Balance Sheet Changes among Pre-retirement Cohorts during the 1990s: How Do Boomers Compare?

This analysis compares the balance sheet of the first baby boomer cohort with the balance sheet of those born during the twelve years prior to 1945 in order to contrast changes between 1989 and 2001 for both groups and to compare the financial status of the two groups at the same age using inflation-adjusted dollars. The comparison illustrates differences in investing and borrowing behavior between the cohorts and provides insight into the relative financial strength of boomers as they approach retirement. Mean wealth of older boomers is higher than mean wealth of pre-boomers at the same age, however median wealth did not change and net worth among lower-middle wealth groups declined.

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Introduction

Baby boomers may exhibit fundamental savings and spending patterns that differ from the cohort born immediately prior to the boomers (the pre-boomers). It has been noted that those born in the decade prior to 1946 exhibit "striking differences" to baby boomers, most notably that "baby boomer households have saved less and have taken on more debt" (Francese, 2001). Such observations may seem self-evident from anecdotal observation, however no study directly compares the magnitude and distribution of accumulated wealth among the baby boom cohort to the cohort immediately preceding the boomers.

Although it is tempting to point to examples of overt materialism as a symptom of a generational unwillingness to maintain the financial moderation needed to prepare for retirement, there is some evidence that baby boomers may not necessarily be worse off financially than their parents' generation (Keister, 2000). It is possible that boomers have borrowed and spent without regard to future financial consequences, however it is also possible that boomers have set aside more than might be assumed, for example through defined contribution plans and increases in home equity. It is also possible that trends toward increased equity investment coupled with strong returns during the 1990s have led to wealth gains that accrue to only a segment of the baby boom generation.

This study explores nationally representative data on asset and liability holdings by early boomers, those born between 1946 and 1957, and pre-boomers, born between 1934 and 1945, for each three-year period between 1989 and 2001. A comparison of financial statements between pre-boomers in 1989 and early boomers in 2001 will provide the first direct comparison of wealth between the two cohorts at an identical cohort age, where debt and asset accumulation adjusted for inflation will provide a clearer understanding of the relative financial strength of boomers. This study will also compare the whether the characteristics of boomers in the highest and lowest wealth categories differ from those of the pre-boomers.

Review of the Literature

Recent studies of boomer financial status have focused on three aspects of that status: retirement income adequacy, wealth or net worth, and debt levels.

Boomer Retirement Income Adequacy

As the baby boom generation has aged, both the media and academic researchers have focused increasing attention on the issue of whether or not Boomers have adequate retirement savings. Media headlines such as "More Workers Can't Afford to Retire" (Dugas, 2003) or "Boomers are Good at Saving, but Not Good Enough" (Svensson, 2003) paint a dismal picture of boomers who either must continue working past the conventional retirement age of 65 or drastically ratchet down consumption during retirement to even have a chance to make ends meet.

Conclusions about retirement income adequacy within the research community are somewhat mixed, however. Results turn on such things as the comparison group selected, the measure of adequacy used, assumptions about real rates of return and life expectancy, and the data set utilized (Congressional Budget Office, 2003).

Some studies have compared the income and wealth levels of boomers to the levels achieved by the previous generation. This work has generally found that, except for those with low levels of education or non-homeowners, boomers had more financial resources than their predecessors did at the same age. The savings rate for both generations is about the same (Congressional Budget Office, 1993; Easterlin, Schaeffer, Macunovich, 1993; Sabelhaus & Manchester, 1993). Easterlin and his co-authors (1993) cite lower fertility rates and women's increased labor force participation as the predominant reasons for the gains that boomers made over their predecessors.

Other studies have compared projected income for boomers at retirement age against the income and asset levels of current retirees (AARP, 1994; Kotlikoff and Auerbach, 1994). These studies present a relatively optimistic picture of boomers who, taken as a group, will generally be able to maintain or exceed their current consumption levels at retirement. For those in the lowest income quintile, approximately four-fifths of the income used to support their consumption in retirement is expected to come from Social Security. For those in higher income quintiles, a greater proportion of income is expected to come from pension and income-generating assets.

Still other studies judge sufficiency by comparing projected boomer financial status at retirement against a calculated standard of need. The theoretical basis for this work is the permanent income hypotheses, which presumes that people act to maintain a certain level of consumption across time, saving excess in times of plenty and drawing down savings in times of lack. This set of studies has defined "adequate income" variously as being above the official poverty threshold (Toder et al., 2002), as replacing at least 80% of pre-retirement income (Gustman & Steinmier, 1998; Gist, Wu & Ford, 1999; Warshawsky & Ameriks, 2000) or as maintaining pre-retirement consumption levels (Moore & Mitchell, 1997; Yuh, Montalto, & Hanna, 1998). These studies typically use statistical models and assumptions about real rates of return and life expectancy to project boomer income to a future point in time. Of course, conclusions of these studies are sensitive to changes in these assumptions.

Results of studies that compare boomer financial status at retirement to a standard of need are mixed. Toder et al (2002) projects that poverty rates among boomers will fall. Chances of maintaining pre-retirement levels of income and consumption are somewhat more pessimistic, however. For a series of studies completed between 1993 and 1997, Bernheim conducted phone surveys with around 2,000 Boomer households to obtain measures of expected retirement income from Social Security and pensions as well as from private savings (See Bernheim, 1993, 1995, 1996, 1997). The collected data were then used as input into a statistical model that projected future levels of income and wealth. He decided that boomers were saving only about one-third of the amount needed to adequately fund their retirement. Bernheim's work has since been criticized for assuming low real rates of return and for excluding home equity. Gale (1997) concluded that when home equity was included in boomer wealth, boomer prospects at retirement were more optimistic. At least a third of boomers, according to Gale (1997) were adequately prepared for retirement by any measure, a third were ready by some standards but not others, and the remainder was not adequately prepared. Reaching a similar conclusion, Moore and Mitchell (1997) assert that around 30 to 40 percent of boomer households can preserve consumption levels (assuming retirement at age 62 or later). Yuh et al (1998), on the other hand, conclude that a little over half of boomer households are on track for retirement. Gist et al (1999) recommended that Boomers who currently are not prepared for retirement increase their savings from 3 to 29 percent of annual income, depending on presence or absence of a pension plan and on assumptions about longevity. In general, this line of research suggests that, while high-income boomers can likely retire at age 62 or later and maintain pre-retirement levels of income or consumption, other Boomers are at risk of falling short of that goal. These boomers will have to either work longer or adjust post-retirement consumption levels downward.

<u>Boomer Wealth</u>

Using Survey of Consumer Finance data for 1989, 1992, 1995, 1998, and 2001 Gist and Wu (2004) document rising wealth inequality among the boomer generation. Between 1989 and 2001, the bottom three wealth quintiles experienced minimal change in the proportion of wealth held. At the same time, the share of wealth held by the top 10 percent of the wealth distribution increased by almost 7 percentage points and that of the top 5 percent by over 10 percentage points. Every year between 1989 and 2001, the top 1 percent of the wealth distribution held more wealth than the bottom 80 percent. The top-heavy nature of boomer wealth inequality is echoed in studies of the broader population, indicative of the influence of the boomer cohort (Danzinger & Gotschalk, 1995; Karoly, 1993; Keister, 2000; Ryscavage, 1999; Weinberg, 1996; Wolff, 2002).

Growth in wealth may be due to rising value of previously purchased investment assets or acquisition of investment assets. The strong bull market of the 1990s likely contributed to both events for many investors. Yao, Hanna, and Lindamood (2004) note that the reported level of risk tolerance in the Survey of Consumer Finances varied across 1983 to 2001. In general, financial risk tolerance appeared to increase in response to increases in stock returns and to decrease in the wake of declines in stock value. To the extent that investors acted consistently with reported risk tolerance, increased stock purchase during the bull market would be expected.

Using Panel Study of Income Dynamics data for 1984, 1989, and 1994, Gittleman & Wolff (2004) examined race differences in patterns of accumulating assets. They conclude that whites devote a greater portion of their income to saving, but the difference in savings rate by race is not significant once income differences are controlled. Keister (2000) had similar findings.

Gist, Wu, and Verma (2004) use SCF data and different measures of wealth to explore the wealth distribution of boomers. They note a rise in wealth holdings over time for all wealth levels. Median net worth of boomers tripled between 1989 and 2001, rising from $35,951 to $107,150 in 2001 dollars. Excluding housing equity from the net worth measure drops the dollar value of wealth, but it still triples from $13,410 to $50,700. They found higher levels of net worth for whites, men, married couples, older persons, families with children, homeowners, and defined benefit plan holders. Using multivariate analysis, they discovered that, having a defined benefit plan resulted in lower savings rates, ceteris paribus, suggesting that defined benefit plans substituted for rather than augmented other forms of retirement savings. Tracy, Schneider and Chan (1999) note that while rapid growth of the stock market during the 1990s fueled the perception that stocks dominated household portfolios, actually residential real estate continued to represent the lion's share of most household portfolios.

Retirement debt trends

Recently, concern has arisen regarding debt levels of the nation's senior population. The National Association of Consumer Bankruptcy Attorneys (NACBA) notes that, during 2001, over a quarter million Americans aged 55 and older declared bankruptcy. Over the past 10 years, the number of Americans 65 and older filing for bankruptcy has tripled, making this the fastest growing age group in the bankruptcy courts. Indications are that the boomer generation is quite likely to follow this same trend (AccountingWeb, 2004). Warren (2003) notes that rather than excessive spending on credit cards for non-necessity items, the main factors leading to bankruptcy are job loss (and consequent income loss), medical costs, marital disruption, and cost of caring for other family members. Expectations are that, to the extent that Boomers have relatively high levels of mortgage and consumer debt, the risk of bankruptcy for this group increases if an economic catastrophe occurred.

Method

Description of Data

Data for this research are from the Surveys of Consumer Finances (SCF) for the years 1989, 1992, 1995, 1998, and 2001. The SCF is primarily designed to measure wealth of American households. The survey questions cover detailed information concerning U.S. family balance sheets in addition to income, labor force participation, use of financial services and pensions, and other demographic characteristics.

The Board of Governors of the Federal Reserve System in conjunction with the United States Department of the Treasury has been sponsoring data collection for the SCF on a triennial basis since 1983. Raw data have been collected for the SCF by the National Opinion Research Center at the University of Chicago since 1992. In 1989, the Survey Research Center at the University of Michigan collected data for the SCF. The sampling design for the SCF is selected from a dual frame including a standard, multi-stage area-probability sample and a stratified list sample, which disproportionately includes wealthy families and is derived from statistical records of tax returns, excluding people the 400 wealthiest people in the U.S. according to Forbes magazine.

The actual number of families interviewed range from 3,803 in 1989 to 4,449 in 2001. In 1992, 1995, and 1998, total families interviewed are 3,906, 4,299, and 4309, respectively. Because of the complex sample design, nonresponse is an important issue to address in the SCF. Missing data are multiply imputed, resulting in five implicates to represent the data. Weighting adjustments include post-stratification to known external control totals for age, location and homeownership and are used to compensate for both the sample complexities and nonresponse patterns. For the list sample, the wealth index and financial income data are also used.

Although the SCF is a cross-sectional data set, there has been substantial consistency of survey questions since 1989 and the data are highly comparable over this 12-year time period. Data included in the analyses for this study are restricted to households with heads born between 1934 and 1957. This birth date restriction allows comparison of households headed by the early part of the baby boom (head born between 1946 and 1957) with household headed by the prior generation (head born between 1934 to 1945). In addition to assessing asset and debt holdings of the cohorts from 1989 to 2001, direct comparison of the pre-boomer cohort in their prime saving years for retirement (those aged 44-55 in 1989) with the boomer cohort (those aged 44-55 in 2001) is made.

Variable Measurement

Demographic Variables. The demographic variables included in this study are education, marital status, saving status, retirement as a reason for saving, race, income, presence of children in the household, employment status, and household pension status. Statistics on these variables are calculated for two cohort groups: Early Baby Boomers and Pre-Baby Boomers. Early baby boomers, or "early boomers", have household heads born between 1946 and 1957. Pre-baby boomers, or "pre-boomers", have household heads born between 1934 and 1945. Statistics are reported for five data years of the SCF for both the early boomer and pre-boomer cohorts.

Education is measured as the number of years of formal education of the household head and the mean value and frequency of education categories are reported for each cohort group for all five sets of data. The four education categories are household heads with: no high school education, high school education, some college education, and college education. Marital status is measured as a dummy variable with 1=married/living with a partner and 0 otherwise.

The proportion of savers (households reporting spent less than income), is reported for both cohorts for four of the five years since data for this variable was excluded from the 1989 SCF. Also, the proportion of households indicating retirement/old age as a reason for retirement is noted for both cohorts and all five years of data.

Race of the household head is a dummy variable with 1=white, non-Hispanic and coded 0 for all other races/ethnicities. The proportion of households with no children in the household is captured through a binary yes/no variable as is the pension status, which is coded "yes" if either the household head or spouse/partner has any type of pension (defined benefit and/or account-based plan) on their current or former job(s).

Four categories are used to indicate employment status: (1) household head is an employee of someone else; (2) household head is self-employed or in business partnership; (3) household head is retired or otherwise voluntarily unemployed (homemaker, student, disabled); and (4)household head is not in the labor force.

Income is measured as the total household income for the previous year. The Consumer Price Index (CPI) is used to adjust all dollar values to 2001 dollars. Income statistics include the mean, median, and frequencies of income in five income categories: households with less than $10,000, those between $10,000 and less than $25,000, those between $25,000 and less than $50,000, those between $50,000 and less than $100,000, and those with $100,000 or more annual income.

Balance Sheet Variables. Household balance sheet information is measured through several asset (financial and non-financial) and debt variables. The CPI is used to index all values to 2001 dollars. For each variable, the proportion of households holding a particular item is included for reference. There are 10 categories of financial assets: liquid assets, certificates of deposit, mutual funds, stocks, bonds, retirement quasi-liquid assets, savings bonds, cash value of life insurance policies, other managed assets, and other financial assets not included in the previous nine categories.

Liquid assets include the summed value of transaction accounts including checking, savings, money market, and call accounts at brokerage houses. Mutual funds include stock mutual funds, tax-free bond mutual funds, government bond mutual funds, other bond mutual funds, combination and other mutual funds not including money market mutual fund accounts. Retirement quasi-liquid assets is the sum of the value of IRA/Keogh accounts, thrift-type accounts (401k, 403b, thrift, savings, SRA, any other account with the option to borrow or withdraw) and future pensions held by the head and/or spouse/partner. Other managed assets are the sum of the value of trusts, annuities, and managed investment accounts in which the household has equity interest. Other financial assets are all financial assets not accounted for by the other nine categories and include loans from the household to another party, future proceeds, royalties, futures, non-public stock, deferred compensation, and oil/gas/mineral investments.

There are 6 categories of non-financial assets: vehicles, principal residence, other residential real estate, net value of non-residential real estate, business interests, and other non-financial assets including precious metals, gems, art, and other market-valued collectibles.

Debt consists of the value of the outstanding balance on six variable categories: housing, other lines of credit, other residential real estate, credit card, installment loans not classified elsewhere, and other debt not captured by the previous five categories. Housing debt includes all mortgages, home equity loans, and home equity lines of credit. Other residential real estate debt includes land contracts, residential property other than the principal residence, vacation property and installment debt reported for cottage/vacation properties. Other debt can include items such as loans against pensions, loans against life insurance, margin loans, and any other miscellaneous debt.

Total assets are calculated by adding total financial assets and total non-financial assets. Net worth is total assets minus total debt. Additional variables are created for analysis, including equity in principal residence, equity of assets held in stock, capital gains for principal residence, stocks, businesses, and total monthly debt payment amount. Equity of assets held in stock is calculated using the net value of directly-held stock, stock mutual funds (full value if described as stock mutual fund, half the value of combination mutual funds), IRAs/Keoghs invested in stock (full value of mostly invested in stock, half the value if split between stocks/bonds or stocks/money market, a third of the value if split between stocks/bonds/money market), other managed assets with equity interest (full value if mostly stock, half value if split between stocks/mutual funds and bonds/CDs, or indicated "mixed diversified" in the survey, one-third the value if respondent indicated "other"), and thrift-type retirement accounts invested in stock (full value if mostly stock, half the value if split between stocks and interest earning assets). Equity of assets directly held in stock is the sum of the net value of directly held stock, stock mutual funds, and half the value of combination mutual funds. Equity of retirement assets held in stock is the net value of IRAs/Keoghs invested in stock plus any thrift-type retirement accounts invested in stock.

Two ratios are included, debt payment to income ratio and stock equity to income ratio. The debt payment to income ratio is calculated by taking the mean total monthly debt payments multiplied by 12, and then the product is divided by mean annual household income. The stock equity to income ratio is calculated as equity of assets held in stock divided by annual household income.

Statistical Analysis

The public data sets for survey years 1989, 1992, 1995, 1998, and 2001 were downloaded from the Federal Reserve Board web site and procedures used to calculate descriptive statistics are those recommended by documentation that accompanies the data (see http://www.federalreserve.gov/pubs/oss/oss2/scfindex.html). All five implicates for each of the five data sets are used in the analyses and all statistics are weighted using weights supplied with the five public-use data sets. Because of the nature of the dual frame data, outliers may overly influence even financial data that has been weighted. Thus, for many of the continuous balance sheet variables that are held by the majority of respondents, medians are reported as well as means. The CPI has been used to adjust all dollar values to 2001 dollars.

Results

Demographic characteristics of the early boomer and pre-boomer twelve-year cohorts at the same age (in 1989 and 2001) are presented in Table 1. Mean educational attainment among early boomers is higher than among pre-boomers. By 2001, the mean education attainment of early boomers was 13.6 years, versus 12.9 years of education for pre-boomers in 1989. While 40 percent of early boomers had obtained a college degree and 60 percent had attended college, 29 percent of pre-boomers had obtained a college degree and 45 percent had attended college. Educational attainment of non-White early boomers was more than one year higher on average than non-White pre-boomers. The proportion of non-White pre-boomers who had completed college increased from 19 to 25 percent the proportion who had beneath a high school education fell from 37% among pre-boomers in 1989 to 23% among early boomers in 2001.

The inflation adjusted median income for early boomers in 2001 was 8.4% higher than the median income for pre-boomers at the same age in 1989 ($54,479 versus $50,254), and the mean income for early boomers was 19% higher than pre-boomers ($95,598 versus $80,174). A smaller proportion of early boomers fell beneath the $10,000 income threshold (6%) in 2001 than in the pre-boomer generation (10%) in 1989, and a smaller overall percentage of boomers had incomes below $25,000 and $50,000 than the pre-boomer generation at the same age. Overall, the income distribution when controlled for inflation was surprisingly similar between the two cohorts. Median household income for non-White early boomers was 7.4% higher ($33,921 versus $31,583) than median income for pre-boomers, and the mean income for non-White early boomers was 11% higher ($50,350 versus $45,355). While a roughly equal proportion of non-White early boomers (31%) and pre-boomers (33%) had incomes above $50,000, a much smaller proportion of early boomer non-White households had incomes below $10,000 (14%) versus non-White pre-boomers (25%) at the same age.

The proportion of pre-boomers with no children in the household was smaller in 1989 (39%) than for boomers in 2001 (48%). The employment status of both groups was similar – a slightly larger proportion of pre-boomers were retired in 1989 (11%) versus early boomers in 2001 (9%), and an identical proportion (16%) was self-employed. The proportion of early boomer households with a pension was slightly lower (66%) for early boomers versus pre-boomers (70%) at the same age. The proportion of non-White early boomer households with no children was much higher (46%) than for pre-boomers (33%), suggesting an increased ability to accumulate wealth. A much lower proportion of early boomer non-Whites were either retired or unemployed (19%) than pre-boomers (32%), and fewer were self-employed.

Table 1. Comparison of Demographic Characteristics of Household/Heads of Cohorts at Ages 44-55 (1989 and 2001)

	1989 (pre-boomers)		**2001 (early boomers)**	
	All	Non-White	All	Non-White
Education (mean)	12.9	11.4	13.6	12.6
No High School	18	37	12	23
High School	37	32	29	33
Some College	16	12	20	19
College	29	19	40	25
Proportion Married	65	49	64	45
Proportion Savers	n/a	n/a	61	42
Save for Retirement	28	18	41	25
White	75	---	78	---
Mean HH Income	80,174	45,355	95,598	50,350
Median HH Income	50,245	31,583	54,479	33,921
<10,000	10	25	6	14
10,000 to <25,000	12	21	15	29
25,000 to <50,000	26	22	24	27
50,000 to <100,000	34	23	31	20
>100,000	18	10	23	11
No Children in HH	39	33	48	46
Employee	68	53	71	73
Self-employed	16	14	16	8
Retired	11	21	9	13
Unemployed	6	11	5	6
Proportion of HH with Pension	70	54	66	54

*Results are in terms of 2001 dollars

Table 2 shows the balance sheet statistics for the early baby boom cohort as they progressed through the life cycle between the ages of 32-43 (1989) to age 44-55 (2001). Perhaps the most striking change in assets within this time period was the increase in mean and median financial assets between 1992 and 2001. In 1992, median financial assets for early boomers were just $10,000 and mean financial assets were $57,000. By 2001, median financial assets ($39,500) and mean financial assets ($234,100) had quadrupled. The bulk of the mean increase in financial assets was in mutual funds ($4,500 to $29,700), direct stock holdings ($6,100 to $44,800) and quasi-liquid retirement accounts ($18,300 to $82,100).

Mean and median non-financial assets increased less in percentage terms for early boomers between 1989 and 2001, although early boomers still held more in non-financial assets in every year than financial assets. Mean non-financial assets grew from $175,400 in 1989 to $337,200 in 2001, due more to a rise in the value of business interests from $41,600 to $110,900 than an increase in the value of the primary residence ($97,000 to $157,500). Rates of homeownership grew from 64% in 1989 to 77% in 2001. Median non-financial assets grew by 49% between 1989 and 2001, compared to a 92% increase in mean non-financial assets. Mean financial and non-financial assets combined (total assets) grew from $226,900 in 1989 to $571,400 in 2001, while median total assets grew from $107,900 to $208,100.

While median assets for pre-boomers nearly doubled between 1989 and 2001 and mean assets increased by 152%, median liabilities increased only 20% and mean liabilities increased by just 32%. The largest increase in liabilities between 1989 and 2001 was within debt on the primary residence, which increased from $43,600 to $61,400 per household. Credit card and installment loan liabilities decreased from $10,600 to $9,600. Net worth, or the difference between assets and liabilities, increased from $168,100 in 1989 to $493,700 in 2001, and median net worth increased from $54,600 to $134,800.

Among pre-boomers, the data from Table 3 that is of greatest interest to this study is the balance sheet in 1989 (which will be compared to early boomers in Table 4). However, noteworthy balance sheet changes for pre-boomers between 1989 and 2001 include a near tripling of mean financial assets from $112,800 to $345,100, and an increase in median financial assets from $20,600 to $47,500. Like early boomers, the most striking shifts were the increases in the value of mutual funds ($7,300 to $36,200), stocks ($15,600 to $72,200) and quasi-liquid retirement savings ($35,600 to $111,200). The median value of non-financial assets for pre-boomers only increased by $9,000, or 6.8%, between 1989 and 2001. Mean financial assets increased from $311,900 to $410,200, and increases were mainly within the primary residence ($133,500 to $165,600) and business interests ($86,500 to $131,200). Liabilities of pre-boomers increased only slightly on average, from $49,600 to $51,900, and median liabilities fell from $22,000 to $10,900. Mean installment debt decreased from $8,000 to $5,000, while credit card debt increased from $1,400 to $1,600. While mean net worth among pre-boomers nearly doubled (from $375,100 to $703,400), median net worth rose by 38% ($134,300 to $185,800) between 1989 and 2001.

Table 2. Mean Values of Assets and Debts among Households of Cohort Heads Born Between 1946-1957 (early baby boom generation).

	1989	**1992**	**1995**	**1998**	**2001**
Age in survey year	32-43	35-46	38-49	41-52	44-55
Financial Assets (% have)	89	90	92	95	94
Mean	51.4	57.0	90.3	157.0	234.1
Median	11.0	10.0	17.4	34.3	39.5
Liquid	8.9 (84)	10.4 (86)	10.4 (88)	18.2 (92)	26.4 (92)
Certificates of Deposit	2.8 (15)	2.0 (10)	3.7 (10)	3.9 (12)	4.3 (16)
Mutual Funds	1.4 (6)	4.5 (10)	10.0 (13)	22.5 (21)	29.7 (20)
Stocks	4.3 (15)	6.1 (19)	10.5 (16)	29.4 (22)	44.8 (22)
Bonds	3.7 (3)	4.3 (3)	4.4 (3)	5.1 (3)	11.0 (3)
Retirement Quasi-Liquid	16.7 (47)	18.3 (49)	35.2 (56)	49.2 (60)	82.1 (64)
Savings Bonds	0.7 (32)	0.9 (28)	1.2 (29)	1.1 (24)	1.6 (22)
Cash Value of Life Insurance	5.5 (38)	5.5 (36)	8.5 (31)	12.8 (32)	14.3 (30)
Other Managed Assets	4.8 (3)	2.5 (3)	3.4 (3)	11.6 (6)	13.5 (6)
Other Financial Assets	2.5 (14)	2.5 (11)	2.9 (11)	3.1 (11)	6.5 (9)
Non-Financial Assets (%)	90	92	91	93	95
Mean	175.4	182.7	206.2	261.5	337.2
Median	90.4	92.9	108.1	120.8	135.0
Vehicles	12.1 (88)	11.8 (89)	14.9 (88)	16.7 (87)	19.3 (90)
Primary Residence	97.0 (64)	93.8 (65)	102.1 (69)	122.7 (74)	157.5 (77)
Other Residential Real Estate	9.7 (10)	11.4 (12)	14.5 (13)	17.4 (14)	25.0 (15)
Net Non-Residential R.E.	7.4 (11)	10.7 (7)	9.1 (9)	17.5 (10)	18.9 (10)
Business Interests	41.6 (15)	51.8 (16)	61.5 (14)	83.6 (17)	110.9 (17)
Other Non-Financial Assets	7.5 (14)	3.1 (9)	4.2 (10)	3.6 (8)	5.6 (7)
Total Assets (% have)	95	97	96	97	98
Mean	226.9	239.7	296.5	418.5	571.4
Median	107.9	117.4	135.8	170.3	208.1
Liabilities:					
Housing	43.6 (57)	47.0 (56)	49.1 (58)	55.3 (61)	61.4 (61)
Other Lines of Credit	0.4 (5)	0.1 (3)	0.2 (2)	0.2 (3)	0.4 (2)
Other Residential Real Estate	3.3 (6)	4.3 (7)	4.6 (7)	5.0 (6)	4.4 (7)
Credit Card	1.4 (49)	1.7 (51)	2.4 (58)	2.5 (53)	2.2 (50)
Installment Loans	9.2 (66)	5.9 (58)	6.2 (58)	8.5 (51)	7.4 (47)
Other Debt	0.7 (8)	1.2 (11)	1.2 (11)	2.7 (10)	1.9 (8)
Total Debts (% have)	88	87	86	87	85
Mean	58.8	60.1	63.7	74.3	77.6
Median	33.0	30.9	33.6	42.3	39.5
Mean Net Worth	168.1	179.6	232.8	344.2	493.7
Median Net Worth	54.6	57.2	74.7	102.2	134.8

*Results are in 000s of 2001 dollars, figures in parentheses represent proportion of households holding the line item

Table 3. Mean Values of Assets and Debts among Household of Cohort Heads Born Between 1934-1945 (pre-baby boom generation)

	1989	**1992**	**1995**	**1998**	**2001**
Age in survey year	44-55	47-58	50-61	53-64	56-67
Financial Assets (% have)	91	93	92	96	95
Mean	112.8	133.5	183.7	268.2	345.1
Median	20.6	21.5	29.5	42.8	47.5
Liquid	19.8 (88)	19.2 (91)	27.2 (89)	25.6 (94)	34.9 (93)
Certificates of Deposit	6.1 (20)	5.0 (18)	6.5 (15)	9.3 (17)	7.2 (17)
Mutual Funds	7.3 (9)	7.2 (10)	21.6 (17)	29.4 (16)	36.2 (21)
Stocks	15.6 (22)	23.2 (21)	28.2 (17)	65.9 (24)	72.2 (26)
Bonds	7.0 (5)	8.9 (5)	9.9 (4)	12.7 (3)	18.0 (6)
Retirement Quasi-Liquid	35.6 (51)	49.1 (52)	62.1 (55)	89.1 (60)	111.2 (57)
Savings Bonds	1.0 (22)	1.3 (24)	1.7 (23)	1.5 (18)	0.9 (13)
Cash Value of Life Insurance	7.7 (41)	7.3 (42)	10.7 (40)	8.9 (34)	11.6 (39)
Other Managed Assets	6.9 (3)	7.0 (5)	10.1 (5)	21.4 (7)	45.7 (14)
Other Financial Assets	5.9 (16)	5.2 (11)	5.5 (13)	4.4 (9)	7.1 (10)
Non-Financial Assets (%)	93	93	94	94	94
Mean	311.9	284.5	306.1	360.5	410.2
Median	132.1	108.6	124.3	132.6	141.1
Vehicles	16.3 (90)	12.9 (90)	16.3 (89)	18.4 (89)	19.1 (89)
Primary Residence	133.5 (76)	119.4 (76)	122.1 (81)	139.8 (80)	165.6 (82)
Other Residential Real Estate	29.0 (20)	27.3 (18)	27.0 (19)	34.4 (21)	38.2 (17)
Net Non-Residential R.E.	40.6 (15)	39.2 (16)	26.5 (14)	34.1 (11)	47.5 (12)
Business Interests	86.5 (15)	81.4 (17)	109.3 (17)	126.5 (15)	131.2 (15)
Other Non-Financial Assets	6.1 (14)	4.2 (8)	5.1 (9)	7.2 (9)	8.5 (8)
Total Assets (% have)	95	96	97	98	98
Mean	424.7	417.9	489.8	628.6	755.3
Median	173.4	155.0	171.2	214.7	220.9
Liabilities:					
Housing	32.9 (58)	37.7 (56)	38.0 (54)	42.5 (51)	36.4 (45)
Other Lines of Credit	0.8 (4)	0.5 (3)	0.4 (1)	0.2 (2)	0.6 (2)
Other Residential Real Estate	5.1 (10)	7.3 (9)	6.8 (9)	6.4 (8)	5.7 (7)
Credit Card	1.4 (49)	1.6 (47)	1.7 (47)	2.6 (48)	1.6 (40)
Installment Loans	8.0 (58)	4.4 (45)	5.2 (41)	6.6 (41)	5.0 (36)
Other Debt	1.5 (8)	1.4 (12)	2.7 (10)	3.6 (9)	2.6 (8)
Total Debts (% have)	85	82	80	79	73
Mean	49.6	52.8	54.7	61.9	51.9
Median	22.0	21.0	18.5	23.1	10.9
Mean Net Worth	375.1	365.1	435.1	566.8	703.4
Median Net Worth	134.3	112.0	128.2	142.4	185.8

*Results are in 000s of 2001 dollars, figures in parentheses represent proportion of households holding the line item

A comparison of balance sheets between early boomers and pre-boomer cohorts at the same age is presented in Table 4. T-tests on the whole sample comparing pre-boomers to early boomers indicate statistically significant differences on all asset variables except bonds, savings bonds, other managed assets, other financial assets, non-financial assets, other residential real estate, business interests, and other financial assets. On the debt side, all variables are significantly different except other residential real estate debt, installment debt, and other debt. Early boomers have more than double the mean financial assets as pre-boomers ($234,100 versus $112,800). Much of the difference between the two cohorts is in holdings of mutual funds ($29,700 versus $7,300), stocks ($44,800 versus $15,600), and quasi-liquid retirement funds ($82,100 versus $35,600). Median financial assets for early boomers are nearly double ($39,500) that of pre-boomers ($20,600).

Early boomers also have greater non-financial assets than pre-boomers had at the same age, however the gap is not as wide as with financial assets. Mean non-financial assets are just 8% higher for early boomers in 2001 than for pre-boomers in 1989, and median non-financial assets are just 2% higher. Despite increases in housing values during the 1990s, the mean value of early boomers' primary residence was $157,500 versus $133,500 for pre-boomers. Early boomers hold greater mean wealth in business interests and pre-boomers held greater mean wealth in non-residential real estate. Total asset holdings were 35% greater for early boomers ($571,400) than for pre-boomers ($424,700), and median total assets were 20% higher ($208,100 versus $173,400).

While early boomers hold greater assets than pre-boomers did at the same age, they also hold greater liabilities. Total liabilities for early boomers were $77,600 in 2001, compared with $49,600 for pre-boomers in 1989. This $28,000 disparity in total liabilities was essentially a result of a mean housing debt that was $31,200 higher for early boomers than for pre-boomers. The free spending boomers held $9,600 in credit card and installment debt in 2001, while the pre-boomer cohort held $9,400 in credit card and installment debt at the same age in 1989. Mean assets minus liabilities for early boomers was 32% greater than for pre-boomers ($493,700 versus $375,100), however the median net worth had only increased by $500 (from $134,300 to $134,800) between the two age cohorts.

T-tests on the sample comparing non-White pre-boomers to non-White early boomers indicate no statistically significant differences on asset variables except total financial assets, mutual funds, retirement quasi-liquid assets, cash value of life insurance, non-financial assets, and net non-residential real estate. On the debt side, most all variables are not significantly different except credit card balances and other debt. Mean financial assets among non-White early boomers increased by a smaller percentage between the two age cohorts (61% vs. 108%), while median financial assets increased from a very low $2,400 to $9,400 (compared to $39,500 for all households). Like White households, much of the increase in financial net worth came in the stocks, mutual funds, and quasi-liquid retirement savings categories. Mean non-financial assets, on the other hand, decreased among non-White households between the two age cohorts from $204,000 to $141,600, and median non-financial assets decreased from $49,400 to $38,500. The largest decreases in non-financial assets among non-Whites were within the non-residential real estate and business interest categories, although the value of the household primary residence declined by $9,500 (from $88,000 to $78,500). Mean liabilities for non-Whites was 16% higher for early boomers, and the median was 12% higher ($7,600 to $8,500). Mean net worth between the two cohorts was 26% lower for early boomer non-Whites than for pre-boomer non-Whites ($166,300 versus $208,900) and median household net worth was 15% lower ($30,000 versus $35,200).

Table 4. Comparison of Mean Values of Assets and Debts among Household of Cohort Heads at Ages 44-55 (1989 and 2001).

	1989 (pre-boomer)		**2001 (early boomer)**	
	All	Non-White	All	Non-White
Financial Assets (% have)	91	72	94	86
Mean¶§	112.8	42.8	234.1	68.8
Median	20.6	2.4	39.5	9.4
Liquid¶	19.8 (88)	9.0 (66)	26.4 (92)	9.4 (81)
Certificates of Deposit¶	6.1 (20)	3.6 (7)	4.3 (16)	1.7 (10)
Mutual Funds¶§	7.3 (9)	1.0 (1)	29.7 (20)	7.1 (8)
Stocks¶	15.6 (22)	1.1 (9)	44.8 (22)	4.8 (11)
Bonds	7.0 (5)	1.0 (2)	11.0 (3)	0.8 (<1)
Retirement Quasi-Liquid¶§	35.6 (51)	15.8 (27)	82.1 (64)	30.7 (45)
Savings Bonds	1.0 (22)	0.6 (14)	1.6 (22)	0.3 (4)
Cash Value Life Insurance¶§	7.7 (41)	5.6 (29)	14.3 (30)	10.6 (29)
Other Managed Assets	6.9 (3)	0.7 (1)	13.5 (6)	1.8 (2)
Other Financial Assets	5.9 (16)	4.4 (11)	6.5 (9)	1.6 (9)
Non-Financial Assets (%)	93	80	95	83
Mean§	311.9	204.0	337.2	141.6
Median	132.1	49.4	135.0	38.5
Vehicles¶	16.3 (90)	12.3 (71)	19.3 (90)	11.0 (77)
Primary Residence¶	133.5 (76)	88.0 (59)	157.5 (77)	78.5 (55)
Other Res. Real Estate	29.0 (20)	19.4 (14)	25.0 (15)	13.1 (9)
Net Non-Residential R.E.¶§	40.6 (15)	28.5 (9)	18.9 (10)	3.6 (3)

Business Interests	86.5 (15)	51.3 (10)	110.9 (17)	33.5 (8)
Other Non-Financial Assets	6.1 (14)	4.6 (7)	5.6 (7)	2.0 (2)
Total Assets (% have)	95	83	98	93
Mean	424.7	246.8	571.4	210.4
Median	173.4	55.6	208.1	64.8
Liabilities:				
Housing¶	32.9 (57)	25.3 (45)	61.4 (61)	32.3 (45)
Other Lines of Credit¶	0.8 (5)	0.3 (4)	0.4 (2)	0.4 (2)
Other Res. Real Estate	5.1 (6)	3.2 (5)	4.4 (7)	3.5 (4)
Credit Card¶§	1.4 (49)	0.8 (40)	2.2 (50)	2.4 (61)
Installment Loans	8.0 (66)	6.8 (57)	7.4 (47)	5.3 (45)
Other Debt§	1.5 (8)	1.4 (3)	1.9 (8)	0.2 (7)
Total Debts (% have)	85	75	85	82
Mean¶	49.6	37.9	77.6	44.1
Median	22.0	7.6	39.5	8.5
Mean Net Worth¶	375.1	208.9	493.7	166.3
Median Net Worth	134.3	35.2	134.8	30.0

*Results are in 000s of 2001 dollars, figures in parentheses represent proportion of households holding the line item
¶ T-test indicates significant difference (90% or greater) of means between pre-boomer and boomer categories (all)
§ T-test indicates significant difference (90% or greater) of means between pre-boomer and boomer categories (non-white)

Changes in the equity of financial and non-financial asset categories, as well as changes in monthly debt burden and the proportion of stock equity to income are presented in Table 5 and 6. Among early boomers, principal residence equity rose in real dollars between 1995 and 2001 due primarily to an overall jump in residential housing prices. The equity value of assets held in stock nearly doubled each three year-period between 1992 and 2001. The debt burden of early boomers fell from a high of 18% total debt payments to income in 1992 to 12% in 2001. The ratio of stock equity to income among early boomers jumped for 30% to 143% in 2001, indicating a much greater allocation toward equity investments.

Table 6 shows that pre-boomers lost significant principal residence equity (in inflation adjusted dollars) between 1989 and 1995, and regained all of those losses in 1998 and jumped to a 28% increase in value by 2001. Like early boomers, pre-boomers saw a large increase in the value of stock assets, and saw their stock equity to income ratio rise from 48% in 1989 to 226% in 2001. Their debt payments as a proportion of income increased from 12% in 1989 to 14% in 1992, then fell to 10% by 2001.

A direct comparison between pre-boomers and early boomers by race is provided in Table 7. The value of principal residence equity is lower for White early boomers in 2001 than it was for White pre-boomers in 1989, indicating that while housing values increased for early boomers so did housing liabilities. The equity of assets held in stock among pre-boomers was 244% greater for White early boomers in 2001 ($166,600) than for White pre-boomers at the same age ($48,100). The ratio of stock equity to income among White early boomers (154%) was likewise much higher than among White pre-boomers (53%). The White early boomer age cohort had exactly the same debt burden (11%) in 2001 as the White pre-boomers had at the same age in 1989.

Non-White pre-boomer had much less mean equity in their primary residence ($46,200 versus $62,700) than non-White pre-boomer households. They also held much larger net wealth in stocks, and early boomer non-Whites had a stock equity to income ratio that was over three times as high as pre-boomers (60% versus 17%) and a higher ratio than all pre-boomers in 1989. The debt burden of early boomer non-Whites was lower (15%) than for pre-boomers in 1989 (17%).

Table 5. Mean Values for Equities, Capital Gains, and Debt Service among Households of Cohort Heads Born Between 1946-1957 (early baby boom generation).

	1989	**1992**	**1995**	**1998**	**2001**
Age in survey year	32-43	35-46	38-49	41-52	44-55
Principal Residence Equity	53.4	46.9	53.0	67.5	96.2
Equity of Assets held in Stock	14.7	17.6	39.0	87.5	136.6
Equity in Directly Held Stock	5.5	8.5	17.2	46.2	69.3
Equity in Ret. Stock Assets	5.8	8.0	20.5	32.8	58.6

Capital Gains on Residence	32.2	25.1	26.4	33.9	53.6
Capital Gains on Business	19.8	36.6	31.7	55.4	72.8
Capital Gains on Stocks/MF	1.1	2.1	3.7	13.0	12.4
Total Monthly Debt Payments	0.9	0.9	0.9	1.0	1.0
Debt PMT to Income Ratio	17%	18%	16%	16%	12%
Stock Equity to Income Ratio	24%	30%	60%	118%	143%

*Results are in 000s of 2001 dollars

Table 6. Mean Values for Equities, Capital Gains, and Debt Service among Household of Cohort Heads Born Between 1934-1945 (pre-baby boom generation)

	1989	**1992**	**1995**	**1998**	**2001**
Age in survey year	44-55	47-58	50-61	53-64	56-67
Principal Residence Equity	100.5	81.8	84.1	97.4	129.2
Equity of Assets held in Stock	38.1	56.0	79.0	154.7	187.5
Equity in Directly Held Stock	19.3	26.8	42.5	88.2	96.0
Equity in Ret. Stock Assets	13.3	25.1	30.0	56.2	63.5
Capital Gains on Residence	68.1	51.7	54.1	57.4	78.7
Capital Gains on Business	45.1	52.6	68.0	84.7	83.7
Capital Gains on Stocks/MF	6.6	6.4	12.1	34.8	21.7
Total Monthly Debt Payments	0.8	0.8	0.7	0.9	0.7
Debt PMT to Income Ratio	12%	14%	12%	13%	10%
Stock Equity to Income Ratio	48%	82%	108%	194%	226%

*Results are in 000s of 2001 dollars

Table 7. Comparison of Mean Values of Equities, Capital Gains, and Debt Service among Household of Cohort Heads at Ages 44-55 by Race (1989 and 2001).

	1989 (pre-boomer)		**2001 (early boomer)**	
	White	Non-White	White	Non-White
Principal Residence Equity§	112.9	62.7	110.3	46.2
Equity held in Stock¶§	48.1	7.6	166.6	30.1
Equity in Directly Held Stock¶	25.2	1.2	85.9	10.5
Equity in Ret. Stock Assets¶§	15.7	6.1	69.6	19.4
Capital Gains on Residence¶§	73.8	50.6	61.2	26.5
Capital Gains on Business	51.7	24.9	85.6	27.4
Capital Gains on Stocks/MF	8.6	0.4	16.9	-3.5
Total Monthly Debt Pmts¶	0.9	0.7	1.1	0.6
Debt PMT to Income Ratio	11%	17%	11%	15%
Stock Equity to Income Ratio¶§	53%	17%	154%	60%

*Results are in 000s of 2001 dollars
¶ T-test indicates significant difference (90% or greater) of means between pre-boomer and boomer categories (all)
§ T-test indicates significant difference (90% or greater) of means between pre-boomer and boomer categories (non-white)

Given the wide difference in mean wealth and very narrow difference in median wealth between early boomer and pre-boomer households at the same age, Table 8 sheds some insight into the possible wealth distribution difference that may exist among early boomer households. Each percentile in 2001 held greater mean financial assets among early boomers than among pre-boomers in 1989, with each group between the 30th and 95th percentile holding roughly double what pre-boomers had at the same age. Likewise, each percentile among early boomers held greater non-financial assets than among pre-boomers with the exception of the 70th percentile, with the wealthiest percentiles not holding appreciable greater proportions of non-financial assets. Total net worth was slightly lower for the 30th and 40th percentiles among early boomers than for pre-boomers at the same age. Net worth was slightly higher among the lower and middle percentiles, however the difference was greatest between the 80th percentile (28% higher) and the 90th percentile (also 28% higher).

Table 8. Comparison of Assets and Net Worth Deciles among Households of Cohort Heads at Ages 44-55 (1989 and 2001)

	Financial Assets		Non-Financial Assets		Net Worth	
Deciles	**1989**	**2001**	**1989**	**2001**	**1989**	**2001**
10	0.0	0.3	2.8	4.1	2.8	3.2
20	1.7	2.3	19.5	20.0	20.8	22.7
30	4.7	9.0	57.8	67.0	44.9	43.9
40	10.4	21.6	96.0	98.6	87.6	81.9
50	20.6	39.5	132.1	135.0	134.3	134.8
60	32.8	69.6	177.6	178.2	178.7	198.5
70	53.5	116.3	246.4	238.9	264.3	295.2
80	110.3	217.5	309.7	343.6	380.4	486.6
90	240.0	478.5	552.0	582.6	739.0	943.4
95	409.5	877.5	985.5	1,098.0	1,317.2	1,517.5
Mean	112.8	234.1	311.9	337.2	375.1	493.7

*Results are in 000s of 2001 dollars

Conclusion

This study compared the inflation-adjusted financial statements of the pre-boomer twelve-year age cohort to the early boomer twelve-year age cohort at the same age. Results indicate a higher mean net worth among early boomers than among the previous age cohort, mainly due to much greater financial asset holdings. Although early boomers on the whole are wealthier than the previous generation at the same age, the median wealth among early boomers is roughly equal to pre-boomers and non-White early boomers have lower mean and median wealth than non-White pre-boomers.

Despite being labeled materialistic over-spenders, the early baby boom generation has accumulated no more credit card and installment debt than the previous age cohort and in fact has a debt to income ratio that is identical to the ratio the pre-boomers had at the same age. While early boomers hold greater liabilities, the difference is due entirely to housing debt and is not surprising given the overall real rise in housing values between 1989 and 2001. Early boomers are also saving more in quasi-liquid retirement vehicles than the previous age cohort, which is not consistent with a failure to subvert immediate gratification.

Perhaps the most noteworthy shift in the balance sheet of pre-boomers and early boomers is the increased allocation of wealth directly or indirectly held in stocks. More than any other previous generation, the baby boomers are relying upon the stock market to support their retirement. If U.S. equities continue to perform as they performed during the 1990s, then the boomers should be even better off in 2012 than pre-boomers were in the year 2001. However, if equities continue to perform as they have thus far in the 21st century, baby boomers may have a more difficult time keeping pace with the massive increases in financial wealth realized by pre-boomers during the 1990s. In addition to having a slightly larger portfolio at the same age as pre-boomers, boomers have a riskier portfolio weighed down with more volatile financial asset categories. The possible negative implications of a slowing or stagnant equity market upon financial wealth during the next ten years as boomers move to retirement age are borne out by these findings.

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