social Security system. While benefit cuts may be necessary to achieve solvency, little is known about how they might affect standards of living for aged households. Many studies have examined the level of resources available to older people and how it is likely to change over time, but there has been remarkably little research on the amount of resources they need to live comfortably in retirement. This research fills a critical gap in the literature.

We find that housing and health care are the two largest spending categories. What is somewhat surprising is that even at older ages individuals spend more on housing than health care. However, older people appear to be increasingly likely to enter retirement with pre-existing mortgages, or to refinance their homes in retirement to cover expenses. Indeed, homeowners with mortgages make up nearly a quarter of our sample. These individuals have higher-than-average expenditures and consume a higher-than-average share of their income. While health care spending accounts for smaller shares of expenditures and income than housing, these shares increase with age and poor health.

In order to assess retirement security, it is necessary to consider expenditures relative to economic resources. At the median, married adults consume between 59 and 84 percent of their household income, depending on whether income is measured before-tax or after-tax, and whether the income measure includes annuitized assets. Nonmarried adults consume a larger share of their income, ranging from 68 to 92 percent. In general, expenditures are lower than

average for economically vulnerable groups; however, but they consume a disproportionate share of their income. Spending patterns vary less across groups than income patterns.

As policymakers consider reforms to the Social Security system, it is important to understand how much older people need to live comfortably in retirement. To this end, we construct a basic needs threshold consisting of housing, health care, food, and clothing expenditures. We find that after-tax incomes fall short of our basic needs threshold for 8 percent of married individuals in our sample, but that only 3 percent are officially considered poor. Even when we expand our definition of resources to account for potential income from assets, the share in need stands at 6 percent. In contrast, the share of nonmarried individuals with incomes below the basic needs threshold is very similar to the share with incomes below the official poverty threshold. However, when we expand our definition of minimum needs to account for other expenditures (such as transportation and entertainment costs), the gap between those in need and those in poverty increases for both married and nonmarried adults. Finally, we find that older adults who report being dissatisfied with retirement, who report lacking enough money to buy food, and who report that they would spend any extra income they might receive instead of saving it are especially likely to fall below our basic-needs threshold. This result suggests that many of these individuals are probably unable to meet their consumption needs.

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Table 1.
Median Per Capita Household Expenditures and Income, by Living Arrangement, Marital Status, and Age

	Married			Nonmarried			All		
	53-64	65-74	>=75	53-64	65-74	>=75	53-64	65-74	>=75
A. All									
Median Level									
Expenditures	$17,409	$15,414	$13,678	$17,196	$17,083	$15,390	$17,350	$15,681	$14,179
Before-Tax Income	30,898	20,023	15,800	24,683	18,581	15,040	29,758	19,764	15,594
After-Tax Income	27,701	19,484	15,727	23,118	18,511	15,036	26,948	19,337	15,563
After-Tax Income Plus Assets	31,366	26,040	23,620	26,070	22,794	21,140	30,436	25,434	22,809
Median Share of Expenditures									
Housing	36%	31%	29%	37%	36%	41%	36%	32%	32%
Health Care	12%	17%	19%	11%	14%	18%	12%	16%	20%
Food	10%	13%	14%	13%	17%	13%	11%	14%	13%
Clothing	5%	3%	2%	5%	3%	3%	5%	3%	2%
Transportation	14%	13%	10%	13%	10%	9%	14%	12%	12%
Entertainment	10%	13%	10%	13%	10%	6%	11%	13%	8%
Gifts	8%	6%	10%	5%	7%	8%	7%	6%	9%
Other	6%	3%	7%	3%	3%	2%	5%	4%	5%
Number of Observations	1,742	1,286	608	615	506	609	2,357	1,792	1,217
B. Excludes Adults Living with Nonspouses									
Median Level									
Expenditures	$20,784	$16,897	$14,056	$24,212	$20,431	$17,856	$21,314	$17,459	$15,070
Before-Tax Income	32,604	20,719	15,624	27,856	18,360	15,053	31,781	20,341	15,492
After-Tax Income	29,115	20,039	15,562	25,768	18,300	15,047	28,477	19,787	15,445
After-Tax Income Plus Assets	34,100	27,942	24,018	29,385	23,356	22,355	33,167	27,324	23,476
Median Share of Expenditures									
Housing	29%	32%	28%	42%	35%	38%	33%	33%	29%
Health Care	12%	14%	21%	10%	15%	19%	12%	13%	20%
Food	12%	12%	13%	11%	12%	11%	12%	12%	13%
Clothing	4%	3%	2%	4%	5%	3%	3%	3%	2%
Transportation	15%	12%	10%	11%	13%	10%	14%	12%	12%
Entertainment	15%	15%	10%	13%	8%	7%	14%	13%	7%
Gifts	8%	7%	10%	6%	9%	10%	8%	8%	9%
Other	5%	5%	7%	1%	2%	2%	4%	6%	6%
Number of Observations	1,142	1,019	541	333	340	471	1,475	1,359	1,012

Note. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution.

Source: Authors' estimates from the Health and Retirement Study.

Table 2.
Median Per Capita Household Expenditures for Adults Ages 65+, by Marital Status, Income Quintile, and Spending Category, 2001

	Share of Sample (%)	Total Expenditures ($)	Share of Total Expenditures							
			Housing (%)	Health Care (%)	Food (%)	Clothing (%)	Transport. (%)	Entertain. (%)	Gifts (%)	Other (%)
A. Married										
All	100	14,792	29	20	13	2	12	10	10	4
Income Quintile										
1st Quintile	20	10,111	33	22	13	1	10	8	5	8
2nd Quintile	20	12,809	27	22	18	2	10	11	9	1
3rd Quintile	20	15,122	26	23	13	3	12	14	8	1
4th Quintile	20	17,393	33	11	11	3	12	18	6	5
5th Quintile	20	25,567	37	14	9	2	10	13	12	3
B. Nonmarried										
All	100	16,178	39	16	15	3	9	7	7	3
Income Quintile										
1st Quintile	20	9,492	40	14	20	5	9	5	7	0
2nd Quintile	20	12,864	29	24	17	8	8	7	6	1
3rd Quintile	20	15,579	41	13	11	3	12	8	10	2
4th Quintile	20	19,904	39	12	12	3	12	13	8	2
5th Quintile	20	27,911	42	8	11	2	6	10	18	3

Notes: Estimates are based on a sample of 1,894 married adults and 1,115 nonmarried adults, all of whom are ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars. Income quintiles are defined on the basis of after-tax income plus the value of annuitized financial assets.

Source: Authors' estimates from the Health and Retirement Study.

Table 3.
Median Per Capita Household Expenditures for Married Adults Ages 65+,
by Personal Characteristics and Spending Category, 2001

	Share of Sample (%)	Total Expenditures ($)	Share of Total Expenditures							
			Housing (%)	Health Care (%)	Food (%)	Clothing (%)	Transport. (%)	Entertain. (%)	Gifts (%)	Other (%)
All	100	14,792	29	20	13	2	12	10	10	4
Age										
65-74	66	15,414	31	17	13	3	13	13	6	3
>=75	34	13,678	29	19	14	2	10	10	10	7
Race										
White,Other	92	15,189	27	19	13	2	13	11	9	5
Black	5	12,024	44	21	10	0	12	2	12	0
Hispanic	4	7,125	42	14	9	1	21	9	2	1
Education										
<HS	24	10,346	34	17	14	2	14	8	9	2
HS	35	13,967	31	20	13	2	11	10	11	4
>HS	41	19,211	28	11	12	2	9	15	10	13
Sex										
Male	57	15,012	29	18	14	2	12	12	9	4
Female	43	14,509	29	20	13	2	12	9	11	4
Self-Reported Health										
Excellent / Very Good	44	17,134	31	13	11	3	12	14	7	7
Good	31	14,036	29	19	13	2	12	10	8	7
Fair / Poor	25	12,499	36	22	16	4	9	5	5	2
Health Insurance										
Employer Sponsored	45	16,210	26	14	13	3	12	14	7	10
Nongroup	26	14,533	25	28	13	1	11	7	11	5
Medicaid	2	5,832	47	2	17	4	5	4	18	3
Medicare Only	27	13,597	35	17	14	5	10	8	9	2
Housing Tenure										
Owner / No Mortgage	64	13,274	28	19	16	3	10	11	10	3
Owner / Mortgage	25	19,639	39	11	12	2	11	9	9	7
Renter	11	13,999	34	25	12	2	9	8	5	5
Urban/Rural										
Urban	40	15,957	30	18	14	2	13	14	8	2
Suburban	29	15,903	28	15	11	3	13	16	7	6
Rural	31	12,600	37	15	15	2	11	9	7	5

Notes: Estimates are based on a sample of 1,894 married adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars.

Source: Authors' estimates from the Health and Retirement Study.

Table 4.
Median Per Capita Household Expenditures for Nonmarried Adults Ages 65+, by Personal Characteristics and Spending Category, 2001

	Share of Sample (%)	Total Expenditures ($)	Share of Total Expenditures							
			Housing (%)	Health Care (%)	Food (%)	Clothing (%)	Transport. (%)	Entertain. (%)	Gifts (%)	Other (%)
All	100	16,178	39	16	15	3	9	7	7	3
Age										
65-74	46	17,083	36	14	17	3	10	10	7	3
>=75	54	15,390	41	18	13	3	9	6	8	2
Race										
White,Other	84	17,101	38	17	13	3	9	8	8	3
Black	10	13,636	61	15	7	3	6	3	3	1
Hispanic	6	8,405	50	5	19	1	20	3	1	1
Education										
<HS	32	12,503	44	17	15	4	9	5	5	0
HS	34	15,047	41	15	14	3	11	7	7	3
>HS	34	22,573	40	13	10	4	11	11	10	2
Marital Status										
Separated/Divorced	22	15,316	38	15	20	3	9	6	5	4
Widowed	70	16,683	40	19	12	3	9	7	8	3
Never Married	7	15,275	46	20	13	4	7	4	5	2
Sex										
Male	23	16,597	38	15	23	1	7	10	5	0
Female	77	16,021	39	17	12	4	10	6	8	4
Self-Reported Health										
Excellent / Very Good	39	17,574	38	15	12	3	11	10	8	4
Good	35	16,191	39	17	18	2	8	7	7	2
Fair / Poor	26	14,687	37	17	18	4	11	6	6	2
Health Insurance										
Employer Sponsored	30	19,741	33	15	13	3	14	8	12	2
Nongroup	29	17,247	40	21	12	2	9	7	8	1
Medicaid	10	8,784	42	12	18	3	13	8	3	0
Medicare Only	31	14,514	40	14	13	4	13	7	7	1
Housing Tenure										
Owner / No Mortgage	51	15,602	37	19	12	3	11	6	7	3
Owner / Mortgage	19	23,693	46	11	12	5	7	12	6	1
Renter	30	14,077	42	15	18	4	8	6	5	2
Urban/Rural										
Urban	42	17,309	38	15	13	2	10	10	9	3
Suburban	30	15,624	45	13	12	3	11	6	8	1
Rural	28	15,053	35	20	15	5	13	4	5	3

Notes: Estimates are based on a sample of 1,115 nonmarried adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars.

Source: Authors' estimates from the Health and Retirement Study.

Table 5.
Distribution of Mean Per Capita Household Expenditures for Adults Ages 65+, by Marital Status, Percentile, and Spending Category, 2001

	Total Expenditures ($)	Share of Total Expenditures							
		Housing (%)	Health Care (%)	Food (%)	Clothing (%)	Transport. (%)	Entertain. (%)	Gifts (%)	Other (%)
A. Married									
Percentile									
5th - 15th	6,487	35	16	16	3	14	8	7	2
20th - 30th	9,881	33	18	14	2	12	9	9	3
45th - 55th	14,792	29	20	13	2	12	10	10	4
70th - 80th	24,016	30	13	9	2	12	12	8	13
85th - 95th	38,749	28	13	6	3	9	12	15	14
B. Nonmarried									
Percentile									
5th - 15th	5,626	47	13	17	3	8	4	6	2
20th - 30th	9,746	38	19	13	4	10	7	8	2
45th - 55th	16,178	39	16	15	3	9	7	7	3
70th - 80th	27,555	37	13	12	4	9	8	12	5
85th - 95th	46,746	28	16	8	2	10	11	14	12

Notes: Estimates are based on a sample of 1,894 married adults and 1,115 nonmarried adults, all of whom are ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars.

Source: Authors' estimates from the Health and Retirement Study.

Table 6.
Share of Median Household Expenditures Devoted to Housing by Married Adults Ages 65+, by Spending Category, 2001

	Total Housing (%)	Mortgage (%)	Insurance (%)	Property Tax (%)	Rent (%)	Utilities (%)	Maintenance (%)
All	29	5	2	6	1	9	5
Housing Tenure							
Owner / No Mortgage	28	0	3	8	0	11	6
Owner / Mortgage	39	18	3	5	0	9	5
Renter	34	0	1	2	13	9	9
Age							
65-74	31	8	2	5	1	10	5
>=75	29	2	2	5	2	11	7
Race							
White,Other	27	5	2	5	1	9	4
Black	44	21	3	3	0	13	4
Hispanic	42	11	5	3	7	10	6
Education							
<HS	34	6	3	6	2	12	6
HS	31	4	2	6	2	10	7
>HS	28	6	2	5	3	8	5
Urban/Rural							
Urban	30	6	2	7	3	8	5
Suburban	28	7	2	5	1	8	6
Rural	37	5	3	9	1	13	6
Income Quintile							
1st Quintile	33	6	2	3	5	13	5
2nd Quintile	27	2	2	6	2	10	6
3rd Quintile	26	5	2	5	1	9	4
4th Quintile	33	8	2	8	2	9	6
5th Quintile	37	13	1	5	5	6	7

Notes: Estimates are based on a sample of 1,894 married adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars. Income quintiles are defined on the basis of after-tax income plus the value of annuitized financial assets.

Source: Authors' estimates from the Health and Retirement Study.

Table 7.
Share of Median Household Expenditures Devoted to Housing by Nonmarried Adults Ages 65+, by Spending Category, 2001

	Total Housing (%)	Mortgage (%)	Insurance (%)	Property Tax (%)	Rent (%)	Utilities (%)	Maintenance (%)
All	39	3	2	5	9	13	7
Housing Tenure							
Owner / No Mortgage	37	0	2	9	0	15	11
Owner / Mortgage	46	19	3	7	0	10	5
Renter	42	0	0	1	27	11	3
Age							
65-74	36	5	1	4	9	12	4
>=75	41	1	2	6	11	12	9
Race							
White,Other	38	3	2	6	9	13	5
Black	61	16	1	14	13	14	3
Hispanic	50	9	0	3	26	10	2
Education							
<HS	44	4	1	4	16	16	2
HS	41	3	2	6	9	12	9
>HS	40	7	2	6	7	10	7
Marital Status							
Separated/Divorced	38	4	1	5	8	11	10
Widowed	40	3	3	6	7	14	7
Never Married	46	5	1	1	20	11	8
Sex							
Male	38	5	1	5	13	9	5
Female	39	3	2	5	7	13	8
Urban/Rural							
Urban	38	3	2	6	12	10	5
Suburban	45	5	3	4	10	14	10
Rural	35	2	2	3	6	14	8
Income Quintile							
1st Quintile	40	2	1	2	16	16	4
2nd Quintile	29	1	2	3	8	12	4
3rd Quintile	41	4	2	4	18	10	4
4th Quintile	39	8	3	7	5	11	6
5th Quintile	42	8	3	5	15	7	4

Notes: Estimates are based on a sample of 1,115 nonmarried adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars. Income quintiles are defined on the basis of after-tax income plus the value of annuitized financial assets.

Source: Authors' estimates from the Health and Retirement Study.

Table 8.
Share of Median Household Expenditures Devoted to Health Care by Married Adults Ages 65+, by Spending Category, 2001

	Total Health Care (%)	Premiums (%)	Drugs (%)	Health Services (%)	Medical Supplies (%)
All	20	8	6	4	1
Self-Reported Health					
Excellent / Very Good	13	5	4	3	1
Good	19	9	5	3	1
Fair / Poor	22	7	8	5	1
Health Insurance					
Employer Sponsored	14	6	3	4	1
Nongroup	28	11	11	4	1
Medicaid	2	1	0	0	0
Medicare Only	17	6	6	4	1
Age					
65-74	17	7	5	4	1
>=75	19	8	6	4	1
Race					
White,Other	19	8	6	4	1
Black	21	3	6	8	4
Hispanic	14	2	4	6	2
Education					
<HS	17	8	5	4	1
HS	20	7	7	4	1
>HS	11	5	2	3	1
Urban/Rural					
Urban	18	8	4	4	2
Suburban	15	7	5	3	1
Rural	15	6	6	2	1
Income Quintile					
1st Quintile	22	11	7	4	1
2nd Quintile	22	8	6	7	2
3rd Quintile	23	10	9	3	1
4th Quintile	11	4	4	3	0
5th Quintile	14	8	2	2	1

Notes: Estimates are based on a sample of 1,894 married adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars. Income quintiles are defined on the basis of after-tax income plus the value of annuitized financial assets.

Source: Authors' estimates from the Health and Retirement Study.

Table 9.
Share of Median Household Expenditures Devoted to Health Care by Nonmarried Adults Ages 65+, by Spending Category, 2001

	Total Health Care (%)	Premiums (%)	Drugs (%)	Health Services (%)	Medical Supplies (%)
All	16	6	6	3	1
Self-Reported Health					
Excellent / Very Good	15	8	3	3	1
Good	17	6	6	5	1
Fair / Poor	17	6	6	4	1
Health Insurance					
Employer Sponsored	15	6	4	4	1
Nongroup	21	10	7	3	1
Medicaid	12	5	7	0	0
Medicare Only	14	5	5	3	0
Age					
65-74	14	5	6	3	0
>=75	18	8	7	3	1
Race					
White,Other	17	7	6	3	1
Black	15	3	6	4	2
Hispanic	5	3	1	0	0
Education					
<HS	17	7	7	3	1
HS	15	7	6	2	0
>HS	13	5	4	3	1
Marital Status					
Separated/Divorced	15	3	7	4	1
Widowed	19	8	7	3	1
Never Married	20	7	8	3	2
Sex					
Male	15	6	6	2	1
Female	17	7	6	4	1
Urban/Rural					
Urban	15	6	5	4	0
Suburban	13	5	4	2	1
Rural	20	10	7	2	1
Income Quintile					
1st Quintile	14	6	7	1	1
2nd Quintile	24	12	7	4	2
3rd Quintile	13	6	5	2	1
4th Quintile	12	6	3	3	1
5th Quintile	8	3	3	2	0

Notes: Estimates are based on a sample of 1,115 nonmarried adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution, and all expenditures are expressed in 2001 dollars. Income quintiles are defined on the basis of after-tax income plus the value of annuitized financial assets.

Source: Authors' estimates from the Health and Retirement Study.

Table 10.
Median Per Capita Household Expenditures, Income, and Expenditure to Income Ratios for Married Adults Ages 65+, by Personal Characteristics, 2001

					Ratio of Expenditures to Income		
	Total Expenditures ($)	Before-Tax Income ($)	After-Tax Income ($)	After-Tax Income Plus Assets ($)	Before-Tax Income (%)	After-Tax Income (%)	After-Tax Income Plus Assets (%)
All	14,792	18,262	18,022	25,269	81	84	59
Age							
65-74	15,414	20,023	19,484	26,040	78	82	60
>=75	13,678	15,800	15,727	23,620	87	90	58
Race							
White,Other	15,189	18,825	18,513	26,542	80	84	58
Black	12,024	12,267	12,250	14,238	90	92	83
Hispanic	7,125	10,940	10,940	12,202	71	76	72
Education							
<HS	10,346	13,087	12,999	16,057	82	84	69
HS	13,967	16,874	16,825	23,530	85	88	62
>HS	19,211	24,775	23,565	37,931	77	82	52
Sex							
Male	15,012	18,672	18,331	25,564	79	83	58
Female	14,509	17,767	17,603	24,887	82	86	60
Self-Reported Health							
Excellent / Very Good	17,134	22,179	21,411	32,280	74	80	53
Good	14,036	17,235	17,082	23,072	82	85	62
Fair / Poor	12,499	13,879	13,808	18,534	89	92	68
Health Insurance							
Employer-Sponsored	16,210	20,976	20,301	27,752	78	82	58
Nongroup	14,533	17,545	17,384	26,763	85	87	56
Medicaid	5,832	5,777	5,777	5,795	99	99	110
Medicare Only	13,597	15,377	15,347	21,139	81	85	62
Housing Tenure							
Owner / No Mortgage	13,274	18,115	17,878	26,290	76	78	52
Owner / Mortgage	19,639	20,656	20,041	25,465	88	94	74
Renter	13,999	14,939	14,884	17,749	96	97	75
Consumption Quintile							
1st Quintile	6,502	12,358	12,337	14,861	48	48	39
2nd Quintile	10,673	16,475	16,345	22,324	64	65	48
3rd Quintile	14,817	17,328	17,245	24,286	86	86	62
4th Quintile	21,353	21,085	20,351	28,339	97	100	74
5th Quintile	37,905	29,588	27,652	47,298	124	132	82
Before-Tax Income Quintile							
1st Quintile	9,938	8,287	8,287	9,786	131	131	99
2nd Quintile	13,152	13,119	13,036	15,908	104	105	77
3rd Quintile	14,448	18,211	18,006	23,780	79	80	55
4th Quintile	17,755	26,033	24,486	33,456	69	74	50
5th Quintile	23,447	49,294	42,027	61,977	44	52	37
After-Tax Income Quintile							
1st Quintile	9,938	8,287	8,287	9,786	131	131	99
2nd Quintile	13,247	13,133	13,054	15,868	105	105	78
3rd Quintile	14,336	18,239	18,051	24,001	78	80	54
4th Quintile	17,283	26,050	24,486	33,294	69	73	50
5th Quintile	24,161	49,294	42,027	61,873	45	52	37
After-Tax Income Plus Assets Quintile							
1st Quintile	10,111	8,891	8,886	9,786	116	116	107
2nd Quintile	12,809	14,331	14,306	17,140	93	94	79
3rd Quintile	15,122	19,757	19,318	25,210	78	80	59
4th Quintile	17,393	27,819	26,240	38,588	70	75	45
5th Quintile	25,567	46,417	40,251	72,016	54	61	31

Notes: Estimates are based on a sample of 1,894 married adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution.

Source: Authors' estimates from the Health and Retirement Study.

Table 11.
Median Per Capita Household Expenditures, Income, and Expenditure to Income Ratios for Nonmarried Adults Ages 65+, by Personal Characteristics, 2001

					Ratio of Expenditures to Income		
	Total Expenditures ($)	Before-Tax Income ($)	After-Tax Income ($)	After-Tax Income Plus Assets ($)	Before-Tax Income (%)	After-Tax Income (%)	After-Tax Income Plus Assets (%)
All	16,178	16,494	16,466	21,945	90	92	68
Age							
65-74	17,083	18,581	18,511	22,794	83	86	67
>=75	15,390	15,040	15,036	21,140	95	96	70
Race							
White,Other	17,101	17,675	17,613	24,487	89	91	67
Black	13,636	13,245	13,223	13,804	90	92	87
Hispanic	8,405	7,964	7,964	8,058	94	94	80
Education							
<HS	12,503	11,440	11,440	13,094	95	96	83
HS	15,047	15,779	15,753	21,011	92	95	69
>HS	22,573	25,505	24,621	39,606	82	87	58
Marital Status							
Separated/Divorced	15,316	15,903	15,894	18,986	86	88	70
Widowed	16,683	16,510	16,484	22,556	92	94	70
Never Married	15,275	19,301	19,031	26,339	71	74	56
Sex							
Male	16,597	23,331	23,026	29,787	71	75	53
Female	16,021	14,780	14,773	19,713	96	97	74
Self-Reported Health							
Excellent / Very Good	17,574	20,691	20,497	29,346	80	82	59
Good	16,191	15,742	15,742	20,700	92	92	70
Fair / Poor	14,687	12,273	12,273	14,711	110	110	89
Health Insurance							
Employer-Sponsored	19,741	23,186	22,765	32,142	79	82	60
Nongroup	17,247	17,244	17,206	25,347	90	91	67
Medicaid	8,784	6,882	6,882	7,014	107	107	106
Medicare Only	14,514	13,939	13,932	18,180	97	99	74
Housing Tenure							
Owner / No Mortgage	15,602	16,387	16,366	24,798	86	88	61
Owner / Mortgage	23,693	23,436	23,086	27,047	83	87	71
Renter	14,077	12,706	12,704	15,427	101	101	83
Consumption Quintile							
1st Quintile	5,667	10,073	10,073	11,096	50	50	43
2nd Quintile	10,841	14,418	14,418	19,937	75	75	57
3rd Quintile	16,283	16,420	16,420	21,047	100	101	78
4th Quintile	24,800	21,519	21,079	29,261	113	116	82
5th Quintile	46,085	29,025	28,054	43,184	173	183	111
Before-Tax Income Quintile							
1st Quintile	9,771	6,863	6,863	7,137	132	132	113
2nd Quintile	13,457	11,493	11,493	12,712	120	120	97
3rd Quintile	15,427	16,463	16,441	19,770	89	90	69
4th Quintile	19,504	24,485	24,012	31,014	79	80	58
5th Quintile	27,188	47,344	42,658	64,160	51	57	37
After-Tax Income Quintile							
1st Quintile	9,771	6,863	6,863	7,137	132	132	113
2nd Quintile	13,457	11,493	11,493	12,712	120	120	97
3rd Quintile	15,577	16,463	16,441	19,771	90	91	69
4th Quintile	19,323	24,485	24,026	31,036	77	79	58
5th Quintile	27,263	47,486	42,658	64,677	51	57	37
After-Tax Income Plus Assets Quintile							
1st Quintile	9,492	6,949	6,949	7,131	127	127	124
2nd Quintile	12,864	12,127	12,127	13,477	106	106	95
3rd Quintile	15,579	18,612	18,526	22,152	87	87	71
4th Quintile	19,904	25,815	25,160	36,355	78	81	55
5th Quintile	27,911	45,365	41,174	78,134	62	69	32

Notes: Estimates are based on a sample of 1,115 nonmarried adults ages 65 and older. The median value is measured as the mean value between the 45th and 55th percentiles of the distribution.

Source: Authors' estimates from the Health and Retirement Study.

Table 12.
Per Capita Household Expenditures and Percent in Need, by Marital Status and Spending Category

	Married			Nonmarried			All		
	Basic	**+Transport**	**+Entertain**	**Basic**	**+Transport**	**+Entertain**	**Basic**	**+Transport**	**+Entertain**
A. Median Per Capita Expenditures									
Spending Category									
Housing	$3,823	$3,823	$3,823	$5,311	$5,311	$5,311	$4,070	$4,070	$4,070
Health Care	1,850	1,850	1,850	1,799	1,799	1,799	1,840	1,840	1,840
Food	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560
Clothing	250	250	250	200	200	200	240	240	240
Transportation		1,250	1,250		1,133	1,133		1,239	1,239
Entertainment			1,100			700			1,010
Sum of Components	$7,483	$8,733	$9,833	$8,870	$10,003	$10,703	$7,710	$8,949	$9,959
B. Percent Poor or In Need									
Poor	3%	3%	3%	18%	18%	18%	7%	7%	7%
In Need									
Before-Tax Income	8%	12%	16%	19%	24%	27%	10%	14%	18%
After-Tax Income	8%	12%	16%	19%	24%	27%	10%	14%	18%
After-Tax Income Plus Assets	6%	8%	10%	16%	19%	21%	8%	10%	13%

Notes: Estimates are based on a sample of 1,894 married adults and 1,115 nonmarried adults ages 65 and older. The basic needs threshold includes expenditures on housing, health care, food, and clothing. The median value is measured at the 50th percentile of the distribution.

Source: Authors' estimates from the Health and Retirement Study.

Table 13.
Share of Adults Ages 65+ In Need, by Marital Status, Needs Threshold, and Personal Characteristics, 2001

	Married			Nonmarried			Total		
	Basic (%)	+Transport (%)	+Entertain (%)	Basic (%)	+Transport (%)	+Entertain (%)	Basic (%)	+Transport (%)	+Entertain (%)
Satisfied With Retirement?									
Very Satisfied	5	7	10	12	15	16	6	8	11
Satisfied	16	22	29	25	34	37	17	24	32
Not Satisfied	30	40	45	28	38	38	29	38	43
Enough Money for Food?									
Yes	8	11	15	18	23	26	10	13	18
No	20	35	44	46	46	55	27	39	45
Spend or Save Extra Income?									
Save All/Most	4	5	9	10	13	15	5	7	10
Spend All/Most	7	11	17	17	22	27	9	13	18
Uncertain	13	18	24	23	28	31	15	19	25

Notes: Estimates are based on a sample of 1,894 married adults and 1,115 nonmarried adults ages 65 and older. The basic needs threshold includes expenditures on housing, health care, food, and clothing. The share in need is based on after-tax income.

Source: Authors' estimates from the Health and Retirement Study.

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