RETIRING IN DEBT? AN UPDATE ON THE 2007 NEAR-RETIREE COHORT

by Chris E. Anguelov and Christopher R. Tamborini*

This research note uses 2007 Survey of Consumer Finances (SCF) data to update the authors' work reported in a prior article, which used earlier data to assess debt levels among households approaching retirement in 1995 and 2004. The authors assess whether there have been changes in the debt holdings of near-retirees in 2007, a point in time reflecting the start of the recent financial and economic crisis. Results show that debt levels of near-retirees were modestly higher in 2007 than in 2004, overall and across several subgroups. The results reinforce a general finding of the original article that current near-retirees, primarily baby boomers, are approaching retirement with more debt compared with their counterparts in the mid-1990s. Because the 2007 SCF data captures only the beginning of the current recession, the authors expect future trends to differ from the results presented here.

Introduction

Debt, particularly among older Americans, may have important implications for retirement savings (Securian Retirement 2009; Munnell and Soto 2008; Cavanagh and Sharpe 2002; Yuh, Montalto, and Hanna 1998). It may also influence the timing of the retirement transition, as highly indebted individuals may need to work longer to pay off that debt. Although not a financial risk by itself, debt can affect retirement income security, and in general, indicates less financial cushion for the debt holder.

The main purpose of this research note is to update Anguelov and Tamborini (2009), which used earlier versions of the Federal Reserve Board's Survey of Consumer Finances (SCF) to assess debt levels and prevalence among households approaching retirement in 1995 and 2004. Using the recently released 2007 SCF, this note documents whether there have been changes in the debt holdings of near-retirees in 2007, a point in time reflecting the start of the recent financial and economic crisis, relative to 2004.¹

Our analysis compares estimates of debt in families headed by near-retirees (aged 50–61) from the 2007 SCF with similar tabulations for the same age group from the 2004 SCF, reported in Anguelov and Tamborini (2009). Because this analysis captures only the beginning of the current recession and housing downturn, we expect that future trends will differ from the results presented here. However, looking at 2007 estimates is a useful way to examine near-retiree debt at the onset of the financial crisis relative to 2004, a year which essentially reflected the top of a bubble in asset valuations and borrowing.² It also permits investigation of the extent to which increases in debt levels and prevalence found in the 2004 near-retiree cohort, relative to their 1995 counterparts, continue in the 2007 cohort.

The summary measures used in our analysis offer different ways to assess debt. We first report the mean and median debt holdings, as well as the prevalence (percentage holding debt) across both the 2004 and 2007 near-retiree cohorts.³ To assess the impact of debt on a household's financial status, we report the household's debt service ratio (DSR), the prevalence of high-debt burdens and debt relative to assets. Because household debt is not uniform across the population,

^{*} Chris E. Anguelov is with the Division of Policy Evaluation, Office of Research, Evaluation, and Statistics (ORES), Office of Retirement and Disability Policy (ORDP), Social Security Administration (SSA). Christopher R. Tamborini is with the Office of Retirement Policy, ORDP, SSA.

Note: Contents of this publication are not copyrighted; any items may be reprinted, but citation of the Social Security Bulletin as the source is requested. To view the Bulletin online, visit our Web site at http://www.socialsecurity.gov/policy. The findings and conclusions presented in the Bulletin are those of the authors and do not necessarily represent the views of the Social Security Administration.

the summary measures are analyzed across several key demographic and socioeconomic subsets of nearretirees defined by age, income, and marital status. Further, because observing debt levels at the population level can mask the impact of debt among debt holders, we present separate estimates for debt holders across those characteristics.

Overall, we expect the more recent 2007 cohort of near-retirees to exhibit higher debt levels than their counterparts in 2004. This expectation is based on our previous results (Anguelov and Tamborini 2009), which showed an increase in the debt of near-retirees from 1995 through 2004 and on the onset of the financial crisis in 2007.

Results: 2004 and 2007

The mean, median, and prevalence of debt among near-retirees in 2004 and 2007, overall and among debt holders only, are shown in Table 1.⁴ On the whole, we observe greater levels of debt among the 2007 nearretiree cohort. Mean debt increased by nearly 16 percent from \$106,769 in 2004 to \$123,715 in 2007, while the median debt rose by an even greater rate of 38 percent, from \$44,261 in 2004 to \$61,000 in 2007. Among debt holders only, an upward pattern is also evident.

Table 1 also shows that general debt levels were not experienced uniformly across all demographic subgroups. Older near-retirees (aged 56–61), as a whole and among debt holders only, experienced greater increases in average debt than near-retirees who were somewhat younger (aged 50–55). Individuals in the lowest third of the income distribution had a higher percentage increase in average total debt from 2004 to 2007 than those with higher incomes. Married and single female near-retirees experienced notable rises in their median total debt.

Consumer and Housing Debt among Near-Retirees

Consumer debt is the focus of Table 2, which shows that near-retirees as a whole experienced little change in all three measures of consumer debt (mean, median, and prevalence) from 2004 to 2007. However, statistically significant increases in consumer debt are observed among some subgroups. For example, lowerand middle-income families and single women experienced increases in their mean consumer debt. Median consumer debt of lower-income families nearly tripled, and that of single women rose more than twofold. When the sample was restricted to consumer debt holders only, many of these increases were not statistically significant. This suggests that increases in mean debt are due, in part, to increases in prevalence of debt.

Table 3 shows housing debt among near-retirees in 2004 and 2007. Among all near-retiree households, there is significant increases in mean and median housing debt and its prevalence. Among the subgroups, statistically significant increases in mean housing debt were registered by older near-retirees and lower- and higher-income households, as well as married households. Part of this increase was driven by a higher prevalence in housing debt among such subgroups. We observe a similar upward pattern of housing debt when the sample is restricted to households with housing debt; however, the differences become nonsignificant.

Debt Service Ratio, Debt Burden, and Debt Relative to Assets

One method to evaluate the actual impact of debt on the financial circumstance of near-retirees is to examine their DSR. The DSR is calculated as the ratio of monthly debt obligations (referring to the estimated monthly payments to service all existing debt), to monthly disposable family income (after tax).⁵ Consequently, the smaller the DSR, the smaller the share of monthly income committed to debt repayment. For the purposes of this analysis, a high-debt burden is indicated by a DSR exceeding 40 percent of family income, a common cut-off point in the literature (Copeland 2006; Lee, Lown, and Sharpe 2007).

Table 4 reports the mean and median DSR for the 2004 and 2007 near-retiree cohorts, as well as the percentage of households with high-debt burdens for the overall population (including zeros) and among debt holders only. The median DSR of near-retirees remained virtually unchanged from 2004 to 2007, but their mean DSR increased by a third. The share of near-retiree households with high-debt burdens rose from 9.6 percent in 2004 to 13.5 percent in 2007. A clear upward trend in the prevalence of highly debt-burdened families is also present when the sample is limited to debt holders only. Such patterns provide evidence that more near-retiree families were financially burdened by debt in 2007 as compared with 2004.

Among the subgroups, the most notable increase in mean DSR levels from 2004 to 2007 was experienced by the lowest third of the income distribution (0.30 to 0.45), single men (0.15 to 0.30), and married house-holds (0.18 to 0.28). Even near-retirees with the highest income that we observe registered an increase in their mean DSR level. A notable upward shift in median DSR levels in 2007 was recorded by older near-retirees

Table 1.

Household debt among families headed by persons aged 50–61: Mean and median amounts and prevalence, by selected characteristics, 2004 and 2007

					Families with household det			
	Mean household debt (\$)		Median household debt (\$)		(%)			
Characteristic	2004	2007	2004	2007	2004	2007		
	All near-retiree households							
All households	106,769	123,715 *	44,261	61,000 *	82.7	84.9 †		
Age of family head								
50–55	116,903	124,074	58,758	71,900	87.2	87.8		
56–61	94,908	123,256 *	26,359	48,800 *	77.5	81.3		
Income thirds								
Lowest	28,988	39,206 *	4,942	10,000 †	70.9	73.9		
Middle ^a	81,861	87,656	52,717	66,400 †	88.0	90.0		
Highest	211,252	245,172 †	142,776	162,500	89.4	91.0		
Family head marital status ^b								
Married	141,111	160,962 †	66,995	90,500 †	87.2	88.3		
Single men	64,796	74,579	18,671	13,000	72.9	76.1		
Single women	49,945	58,899	11,093	24,000 †	77.6	81.2		
	Household debt holders only							
Household debt holders Age of family head	129,079	145,712 †	65,128	83,030 *	100.0	100.0		
50–55	134,067	141,372	77,209	89,000	100.0	100.0		
56–61	122,510	151,694 †	51,180	71,600 *	100.0	100.0		
Income thirds		<i>,</i> .		,				
Lowest	40,847	53,074 †	16,474	23,600	100.0	100.0		
Middle ^a	93,048	97,388	62,602	78,500 †	100.0	100.0		
Highest	236,226	269,304 †	161,447	187,000	100.0	100.0		
Family head marital status ^b								
Married	161,943	182,244	97,747	111,830	100.0	100.0		
Single men	90,171	97,964	41,515	30,000	100.0	100.0		
Single women	64,258	72,526	38,440	46,600	100.0	100.0		

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

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 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* p < .05 and † p < .10.

a. Middle third: \$40,607-\$92,492 in 2004; \$43,192-\$93,582 in 2007.

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

(0.11 to 0.14) and by lower-income households (0.08 to 0.14). Married households also had a higher median DSR in 2007 compared with 2004.

The upward shift in median DSR levels appears to be driven partly by a rise in the proportion of nearretirees with high-debt burdens (DSR>0.40). The percentage of high income near-retirees with high-debt burdens, for example, increased roughly two and a half times (1.7 percent to 6.1 percent), and the proportion of households led by single men with high-debt burdens increased almost one and a half times. The share with high-debt burdens also increased considerably among younger near-retirees, lower-income families, and married households. These patterns hold when the sample is restricted to debt holders only. Because DSR is essentially a measure of the share of disposable monthly income devoted to servicing debt payments, the increase in the share of highly debt-burdened

Table 2.

Consumer debt among families headed by persons aged 50–61: Mean and median amounts and prevalence, by selected characteristics, 2004 and 2007

					Families with con	sumer debt	
	Mean consumer debt (\$)		Median consumer debt (\$)		(%)		
Characteristic	2004	2007	2004	2007	2004	2007	
	All near-retiree households						
All households	15,911	16,719	4,503	5,070	68.7	70.9	
Age of family head							
50–55	15,848	17,755	5,535	6,000	72.7	73.3	
56–61	15,983	15,398	3,515	3,600	64.0	68.0	
Income thirds							
Lowest	5,882	7,412 †	604	1,800 †	60.7	65.1	
Middle ^a	13,416	16,771 *	7,908	8,950	73.5	79.3 †	
Highest	28,661	26,110	9,885	7,000	72.0	68.6	
Family head marital status ^b							
Married	21,163	21,692	7,688	7,200	74.2	72.6	
Single men	9,799	6,788	99	1,000	50.1	60.2 †	
Single women	7,138	9,848 *	1,768	4,000 †	65.8	72.7	
	Consumer debt holders only						
Consumer debt holders Age of family head	23,164	23,568	12,081	12,000	100.0	100.0	
50–55	21,805	24,238	11,686	11,500	100.0	100.0	
56–61	24,971	22,646	12,300	12,000	100.0	100.0	
Income thirds							
Lowest	9,676	11,385	5,052	6,340	100.0	100.0	
Middle ^a	18,265	21,153	14,388	13,000	100.0	100.0	
Highest	39,830	38,059	19,769	17,400	100.0	100.0	
Family head marital status ^b	·		·	•			
Married	28,537	29,901	15,266	16,000	100.0	100.0	
Single men	19,512	11,269 *	10,983	8,460	100.0	100.0	
Single women	10,855	13,549 †	6,590	7,000	100.0	100.0	

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* p < .05 and † p < .10.

a. Middle third: \$40,607-\$92,492 in 2004; \$43,192-\$93,582 in 2007.

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

households may be particularly problematic for nearretirees with low income.

Another way to assess the impact of debt on a household's financial circumstance is to examine the ratio of a household's total debt to the sum of its financial and nonfinancial assets. The higher the ratio, the more likely a household would face difficulties repaying its debts if its income was abruptly halted or assets declined in value. A debt-to-assets ratio greater than 1.0 indicates negative net worth. Table 5 presents the mean and median debt-to-assets ratio for the 2004 and 2007 cohorts, overall and among debt holders only. Overall, estimates show statistically similar mean and median debt-to-assets ratios among near-retirees.⁶ Among the subgroups, our results show only two, somewhat incongruent, statistically significant outcomes with respect to changes in the ratio. Specifically, older near-retirees had a statistically significant increase in their median debt-to-assets ratio, which went up from 0.10 in 2004 to 0.14 in 2007. Among older near-retirees who held debt, the mean debt-to-assets

Table 3.

Housing debt among families headed by persons aged 50–61: Mean and median amounts and prevalence, by selected characteristics, 2004 and 2007

	Mean housing debt (\$)		Median housing debt (\$)		Families with housing debt		
Characteristic	2004	2007	2004	<u>9 debt (</u> ه) 2007	(%) 2004	2007	
	All near-retiree households						
All households	90,859	106,996 *	31,850	48,000 †	59.5	63.9 †	
Age of family head							
50–55	101,055	106,319	47,226	55,000	65.0	66.5	
56–61	78,925	107,859 *	10,543	27,000	53.0	60.4 †	
Income thirds							
Lowest	23,106	31,794 †	0		33.5	40.4 †	
Middle ^a	68,445	70,885	40,636	54,000	67.2	68.5	
Highest	182,591	219,063 †	123,007	138,000	78.2	83.0	
Family head marital status ^b							
Married	119,947	139,370 †	54,914	75,000 *	68.8	72.4	
Single men	55,997	67,791	0	,	46.0	45.0	
Single women	42,806	49,051	0	10,000	45.1	52.9 †	
	Housing debt holders only						
Housing debt holders Age of family head	152,877	167,580	94,452	100,000	100.0	100.0	
50–55	155,570	159,789	94,451	105,000	100.0	100.0	
56–61	149,012	178,528	94,452	91,000	100.0	100.0	
Income thirds	,	,	,	,			
Lowest	69,024	78,628	51,619	60,000	100.0	100.0	
Middle ^a	101,927	103,507	82,371	84,000	100.0	100.0	
Highest	233,526	263,922	155,956	175,000	100.0	100.0	
Family head marital status ^b	·		·	·			
Married	174,278	192,244	114,221	125,000	100.0	100.0	
Single men	121,953	150,757	76,880	79,000	100.0	100.0	
Single women	94,939	92,767	65,897	79,000	100.0	100.0	

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from the comparable 2004 estimates at the following levels (one-tailed tests):

* p < .05 and † p < .10.

a. Middle third: \$40,607-\$92,492 in 2004; \$43,192-\$93,582 in 2007.

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

ratio recorded a statistically significant decrease (0.82 to 0.35). However, upon closer inspection of the distribution of the ratio among this group, the apparent drop in their mean ratio appears to be driven almost entirely by outliers at the 99th percentile. More specifically, the debt-to-assets ratio of near-retirees aged 56–61 in 2004 and 2007 is similar across most of the percentiles (10th, 25th, 50th, 75th, 90th, 95th). The differences lie at the 99th percentile (and above), which was around 7.7 in 2004 compared with 2.0 in 2007. Among older near-retirees who held debt, the debt-to-assets ratio at the 99th percentile was 11.0 in 2004 compared with 4.4 in 2007. Both sets of estimates show a sharp decrease at the 99th percentile from 2004 to 2007. To account for this difference, our analysis includes both the median and the mean debt-to-assets ratios, as the former is less affected by the presence of outliers than the latter.

Conclusions

Using the 2007 SCF to update Anguelov and Tamborini (2009), this research note shows that the overall debt levels of near-retirees in 2007 were modestly higher

Table 4.

Mean and median debt service ratio (DSR)^a and percent carrying high-debt burdens^b among families headed by persons aged 50–61, by selected characteristics, 2004 and 2007

	M 50	D			Households with E	OSR > 0.40		
	Mean DS 2004	R 2007	Median DS 2004	2007	(%)	2007		
Characteristic	2004	2007	2004	2007	2004	2007		
	All near-retiree households							
All households	0.21	0.28 *	0.14	0.15	9.6	13.5 *		
Age of family head								
50–55	0.22	0.28	0.15	0.16	11.0	15.8 *		
56–61	0.21	0.27	0.11	0.14 †	8.0	10.6		
Income thirds								
Lowest	0.30	0.45 †	0.08	0.14 *	17.6	23.4 *		
Middle ^c	0.20	0.21	0.17	0.20	9.4	10.8		
Highest	0.14	0.17 *	0.14	0.13	1.7	6.1 *		
Family head marital status ^d								
Married	0.18	0.28 *	0.14	0.16 *	7.4	10.4 †		
Single men	0.15	0.30	0.10	0.10	6.6	16.4 *		
Single women	0.33	0.25	0.12	0.16	16.2	19.7		
	Debt holders only							
Debt holders	0.26	0.33 †	0.17	0.19 †	11.6	15.9 *		
Age of family head				·				
50–55	0.25	0.32	0.18	0.19	12.6	18.0 *		
56–61	0.27	0.33	0.16	0.18	10.3	13.0		
Income thirds								
Lowest	0.42	0.61	0.19	0.25 †	24.7	31.7 †		
Middle ^c	0.23	0.23	0.19	0.22	10.7	12.0		
Highest	0.16	0.18	0.15	0.15	1.9	6.7 *		
Family head marital status ^d								
Married	0.20	0.32 *	0.16	0.19 *	8.5	11.7 †		
Single men	0.20	0.39	0.17	0.16	9.1	21.5 *		
Single women	0.43	0.31	0.21	0.20	20.8	24.2		

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* p < .05 and † p < .10.

- a. Defined as the ratio of required monthly housing and consumer debt payments (excluding rent) to monthly disposable personal income.
- b. High-debt burden is indicated if debt service payments exceed 40 percent of household income.
- c. Middle third: \$40,607-\$92,492 in 2004; \$43,192-\$93,582 in 2007.
- d. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

than in 2004. This result reinforces a general finding of our previous work that current near-retirees comprised primarily of persons from the baby-boom generation—are approaching retirement with more debt compared with their counterparts in the mid-1990s.

Our updated estimates reveal a substantial increase in the share of high debt-burdened near-retirees in 2007 relative to 2004, overall and across a number of subgroups. This pattern suggests that because of debt, more recent cohorts will reach retirement age with less financial cushion than their predecessors. A noteworthy finding emerging from our analysis of subgroups is that lower-income households experienced considerable increases in average total debt, consumer debt, and housing debt levels from 2004 to 2007. More problematic in terms of financial well-being, the analysis reveals sharp relative increases in the mean and median DSRs in lower-income households

Table 5.

Mean and median debt-to-assets ratio^a among families headed by persons aged 50–61, by selected characteristics, 2004 and 2007

Characteristic	Mean debt-to-assets	ratio	Median debt-to-assets ratio				
	2004	2007	2004	2007			
	All near-retiree households						
All households	0.70	0.86	0.16	0.18			
Age of family head							
50–55	0.76	1.31	0.21	0.22			
56–61	0.63	0.28	0.10	0.14 *			
Income thirds							
Lowest	1.57	2.05	0.11	0.16			
Middle ^b	0.31	0.29	0.19	0.22			
Highest	0.21	0.22	0.16	0.16			
Family head marital status ^c							
Married	0.29	0.30	0.16	0.19			
Single men	0.77	1.50	0.07	0.07			
Single women	1.61	1.89	0.17	0.20			
	Debt holders only						
Debt holders	0.85	1.01	0.22	0.23			
Age of family head							
50–55	0.87	1.45	0.25	0.26			
56–61	0.82	^d 0.35 *	0.17	0.19			
Income thirds							
Lowest	2.21	2.77	0.29	0.32			
Middle ^b	0.35	0.33	0.24	0.25			
Highest	0.24	0.24	0.18	0.18			
Family head marital status ^c							
Married	0.33	0.34	0.20	0.22			
Single men	1.05	1.97	0.18	0.18			
Single women	2.07	2.33	0.31	0.24			

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* p < .05 and † p < .10.

- 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, the cash value of whole life insurance, other trusts, annuities, and managed investment accounts. Nonfinancial assets include the value of all vehicles, primary residence, other residential real estate, net equity in nonresidential real estate, and business interests.
- b. Middle third: \$40,607-\$92,492 in 2004; \$43,192-\$93,582 in 2007.
- c. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.
- d. This drop in the mean ratio is almost entirely driven by differences in the outliers at the 99th percentile between 2004 and 2007. The debt-to-assets ratio of near-retirees aged 56–61 in 2004 and 2007 is similar across much of the percentile distribution (10th, 25th, 50th, 75th, 90th, 95th).

in 2007, as well as a rising share with a DSR of over 40 percent.

Our results do not capture the full impact of the financial crisis, which manifested at the end of 2007 and in 2008.⁷ As more recent data become available,⁸ further analysis of debt levels and their impact on

the financial circumstance of near-retirees would be beneficial. Another avenue to explore is change in the composition of debt, particularly in times of weak economic growth. For example, an increase over time in high-interest unsecured debt (debt not backed up by assets) may reduce a borrower's ability to repay the debt by requiring that a larger portion of a household's income go toward servicing this debt. Other valuable research topics may include analysis of the extent to which debt affects the savings rates of near-retirees or the age at which older Americans claim Social Security retirement benefits. One question to examine with data that more fully capture the financial crisis is how it has affected the asset side of near-retiree household balance sheets. For example, downward directions in stock and home prices, without corresponding reductions in debt, would tend to lead to rising debt-to-assets ratios.

Notes

¹ For further description of the SCF, see Anguelov and Tamborini (2009) and Lindamood, Hanna, and Bi (2007).

² Data for the 2007 SCF was collected from May 2007 to March 2008. The majority of the interviews were conducted before the end of 2007 (Kennickell 2008).

³ Debt is divided into two parts: consumer and housing. Consumer debt includes credit card and installment debt, such as automobile loans. Housing debt includes mortgage, residential, and other residential housing debt, such as debt on properties other than the principal residence, time shares, and vacation homes.

⁴ The demographic characteristics of the two crosssectional samples of near-retirees in 2004 and 2007 are statistically similar. Standard errors were computed using replicate sample weights provided by the Federal Reserve Board (results can be provided by the authors upon request). This method produces standard errors that take into account both sampling and imputation errors (Rubin 1987). We use one-tailed tests based on our expectations of an increase in debt. All results discussed in this study are significant at least at the 90 percent confidence level unless otherwise indicated. Note that all dollars are adjusted to 2007.

⁵ When constructing the DSR variable, we avoided dividing by values of zero by assigning a value to income equal to \$100 for those respondents with \$0 income (0.3 percent in 2004 and 0.8 percent in 2007). Had we not done this, we would have had to remove the families with \$0 income, which would have introduced a potential bias. When constructing the debt-to-assets ratio variable, we avoided dividing by values of zero by assigning a value to assets equal to \$100 for those respondents with \$0 assets (2.2 percent in 2004 and 1.2 percent in 2007).

⁶ The standard deviation of the debt-to-assets ratio in 2007 is around two and a half times greater than that of the 2004 ratio, indicating greater variation in the ratio of the most recent cohort.

⁷ According to a press release by the Bureau of Labor Statistics, the recession in the United States economy did not start until December 2007 (http://www.bls.gov/news .release/empsit.nr0.htm).

⁸ To provide more up-to-date information on the effects of the economic and financial crises, the Federal Reserve Board conducted a special study of the Survey of Consumer Finances in 2009. Although the SCF is typically administered every 3 years and is cross sectional, the board reinterviewed participants in the 2007 survey in 2009 to collect data on respondents' more recent financial circumstances. Data from this survey are expected to be available by the end of 2010 (Board of Governors 2009).

References

- Anguelov, Chris E., and Christopher R. Tamborini. 2009. Retiring in debt? Differences between the 1995 and 2004 near-retiree cohorts. *Social Security Bulletin* 69(2): 13–34.
- [Board of Governors] Board of Governors of the Federal Reserve System. 2009. Press release, July 27, available at http://www.federalreserve.gov/newsevents/press/ other/20090727a.htm.
- Cavanagh, Joyce A., and Deanna L. Sharpe. 2002. The impact of debt levels on participation in and level of discretionary retirement savings. *Financial Counseling and Planning* 13(1): 47–62.
- Copeland, Craig. 2006. Debt of the elderly and near elderly, 1992–2004. *EBRI Notes* 27(9): 2–13.
- Kennickell, Arthur B. 2008. The bitter end? The close of the 2007 SCF field period. SCF Working Paper. Washington, DC: Federal Reserve Board. Available at http:// www.federalreserve.gov/pubs/oss/oss2/papers/asa2008 .complete.1.pdf.
- Lee, Yoon G., Jean M. Lown, and Deanna L. Sharpe. 2007. Predictors of holding consumer and mortgage debt among older Americans. *Journal of Family and Economic Issues* 28(2): 305–320.
- Lindamood, Suzanne, Sherman D. Hanna, and Lan Bi. 2007. Using the Survey of Consumer Finances: Some methodological considerations and issues. *Journal of Consumer Affairs* 41(2): 195–222.
- Munnell, Alicia, and Mauricio Soto. 2008. The housing bubble and retirement security. CRR Working Paper No. 2008-13. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Rubin, Donald B. 1987. *Multiple imputation for nonre*sponse in surveys. New York, NY: John Wiley & Sons.
- Securian Retirement. 2009. Debt: The detour on America's road to retirement. Securian's 2009 Survey of Financial Values and Debt, available at http://www.securian.com/Securian/Debt.
- Yuh, Yoonkyung, Catherine Phillips Montalto, and Sherman Hanna. 1998. Are Americans prepared for retirement? *Financial Counseling and Planning* 9(1): 1–13.