# RETIRING IN DEBT? DIFFERENCES BETWEEN THE 1995 AND 2004 NEAR-RETIREE COHORTS

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This article uses the Federal Reserve Board's Survey of Consumer Finances to examine the debt holdings of near-retirees (aged 50–61) in 1995 and 2004. Employing a variety of measures of household borrowing, we find that near-retirees in 2004—the leading edge of the baby-boom cohort—had more consumer and housing debt than their counterparts in 1995. We observe a modest increase in the median debt service and debt-to-assets ratios between the two cohorts, but no statistical difference in the average ratios. Analysis of several demographic and socioeconomic subgroups reveals certain population segments, such as households headed by single women, with significantly higher debt service ratios in 2004. We discuss the implications of these trends for the retirement income security of older baby boomers and suggest further avenues of research.

### Introduction

This article examines patterns of debt among households approaching retirement in 1995 and 2004.¹ Household debt in the United States has received increased academic and public policy focus in recent years.² Underlying this attention has been growth in aggregate household debt, as well as in personal bankruptcy claims since the end of the 1980s (Bucks, Kennickell, and Moore 2006; Kish 2006; Manning 2000; Masnick, Di, and Belsky 2006; Mishel, Bernstein, and Allegretto 2005, Tables 4.13–4.17; Sullivan, Warren, and Westbrook 2000). At the end of the first quarter of 2007, the debt outstanding in the U.S. household sector, including mortgage debt, totaled over \$13 trillion, up from \$3.6 trillion in 1990, adjusting for inflation (Board of Governors 2007).³

Debt is an increasingly substantive concern for retirement analysts and policymakers for several reasons. Although carrying substantial debt later in life is not an indication of financial risk by itself, it can have repercussions for retirement income security. The financial planning literature has shown that the more economic resources a family uses to service its debt, the less it will save for retirement (Cavanagh and Sharpe 2002; Yuh, Montalto, and Hanna 1998). Debt may affect retirement timing, as individuals with high

debt may need to work longer to service that debt. If carried into retirement, debt can decrease the longevity of accumulated financial assets and savings, and more generally, mean less financial cushion for the debt holder. For example, the ability of an aged person to respond to health shocks and other costly life events may be negatively impacted if he or she holds a high debt burden.

A number of recent studies have examined various aspects of debt with a focus on retirement income security (for example, Lee, Lown, and Sharpe 2007; Munnell and Soto 2008; and Soto 2005). However, debt remains an understudied component of older Americans' financial circumstances. To advance our understanding of debt patterns among older workers, this article documents trends in debt among two recent cohorts approaching retirement. Specifically, data from the Federal Reserve Board's Survey of Consumer Finances (SCF) are used to compare debt among households headed by individuals aged 50-61 in 1995 (comprising persons born between 1934 and 1945, largely the war-baby cohort) with debt among those headed by individuals aged 50-61 in 2004 (comprising persons born between 1943 and 1954, largely the leading edge of the baby-boom cohort).<sup>4</sup> To gain a deeper understanding of trends across different population segments, debt measures are broken out by

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various demographic and socioeconomic subgroups of near-retirees.

The results document changes in household debt patterns among near-retirees in the leading edge of the baby-boom cohort, showing prominent increases in mortgage and home equity debt in particular. The level of debt, however, does not necessarily portend financial problems; more reliable indicators are debt's relation to household income and assets. Median debt service and debt-to-assets ratios of near-retirees in 2004 were modestly higher than those in 1995. Higher debt levels may be a concern for certain subgroups of near-retirees in 2004, particularly lower-income, less-educated, and single-female heads of households. Though it remains unclear exactly how debt may affect the retirement income security of individual members of these groups, it is likely that some will reach retirement age with less financial cushion than their predecessors because of greater debt levels.

This article begins with a summary of the background and significance of relevant issues. A discussion of our data and methods follows. Next, we report our findings, which include important differences between the debt patterns of the two near-retiree cohorts. The article concludes with a discussion of this study's implications for the economic well-being of future retirees.

### Background

Increasing attention has been paid to the retirement preparedness of the near elderly given the looming retirement of the large baby-boom generation (Bridges and Choudhury 2007; Cashell 2008; CBO 2003; Dushi and Iams 2007; Iams and others 2007; GAO 2006: Lusardi and Mitchell 2006).<sup>5</sup> Overall. there have been substantial improvements in the financial circumstances of the elderly over the past 30 years, and the baby boomers, as a group, are expected to experience at least as much retirement income security as current retirees (Butrica, Iams, and Smith 2003). Since the distribution of income and wealth within the baby-boom cohort is uneven (Lusardi and Mitchell 2006, Table 2), some subgroups, such as high-income and college-educated households, may be expected to experience relative increases in real income and wealth compared with current retirees, while other subgroups, such as families headed by divorced women, the never-married, or low lifetime earners, may be more vulnerable in terms of poverty and relative well-being (Iams and others 2007; Tamborini 2007).

A small but growing body of work has focused on debt trends among the older population. Using the 2000 Health and Retirement Study, Lee, Lown, and Sharpe (2007) analyze the correlation between housing and consumer debt among persons aged 65 or older. Copeland (2006) employs SCF data and reports rising debt among the elderly and near elderly between 1992 and 2004, with substantial growth in debt among families in the lowest income quartile. That study also finds housing debt rising among families headed by persons aged 55 or older, from 24 percent holding some type of housing debt in 1992 to 36 percent in 2004 <sup>6</sup>

Debt has diverse implications for near-retirees. Servicing high levels of debt while working may hinder a family's ability to save for retirement,<sup>7</sup> particularly given recent shifts away from defined benefit pension plans and toward defined contribution plans (Munnell and Sunden 2004). As a result, a retiree might rely more on Social Security benefits for retirement income, which are meant as a floor of protection to be supplemented with employer pensions and private savings. Debt service obligations could lead individuals to work longer. Debt may also reduce the longevity of a household's accumulated financial assets and savings, which would have to be spent down to repay debt when income is more limited. Indebtedness, especially from high-interest consumer borrowing, could also leave elderly persons with fewer retirement resources in the face of health and other income shocks. For example, Munnell and Soto (2008) provide evidence that the recent decline in house prices marked by the 2007 subprime mortgage crisis is likely to reduce the retirement income security of about one-third of older households, notably those who extracted home equity lines of credit.8

Just as the consequences of debt are varied, so are its influences. On the macroeconomic level, broad financial and market conditions are prominent factors shaping household debt. Lower interest rates, for example, may encourage consumers to borrow more, especially in a booming economy. On the household level, actual or expected real income growth may promote demand for credit from consumers confident that they will be able to repay their debt. Likewise, a "wealth effect," whereby persons consume more as assets such as housing equity and 401(k) account values increase, may encourage persons to incur more debt regardless of whether their income grows (Belsky and Prakken 2004). Additionally, generational expectations about consumption and credit can influence

household debt. For example, baby boomers are often viewed as being more amenable to assuming debt than previous cohorts (Manning 2000).

A "life-cycle" perspective (Ando and Modigliani 1963) ties household debt levels to age. It suggests that younger workers, with relatively low earnings and few assets, will save little and borrow against their future earnings to finance consumption or a mortgage. As households enter their peak earning years (late middle ages), they save and begin paying off their debt. As they near retirement, their debt is expected to drop sharply, resulting in part from paying off mortgages on primary residences. Retirees then spend down their savings and tap into their accumulated assets to permit consumption beyond their immediate earning capacity. Some examples of recent studies giving empirical support to a life-cycle hypothesis of household assets and liabilities include Kennickell and Starr-McCluer (1997) and Yilmazer and DeVaney (2005).<sup>11</sup>

Even as debt generally declines with age, growing evidence shows considerable debt growth among the near-elderly population since the 1990s (Copeland 2006; Masnick and others 2006; McGhee and Draut 2004). Data from the SCF confirm this trend. The incidence of debt among families headed by persons aged 55 to 64 grew from 70.8 percent in 1989 to 76.3 percent in 2004. The median total debt of these families also rose, from \$14,000 in 1989 to \$48,000 in 2004, adjusted for inflation (Board of Governors 2004). 12

### Characteristics of Household Debt

Debt can be divided into several components. A typical portfolio consists of housing debt and consumer debt. Housing debt includes first mortgages, home equity loans, and other lines of credit on the household's primary and secondary residences. Consumer debt consists of revolving debt, such as credit card balances; and nonrevolving or installment debt, which must be paid at fixed intervals, such as automobile loans. Of the two broad categories, housing debt is generally viewed as more secure because it is backed by an asset. Compared with consumer debt, housing debt is also distinguished by lower interest rates, a longer time horizon, and favorable tax treatment.<sup>13</sup>

Evidence suggests that much of the recent growth in borrowing in the 1990s and early 2000s was driven by greater exposure to housing debt (Apgar and Di 2005; Li 2005; Masnick, Di, and Belsky 2006; Munnell and Soto 2008; Soto 2005). According to aggregate figures

from the Federal Reserve Board's Flow of Funds Accounts (2007, Table D3), mortgage debt accounted for about 76 percent of aggregate household debt in the first quarter of 2007, up from 70 percent in 1990. For households headed by near-elderly individuals, the trend is parallel. Data from the SCF show that the share of U.S. households headed by persons aged 55-64 with some form of home-secured debt rose from 37 percent in 1989 to 51 percent by 2004, while the inflation-adjusted median housing debt for these families increased from \$29,300 to \$83,000 in 2004 dollars (Board of Governors 2004). This upward shift follows several changes in the housing market over the past 15 years, notably historically low mortgage interest rates, the rapid appreciation of home prices, and the proliferation of flexible mortgage products (Joint Center for Housing Studies 2007).

Consumer debt has also grown since the 1990s (Kish 2006; Manning 2000; White 2007). Data from the SCF show that the percentage of U.S. families headed by persons aged 55-64 with credit card debt rose from 32.9 percent in 1989 to 42.1 percent in 2004, and during the same period, their mean credit card balance increased from \$2,600 to \$5,700, adjusted for inflation (Board of Governors 2004). This upward trend follows several noteworthy financial and market developments in the 1990s: the deregulation of the credit system and the expansion of lending to formerly credit-constrained households (Kish 2006); the tendency of baby boomers to have less adverse attitudes toward consumer credit than previous cohorts (Manning 2000); and the increase in the use of credit cards as a means of convenience (to pay for everyday goods and services) rather than solely to expand household consumption through credit (Brito and Hartley 1995; Duca and Whitesell 1995).14

This article examines the debt carried by two different cohorts as they approached Social Security's early eligibility age of 62 for retired-worker benefits. We examine the distribution of consumer and housing debt across household types, analyze its impact by relating debt levels to household income and assets, and identify subgroups that appear most vulnerable to high debt burdens in both near-retiree cohorts.

### Data and Methods

Data are from the 1995 and 2004 SCF. The SCF is considered one of the best sources of information on the financial characteristics of the U.S. population. It is a triennial cross-sectional survey sponsored by the Federal Reserve Board of Governors with the

cooperation of the Statistics of Income Division of the Internal Revenue Service. The survey collects data on household assets, debt, saving behavior, use of financial services, income, demographics, and labor force participation.<sup>15</sup>

The SCF uses a dual-frame sample consisting of both a standard random sample and a special oversample of wealthier households to correct for the underrepresentation of high-income families in the survey. The sampling frame requires that data from the SCF be weighted in descriptive analysis (Aizcorbe, Kennickell, and Moore 2003). The SCF also uses multiple imputation techniques to deal with missing data. This procedure creates five data sets called "implicates" (Kennickell, Starr-McCluer, and Sunden 1997).

Our analysis compares debt in families headed by near-retirees (workers aged 50-61) in 1995 with debt in families headed by near-retirees in 2004. Nearretirees in 1995 are largely from the war-baby cohort (1934–1945) and near-retirees in 2004 are largely from the leading edge of the baby-boom cohort (1943–1954). Selecting this age range gives us a window into the financial readiness of persons approaching retirement. As previously noted, debt by itself is not necessarily an indication of financial risk, but carrying debt later in life can have repercussions for retirement income security. Selecting near-retirees in 2004 and 1995 also enables comparison of the leading edge of the babyboom cohort with a previous cohort at the same life stage. Given the looming retirement of the large babyboom generation, it is important to study the financial well-being of those in its leading edge (Bridges and Choudhury 2007).

All references to "households" or "families" in this analysis correspond with the primary economic unit (PEU) as defined by the SCF. The PEU consists of an economically dominant individual or couple (married or living as partners) and all other individuals in the household who are financially interdependent with that individual or couple. If a couple is the dominant PEU, then the head is taken to be the male in a mixed-sex couple or the older individual in the case of a same-sex couple.<sup>17</sup>

Note that households headed by persons between the ages of 62 and 64 are excluded from our analysis so as to focus on households still in the labor market. Although survey data suggest that many baby boomers plan to work beyond Social Security's early retirement age of 62 (GAO 2006, 19), many will also begin drawing retired-worker benefits once they are eligible. 18

Furthermore, this study does not limit the definition of near-retirees to those aged 56–61 because doing so would produce small sample sizes for certain household subgroups. However, to capture potential differences between younger and older near-retirees, detail for two age subgroups (50–55 and 56–61) is provided in the analysis of the cohort samples.

Table 1 reports the characteristics of our weighted sample. The selection of households headed by individuals aged 50-61 yields an unweighted count of 880 families in 1995 and 1,240 families in 2004. An important observation is that the 2004 near-retiree sample was much better educated than its predecessor: The percentage with at least a college degree rose from 29 percent in 1995 to 43 percent in 2004.<sup>19</sup> Real income was higher in the 2004 near-retiree cohort, partly as a result of general wage growth during the period. The middle third of the income distribution for households headed by persons aged 50-61 ranged between \$30,264 and \$65,571 in 1995 (2004 dollars) and between \$36,968 and \$84,204 in 2004. About onequarter of the sample households in both survey years were headed by nonwhite persons, including African Americans, Hispanic Americans, Native Americans, and others. The proportion of married couples declined from 65 percent of the near-retirees in 1995 to 60 percent in 2004.

### Measures and Analysis

There are many ways to measure household debt. As a starting point, we examine the mean and median amounts of debt holdings as well as the incidence (percentage of families holding debt) across both nearretiree cohorts. Debt is then broken out into consumer and housing debt and their respective components. Consumer debt is decomposed into credit card debt, installment debt, and other lines of credit. Housing debt is divided into mortgage debt for the primary residence, home equity loans, and other residential housing debt.

Several other measures enable further analysis of the impact of debt on a household's financial circumstances. One useful indicator is the debt service ratio (DSR). DSR measures the portion of a household's monthly disposable income dedicated to required minimum principal and interest payments on housing and consumer debt such as mortgages, automobile loans, and credit cards. Rent payments are excluded.<sup>20</sup>

Another valuable gauge is debt relative to assets. We calculate a debt-to-assets ratio, equal to a household's combined consumer and housing debt relative

Table 1.
Weighted sample of U.S. families headed by persons aged 50–61, by selected characteristics, 1995 and 2004

Variable	1995	2004
Debt holders (%)	80	83 †
Age of family head (%) 50 to 55 56 to 61	55 45	54 46
Income thirds <sup>a</sup> (%) Lowest Middle Highest	33 33 33	33 33 33
Race and ethnicity of family head (%) White, non-Hispanic Nonwhite or Hispanic	77 23	75 25
Family head marital status <sup>b</sup> (%) Married Single man Single woman	65 10 25	60 * 14 * 26
Education of family head (%) Less than high school High school Some college College degree or higher	21 35 15 29	10 * 29 18 * 43 **
Number of households <sup>c</sup>	880	1,240

NOTE: Designated 2004 estimates differ significantly from the comparable 1995 estimate at the following levels (two-tailed tests):  $\uparrow$  < .10, \* < .05, \*\* < .01.

- a. Middle third: \$30,264–\$65,571 in 1995, \$36,968–\$84,204 in 2004
- Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.
- c. To better reflect the real sample size of near retirees, our unweighted count reflects the total number of observations (all five SCF implicates) divided by 5. For more details see Aizcorbe, Kennickell, and Moore (2003).

to its combined financial and nonfinancial assets. This measure indicates the assets that would have to be sold to cover debt. In short, the greater the ratio, the greater a household's debt in relation to its total assets, such as a home, automobile, or 401(k) plan.

As a final point of analysis, we examine the prevalence of high debt burdens. In this article, a high debt burden denotes a household spending more than 40 percent of its monthly income on debt service (that is, a DSR of more than 0.40), a commonly used cutoff (Copeland 2006; Lee, Lown, and Sharpe 2007).

Since debt is not distributed uniformly across households, we analyze the aforementioned measures across different demographic and socioeconomic subsets of near-retirees. Variables of interest include age, income, race/ethnicity, marital status, and educational level. Looking at debt among these subgroups allows us to evaluate differences in debt across different sections of the population and to identify segments potentially vulnerable to high debt burdens.

All estimates reported in this study are expressed in 2004 dollars and apply survey weights supplied in the datasets. Because of SCF's complex survey design, analysts cannot rely on typical procedures for variance estimation. The standard errors of proportions, means, and medians reported herein were computed using replicate sample weights provided by the Federal Reserve Board (results can be provided upon request).<sup>21</sup> Our standard errors take account of both sampling and imputation error (Rubin 1987). The statistical significance of differences in the proportions, means, and medians reported in this article were calculated using *Z*-score values. Statistical differences between comparable 2004 and 1995 estimates are denoted with superscripts in the tables.

It is important to keep in mind that this article assesses the debt trends of two cohorts approaching retirement in different years. The article analyzes the data from a descriptive framework and focuses primarily on measures of central tendencies. The analysis does not attempt to establish causation or address questions related to the influence of particular socioeconomic factors on debt. Conclusions about the influence of household characteristics on debt loads therefore should not be drawn.<sup>22</sup>

Furthermore, household-level debt trends do not occur in a vacuum and are influenced by a variety of structural and temporal factors. These include macroeconomic conditions, the housing and consumer credit market, and the regulatory environment, all of which have changed dramatically since 2004. For example, economic good times may promote more borrowing along with rising asset values, while credit may be more restrained in a falling economy. Asset valuations are also highly sensitive to market conditions. Although it is outside the scope of this article to quantify the contribution of such factors on debt levels, the analysis calls attention to important connections between observed outcomes and wider structural conditions during the period of study.

### Results

## Total indebtedness of near-retirees, 1995 and 2004 cohorts

Table 2 reports the mean and median debt amounts and the incidence of debt among near-retirees in 1995 and 2004. First, note the sizable differences in mean and median debt estimates across the board. One would expect the mean and median figures to be comparable if the distribution of debt were roughly similar above and below the midpoint. However, debt

levels, like many measures of income and assets, are heavily skewed with very high values concentrated among a relatively small portion of the population (and subgroups therein), which pulls the average away from the median.

Overall, the data reveal greater debt among the near-retiree cohort of 2004. This is indicated by a significant rise in median debt, from \$19,697 in 1995 to \$40,300 in 2004, and mean debt, from \$58,124 in 1995 to \$97,363 in 2004.<sup>23</sup> It is also evidenced by a rise in the proportion of near-retiree families holding debt,

Table 2. Household debt among families headed by persons aged 50–61: Mean and median amounts, and incidence, by selected characteristics, 1995 and 2004

		1995			2004	
Variable	Mean debt (\$)	Median debt (\$)	Families holding debt (%)	Mean debt (\$)	Median debt (\$)	Families holding debt (%)
All households	58,124	19,697	79.8	97,363 **	40,300 **	82.7 †
Debt holders	72,854	36,932	100.0	117,709 **	59,300 **	100.0
Age of family head 50 to 55 56 to 61	65,912 48,447	28,561 11,941	85.2 73.1	106,523 ** 86,607 **	52,000 ** 23,500 *	87.2 77.5
Income thirds <sup>a</sup> Lowest Middle Highest	20,283 43,950 112,469	4,924 20,928 68,817	66.7 84.7 88.6	26,392 † 74,536 ** 192,547 **	4,500 46,600 ** 130,000 **	70.9 88.0 89.4
Race and ethnicity of family head White, non-Hispanic Nonwhite or Hispanic	63,283 40,881	23,637 7,239	80.8 76.2	109,685 ** 60,045 **	48,400 ** 17,700	84.0 † 78.7
Family head marital status <sup>b</sup> Married Single man Single woman	72,525 44,697 25,463	32,254 7,977 5,909	83.4 72.6 73.0	128,633 ** 60,031 45,510 **	61,000 ** 17,000 9,600	87.2 † 72.9 77.6
Education of family head Less than high school High school Some college College degree or higher	23,650 40,966 60,603 101,492	6,586 17,087 24,006 42,361	65.9 78.7 87.6 87.0	20,840 47,602 92,346 * 150,580 **	1,000 * 20,100 45,000 † 84,500 **	63.7 79.2 90.8 86.0

SOURCE: Authors' calculations using the 1995 and 2004 Survey of Consumer Finances.

NOTES: All debt is measured in constant 2004 dollars. All observations are weighted for analysis.

Household debt includes housing debt (for example, primary residence mortgage, home equity lines of credit) and consumer debt (for example, credit card balances, installments).

Designated 2004 estimates differ significantly from the comparable 1995 estimate at the following levels (two-tailed tests): † < .10, \* < .05, \*\* < .01.

- a. Middle third: \$30,264-\$65,571 in 1995, \$36,968-\$84,204 in 2004.
- b. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

from 79.8 percent to 82.7 percent. Similar debt amount patterns occurred among the subsample consisting only of debt holders.

However, these general patterns were not experienced uniformly across household subgroups. Families headed by older individuals (aged 56–61) held less debt on average than younger near-retirees (aged 50–55); however, the average and median debt of both age groups were higher at a statistically significant level in 2004 than in 1995. As might be expected, there were sharp differences by income level, such that households with higher income also were those with the highest debt. For example, the median debt held by the top third of the income distribution in 2004 was \$130,000, compared with \$4,500 for the lowest third. Moreover, debt grew at a faster pace between 1995 and 2004 in the highest and middle income thirds than in the lowest third.

Heterogeneity in debt also appears by race/ethnicity, marital status, and educational attainment. The mean debt of both white and nonwhite near-retirees was significantly higher in 2004 than in 1995, but the mean and median amounts were significantly greater in white households in both years. Among marital status groups, married households held higher mean and median debt than those headed by single men and women in both years of analysis. Average debt was significantly higher in 2004 for married households and single women than for their counterparts in the 1995 cohort. Among educational groups, households with higher educational attainment were also those with the highest mean and median debt. Households headed by an individual with some college or with a college degree or higher recorded a significantly higher mean and median debt in 2004 than in 1995. By contrast, there was no statistical difference in mean debt among households headed by a high school graduate or a person with less than a high school diploma. The subgroup with the highest incidence of debt in 2004, at 90.8 percent, was households headed by a person with some college education.

Several structural developments likely contributed to these changes. The time span under examination was generally one of economic expansion in the United States. The U.S. economy grew rapidly in the 1990s, marked by real income gains, low unemployment, and low inflation (DeNavas-Walt, Proctor, and Lee 2006, Figure 1). Insofar as households believe that their income will rise faster than debt during periods of strong economic growth, more borrowing is likely

to follow periods of strong economic performance.<sup>24</sup> Between 1996 and 1999, the economy recorded a 4.4 percent average annual real GDP growth (Su 2007). After slowing in the early 2000s, economic performance strengthened by mid-2003 with employment growth. Another factor may relate to generational differences in attitudes toward debt. The near-retiree cohort in 2004 was mostly made up of older baby boomers, a group likely to have less adverse attitudes toward debt than earlier cohorts (Manning 2000). Developments in the housing market in the 2000s, and the corresponding rise in housing debt, are also important factors underlying growth in total debt, as is shown later in the article.

### Components of near-retirees' debt

Consumer debt. A better understanding of nearretirees' debt requires a more detailed analysis of their holdings. Table 3 focuses on the consumer debt of near-retirees in 1995 and 2004 and decomposes its associated components—credit card debt, installment loans, and other lines of credit. Credit card debt consists of revolving debt, or borrowing without fixed amounts and time horizons for repayment.<sup>25</sup> In contrast, installment debt is typically nonrevolving (or closed-ended), with fixed payments and terms; examples include automobile loans, student loans, and borrowing for durable goods such as furniture. Other consumer debt consists mainly of loans on the cash value of whole life insurance, loans against pension accounts, borrowing on margin accounts, and miscellaneous personal loans not explicitly categorized. Because the median amount of certain types of consumer debt was zero for some subgroups of near-retirees, Table 3 reports only the mean amount and the incidence of consumer debt (median amounts are provided in Appendix Table A.1).

Several differences between the cohorts stand out. Mean consumer debt grew significantly between 1995 and 2004, from \$10,665 to \$14,514, an increase of 36 percent. Of the types of consumer debt, credit card debt was about as common as installment debt, but the average amount of installment debt was larger. The 2004 cohort recorded increases in mean credit card debt over the 1995 cohort (from \$1,786 to \$2,824) and mean installment debt (from \$5,530 to \$8,683), but the overall incidence of these types of debt was relatively similar. Meanwhile, relatively large dollar amounts characterized "other consumer debt" among some demographic subgroups.

Table 3.

Consumer debt by type: Mean amount and incidence among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004

Variable	Mean consumer debt (\$)	credit card	Mean installment debt (\$)		Families with consumer debt (%)		Families with installment debt (%)	Families with other consumer debt (%)
				19	95			
All households	10,665	1,786	5,530	3,349	65.0	46.9	41.4	11.6
Debt holders	13,368	2,239	6,932	4,197	81.5	58.7	51.9	14.6
Age of family head 50 to 55 56 to 61	11,116 10,106	1,788 1,784	7,113 3,564	•	69.3 59.7	49.6 43.4	45.3 36.6	13.5 9.3
Income thirds <sup>a</sup> Lowest Middle Highest	5,176 6,583 20,618	1,527 1,351 2,503	3,133 4,382 9,229	850	58.1 71.1 66.2	41.6 51.9 47.2	32.6 47.4 44.5	13.0 6.7 15.2
Race and ethnicity of family head White, non-Hispanic Nonwhite or Hispanic Family head marital status b	11,466 7,988	1,827 1,650	5,474 5,718	4,165 621	64.2 67.9	44.6 54.3	42.1 39.0	11.2 13.0
Married Single man	13,255 8,442	1,850 2,285	7,148 2,237		68.1 57.2	50.9 33.9	45.8 29.9	12.2 15.9
Single woman	4,715	1,415	2,582	717	60.0	41.4	34.5	8.5
Education of family head Less than high school High school Some college College degree or higher	5,556 8,746 14,872 14,437	1,135 1,492 3,069 1,950	3,409 4,551 9,583 6,154	2,703 2,221	54.2 68.4 82.1 60.2	41.6 50.2 63.8 38.2	36.1 43.4 50.3 38.3	10.9 10.3 16.0

(Continued)

Although the incidence of consumer debt was generally widespread, there are some noteworthy differences across demographic subgroups. Mean consumer debt rises with income, a pattern observed for both cohorts. Similarly, households headed by individuals with a college degree or with some college held more consumer debt than lesser-educated groups. Near-retirees in the middle income group and with some college education had the highest incidence of consumer debt in both cohorts. The incidence and average amount of consumer debt held by households headed by an individual with less than high school education in the 2004 cohort was not statistically different from those of their 1995 counterparts. Mean consumer debt was significantly higher, however, among middle-income, white, nonwhite, married, and single female households.

The incidence of credit card debt was high among middle-income families and households headed by an individual with some college education. Installment borrowing was more prevalent among households with higher income and those headed by individuals with at least some college, particularly in 2004. Average credit card and installment debt rose substantially in single female-headed households during the period. On average, "other" consumer debt was relatively large in higher-income and more educated families.

**Housing debt**. Table 4 reports housing debt among near-retirees in 1995 and 2004. Housing debt is borrowing secured by real estate, which includes debt from conventional mortgage loans on the primary residence, home equity lines of credit, and mortgage loans on other residential properties. Because the median for

Table 3.

Consumer debt by type: Mean amount and incidence among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004—Continued

Variable	Mean consumer debt (\$)	Mean credit card debt (\$)			Families with consumer debt (%)	Families with credit card debt (%)	Families with installment debt (%)	Families with other consumer debt (%)
				200	04			
All households	14,514 *	2,824 **	8,683 **	3,006	68.7	48.2	45.4 †	9.0
Debt holders	17,547 *	3,415 **	10,498 **	3,635	83.0	58.3 **	54.9	10.9 †
Age of family head 50 to 55 56 to 61	14,442 † 14,598 †	3,232 ** 2,346 †	8,603 8,777 **	2,608 3,475	72.7 64.0	52.7 * 43.0	46.8 43.7 *	9.8 † 8.1
Income thirds <sup>a</sup> Lowest Middle Highest	5,353 12,216 ** 26,148	1,663 3,092 ** 3,737 †	3,401 8,162 ** 14,582 **	290 961 7,829	60.7 73.5 72.0	42.7 52.9 49.2	32.8 50.8 52.7 *	7.3 * 7.8 12.0
Race and ethnicity of family head White, non-Hispanic Nonwhite or Hispanic Family head marital status b Married	15,760 * 10,741 † 19,300 *	2,912 ** 2,558 * 3,388 **	9,176 ** 7,192 11,726 **	3,672 991 4,185	68.0 70.7 74.2 *	47.8 49.6 51.9	44.2 49.0 * 52.9 **	8.8 9.7 9.6
Single man Single woman	8,928 6,513 *	1,543 2,207 †	4,193 * 4,082 *	3,192 224 †	50.1 65.8	31.6 48.6	27.8 37.3	8.2 8.1
Education of family head Less than high school High school Some college College degree or	4,295 9,806 11,958	1,725 2,120 3,450	2,492 6,816 8,095	79 * 870 414 **	52.9 69.1 82.3	35.0 50.0 58.6	24.9 * 43.9 56.3	7.7 6.8 † 11.9
higher	21,123	3,284 **	11,616 **	6,223	66.2 †	45.7 †	46.4 *	9.6

NOTES: All debt is measured in constant 2004 dollars. All observations are weighted for analysis.

Designated 2004 estimates differ significantly from the comparable 1995 estimate at the following levels (two-tailed tests): † < .10, \* < .05, \*\* < .01.

- a. Middle third: \$30,264-\$65,571 in 1995, \$36,968-\$84,204 in 2004.
- b. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

some categories of housing debt, such as home equity, was zero, Table 4 reports only the mean amount and the incidence of housing debt (estimated medians are reported in Appendix Table A.2).

Comparing average housing debt between the 1995 and 2004 cohorts, considerable growth is evident almost across the board, with the overall mean rising from \$47,458 to \$82,849, an increase of about 74 percent. There is a particularly sharp increase in both the mean home equity debt (from \$1,417 to \$4,376) and the proportion of families that use it, from 4.6 percent

to 11.9 percent. When restricting the sample to households with debt, a similar pattern emerges.

With respect to subgroups, households headed by older individuals (aged 56–61) continued to have a lower mean amount and incidence of housing debt than younger ones (aged 50–55) in 2004. However, compared with their counterparts in 1995, older near-retirees had significantly larger mean housing debt in 2004 (\$72,009, up from \$38,341). As expected, the amount and incidence of housing debt rises with income, with the top income third recording a mean

Table 4. Housing debt by type: Mean amount and incidence among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004

	Mean	Mean	Mean home	Mean other residential	Families with	Families with	Families with home	Families with other residential
	housing	mortgage	equity debt		housing	mortgage	equity debt	
Variable	debt (\$)	debt <sup>a</sup> (\$)	(\$)	debt (\$)	debt (%)	debt <sup>a</sup> (%)		debt (%)
				1995	i			
All households	47,458	38,971	1,417	7,070	56.4	53.2	4.6	8.8
Debt holders	59,486	48,847	1,776	8,862	70.7	66.7	5.7	11.0
Age of family head								
50 to 55	54,796	46,430	1,344	7,022	61.9	59.0	5.0	8.9
56 to 61	38,341	29,703	1,509	7,130	49.5	45.9	4.1	8.7
Income thirds <sup>b</sup>								
Lowest	15,107	14,354	430	324	34.5	32.9	1.4	2.3
Middle	37,367	33,967	773	2,626	61.8	58.9	4.3	5.5
Highest	91,851	70,019	3,115	18,717	74.0	68.7	8.2	19.0
Race and ethnicity of family head								
White, non-Hispanic	51,817	42,352	1,647	7,817	60.5	57.0	5.1	9.4
Nonwhite or Hispanic	32,893	27,670	648	4,574	42.8	40.6	2.7	6.8
Family head marital								
status <sup>c</sup>								
Married	59,270	47,945	1,849	9,476	65.4	62.5	6.0	10.8
Single man	36,255	29,675	888	5,693	43.9	39.4	3.2	8.4
Single woman	20,748	18,992	489	1,267	37.6	34.0	1.4	3.6
Education of family head								
Less than high school	18,095	17,043	47	1,005	44.9	40.8	0.1	7.3
High school	32,220	25,896	1,480	4,844	54.1	51.6	3.0	6.3
Some college	45,731	36,882	1,627	7,178	52.8	52.1	6.4	7.8
College degree or								
higher	87,056	70,909	2,212	13,936	69.2	64.3	8.6	13.2
								(Continued)

(Continued)

housing debt of \$166,399 in 2004 compared with \$21,038 for the low-income group. Near-retirees in the higher- and middle-income groups show exceptionally large increases in mortgage debt in the 2004 cohort. Middle- and higher-income groups were also more likely to have borrowed against their home equity in the 2004 cohort. This result likely relates, at least in part, to dramatic increases in home prices during the period. According to Munnell and Soto (2008), one characteristic associated with an increased likelihood of taking on home equity debt is substantial home value appreciation.

The incidence and mean amount of housing debt also diverged by racial and ethnic group, marital status, and education. Mean mortgage debt increased for both white and nonwhite near-retirees in 2004 relative

to 1995, but was substantially higher for white households in both cohorts. Home equity lines of credit are considerably more prevalent in white households than in nonwhite households, and the gap widened from 1995 to 2004.

In terms of family status, housing debt increased across the board in 2004 relative to 1995. The mean housing debt increased more for married couples than single persons, but that is not to say that housing debt did not increase among single persons. Single women near retirement, for example, experienced a sharp increase in their mean housing debt from 1995 (\$20,748) to 2004 (\$38,997). Households headed by individuals with less than a high school diploma represented the only subgroup with lower and less prevalent housing debt in 2004 than in 1995.

Table 4. Housing debt by type: Mean amount and incidence among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004—Continued

Variable	Mean housing debt (\$)	Mean mortgage debt <sup>a</sup> (\$)		Mean other residential housing debt (\$)	Families with housing debt (%)	Families with mortgage debt <sup>a</sup> (%)	with home equity debt	Families with other residential housing debt (%)
				2004				
All households	82,849 **	66,265 **	4,376 **	12,207 †	59.5	54.7	11.9 **	7.0
Debt holders	100,162 **	80,113 **	5,291 **	14,758 †	71.9	66.1	14.4 **	8.4 †
Age of family head 50 to 55 56 to 61	92,081 ** 72,009 **	76,030 ** 54,801 **	4,811 ** 3,865 **	11,240 † 13,343	65.0 53.0	61.6 46.5	12.6 ** 11.0 **	7.1 6.7
Income thirds <sup>b</sup> Lowest Middle Highest	21,038 † 62,320 ** 166,399 **	19,370 54,935 ** 125,384 **	616 2,132 ** 10,460 **	1,052 5,253 30,555	33.5 67.2 78.2	31.5 61.7 71.1	3.3 14.3 ** 18.2 **	2.2 4.7 14.1 †
Race and ethnicity of family head White, non-Hispanic Nonwhite or Hispanic Family head marital status c Married	93,925 ** 49,304 * 109,334 **	73,582 ** 44,108 ** 86,604 **	5,537 ** 860 6,111 **	14,807 † 4,335	63.4 47.5 68.8	57.9 44.7 63.6	14.6 ** 3.8 14.4 **	8.2 3.3 † 7.9 †
Single man	51,103 †	40,537	1,769	8,797	46.0	38.5	8.2 *	8.3
Single woman  Education of family head Less than high school High school Some college College degree or	38,997 * 16,545 37,795 ** 80,388 *	33,292 ** 15,597 34,070 ** 60,562 *	1,778 411 1,335 3,604 †	3,927 † 538 2,390 † 16,197	45.1 † 28.8 ** 51.4 64.9 *	42.6 * 25.7 ** 47.7 59.5	8.2 ** 2.9 † 8.0 ** 13.7 *	4.0 0.2 ** 4.1 7.0
higher	129,457 **	102,001 **	7,664 **	19,792	69.6	63.9	15.8 **	10.4

NOTES: All debt is measured in constant 2004 dollars. All observations are weighted for analysis.

Designated 2004 estimates differ significantly from the comparable 1995 estimate at the following levels (two-tailed tests): † < .10, \* < .05, \*\* < .01.

- a. For mortgage loans on primary residence only.
- b. Middle third: \$30,264-\$65,571 in 1995, \$36,968-\$84,204 in 2004.
- c. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

Several factors related to the housing market help explain the observed expansion of housing debt among the 2004 near-retiree cohort. To begin with, historically low mortgage interest rates reduced the cost of borrowing for homeowners who may have wanted to "trade up" during the period or for renters who decided to purchase a home. In addition, substantial increases in home values, especially between 2001 and 2005, required new buyers to take on higher amounts of housing debt. According to the Standard & Poor's/

Case-Shiller Home Price Index, which tracks house prices for repeat sales, values appreciated more than 60 percent from 2000 to their peak, around the third quarter of 2006 (cited in Munnell and Soto 2008). <sup>26</sup> That being said, near-retirees may be more likely to scale down as they approach retirement than to scale up, and are more likely already to be homeowners than younger adults, particularly those in their 20s and 30s. There is also evidence that rapidly appreciating home prices, when combined with low interest rates,

provided homeowners with opportunities to tap into the value of their homes by taking out home equity lines of credit or refinancing for greater than the outstanding balance (Belsky and Prakken 2004; Hurst and Stafford 2004; Masnick, Di, and Belsky 2006; Munnell and Soto 2008).<sup>27</sup>

Innovations in mortgage loan products from 1995 to 2004 are an additional factor. The growth of the subprime credit market made housing loans more affordable and accessible to groups previously rejected for mortgage loans.<sup>28</sup> Although less important for the near-retiree group than for younger adults, adjustable-rate mortgages—which typically reduce monthly payments for the first several years—likely encouraged some households headed by older individuals to take on larger mortgage loans.<sup>29</sup>

These findings raise the question of whether housing debt growth among near-retirees will translate to a potential asset gain after retirement. It could be argued that housing debt is an investment, as evidence indicates that housing wealth represents the largest asset for the majority of Americans, including the baby boomers (GAO 2006, 20; Hurst, Luoh, and Stafford 1998; Lusardi and Mitchell 2006). However, the financial rewards of incurring more housing debt near retirement are not straightforward (Apgar and Di 2005). Large increases in housing debt between 1995 and 2004 paralleled home value appreciation. If home prices face sustained downward pressure, such as the recent downturn resulting from the 2007 subprime mortgage crisis, some near-retirees may have to sell their homes after retiring and move to a cheaper area or find cheaper housing through downsizing or renting to offset their large housing debt.

Decomposing debt into its components, though useful, does not assess the impact of that debt on household finances. There are several ways to evaluate the influence of debt on a family's financial circumstances.

**Debt service ratio (DSR)**. We begin by calculating near-retirees' DSR. The DSR is the ratio of monthly debt obligations (the estimated required monthly principal and interest payments on all outstanding mortgage and consumer debt) to monthly disposable (after-tax) family income.<sup>30</sup> The size of a household's debt payments is a function of a mix of complex terms of debt such as interest rate and time horizon. A low DSR (close to zero) indicates that a small share of monthly income is committed to debt repayment. A DSR greater than 1.0 would indicate that a household's

after-tax monthly disposable income is lower than its monthly required debt service payments.

Table 5 reports the mean and median DSRs for the 1995 and 2004 cohorts. Because high DSRs are concentrated among small portions of the population, some mean and median estimates differ widely. Caution should therefore be used in extrapolating average or median DSRs, especially within smaller subgroups.

Overall, despite the fact that the 2004 near-retiree cohort amassed significantly more total debt than its 1995 counterpart, median DSR grew modestly over the interval (from 0.11 to 0.13), and the difference in mean DSR between the cohorts is not statistically significant. This result parallels that in Soto (2005), which found a similar share of income devoted to debt service across the period despite sharp growth in total debt from 1992 to 2004.

One factor helping keep DSRs relatively stable even in the face of aggregate debt increases may be the growing use of home equity loans, which often require lower monthly payments than consumer debt (McConnell, Peach, and Al-Haschimi 2003). In addition, historically lower mortgage interest rates and the growth of adjustable rate and other nontraditional mortgage loans over the period would tend to keep monthly payments relatively low for the 2004 cohort, at least for the short term. It is also noteworthy that real wages of the average worker grew sharply relative to inflation in the late 1990s and early 2000s (Mishel, Bernstein, and Allegretto 2005, Chapter 2).

Table 5 also reveals a diversity of DSRs across households with different characteristics. There are relatively small differences in the average and median DSRs between older and younger near-retirees. Lowerincome near-retirees had an average DSR more than twice that of the top income group, but their median DSR was lower. This difference reflects a concentration of high DSRs in a relatively small segment of low-income families. It may also reflect the exclusion from the DSR calculation of rent payments, which tend to be concentrated in lower-income groups. A large disparity between the mean and median is also found among households headed by single women, whose average and median shares of income dedicated to debt payments were noticeably greater for the 2004 cohort than for the 1995 cohort. Middle-income families in 2004 had a significantly higher mean DSR (at .10 level) than their counterparts in 1995.

With respect to educational attainment, households headed by individuals with some college had relatively

Table 5.

Mean and median debt service ratio (DSR)<sup>a</sup> among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004

	1995		2004	
Variable	Mean DSR	Median DSR	Mean DSR	Median DSR
All households	0.21	0.11	0.22	0.13 *
Debt holders	0.26	0.15	0.27	0.17 *
Age of family head				
50 to 55	0.21	0.12	0.23	0.15 **
56 to 61	0.20	0.10	0.21	0.11
Income thirds b				
Lowest	0.31	0.07	0.33	0.08
Middle	0.17	0.13	0.20 †	0.17 *
Highest	0.14	0.11	0.14	0.13 *
Race and ethnicity of family head				
White, non-Hispanic	0.21	0.11	0.22	0.13 *
Nonwhite or Hispanic	0.20	0.08	0.24	0.14 *
Family head marital status <sup>c</sup>				
Married	0.20	0.13	0.18	0.14
Single man	0.34	0.07	0.15	0.10
Single woman	0.19	0.08	0.37 **	0.13 *
Education of family head				
Less than high school	0.18	0.09	0.15	0.03 †
High school	0.22	0.11	0.17 †	0.12
Some college	0.31	0.13	0.41	0.19 *
College degree or higher	0.17	0.11	0.20	0.14 **

NOTES: All income and debt measures were estimated in 2004 dollars. All observations are weighted for analysis.

Designated 2004 estimates differ significantly from the comparable 1995 estimate at the following levels (two-tailed tests): † < .10, \* < .05, \*\* < .01.

- a. Defined as the ratio of required monthly housing and consumer debt payments (excluding rent) to monthly disposable personal income.
- b. Middle third: \$30,264-\$65,571 in 1995, \$36,968-\$84,204 in 2004.
- c. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

high mean and median DSRs in both years of analysis. In contrast, relatively low mean and median DSRs were recorded for high school graduates or less, which again may be related, in part, to the exclusion of rent from the measure. Recall that Table 4 showed that high school dropouts had the lowest proportion of families with housing debt, at 28.8 percent in 2004.

**Debt-to-assets ratio**. Another way to evaluate the impact of debt on household finances is to examine whether assets have been increasing along with debt. An increase in debt is not likely to lead to greater financial risk if that household has experienced corresponding gains in assets. Moreover, whether a household views asset appreciation as temporary or permanent may affect its willingness to take on new debt.

Table 6 presents the mean and median debt-to-assets ratios for the 1995 and 2004 cohorts. This measure divides the value of total household debt by the sum of the value of all its financial and nonfinancial assets. A high ratio indicates high household debt relative to the value of its asset portfolio.<sup>31</sup> Put another way, the higher the ratio, the more likely a household would face difficulties repaying its debts if its income was abruptly halted or its assets declined in value. A debt-to-assets ratio greater than 1.0 indicates negative net worth.

As with the DSR, the distribution of the debt-to-assets ratios is highly skewed, resulting in large differences between the mean and median.<sup>32</sup> Furthermore, given that housing is the largest nonpension asset among near-retirees, as it is for the majority of the U.S.

Table 6.

Mean and median debt-to-assets ratio<sup>a</sup> among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004

	1995		2004	
Variable	Mean ratio	Median ratio	Mean ratio	Median ratio
All households	0.44	0.13	0.68	0.16 **
Debt holders	0.55	0.18	0.82	0.22 *
Age of family head				
50 to 55	0.37	0.16	0.74 **	0.21 **
56 to 61	0.52	0.08	0.61	0.10
Income thirds b				
Lowest	0.86	0.09	1.50	0.11
Middle	0.24	0.14	0.31 **	0.19 *
Highest	0.19	0.12	0.21	0.16 *
Race and ethnicity of family head				
White, non-Hispanic	0.26	0.12	0.32	0.15 *
Nonwhite or Hispanic	1.02	0.16	1.75	0.20
Family head marital status <sup>c</sup>				
Married	0.28	0.14	0.29	0.16 †
Single man	0.28	0.11	0.73	0.07
Single woman	0.91	0.08	1.54	0.17 *
Education of family head				
Less than high school	0.29	0.11	1.35 *	0.09
High school	0.29	0.11	1.05 *	0.14
Some college	1.35	0.16	0.71	0.24 †
College degree or higher	0.26	0.13	0.26	0.16 †

NOTES: All income and debt measures were estimated in 2004 dollars. All observations are weighted for analysis.

Designated 2004 estimates differ significantly from the comparable 1995 estimate at the following levels (two-tailed tests): † < .10, \* < .05, \*\* < .01.

- a. Defined as the ratio of a household's combined consumer and housing debt to combined financial and nonfinancial assets. Financial assets include liquid assets, certificates of deposit, directly held mutual funds, stocks, bonds, savings bonds, cash value of whole life insurance, other trusts, annuities, and managed investment accounts. Nonfinancial assets include value of all vehicles, primary residence, other residential real estate, net equity in nonresidential real estate, and business interests.
- b. Middle third: \$30,264-\$65,571 in 1995, \$36,968-\$84,204 in 2004.
- c. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

population (Hurst, Luoh, and Stafford 1998), home prices play an important role in influencing household assets. Consequently, a sharp decrease in home values would potentially increase a household's debt-to-assets ratio.

Overall, the 2004 near-retiree cohort recorded a slightly higher median debt-to-assets ratio than the 1995 cohort.<sup>33</sup> If the calculation is restricted to debt holders only, the trend is similar. Large differences between the mean and median (for example, 0.68 mean compared with 0.16 median in 2004) stem, in part, from a concentration of high debt-to-assets ratios among a relatively small portion of both cohorts.

Debt-to-assets ratios also vary according to house-hold characteristics. For the lowest income group, the medians were considerably smaller than the corresponding means, implying a concentration of high levels of debt relative to assets among a small segment of low-income families. The average and median debt-to-assets ratios were significantly higher for middle-income families in 2004 than for their predecessors in 1995. For the top income group, the mean debt-to-assets ratio in 2004 was essentially unchanged relative to 1995, but the median was modestly higher. Debt-to-assets ratios also diverge by marital status and education level. Single women nearing retirement

had a significantly higher median debt-to-assets ratio in 2004 than in 1995. Note however that the median is much smaller than the mean in both years, reflecting a concentration of exceptionally high debt-to-assets ratios among a small portion of single women. Similarly, near-retirees without a high school diploma saw a significant jump in their mean debt-to-assets ratio, from 0.29 in 1995 to 1.35 in 2004, but recorded a much lower median figure in both years. This pattern of a sharply lower median relative to mean was present in all educational groups.<sup>34</sup>

Prevalence of high debt burdens. As a final line of analysis, Table 7 reports the distribution of near-retirees with high debt burdens.<sup>35</sup> For the purposes of this analysis, a high debt burden is indicated if the DSR exceeds 0.40 (debt service payments exceed 40 percent of family income). Because it can be argued that such families are more likely to experience financial distress due to debt, the 40 percent cutoff is commonly used in studies of household debt (Copeland 2006; Lee, Lown, and Sharpe 2007).

Overall, Table 7 indicates that the higher total debt carried by the 2004 cohort did not translate to a higher share of near-retirees with high debt burdens (10.3 percent in 1995 and 9.6 percent in 2004). As noted previously, this pattern may relate, in part, to the increasing use of home equity to reduce monthly debt payments in a period of low interest rates and rising home prices.

A more diverse picture emerges across subgroups. For example, the share of high-income families with high debt burdens was small, and was significantly lower in 2004 (1.7 percent) than in 1995 (4.3 percent). The share of families headed by a person with a college degree with high debt burdens was also significantly lower among the 2004 cohort. Conversely, although the absolute value of debt tended to be much lower among lower-income near-retirees, a strikingly higher fraction of low-income families had high debt burdens, both in 1995 (17.3 percent) and in 2004 (17.6 percent). This is consistent with other data suggesting that debt is more likely to be a financial burden for low-income households with little wealth (Mishel, Bernstein, and Allegretto 2005, Table 4.16).

Another noteworthy subgroup was single female-headed households, whose share with a high debt burden was 10.3 percent in the 1995 cohort and 16.2 percent in the 2004 cohort. The share of heavily indebted households was relatively high among nonwhite near-retirees (12.2 percent in 1995 and

Table 7.
Percentage of families headed by persons aged 50–61 that carry high debt burdens,<sup>a</sup> by selected characteristics, 1995 and 2004

Variable	1995	2004
All households	10.3	9.6
Debt holders	12.9	11.6
Age of family head 50 to 55 56 to 61	10.5 10.0	11.0 8.0
Income thirds <sup>b</sup> Lowest Middle Highest	17.3 8.9 4.3	17.6 9.4 1.7 *
Race and ethnicity of family head White, non-Hispanic Nonwhite or Hispanic	9.7 12.2	7.9 14.6
Family head marital status <sup>c</sup> Married Single man Single woman	9.8 13.3 10.3	7.4 6.6 16.2
Education of family head Less than high school High school Some college College degree or higher	9.9 8.7 13.7 10.6	11.0 9.9 17.4 5.8 *

SOURCE: Authors' calculations using the 1995 and 2004 Survey of Consumer Finances.

NOTES: Monthly minimum debt payments and monthly income were measured in 2004 dollars. All observations are weighted for analysis.

Designated 2004 estimates differ significantly from the comparable 1995 estimate at the \* < .05 level (two-tailed tests).

- High debt burden is indicated if debt service payments exceed 40 percent of household income.
- Middle third: \$30,264–\$65,571 in 1995, \$36,968–\$84,204 in 2004.
- Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

14.6 percent in 2004), compared with households headed by white individuals (9.7 percent in 1995 and 7.9 percent in 2004). Among households headed by a person with some college education, the share with large debt service payments was relatively high in both cohorts. Such trends may reflect, in part, the extension of housing and consumer credit since the 1990s to households that would not have qualified for loans previously (Dynan, Johnson, and Pence 2003).

### **Conclusions**

The implications of debt for retirement income security are of interest to researchers and policymakers. A primary reason policymakers may care about debt among older Americans relates to potential interactions between debt and retirement outcomes. Debt near retirement may affect how long a person works, how much he or she saves, and the longevity of his or her accumulated financial assets in old age. The type and level of debt relative to income for a person nearing retirement may also affect the relative importance of Social Security benefits in retirement.

Using the SCF, this study compared general patterns of the debt holdings of a near-retiree cohort in 2004, the majority of which is part of the leading edge of the baby-boom generation, to a cohort in 1995, the majority of which is part of the war-baby generation. Overall, the results provide evidence of some differences in the debt carried by the two cohorts as they approached retirement. Compared to their 1995 predecessors, 2004 near-retirees had sharply higher mean and median total debt. Much of this increase appears to be driven by taking on greater amounts of housing debt rather than consumer debt. Despite this growth, we observe only a modest increase in the median DSR between the two cohorts, and no statistical difference in their respective average DSRs. However, the DSR measure may underestimate the share of households that will have high debt burdens as it may reflect "teaser" interest rates on adjustable rate mortgages or consumer debt. Relative to assets, the average debt of the 2004 cohort was not significantly different from its 1995 predecessor, giving evidence of a connection between rising assets and debt during the period (Soto 2005). However, near-retirees' median debt-to-asset ratios did increase slightly between 1995 and 2004.

As in previous work (Aizcorbe, Kennickell, and Moore 2003; Copeland 2006; Lee, Lown, and Sharpe 2007), our findings indicate the importance of family characteristics in the use of debt and its impact on household finances. For example, estimates show that increases in mean and median debt between the 1995 and 2004 cohorts were greater for high-income and higher-educated near-retirees, particularly with respect to mortgage and home equity credit. Although total debt is considerably higher for such households, signs

of financial distress due to debt appeared elsewhere in the population. For example, we observed substantially greater debt burdens (families devoting more than 40 percent of their income to debt service) among lowincome, less-educated, nonwhite and single-female near-retiree households in both 1995 and 2004.

Although debt patterns among near-retirees may provide insights into the financial circumstances of future retirees, caution should be used in extrapolating our findings to the retirement preparedness of the leading edge of the baby-boom cohort. An important remaining question relates to the impact of housing debt, the largest share of near-retirees' debt, on future retirement income security. Housing debt is secured by a home, which is often considered to be an asset. The consequences of taking on more housing debt later in life will depend on structural factors such as the condition of the general economy, the direction of the housing market, and prevailing interest rates. For example, if the value of a home increases over time, the debt associated with it can be eliminated by liquidating the asset. However, if overall economic conditions reduce a home's value, then having more housing debt in retirement could negatively impact a household's financial well-being. The downward adjustment in home prices that began in late 2006, coupled with the subprime credit market crises (Joint Center for Housing Studies 2007), raises serious questions about the potential effects of a prolonged housing downturn on the retirement income security of near-retirees with large amounts of housing debt.<sup>36</sup>

Additional research on debt patterns among the older population would be fruitful. One avenue of future work would focus on the emerging consequences of the economic and financial crises on near-retirees after 2004, particularly their debt-to-assets ratios. Essentially, the two periods observed in this paper were fairly similar in reflecting, in a sense, the tops of two bubbles: asset valuations and borrowing. In this context, the relative stability in debt-to-assets ratios observed across the two cohorts may not be surprising.

Another area to examine further is the extent to which debt reduces household savings for retirement, such as a 401(k) account, and how different types of debt may mediate this relationship. The higher debt

level carried by baby boomers nearing retirement relative to earlier cohorts also raises the question of whether high debt loads encourage older adults to delay retirement in order to pay down their debt before claiming Social Security retirement benefits. There is also the issue of untangling the factors underlying debt growth, and how debt may be used differently

across subgroups. Multivariate analysis that focuses on establishing the factors driving debt loads among older Americans would be valuable. Finally, the impact of financial education programs informing consumers about the potential risks of approaching retirement with high debt obligations may also be of interest.

### Appendix

Table A.1.

Consumer debt by type: Median amount (in 2004 dollars) among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004

		19	95			20	04	
Variable	All consumer debt	Credit card debt	Installment debt	Other consumer debt	All consumer debt		Installment debt	Other consumer debt
All households	1,847	0	0	0	4,100	0	0	0
Debt holders	4,924	369	308	0	7,300	400	2,300	0
Age of family head 50 to 55 56 to 61	2,831 1,231	0	0	0	5,040 3,200	180 0	0	0
Income thirds <sup>a</sup> Lowest Middle Highest	616 1,847 5,417	0 66 0	0 0 0	0 0 0	550 7,200 9,000	0 250 0	0 1,900 3,100	0 0 0
Race and ethnicity of family head White, non-Hispanic Nonwhite or Hispanic Family head marital status b	1,847 1,847	0 99	0	0	4,270 4,000	0	0	0 0
Married Single man Single woman	3,570 862 431	12 0 0	0 0 0	0 0 0	7,000 90 1,610	190 0 0	2,400 0 0	0 0 0
Education of family head Less than high school High school Some college College degree or	259 1,600 4,924	0 62 616	0 0 222	0 0 0	210 3,700 8,000	0 60 400	0 0 1,800	0 0 0
higher	1,847	0	0	0	5,050	0	0	0

SOURCE: Authors' calculations using the 1995 and 2004 Survey of Consumer Finances.

NOTE: All observations are weighted for analysis.

a. Middle third: \$30,264–\$65,571 in 1995, \$36,968–\$84,204 in 2004.

b. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

Table A.2. Housing debt by type: Median amount (in 2004 dollars) among families headed by persons aged 50–61, by selected characteristics, 1995 and 2004

		19	95		2004			
Variable	All housing debt	Mortgage debt <sup>a</sup>	Home equity line of credit debt		All housing debt	Mortgage debt <sup>a</sup>	Home equity line of credit debt	
All households	8,618	4,678	0	0	29,000	20,000	0	0
Debt holders	24,622	18,466	0	0	50,000	43,000	0	0
Age of family head 50 to 55 56 to 61	14,773 0	12.311 0	0	0	43,000 9,600	37,000 0	0	0
Income thirds <sup>b</sup> Lowest Middle Highest	0 13,542 57,861	0 12,311 34,470	0 0 0	0 0 0	0 37,000 112,000	0 30,000 86,000	0 0 0	0 0 0
Race and ethnicity of family head White, non-Hispanic Nonwhite or Hispanic Family head marital status <sup>c</sup>	14,773 0	10,464 0	0	0	38,000 0	29,000	0	0
Married Single man Single woman	20,190 0 0	14,773 0 0	0 0 0	0 0 0	50,000 0 0	43,000 0 0	0 0 0	0 0 0
Education of family head Less than high school High school Some college	0 6,155 4,924	0 1,847 4,924	0 0 0	0 0 0	0 4,500 39,000	0 0 35,000	0 0 0	0 0 0
College degree or higher	36,932	27,084	0	0	70,000	55,000	0	0

NOTE: All observations are weighted for analysis.

a. For mortgage loans on primary residence only.

b. Middle third: \$30,264-\$65,571 in 1995, \$36,968-\$84,204 in 2004.

c. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

### Notes

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- <sup>1</sup> This study analyzes trends before the financial market crisis starting in 2007. The findings are thus based on an economic environment that has changed significantly since the analyzed data were collected. As new data become available, it will be vital to undertake further analysis of debt among older Americans to ascertain how trends have changed since 2004.
- <sup>2</sup> The theme of debt among older Americans has also been highlighted by the popular media in recent years (for example, see Bayot 2004 and Dugas 2002).
- <sup>3</sup> The number of Americans who filed for personal bankruptcy rose from 288,000 in 1980 to 1.5 million in 2004, an increase more than five-fold (White 2007).
- <sup>4</sup> "Baby-boom generation" typically refers to persons born from 1946 to 1964.
- <sup>5</sup> About 78 million Americans born between 1946 and 1964 were living in 2005. As the baby-boom cohort retires, the share of the U.S. population aged 65 or older is projected to rise from 12.4 percent in 2000 to 19.6 percent in 2030 (GAO 2006).
- <sup>6</sup> See also Apgar and Di (2005), McGhee and Draut (2004), and Soto (2005).
- <sup>7</sup> For example, Cavanagh and Sharpe (2002) and Yuh, Montalto, and Hanna (1998) found that households with credit card or installment debt had significantly smaller accumulations on discretionary retirement savings balances.
  - <sup>8</sup> See also Masnick, Di, and Belsky 2006.
- <sup>9</sup> A large body of work has focused on the interaction between household debt and macroeconomic factors, such as the effect of credit and liquidity constraints on consumer debt (Min and Kim 2003).
- <sup>10</sup> Housing wealth is less liquid than financial assets. The greater the amount of assets, the more able (and willing) such households will be to take on more debt and pay off that debt.
- <sup>11</sup> Using the 2001 SCF, Yilmazer and DeVaney (2005) provide evidence that households reduce their debt as they approach retirement and that the ratio of total debt to assets tends to decrease with age.
- <sup>12</sup> During the same period, the mean debt per household with debt holdings increased from \$46,700 to \$113,600 (in 2004 dollars). Summary tables can be found in the *2004 Survey of Consumer Finances Chartbook*, available at

- www.federalreserve.gov/pubs/oss/oss2/2004/scf2004home html
- <sup>13</sup> The Tax Relief Act of 1986 (TRA-86) phased out the deductibility of consumer interest paid before taxes over a 5-year period, but kept the deductibility of interest paid for housing debt.
- <sup>14</sup> There are many other factors that may have contributed to the rise in consumer debt. McConnell, Peach, and Al-Haschimi (2003) argue that a historically low savings rate promoted an increase in debt. Another possible factor involves the interaction between economic growth, consumer expectations of income growth, and consumer debt trends.
- <sup>15</sup> Lindamood, Hanna, and Bi (2007) provide useful summary of methodological issues in the SCF.
- <sup>16</sup> About two-thirds of the respondents are selected from a standard multistage area-probability design, which provides coverage of characteristics broadly distributed in the population. However, since many assets are not widely distributed among households, the survey oversamples wealthy households from a "list sample" derived from tax records. Sample weights offset the effect to reflect the national population.
- <sup>17</sup> The use of head of household reflects a means of analyzing the data based on the structure of SCF files, not as a basis of judgment of household responsibility.
- <sup>18</sup> For example, in 2004, about 58 percent of current retirees elected their benefits at the early retirement age of 62 (Reznik, Shoffner, and Weaver 2005/2006, Table 4).
- <sup>19</sup> Changes reported in this paper, such as shifts in educational attainment or debt levels among near-retirees, inevitably reflect a mix of period and cohort effects that are difficult to disentangle. For example, in the case of debt, trends can be influenced by period effects such as macroeconomic conditions. They can also be influenced by birth cohorts, which may have differing attitudes toward debt or consumption. Age can also influence debt trends, but our analysis implicitly controls for this by using samples of the same age in their respective periods. See Fienberg and Mason (1979) and Lauderdale (2001) for more general discussion on strategies to deal with age, period, and cohort effects in analysis of social and economic events.
- <sup>20</sup> More detailed information on the DSR is available in Dynan, Johnson, and Pence (2003).
- <sup>21</sup> The SCF uses a bootstrap technique to obtain standard errors and follows a standard weighting algorithm designed by the Federal Reserve Board. For more details, readers should refer to the SCF Codebook. Estimates reported in this article reflect the average of all five SCF implicates. This approach yields the same substantive results as not averaging the SCF implicates.
- <sup>22</sup> Although this article does not aim to explain the factors influencing debt from a multivariate framework,

we wanted to confirm the global significance of the demographic and socioeconomic subgroups selected to assess debt across different population segments. An F-test statistic allows us to assess whether the subgroups in our system (as independent variables) are jointly statistically different from zero.

To compute the F-test, we ran a series of multivariate ordinary least square regression models for Tables 1–6 where the subgroups were employed as independent variables (dummy format), with the corresponding debt outcome as the dependent variable. Each year (cohort) was estimated separately. As an example, for Table 2, we regressed total near-retiree debt on dummy variables created from the age, income, race, marital status, and education subgroups for the years 1995 and 2004.

As expected, the F values allow us to reject the null hypothesis that the variables jointly do not help explain the debt measure, with 0.95 confidence for all tables (and both years), with the exception of Table 3 for 1995 and 2004. Such findings generally confirm the selection of the subgroups used in our descriptive analysis.

- <sup>23</sup> The narrowing of the mean-to-median ratios indicates a modest increase in the equality of debt distribution among the 2004 near-retiree cohort.
- <sup>24</sup> Credit and liquidity constraints also influence levels of household debt (see Min and Kim 2003).
- <sup>25</sup> Most credit cards, such as Visa, MasterCard, Discover, store cards, and others, allow the borrower to carry a balance forward from month to month.
- <sup>26</sup> Between 2000 and 2004, the median price of a single family home in the U.S. rose from \$148,170 to \$184,100 (Joint Center for Housing Studies 2005).
- <sup>27</sup> An important line of research not elaborated upon here involves how the elderly use housing equity to smooth their consumption during retirement (Venti and Wise 2001).
- <sup>28</sup> These groups include subprime or high risk borrowers—people with a credit rating below "A" (Li 2005).
- <sup>29</sup> In terms of the regulatory environment, the Taxpayer Relief Act of 1997 (TRA-97) excused more of the profits of home selling from capital gains taxes, giving further incentives for homeownership. That is to say, the ensuing loss of deductibility of consumer debt provided homeowners with incentives to shift away from consumer debt and toward second mortgages and home-equity lines of credit (Maki 2001).
- <sup>30</sup> When constructing the DSR variable, we avoided dividing by values of zero by assigning an income value of \$100 for those respondents with zero income. This was done to avoid removing families with zero income, which would have introduced a potential bias in the sample. In both years of analysis the weighted share of households with zero income was relatively small, 1.6 percent in 1995 and 0.3 percent in 2004. This procedure should not be confused with imputation of missing data.

- <sup>31</sup> Specific financial assets used in calculating debt-to-asset ratio include liquid assets, certificates of deposit, directly held mutual funds, stocks, bonds, savings bonds, whole life insurance (cash value), other trusts, annuities, and managed investment accounts. Nonfinancial assets include vehicles, primary residence, other residential real estate, net equity in nonresidential real estate, and business interests.
- <sup>32</sup> To avoid dividing by values of zero, we assigned an asset value of \$100 for those households with zero assets. This was done to avoid removing the families with zero assets, which would have introduced a potential bias in the sample. In both years of analysis the weighted share of households with zero assets was relatively small, 3.1 percent in 1995 and 2.2 percent in 2004. This procedure should not be confused with imputation of missing data.
- <sup>33</sup> The difference in mean ratios between 1995 and 2004 appears substantial but is not statistically significant because the standard errors are large.
- <sup>34</sup> It should be noted that declines in home prices since the 2004 survey was administered may lower the asset side of a household's balance sheet if that household also took out a home equity line of credit during that time, at least in the short term. According to Munnell and Soto (2008), between 2001 and 2008, taking on more home equity debt for the typical household headed by an individual aged between 50 and 62 in 2004 brought about a 14 percent decline in net worth (adjusting for the present discounted value of future rents).
- <sup>35</sup> See DeVaney (1994) for more information on the concept of using ratios to measure a household's overall financial health.
- <sup>36</sup> For more information on the impact of housing and home equity on retirement well-being see Munnell and Soto (2008) and Sinai and Souleles (2007).

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