

The State of Young Adult's Balance Sheets: Evidence from the Survey of Consumer Finances

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Abstract

In this paper, we investigate recent trends in financial circumstances of young adults using data from the triennial Survey of Consumer Finances (SCF) from 2001 to 2010. We examine trends in young adult's net worth, break down the composition into specific assets and liabilities, and describe young adults' experiences with credit markets. Our analysis focuses on comparisons over time, between young adults and older adults, and between young adult Millennials and young adults from Generation X in 1989. We find that between 2001 and 2010, young adults experienced a decline in net worth, driven both by increases in liabilities and declines in assets. However, despite media attention surrounding the Millennial generation's poor economic outcomes during the Great Recession, young adults in the SCF are doing better on many measures than both current older adults and earlier young adults. Compared to older adults, young adults experienced a relatively modest decline in net worth, and declines in delinquency and payment to income ratios. Compared to young adults from Generation X, Millennials are more likely to own homes and retirement accounts, and less likely to be delinquent or exhibit other signs of financial distress.

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1 Introduction

The past decade ushered in historic swings in housing, labor and stock markets, and there is recent interest in what this means for young adults, who are only beginning to interact with credit markets and accumulate assets. Significant media attention has focused on how young adults have fared in the wake of the Great Recession. Particular notice has been paid to young adults' relative lack of financial independence as compared to previous generation of young adults, most notably captured by the unprecedented increase in the fraction of young adults living with a parent (e.g., Thompson, 2012; Parker, 2012; Fry, 2013). There is growing concern surrounding the ramifications of delayed financial independence, and what they mean for aggregate consumer spending and economic growth (Rampell, 2011) The finances of young adults also have important implications for their lifetime wealth accumulation. At the same time, because they are early in the life-cycle, young adults may be better equipped to weather economic upheaval than older generations.

In this paper, we investigate recent trends in financial circumstances of young adults. We employ individual-level data drawn from household interviews in the triennial Survey of Consumer Finances (SCF) from 2001 to 2010.¹ We examine trends in young adult's net worth and break down the composition into specific assets and liabilities. In addition, we describe young adults' experiences with credit markets with respect to credit constraints, delinquency, and loan payment burdens.

Our analysis focuses on three main comparisons. First, we examine trends in young adult's circumstances over time between 2001 and 2010, a period characterized by large swings in the overall economy. Second, we draw comparisons between young adults and older adults aged 35-50 over the 2001 to 2010 period. And finally, we compare young adults in 2010, who are members of the "Millennial Generation," to young adults of the same age in the 1989 wave of the SCF, or members of "Generation X."²

¹More information about the SCF can be found at <http://www.federalreserve.gov/econresdata/scf/scfindex.htm>.

²In this paper, we define young adults as age 18-31, which means that young adults in the 2010 survey were born between 1979 and 1995 and young adults from the 1989 survey were born between 1958 and 1971.

We find that between 2000 and 2001, young adults experienced a decline in net worth, driven both by increases in liabilities and declines in assets. However, despite recent media attention surrounding the Millennial generation’s poor economic outcomes during the Great Recession, young adults in the SCF are doing better on many measures than both current older adults and earlier cohorts of young adults from Generation X. Compared to older adults, young adults experienced a relatively modest decline in net worth, as well as declines in delinquency and debt payment to income ratios. We should note, however, that while the SCF is representative of American households and well-equipped to capture the financial situation of young adults living independently, the survey is not as well suited to analyzing young adults, who may live with their parents or roommates (see Dettling and Hsu, 2014, for a discussion). Therefore, SCF figures may somewhat overstate the financial positions of young adults, but still provide meaningful information on trends over time particularly at various points in distributions.

2 Data

We use data from multiple waves of the Survey of Consumer Finances (SCF). The SCF is a survey of household balance sheets conducted triennially by the Federal Reserve to gather comprehensive information on household assets, liabilities, income and credit market experiences. The SCF provides a comprehensive look at household balance sheets, describing both ownership and magnitude of particular assets and debts. In addition, the SCF also collects demographic information as well as data on employment and household income. Wealth data from the SCF is widely regarded as the most comprehensive data available in the United States. Our primary analysis focuses on young adults, defined as individuals aged 18-31, in the 2001, 2004, 2007 and 2010 waves of the SCF. We will additionally compute

The Millennial generation encompasses cohorts born between 1979 and 1995 and Generation X encompasses cohorts born between 1965 and 1978. We will refer to young adults from the 2010 survey as “Millennials” and young adults from the 1989 survey as “Generation X”.

some statistics for individuals aged 35-50 in those years, who we will refer to as “middle adults” as well as for young adults from the 1989 wave for comparison.

The SCF is a household survey, and its sampling frame is designed to be representative at the household level. Young adults can be a part of very different types of households in the SCF because young adults vary widely in their living arrangements and family structure. A young adult may be living completely independently, with a spouse or cohabitating partner, in group quarters, or with a parent. In each of these cases, the SCF might capture different types of information about the individual and we must tailor our analysis to address these differences. Assets and liabilities are collected at the household level, and pooled for all financially dependent household members, called the “primary economic unit”. Income is only collected for household heads and spouses/cohabitating partners. In roommate situations, the eldest roommate will typically be considered the household head, and unless the roommates consider themselves financially dependent on one another, very little information will be collected about the other roommates. Individuals living with a parent may contribute to the total household assets and liabilities, but only if the parent considers the child financially dependent and part of the primary economic unit.³

To facilitate comparisons between individuals in different types of living arrangements, we will calculate an individual-level version of the household-level measures of assets, liabilities and income which are found in the SCF. In most cases, we calculate this measure by weighting the total measures of income, assets and debts by $1/N$, where N is the number of adults (over age 18) in the primary economic unit. There are several important exceptions to this procedure to note. First, since wages are only collected for heads and spouses/cohabitating partners, we can only calculate income for those individuals. Second, when a young adult is in the primary economic unit and the household head is a parent or grandparent (or any other adult older than 50 who is not the spouse/cohabitating partner), we do not assign

³The SCF does collect some more limited information on income and liabilities for household members who are not financially dependent on the household head. Due to these data limitations, we will not use this information in our analysis.

the young adult to a share of the household's total assets or liabilities, and we omit that young adult from the analysis, since the household's financial circumstances are likely to be dominated by the head rather than the young adult child/grandchild. In section 4, we further discuss issues which arise from the SCF sampling frame and the young adults who we do not capture because they are not part of the primary economic unit.

The SCF has information on whether or not an individual holds various types of assets and debts, as well as the balances associated with those accounts. We will use this information to look at net worth, total asset holding, total liabilities, and total holdings of various types of assets and debts. Total assets is an aggregate measure of all holdings in checking accounts, savings/money market accounts, stocks, bonds, quasi-liquid retirement accounts, and any homes or vehicles owned by the family. Total liabilities are similarly measured as the sum of housing debt (including second mortgages and home equity loans), lines of credit, credit cards, installment debt, vehicle loans, student loans, and other debt. Net worth is defined as the total of all assets net of all debts.

We will also separately analyze several broad categories of assets and debts which are of particular importance to young adults. On the asset side we summarize bank deposits (checking and savings accounts), housing, quasi-liquid retirement accounts (such as 401(k)s and IRAs), and stock and bond holding. On the debt side we will separately summarize credit card debt, housing debt, vehicle loans, and student loans. Most of our analysis will focus on medians because of skewness in the distribution of financial holdings, although we will present information on other aspects of the distribution as well.

In addition to surveying respondents on aspects of their balance sheet, the SCF also asks respondents about their interactions with credit markets. Measures collected include information on payment behavior, payment burdens, and bankruptcy filing. In addition, we can infer if the individual is credit constrained, based on questions about applications for credit. The survey asks the respondent if he/she was denied credit in the past two years, and if the individual opted not to apply for credit for fear of being denied. We define individuals

who report yes to either of these questions as credit constrained.

3 Trends in Young Adult's Balance Sheets

3.1 Net Worth

Figure 1 (a) displays net worth from 2001 to 2010 at the median, 25th percentile and 75th percentile of the distribution for young adults in the SCF, expressed in 2010 dollars. In 2001, the median net worth of young adults was about \$8,000. The median peaked in 2004, after which it declined over the next two waves. For the 75th percentile, median net worth was approximately \$42,000 in 2001. This number fell slightly until 2007 and fell sharply between 2007 and 2010. The decline for the 75th percentile was much more dramatic than the decline at the median or the 25th percentile. Table 1 displays the data from figure 1 as well as additional points of the distribution, and the distribution for middle adults. Notable in table 1 is statistics for both the 90th and 99th percentile of net worth. One of the reasons the SCF is considered the most comprehensive sources of wealth information is its ability to capture the top of the wealth distribution. This indicates that net worth for young adults in the 90th and 99th percentile rose between 2001 and 2007 and fell between 2007 and 2010, just as it did for the rest of the distribution. Interestingly, in terms of percent change, the drop in net worth for the 99th percentile was smaller than the drop experienced by the 75th and 90th, which experienced a 24 percent and 33 percent fall in net worth between 2007 and 2010, respectively. The change at the 99th percentile was only 14 percent, similar to the 11 percent drop experienced by the median.

The right panel of figure 1 (a) also displays the 25th percentile, median and 75th percentile of net worth for young adults in 1989. This indicates that during young adulthood, the median individual from Generation X fared slightly worse than the median Millennial in 2001 and 2004, and slightly better than the median Millennial in 2007 and 2010. However, the 75th percentile of the previous generation fared much better in young adulthood than

today's young adults. Table 1 indicates that net worth at the 90th and 99th percentile was far higher for young adults of Generation X than the today's Millennials. In fact, net worth at the 90th percentile and 99th percentile for young adults in 1989 was over 90 percent larger than net worth at the 90th and 99th percentile for Millennials.

Figure 1 (b) displays the ratio of median middle adult (age 35-50) net worth to young adult net worth. In 2001, median net worth for middle adults was approximately \$70,000, which is almost 10 times as large as that for young adults. In pre-crisis waves of the SCF, median young adult net worth was about ten percent of that of middle aged adults; in 2010, young adult net worth rose to 15 percent of the net worth of the older group. This is likely attributable to the fact that young adults are less likely to own homes or stocks, and therefore did not benefit from the housing and stock market boom between 2004 and 2007, nor did they suffer from the housing and stock market bust from 2007 to 2010. Table 1 indicates that the 90th and 99th percentile of net worth fell much less steeply than the 75th, median or 25th percentile for middle adults.

Figure 2 breaks down the trends in net worth into trends in accumulated assets and debt. Figure 2 (a) displays trends in the 25th percentile, median and 75th percentile in total asset holding. Figure 2 (a) indicates that median total assets hovered between \$21,000 and \$23,000 through the early 2000s, dropping to about \$18,500 in 2010. Figure 2 (b) displays trends in debt holding. This indicates that median total debt among young adults was close to \$11,500 throughout the period from 2001 to 2007, and dropped to about \$9,700 in 2010. A striking feature of this plot is the divergence in trends in debt levels at the 75th percentile. Between 2001 and 2004 debt levels grew dramatically for the 75th percentile, from \$42,000 in 2001 to almost \$60,000 by 2004, where it remained throughout the rest of the decade. Relative to young adults in 1989, young adults in 2010 held fewer assets and more debt. Moreover, Millennials at the 75th percentile hold almost three times as much debt as their counterparts from Generation X held as young adults.

Figure 3 displays trends in net worth (a), total assets (b) and total debts (c) for young

adults by level of education,. Education is defined by the highest level of schooling completed and split into four categories: high school dropouts, high school graduates, some college, and Bachelor's degree or more. Similar patterns to those in figures 1 and 2 are found. Net worth among college educated individuals was substantially higher than it was for less educated individuals throughout the period. It fell substantially, however, throughout the 2000s. Figure 3 (b) and (c) indicate this drop was driven by a large increase in total debt holding for this group. The right panels of figure 3 indicate that compared to the past generation, college-educated Millennials have higher debt burdens (over three times more at the median) and lower net worth (about one-third less at the median) than their counterparts from Generation X had in 1989. For those with a high school degree or some college, net worth rose slightly from approximately \$7,000 between 2001 and 2004, and then fell until 2010. For high school dropouts, median net worth in 2001 was approximately \$2300. This grew until 2007 and then reverted to its 2001 level in 2010. Compared to 1989, young adults in 2010 with at least some college have much lower net worth. Those with a high school degree look similar to their Generation X counterparts and for high school dropouts, net worth was actually lower for Generation X in 1989 than for today's Millennials.

3.2 Assets

Figure 4 displays ownership patterns and conditional median values of the four main categories of assets: bank deposits, housing, retirement accounts and stocks. The fraction of young adults holding each asset is displayed in the gray bars and the conditional median value of each asset is represented by the black dotted markers and dashed line. In 2010, over 95 percent of young adults held some type of asset; 88 percent had a deposit account, 36 percent owned a home, 39 percent had a retirement account and 10 percent held stocks. In general, rates of ownership fell between 2001 and 2010, as did conditional median values.

Figure 4 (a) indicates that about 85 percent of young adults held deposit accounts (checking accounts, savings accounts, or both) in 2001, and this rose slightly throughout the period. Young adults holding rates of bank deposits are very similar to middle adults, who hold bank deposits at a rate of approximately 90 percent. The conditional median value also rose slightly between 2004 and 2010. Figure 5 (a) displays trends in conditional values for the 25th percentile and 75th percentile of the distribution as well as the median. This indicates that bank deposits rose substantially at the 75th percentile over this period. Relative to Generation X's young adults, young adults today are more likely to hold bank deposits and those bank deposits have a higher median value. Figure 5 (a) indicates the conditional value of bank deposits at the 75th percentile for today's Millennials is also considerably higher than it was for Generation X's young adults in 1989.

Figure 4 (b) displays the holding and conditional median values of housing assets. Just under 40 percent of young adults reported owning homes throughout this period, with a nearly three percentage point difference in ownership rates between the peak in 2004 and post crisis in 2010. The homeownership rate of young adults has been about half that of middle adults, whose rate of ownership is around 72 percent. The conditional median value of housing assets follow closely the path of home prices over the period, and figure 5 (b) indicates this is true at the 75th and 25th percentile as well as the median. Relative to Generation X's young adult, young adult Millennials are more likely to own a home, but conditional on ownership, their homes are worth less. In fact, Generation X's conditional median home value was approximately equal to those experienced by Millennials at the peak of the housing boom in 2007 (as captured in the triennial SCF). Moreover, figure 5 (b) indicates that relative to the past generation, the distribution of home values is more concentrated among today's young adults: 1989's young adults had a lower 25th percentile and a higher 75th percentile.

Figure 4 (c) displays trends in ownership of quasi-liquid retirement accounts, which includes individual retirement accounts (IRAs) as well as account-type plans such as 401(k)s.

Note that this does not include the present-value of defined benefit or defined contribution pension plans. Since 2001, the share of young adults holding retirement accounts, has bounced around 40 percent. Time trends of ownership are similar for middle adults, but the holding rate in that group is higher at about 60 percent. In 2010, conditional on owning a retirement account, the median young adult held six thousand dollars in those accounts. Figure 5 (c) additionally displays 75th and 25th percentiles, indicating that in 2010, the 75th percentile held approximately \$10,000 in retirement accounts, while the 25th percentile held approximately \$1,000. Time trends indicate the value of these accounts bounced around throughout the period at all points in the distribution, but the conditional values of these accounts are difficult to interpret because they can be attributed to both changes in the stock market as well as changes in contributory behavior. Relative to young adults from the previous generation, today's Millennials are much more likely to hold a quasi-liquid retirement account, although conditional on ownership, the median values are similar at the median and 25th percentile. The conditional value at the 75th percentile, however, is much higher in 2010 than it was in 1989. The trends in holding and conditional values are likely at least partially attributable to the declining popularity of defined benefit pensions since the 1980s, and the increasing popularity of account-type plans as an alternative.⁴

Lastly, figure 4 (d) displays trends in stock ownership (outside of retirement accounts). The share of young adults owning stocks declined dramatically, from 16.2 percent in 2001, to 13.1 percent in 2007. In 2010, less than 10 percent of young adults held stock, and those who did held about three thousand dollars worth. Stock holding among middle adults also fell over this period, from 21 percent in 2001 to 15 percent in 2010. The conditional median value of stocks also fell over the period 2001-2007 and then rose slightly between 2007 and 2010. Again, this is difficult to interpret as it may reflect changes in the stock market or selection into stock ownership (e.g., those who continued to hold stocks held greater amount or are relative lucky). Relative to the past generation, stock ownership among Millennials

⁴In 1989, 17 percent of young adults had a defined benefit plan. That number fell to 13 percent by 2010.

is similar to their Generation X counterparts in 1989, but the conditional median value of stocks in 1989 was much higher than it is for Millennials. Figure 5 (d) indicates this is true both at the median and the 75th percentile.

The evidence presented in the section indicates that asset holding was relatively stable over the 2000s among young adults, although bank deposits have grown slightly and stock holding has fallen. This likely reflects a general retreat towards safer assets during this period, since stock holding fell and bank deposits rose for middle adults as well. Indeed, SCF data show that young adults have reported increased unwillingness to bear risk in financial investments since 2001. Relative to young adults from Generation X, Millennials in 2010 were more likely to be home owners, have bank deposits, and own retirement accounts, but less likely to have stock holdings.

3.3 Debt

Figure 6 displays ownership patterns and conditional median values of four main types of debt: credit card debt, housing debt, automobile loans and student loans. The fraction of young adults holding each type of debt is displayed in the gray bars and the conditional median value of the debt is represented by the black dotted markers and dashed line. While about 80 percent of young adults in the sample period have some sort of debt, rates of holding debt vary quite dramatically across types of debt. Across the four most recent waves of the survey, about 45 percent of young adults have credit card debt, 40 percent have auto loans, 35 percent have mortgages, and 31 percent have student loans. Generally, rates of holding the various types of debt did not change substantially between 2001 and 2007, and dropped in 2010, although student loans are an exception to this trend. Conditional on holding debt, balances generally rose until 2004, fell in 2007, then increased somewhat in 2010. Again, student loans are exception which we discuss further below.

Figure 6 (a) displays trends in credit card debt, which is defined as the outstanding balance after the most recent payment, and includes bank issued credit cards and retail cards.⁵ Over this time period, the incidence of holding credit card debt generally fell, as did the conditional median value of the debt. In 2010, 40 percent of young adults had credit card debt, compared to 49 percent of middle adults (not shown in the figure). The median credit card borrower owed a little over one thousand dollars throughout the sample period, although there was a slight downward trend in the median value throughout the period. Figure 7 (a) indicates this downward trend in the value of credit card debt was true for the median and 25th percentile, but not for the 75th percentile. At the 75th percentile, the value of credit card debt increased until 2007 and then fell. Compared to young adults in 1989, young adults in 2010 are less likely to hold credit card and hold less debt on average at each point in the distribution.

Figure 6 (b) displays trends in holdings of housing debt, which includes mortgages, home equity loans, and home equity lines of credit on both principal residences and other real estate properties. Between 2001 and 2010, the fraction of young adults carrying housing debt fell from 35 percent to 33 percent. For middle adults, housing debt ownership also fell over this period, from a peak of 66 percent in 2004 to 61 percent in 2010 (not shown in the figure). The conditional median value of housing debt was \$75,000 in 2010, which is close to the median of \$77,500 for middle adults. The conditional median values for young adults essentially followed the path of home prices over the period. This is likely because young adults tend to hold recently acquired mortgages/home equity loans. Figure 7 (b) indicates trends in the value of debt holding were similar across the distribution. The 75th percentile of housing debt was \$118,000 in 2010, compared to \$43,000 at the 25th percentile. Compared to the previous generation, young adults in 2010 are slightly more likely to have housing debt than their counterparts in 1989, and the conditional median values of the debt are similar. This is at least partially due to differential ownership rates between the two generations.

⁵This measure is generally zero for those who paid their last balance in full. In contrast, measures drawn from credit reports report the current balance.

Figure 6 (c) displays trends in automobile debt, which consists of installment loans for both new and used vehicles. This indicates that the fraction of young adults holding automobile debt fell from 45 percent in 2001 to 32 percent in 2010. Note that vehicle ownership declined from around 85 percent in 2001 to 80 percent in 2010. As a comparison, nearly 40 percent of middle adults held auto debt in 2010. The median young adult who held auto debt in 2010 owed approximately \$5,600, which is similar to the median \$6,000 owed by middle adults. Figure 7 (c) indicates that the 25th, median and 75th percentiles display similar trends in conditional values: auto debt levels rose until 2007 and then fell between 2007 and 2010. Relative to the previous generation, both ownership of auto debt and the conditional median value of the debt was higher in 1989 than it was in 2010.

Figure 6 (d) displays trends in education debt. Compared to the other types of debt, trends in holding of student loans are unique: student loan holding and the distribution of values rose throughout the period. In 2001, 26 percent of young adults had a student loan and in 2010 that number had jumped to 40 percent. These numbers are substantially higher for young adults than for middle adults, of whom only 22 percent held student loan debt in 2010. Young adult borrowers of student loans owed a median of six thousand dollars in 2001, increasing continuously to \$9,500 in 2007, and then falling to \$7,800 in 2010. Figure 7 (d) indicates that the growth in the value of student loan debt over the period was even stronger at the 75th percentile, where balances grew from \$13,500 in 2001 to \$19,400 in 2007. At the 25th percentile, balances grew throughout the 2000s, from \$2,500 in 2001 to a peak of \$3,750 in 2010. Compared to the previous generation, young adults in 2010 were much more than twice as likely to hold student loan debt and owe more money on student loans than young adults in 1989.

On net, the evidence presented in this section indicates that, with the exception of student loans, liabilities have been declining for young adults over the 2001 to 2010 period. Student loan debt, on the other hand, has risen substantially. Middle adults experienced similar trends in debt holding, although they are more likely to hold housing, auto and credit card

debt, but less likely to hold student loan debt. Compared to young adults from Generation X, young adult Millennials in 2010 were much more likely to carry student loan and housing debt, and less likely to carry credit card or auto debt. Overall, this suggests that for young adults, these different forms of debt may be substitutes for one another.

3.4 Credit Market Experiences

Next we examine how young adults interact with credit markets. Figure 8 displays trends among young and middle adults in their relationships with credit markets. In all of the subsequent analysis, we include all respondents whether or not they hold debt, in order to assess the overall incidence of particular credit experiences. Beginning with figure 8 (a) we examine the fraction of young adults (dark gray bars) and middle adults (light gray bars) who report being credit constrained. As described in section 2, we define an individual to be credit constrained if he/she reports either being denied credit or not applying for credit for fear of being denied. Figure 8 (a) indicates that young adults are decreasingly likely to be credit constrained over the period studied. On the other hand, middle adults are increasingly likely to be credit constrained. In 2001, 44 percent of young adults reported being credit constrained, compared to 28 percent of middle adults. By 2010, the gap had narrowed so that 39 percent of young adults reported being credit constrained and 36 percent of middle adults reported being credit constrained. Compared to young adults in 1989, Millennial young adults in 2010 are slightly less likely to be credit constrained .

Figure 8 (b) reports the proportion of respondents who revolve credit card balances. Between 2001 and 2010, a declining share of young adults don't always pay their monthly credit card balances in full, from 39 percent to 28 percent. In all years, the share is less than that of middle adults. Note that the sample here includes respondents who do not have credit cards, and a rising share of young adults over this period report having no cards.

Next in figures 8 (c) and (d) we examine the fraction of young adults who report being late on payments and being late on payments by more than two months in the 12 months before the survey. As evidenced by figure 8 (c), the fraction of young adults who were late on payments rose from 21 percent in 2001 to 29 percent in 2007, and then fell back to 21 percent in 2010. Generally, fewer middle adults than young adults had late payments during the sample period. However, for middle adults, the proportion trends upward and by 2010 middle adults and young adults are almost equally as likely to report being late on payments. Note that the late payments measure takes a value of 1 even if respondents only missed one payment. A stronger measure of payment delinquency is displayed in figure 8 (d) , which reports the fraction of respondents who were ever two months late on payments. Between 2001 and 2010, about 10 percent of young adults report ever being two months late (this includes borrowers and respondents who do not currently hold debt alike). In contrast, a smaller proportion of middle adults were two months late for 2001-2007, however, by 2010, their delinquency rates exceed that of young adults in 2010. Compared to young adults of the previous generation, young adult Millennials are less likely to report being late on payments.

Our next exercise is to examine signs of financial distress. Figure 8 (e) displays the fraction of respondents with high payment to income ratios, which is defined as debt repayment obligations which amount to over 40 percent of income. In 2001, 8.5 percent of young adults had high payment to income ratios, compared to 10 percent of middle adults. The fraction of young adults with high debt to income ratios also rose substantially between 2001 and 2007, and then fell sharply between 2007 and 2010, returning to 2001 levels by 2010. In contrast, for middle adults, there was a continued rise between 2007 and 2010. Compared to young adults in 1989, young adult Millennials are less likely to have high payment to income ratios. In fact, in the previous Generation X young adults were more likely to have high payment to income ratios than middle adults in that time, while in the 2000s, young adults were always less likely to have high payment to income ratios than middle adults. This indicates

the previous cohort had, and continues to have, more burdensome debt than this cohort. Figure (f) reports the proportion of adults who have filed for bankruptcy. Across the four waves, about 5.6 percent of young adults had ever declared bankruptcy, and this declined between 2007 and 2010. For middle adults, on average about 16 percent of had declared bankruptcy over the time period, and this increased between 2001 and 2010. Note that this is a retrospective question and its possible some of the middle adults declared bankruptcy as young adults.

On net, many young adults experience high levels of borrowing stress relative to middle adults, but this pattern appears to be changing over time. While fewer younger adults experienced stress in 2010 than earlier waves, the rates for middle adults climbed during the analysis period and reached high points in 2010. And by 2010, a greater fraction of middle adults than young adults had high payment to income ratios and were late on payments by two months or more. Moreover, relative to young adults in 1989, young adults in 2010 were less likely to be credit constrained, have high income to payment ratios, or be late on payments. One explanation for this could be differentially tightened credit standards for young adults, relative to those in older age groups and those in the past. For example the Credit CARD Act, which made it very difficult for those under 21 to acquire credit cards without a co-signer or evidence of sufficient income, was passed in 2009 and went into effect in February 2010, prior to the interview period for the 2010 wave of the survey.

4 Benchmarking the SCF

In section 2 we briefly discussed the SCF sampling frame, and how it can undercount young adults. These “missing” young adults are typically either financially independent roommates of a household head or living with a parent whose balance sheet information is not collected in the SCF due to their living arrangements. In this section we investigate whether this feature of the SCF sampling frame causes the SCF sample to be unrepresentative of the overall

young adult population, and whether there have been any changes in its representativeness over time.

In order to understand if the SCF is representative of the population of young adults in the U.S. we will compare the SCF data to those found in data sources which are representative at the individual-level. Our comparison data source is the March Current Population Survey Annual Social and Economic Supplement (henceforth, the CPS). While the CPS does not have information on assets and liabilities for us to compare, it does have information on income, demographics and living arrangements which we can use to benchmark the SCF data more generally.

We begin by tabulating the fraction of young adults age 18-31 who are living in various types of arrangements in the CPS, including living independently (household heads, spouses and cohabitating partners), living with roommates and living with a parent. Figure 9 displays the results of that analysis from 2001 to 2010, and the SCF years are highlighted. This indicates that over the period studied, young adults were increasingly likely to live with a parent and less likely to live independently. Recall that the SCF is able to best capture information about those living independently and is unable to capture information about those living with a parent. This suggests the SCF may have become increasingly unrepresentative of young adult individuals over the past decade.

Next, we compare income tabulated in the CPS to income tabulated in the SCF in order to see if SCF and CPS young adults differ on a financial measure that is common to both data sources. Note that we focus exclusively on wage income, although total income looks similar. Figure 10 (a) displays median wage income, calculated for all young adults in the CPS and for those young adults which it is available in the SCF (household heads and spouses/cohabitating partners). We see that SCF median income is well above the median income in the CPS for all of the years displayed. Figure 10 (b) displays those differences over time and indicates the difference is fairly stable and approximately \$10,000 throughout the period. There is however, a small rise in the difference between 2007 and 2010, when living

arrangements were changing the most. Despite this small rise, the difference in median SCF income and CPS income was almost the same in 2010 as it was in 2001. Overall, this suggests that the SCF may tend to overstate young adults balance sheets on average, but that the trends and comparisons over time may be a good approximation of changes in young adults balance sheets.

5 Conclusion

This paper examines the states of young adult's balance sheets between 2001 and 2010. We draw comparisons between young adults over time, between young adults and middle adults, and between young adults today as compared to young adults from Generation X. We find that the net worth of young adults has fallen in the recent recession, due to both a decline in asset holding and an increase in liabilities. However, relative to middle adults, young adults experienced a relatively modest declines in net worth. The greatest changes occurred at the upper end of the distributions of assets and debts, rather than at the median or the bottom.

We find that asset holdings of young adults have been relatively stable over the 2000s, although bank deposits have grown slightly and stock holding has fallen. Relative to young adults from Generation X, Millennials in 2010 were more likely to own homes and retirement accounts, but less likely to hold stocks outside retirement accounts. These findings are consistent with increases in risk aversion among the current generation of young adults. We find that overall, liabilities declined modestly for young adults over the 2001 to 2010 period with one important exception: student loans, which rose substantially over the period. Much of the increase in student loan balances is driven by increases at the top of the distribution. Compared to young adults from Generation X, Millennials in 2010 are much more likely to carry student loan and housing debt, and less likely to carry credit card or auto debt. This suggests that for young adults, these different forms of debt may be substitutes for one another.

Lastly, we also examine young adult's experiences with credit markets. We find that in the past, young adults experienced higher levels of borrowing stress than older adults, as captured by the likelihood to be credit constrained, late on payments, or having high debt payment burdens. Over the 2000s and the Great Recession period, however, this pattern has changed. While fewer younger adults experienced stress in 2010 than earlier waves, the rates for middle adults climbed during the analysis period and reached high points in 2010. In 2010, a greater fraction of middle adults than young adults had high payment to income ratios and were late on payments by more than two months. Moreover, relative to young adults in 1989, young adults in 2010 were less likely to be credit constrained, have high payment to income ratios, or be late on payments. One explanation for this could be differentially tightened credit standards for young adults, relative to those in older age groups and those in the past. For instance, the Credit CARD Act, implemented in 2010, made it more difficult for those under 21 to acquire credit cards.

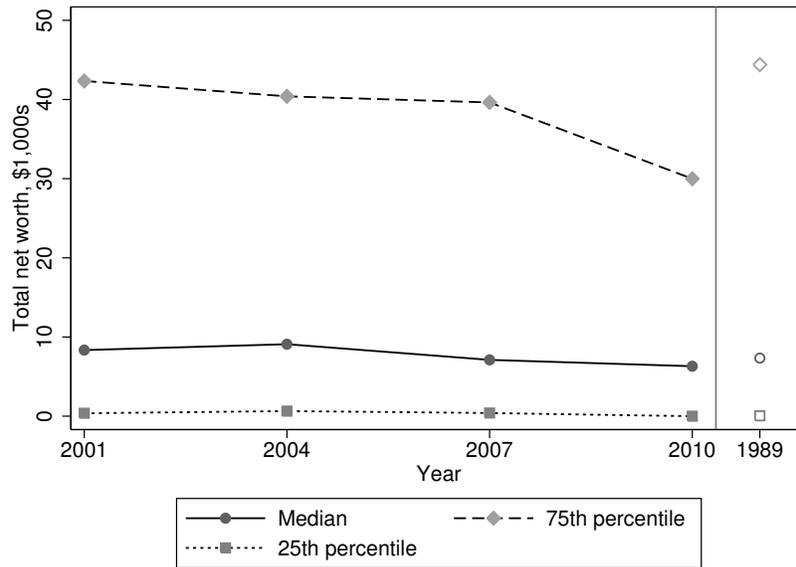
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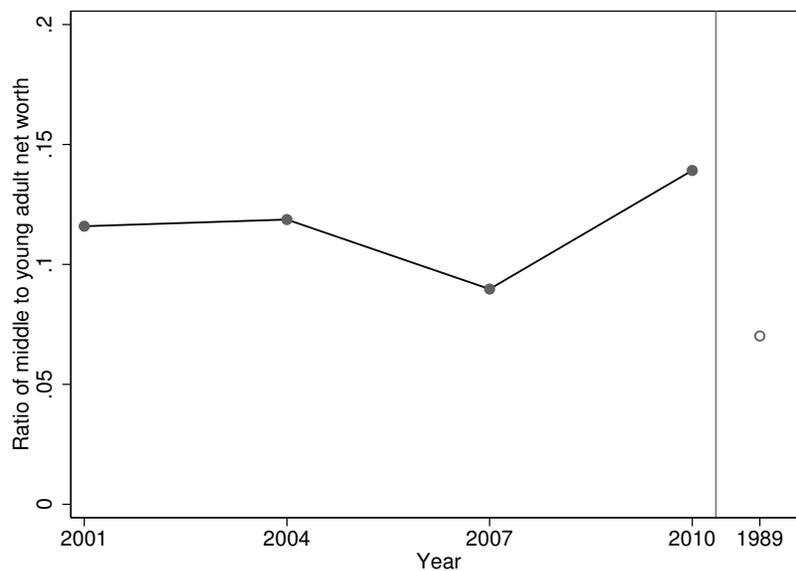
Figures and Tables

Figure 1: Net Worth Among Young Adults

(a) Distribution of Net Worth



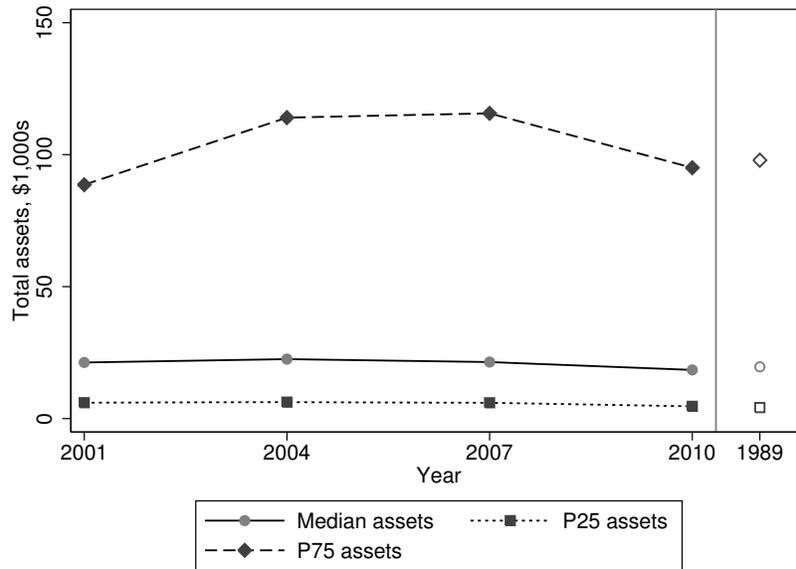
(b) Ratio of Middle Adult to Young Adult Median Net Worth



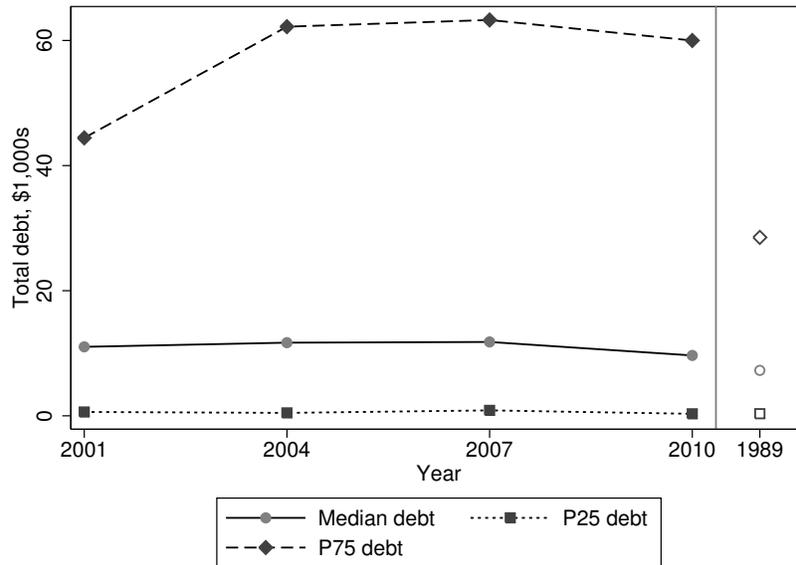
Notes: Panel (a) displays various points in the distribution of net worth for young adults age 18-31. Panel (b) displays the ratio of middle adult (35-50) to young adult (18-31) median net worth. Source is Survey of Consumer Finances for the the years shown. All nominal values were adjusted to 2010 dollars using the CPI-U.

Figure 2: Distribution of Assets and Debts Among Young Adults

(a) Assets

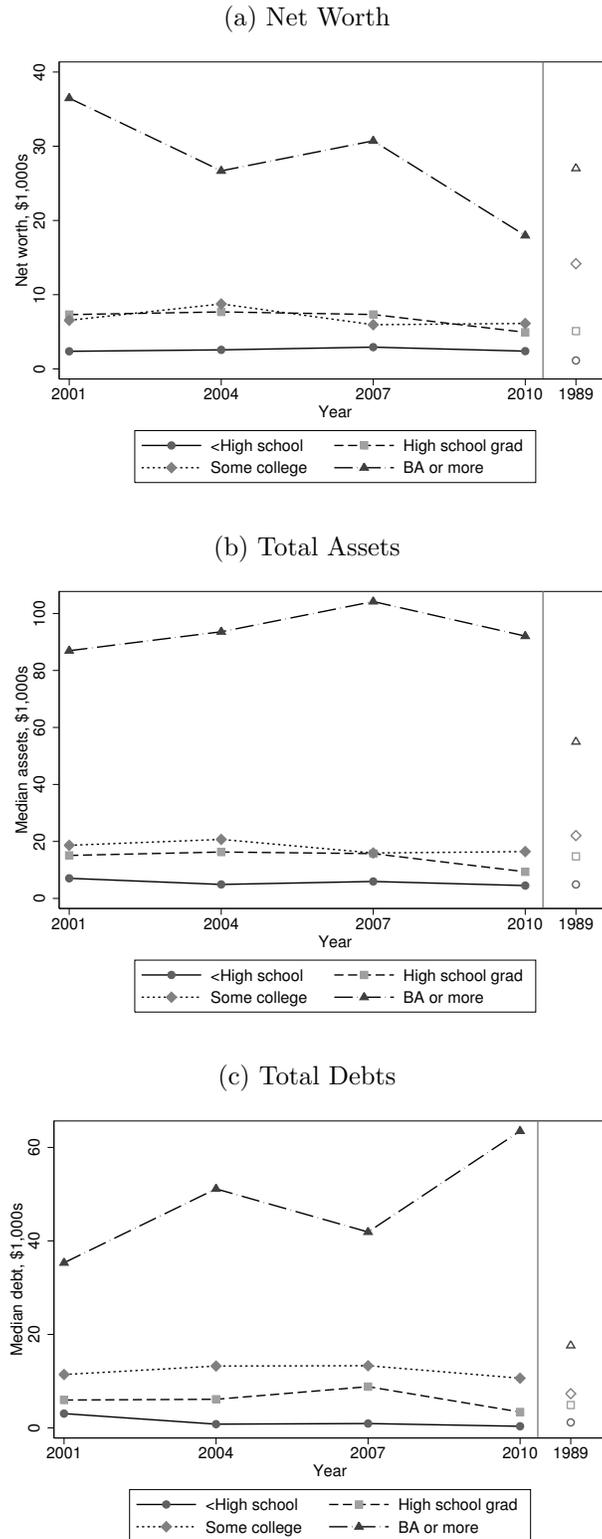


(b) Debts



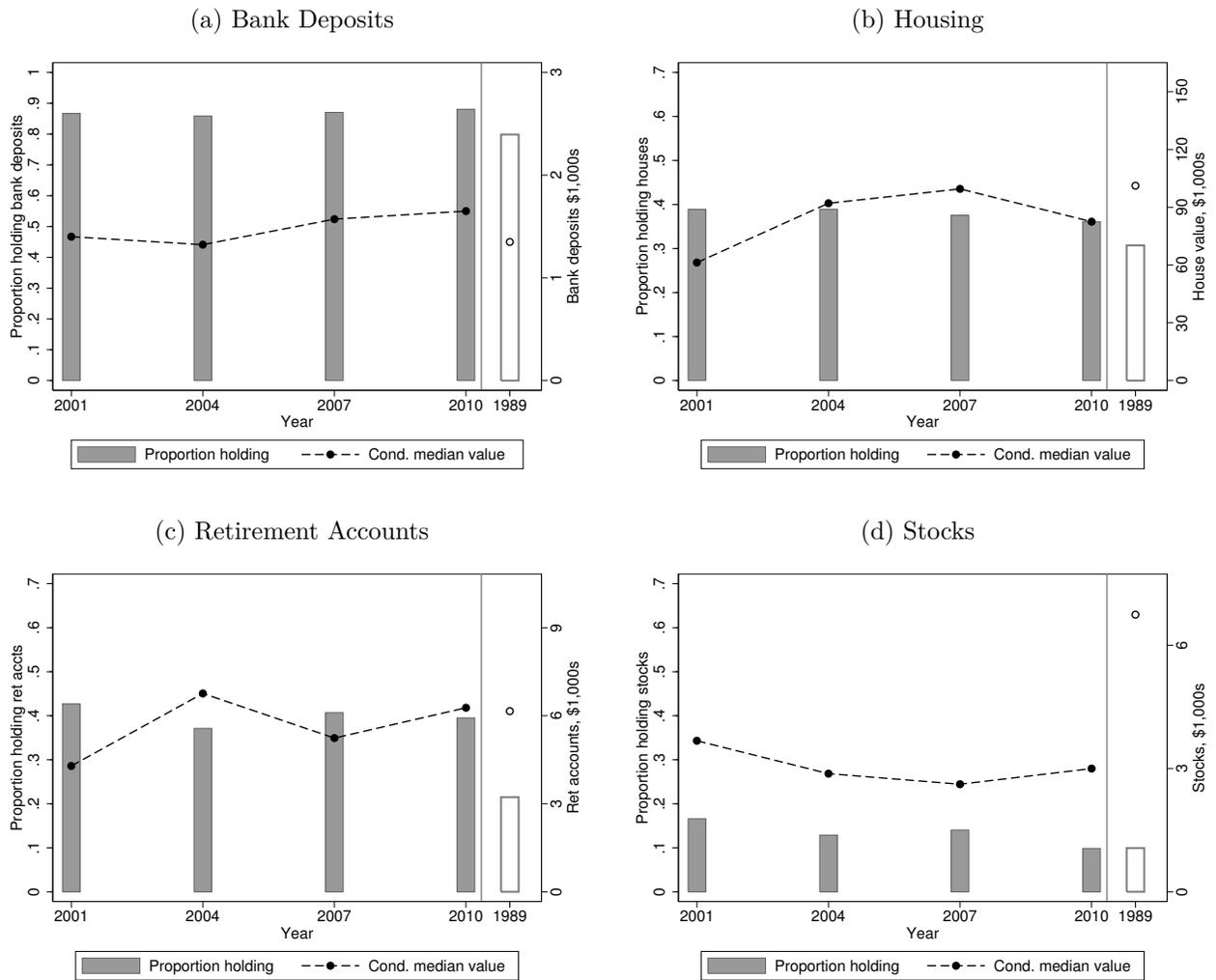
Notes: Displayed are various points in the distribution of total assets and total debts for young adults age 18-31. Source is Survey of Consumer Finances for the the years shown. All nominal values were adjusted to 2010 dollars using the CPI-U.

Figure 3: Net Worth, Assets and Debts for Young Adults, by Education



Notes: Displayed are trends in net worth (a) total assets (b) and total debts (c) for young adults age 18-31 by level of education. Source is Survey of Consumer Finances for the the years shown. All nominal values were adjusted to 2010 dollars using the CPI-U.

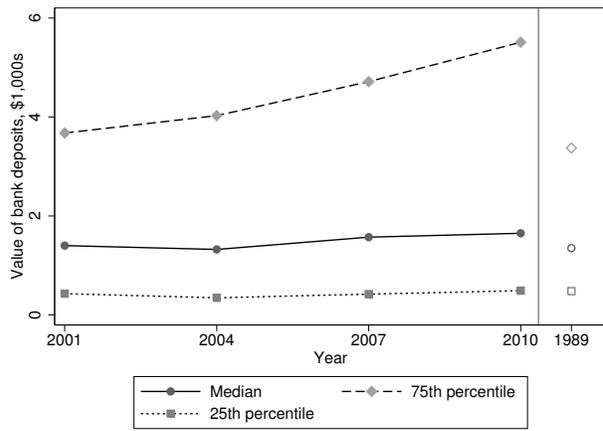
Figure 4: Fraction Holding and Median Values of Assets for Young Adults



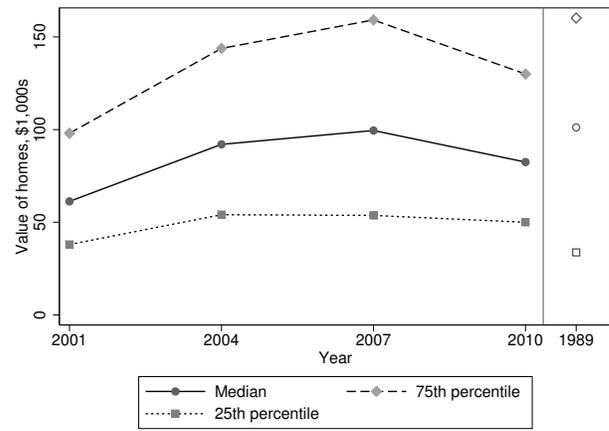
Notes: Displayed are fraction holding and median values for different types of assets for young adults age 18-31. Source is Survey of Consumer Finances for the the years shown. All nominal values were adjusted to 2010 dollars using the CPI-U.

Figure 5: Distribution of Values of Assets for Young Adults

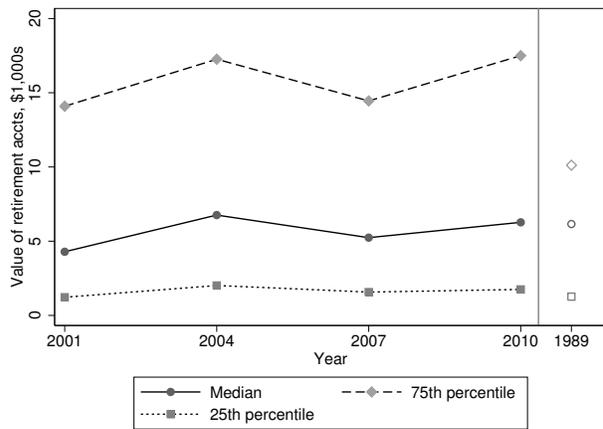
(a) Bank Deposits



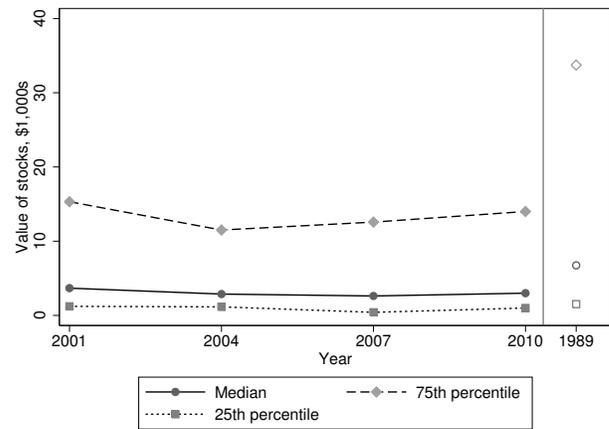
(b) Housing



(c) Retirement Accounts

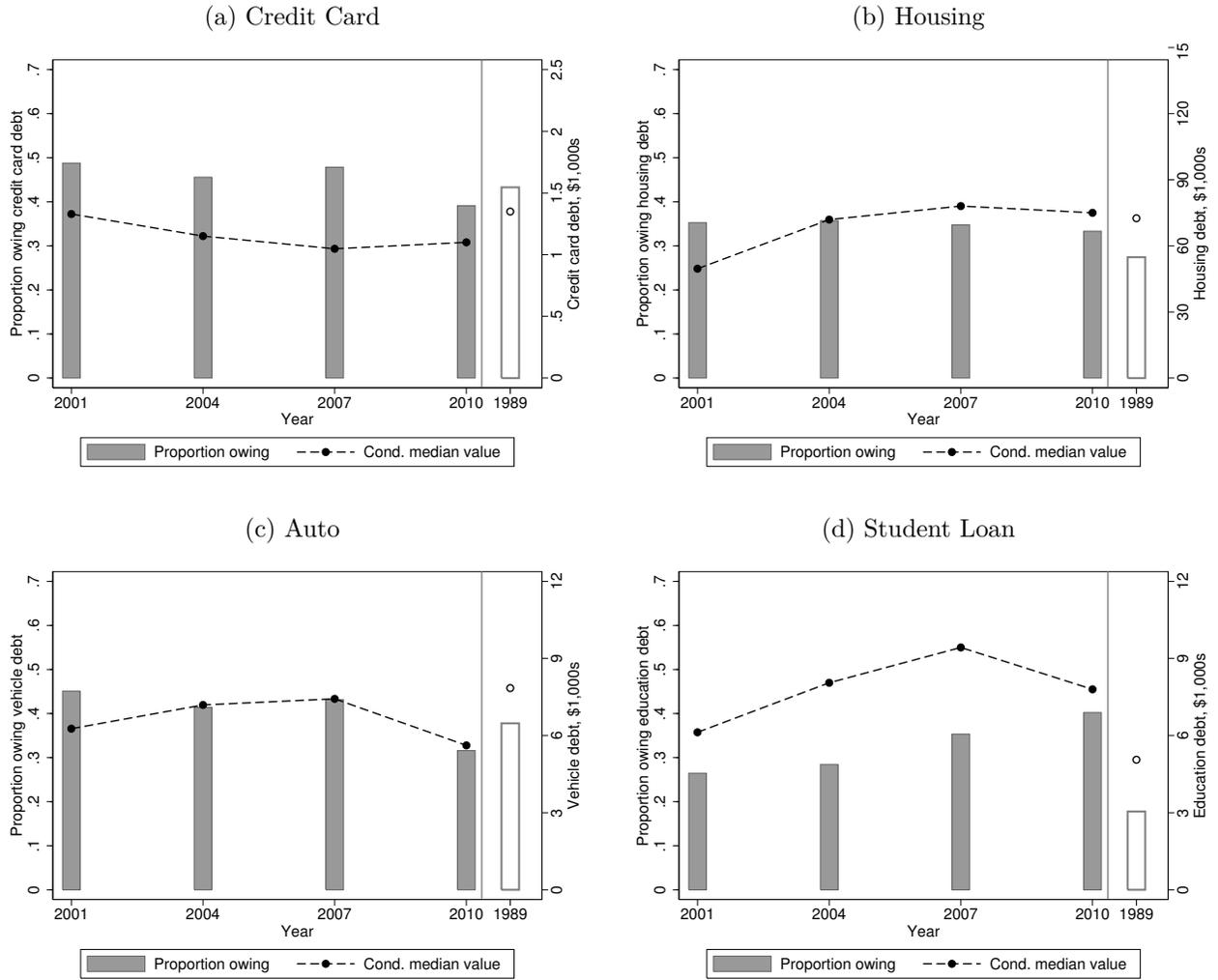


(d) Stocks



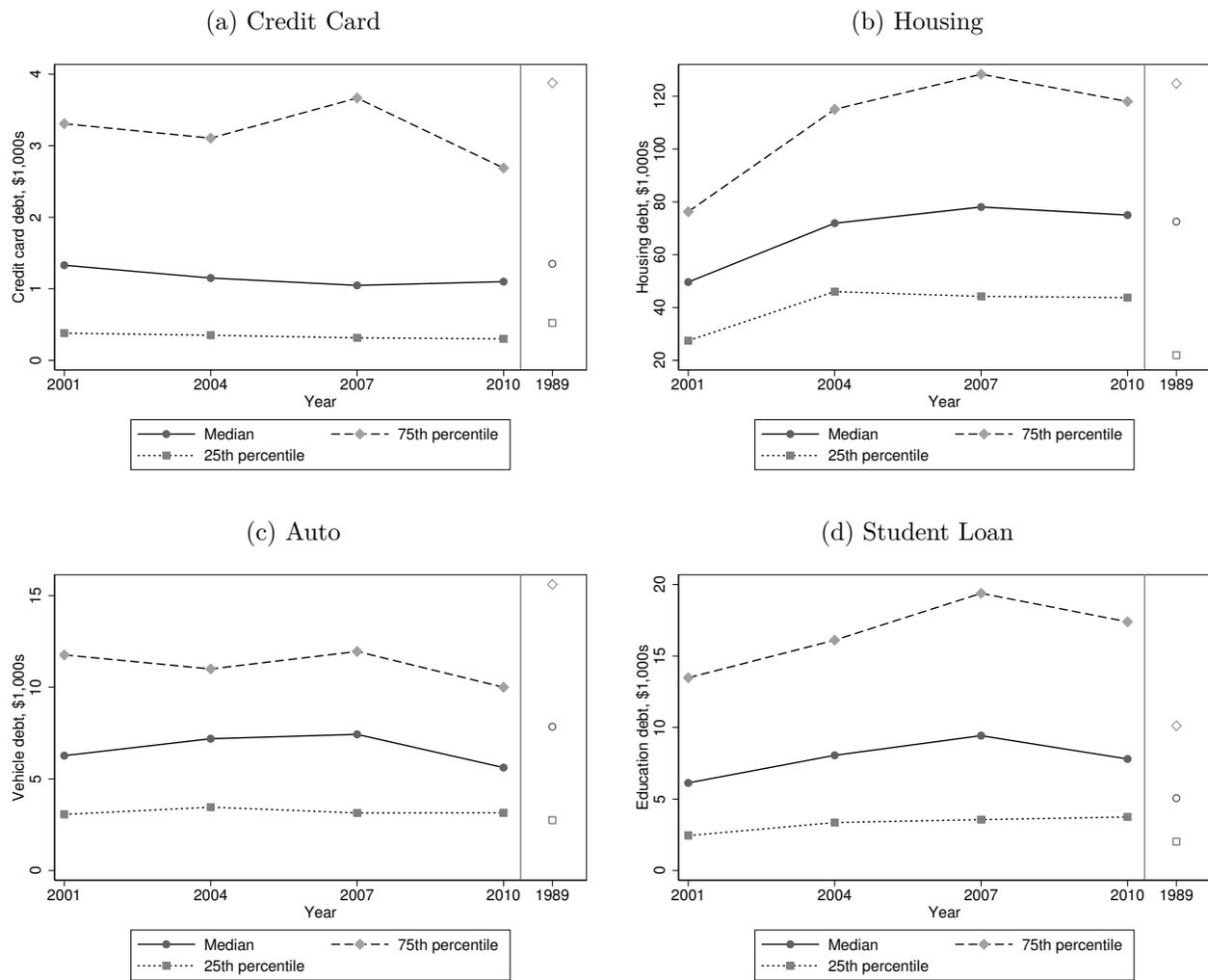
Notes: Displayed are various points in the distribution of total values of various types of assets for young adults age 18-31. Source is Survey of Consumer Finances for the the years shown. All nominal values were adjusted to 2010 dollars using the CPI-U.

Figure 6: Fraction Holding and Median Values of Debts for Young Adults



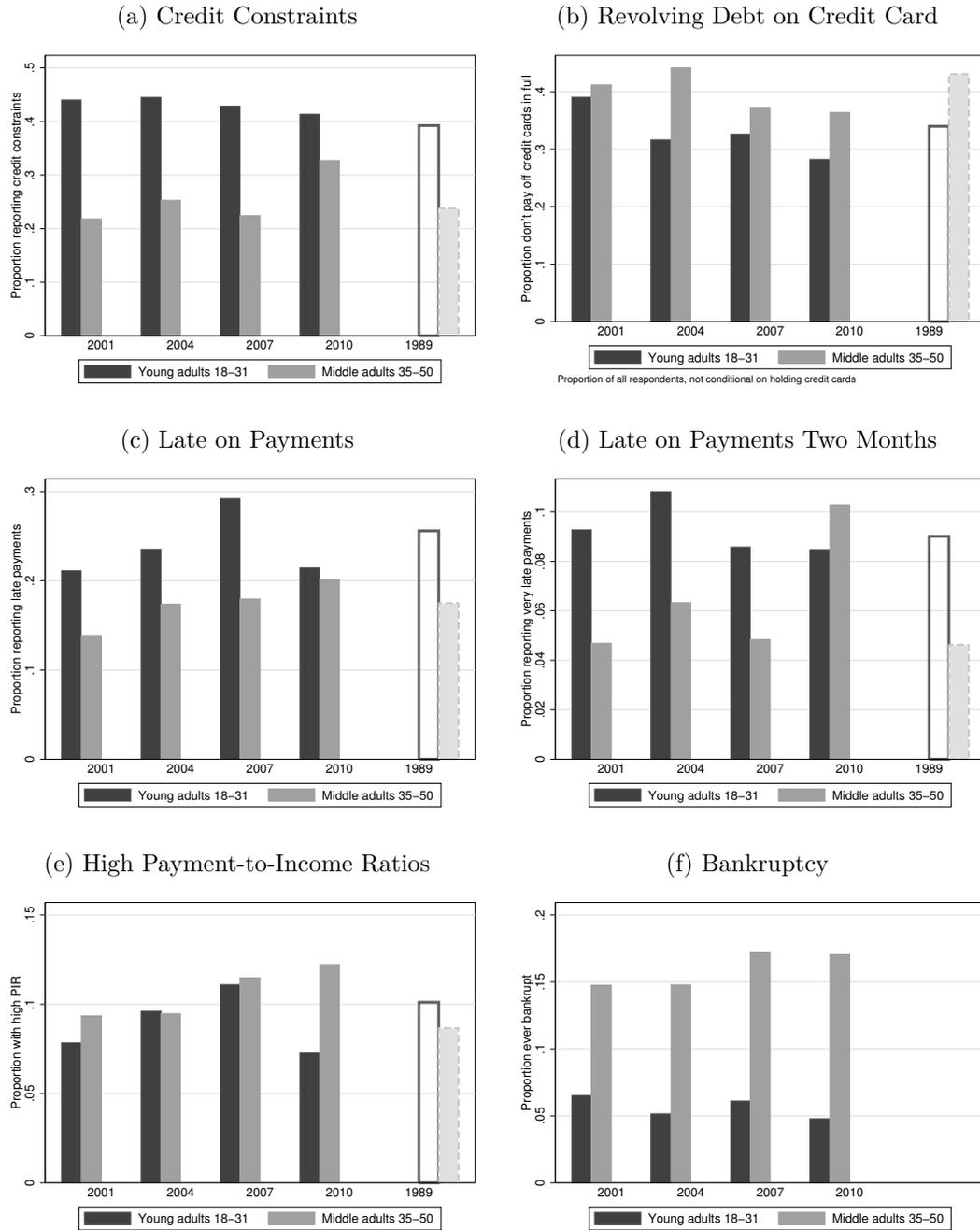
Notes: Displayed the fraction holding and median values for different types of debt for young adults age 18-31. Source is Survey of Consumer Finances for the the years shown. All nominal values were adjusted to 2010 dollars using the CPI-U.

Figure 7: Distribution of Values of Debts for Young Adults



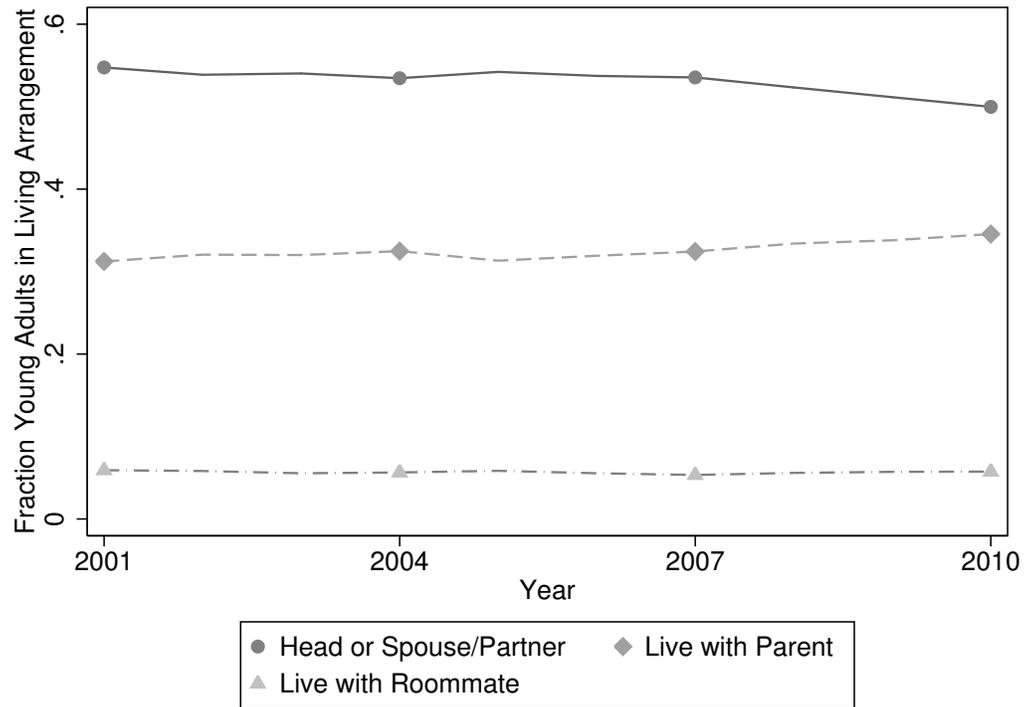
Notes: Displayed are various points in the distribution of total debts by type of debt as indicated for young adults age 18-31. Source is Survey of Consumer Finances for the the years shown. All nominal values were adjusted to 2010 dollars using the CPI-U.

Figure 8: Credit Market Experiences for Young and Middle Adults



Notes: Panel (a) displays the fraction of young (18-31) and middle (35-50) adults who are credit constrained. An individual is considered credit constrained if he/she reports either being denied credit in the past two years or not applying for credit for fear of being denied in the past two years. Panel (b) displays the fraction of young and middle adults who report that they sometimes or hardly ever pay off the total balances owed on credit cards each month. Panel (c) displays the fraction who report being late on payments in the last year, and (d) the fraction who have been for two months or more. Panel (e) displays the fraction of all respondents with debt payment-to-income ratios exceeding 40 percent. Panel (f) displays the fraction of young and middle adults who report ever having declared bankruptcy, which is not available in the 1989 wave of the SCF. Source is the Survey of Consumer Finances.

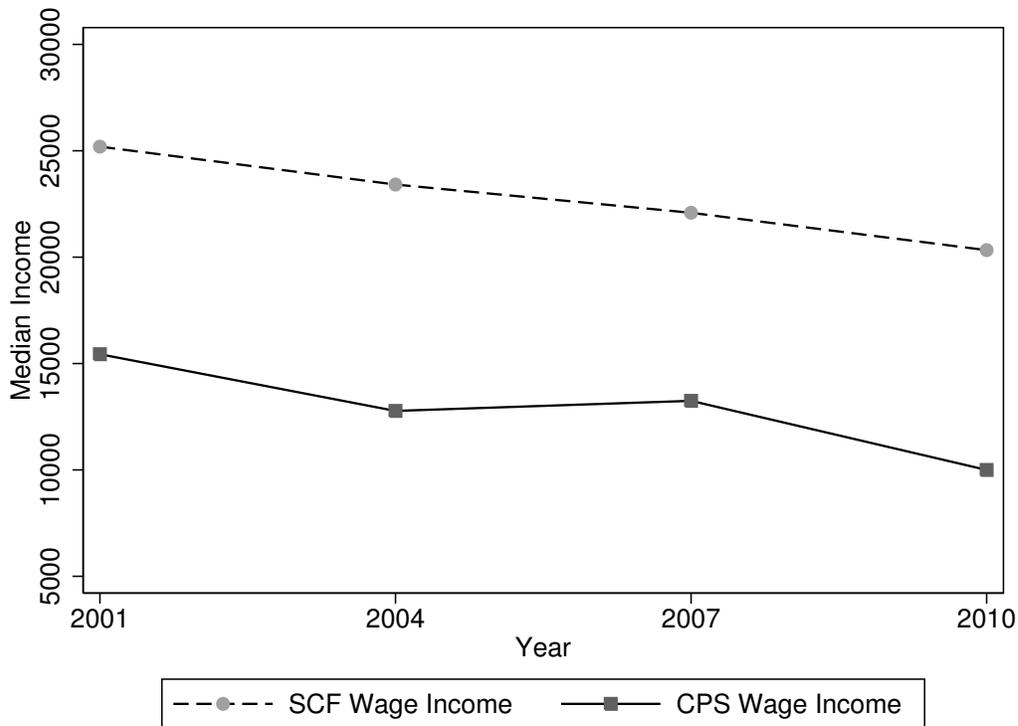
Figure 9: Trends in Young Adults Living Arrangements



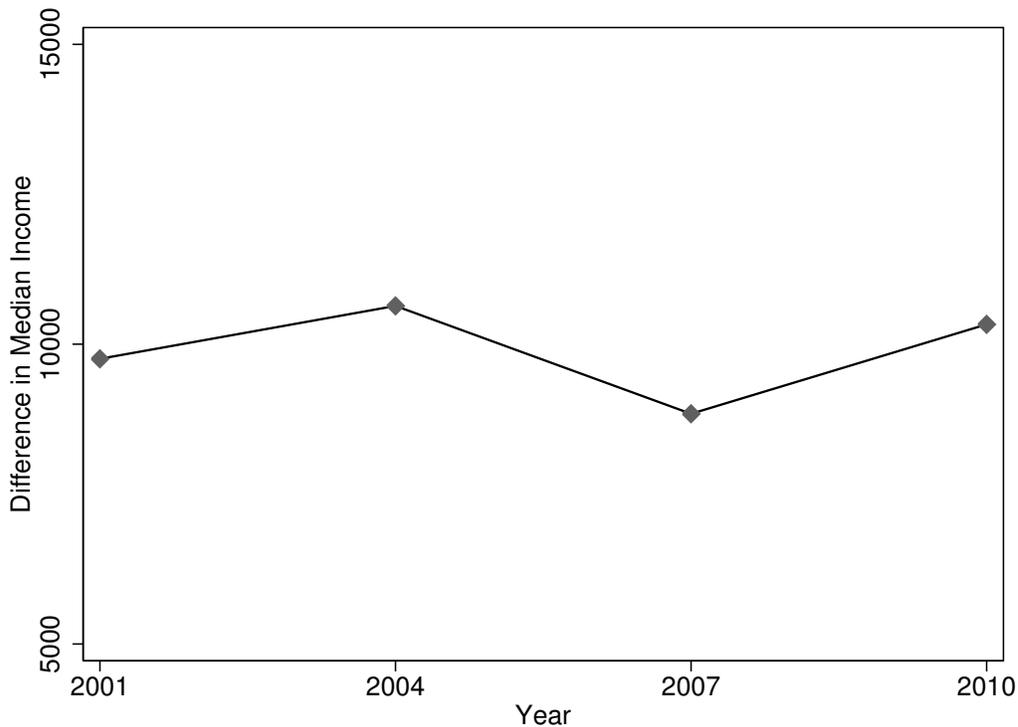
Notes: Displayed are trends in the fraction of young adults living with independently (as a household head, spouse or cohabitating partner), living with a roommate, and living with a parent, calculated from the March Current Population Survey 2001-2010.

Figure 10: Comparing SCF and CPS Wage Income

(a) Median Wage Income in the SCF and CPS



(b) Difference in Medians



Notes: Displayed are trends in mean and median wage income for young adults age 18-31 in the SCF and CPS. Panel (a) displays the raw trends and panel (b) displays the differences.

Table 1: Net Worth

Year	25th	50th	75th	90th	99th
<i>Young Adults</i>					
2001	0.4	8.3	42.3	115.8	703.9
2004	0.6	9.1	40.4	116.1	591.8
2007	0.4	7.1	39.6	118.9	577.9
2010	0.0	6.3	30.0	79.1	498.5
1989	0.0	7.3	44.4	153.3	955.3
<i>Middle Adults</i>					
2001	18.7	72.0	208.5	489.5	3529.0
2004	19.1	76.6	213.6	476.1	4017.2
2007	15.5	79.2	230.8	550.5	4231.5
2010	6.5	45.3	147.5	404.0	3106.8

Notes: All values displayed in 1000s. Nominal values were adjusted to 2010 dollars using the CPI-U. Data source is Survey of Consumer Finances.