# Baby Boomers and Their Parents How Does Their Economic Well-Being Compare in Middle Age? 

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#### Abstract

We use survey data to compare the income and consumption of baby boomers in 1989 with that of their parents' generation in the early 1960 s when they were the same ages. Various adjustments allow for changes in household composition and living arrangements. We also assess how wealth accumulation by baby boomers compares to that of their parents' generation. We find that boomers on average have accumulated more wealth relative to income at this point in their lives than their parents' generation had at the same stage of life 30 years ago. However, measured consumption has not increased as much as measured income for young adults.


## I. Introduction

How does the economic well-being of baby boomers in 1989 compare to that of their parents' generation when they were the same ages in the early 1960s? This paper uses survey data to look at the income and consumption of the two groups, allowing for changes in household composition and living arrangements. We also assess how wealth accumulation by baby boomers compares to that of their parents' generation. Our goal in presenting these measures is to help distinguish facts from popular myths about the economic circumstances facing boomers and about their economic behavior.

Theoretical work on how a large cohort like the baby boom should fare in

[^0]economic terms suggests that "crowding" could cause a decrease in well-being.' Members of a large birth cohort could face increased competition for entry-level positions, less opportunity for advancement, and less likelihood of improving economic status relative to expectations. Contrary to these theories, we find that the income of boomers has grown on par with that of all other age groups. However, measured consumption of boomers has risen more slowly than that of other age groups. The possible explanations include changes over time in the tax code, the difference between measured and actual expenditures on housing and medical care, and perhaps increased saving by baby boomers relative to their parents.

Some fictions about baby boomers are commonly espoused but not supported by the data. Boomers are portrayed in popular culture as wanting to have it all now-some argue that instant gratification takes too long for the average boomer. ${ }^{2}$ Both older and younger cohorts seem to hold this view, and organized baby busters (born after 1964) often mention boomer profligacy when describing the ills of the world they are inheriting. But is this characterization accurate? Data presented in this paper suggest that it is not.

Our estimates show that boomers on average have accumulated more wealth relative to income at this point in their lives than their parents' generation had at the same stage of life 30 years ago. ${ }^{3}$ We do not assert that significant wealth accumulation (relative to their parents) by a group which is still on average less than 40 years old tells us much about their future. Some researchers looking ahead have painted a fairly dim picture of retirement for baby boomers. We would note that minor changes in the growth rate of productivity dramatically alter projections of future well-being. But if problems with the retirement outlook of boomers lie ahead, and we acknowledge that some problems do exist, the explanation does not necessarily rest on lack of frugality within the boomer cohort.

## II. Incomes: How Do Baby Boomers Compare to Their Parents?

Most analysis of economic well-being begins with income, generally measured on a before-tax basis. ${ }^{4}$ In this section we compare incomes of baby

[^1]boomers to those of their parents' generation 30 years ago. We find that incomes of baby boomers are significantly higher than those of their parents. Moreover, the increase is comparable to income growth for all age groups over the last 30 years. These conclusions about income growth hold under various adjustments for changes in household composition.

Tremendous demographic differences between the boomers and their parents imply that income-based measures of economic well-being will be sensitive to how we control for household composition. ${ }^{5}$ For example, how should we compare the income of the typical 1960s family with husband working and wife at home with three children to the income of a typical single parent in the late 1980s? Given measures of income at the household level, the method used to control for underlying demographic shifts can significantly affect conclusions about economic well-being.

Two distinct aspects of the changes in household composition influence our measures of well-being. First, the decrease in the average number of children per household raises the issue of how to count outlays for child rearing. ${ }^{6}$ Should the cost of raising children be counted as consumption or as foregone income of the parents? If children are viewed as consumption goods, then no adjustment for the number of children in the household is needed when measuring the parents' wellbeing. Even if costs of childrearing are thought of as foregone income, the cost can be specified as being somewhat less than the cost of providing for an adult by giving children a weight of less than 1 in adjusting for household composition.

The second aspect of household composition arises because more adults live alone today than was the case 30 years ago. ${ }^{7}$ This change is important if economies of scale in goods sharing affect the outlays needed on a per adult basis to reach a certain level of well-being. Two adults do not need twice the outlays of one adult to achieve a comparable level of utility because many commodities can be shared with no congestion (a television) or used more efficiently (a car).

The two types of adjustments for household composition generate several possibilities for comparing well-being of households. By comparing changes on a per household basis, the underlying assumptions are that economies of scale are infinite (two adults need the same consumption as one adult) and that children are consumption goods. Measures of changes on a per capita basis are at the other extreme on both dimensions, as childrearing costs are treated as foregone income and children get a weight of 1 just as adults do. The weights do not change as the number of adults or children increases, meaning there are no economies of scale.

The per capita and per household measures are extreme, and we use these only to bracket our estimates and to show that the basic results are not sensitive to which adjustment is used. But the implicit assumption in the per capita calculations, that it costs as much to provide for any child as it does for any adult, is

[^2]probably unrealistic in most cases. For example, it implies that a single parent with one child and an income of $\$ 30,000$ would be just as well off if he or she had no child and an income of $\$ 15,000$. So long as the cost of raising the child is less than providing for a single person ( $\$ 15,000$ in the example), the parent with the higher income and child is better off. The per household measure is also questionable, because it indicates that a single person and a married couple are equally well off on the same income. Two can eat as cheaply as one, but only if one does not eat.

Between the per capita and per household extremes are per adult and adultequivalent measures of well-being. The per adult comparisons assume that children are consumption items (kids get a weight of 0 ) and that no economies of scale exist for the adults (each adult gets a weight of 1). The adult-equivalent measure we use is based on Fuchs' scale in which the first adult gets a weight of 1 , the second adult gets a weight of 0.8 , all other adults get weights of 0.7 , the first child gets a weight of 0.4 , and all other children get a weight of $0.3 .{ }^{8}$ Economies of scale exist for both children and adults, and costs of raising children are foregone income, but the cost of providing for children is always less than the cost of providing for adults.

Our estimates of median and average incomes for all households headed by someone 25 to 44 years old in 1989 (baby boomers) and in 1960 (parents of baby boomers) appear in Table 1. ${ }^{9}$ The four measures described above-per household, per adult, Fuchs' scale, and per capita-bracket the possible ways to adjust for household compositional changes. As expected, the shift towards smaller households with fewer children arrays the four measures from per household measures showing the lowest increase over time to per capita measures showing the highest. ${ }^{10}$

Income for baby boomers in 1989 on a per adult basis was $\$ 21,141$, some 55 percent higher than their parents' level 30 years earlier, a statistically significant result at the 99 percent confidence level. This increase is surprisingly similar to overall growth of income per adult in the United States. Real GDP per adult rose 57 percent between 1960 and 1990. The 89 percent growth in average per capita income shown in Table 1 is also close to the growth of GDP per capita, which was 88 percent. ${ }^{11}$

[^3]Table 1
Incomes of Baby Boomers and Their Parents at Ages 25 to 44

| Measurement Basis | Median | Average For |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom Quintile | Middle 60 Percent | Top Quintile | All Incomes |
| Per household |  |  |  |  |  |
| Parents (1960) | 25,888 | 9,327 | 26,487 | 56,805 | 29,119 |
| Boomers (1989) | 37,350 | 11,659 | 38,367 | 85,420 | 42,436 |
| Ratio | 1.44** | 1.25** | 1.45** | 1.50** | 1.46** |
| Per adult |  |  |  |  |  |
| Parents (1960) | 12,297 | 4,587 | 12,520 | 26,258 | 13,681 |
| Boomers (1989) | 18,605 | 6,292 | 19,031 | 42,322 | 21,141 |
| Ratio | 1.51** | 1.37** | 1.52** | 1.61** | 1.55** |
| Using Fuchs' scale |  |  |  |  |  |
| Parents (1960) | 10,394 | 3,587 | 10,636 | 23,672 | 11,833 |
| Boomers (1989) | 17,356 | 5,462 | 17,819 | 41,059 | 19,996 |
| Ratio | 1.67** | 1.52** | 1.68** | 1.73** | 1.69** |
| Per capita |  |  |  |  |  |
| Parents (1960) | 6,472 | 2,051 | 6,664 | 17,765 | 7,962 |
| Boomers (1989) | 11,850 | 3,406 | 12,554 | 34,311 | 15,076 |
| Ratio | 1.83** | 1.66** | 1.88** | 1.93** | 1.89** |

Source: Authors' tabulations using 1960 Decennial Census and 1990 (March) Current Population Survey. Two asterisks indicate ratio is statistically different from 1 at the 1 percent level using a onetailed test. See data appendix for details.

Although median and average incomes of boomers were higher than parents' income by roughly the same amount, averages for households in the low, middle, and high income groups show increased skewness in incomes (see Table 1). ${ }^{12}$ All four adjustments for household composition agree that the rise in income for the bottom quintile was below that for the middle three quintiles, which in turn was below that for the top income group. On a per adult basis, the incomes of the top 20 percent grew about two-thirds faster than incomes of the bottom 20 percent.

Per adult estimates for four subgroups in the baby boomer/parent populations show income gains by age and marital status (see Table 2). The rise of average and median incomes for young and old, or married and single, is similar. ${ }^{13}$ For

[^4]Table 2
Incomes of Baby Boomers and Their Parents, Specified Subgroups, Per Adult Basis

| Subgroup | Median | Average For |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom Quintile | Middle 60 Percent | Top Quintile | All <br> Incomes |
| Ages 25 to 34 |  |  |  |  |  |
| Parents (1960) | 11,865 | 4,786 | 11,935 | 23,179 | 12,754 |
| Boomers (1989) | 17,505 | 5,903 | 17,758 | 38,051 | 19,446 |
| Ratio | 1.48** | 1.23** | 1.49** | 1.64** | 1.52** |
| Ages 35 to 44 |  |  |  |  |  |
| Parents (1960) | 12,800 | 4,427 | 12,907 | 27,901 | 14,210 |
| Boomers (1989) | 19,650 | 6,704 | 20,226 | 45,611 | 22,599 |
| Ratio | 1.54** | 1.51** | 1.57** | 1.63** | 1.59** |
| All married |  |  |  |  |  |
| Parents (1960) | 12,513 | 4,825 | 12,486 | 25,854 | 13,627 |
| Boomers (1989) | 19,275 | 7,486 | 19,678 | 41,485 | 21,601 |
| Ratio | 1.54** | 1.55** | 1.58** | 1.60** | 1.59** |
| All single |  |  |  |  |  |
| Parents (1960) | 10,355 | 2,048 | 10,844 | 27,700 | 12,456 |
| Boomers (1989) | 16,944 | 4,476 | 17,377 | 44,076 | 20,137 |
| Ratio | 1.64** | 2.19** | 1.60** | 1.59** | 1.62** |

Source: Authors' tabulations using 1960 Decennial Census and 1989 Current Population Survey. Two asterisks indicate ratio is statistically different from 1 at the 1 percent level. See data appendix for details.
married people and those ages 35 to 44, the growth of income across income groups is similar as well. For single people, income has increased most for the lowest income quintile, but these incomes are still substantially below those of other groups. ${ }^{14}$

Increased skewness in incomes occurs primarily among those who are ages 25 to 34 . Income growth for the top quintile is over twice the growth for the bottom quintile. This growth differential for young people reflects an increase in the college wage premium arising in part from a decline in the number of entry-level positions that do not require a college education in manufacturing and other high-wage industries. ${ }^{15}$ In addition, faster income growth within the top quintiles

[^5]is the result of a rapid increase in the participation in the labor force of married women ages 25 to 34 . Only 29 percent of these women were in the labor force in 1969, but the proportion rose to 70 percent in 1990.

## III. Consumption: An Alternative Measure of Economic Well-Being

Changes in the economic environment during the last 30 years may bias the assessment of well-being based on income for several reasons. Changes in the tax system have somewhat reduced the real consumption possibilities for any given level of income, especially for young people whose income is primarily from working. And increases in actual expenditures for housing and a rise in compensation outside of wages and salaries also affect well-being separately from income.

Two alternative methods for measuring well-being that allow for these changes in the economic environment during the last 30 years could be considered. First, we could estimate tax liabilities for boomers in 1989 and parents in 1960 in order to compute disposable income. Unfortunately, the data sets on income do not contain the information needed to estimate tax liabilities. Even if we could impute missing pieces for a tax calculator, the incidence assumptions might dominate the outcomes.

The second strategy is to measure consumption directly. We do this by employing four more survey data sets from the early 1960s and late 1980s that have information on household expenditures and the value of owned housing. The measure of consumption we present is primarily household expenditures measured on a cash basis, but with an adjustment for housing consumption to avoid any bias that results from trends in housing prices or changes in the rate of homeownership. ${ }^{16}$ The adjustment for housing replaces the outlays for owneroccupied housing (mortgage interest, property taxes, and maintenance) with an estimate of the value of space rent for the house. ${ }^{17}$ Space rent is specified to be 6 percent of the value of the house, which comes from dividing owner-occupied space rent from the national income and product accounts (NIPA) by the value of housing in the Flow of Funds accounts. ${ }^{18}$

[^6]Measured consumption for baby boomers and parents using the four adjustment methods and across four subgroups rose about half as much as did income (see Tables 3 and 4). ${ }^{19}$ Consumption of baby boomers on a per adult basis was about 27 percent higher than that of their parents' generation in 1960. For the United States as a whole, however, consumption per adult increased over 60 percent between 1960 and 1990.

Consumption growth across income groups using per household, per adult, Fuchs' scale, and per capita measures are more closely bunched than the comparable rates of growth in income. This in part reflects the extent to which differential income taxation transfers resources across households. Big differences in overall growth across the four measures remain, and the ordering from small increases on a per household basis to larger increases on a per capita basis is still evident. The per capita consumption increase for boomers of 53 percent is well below the national per capita increase of about 90 percent over the period.

The rise of consumption within subgroups is always less than half the increase in income for the same group (see Table 4 and Table 2), and some of the increases are not statistically discernible from no change. Again, the increase is more uniform across the income distribution for married households. Single baby boomers in the bottom income quintile have consumption which is only 6 percent above the level of their parents' generation, and statistical tests show this growth rate is not different from zero at the 95 percent confidence level. At the other end of the income distribution, single boomers in the top quintile have consumption that is 43 percent higher, statistically significant at the 99 percent confidence level. The increase in consumption of older boomers is stronger than that of younger boomers, perhaps reflecting the fact that many older boomers became homeowners in the (good old) days of inflation and rising home values. ${ }^{20}$

Increased saving rates by boomers could explain the gap between incomes and consumption, but evidence from Bosworth, Burtless, and Sabelhaus (1991) does not support this view. Rather, a shift in the tax burden toward the young may explain some of the gap. Though the ratio of federal taxes to GDP has risen only slightly since 1960 , social insurance taxes, which fall more heavily on young and middle-income households, have more than doubled as a share of GDP. In 1960, the Social Security tax rate for employees was 3 percent, and only the first $\$ 4,800$ of income (roughly $\$ 19,200$ in 1989 dollars) was taxable. By 1990, the tax rate

[^7]Table 3
Consumption of Baby Boomers and Their Parents at Ages 25 to 44

| Measurement Basis | Median | Average For |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom Quintile | Middle 60 Percent | Top Quintile | All Incomes |
| Per household |  |  |  |  |  |
| Parents (1960) | 23,407 | 13,857 | 24,178 | 40,634 | 25,405 |
| Boomers (1989) | 25,410 | 16,475 | 28,108 | 52,744 | 30,708 |
| Ratio | 1.09** | 1.19** | 1.16** | 1.30** | 1.21** |
| Per adult |  |  |  |  |  |
| Parents (1960) | 11,468 | 6,761 | 11,752 | 19,532 | 12,310 |
| Boomers (1989) | 12,400 | 8,120 | 14,192 | 27,239 | 15,659 |
| Ratio | 1.08** | 1.20** | 1.21** | 1.39** | 1.27** |
| Using Fuchs' scale |  |  |  |  |  |
| Parents (1960) | 9,487 | 5,305 | 9,935 | 17,043 | 10,430 |
| Boomers (1989) | 11,555 | 7,440 | 13,140 | 25,128 | 14,397 |
| Ratio | 1.22** | 1.40** | 1.32** | 1.47** | 1.38** |
| Per capita |  |  |  |  |  |
| Parents (1960) | 5,823 | 3,021 | 6,179 | 13,131 | 6,938 |
| Boomers (1989) | 8,160 | 4,764 | 9,448 | 20,081 | 10,638 |
| Ratio | 1.40** | 1.58** | 1.53** | 1.53** | 1.53** |

Source: Authors' tabulations using 1960-61 and 1989 Consumer Expenditure Surveys (CEX), 1962-63 Survey of Financial Characteristics of Consumers (SFCC), and 1989 Survey of Consumer Finances (SCF). Two asterisks indicate ratio is statistically different from 1 at the 1 percent level. See data appendix for details.
had more than doubled to 7.6 percent, and income was taxed up to $\$ 51,300$. These changes raised the inflation-adjusted tax paid by high earners by a factor of almost seven. ${ }^{21}$ The change in payroll taxes alone could significantly affect comparisons between boomers and their parents at the same age on an after-tax basis.
The difference between actual and measured expenditures for housing services may explain another chunk of the gap. The Consumer Expenditure Surveys show higher expenditures paid out for owner-occupied housing services in 1989 than in the early 1960s.
The increasing proportion of compensation in benefits other than wages and salaries may be another reason why measured incomes increased faster than measured consumption. In 1960, other labor costs such as health insurance and

[^8]Table 4
Consumption of Baby Boomers and Their Parents, Specified Subgroups, Per Adult Basis

| Subgroup | Median | Average For |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom Quintile | Middle 60 Percent | Top Quintile | All <br> Incomes |
| Ages 25 to 34 |  |  |  |  |  |
| Parents (1960) | 11,382 | 7,226 | 11,439 | 17,940 | 11,897 |
| Boomers (1989) | 11,446 | 8,057 | 13,458 | 22,867 | 14,260 |
| Ratio | 1.01 | $1.11^{* *}$ | 1.18** | 1.27** | 1.20** |
| Ages 35 to 44 |  |  |  |  |  |
| Parents (1960) | 11,778 | 6,436 | 12,037 | 20,553 | 12,620 |
| Boomers | 13,113 | 8,255 | 14,818 | 30,444 | 16,631 |
| Ratio | $1.1{ }^{* *}$ | 1.28** | 1.23** | 1.48** | 1.32** |
| All married |  |  |  |  |  |
| Parents (1960) | 11,682 | 6,774 | 11,739 | 19,601 | 12,318 |
| Boomers (1989) | 12,720 | 8,439 | 14,477 | 27,315 | 15,837 |
| Ratio | 1.09** | 1.25** | 1.23** | 1.39** | 1.29** |
| All single |  |  |  |  |  |
| Parents (1960) | 10,894 | 7,020 | 10,691 | 18,673 | 11,553 |
| Boomers (1989) | 11,554 | 7,413 | 13,356 | 26,774 | 14,851 |
| Ratio | 1.06 | 1.06 | 1.25** | 1.43** | 1.29** |

Source: Authors' tabulations using 1960-61 and 1989 Consumer Expenditure Surveys (CEX), 1962-63 Survey of Financial Characteristics of Consumers (SFCC), and 1989 Survey of Consumer Finances (SCF). Two asterisks indicate ratio is statistically different from 1 at the 1 percent level. See data appendix for details.
pension contributions were 4 percent of wages and salaries. By 1989, these other labor costs had risen to 10 percent of wages and salaries. To the extent that health insurance premiums should be included in both consumption and income, this rising share of nonwage benefits means that our measures of both consumption and income are more severely understated in 1989 than in 1960. The increase in consumption would be higher relative to the increase in income if these benefits were properly included in our measures.

## IV. Wealth Accumulation: A (Guarded) Look Ahead at the Well-Being of Baby Boomers

Measures of economic well-being based on both income and consumption indicate that baby boomers are doing better than their parents in midlife. But can baby boomers expect the same degree of well-being in retirement as their parents? Private wealth accumulation, the measurable part of retirement preparation, shows that boomers are generally accumulating wealth at a faster

Table 5
Wealth/Income Ratios, Baby Boomers and Their Parents

| Subgroup | Median | Average For |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom Quintile | Middle 60 Percent | Top Quintile | All Incomes |
| Ages 25 to 34 |  |  |  |  |  |
| Parents (1960) | 0.30 | 1.07 | 0.74 | 2.53 | 1.42 |
| Boomers (1989) | 0.28 | 0.91 | 1.32 | 4.64 | 2.60 |
| Ratio | 0.95 | 0.84 | 1.79** | 1.83 | 1.83** |
| Ages 35 to 44 |  |  |  |  |  |
| Parents (1960) | 1.22 | 1.78 | 1.71 | 3.71 | 2.50 |
| Boomers (1989) | 1.37 | 1.89 | 1.96 | 4.94 | 3.16 |
| Ratio | 1.13 | 1.06 | 1.15 | 1.33** | 1.26** |
| All married |  |  |  |  |  |
| Parents (1960) | 0.85 | 1.44 | 1.32 | 2.87 | 1.92 |
| Boomers (1989) | 1.14 | 1.54 | 1.90 | 4.41 | 2.84 |
| Ratio | 1.34** | 1.07 | 1.44** | 1.53** | 1.48** |
| All single |  |  |  |  |  |
| Parents (1960) | 0.29 | 1.56 | 1.16 | 6.70 | 3.64 |
| Boomers (1989) | 0.18 | 0.11 | 1.14 | 5.39 | 2.95 |
| Ratio | 0.61 | 0.07 | 0.99 | 0.80 | 0.81 |

Source: Authors' tabulations using 1960 Decennial Census, 1990 (March) Current Population Survey (CPS), 1962-63 Survey of Financial Characteristics of Consumers (SFCC), and 1989 Survey of Consumer Finances (SCF). Two asterisks indicate ratio is statistically different from 1 at the 1 percent level. See data appendix for details.
pace than their parents. However, this does not necessarily mean they will remain better off as they get older.

Ratios of wealth to income, calculated on a per adult basis, are generally higher for baby boomers than they were for their parents 30 years ago, with some notable exceptions (see Tables 5 and 6 ). ${ }^{22}$ Single people in 1989 generally have less wealth relative to income in 1989 across all income levels, though the limitations of the wealth data preclude strong inferences about the drop in wealth. Young people in the bottom income group also have a lower wealth ratio. But, especially when

[^9]Table 6
Wealth/Consumption Ratios, Baby Boomers and Their Parents

| Subgroup | Median | Average For |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom Quintile | Middle 60 Percent | Top Quintile | $\begin{gathered} \text { All } \\ \text { Incomes } \end{gathered}$ |
| Ages 25 to 34 |  |  |  |  |  |
| Parents (1960) | 0.31 | 0.71 | 0.77 | 3.27 | 1.52 |
| Boomers (1989) | 0.43 | 0.66 | 1.75 | 7.72 | 3.54 |
| Ratio | 1.39 | 0.93 | 2.26** | 2.36 | $2.33^{* *}$ |
| Ages 35 to 44 |  |  |  |  |  |
| Parents (1960) | 1.33 | 1.22 | 1.84 | 5.04 | 2.82 |
| Boomers (1989) | 2.06 | 1.54 | 2.68 | 7.40 | 4.30 |
| Ratio | 1.55** | 1.26 | 1.46** | 1.47** | $1.52^{* *}$ |
| All married |  |  |  |  |  |
| Parents (1960) | 0.91 | 1.02 | 1.40 | 3.79 | 2.12 |
| Boomers (1989) | 1.73 | 1.36 | 2.58 | 6.70 | 3.87 |
| Ratio | 1.89** | 1.33 | 1.84** | 1.77** | 1.82** |
| All single |  |  |  |  |  |
| Parents (1960) | 0.28 | 0.46 | 1.18 | 9.94 | 3.92 |
| Boomers (1989) | 0.26 | 0.07 | 1.49 | 8.87 | 4.01 |
| Ratio | 0.95 | 0.14 | 1.26 | 0.89 | 1.02 |

Source: Authors' tabulations using 1960-61 and 1989 Consumer Expenditure Surveys (CEX), 1962-63 Survey of Financial Characteristics of Consumers (SFCC), and 1989 Survey of Consumer Finances (SCF). Two asterisks indicate ratio is statistically different from 1 at the 1 percent level. See data appendix for details.
attention is focused on the middle of the distributions, ratios of wealth to income are about the same or significantly higher than in $1960 .{ }^{23}$

Because consumption grew more slowly than income for people ages 25 to 44, ratios of wealth to consumption (Table 6) grew faster than ratios of wealth to income. Ratios of wealth relative to consumption may be more meaningful than those of wealth relative to income because they indicate how many years of current consumption a person's wealth will support. The only groups which show consistent declines in the ratio of wealth to consumption are single people in the bottom and top quintiles, and these decreases are not supported by the statistical tests.

[^10]Higher wealth accumulation does not offer much solace, however. In both 1960 and 1990, and for all but the top quintiles, people ages 25 to 44 generally have wealth to support only one or two years of consumption. Simulation-based forecasts of retirement prospects for the baby boomers by Bernheim (1992, 1993) based on a different source of data indicate that the cohort needs to save more to maintain the level of living standards to which they have grown accustomed. ${ }^{24}$ Aggregate trends also point toward problems in the future. Both personal and government saving rates have fallen to less than half the postwar averages, and we are probably already experiencing some of the effects of lower investment.

Moreover, the role of personal saving in providing for retirement has been dwarfed by other fortuitous circumstances in the case of current retirees. The parents' generation did not create their bountiful retirement outcomes through diligent saving. ${ }^{25}$ Bosworth, Burtless, and Sabelhaus (1989) show that the decline in U.S. personal saving in the mid 1980s occurred because the group of people approaching retirement saved less than half of what their parents had saved at the same point in life in earlier decades. The need to save was substantially mitigated by unexpected capital gains in housing and by net intergenerational transfers. These transfers occurred explicitly through expanded Medicare and Social Security benefits and implicitly through government deficits. Government policies that expanded tax preferences for retirement saving subsidized some part of the saving that remained.

Predicting retirement outcomes for the baby boomers is very difficult because it is too early to know what trends will most affect future well-being. Thirty years or so remain before the middle boomers will enter retirement, and a lot will happen between now and then. [Imagine, in 1960, having predicted retirement outcomes for the parent cohort in 1990!] The two economic factors which dominate the retirement well-being of the parents' cohort-bountiful generational transfers and copious returns to wealth-could never have been forecast.

But the fact remains that baby boomers are unlikely to get windfalls similar to those of their parents. Moreover, baby boomers face a number of new challenges, ranging from the possibility of lower benefits or higher taxes for Social Security and other government programs to the strains on families created by the increased incidence of two-earner couples. Should these factors be taken as evidence that the outlook for future retirees is bleak? Boomers are behaving the way their parents did before their elders learned about the windfalls from housing and Social Security, so it seems wrong to assume they will follow in their parents' footsteps the rest of the way towards retirement if we expect them to be confronted by different economic circumstances. How baby boomers respond to the changing

[^11]economic circumstances that will shape the future will provide many opportunities for interesting and informative research.

## Data Appendix

The data used in this paper come from six public-use survey data sets covering income, expenditures, and wealth for each of the two time periods. The income data come from the 1960 Decennial Census file and the March 1990 Current Population Survey (CPS). The expenditure data come from the 1960-61 and 1988-89 Consumer Expenditure Surveys (CEX). Finally, the wealth data come from the 1962-63 Survey of Financial Characteristics of Consumers (SFCC) and the 1989 Survey of Consumer Finances (SCF). The sample sizes for the 25-to-44 age groups we focus on are shown in Table A1. ${ }^{26}$

All values are converted to 1989 dollars using the consumption (PCE) deflator in the national income and product accounts. Household weights are adjusted for the number of adults. Quintile breaks are set to preserve equal numbers of adults in each group. The 1988-89 CEX differs from the 1960-61 CEX in that households are interviewed over four consecutive quarters, rather than at one sitting as in the earlier surveys. To construct annual records which are conceptually equivalent to the 1960s data, we matched the four quarterly interviews for a household, then adjusted the sample weights (by age and homeownership group as in the original CEX stratification adjustment) to reflect attrition for those who did not complete the survey. The households in the 1980s CEX can start and finish in any of the four calendar quarters. Any household with data that pertain to 1989 is included in our sample.

All of the measures except income (Tables 1 and 2) used data from two or more data sets in each period. Consumption levels (Tables 3 and 4) are constructed using nonhousing expenditures in the CEX data sets and value of owned home (multiplied by the space rent factor) in the SCF data sets. For example, average per household consumption for all parents in $1960(\$ 25,405)$ is the sum of nonhousing expenditures per household in the CEX $(\$ 23,535)$ and the space rent factor (.06) times the average value of owned homes in the SCF $(\$ 31,165)$. The wealth-to-income ratios (Table 5) use income data from the Census and CPS in the denominator and wealth data from the SCFs in the numerator. The ratios of wealth to consumption (Table 6) use the same CEX/SCF combination described for consumption levels (Tables 3 and 4) for denominators, and wealth comes from the SFCC/SCF.

We used the bootstrap technique to infer statistical significance for the differences between parent and baby boomer values. Bootstrap standard errors for each value were estimated using 1,000 replicates. In the case of average incomes where a sample standard deviation could be calculated, we checked that bootstrap estimates were consistent. The same approach was then used in the cases where

[^12]Table A1
Sample Sizes across the Six Data Sets and Subgroups

| Data Set/Subgroup | Parents <br> (1960-63 Data) | Boomers <br> (1989 Data) |
| :--- | :---: | :---: |
| Incomes (1960 Census, 1989 CPS) |  |  |
| All households, head age 25 to 44 | 21,471 | 26,372 |
| Head age 25 to 34 | 9,708 | 12,768 |
| Head age 35 to 44 | 11,763 | 13,604 |
| Married head | 18,263 | 15,564 |
| $\quad$ Single head | 3,208 | 10,808 |
| Expenditures (1962-63 and 1988-89 CEX) |  |  |
| All households, head age 25 to 44 | 5,525 | 2,651 |
| Head age 25 to 34 | 2,449 | 1,304 |
| Head age 35 to 44 | 3,076 | 1,347 |
| Married head | 4,788 | 1,587 |
| Single head | 737 | 1,064 |
| Wealth (1962-63 and 1989 SCF) |  |  |
| All households, head age 25 to 44 | 884 | 1,137 |
| Head age 25 to 34 | 362 | 452 |
| Head age 35 to 44 | 522 | 685 |
| Married head | 760 | 798 |
| Single head | 124 | 339 |

we could not construct a sample standard deviation. Consumption, for example, required draws from the data sets on both expenditure and wealth (to obtain housing values).

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[^0]:    John Sabelhaus is a Researcher at the Urban Institute. Joyce Manchester is a Researcher at the Congressional Budget Office. The views here are those of the authors and do not necessarily reflect those of the Congressional Budget Office or the Urban Institute. Blake Mackey provided excellent research assistance on this project, and two anonymous referees provided useful comments on the original draft. The data used in this article can be obtained beginning in June 1996 through June 1999 from John Sabelhaus, The Urban Institute, 2100 M St. NW, Washington, D.C. 20037.
    [Submitted February 1994; accepted January 1995]

[^1]:    1. See, for example, Easterlin (1987) and Welch (1979).
    2. For example, Levy and Michel (1986) discuss how the middle-class American dream has expanded to include many more material goods than the previous generation had.
    3. Some readers might be concerned that comparisons of well-being in 1960 and 1989 are biased by business cycle effects. 1960 is close to a business cycle trough while 1989 is at the end of a long business cycle expansion. In fact, the aggregate ratio of household net worth to GDP is similar in the two years: 3.56 in 1960 and 3.61 in 1989. Further, no cyclical pattern in the ratio of household net worth to GDP is obvious-the ratio rose from 1945 to 1960, fell from 1960 to 1975, and then rose again from 1975 to 1994.
    4. Several recent studies have looked at income growth across cohorts over the last few decades. Richard Easterlin and several coauthors ( 1990 , 1993) have shown that, after adjusting for household composition using the Fuchs' scale, baby boomer incomes are higher than those of their parents when they were the same age. Levy and Michel (1991) found a similar pattern, but raise concerns about increasing earnings inequality within cohorts.
[^2]:    5. The Congressional Budget Office (1993) provides information on how household composition of baby boomers differs from that of their parents. It also presents data on household income, wealth, and ratios of wealth to income by type of household for baby boomers and parents.
    6. The average size of families has declined from 3.7 in 1960 to 3.2 in 1990.
    7. The percentage of households composed of one person has risen from 13.1 percent in 1960 to 24.7 percent in 1990.
[^3]:    8. Easterlin and coauthors (1990, 1993) refer to the Fuchs' scale applied to income as "income per adult equivalent" or IAE. The scale is described in Fuchs (1986).
    9. The income measure used in all of the tables is the standard Census cash income. It includes wages and salaries, self-employment income, property income, and transfers. The only notable income item not included is capital gains.
    10. The weights used to compute means are adjusted for the number of adults in the household, and this has a big effect on differentials in rates of increase using the four measures. Consider the following example. In the base period, we have one household with $\$ 20,000$ of income and two people. In the second period, we have one household with income of $\$ 40,000$ and two people, and a second household with income of $\$ 20,000$ and one person. The adjustment for the number of adults raises the per household rate of increase from $(30,000 / 20,000)=50$ percent to $(33,333 / 20,000)=67$ percent. The per adult rate of increase in this example is 100 percent and is insensitive to whether or not the household weight is adjusted for the number of adults.
    11. An alternative is to compare growth of per adult incomes for people aged 25 to 44 in the surveys to aggregate survey income growth. The answer turns out to be the same, because the aggregate survey income grew at roughly the same rate as GDP.
[^4]:    12. The income break-points used to split the sample across income groups in Table 1 are set so as to keep equal numbers of adults in cach of the five quintiles. The middle three quintiles are then combined to create the middle 60 percent. The distribution break-points for each measure are created separately, because any person's position in the income distribution is potentially sensitive to which measure is used.
    13. This result differs from the CBO (1993) conclusion that incomes for younger baby boomers have increased less than those of older boomers. Our findings differ because we are looking at averages per adult using per adult weights, whereas CBO computed household averages using household weights. The CBO method will find much lower income growth when there is substantial demographic shift from two-adult to one-adult households as occurred among the younger group.
[^5]:    14. If the percentage of less wealthy young people living with their parents (and thus not counted in our households) has risen over time, our measures of well-being could be biased by a sample-selection problem. Evidence is difficult to find, but the proportion of people ages 25 to 44 who live with their parents changed little between 1975 and 1989, rising from 4.99 percent to 7.85 percent.
    15. Levy and Murnane (1992) present a summary of the research on expanding U.S. wage differentials and show that much of the increase is attributable to an increase in the college wage premium for young males.
[^6]:    16. The appendix to Bosworth, Burtless, and Sabelhaus (1991) describes what we mean by a cash-basis measure of consumption. Cash consumption is National Income and Product Account (NIPA) consumption less spending imputations to the household sector, and includes almost all goods and services which the household directly pays for. It excludes some items, such as medical care provided by the government, for which the household does not directly pay.
    17. For example, consider a homeowner with $\$ 30,000$ in expenditures, $\$ 5,000$ of which go to mortgage interest, property taxes, and maintenance of the home. The homeowner lives in a house with a market value of $\$ 200,000$. Measured expenditure is just the $\$ 30,000$, but our measure of consumption is ( $\$ 30,000$ $-\$ 5,000)+(.06 * \$ 200,000)=\$ 37,000$. The consumption measures are comparable over time, and also between homeowners and renters at a point in time.
    18. The space rent factor has been stable at .06 over time for the following reason. If rental markets are in zero-profit equilibrium, the rent per dollar of capital is just the real interest rate plus property tax rate plus maintenance per dollar rate. Since the NIPA uses observed rents to estimate the unobserved owner-occupied rents, the space rent factor is stable as long as the sum of the three components is stable.
[^7]:    19. The averages for all incomes reflect an important adjustment made to avoid bias in comparing expenditures over time. Bosworth, Burtless, and Sabelhaus (1991) showed that the measured expenditures in the 1980s Consumer Expenditure Surveys (CEX) were lower relative to NIPA controls than the aggregates in the 1970s data, and the same is true for the 1960 s data. The reason is that the CEX does not impute incomes or expenditures, so CEX incomes are lower than CPS incomes, where extensive imputations are used. We implicitly correct for the lower incomes by measuring overall average consumption (column 5) as a weighted average of consumption across the income distribution (columns 2,3 , and 4) using the appropriate weights of $0.2,0.6$, and 0.2 . This adjustment yields overall CEX expenditure growth which is in line with CPS income growth and overall NIPA expenditure growth. Unfortunately, the same problem may bias the median (though not nearly as much), and we know of no way to correct for that.
    20. Homeownership rates for married couples with children and for single parents with children have dropped over the last two decades. Other groups continue to experience increases. See the Joint Center for Housing Research (1993).
[^8]:    21. This calculation does not include the implicit Medicare cost-shifting tax paid by young people, which is subject to debate, but probably very large. Other changes in the tax code over the last few decades, including changes in IRA eligibility, eliminated deductibility of sales taxes and nonmortgage interest, and expansion of standard deductions have had differential generational impacts. It would be interesting to explore how comprehensive average and average-marginal tax rates across age groups have changed.
[^9]:    22. Wealth includes liquid as well as illiquid financial assets such as IRAs or Keogh plans; the value that can be borrowed against employer-provided pension accounts; the value of any housing, land, and automobiles owned less the debt owed on them; less other nonhousing liabilities such as credit-card debt. We include housing wealth, defined as the value of the home less outstanding mortgages, in our calculation of wealth. Others, such as Bernheim (1992), do not include housing equity in measures of retirement preparedness, arguing that most people do not draw down the value of housing wealth as they age.
[^10]:    23. There is good reason to focus on the middle 60 percent and/or the median wealth values. The two wealth data sets used in this paper are small, each about 3,000 total observations. Because wealth is a highly skewed variable, statistical tests for certain groups are tenuous. The probability of discernible change in the ratios (given a level of change) is much higher in the middle 60 percent and median values, because the very wealthy show up with either very low income (which distorts the bottom quintile) or very high income (which distorts the top quintile).
[^11]:    24. Whether the increase in saving is significant depends on whether housing wealth is included in total wealth. When housing wealth is excluded from total wealth, Bernheim finds that baby boomers are saving only 34 percent as much as they should if they wish to maintain the same level of consumption after retirement as before. Including housing wealth raises that percentage to 84 percent.
    25. Several indications of considerable well-being of current retirees can be found. Rates of labor force participation for males ages 55 to 64 have dropped nearly 20 percentage points over the last few decades. Older people are not obtaining additional leisure with foregone consumption since expenditures for people over 55 have increased faster than for any other age group.
[^12]:    26. The sample sizes across quintile breaks are not shown because they vary by type of adjustment (e.g., per adult or per household). As expected, the sample sizes across the three income cells in each row are roughly 20 percent, 60 percent, and 20 percent of the total.
