

INCREASING INEQUALITY:
The Role of American Household Indebtedness Between 1989 and 2004

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Introduction

This paper provides an extensive examination of the changing role of debt in the lives of Americans between the late 1980s and the early 2000s. Using data from two years of the Survey of Consumer Finances (SCF), 1989 and 2004 (the most recent year available as of the writing of this paper), we consider how the use of debt shifted over the 15 year period; we look in particular for evidence of a differential reliance on debt by households in different income, racial/ethnic, tenure, and educational groups.¹

We undertake our study for three main reasons. First, we are curious about the differing ability of individuals to use debt productively or non-productively. A “productive” use of debt would be the use of debt for longer-term gain, e.g. to finance home purchase or an education. “Non-productive” debt, on the other hand, can assist households in meeting their immediate needs, but might have the disastrous effect of pulling individuals into a debt spiral from which it is difficult to emerge (at which point this debt becomes “counter-productive”); high interest credit card debt provides an example of non-productive debt.

Second, we are interested to see if there is evidence of increasing inequality among Americans. Since our paper focuses on debt, we are concerned not so much with inequality in wealth and income, but inequality in terms of financial security, that is, inequality in the ability to meet, rather than be overwhelmed by, one’s debts.

Third, we are interested in considering Americans’ indebtedness in light of the recession that began at the end of 2007 and the credit crisis currently ravaging the country’s economy:

¹ The literature on assets and debt over the life cycle is extensive (see, for example, Modigliani (1975), Gale and Scholz (1994), Poterba and Samwick (1997), Cagetti (2003), and Yilmazer, and DeVaney (2005)). Because at a descriptive level of analysis SCF data conform so closely to what one would expect over the life cycle (for example, a high ratio of debt-to-assets early on in life giving way to a high ratio of assets-to-debt later in life), we do not present findings by age in our analysis.

what are the likely effects of Americans' indebtedness on their ability to weather the country's current financial maelstrom?

The literature on American indebtedness takes several forms. Some studies concentrate on the use of specific types of debt instruments, for example, credit card debt (Bird, Hagstrom, and Wild, 1997) or the use of payday loans (Stegman and Faris, 2003). Other studies focus on the indebtedness of different groups of people, for example, younger people (Chiteji, 2006), people in different income groups (Wheary, Shapiro, and Draut, 2007), or people of different races/ethnicities (Wheary, Shapiro, Draut, and Meschede, 2008). Still other studies focus on the negative side of debt, such as over-indebtedness (Scurlock, 2007) and bankruptcy (Warren and Tyagi, 2003). Our study adds to the literature by combining two of these approaches, i.e. a focus on debt instruments and an examination of the disparate reliance on them over time by individuals in different groups.

Our paper is organized as follows. We first present an overview of the data underpinning the analysis and explain our use of these data. Next, we present our analyses and the most intriguing findings from them, organized into subsections as follows: a brief overview of the macroeconomic conditions in the two years in question; a preliminary examination of Americans' wealth and income; a broad overview of Americans' debt holdings and of how the reliance on different instruments shifted over time; and a look at specific measures of indebtedness and economic insecurity, including asset-to-debt ratio, debt-to-net worth ratio, debt-to-savings ratio, and debt service ratio. In the concluding section of our paper, we consider what the analyses reveal about our three central concerns: the differing ability of individuals to use debt productively or non-productively; whether or not there is evidence of increasing

inequality in Americans' financial security; and how Americans were situated by the mid-2000s to weather the current financial crisis.

SCF Data and their Use²

Our study uses data from the Federal Reserve's Survey of Consumer Finances, 1989 and 2004. SCF data are cross-sectional, and as our analysis tracks changes in American indebtedness over time, readers should not make the mistake of thinking that we are tracking the same households over time. However, SCF data are handled in such a way that they are generalizable to the entire United States population, and because of this our analysis provides a portrait of the wealth and indebtedness of Americans over time.

The SCF is a survey of US families³ that is conducted every three years; it is sponsored by the Board of Governors of the Federal Reserve System with the cooperation of the US Department of Treasury. The goal of the SCF is to assess the financial status of all Americans. Bucks, Kennickell, and Moore (2006) summarize succinctly the methods used to meet this goal:

The SCF is expected to provide reliable information both on attributes that are broadly distributed in the population (such as homeownership) and on those that are highly concentrated in a relatively small part of the population (such as closely held businesses). To address this requirement, the SCF employs a sample design, essentially unchanged since 1989, consisting of two parts: a standard, geographically based random sample and

² The authors thank Bert Grider, former Graduate Research Assistant with the Center for Community Capital, for his hard work preparing and analyzing the SCF data.

³ In fact, SCF data are intended to provide information on the "primary economic unit" (PEU) within the household. According to the 2004 SCF codebook, this unit "consists of an economically dominant single individual or couple (married or living as partners) in a household and all other individuals in the household who are financially interdependent with that individual or couple. For example, in the case of a household composed of a married couple who own their home, a minor child, a dependent adult child, and a financially independent parent of one of the members of the couple, the PEU would be the couple and the two children." In our analysis, when we refer to a "household" or "family" we are using these terms interchangeably with SCF's "primary economic unit".

a special over-sample of relatively wealthy families. Weights are used to combine information from the two samples to make estimates for the full population. (A3)

One of the complications of using SCF data is that since 1992, multiple imputation has been used to handle missing data within the survey (see Montalto and Sung, 1996 for a full explanation). This means that the SCF comprises not one dataset, but five distinct datasets. Researchers using the data for descriptive analysis (as we do in this paper) have two options for arriving at means, medians, and frequencies; one option provides exact means and frequencies but only a close approximation of medians while the other provides exact values for all statistics. Our paper, relying heavily on the use of medians, employs the exact method. Under this method we compute desired statistics separately for each imputation using the sample weight,⁴ and the five values are averaged to arrive at a final estimate.

Additional important technical points are as follows. First, all dollar values in this paper are adjusted to 2004 dollars. Second, in keeping with the Federal Reserve's own analysis of SCF data, where the data are disaggregated by income quintile, the highest quintile is further broken down into two deciles. Third, in developing our various ratios, only those households who reported values for both the numerator and denominator were included in the analysis (e.g. to be included in the analysis of debt-to-savings ratio, a household had to report holding both some debt and some savings).

⁴ Because the SCF over-samples wealthy households, the use of weights is crucial in order to make the data representative of the greater American population. We apply weights as directed by the relevant SCF codebooks.

The Findings

Setting the economic stage: 1989 and 2004

Before presenting our most pressing findings, we pause to examine macroeconomic conditions in both 1989 and 2004. Americans' use of debt will certainly be affected by the broader economy, and we consider here how these conditions might affect our findings.

According to the National Bureau of Economic Research (2008), the US economy was expanding in both 1989 and 2004. In fact, the economy expanded for 92 consecutive months beginning in November of 1982 and ending in July 1990, which means that 1989 was at the tail end of an extended period of economic growth. The most recent economic contraction (a.k.a. recession) of the US economy to occur before 2005 started in March 2001 and ended in November of 2001; this means that 2004 was also part of a period of economic growth.

Table 1 presents economic indicators for the two years. From these we can see that 1989 and 2004 were similar both in terms of GDP growth rate and in rates of unemployment. The major differences between the two years are inflation, which was higher in 1989, and the nominal rate on a fixed rate 30 year mortgage, also higher in 1989. When adjusted for inflation, the real interest rate on a conventional mortgage was 5.12 percent in 1989 and only 2.87 percent in 2004; we would therefore expect to see an increase in mortgage finance between the two years, and, in fact, the data support this. Another major difference between the two years is the annualized federal funds rate, which can affect the cost of consumer credit and also the interest paid on savers' deposits. This rate is much lower in 2004 than in 1989, and we would therefore expect to see an increase in the use of consumer credit and a decrease in consumer savings between the two years. For the most part, the data meet these expectations.

Another important trend was the rise in home prices over the period. Figure 1 shows changes in median existing and new single-family home prices⁵; all values are converted to 2004 dollars. We see that an initial decline in prices between 1989 and 1992 gave way to a steady increase in median values and an especially dramatic increase in prices after 1997. There was a corresponding growth in housing debt over the time frame: the federal flow of funds accounts for the two years in question show that mortgage borrowing grew from \$342.6 billion (2004\$) in 1989 to \$943.5 billion in 2004 (Board of Governors of the Federal Reserve System, 2008a and 2008b).

Weller (2007) sites a number of important macro trends that led to increased levels of consumer indebtedness after 2001. While wages stagnated and health and pension benefits declined, housing, education, and transportation costs rose sharply. These factors led to “a record run-up in consumer debt” (p. 583). In addition, Lyons (2003) found that financial industry innovations helped close the gap between actual and desired borrowing after 1983, and that the “ability of all households to obtain their desired debt levels increased...most dramatically between 1992 and 1998” (p. 231). All of these macro-economic shifts help explain the increases in indebtedness we reveal in our own analysis.

Americans' Wealth and Income, 1989-2004⁶

Our main findings concerning changes in Americans' wealth and income are that:

- Incomes and wealth grew almost across the board. However, inequality remained largely unchanged: at the median, in both years, the lowest income quintile earned six cents for

⁵ Existing house price data come from the National Association of Realtors; new house price data come from the US Census.

⁶The underlying population for this analysis of wealth (assets, debts, net worth) and income is the entire SCF population. The median values for each variable are for the entire population, including those who reported “0” as the value of their assets, debts, or income.

every dollar earned by those in the highest decile; also in both years, the bottom quintile of earners had less than one cent for every dollar of net worth of those in the top decile.

- Educational attainment played an increasingly important role in income and asset inequality as those without a high school diploma fell further behind in earnings and actually lost ground in terms of net worth and assets.
- Housing tenure had a dramatic effect on wealth gaps: while the median renters' income was 40 - 45 percent of the median owners', the asset gap was much more dramatic with the median renter holding only 2 percent of the assets of the median owner.
- Racial and ethnic gaps diminished somewhat between 1989 and 2004 so that median minority income was nearly 60 percent of median non-Hispanic white income, and median minority wealth reached 14 percent of non-Hispanic whites' wealth. However, the fact remains that minority family wealth remained a fraction of white family wealth.

The in-depth analysis behind these findings is presented here.

We begin the paper with a descriptive analysis of how Americans' balance sheets and income shifted between 1989 and 2004. The typical SCF respondent in both years was a married, white homeowner with a high school diploma. In 1989, this person lived in a household earning (at the median) \$36,358; by 2004, this figure had increased to \$42,090 (as noted previously all 1989 figures in this paper are inflated to 2004 dollars). While the median householder's debt increased over the time frame from \$8,248 to \$23,480, so too did her asset levels increase, from \$108,354 to \$169,466. Overall, things look good for American families, with their median net worth rising from \$69,905 in 1989 to \$94,504 in 2004.

How do the gains experienced across the population hold when the data are disaggregated by income group, race/ethnicity, tenure and level of educational attainment? We move now to consider household wealth and income in more detail.

Wealth and income

We begin with a look at how households broken down by income quintile (with the top quintile further broken out into two deciles) have fared over the 15 year period.⁷ The analyses show that incomes⁸ and wealth⁹ grew almost across the board. However, inequality remained largely unchanged: at the median, in both years, the lowest income quintile earned six cents for every dollar earned by those in the highest decile. Ostensibly, the lowest-income households saw the greatest percentage change to their income over time (Table 2); however, this was actually a modest dollar increase. The wealthiest 10 percent of households, on the other hand, saw a similar percentage change to their income, but the actual dollar increase was \$33,393 – an amount greater than the median annual income of households in the two bottom quintiles.

When it comes to changes in net worth, it is clear that the top 40 percent of households saw impressive gains in their net worth over time (Table 3), while the bottom 40 percent of households either saw an increase in what was originally negligible net worth or saw a slight

⁷ As a point of reference, in 2004, the income percentile cutoffs were as follows: 0 to 19.9 (\$18,000); 20-39.9 (\$33,000); 40-59.9 (\$52,000); 60 to 79.9 (\$87,000); 80-89.9 (\$126,000); and the median income for the top earners (\$180,000).

⁸ Income is calculated in this paper as it is by the analysts at the Federal Reserve in their use of SCF data, i.e. by reliance on variable X5729. This value should include income received from the following sources: wages and salaries; income from a professional practice, business or farm; non-taxable investments such as municipal bonds; other interest income; dividends; net gains from the sale of stocks, bonds, or real estate; net rent, trust income, or royalties from any other investment or business; unemployment or worker's compensation; child support or alimony; income from AFDC ('95), TANF ('04), food stamps, or other forms of welfare or assistance such as SSI; income from Social Security or other pensions, annuities, or other disability or retirement programs; income from any other sources.

⁹ "Wealth" or "net worth" is arrived at by subtracting "total debts" from "total assets." "Total assets" includes the following types of assets: any real estate (including money due to respondent on real estate sold); all vehicles; checking accounts; IRA/Keogh; money market and other savings accounts; CDs; mutual funds; govt. bonds; other savings bonds or bills; stock; cash or call money account; equity interest in annuities, trusts or managed investment accounts; cash value life insurance; employer sponsored retirement plans; accounts receivable – personal loans to a family business; accounts receivable – personal; non-farming business assets (note: farm assets are counted by percentage of mortgage within SCF); other substantial assets (artwork, futures contracts, etc.). "Total debts" includes the following types of debt: credit card; store charge card; gas card; general purpose card; other card (airline, car rental); non-card acct. at stores; first, second, third mortgages; other loans for home purchase; home equity lines of credit; other lines of credit; remodeling/additions loans; loans for other real estate; vehicle debt; other consumer loans; loans owed to businesses in which respondent has share; margin loans at a stock brokerage; loans against CV life insurance; loans against retirement accounts; education loans; and any other loans at all.

decrease in net worth. By 2004, at the median, the bottom 20 percent of households held less than one penny (\$.01) of wealth for each dollar held by the top 10 percent of households.¹⁰

Racial and ethnic gaps diminished somewhat between 1989 and 2004 so that median minority income was nearly 60 percent of median non-Hispanic white income by 2004.¹¹ Blacks, despite a high percentage increase to their income, had the lowest median income in both years (Table 4). As concerns median minority wealth, it increased and reached 14 percent of non-Hispanic whites' wealth by 2004; this was up from 6 to 7 percent in 1989 (Table 5). Despite these changes, the fact remains that minority family wealth remained a fraction of white family wealth by the end of the time frame.

When Americans are disaggregated by tenure, we see that median income levels grew for both owners and renters (Table 6). Very little changed in the relationship between owners' and renters' income over time, with the median owner making more than twice the median renter in both years.

Housing tenure had a dramatic effect on wealth gaps.¹² Although owners' and renters' median net worth increased over time (Table 7), in both years the median renter held only 2 percent of the wealth of the median owner. While both owners' and renters' asset and debt levels showed dramatic increases between 1989 and 2004, the changes for renters were largely

¹⁰ When we look at the data behind these changes, we see that for all groups both median assets and debts increased over the time period, with assets continuing to far outweigh debts. However, in the case of those whose median net worth declined over time the increase in indebtedness was unusually large (up 676 percent, from a median of \$771 in 1989 to a median of \$5,980 in 2004).

¹¹ In keeping with the racial/ethnic categories delineated in the public dataset of the SCF, our analysis breaks individuals into four groups: white, black, Hispanic, and "other" (which includes Asian, Native American, Native Hawaiian/Pacific islander, and anyone who responded "other" when asked to identify their race/ethnicity). As a point of reference, in 2004, the share of the SCF population represented by each racial/ethnic group is: white (72%), black (13%), Hispanic (11%), other (3%). (Figures do not tally to 100% due to rounding.)

¹² In 2004, 69% of SCF respondents were owners and 31% were renters.

illusory – changes to values that were minimal to begin with.¹³ For owners, in contrast, we see significant real increases in both their asset and debt holdings, consistent with the trends in home values and prices described earlier. At the median, owners' assets jumped by 52 percent, from \$193,186 to \$294,074. The shift in owners' debt is equally startling, however, with the median owner experiencing an increase from \$27,999 in 1989 to \$71,038 in 2004.

Finally, we look at the population by level of educational attainment.¹⁴ We see that the incomes of those without a high school diploma were stagnant over time (Table 8), and that the only group to see a sizeable increase in their incomes was those with graduate degrees. Inequality between these groups therefore increased over time: in 1989, those with graduate degrees earned about three-and-a-half times the income of those who had not completed high school; by 2004, the median householder with a graduate degree earned five times that of his less educated counterpart.

Educational attainment played an increasingly important role in asset inequality as well, as those without high school diplomas actually lost ground in terms of net worth (Table 9). Of all groups (income, race/ethnicity, tenure, or education), those who did not finish high school are the *only* group to see their median asset level decline over the time frame; while their debts declined as well, they were small to begin with and the decline was slight.¹⁵ At all other levels of educational attainment, net worth increased, and the higher the education level, the greater the actual increase in net worth.

¹³ At the median, renters saw their assets grow from \$7,307 to \$10,384 over the time frame, while their debts climbed from \$742 to \$1,500.

¹⁴ In 2004, the share of population represented by educational group was: less than high school diploma (16%), high school graduates (52%), college graduates (19%), those with graduate degrees (13%).

¹⁵ The median asset level for those without a high school degree fell from \$50,028 in 1989 to \$36,766 in 2004 while median debt levels for this group fell from \$469 to \$372.

*Descriptive Analysis: Americans' Debt Holdings, 1989 and 2004*¹⁶

Our main findings concerning changes in Americans' debt holdings are that:

- By 2004, a greater percentage of Americans were indebted, and to a greater degree, than in 1989; almost all types of debt contributed to this change.
- All income groups gained access to greater amounts of credit over time, with the lowest income group having access to credit equal to half their annual income by 2004. In 2004, households below the 60th percentile of income were using more of their available credit than higher-income households were.
- Credit and charge card use increased faster among lower-income segments than higher income segments and among black and Hispanic households than white households, resulting in these groups “gaining on” more advantaged groups in this debt category.
- Real property debt levels ballooned. Lower-income and black households gained on their more advantaged counterparts in terms of real property debt, both in terms of access and amounts borrowed.
- By 2004, more households were borrowing, and at greater levels, to fund education. While education debt levels grew for nearly all groups, they grew more for blacks than whites and more for renters than for owners.

The in-depth analysis behind these findings is presented here.

This section presents an analysis of the types and levels of debt held by Americans in both 1989 and 2004. We also look at whether or not certain groups came to rely more or less

¹⁶ There were a number of changes in how debt data were gathered between 1989 and 2004. For the most part, these changes affect the accuracy of the 1989 data, in general resulting in underestimates of debt levels in 1989. Please contact corresponding author for full details.

heavily on specific types of debt.¹⁷ For these analyses, we aggregate the debt reported in the SCF into six types: revolving debt, real property debt, vehicle debt, recreational vehicle debt, education debt, and remaining debt.¹⁸ After presenting findings for the entire population, we disaggregate our analysis by income, race/ethnicity, tenure, and education of householder

Total Population

Overall, Americans' use of debt increased over time as both the share of households carrying debt and the amounts borrowed increased (Table 10). Credit and charge card debt increased in importance over the time frame, so that by 2004, Americans were more likely to hold this than any other type of debt. The median household experienced a 145 percent increase in total indebtedness, to a 2004 figure of \$57,300. Though balances increased for almost all types of debt, the most dramatic dollar growth was in real property debt. Levels of education debt nearly doubled.

We move now to examine the indebtedness of Americans disaggregated by income, race, tenure and educational attainment to assess whether the changes found for the entire population were borne equally across groups.

Income Group

When the population is disaggregated by income, the first thing that stands out is a marked increase in the holding of credit and charge card debt by the lowest income households (Table 11). For the lowest earners, the incidence of carrying such debt nearly doubled, while for

¹⁷ For these analyses, the underlying population is anyone with any debt at all (i.e. the total indebted population); as long as survey respondents reported at least \$.01 worth of debt on any variable, they were included in these analyses.

¹⁸ The different types of debt are defined as follows. "Revolving debt" includes credit card debt, store charge card debt, gas card debt, general purpose card debt, any other card debt, and debt on non-card accounts at stores. "Real property debt" includes debt related to any type of investment in real estate (purchase, improvement, etc.). "Vehicle debt" includes any debt used for a car, truck, jeep, or utility vehicle. "Recreational vehicle debt" includes debt used for any other type of vehicle (e.g. airplane, boat, motorcycle, camper, etc.). "Education debt" refers to any debt used for educational expenses. "Remaining debt" refers to any debt that is not carried on credit card or a store account and that was not applied to one of the purposes just delineated.

the second income quintile, the likelihood of holding such debt increased by 50 percent. The heaviest reliance on credit and charge cards remained among middle to upper income households, however, more than half of whom carried revolving debt in 2004. For all but the top decile of earners, the median value of revolving debt either doubled or came close to doing so.

In both years, the likelihood of holding real property debt increased with income. However, only low- and middle-income households experienced increases in the share holding real property debt; the likelihood of holding real property debt declined over time for those above the 60th percentile of income (Table 12). For all households with real property debt, median debt levels increased impressively over the 15 year period, tripling for lowest-income households and more than doubling for several other groups.

The final finding across income groups is an increase in the percentage of households in all groups carrying education debt. This time the increase is most significant for those in the middle and upper income quintiles (Table 13). Interestingly, the median amount of education debt carried does not vary greatly by income group; in 1989 it was close to \$5,000 and by 2004, it hovered around \$10,000 for most groups.

Dramatic increases in the share of lower-income people carrying credit and charge card debt and in the proportion that this debt constituted of the average lower-income person's total debt load (from 18 percent of total debt in 1989 to 27 percent of total debt in 2004) prompted us to take a closer look at the use of open-end credit across income groups. Here we look at both revolving debt and debt on lines of credit (whether or not they are secured by the home).

The data reveal that in all income groups, American families had increasing amounts of credit available¹⁹ to them relative to their income over the 15 year period. This ratio gives us

¹⁹ Credit available is calculated by combining respondents reported credit limit on all cards held and on all lines of credit (whether or not they are secured by a home).

some sense of how the opportunity to become (over)indebted on credit changed over time, and it more than doubled for all groups above the 40th percentile of income (Table 14). The highest level of credit relative to income was, surprisingly and of great concern, available to the lowest-income Americans, who in 2004 had a median credit line equal to half of annual income.

As far as how Americans in different income groups were making use of their available credit, changes over time varied across groups. While the lowest income Americans (those below the 40th income percentile) were hardly using their available credit in 1989, by 2004 this group was using, at the median, between 13 and 15 percent of their total credit (Table 14). Higher income Americans (those above the 60th percentile) actually saw declines in their use of available credit over time and by 2004 were using less of the credit available to them than lower-income families were. Low-income Americans' increased reliance on open-end credit is disturbing: as Bird, Hagstrom, and Wild (1997) point out, such credit²⁰ can be used to smooth consumption when there are disruptions in income, but the down side of using open-end credit is that it can have "the serious ex post consequence of leaving...users with a debt that must eventually be paid. Consumption is reduced involuntarily for a long period even after income returns to normal levels. The burden can become very heavy in just a short time..." (pp. 2-3).

Race/Ethnicity

When the debt data are disaggregated by race, we see that the most dramatic growth in share of households carrying credit and charge card debt occurred among black and Hispanic households (Table 15), though these changes left all racial/ethnic groups with similar rates of usage by 2004. Median levels of indebtedness on credit and charge cards also grew for all

²⁰ While these authors confine their analysis to credit card use alone, we believe their observations apply to all types of credit.

groups over the time frame. Blacks maintained the lowest median levels of revolving debt in both years.

A second interesting shift across racial/ethnic groups concerns debt related to real property. In both years, whites were the most likely to hold real property debt, though by 2004 black and “other” households had narrowed this gap (Table 16). When it came to the actual amount of property debt held, in both years blacks’ median debt levels were markedly lower than those of all other groups.

A final interesting shift across racial/ethnic groups concerns education debt. While the trend across the American population was an increase in the holding of such debt, Hispanics actually saw a decline both in their likelihood of carrying education debt and in the amount carried (Table 17). Conversely, the 33 percent increase in the percent of black households carrying education debt and a near tripling in median amounts carried suggests good news and bad: this could signal an increase in productive investment in higher education by blacks, but also suggests the associated debt burden is heavy.

Tenure

Turning to a breakdown by tenure, owners were only slightly more likely to carry any debt in 2004 than in 1989, but the median amount of total debt held doubled (Table 18). At the median, almost all levels of debt increased for indebted owners, the exception being recreational vehicle debt. Renters saw all types of debt increase over the 15 year period (Table 19), with the most significant increase (in terms of percentage change) occurring to education debt. Renters were much more likely than owners to carry education debt (19 percent versus 11 percent, respectively); this was the only type of debt more prevalent among renter households. In both 1989 and 2004, owners were more indebted at the median than their renter counterparts,

regardless of the type of debt being considered, with renters most closely approximating owners in their levels of education debt.

Education

Finally, we look at the population disaggregated by level of educational attainment and see that the greatest increase in the use of revolving debt occurred among those with less than a college degree; in fact, by 2004, high school graduates were the most likely to carry such (Table 20). Median balances carried on credit and charge cards increased for all groups over time, and did so more greatly as education level increased, with the result that by 2004, those with graduate degrees had the highest median balance on their accounts. The average American without a high school diploma saw a marked increase in the share that credit card debt was of their total debt (up from 14 percent of total debt in 1989 to 21 percent of total debt in 2004) and the average high school graduate also saw an increase in the ratio of credit card debt to total debt; the opposite was true for better educated Americans.

The data also reveal a striking increase in the holding of education debt by those with college degrees (Table 21). By 2004, more than 1 in 5 college educated households held education debt, with the median amount doubling from \$7,000 to \$14,000. Interestingly, the percentage of those with graduate degrees who carried education debt declined over the 15 year period, suggesting that these more highly educated individuals are using sources other than loans for their school expenses. However, for those with graduate degrees actual levels of education debt tripled.²¹

Putting the Pieces Together: Economic Security, 1989 and 2004

²¹ We have not to this point discussed at any length findings to do with “remaining debt,” that is, debt that is not revolving debt, and that was not used to finance property, vehicles of any sort, or education. While there are several interesting findings as concerns households’ use of remaining debt, we are reluctant to emphasize these in our analysis since changes over time in the SCF’s coding make it difficult to track consistently how exactly this debt was employed.

We have looked at assets, income, and debt independently. In this section, we move to consider how the use of debt has impacted Americans' economic security over time by examining the relationships between these elements. We define "economic security" as the ability to meet, rather than be overwhelmed by, one's debts. In assessing Americans' economic security, we utilize ratios²² to examine the population's financial health along four dimensions: solvency (the asset-to-debt ratio); leverage (the debt-to-net worth ratio); financial precariousness (the debt-to-savings ratio); and liquidity (the debt service ratio, a measure of monthly debt payments to monthly income).

Shifting debt patterns are indeed having a negative effect on certain households' financial security over time. Our main findings concerning Americans' economic security are that:

- Black households' solvency and leverage worsened the furthest and ended the weakest of all racial and ethnic groups; this was due to a significant increase in total debt which outstripped asset growth.
- By just about every measure, education stands out as a sharp line of demarcation: the only subgroup to hold steady in solvency was those with graduate degrees – all other groups lost ground; households with only a high school degree were more highly leveraged than all other groups; less educated families were more likely to spend 40 percent or more of their income on debt and housing obligations; less educated families had higher levels of debt relative to savings and the least well educated saw a marked increase in this ratio over time; delinquency rates increased over the time frame for those with a high school degree or less and decreased for those with a college degree or more.

²² All ratios are calculated for those who had a positive value in both the numerator and denominator; for example, a household was only included in the analysis of asset-to-debt ratio if that household reported having asset and debt levels greater than "0". The median values presented for each aspect of the ratios (e.g. median assets and median debts) are taken from the same population. However, the values provided, when compared to one another, will not arrive at the ratio provided since the median ratio was taken after the ratios were calculated.

- For lower-income households, debt appears to have supplanted savings, leaving them in a potentially precarious situation. The lowest income households in 2004 held more than \$7.50 in debt for every dollar they had in savings. Coupled with this problem was that a high share of the lowest earners were stretching to meet their monthly debt and housing obligations.
- Likewise, renters' increasing debt-to-savings ratio and their growing rates of delinquency and serious delinquency are signs of financial stress; renters' indebtedness may jeopardize or delay their prospects for homeownership.

The in-depth analysis behind these findings is presented here.

Solvency: The asset-to-debt ratio

The asset-to-debt ratio is a measure of solvency that helps us assess how capable a household would be of paying down its total liabilities using only its assets. Here we address the following question: how did the solvency of different groups of Americans shift between the late 1980s and the mid-2000s?

We know that both asset and debt levels grew for most groups, and that debt grew the faster of the two.²³ Thus, it is unsurprising that Americans became less solvent between 1989 and 2004, with their median asset levels dropping from \$3.72 to \$2.92 for each dollar of debt they held.

Looking at Americans disaggregated by income, we see by 2004, every group's solvency had declined, but the lowest earners had become the least solvent of all groups, with a median of \$2.50 in assets for each dollar held in debt (Table 22). The data reveal a clear increase in inequality over time: in 1989, Americans in the top income decile had a median asset-to-debt

²³ At the median, Americans saw their assets increase by 46 percent to a 2004 value of \$176,182; median debt levels, on the other hand, increased by 56 percent to \$57,300.

ratio that was only 36 percent greater than that of the lowest-earning families; by 2004, the top 10 percent of earners had an asset-to-debt ratio almost twice that of the bottom quintile.

Looking at Americans by race/ethnicity, the data reveal that only the solvency of Hispanic Americans improved over time (Table 23). It is distressing to see that the solvency of black households (on a par with white households in 1989) dropped more significantly over the 15 year period than did the solvency of any other group; this is due to the fact that black families' indebtedness outstripped increases in their asset holdings.²⁴ By 2004, all groups lagged behind whites in terms of their solvency.

How does the solvency of Americans look when viewed by tenure? Not surprisingly, owners have a greater median asset-to-debt ratio than renters (Table 24). However, the solvency of owners declined more significantly than that of renters, likely due to increases in owners' real property debts. The median owner saw her debts double over the 15 year period to \$97,100, while the median renter saw a smaller increase of 70 percent in her debts, up to \$7,826.

Finally, we look at the solvency of Americans disaggregated by educational attainment. In 1989, Americans with the lowest level of educational attainment actually had the highest level of assets for each dollar of debt held (Table 25). However, the median asset levels of this group actually *dropped* over time²⁵ while their debt levels continued to rise, which led to the loss of their solvency advantage. The only group to hold steady over time in terms of solvency was those with graduate degrees.

²⁴ At the median, blacks saw a 52 percent increase in their assets, compared to a much larger 309 percent increase in their debts.

²⁵ Asset levels for this group fell from a 1989 median of \$65,005 to a 2004 median of \$52,966.

Leverage: The debt-to-net worth ratio

An analysis of debt-to-net worth has been used in the literature to examine the leverage position of households, that is, how much households have borrowed compared to what they actually own (Chiteji, 2006). While some authors use a debt-to-asset ratio to examine the leverage position of households (Bucks, Kennickell, and Moore, 2006; Bush and Katz, 2006), we prefer the more stringent debt-to-net worth ratio, since it gives an assessment of what households owe compared to what they actually own outright.

Americans became more leveraged between 1989 and 2004. In 1989, the median debt-to-net worth ratio was \$.31 of debt for each dollar of net worth. By 2004, Americans owed a median of \$.42 for each dollar of assets they owned outright. While both debt and net worth levels grew over the 15 year period, the growth of debt outstripped the growth of net worth.²⁶

When we disaggregate the population by income group, we see that the lowest earners saw the greatest increase in their leverage over time (Table 26). However, those in the bottom quintile were not the most leveraged among Americans in 2004, a distinction that belonged to those between the 40th and 90th percentile of income. The least leveraged among Americans were those families in the top income decile, who also saw the smallest change in their leverage.

As for Americans in different racial/ethnic groups, black Americans saw a startling increase in their leverage over the time frame, and this left black families the most highly leveraged among racial/ethnic groups in 2004 (Table 27; Figure 2).²⁷ Hispanics were the only

²⁶ Between 1989 and 2004, the median level of debt in America rose by 145 percent to \$57,300, while the median level of net worth grew 32 percent to \$122,436.

²⁷ This shift is explained by the fact that blacks' debt and net worth levels both grew over time, yet increases in blacks' indebtedness dwarfed increases in their net worth. In 1989 blacks owed, at the median, \$7,330, an amount that increased to \$30,000 by 2004. The median net worth of blacks, on the other hand, grew only 16 percent, from \$33,750 in 1989 to \$39,190 in 2004.

group to see their debt-to-net worth ratio decline, though their ratio was still close to that of blacks by 2004.

Moving on to tenure, owners saw a large increase in indebtedness relative to net worth (Table 28). This change came from the dramatic increase in their debts between 1989 and 2004: while owners' median debt and median net worth levels grew over the 15 year period, the median debt level doubled (from \$48,409 to \$97,100) while net worth grew by only 28 percent (from \$150,263 to \$192,280). Renters, on the other hand, actually saw an improvement in their leverage position over the time frame.

Finally, we consider the leverage position of Americans with different levels of education. The data reveal that in both years those with high school degrees were the most leveraged of all groups (Table 29). Those without a high school diploma were relatively less leveraged than other groups in 1989, but by 2004 had seen a dramatic increase in their debt-to-net worth ratio. The worsening lot of those with less than a high school degree was caused by a shocking decline in their median net worth – down 32 percent from \$59,036 to \$40,420 – while their debts continued to rise.

Financial Precariousness: The debt-to-savings ratio

Saving has historically been the first step on the path to asset acquisition. Yet, in a study of its members' financial behaviors and attitudes, Alternatives Federal Credit Union (Alternatives) found that “for many, borrowing has supplanted savings as the next rung up on the ladder for a person engaging primarily in transactional services” (2006, p. 7). We were curious if Alternatives' finding applied to the greater US population, and so look here at the relationship between Americans' savings²⁸ and their debts. Because savings include assets that can be easily

²⁸ Total savings include funds held in: checking accounts, IRA/Keoghs, money market accounts, other savings accounts, CDs, mutual funds, stocks and bonds, annuities/trusts, cash value life insurance, and retirement accounts.

converted into cash, the analysis also gives a sense of how able Americans would be to meet their debts and expenses should an emergency force them to use their savings to do so. The relationship between debt and savings, therefore, gives some sense of Americans' overall financial precariousness.

When we look at all Americans, we see that debt levels overwhelm savings levels in both 1989 and 2004. In 1989, Americans held \$1.76 in debt for each dollar they had in savings. By 2004, Americans held \$2.05 in debt for each dollar they held in savings. The increase in Americans' debts relative to their savings should not surprise us given the decline in the Federal Funds rate over the 15 year period, which made certain types of borrowing cheaper and also made the return to savings less substantial over time.

Increases in the debt-to-savings ratio were not experienced uniformly across income groups. The most dramatic increase was experienced by those in the lowest income quintile, who held a median of \$2.65 in debt for each dollar in savings in 1989 and a whopping \$7.58 in debt for each dollar in savings in 2004 (Table 30; Figure 3). Those in the second income quintile also saw significant increases in their median debt-to-savings ratio, which more than doubled between 1989 and 2004.²⁹ Conversely, for those in the top income quintile (80th to 100th percent of income), savings increased relative to debts over the time frame.³⁰ It would seem, then, that Alternatives' finding that "borrowing has supplanted savings as the next rung up on the ladder" is true only for those Americans at the lower end of the income scale. Unfortunately, this

²⁹ For each of the bottom quintiles, savings declined over the 15 year period while debt rose, and did so dramatically. The bottom quintile of Americans saw their median debt levels increase 172 percent between 1989 and 2004, from \$2,800 to \$7,620. Savings levels for these families actually declined by 9 percent over the same period, to a value of \$1,330 in 2004. For those in the 20th to 39.9th percentile of income, the story is similar: for these households, median debt levels rose 132 percent to a 2004 value of \$17,040; at the same time, savings levels dropped 25 percent, to \$5,202 by 2004.

³⁰ For those in the 80th to 89.9th percentile of income, debts were up 107 percent to a 2004 value of \$136,580; median savings, on the other hand, were up 142 percent, to a 2004 value of \$111,200. For those in the top decile, the median debt level increased 60 percent over the 15 years, to a 2004 value of \$218,600; median savings for this group increased 83 percent, up to \$375,036 in 2004.

borrowing might have a dramatic effect on low-income people's future well-being: the debt-to-savings ratio includes households' retirement savings, which were increasingly dwarfed by lower-income peoples' debts.

When we consider Americans by race/ethnicity, we see that the only dramatic increase in the debt-to-savings ratio was for black Americans, who saw their median ratio almost double over time (Table 31). Hispanic and "other" households actually saw their debt-to-savings ratios decline over time (i.e. their debts declined in importance relative to their savings), though in both years, Hispanics had the highest level of debt relative to savings of all groups. Ultimately, the debt-to-savings ratios of blacks and Hispanics in 2004 were more than double those of whites and "others", indicating a higher level of financial precariousness among these households.

When Americans are viewed by tenure, we see that in both years, owners had approximately twice in debt what they had in savings (Table 32). For renters, however, debt levels skyrocketed compared to savings levels. In 1989, renters had approximately 40-percent more in debt than they did in savings; by 2004 renters' debt levels were more than twice their savings levels, and in fact their median debt-to-savings ratio topped that of owners. This is of great concern: if Alternatives is correct that borrowing has supplanted savings as the next rung up on the ladder toward asset ownership, then renters may be maxing out their borrowing options before they've even attempted to borrow for the most important asset in most Americans' lives, a home.

Finally we look at Americans by level of educational attainment. Again, the most vulnerable Americans are in the most precarious situation when it comes to the relationship between their debts and savings. In both years, the least educated Americans had the highest level of debt relative to savings, and they saw a drastic deterioration in the ratio over time (Table

33; Figure 4). In 1989, those without a high school degree carried (at the median) more than twice in debt what they held in savings; by 2004, this group had over four-and-a-half times in debt what they had in savings.³¹ Only those with graduate degrees saw their ratio decline over time; by 2004 this group had, at the median, near parity between their debts and savings.

Liquidity: The debt service ratio

Finally, we consider economic security by looking at household liquidity. Maki (2000) points out that an analysis of the amount that households pay in servicing their debts each month is a more useful way of examining the effects of indebtedness than is a mere estimation of total debt. Therefore, we consider here the relationship between total monthly debt payments and total monthly income in order to assess how Americans are coping with their debts. We also look at the incidence of financial distress (i.e. a debt service ratio in excess of .4) across American households and examine payment delinquency across groups. We present the most compelling findings here.

Much of our analysis is modeled on that of Bucks, Kennickell, and Moore (2006). However, we make one significant change to their analysis: we include monthly rental payments in our calculation of debt service. Although rental payments are an expense rather than a debt, it seems nonsensical to look at the monthly debt service of Americans and take into account owners' monthly mortgage payments but not renters' monthly rental payments. Doing so treats the groups unequally in that one group's housing costs are accounted for while another group's housing costs (even though they are not being put toward ownership of an asset) are not.³² We

³¹ This dramatic change is explained by a simultaneous increase in levels of debt and a decrease in levels of savings. In 1989, those without a high school diploma had a median debt level of \$8,043; by 2004, this had climbed 43 percent to \$11,540. The savings held by this group dropped by 56 percent over the time frame, from a 1989 median of \$6,043 to a 2004 median of only \$2,662.

³² Rent can, in fact, be more like a debt than it is like an expense. When one rents an apartment, one normally signs a lease that indicates that a certain amount of rent will be paid on a regular basis for the duration of the lease. The total amount that this tallies to is due to the landlord, whether or not one makes use of the unit, moves away, etc. In

therefore factor into the analysis renters' monthly housing costs in order to compare more accurately the monthly obligations of owners and renters. This method was used in all of our analysis of the debt service ratio, not simply where we specifically separate owners and renters, and for this reason our findings differ from those of Bucks, Kennickell, and Moore (2006).

For all indebted Americans, the median debt service ratio barely changed between 1989 and 2004: in 1989 the median household was allocating 23 percent of its monthly income to servicing its debts; by 2004 this had increased to 25 percent of monthly income. This suggests that that monthly debt service kept pace with monthly incomes over time.

However, when indebted Americans are disaggregated by income group, it is no surprise that those with the lowest incomes have the highest median debt service ratio in both years, .45 in 1989 and .48 in 2004 (Table 34). These figures mean that by 2004, the median lowest-income indebted household was using nearly half its monthly income to pay down its monthly debt obligations. It is equally unsurprising that as income increases, the ratio between monthly debt payments and monthly income declines.

When we look at the population by race/ethnicity, two things stand out. First, in both years indebted whites have the lowest median debt service ratio of any group (23 percent by 2004; Table 35). Second, in both years, Hispanics and blacks had the highest debt service ratio.

The results concerning owners' and renters' monthly debt service are surprising. When Bucks, Kennickell, and Moore (2006) ran their analysis of monthly debt service, they found that American renters had a median debt service ratio of .082 in 2004, meaning that renters were

this way, rent can seem more like a debt to be paid down over time than like a monthly expense. The fact that this debt is unsecured, i.e. that there is no asset behind the money paid, is one reason rent is excluded from analyses of assets and debts. However, other types of unsecured debt (lattes or vacations purchased by credit card) are included in most analyses of American indebtedness. For these reasons, i.e. because rent is akin to a debt paid down over time and because other types of unsecured debt are included in analyses of American indebtedness, we feel justified in including rental payments in our analysis.

using only 8 percent of their monthly income to service their debts. When monthly rental payments are included in the analysis, however, this figure jumps dramatically, and we find that the median indebted renter household was paying 32 percent of its monthly income toward its debts (Table 36). Further, we find that the median renter's debt service ratio actually exceeded that of the median owner by a fair margin.³³

Finally we consider the monthly debt service of indebted Americans disaggregated by level of educational attainment and find that Americans with lower levels of education were more straitened when it came to meeting their monthly debt obligations than were their better educated counterparts (Table 37). Over the time frame, the only drop in the median debt service ratio was experienced by those who had obtained graduate degrees.

We move now to look at levels of payment distress among indebted Americans. It is commonly held that if more than 40 percent of one's monthly income goes toward meeting one's debts, then one is stretched too thin financially, i.e. one is in financial distress (Bucks, Kennickell, and Moore, 2006; Chiteji, 2006). We look now at the financial distress of Americans in 1989 and 2004, examining in particular what percentage of Americans were

³³ We were initially startled by the extent to which the median indebted renter's debt service ratio (when monthly rent is included) exceeded that of the median indebted owner. However, this finding is less surprising when one considers the math behind these figures. Essentially, all of the renters in our analysis bore the costs of renting their unit each month; the owners in our analysis, on the other hand, were included in the sample of indebted owners as long as they had some form of debt, whether or not they were still making monthly mortgage payments. (In both years, only 63-64 percent of owners were paying down some type of real property debt; this did not necessarily include monthly mortgage payments on the primary residence.) The disparity between the debt service ratios of owners and renters likely reflects the fact that owners eventually stop making a monthly mortgage payment, lowering the median debt service ratio for all owners as a group. Renters, of course, face rental costs for as long as they rent, raising the monthly cost over time (relative to owning) of this form of tenure. The difference might also stem from the fact that renters have lower incomes than owners. In 1989, the median renter's income was \$19,352 compared with \$47,207 for the median owner; in 2004 the median renter household earned \$24,000 compared with \$53,020 for owners.

dedicating more than 40 percent of their monthly household income toward paying down their debts.³⁴

For the entire US population, approximately 20 percent of households in 1989 and 21 percent of households in 2004 were paying more than 40 percent of their monthly income toward their debt obligations. This modest increase of one percentage point suggests that when the population is taken as a whole financial distress did not increase dramatically over the 15 year period. We now consider whether this is true across income, racial/ethnic, tenure, and educational groups.

When Americans are disaggregated by income, the changes over the time frame are less interesting than the disparities between different income groups in both years. Not surprisingly, a greater percentage of indebted lower-income Americans were in financial distress. The level of distress shocked us, however: in 2004 close to 60 percent of families in the bottom quintile were dedicating more than 40 percent of their monthly income to debt repayment (Table 38); a closer look at the data reveals that nearly 40 percent of the lowest income families were using more than 60 percent of their monthly income for debt service. The financial precariousness of America's lowest earners cannot be overstated here: it is clear from our analysis that these individuals are struggling to meet their debts, let alone their living expenses, on their modest incomes.

When the population is disaggregated by race/ethnicity, differences between racial/ethnic groups and changes over time both stand out. White Americans had a smaller incidence of financial distress than other groups in both years (Table 39). Both black and "other" families

³⁴ It should be pointed out that "income" in the SCF refers to pre-tax income. This means that our analysis assumes individuals are paying their debts out of their pre-tax income, which is of course unlikely. We can assume, therefore, that measures of debt service and financial distress are understated in our analysis and in all analysis relying on SCF data, given that all such analysis assumes that households have access to more income than they in fact do.

saw a noticeable increase in their financial distress over time. Despite a decline in incidence of financial distress for Hispanics between the two years, Hispanic and “other” households were the most likely to be in financial distress in 2004.

When Americans are disaggregated by tenure, we see that indebted renters are more likely to be financially straitened than indebted owners. Despite the costs of paying down a mortgage, only 16 percent of owners had debt service ratios in excess of .4 in 2004 (Table 40). For renters, the incidence of financial distress hardly changed over the 15 years, but in both years, renters were twice as likely as owners to report debt loads that placed them in financial distress. Given this, it is not surprising to learn that renters saw an increase in their overall rates of payment delinquency over time, so that by 2004, renters were almost twice as likely as owners to report having been late in paying a bill.³⁵ In terms of rates of serious delinquency (i.e. having been behind in at least one payment by two or more months), by 2004, half of all delinquent renters were seriously delinquent, compared with 35 percent of delinquent owners.

Finally we consider the population by level of educational attainment. We see that the incidence of financial distress (in 2004, at any rate) declined with increases in educational attainment (Table 41). We also find that for all groups up through those with college degrees, the likelihood of being in financial distress increased over time; thus the least educated saw the greatest increase in financial stress, while the most highly educated actually saw a decline. Given these changes, it is not surprising that payment delinquency rates increased over the time frame for those with a high school degree or less and decreased for those with a college degree or

³⁵ Our analysis of delinquency comes from two questions in the SCF. First, X3004 asks, “Now thinking of all the various loan or mortgage payments you made during the last year, were all the payments made the way they were scheduled, or were payments on any of the loans sometimes made later or missed?” Second, X3005 asks of those who answered “yes” to X3004, “Were you ever behind in your payments by two months or more?”

more. By 2004, those with high school degrees had the highest rate of delinquency, at 20 percent; this was more than twice the rate for those who had completed graduate school.

Implications³⁶

We stated in the introduction to this paper that we undertook our study for three reasons: first, to learn how American families either use debt either productively or non-productively (that is, to invest for longer-term gain or to meet immediate needs at a high long-term cost); second, and connected to the first reason, to look for evidence of changing inequality among Americans arising from the distribution of reliance on different types of debt; third, to consider the effect of Americans' indebtedness by the mid-2000s on their ability to weather the current financial maelstrom.

We conclude our paper by addressing each of these points, beginning with the use of productive and non-productive debt.

Productive vs. non-productive debt: the rich get richer, the poor get plastic

We start our analysis with an examination of the use of productive debt over time. We take both real property debt and education debt as examples of productive debt, and look here at their uses across all American households.³⁷

The data indicate that the rich used property debt to get richer. While the share of low- and middle-income households holding real property debt increased, upper-income Americans remained much more likely than other groups to carry debt related to an investment in real

³⁶ Our preliminary findings concerning owners and renters led us to write an in-depth paper looking just at these two groups. For this reason, we do not summarize our findings for owners and renters in this conclusion. Interested readers should see: Freeman, Allison and Janneke Ratcliffe. 2008. *Stepping Stone or Stumbling Block: Debt in the Lives of American Owners and Renters*. Center for Community Capital Working Paper. Chapel Hill, NC: Center for Community Capital.

³⁷ When we began our analysis in early 2007, we did so with the fairly firm conviction that mortgage debt was “productive,” i.e. a solid investment for future gain. We recognize now, in the wake of the mortgage crisis, that this is not necessarily true, and we intend in future to refine our analysis by assessing the assets linked to investment in real property. Here, we proceed with our analysis as if mortgage debt were “productive,” knowing that most mortgage debt is still an investment in future wealth generation.

property; further, property debt constituted a greater proportion of their overall debt than it did for lower-income families. While the median property debt of the lowest-earners grew by \$22,951, median net worth for this group grew by only \$4,482. In contrast, the median property debt of those in the top decile grew by \$70,573 while their median net worth grew by a whopping \$367,625. The data also indicate that whites maintained their advantage in building wealth via investment in property, being the most likely to invest in real property in both years and dedicating a larger share of their indebtedness to such investment.

Education debt is another form of productive debt, since it can be expected to lead to higher levels of income over time. Middle- and upper-middle income families saw the most significant increase in their likelihood of carrying education debt over time and were also the most likely to rely upon education debt in 2004. Lower-income families allocated a larger percentage of their overall indebtedness to education than did other groups. We also found that the rates of carrying education debt increased for all racial/ethnic groups with the exception of Hispanic households. Blacks were the most likely in both years to carry education debt, and they took on proportionally larger shares of such debt than other racial/ethnic groups. For all of these income and racial/ethnic groups, then, we can assume that investment in education is a priority.³⁸ We know that increased education is highly likely to yield not just greater levels of income, but greater levels of financial security: our analysis found that more educated groups were the most likely to experience increases in wealth and financial security over time. The flip side, however is that people are having to indebt themselves in order to realize these longer term gains.

In conclusion, our findings concerning productive debt are mixed. Wealthier people and whites have and continue to maintain the lead when it comes to building wealth through

³⁸ None of this is to imply that investment in education is not a priority for upper-income people; rather, our data likely show that lower- and middle-income people are more likely to *need* to borrow for education than upper-income people, who undoubtedly have additional resources with which to finance education.

investment in real property. Blacks and lower- to upper-middle-income people show a greater propensity for borrowing to invest in education debt, indicating a determination to increase incomes (and, as our analyses show, wealth) over time.

We move now to consider non-productive debt, which helps families meet immediate needs, but which could have the disastrous effect of pulling them into a debt spiral. Credit and charge card debt are our main example of non-productive debt.

The data reveal a marked increase in the carrying of revolving debt by lower-income households and an increase in the share that revolving debt was of these families' total indebtedness over time. In fact, for families in the lowest-income quintile, revolving debt made up a greater share of their overall debt than it did for any other group. We also found that the most dramatic growth in the use of revolving debt occurred among black and Hispanic households. While blacks actually saw a slight decrease in the role that revolving debt played in their overall indebtedness, Hispanics saw the opposite and by 2004 they had the largest share of credit and charge card debt relative to their other types of debt. Finally, we found that the greatest increase in the use of revolving debt occurred among those without college degrees, and that by 2004 this group was relying most heavily on credit and charge card debt relative to other types of debt.

In conclusion, our findings concerning non-productive debt are fairly straightforward. Over the 15 year period something (either increased access to credit and charge cards, greater necessity, or both) caused the most economically vulnerable (lower-income people, the least well educated) and those who have historically had less wealth and lower incomes (blacks and Hispanics) to increase their rates of using such debt and to increase their use of revolving debt relative to other types of debt. It seems clear from our analysis that whites and upper-income

Americans are more able to avoid reliance on revolving debt and are thereby better able to avoid the likelihood of falling into the high-cost debt spiral that credit and charge card usage can entail.

Debt and inequality: the weakest households are the most exposed

We move now to look for evidence of increasing inequality among Americans, considering inequality in terms of financial security, that is, the ability to meet, rather than be overwhelmed by, one's debts.

When we looked at solvency and leverage, we learned that most groups saw a decrease in their financial security over time, but increasing insecurity was not experienced equally across groups. Those in the lowest income groups saw greater decreases in their solvency and greater increases in their leverage than their more privileged counterparts, though middle- and upper-income Americans were still more leveraged overall in 2004. Further, by 2004, white Americans were noticeably more solvent than all other racial/ethnic groups, while black Americans saw a significant increase in what they owed relative to what they owned and were the most leveraged of all racial/ethnic groups. Finally, those who had not completed high school saw the most sizeable increase in their leverage and were the ones to owe most compared with what they owned.

Our analysis of financial precariousness provided unequivocal results: those who were the most economically vulnerable (low income people, poorly educated people) and those who have historically earned less income and held less wealth (blacks and Hispanics) were the most precariously situated when it came to being able to rely on their savings to manage their debts. We are particularly concerned about the plight of lower-income people, whose debts dwarfed their savings (including retirement savings) by 2004.

When we looked at the ability of Americans to manage their monthly debt payments,³⁹ we concluded the following. In both 1989 and 2004 lower-income people were much more burdened when it came to meeting their monthly debts and were much more likely to be in a situation of financial distress by doing so; lower-income people were also more likely to be behind in their payments and their ability to pay their bills on time decreased over the time frame. Whites spent the lowest share of their income (of any racial/ethnic group) on debt service and had the lowest rates of financial distress in both 1989 and 2004. Blacks saw a startling increase in their rates of financial distress over the period, which might help explain why they also saw a marked decline in their ability to pay their bills on time. Finally, over the time frame, the best educated among us saw a decline both in the share of income they were devoting to monthly debt service and in their rates of financial distress.

When we combine these results with those for our measures of financial security (solvency, leverage, precariousness, ability to service debts), we conclude that inequality in financial security persisted, and in some cases worsened, over the time frame. Particularly hard hit were lower-income people, whose solvency, leverage, and precariousness increased over the 15 year period. Non-whites generally started in a weaker position than whites on our four measures of financial security and changes over time often exacerbated the differences between whites and non-whites. Finally, the least well educated among the population saw declines in their leverage and experienced dramatic increases in their inability to rely upon their savings to manage their debts over time, leaving them more vulnerable than they were at the start of the time period. There is no doubt that inequality in terms of financial insecurity either remained

³⁹ As a reminder, we included owners' monthly mortgage payments and renters' monthly rental payments in our analysis of debt service. See section on debt service ratio for full details.

strong or increased over the time frame, with the most economically vulnerable and those who have historically had less wealth and lower incomes being hardest hit.

On the beach, waiting for the financial tsunami

All of this brings us to the current financial crisis. We are living in a time of enormous economic insecurity: consumer prices are unpredictable, credit for housing, businesses, and education is increasingly hard to come by, asset values are plunging, and unemployment rates are rising. We won't begin to understand the full effect of these changes on American families' financial well being until the 2007 (and, ideally, 2010) SCF data are available for analysis. What our research *does* show, and extraordinarily clearly, is that by 2004 most Americans were not well positioned to weather the current financial disaster.

Many vulnerable Americans (lower-income, less educated) entered the crisis period with no savings, minimal assets, and high levels of debt; these families have undoubtedly had a hard time weathering increases in prices and decreases in income. The social safety net that might have cushioned these families in past decades has been eroded by years of aggressive attacks on the framework of progressive taxation and by efforts to "end welfare as we know it." Economic risk is increasingly weathered at the individual household level (Hacker, 2006), and as our research has shown, few households are financially secure enough to weather a prolonged period of economic decline.

Unlike in previous periods of financial crisis, however, the current financial meltdown has affected households across the financial strata. Since 2004 – a year that marked a peak in housing and stock market values relative to today – housing values have plunged, retirement assets have shrunk, and the stock market is declining at a steady and unanticipated rate. For the better-off families who felt confident that high net worth would provide a cushion against

their financial ruin, confidence has undoubtedly been shaken thanks to plunging asset values: debt (like death and taxes) is the constant in our lives; asset volatility drives our net worth.

Given recent shifts in the macro-economy, the next step in our analysis will be to model the layered effect of who one is and how one borrowed and invested in order to examine the impact of economic changes on Americans' financial well-being between 2004 and 2007. Only then will we be able to understand more fully the role of debt in Americans' lives, the effect of debt on our financial stability, and the role debt plays in exacerbating or redressing economic inequality.

References

Alternatives Federal Credit Union. *Toward a new credit path®: lessons from a survey of 904 Alternatives Federal Credit Union members*. Ithaca, NY: Alternatives Federal Credit Union. (2006)

Bird, E. J., Hagstrom, P. and Wild, R. *Credit cards and the poor*. Institute for Research on Poverty Discussion Paper 1148-97. (1997)

Board of Governors of the Federal Reserve System. *Flow of Funds Accounts of the United States: Annual Flows and Outstandings 1985-1994*. Washington, DC: Federal Reserve. (2008a)

Board of Governors of the Federal Reserve System. *Flow of Funds Accounts of the United States: Annual Flows and Outstandings 1995-2004*. Washington, DC: Federal Reserve. (2008b)

Bucks, B., Kennickell, A. and Moore, K. Recent changes in U.S. family finances: Evidence from the 2001 and 2004 survey of consumer finances. *Federal Reserve Bulletin* (March 22): A1-A38. (2006)

Bush, M. and Katz, J. US household debt levels are worrying no matter how you look at them. *Reinvestment Alert* 30. Chicago, IL: Woodstock Institute. (2006)

Cagetti, M. Wealth accumulation over the life cycle and precautionary savings. In *Journal of Business & Economic Statistics*. 21(3): 339-354. (2003)

Chiteji, N. S. To have and to hold: an analysis of young adult debt. Forthcoming in *The Price of Independence: The Economics of Early Adulthood*, ed. Sheldon Danziger and Cecilia Rouse. New York, NY: Russell Sage Foundation. (2006)

Gale, W. G. and Scholz, J. K. Intergenerational Transfers and the Accumulation of Wealth. In *Journal of Economic Perspectives*. 8(4): 145-160. (1994)

Hacker, J. *The Great Risk Shift*. New York: Oxford University Press. (2006)

Lyons, A. C. How Credit Access Has Changed Over Time for U.S. Households. *The Journal of Consumer Affairs*. 37(2): 231-255. (2003)

Maki, Dean M. *The growth of consumer credit and the household debt service burden*. FEDS Working Paper No. 2000-12. (2000)

Modigliani, F. The Life Cycle Hypothesis of Saving, Twenty Years Later. In Parkin, M., ed., *Contemporary Issues in Economics*. Manchester: Manchester University Press, 2-36. (1975)

- Montalto, C. P. and Sung, J. Multiple imputation in the 1992 Survey of Consumer Finances. *Financial Counseling and Planning* 7: 133-141. (1996)
- National Bureau of Economic Research. Business Cycle Expansions and Contractions. Available at <http://www.nber.org/cycles.html>. (2008).
- Poterba, J. M. and Samwick, A. A. Household Portfolio Allocation Over the Life Cycle (September 1997). NBER Working Paper No. W6185. (1997)
- Scurlock, J. D. *Maxed out: hard times, easy credit, and the era of predatory lenders*. New York: Scribner. (2007)
- Stegman, M. A. and Faris, R. Payday Lending: A Business Model that Encourages Chronic Borrowing. *Economic Development Quarterly* 17(1): 8-32. (2003)
- Warren, E. and Tyagi, A. W. *The Two-Income Trap*. New York, NY: Basic Books. (2003)
- Weller, C. E. Need or Want: What Explains the Run-up in Consumer Debt? *Journal of Economic Issues* XLI(2): 583-591. (2007)
- Wheary, J., Shapiro, T. M. and Draut, T. *By a thread: The new experience of America's middle class*. New York: Dēmos. (2007)
- Wheary, J., Shapiro, T. M., Draut, T. and Meschede, T. *Economic (in)security: The experience of the African-American and Latino middle class*. New York: Dēmos. (2008)
- Yilmazer, T. and DeVaney, S. A. Household debt over the life cycle. *Financial Services Review* 14(4): 285-304. (2005)

Tables

Table 1: Economic indicators, 1989 and 2004

	1989	2004
Rate of GDP growth	3.50%	3.60%
Inflation rate	5.20%	2.97%
Unemployment rate	5.30%	5.50%
Nominal interest rate (conventional mortgage)	10.32%	5.84%
Annualized Federal Funds Rate	9.21%	1.35%

Sources: Bureau of Economic Analysis; Bureau of Labor Statistics; Freddie Mac; Federal Reserve

Table 2: Median income by income group, 1989 and 2004 (2004\$)

Percentile of income	1989	2004	\$ Δ	% Δ
Less than 20	\$8,796	\$10,920	\$2,124	24.1%
20-39.9	\$20,525	\$25,000	\$4,475	21.8%
40-59.9	\$36,652	\$42,202	\$5,551	15.1%
60-79.9	\$58,643	\$66,526	\$7,883	13.4%
80-89.9	\$86,498	\$102,450	\$15,952	18.4%
90-100	\$146,607	\$180,000	\$33,393	22.8%
Ratio: Lowest to highest	\$.06	\$.06	—	—

Table 3: Median HH net worth by income group, 1989 and 2004 (2004\$)

Percentile of income	1989	2004	\$ Δ	% Δ
Less than 20	\$3,058	\$7,540	\$4,482	146.5%
20-39.9	\$37,558	\$36,598	-\$960	-2.6%
40-59.9	\$61,243	\$76,764	\$15,521	25.3%
60-79.9	\$105,821	\$162,802	\$56,981	53.8%
80-89.9	\$201,223	\$318,164	\$116,941	58.1%
90-100	\$586,365	\$953,990	\$367,625	62.7%
Ratio: Lowest to highest	\$.005	\$.008	—	—

Table 4: Median income by race/ethnicity, 1989 and 2004 (2004\$)

Race/ethnicity	1989	2004	\$ Δ	% Δ
Non-Hisp. white	\$42,809	\$48,200	\$5,391	12.6%
Black	\$16,127	\$27,600	\$11,473	71.1%
Hispanic	\$20,818	\$27,810	\$6,992	33.6%
Other	\$31,374	\$51,272	\$19,899	63.4%
Ratio: Black to white	\$.38	\$.57	—	—
Ratio: Hispanic to white	\$.49	\$.58	—	—

Table 5: Median HH net worth by race/ethnicity, 1989 and 2004 (2004\$)

Race/ethnicity	1989	2004	\$ Δ	% Δ
Non-Hisp. white	\$106,389	\$141,240	\$34,851	32.8%
Black	\$6,621	\$20,850	\$14,229	214.9%
Hispanic	\$7,486	\$19,770	\$12,284	164.1%
Other	\$52,042	\$151,274	\$99,232	190.7%
Ratio: Black to white	\$.06	\$.15	—	—
Ratio: Hispanic to white	\$.07	\$.14	—	—

Table 6: Median income by tenure, 1989 and 2004 (2004\$)

Tenure	1989	2004	\$ Δ	% Δ
Own	\$47,207	\$53,020	\$5,813	12.3%
Rent	\$19,352	\$24,000	\$4,648	24.0%
Ratio: Renters to owners	\$.41	\$.45	—	—

Table 7: Median HH net worth by tenure, 1989 and 2004 (2004\$)

Tenure	1989	2004	\$ Δ	% Δ
Own	\$148,266	\$187,746	\$39,480	26.6%
Rent	\$2,964	\$4,080	\$1,116	37.6%
Ratio: Renters to owners	\$.02	\$.02	—	—

Table 8: Median income by educational attainment, 1989 and 2004 (2004\$)

Educational Attainment	1989	2004	\$ Δ	% Δ
Less than HS	\$19,059	\$19,200	\$141	0.7%
HS degree	\$35,186	\$37,400	\$2,214	6.3%
College degree	\$60,402	\$64,620	\$4,218	7.0%
Grad. Degree	\$71,837	\$96,300	\$24,463	34.1%
Ratio: Less than HS to grad. degree holders	\$.27	\$.20	—	—

Table 9: Median HH net worth by educational attainment, 1989 and 2004 (2004\$)

Educational Attainment	1989	2004	\$ Δ	% Δ
Less than HS	\$34,810	\$23,448	-\$11,362	-32.6%
HS degree	\$61,082	\$73,152	\$12,070	19.8%
College degree	\$156,233	\$200,580	\$44,347	28.4%
Grad. Degree	\$252,926	\$397,740	\$144,814	57.3%
Ratio: Lowest to highest	\$.14	\$.06	—	—

Table 10: Percent of total population carrying each type of debt and median value of debt for indebted population, 1989 and 2004

	% of Total Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Any debt at all	72.7%	76.5%	3.9	\$23,428	\$57,300	144.6%
By type:	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Revolving debt	39.7%	46.2%	6.5	\$1,331	\$2,140	60.8%
Real property debt	42.2%	44.5%	2.4	\$50,139	\$94,200	87.9%
Vehicle debt	35.3%	36.6%	1.3	\$8,676	\$11,000	26.8%
Rec. vehicle debt	1.7%	2.6%	0.9	\$9,969	\$9,520	-4.5%
Education debt	9.5%	13.4%	3.9	\$4,750	\$9,120	92.0%
Remaining debt	26.3%	20.8%	-5.5	\$2,932	\$10,280	250.6%

*The median debt level for each type of debt was calculated from the sample of households carrying that type of debt.

Table 11: Percent carrying and median value of revolving debt by income group, 1989 and 2004

Percentile of income	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Less than 20	16.1%	29.1%	13.0	\$522	\$1,000	91.6%
20-39.9	28.2%	42.6%	14.3	\$932	\$1,854	98.8%
40-59.9	49.2%	55.1%	5.9	\$1,173	\$2,040	73.9%
60-79.9	56.8%	56.2%	-0.5	\$1,466	\$3,000	104.6%
80-89.9	58.2%	57.8%	-0.4	\$2,023	\$2,640	30.5%
90-100	40.3%	38.5%	-1.7	\$3,331	\$4,000	20.1%
Ratio: Lowest to highest	—	—	—	.16	.25	—

*The median debt level for each group was calculated from the sample of households carrying revolving debt.

Table 12: Percent carrying and median value of real property debt by income group, 1989 and 2004

Percentile of income	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Less than 20	10.2%	14.7%	4.4	\$10,849	\$33,800	211.6%
20-39.9	24.4%	28.4%	3.9	\$19,645	\$54,200	175.9%
40-59.9	39.9%	47.3%	7.4	\$32,840	\$75,800	130.8%
60-79.9	61.6%	60.1%	-1.4	\$53,072	\$95,200	79.4%
80-89.9	74.0%	72.7%	-1.3	\$65,152	\$132,000	102.6%
90-100	79.9%	73.0%	-6.9	\$128,427	\$199,000	55.0%
Ratio: Lowest to highest	—	—	—	.08	.17	—

*The median debt level for each group was calculated from the sample of households carrying real property debt.

Table 13: Percent carrying and median value of education debt by income group, 1989 and 2004

Percentile of income	% of pop. carrying			Median value for indebted pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Less than 20	8.3%	10.9%	2.6	\$4,211	\$6,560	55.8%
20-39.9	8.9%	10.4%	1.4	\$4,985	\$9,998	100.6%
40-59.9	7.8%	15.3%	7.5	\$6,310	\$10,200	61.6%
60-79.9	12.5%	17.3%	4.8	\$4,398	\$8,540	94.2%
80-89.9	9.5%	14.5%	5.0	\$4,398	\$10,620	141.5%
90-100	11.1%	12.1%	1.0	\$6,744	\$10,720	59.0%

*The median debt level for each group was calculated from the sample of households carrying education debt.

Table 14: Median ratio credit available/annual income and credit used/credit available by income group, 1989 and 2004

Percentile of income	Credit available/annual income			Credit used/credit available		
	1989	2004	Pct. Pt. Δ	1989	2004	Pct. Pt. Δ
Less than 20	33.5%	51.0%	17.5	0.0%	12.9%	12.9
20-39.9	18.2%	29.8%	11.6	0.8%	14.6%	13.8
40-59.9	15.0%	31.4%	16.4	5.9%	13.4%	7.4
60-79.9	12.2%	29.9%	17.7	12.8%	10.1%	-2.7
80-89.9	10.6%	28.6%	18.0	9.1%	7.4%	-1.7
90-100	10.4%	22.8%	12.4	0.7%	0.2%	-0.5

Table 15: Percent carrying and median value of revolving debt by race/ethnicity, 1989 and 2004

Race/ethnicity	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Non-Hisp. white	41.4%	46.1%	4.6	\$1,404	\$2,500	78.0%
Black	33.4%	47.0%	13.6	\$888	\$1,400	57.6%
Hispanic	34.7%	46.5%	11.9	\$1,586	\$1,764	11.2%
Other	36.9%	44.0%	7.1	\$932	\$3,140	236.8%

*The median debt level for each group was calculated from the sample of households carrying revolving debt.

Table 16: Percent carrying and median value of real property debt by race/ethnicity, 1989 and 2004

Race/ethnicity	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Non-Hisp. white	46%	48%	2.5	\$53,365	\$96,000	79.9%
Black	29%	34%	4.9	\$18,472	\$66,800	261.6%
Hispanic	34%	34%	0.6	\$58,349	\$91,600	57.0%
Other	39%	45%	5.9	\$58,643	\$147,000	150.7%

*The median debt level for each group was calculated from the sample of households carrying real property debt.

Table 17: Percent carrying and median value of education debt by race/ethnicity, 1989 and 2004

Race/ethnicity	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Non-Hisp. white	9.1%	13.5%	4.5	\$5,864	\$10,000	70.5%
Black	12.6%	16.6%	4.0	\$2,932	\$8,460	188.5%
Hispanic	9.9%	9.2%	-0.7	\$5,864	\$4,960	-15.4%
Other	8.1%	12.4%	4.3	\$5,864	\$7,000	19.4%

*The median debt level for each group was calculated from the sample of households carrying education debt.

Table 18: Percent carrying and median value of different types of debt for owners, 1989 and 2004

	% of pop. carrying			Median value for indebted pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Any debt at all	78.6%	82.4%	3.8	\$48,409	\$97,100	100.6%
By type:	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Revolving debt	43.9%	48.8%	4.9	\$1,451	\$2,500	72.2%
Real property debt	64.0%	63.4%	-0.5	\$50,726	\$94,680	86.7%
Vehicle debt	39.1%	40.3%	1.2	\$8,796	\$12,000	36.4%
Rec. vehicle debt	2.2%	3.4%	1.2	\$10,849	\$10,020	-7.6%
Education debt	7.7%	10.9%	3.3	\$5,864	\$9,880	68.5%
Remaining debt	25.8%	22.1%	-3.7	\$3,008	\$22,800	657.9%

*The median debt level was calculated from the sample of owner households carrying that type of debt.

Table 19: Percent carrying and median value of different types of debt for renters, 1989 and 2004

	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Any debt at all	62%	64%	1.3	\$4,601	\$7,826	70.1%
By type:	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Revolving debt	32%	40%	8.2	\$1,173	\$1,500	27.9%
Real property debt	4%	2%	-1.3	\$38,264	\$68,200	78.2%
Vehicle debt	29%	28%	-0.2	\$5,864	\$7,980	36.1%
Rec. vehicle debt	1%	1%	0.0	\$5,864	\$6,080	3.7%
Education debt	13%	19%	6.1	\$4,398	\$8,900	102.4%
Remaining debt	27%	18%	-9.4	\$1,214	\$2,006	65.3%

*The median debt level was calculated from the sample of renter households carrying that type of debt.

Table 20: Percent carrying and median value of revolving debt by educational attainment, 1989 and 2004

Educational Attainment	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Less than HS	24%	30%	5.2	\$1,020	\$1,172	14.9%
HS degree	45%	52%	6.9	\$1,319	\$2,000	51.6%
College degree	49%	47%	-1.5	\$1,756	\$2,700	53.7%
Grad. Degree	41%	42%	0.9	\$1,481	\$3,034	104.9%

*The median debt level for each group was calculated from the sample of households carrying revolving debt.

Table 21: Percent carrying and median value of education debt by educational attainment, 1989 and 2004

Educational Attainment	% of Pop. Carrying			Median value for Indebted Pop.*		
	1989	2004	Pct. Pt. Δ	1989	2004	% Δ
Less than HS	2%	3%	1.4	\$2,932	\$4,000	36.4%
HS degree	9%	12%	2.6	\$4,398	\$6,000	36.4%
College degree	16%	22%	6.2	\$7,037	\$14,000	98.9%
Grad. Degree	21%	19%	-2.0	\$5,864	\$17,660	201.1%

*The median debt level for each group was calculated from the sample of households carrying education debt.

Table 22: Median asset-to-debt ratio by income group, 1989 and 2004

Percentile of income	1989	2004	% Δ
Less than 20	3.91	2.50	-36.1%
20-39.9	3.78	2.64	-30.2%
40-59.9	3.13	2.60	-17.0%
60-79.9	3.14	2.67	-14.9%
80-89.9	4.27	3.11	-27.2%
90-100	5.32	4.81	-9.7%

Table 23: Median asset-to-debt ratio by race/ethnicity, 1989 and 2004

Race/ethnicity	1989	2004	% Δ
Non-Hisp. white	3.83	3.17	-17.2%
Black	3.80	2.17	-42.9%
Hispanic	1.80	2.44	35.7%
Other	3.96	2.73	-31.1%

Table 24: Median asset-to-debt ratio by tenure, 1989 and 2004

Tenure	1989	2004	% Δ
Own	4.16	3.15	-24.1%
Rent	2.45	2.17	-11.3%

Table 25: Median asset-to-debt ratio by educational attainment, 1989 and 2004

Educational Attainment	1989	2004	% Δ
Less than HS	4.64	3.48	-24.8%
HS degree	3.44	2.69	-21.8%
College degree	3.88	3.02	-22.2%
Grad. Degree	3.57	3.58	0.3%

Table 26: Median debt-to-net worth ratio by income group, 1989 and 2004

Percentile of income	1989	2004	% Δ
Less than 20	0.18	0.38	111.7%
20-39.9	0.25	0.43	69.1%
40-59.9	0.39	0.49	28.0%
60-79.9	0.42	0.54	29.6%
80-89.9	0.29	0.47	60.7%
90-100	0.23	0.26	13.0%

Table 27: Median debt-to-net worth ratio by race/ethnicity, 1989 and 2004

Race/ethnicity	1989	2004	% Δ
Non-Hisp. white	0.31	0.39	24.3%
Black	0.26	0.58	120.1%
Hispanic	0.65	0.55	-15.6%
Other	0.30	0.44	44.5%

Table 28: Median debt-to-net worth ratio by tenure, 1989 and 2004

Tenure	1989	2004	% Δ
Own	0.31	0.45	46.1%
Rent	0.33	0.31	-6.1%

Table 29: Median debt-to-net worth ratio by educational attainment, 1989 and 2004

Educational Attainment	1989	2004	% Δ
Less than HS	0.20	0.33	60.6%
HS degree	0.34	0.50	46.6%
College degree	0.32	0.38	20.2%
Grad. Degree	0.32	0.34	4.0%

Table 30: Median debt-to-savings ratio by income group, 1989 and 2004

Percentile of income	1989	2004	% Δ
Less than 20	2.65	7.58	186.1%
20-39.9	2.00	4.53	126.7%
40-59.9	2.35	2.80	18.9%
60-79.9	2.05	2.10	2.4%
80-89.9	1.43	1.24	-13.1%
90-100	0.90	0.64	-28.5%

Table 31: Median debt-to-savings ratio by race/ethnicity, 1989 and 2004

Race/ethnicity	1989	2004	% Δ
Non-Hisp. white	1.53	1.77	15.9%
Black	2.27	4.09	80.2%
Hispanic	4.83	4.27	-11.7%
Other	2.70	1.89	-29.8%

Table 32: Median debt-to-savings ratio by tenure, 1989 and 2004

Tenure	1989	2004	% Δ
Own	1.94	2.00	2.8%
Rent	1.38	2.35	70.1%

Table 33: Median debt-to-savings ratio by educational attainment, 1989 and 2004

Educational Attainment	1989	2004	% Δ
Less than HS	2.24	4.63	106.5%
HS degree	1.88	2.60	38.2%
College degree	1.29	1.53	18.8%
Grad. Degree	1.47	1.03	-29.5%

Table 34: Median debt service ratios, indebted Americans by income group, 1989 and 2004

Percentile of income	1989	2004	% Δ
Less than 20	0.45	0.48	8.6%
20-39.9	0.30	0.31	3.4%
40-59.9	0.25	0.28	11.7%
60-79.9	0.22	0.24	8.2%
80-89.9	0.17	0.19	12.8%
90-100	0.13	0.13	5.1%

Table 35: Median debt service ratios, indebted Americans by race/ethnicity, 1989 and 2004

Race/ethnicity	1989	2004	% Δ
Non-Hisp. white	0.21	0.23	7.9%
Black	0.26	0.30	16.0%
Hispanic	0.31	0.30	-0.9%
Other	0.27	0.28	4.8%

Table 36: Median debt service ratios, indebted Americans by tenure, 1989 and 2004

Tenure	1989	2004	% Δ
Own	0.20	0.22	13.2%
Rent	0.30	0.32	7.3%

Table 37: Median debt service ratios, indebted Americans by educational attainment, 1989 and 2004

Educational Attainment	1989	2004	% Δ
Less than HS	0.22	0.26	17.7%
HS degree	0.23	0.26	13.9%
College degree	0.22	0.24	9.4%
Grad. Degree	0.21	0.19	-7.8%

Table 38: Percent of debtors by income group with debt service ratios >.4, 1989 and 2004

Percentile of income	1989	2004	Pct. Pt. Δ
Less than 20	54.9%	58.5%	3.6
20-39.9	34.0%	31.1%	-2.9
40-59.9	16.5%	19.7%	3.2
60-79.9	8.5%	9.1%	0.6
80-89.9	4.3%	3.1%	-1.2
90-100	2.3%	2.6%	0.3

Table 39: Percent of debtors by race/ethnicity with debt service ratios >.4, 1989 and 2004

Race/ethnicity	1989	2004	Pct. Pt. Δ
Non-Hisp. white	17.2	17.3	0.2
Black	21.2	28.6	7.4
Hispanic	34.9	32.8	-2.0
Other	26.6	33.5	6.9

Table 40: Percent of debtors by tenure with debt service ratios >.4, 1989 and 2004

Tenure	1989	2004	Pct. Pt. Δ
Own	13.2	16.2	3.0
Rent	33.6	34.7	1.1

Table 41: Percent of debtors by educational attainment with debt service ratios >.4, 1989 and 2004

Educational Attainment	1989	2004	Pct. Pt. Δ
Less than HS	23.0	27.3	4.3
HS degree	19.8	22.7	2.9
College degree	15.3	18.8	3.5
Grad. Degree	17.1	11.7	-5.4

Figures

Figure 1: Median price of new and existing single-family homes, 1989-2004 (2004\$)

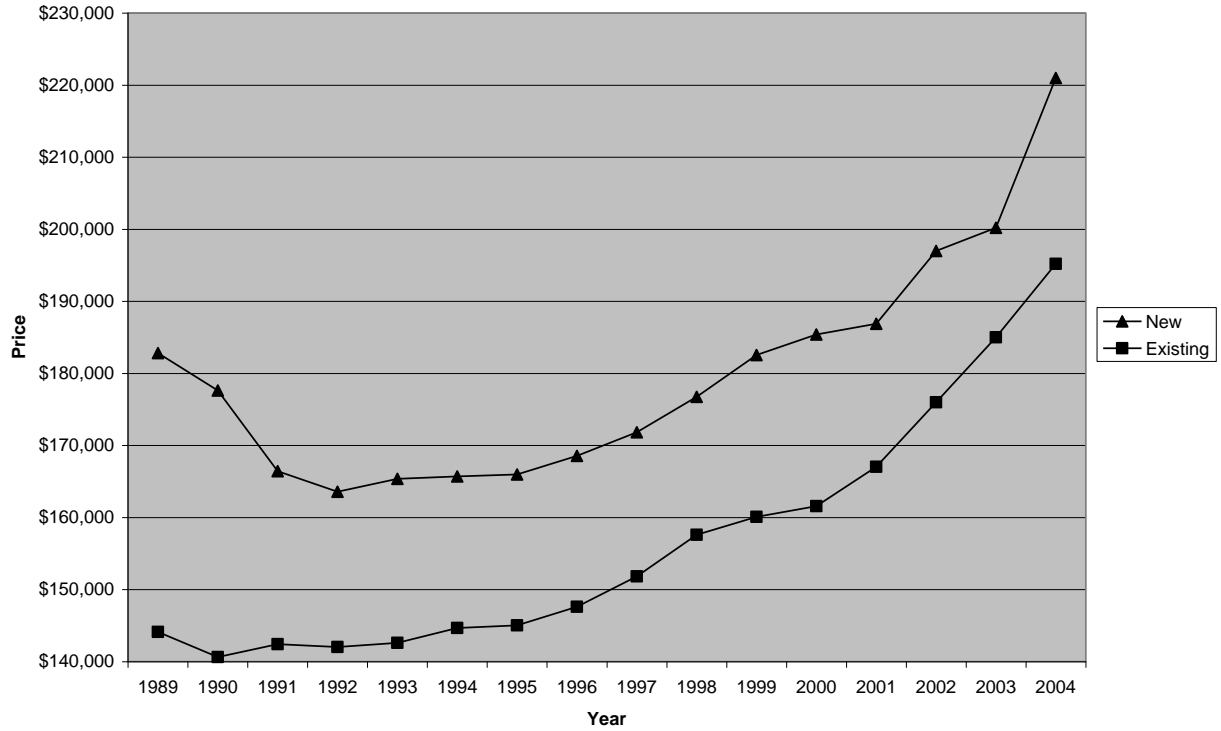


Figure 2: Median debt-to-net worth ratio, American households by race/ethnicity, 1989 and 2004

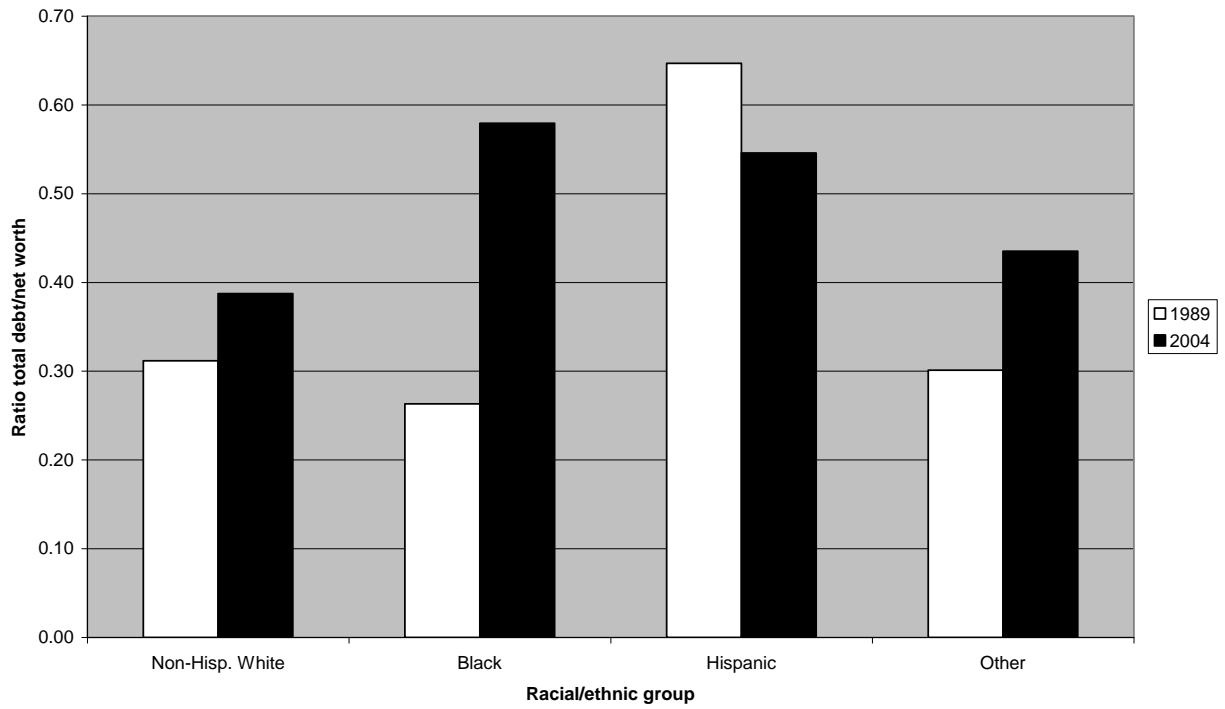


Figure 3: Median debt-to-savings ratio, American households by income group, 1989 and 2004

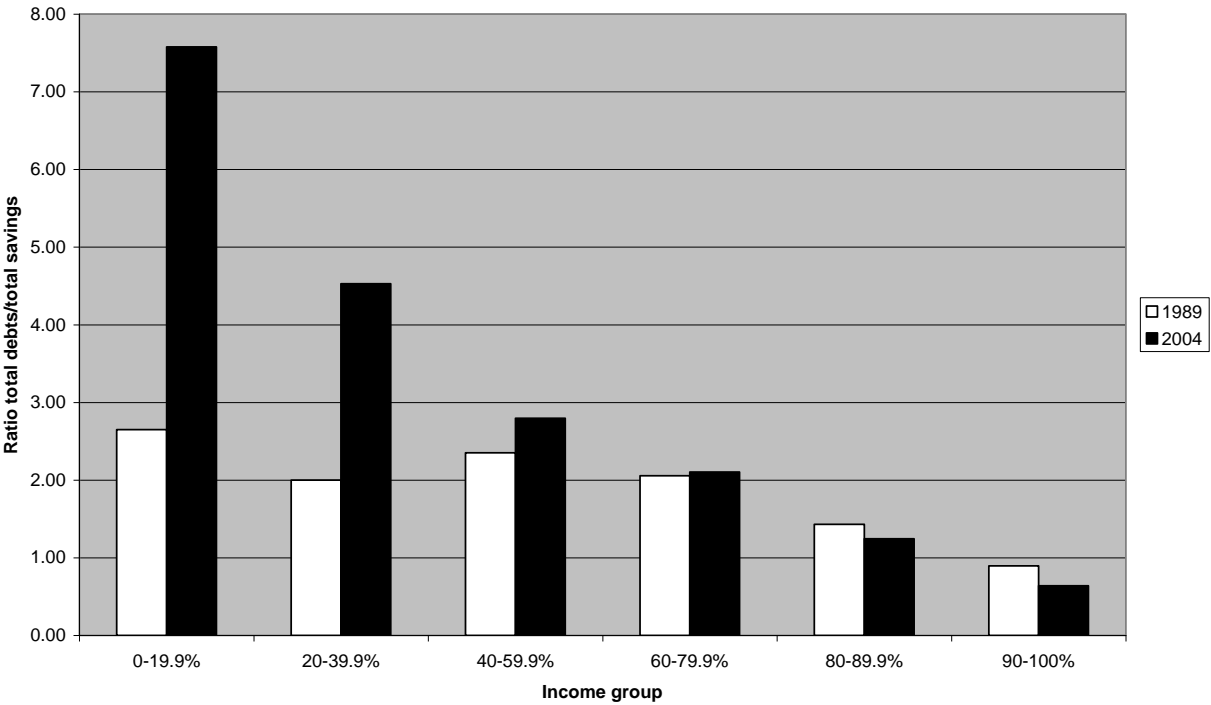


Figure 4: Median debt-to-savings ratio, American households by educational attainment, 1989 and 2004

