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The Emergence of a Finance Culture in American Households, 1989-2007

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Abstract

As the financial economy has expanded beginning in the mid-1980s, it has done so in part by selling more products to individuals and households. Households have had more access to new forms of assets and debts and new ways to fund their lifestyles. This occurred at the same time that income inequality and job insecurity increased dramatically in the U.S. We show that a more risk taking culture that engages in more active financial management emerges amongst the middle and upper middle classes. We suggest that these households are feeling the effects of growing inequality at the top more acutely and they respond by changing how they think about their financial lives. For those lower on the income distribution, financial strategies are more of a defensive strategy to get by. Those at the top embrace finance as an opportunity to preserve and extend their lifestyles.

SER Keywords: Consumers, Culture, Inequality, Family Economics, Financialization

JEL Classification: D12 Consumer Economics: Empirical Analysis; D31 Personal Income, Wealth and their distributions; G21 Financial Institutions: Banks; Z13 Economic Sociology

Introduction

Financialization, broadly understood to mean the increasingly important role of financial markets, motives, actors, and institutions in the operation of the economy (Epstein, 2005), has attracted increasing attention in recent years (Krippner, 2005; Orhangazi, 2008; Davis, 2009). Scholars have produced a growing number of studies on the origins, dimensions, and effects of financialization across multiple domains, both in the U.S. and elsewhere (Zorn, *et al.*, 2004; Krippner, 2011; Tomaskovic-Devey and Lin, 2011; Lin and Tomaskovic-Devey, 2013; Baud and Durand, 2011; Van Der Zwan, 2014).

One area that has received less attention is the role of households in financialization. As the financial economy has expanded, it has done so in large part by selling more products to households, such as mortgages, second mortgages, mutual funds, stock trading accounts, student loans, car loans, and various forms of retirement products (Greenwood and Scharfstein, 2012; Aalbers, 2008). This has been particularly true in the United States, where increasing consumption of financial products and services has deepened households' involvement in financial markets dramatically during the past two decades. In credit markets, real median household debt levels increased 179% from 1989-2007 as consumers took on an ever-wider array of loans (Wolff, 2010). This trend is also apparent in the widespread acquisition and trading of investment assets. The percentage of households with direct holdings of stock equities or mutual funds increased from 20% to over 30% during the 1990s, and the median frequency of financial transactions more than tripled over this period (Kremp, 2011). Later, the housing bubble of the mid-2000s saw the widespread popularization of housing investment as an entrepreneurial activity.

Several theorists have argued that such trends are indicative of a more fundamental shift in how people think about financial activities and markets (Martin, 2002; Langley, 2008; Davis, 2009). Akerlof and Shiller (2009, p.157) assert that the increasing prominence of the stock market during the 1990s made investment success a popularly understood indicator of intelligence. Davis characterizes the U.S. in the early 21st century as a "portfolio society," in which "investment becomes the dominant metaphor to understand the individual's place in society" (2009, p. 193). Davis argues that this means a change in the way that people think about what they own. From this

perspective, households have come to actively embrace financial strategies as a means to manage their consumption, indebtedness, and saving, what could be termed a finance culture.

We use the term “culture” here not as a unitary set of beliefs held by all people. Instead, culture is a toolbox of meanings that can be used in a given situation as a way to frame, make sense of, and organize action in some aspect of people’s lives (Swidler 1986). Our use of the term “finance culture” does not imply that household financialization is caused by an exogenous cultural shift. Nor does it imply that emergent cultural repertoires are disconnected from material pressures. A finance culture involves people becoming more fluent and comfortable with financial language and taking financial risks, including increasing one’s indebtedness as a means to support their lifestyles. Behaviorally, it implies engaging in activities like the active trading of stocks and treating one’s house as an investment asset.

Economists and sociologists have studied fragmentary pieces of this process, including changes in household portfolio mix, shifts in attitudes about risk, financial literacy, and the performance of retail stock investors (see Tufano, 2009 for an overview). Scholars have also studied evolving patterns of participation in particular financial markets, including credit cards (Manning, 2001; Zinman, 2009), mortgage credit (Dyner and Krohn, 2007; Mian and Sufi, 2010), and stock equities (Kremp, 2010). Yet we lack a panoramic analysis of the financialization of American households over the previous two decades. The purpose of the present paper is to lay a conceptual and empirical groundwork for how social scientists might think about this multi-faceted issue. Our goal is to provide a global view of the various ways that households at different points in the stratification structure have become more involved with the financial economy and how this has co-evolved with their attitudes towards risk and debt.

Lurking behind these questions are several alternative accounts about how we ought to understand the financialization of households in relation to broader changes in the economy. Wage stagnation, rising inequality, and declining job security over the past three decades have altered Americans’ life-chances and mobility strategies in profound ways. There are two views about how this shaped households’ turn to finance, one that focuses on how households reacted defensively to preserve their lifestyles, and the other that suggests households embraced the logic of the risk economy and developed a more aggressive mindset for managing their assets and debts.

The first account highlights how structural changes pushed households to become more reliant on financial services (Rajan, 2010). As the finance-fuelled shareholder-value movement made employment less secure and less remunerative, households had little choice but to take on more debt (Harvey, 2010; Leicht and Fitzgerald, 2007). Meanwhile, pension reform and the privatization of risks tied Americans' retirement savings to privately-managed financial investment accounts. Financial firms devised new ways to profit from these needs by marketing an expanded array of services to ever-wider segments of the population up and down the income distribution. By this account, the financialization of households manifests itself primarily in the increasing sale of financial products to all households.

The second view posits a more expansive conception of financialization whereby the increasing availability of financial products also coincides with the emergence of qualitatively new cultural frames (Davis, 2009; Langley, 2008). Here, households come to embrace a more proactive and entrepreneurial management of their finances in order to capitalize on the opportunities these products present. In other words, they begin to think more financially. They conceive of their wealth as deployable assets. They embrace risk and trade stocks. They use leveraged equity to fund investments and consumption expenditures (Greenspan and Kennedy, 2008). This account suggests that financialization involves more than simply consuming more financial products and services. Rather, it means a new kind of socio-economic game for households, with new frames of meaning and repertoires of action.

Neither of these two accounts is mutually exclusive, but they imply different views on the scope of what household financialization entails. Our goal is to explore how well each of these accounts characterizes the patterns of financial market involvement by U.S. households across the stratification structure. We use triennial data from the *Survey of Consumer Finances* to chart changes in the financial activities and attitudes of households across an array of different indicators from 1989 to the onset of the financial crisis in 2007. We find that there is substantial growth in the use and holding of financial products of all kinds across the stratification structure. This implies that the financial firms sought out customers for their products and made them available to people up and down the status distribution. Not surprisingly, those with the highest socio-economic status (SES) have the most financial products.

For the bottom part of the distribution, there is little discernible evidence that increasing use of financial services has brought about a significant shift in cultural norms about risk and debt.

Middle and upper middle class households have responded to income inequality by more actively managing their financial situations and adopting a more thoroughly financial mindset. While upper middle class households have been amongst the principal beneficiaries of economic growth in the past 20 years, they have found themselves in competition for valued goods like housing and schools with those above them (i.e. the top 2%), whose income and wealth have grown faster. This has pushed them to take on more debt and use that debt to maintain and expand their lifestyles. In their case, embracing a more financial outlook is a creative one to help them keep up their lifestyles in the face of the competition for valued positional goods. Those in the bottom 40% of the income distribution more clearly have had to become more involved in borrowing money. But this appears to be in response to declining income opportunities.

Our results extend and qualify previous arguments about the increasing integration of American households into the financial economy (Davis, 2009). Our findings imply that household financialization (in the sense of the increased use of financial products) should be seen as a broad-based process extending across the socio-economic distribution. However, to the extent that we can discern a deepening culture of risk-taking and strategic deployment of assets, this is concentrated within the middle and upper middle income groups.

We elaborate our argument by first considering how the rise of the shareholder value movement made working conditions for most Americans less secure and less remunerative. Then, we consider the effects of these changes on the income distribution. We discuss the idea of lifestyle and consider how households may have utilized financial services and strategies in order to adapt to new economic circumstances. Here, we use the extant literature to discuss how a finance culture might have arisen, and we generate hypotheses about which parts of the income distribution might have adopted this culture. Then we introduce our data and examine which hypotheses best account for the changing patterns of financial attitudes and behavior among American households. We conclude by considering what this means about the household level response to growing income inequality in the U.S. and what additional research is needed.

Shareholder Value, Inequality, and Insecuritization in the U.S. since the 1980s

Households located in different parts of social structure have faced different challenges and opportunities as the larger economy in the U.S. has changed in the past 30 years. By understanding

the nature and timing of these changes and connecting them to the stratification of the population, we will be in the position where we can make some hypotheses about how households in various social positions had to change the way they saved, borrowed and invested in response to potential pressures on their lifestyles.

The late 1970s marked the beginning of an era of rising inequality and declining economic security for U.S. households. The 1970s was a period of slow economic growth, high inflation, and high interest rates. Corporate America found itself at the end of the decade with lots of cash, low stock prices, and undervalued assets on their books (Zorn *et al.*, 2004). In the late 1970s, the institutional investment community pushed corporate managers to focus on raising stock prices, i.e. boosting shareholder value (Useem, 1993). The main strategy to pursue this was corporate reorganization. Layoffs, selling off low performing divisions, outsourcing, and buying back shares of stock were all seen as actions that would increase shareholder value (Fligstein and Shin, 2007).

The spread of the shareholder value movement during the 1980s had a profound effect on the jobs of millions of Americans. One of the main outcomes was massive layoffs of blue collar workers, weakening of unions, and the closure of a large part of America's manufacturing capacity (Davis, 2009). Unionized blue collar workers who lost their jobs during the 1980s never recovered financially from those layoffs (Farber, 1996; 1997). Even for those who did keep their jobs, corporate provision of benefits decreased. Defined-benefit pensions and health insurance became rarer and employees had to pay more for the benefits they got (Hacker, 2006). The 1980s produced a large growth in income inequality, at least part of which was caused by the lack of opportunities for those who were downsized and outsourced, and part of which reflected the ability of those at or near the top to increase their incomes (Lin and Tomaskovic-Devey, 2013).

The 1990s saw the return of better macro-economic conditions and rapidly rising stock prices. But, the growth of inequality continued during this period, driven predominantly by rising incomes in the top 10% and especially the top 1% of the income distribution, with continuing stagnation below (Saenz, 2009; Volscho and Kelley, 2012; Mishel *et al.*, 2007). Moreover, households continued to experience heightened labor market risks and more frequent income shocks (Fligstein and Shin, 2004; Kalleberg, 2009; Hollister, 2011; Western, *et al.*, 2012). There was a growth in contingent employment where work was based on temporary contracts (Kalleberg, 2009). Newly created job positions were concentrated at the bottom of the income distribution during the 1990s (Wright and Dwyer, 2003), and positions were increasingly part time. Job

duration shortened throughout most of the occupational structure (Hollister, 2011). Rates of involuntary job loss increased, even during the high-growth years of the late 1990s. White collar workers became almost as susceptible to layoffs as blue collar workers (Aaronson and Sullivan, 1998). McCloud and Dwyer (2011) show that middle class families were particularly vulnerable to financial hardship. Events such as job loss, divorce, or health crises plunged middle class families into more frequent credit troubles, defaults, and bankruptcies (Porter, 2012). Not surprisingly, this high-risk economy resulted in marked increases in economic anxiety across the occupation structure, and most dramatically so amongst middle and upper middle-class white-collar workers who had previously been insulated from labor market dislocations (Western, *et al.*, 2012).

The main goal of our research is to examine how these larger changes in social stratification and economic risk shaped the differential incorporation of households into the financial economy. Households were pushed to adjust their lifestyles in response to this new economic order. But financial markets also dangled the prospect of new opportunities to maintain or enhance one's lifestyle (Rajan, 2010). Indeed, popular discourses about financial investment tend to frame these markets as a "brave new world" in which entrepreneurial agents can advance themselves through active management of their financial and human capital (Langley, 2008). So, for example, Dwyer, *et al.* (2011) provocatively demonstrate that young people who use credit cards and student loans to enhance their life chances experience positive changes in their self-esteem.

Financial Adaptation: Credit, Lifestyle, and Emergence of a Finance Culture

Obviously, people at different levels of the income, wealth, and education distributions faced very different economic prospects and might have made quite different decisions. In order to theorize households' behavior it is useful to consider the sociological concept of lifestyle. Lifestyle can be conceived of as the cultural meanings and identities attached to consumption (Bourdieu, 1984; Sobel, 1981). What we consume has a meaning that reflects who we are and how we want others to perceive us (Schor, 1998). It draws boundaries and allows privileged groups to claim social distinction (Bourdieu, 1984). It also ratifies inclusion within broader identity groupings, such as consumption standards that qualify one as having a "middle-class lifestyle."

In our paper, the main measure of a household's position is its relative place in the socio-economic status (SES) distribution. We conceive of socio-economic status as an index measure based on a household's income, assets, and educational attainment. The most influential sociological statement on lifestyles views them as product of one's location on two separate dimensions of status: economic and cultural capital (Bourdieu, 1984). We opt to use a single-dimension measure because it better serves our analytic purposes. Unlike Bourdieu, we are not interested in what people are consuming per se, but instead in their ability to maintain their lifestyle given their current resources. Since income inequality and the prospects for those with differing levels of education shifted dramatically in the U.S. in the past 25 years, it follows that the lifestyles of households at any level the distribution became more difficult to sustain, particularly relative to those who were situated just above you. As the share of income and wealth at the top of the distribution increased, it heightened pressures on those below to try to keep up (Frank, 2007; Charles and Lundy (2012).

Most people's reaction to threats to their lifestyle and consumption involve trying to preserve their style of life (Elias 1994). In the past 25 years, the easiest way to close the gap between what you were earning and what you needed to preserve your position was to borrow money. To accomplish this, there had to be a huge expansion of credit (Rajan, 2010; Hyman, 2011). During the 1970s, many lower-income and minority households had long had only limited access to credit (Krippner, 2011). But, after 1985, securitization was used to create bonds not just from mortgages, but second mortgages, home loans, student loans, and credit card debt. This propelled a broad expansion of the credit availability to all sorts of households (Rajan, 2010; Kendall, 1996; Erturk *et al.*, 2007).¹ Deregulation and the advent of new credit-scoring and classification techniques facilitated this broad-based expansion by allowing lenders to tailor product offerings and credit pricing to the calculated risk profile of each borrower (Rona-Tas and Hiss, 2010; Fourcade and Healy, 2013). Although the terms and prices of these products varied, they were marketed aggressively across the income distribution. In the aggregate, it would appear that credit expansion allowed Americans to compensate for their growing insecurity, thereby maintaining their lifestyles and positions in the status hierarchy (Hacker, 2006; Leicht and Fitzgerald, 2007).

Of course, protecting one's lifestyle in response to economic change involves not only maintaining current consumption, but also securing one's future position. Here new

investment opportunities, particularly the mass-participatory booms in the stock market during the 1990s (Kremp, 2011) and in real estate markets during the 2000s (Goldstein, 2014), offered households new avenues to supplement their income and wealth. Here again we might expect that labor market insecurity may have also played a role by spurring more households to embrace investment as a substitute for the economic security that had formerly derived from the stable career and defined-benefit pension (Langley, 2008). In the case of real estate, investment activity is closely associated with increased mortgage borrowing activity.

So far, we have only discussed the idea that in order to protect their lifestyles various groups would adapt by consuming more debt and investment products. This implies a *quantitative* expansion in their financial activities. But, another provocative idea is that a new cultural frame emerged during this period. By this, we mean a set of understandings that people use in order to take a more active stance towards their financial affairs. Beginning with pension reform and the switch from defined-benefit to defined contribution plans, Americans have been encouraged to shift their outlook from being passive to proactive financial subjects (Langley, 2008). Davis (2009) argues that as households have been integrated in financial markets more directly, they have had to learn to think like financial economists in order to manage their consumption, investments, and debts. Such arguments suggest that financialization also entailed a *qualitative shift* in households' orientation toward financial activities, which we refer to as a "finance culture."

It is useful to elaborate what we mean by "finance culture", and how we use it analytically. The idea of "finance culture" as we use it is based on a toolkit model of culture (Swidler, 1986). This means that people have a set of concepts that they utilize to interpret and orient action in particular situations. In this case, as American have become confronted with more financial products and discourses, they have developed notions about how to manage their finances that reflect changed views on what an asset is, what debt is, and how can one's assets can be leveraged to allow one to live the life one aspires toward. So, for example, one would not have to go very back into time (say as late as 1990) to discover that most people saw their houses primarily as a place to live, not as an asset to be deployed and borrowed against. The finance culture thesis implies that as financial products have proliferated since the early 1990s, a growing portion of U.S. society have come to think about their economic lives in distinctly financial terms. By developing a cultural toolkit that allows them to engage in ever-more elaborate financial strategies, these households have sought to put financial resources to work in order to enhance their lifestyles.

Empirically, this means that more households began to look at their income and wealth as assets to be deployed. They also learned to embrace risk-taking and to relax their attitudes towards taking on debt. These attitudinal shifts were accompanied by a set of concrete financial strategies to accomplish this end. Active stock trading, using leveraged home equity to fund investments, and investing in real estate (“house flipping”) are all indicators of a more thoroughly financialized repertoire.

We should emphasize that we do not intend the finance culture thesis as a competing account that "explains" the increased consumption of financial products better than other institutional, material, or technological factors. To the extent that these cultural shifts occurred, we suspect that they are as much a consequence of the growth of financial services as a cause. Unfortunately, our data does not allow us to disentangle such causal dynamics at the individual household level. For the purposes of the present analysis, we treat the expanded consumption of financial products and the adoption of a finance culture as analytically separate dimensions of financialization. We use available indicators to assess the extent to which each has occurred across the SES distribution.

Hypotheses

It is useful to formalize these arguments into a set of hypotheses. We first consider the degree to which households felt that their lifestyles were under some pressure. As the U.S. society became more unequal over much of this period, we posit that those at the bottom of the distribution were more likely to perceive their income had declined than those at the top (Western, et. al., 2012).

Hypothesis 1: Lower SES households are more likely to perceive that their incomes have been falling over time. Only the highest SES groups will perceive that their incomes have been rising or remained stable over time.

We next consider the growing consumption of financial products and services. The preceding discussion suggests that households throughout all but the very top of the distribution have felt heightened lifestyle pressures because of growing income inequality, labor market risks, and changes in benefits like pensions and health care. Financial services firms saw this as an

opportunity to sell more financial products to all segments of the distribution and provide financial advice to clients in order to secure their business.

Hypothesis 2: Because of the expansion of financial services, there should be a general increase in the holding of all kinds of financial instruments including bank accounts, credit cards, stock or mutual funds, and the use of home equity to take cash out from a house across the SES distribution. There should also be an increase in the use of professionals who provide such advice.

To what extent did expanded financial consumption coincide with the spread of a finance culture at different points in the stratification structure? We generate several versions of this hypothesis in order to highlight the difference of opinions about the both existence and scope of such a culture across the SES distribution. A null hypothesis is that consumption of financial products and services grew *without* any attendant shift in cultural repertoires. In other words, there was no finance culture.

Hypothesis 3a: Attitudes towards debt and risk did not change across SES groups even as access to financial products increased.

The opposite possibility, implied by Davis (2009), is that everyone became more financially savvy as they were encouraged to take responsibility for their economic futures and as the financial services industry marketed products more widely and aggressively. Households embraced taking on financial risk and became comfortable with going into debt to support their lifestyles. Households across the distribution actively managed their assets by participating in the stock market and using their house to borrow money to support their lifestyles.

Hypothesis 3b: As their consumption of financial products increased, all households across the SES distribution developed more of a finance culture whereby they had more of a taste for risk and a more relaxed attitude towards taking on debt. We should see more stock market investment and more withdrawal of home equity to support households' current lifestyles across the SES distribution.

Another alternative emphasizes how the need to engage in financial behavior was spread unevenly across the stratification structure. Since higher SES groups already had access to financial markets, financialization is really about the popularization of finance whereby lower and middle class groups increasingly come to adopt a financial orientation toward managing their economic lives (Rajan, 2010). As incomes stagnated, lower middle class and working class households, who had previously been less involved in financial markets, suddenly had both a heightened impetus and expanded opportunities to participate.

Hypothesis 3c: We ought to observe households in the bottom 60% of the SES distribution driving the expansion of financial practices. These groups began the period with the most latent demand due to their previous impediments. They faced the strongest pressures to become more financially attuned as a way to finance a better life in the face of growing inequality and declining incomes.

The opposite might have been taking place. Given that income inequality rose most at the very top, one can theorize that pressures on people's lifestyles were most acutely felt first by those in the upper middle class (80-98% in the income distribution) and to a lesser extent by the middle classes (40-80% of the income distribution). These were the households who most struggled to keep up with the rising price of positional goods like housing and schools, particularly in high priced urban areas. These households had more financial resources to begin with and they were able to take advantage of the expansion of new financial opportunities. But in order to do so, they needed to change their attitudes towards risk and debt. They needed to take active control over their income and wealth and deploy their resources more aggressively. These households saw the rising stock market in the 1990s and the rising housing market in the 2000s as exploitable opportunities. As a result, we expect that it is the upper-middle part of the income distribution where the finance culture took root most widely.

Hypothesis 3d: It was predominantly in the upper-middle SES strata where households not only felt the need but also had the means to take more responsibility for their financial welfare. They bought more stocks and began to see their houses as assets and their mortgages as ways to get financial leverage. As a result, they use debt more creatively to engage in status competition for positional goods, particularly housing.

Data and Methods

One needs data over time that documents both socioeconomic characteristics, attitudes towards risk and debt, and financial activities in order to examine these alternative patterns of household financialization. The Federal Reserve has conducted the *Survey of Consumer Finances* (hereafter, *SCF*) every three years since 1989 (1989, 1992, 1995, 1998, 2001, 2004, and 2007). The *SCF* offers the most comprehensive and consistent source of data that includes attitudes towards various kinds of financial risks, sources of financial information, and detailed information on sources of debt and investment. The *SCF* is a repeated cross-sectional survey. Each cross-section includes approximately 4000 households with an oversample of high-income households (for more information on the surveys, see www.federalreserve.gov/econresdata/scf/scfindex.htm).² One might prefer longitudinal data that tracks households over time, but the *SCF* is appropriate for the present purpose, which is to describe the distributional contours of household financialization.

The primary aim is to track how financial attitudes and behaviors spread across the socioeconomic status distribution. The basic strategy is to chart the patterns for various attitudinal and behavioral indicators broken down by different levels of SES, and consider how these patterns changed over time. We perform statistical tests to determine whether or not our indicators have changed significantly from the first measurement to the last measurement. We use z-tests to see if the percentage within an income category has changed and t-tests for tests of differences between means. We measure households' position in the stratification structure using a socio-economic status index constructed from a principle components factor analysis on respondents' (log) income, (log) assets, and years of education. We note that constructing quantiles only from household income produces substantively identical results.

We break this down into seven percentile groups ("quantiles") in order to index a household's relative position in the stratification structure: 0-20%, 20-40%, 40-60%, 60-80%, 80-90%, 90-98%, and 98-100%. All of the figures we report refer to either the proportion or the mean *within* each quantile. Because the *SCF* is a stratified sample, we used sampling weights in order to allocate each observation to the appropriate quantile groups. The over-sampling of high net-worth households in the *SCF* allows us to calculate valid estimates for the smaller quantiles at the top.³

We utilize survey weights in order to render our descriptive estimates representative of the population of U.S. households.

In order to measure how households feel about how they have fared in terms of pressures on their lifestyle, we use the following question: “Relative to the prices for things you buy has your income increased in the past five years, remained constant, or decreased in the past five years”. This question captures the degree to which a household feels itself a winner or loser in the recent economic race. It offers a way to measure the pressures households feel on trying to preserve their lifestyles.

In trying to measure the existence of a finance culture, we include both attitudinal and behavioral measures. The attitudinal measures in the *SCF* are less extensive than we would ideally like. We choose two attitudinal measures that get at aspects of a finance culture (neither of which is perfect). One aspect of a finance culture is a respondent’s attitude towards risk. Taking financial risk is core to thinking financially. To index the degree that households are comfortable assuming more risk, we use the following question in the *SCF*:

Which of the following statements on this page comes closest to the amount of financial risk that you are willing to take when you save or make investments?

1. Take substantial financial risk expecting to earn substantial returns
2. Take above average financial risks expecting to earn above average returns
3. Take average financial risks expecting to earn average returns
4. Not willing to take any financial risk

In our analyses, we collapse this question into three categories: take substantial or above average risks, take average risks, and take no risks. For a discussion of the meaning of this measure, see Grable and Lytton, (2001).

One of our arguments about the finance culture is that households adopt a more relaxed attitude towards debt. If households decide to tap into the equity on their house by refinancing or taking out a home equity loan, they are taking on debt now to fund current

consumption. The *SCF* does not contain a general question about attitudes towards taking on debt. But, the *SCF* does ask “Do you think it is right to borrow money to fund expenses when one’s income declines?” This question is answered “yes” or “no”. We expect that over time if there is a finance culture, more people will answer “yes.”

Results

Income Pressures

Figure 1 presents perceptions of the household’s real income growth over the preceding five years, broken down by SES quantile. The top panel shows the percentage who report negative income growth, while the bottom panel shows the percentage who report positive income growth. The remainder represents those who report constant real income (not shown). There are two main trends apparent in the figure. First, there is a statistically significant decline over time in the percentage of households who feel that their income has gone up and an increase in those who have felt that their household income has gone down. Overall, the percentage of households experiencing negative income growth rises from 32% in 1989 to 42% in 2007 ($z=-9.82$, $p<.01$), with particularly significant growth after 2001. Meanwhile, the percentage of households who perceive their income as having risen has dropped dramatically from 28% in 1989 to 18% ($z=11.27$, $p<.01$) by 2007. This sobering fact implies that nearly half of American households are feeling downward pressure on their current style of life and consumption. We note that this does not include data from 2010 after the financial crisis when one could expect that household income would have dropped even further.

(Figure 1 about here)

The second important pattern is the clear association between income trajectory and SES level. When we consider how perceived income growth varies across quantiles, we see a pattern that confirms hypothesis 1. The groups in the bottom 90% of the distribution all report statistically significant declines in their income over the past 5 years. The top 10% of households report no statistically significant change over the period. The groups in the bottom 90% of the SES distribution also report statistically significant declines in upward income mobility over the past five years. These results dramatically show the effects of 18 years of increasing inequality in the U.S. Only in the top 10% of the SES distribution do the majority of households report similar

percentages of income growth at the beginning and the end of the period. Poor families, middle class families and even upper middle class families (80-90% percentiles of the SES distribution) have faced stagnant or declining income.

Household Financialization 1: Financial Holdings and Consumption of Financial Services

We know that the financial services industry has greatly expanded its activities in the past 20 years. It follows that this supply side increase of all sorts of services and tools must trickle over to households. After all, someone is holding all of those mortgages, home equity loans, student loans, credit cards, debt, stocks and mutual funds. Figures 2-5 provide a test of hypothesis 2, which states that households throughout all but the very top of the SES distribution will increase their consumption of financial services. We note that we have only included a limited number of financial products in our analyses. This could affect our analyses of lower SES groups most directly. Such groups often rely on different financial services than middle class households. They are more likely to use pawn shops, payday loans, loans on tax returns (for a review, see Barr, 2012). Unfortunately, there is little information in the SCF on these types of financial instruments.⁴ The degree to which these types of services might lead us to underestimate the financialization of lower SES groups should lead to some caution in interpreting the results.

Figure 2 presents data on the number of accounts of all forms other than credit cards that households have with financial institutions. Here we see roughly parallel growth across the SES quantiles, which implies that financial services firms were able to get households throughout the distribution to increase their consumption of their products. The changes in the average number of accounts from 1992 until 2007 are statistically significant for each quantile except for the top 2%. But, clearly the differences between the levels of consumption remain across quantiles. The highest SES households had somewhere around 5.5 such accounts in 1992 and that grew to 5.6 in 2007 while the lowest income household only had 1 in 1995, which grew to 1.5 in 2007.

(Figure 2 about here)

Figure 3 contains data on the average number of credit cards in each household by SES quantile. Here, we see a similar pattern. There is a statistically significant increase in the number of credit cards held by each group from 1989 until 2007. While higher SES households tend to have more credit cards in general, the financial industry succeeded in getting all people to open and

maintain more accounts. The slightly widening gap between the top income groups and the bottom suggests this trend was more pronounced among the affluent.

(Figure 3 about here)

Figure 4 presents data on whether or not households get professional advice when making investment or borrowing decisions. Seeking out financial advice implies that people are more connected to the financial services industry, and that their decision-making is more likely to be guided by such contacts. The question asks whether or not a household gets advice from a wide variety of sources and respondents can answer as many of the categories as apply. We consider the following responses to be a professional: lawyer, accountant, banker, broker, or financial planner. If the household identifies any one of these, they are coded as having used the services of a financial professional. There is no statistically significant change in the percentage of people who used financial professionals to get information within any of the quantiles from 1998 until 2007. The figure does show quite clearly, however, that the use of such professionals is highly related to income. The top of the income distribution is nearly 50% more likely than the bottom 20% to seek out such advice.

(Figure 4 about here)

Figure 5 shows the growth of stock or mutual fund ownership by quantile. The measure we use does not include retirement accounts or pension plans that invest in stocks. It only includes whether or not the household owned stocks or mutual funds directly (Kremp, 2011). This is a good measure of the degree to which households are financially oriented because stock or mutual fund ownership outside of the context of pensions requires people to actively seek out stock brokers or brokerage firms. As with all other indicators of financial involvement, there are large differences in stock ownership across income groups over time.

All of the income groups were increasing their holdings during the stock bubble of the 1990s and early 2000s, with declines after 2001. However, even with the declines, there is a statistically significant increase in owning stocks or mutual funds by households at all levels of the income distribution except the 90-98%. The biggest movement (both upward and downward) occurs in the 80-90% and the 98-100%. This overall trends show that the upper middle class were the largest participants in the riskiest part of the financial economy. Meanwhile, ownership expansion in the middle portions of the distribution was more modest during the 1990s. But the gains were also more permanent: by 2007 the ownership rate in the 60th-80th percentile was still

10% greater than 1989. In spite of having a statistically significant change in stock ownership for the bottom 60% of the SES distribution, their rates of stock ownership remained below 20% throughout the period.

(Figure 5 about here)

All households became more involved in the financial system over time in line with hypothesis 2. They held increasing numbers of credit cards and other accounts including mortgages, bank accounts, and equity and mutual funds. Not surprisingly, variations in financial market involvement are strongly related to one's socio-economic position. The highest income groups consistently held more of all of these financial services and instruments and they ended up consuming more of them over time. We offer two conclusions. First, obviously one needed to have money to invest in order to consume financial products and gain access to credit. Second, is the fact that the trend lines tend to grow in parallel. That is, consumption of financial services into households' financial decision-making rose *roughly* in tandem for all income groups over time. This suggests that the aggressive expansion of the financial services industry was successful in servicing all parts of the income distribution with more products, not just the most wealthy.

Household Financialization 2: Finance Culture and Financial Savvy

In this section we turn to analyzing attitudinal and behavioral indicators of more active or savvy financial management. Our null hypothesis, hypothesis 3a, is that no one had to change their attitudes to increase their involvement with financial products as the industry pushed to sell everyone as much as they could. Our other versions of hypothesis 3 explore the idea that some income groups were more likely than others to change how they thought about active financial management either because of necessity, opportunity, or a mix of both. One useful attitudinal indicator is the degree to which individuals are altering their conceptions of risk. In our theoretical discussion, we argued that willingness to take on risk reflects a more informed and aggressive orientation toward financial market participation. Hypothesis 3 b-d offered different views about how attitudes towards risk might have changed within different portions of the SES distribution.

The *SCF* data indicate that risk tolerance among American households rose sharply during the 1990s, but then retreated a little after 2001. We suspect this pattern reflects increasing household participation in the stock market during the bubble of the 1990s, which was followed by the stock market crash in 2001. Overall, the percentage of households who say they take no

financial risks declined from 47% in 1989 to 35% in 2001, and then crept back to 39% in 2007, which is still a statistically significant change. The percentage of households who say they take above average or high risks rises from 14% in 1989 to 25% in 2001 and then dips to about 22% by 2007 (also a statistically significant difference). This implies a rejection of hypothesis 3a that there was no change in attitudes towards risk. The timing of these changes is consistent with Akerlof and Schiller's (2011) argument that the rising stock market attracted households who wanted to be part of the "new" economy and accustomed them to be more comfortable with risk-taking (see also Langley 2008). There is some cyclicity in the risk responses over time that reflects recent stock market performance (Yao, *et al.*, 2004), but some of the shift appears to be permanent. It is worth emphasizing, however, that between 75% and 85% of all households report taking either average risk or no risk throughout the period. If a self-conscious culture of aggressive financial risk-taking emerged in the U.S., it is restricted to less than a quarter of households.

Figure 6 shows the proportion of households who see themselves as taking above average or high risks, broken down by SES quantiles. This figure will allow us to evaluate hypotheses 3b-d about which groups might have shifted their attitudes towards risk. The figure dramatically shows a huge difference in risk tolerance for the top and bottom of the distribution. In the bottom 40% of the distribution, only 10% embrace above average or high risk, and this changes little over time. At the top of the distribution, above average risk-taking grows from about 20% of the households in 1989 to 45% in 2001. The more prevalent spread of aggressive risk orientations at the top is consistent with hypothesis 3d. Over time, we see a statistically significant increase in having an above average or high tolerance for risk within the quantile groups 40-60%, 60-80%, 80-90%, 90-98%, and 98-100%. There is no statistically significant change within the 0-20% and 20-40% groups. The change in risk taking is really a product of the top 60% of the distribution and especially the top 20% of the distribution.

(Figure 6 about here)

The results in figure 6 suggest that hypothesis 3b is wrong. It is not the case that all households shifted their attitudes towards risk, as Davis (2009) has suggested. Hypothesis 3c, based on Rajan's work (2010), stated that lower income groups should have adopted more risky attitudes towards finance given the dramatic increases in inequality. The data do not support this idea either. The evidence is most consistent with hypothesis 3d, which suggests that a finance culture that involves taking more risks is focused on the middle and particularly upper middle part

of the income distribution. It is these households who felt the need to compete with other high SES households over positional goods like housing and schools and it was these households who had the opportunity and wherewithal to shift their views of financial risk.

Norms about Debt-Funded Consumption

We next consider the degree to which people embrace more liberal norms about the appropriateness of debt-funded consumption to maintain one's lifestyle in the face of income shocks. Given that so many households, particularly in the bottom part of the SES distribution have experienced increasingly negative income growth over time, it is interesting to explore how their attitudes about using debt to support their lifestyles may have changed.

Figure 7 shows that there has been a substantial increase from about 45% to about 55% in the proportion who feel it is okay to borrow to support one's lifestyle if income declines. The overall difference is statistically significant at the .05 level. This increase is statistically significant for those groups whose incomes have increased or remained constant. But it is statistically insignificant for those who say their incomes have decreased. We interpret this to mean that those who are facing downward income mobility have always had a more open attitude towards taking on debt in order to support their lifestyles. In the face of income decline, they have always been willing to go into debt to support their current lifestyle. What has changed is that those whose incomes are constant or rising agree in increasing numbers over time that it is permissible to go into debt to support one's lifestyle. Those who have experienced positive income growth actually exhibit the largest change in agreement, from about 42% in 1989 to 55% in 2007.

(Figure 7 about here)

The bottom panel of Figure 7 shows responses to the same question, broken down by groups who share levels of household indebtedness (household debt-to-income ratio). Here again there is a broad-based upward trend in the percentage of households who believe it is permissible to go into debt holds to support one's lifestyle. The change in attitudes is statistically significant for those in the 25-50%, 50-75%, and 75-100% groups. Amongst the least indebted quartile, people maintain a less positive view of going into debt and this negative attitude towards debt does not change over time. The percentage of this group who approve of such behavior grows only from about 41% to 44% over the period. But for the other 75% of the indebtedness distribution, a majority supports the new norm of borrowing to sustain one's lifestyle in the face of declining

income, and they converge to a higher rate of approval over time. Overall, patterns in figure 7 suggest a secular shift in beliefs about using debt to fund one's lifestyle when times get bad.

Our attitudinal measures provide evidence that American households became willing to take on more financial risk over time and that they became more accepting of debt as a tool to support a given lifestyle against income shocks. But, these shifts also imply quite different social processes for different ends of the income distribution. The top of the income distribution, which has seen the most income gains from 1998-2007, has become much more accepting of risk *and* more accepting of borrowing when times become difficult. The bottom of the income distribution rarely takes financial risks but has always been willing to find borrowing acceptable to keep a lifestyle in place. Those in the middle and upper middle classes have gotten used to higher levels of risk and reward and are more comfortable with going into debt to support their lifestyles. This offers overall support for hypothesis 3d, which argues that if there is a new finance culture, it is most prevalent in the upper-middle and top parts of the SES distribution.

Frequency of Stock Trading

Earlier we argued that a finance culture does not just imply a shift in attitudes towards debt and risk, but also more active management of financial assets. Figure 8 shows the average number of annual transactions reported across the income categories among those households who have a stock brokerage trading account. Note that the 0-20th quantile is omitted because the very small number of stockowners in this category results in unstable estimates. We see the familiar pattern whereby the active trading of stocks grows higher as one goes up in the income distribution. There are statistically significant changes over time in the average number of annual trades for the 60-80%, 80-90%, and 90-98, and 98-100% groups. There are no statistically significant changes in the number of trades for people in the 20-40% and 40-60% groups. This is more support for hypothesis 3d. We note that for the 90-98%, stock trades increased from an average of 4.6 to an average of 11.4 while for those in the top 2%, stock trades increased from 9.7 per year to 17.1. This is strong behavioral evidence that not only did attitudes towards risk change, but levels of engagement in risky financial markets increased in parallel.

(Figure 8 about here)

The House as an Automatic Teller Machine (ATM)

The final indicator of finance culture we examine, is the incidence and uses of home equity borrowing. Davis (2009) has argued that home equity borrowing is a consummate instance of a finance culture insofar as it involved a) conceptualizing houses as income-producing capital assets, and then b) using debt in order to leverage against the asset to pursue various other economic purposes. Goldstein (2014) has shown that the bulk of household debt-to-income growth from 1989-2007 comes from three sources: mortgages on primary residences, home equity loans on those residences, and the purchase of other real estate including second homes and commercial property by households. Home equity debt was the fastest growing type of debt from 2001 through 2007. This reflects the real estate bubble of this period, when many households took advantage of rising housing prices by borrowing money against their increasing equity. Greenspan and Kennedy (2008) estimate that households were extracting over \$500 billion in equity annually on average from 2002-2007.

Figure 9 shows the proportion of all homeowners with home equity borrowings, broken down by SES quantile. The overall upward trend is dramatic. This includes any home equity loan balances, active use of home equity lines of credit, or balances on refinanced purchase mortgage in which the borrower extracted additional cash. The plots begin at 1995 because the *SCF* contained only limited data on equity extraction for earlier years. By 2007, approximately one third of all homeowners carried some sort of home equity debt for purposes other than purchasing the property. There is a statistically significant increase in the use of home equity borrowings within all quantiles through the period except for the 98-100%. This implies that the financial services industry successfully sold home equity withdrawals to all income groups. This provides some support for Davis' view that the active management of home equity spread across society.

Patterns of home equity borrowing also reflect the effects of rising relative income inequality on financial involvement. The 90-98% group took out the most home equity followed by the 80-90% and the 60-80%. This is evidence that in order to maintain their lifestyles, these middle and upper middle class groups had to take more money out of their houses to engage in other forms of consumption. However, we see clear effects of income levels on the changes in this practice. As borrowing against one's house became easier and more commonplace during the housing bubble years, it was a way for the middle and upper-middle classes to keep up with the lifestyles of those above them.⁵

(Figure 9 about here)

For what sorts of consumptive purposes were households using extracted equity? Figure 10 shows the percentage of all homeowners who report using an outstanding home equity loan or cash taken out from refinancing for the given type of purpose. Note that homeowners who have multiple home equity loans could be counted for multiple purposes. Over time, we see statistically significant increases in the percentage of homeowners who borrow against their house for two different sets of purposes: investments and home renovations on the one hand, and paying daily living expenses and bills on the other hand. This fits with the view that homeowners increasingly saw their houses as assets and sought to leverage against them in order to maximize their market value and increase salability (e.g. by installing luxury kitchens). But they also increasingly saw them as tools to fund consumption by covering living expenses and paying off bills.

Only a small portion of homeowners borrowed to fund “extravagant” consumption like home entertainment systems, vacations, wedding parties, recreational vehicles and boats. The incidence of this behavior did not change in a statistically significant fashion over the study period. This casts some doubt on the popular view that home equity loans were being widely used as a cash machine to fund luxurious lifestyles. We note that there may be a social desirability effect at work here. Admitting to borrowing money to fund what some may view as frivolous activities means that these purchases are underreported. Nor were a significantly growing number of homeowners extracting equity for educational and/or medical expenses. Only 1-2% of homeowners report doing so throughout the study period. Instead, homeowners were most commonly reinvesting borrowed equity into their house, or alternatively using it to cover “normal living expenses” and pay off credit card bills.

(Figure 10 about here)

Of course, we would expect different uses of borrowed equity would be relatively more concentrated in different parts of the SES distribution. Figure 11 examines how people spent money extracted from their homes across in order to see if the distribution of uses differs significantly across the SES quantiles. This figure is based only on the 2007 SCF cross-section, and it focuses only on the two most frequent uses of borrowed equity discussed above. Several patterns are apparent. First, the relative likelihood that a home equity borrower uses borrowed equity to reinvest in their housing asset is high throughout the SES distribution. Even in the bottom quantiles, homeowners who extracted equity were at least as likely to do so in order to fund

reinvestments as they were to fund living expenses (although a lower proportion of homeowners are borrowing at all in the bottom quintiles). However, we also see that a significant minority of equity borrowing went to cover general living, educational, or medical expenses all the way up to the 90th percentile of the distribution. Only in the top 10% is there a clear divergence. This is particularly pronounced in the top 2% group, where 20.4% of homeowners report using their borrowed equity for investment/home renovation, compared to 3.7% who use borrowings for expenses. One way to interpret these trends is that a significant number of households up to the 90th percentile were experiencing a middle class squeeze whereby they had to use their borrowed money to fund living expenses. This supports the argument that lower and middle-class groups are using credit more defensively to maintain their current lifestyles while the highest SES groups are using their resources to expand their wealth by investing in their real estate assets.

(Figure 11 about here)

Summary

We conclude that if there is a new finance culture, the evidence suggests that those in the middle and particularly upper middle classes have been the ones to embrace it. The upper middle class (roughly 80-98% in the SES distribution) have become accustomed to taking on risk, trading frequently in the stock market, and demonstrating their financial savvy by using the equity in their homes to fund investment and home renovation. They have done so as their incomes have remained stable or increased. Those in the middle class (40-80%) have also become more financially oriented in order to maintain their lifestyles, but to a lesser degree. The lowest SES groups did not change their attitudes towards risk and debt significantly. Their increased participation in financial markets reflected their need to defend their existing lifestyles more actively with debt. It is clear that the most intensive and multi-faceted finance culture centered amongst the most well off 20% of the population.

Conclusions

The huge expansion of financial services in the U.S. since the early 1990s made financial products more readily available to everyone. But, these opportunities were differentially distributed across the income distribution. While all households have been involved in the expansion of

financial services over the past 20 years, the most well off households continue to lead across every category of financial services consumption. Even as the much discussed “democratization” of finance and the rise of “sub-prime” lending have brought more lower-income households into the financial economy, this has not undermined the strong effect of income level on participation.

We see the clear effects of stratification when we consider the growth of a finance culture. In contrast to the parallel trend lines for financial services consumption, the development of financialized attitudes and strategies appears most strongly in the 80-98% of the income distribution, and to some degree into the middle class (40-80% of the income distribution). For those in the upper middle class, while their incomes did increase, they were still falling behind those in the top 2%. The evidence shows that they adopted a more aggressive attitude towards risk and engaged in more financial activities to support their lifestyles.

For the 40% of households living at the bottom of the income distribution, life chances have declined dramatically in the past 20 years. Their income growth is negative, they are vulnerable to not having enough money to survive, and as a result tend to be extremely risk averse. For these households the growth of finance has meant new products to cope with a changing economic landscape. Because we lacked data, our results certainly understate the degree to which poorer households also paid more for this credit by using products with high interest rates or significant fees (bank overdrafts, refund anticipation loans, payday loans). When they borrow, they tend to use their borrowing for routine household expenses such as paying bills, medical expenses or financing education. The rapid expansion of credit availability to those in the bottom 40% has not produced a finance culture.

Our results imply a number of research opportunities. We have focused on single summary measure of SES position. One can hypothesize that multi-dimensional measures of stratification will produce a more nuanced picture of the precise clusters of people who have adopted the finance culture. For example previous research shows that that young educated white males may be less risk averse than similarly situated women and minorities (Yao, *et al.*, 2005). It would also be useful to further disentangle age, period, and cohort effects within the aggregate trends. The SCF provides a great data source to explore how stratification interacts with financial styles in more complex ways.

The idea that a finance culture has taken hold in the top part of the income distribution needs to be explored more fully. We have been careful to avoid implying that finance culture

represents some kind of exogenous cultural shift that has independently come to affect our identities. Instead, we have conceived of it as a cultural frame that make some people look at what they own as assets and offer an appropriate set of tactics to manage our risk, debt, and equity. Our analysis relies on attitudinal and behavioral proxies that are consistent with this view, but not definitive proof. We need to understand the mechanisms through which people are socialized into the finance culture, how they come to develop the skills and knowledge to engage in being more entrepreneurial about their investments. Scholars should also further explore the extent to which these cultural shifts endured in the wake of the recent financial crisis. Finally, the causal connections between the expansion of financial services and emergence of a finance culture needs to be explored more fully at the individual level.

Lastly, research should consider the degree to which increased levels of participation in financial markets, and the American-style household finance culture has expanded to other countries (Kus 2013). Many of the advanced industrial countries have experienced increases in income inequality in the past 20 years, as well as financialization of their broader economies. Many of these societies have also witnessed financial and labor market deregulation. There have been constant political struggles, particularly in Europe, over maintaining current levels of the social safety net. One would predict that the pressures for households to become more indebted and adopt a finance culture are most likely to occur in the other liberal market economies like Great Britain, Australia, and Canada. But households in many social democracies also faced these pressures on their current lifestyles and how they have responded is an important question for subsequent research.

We have tried to center our discussion of the change in finance culture in a broader sociological discussion about stratification and growing inequality. Our results imply that growing income inequality has pushed middle and upper middle class people to adopt a more aggressive attitude towards the management of their assets in order to maintain and expand their lifestyles and “keep up with the Jones” in the top 2% of the income distribution. This has meant that they need to embrace financial savvy and knowledge in order to manage their equity and debt and thus be able to afford the good things. For lower income people, growing inequality has meant making it harder to keep your head above water. Taking on debt has been part of the answer, albeit one that comes with costs.

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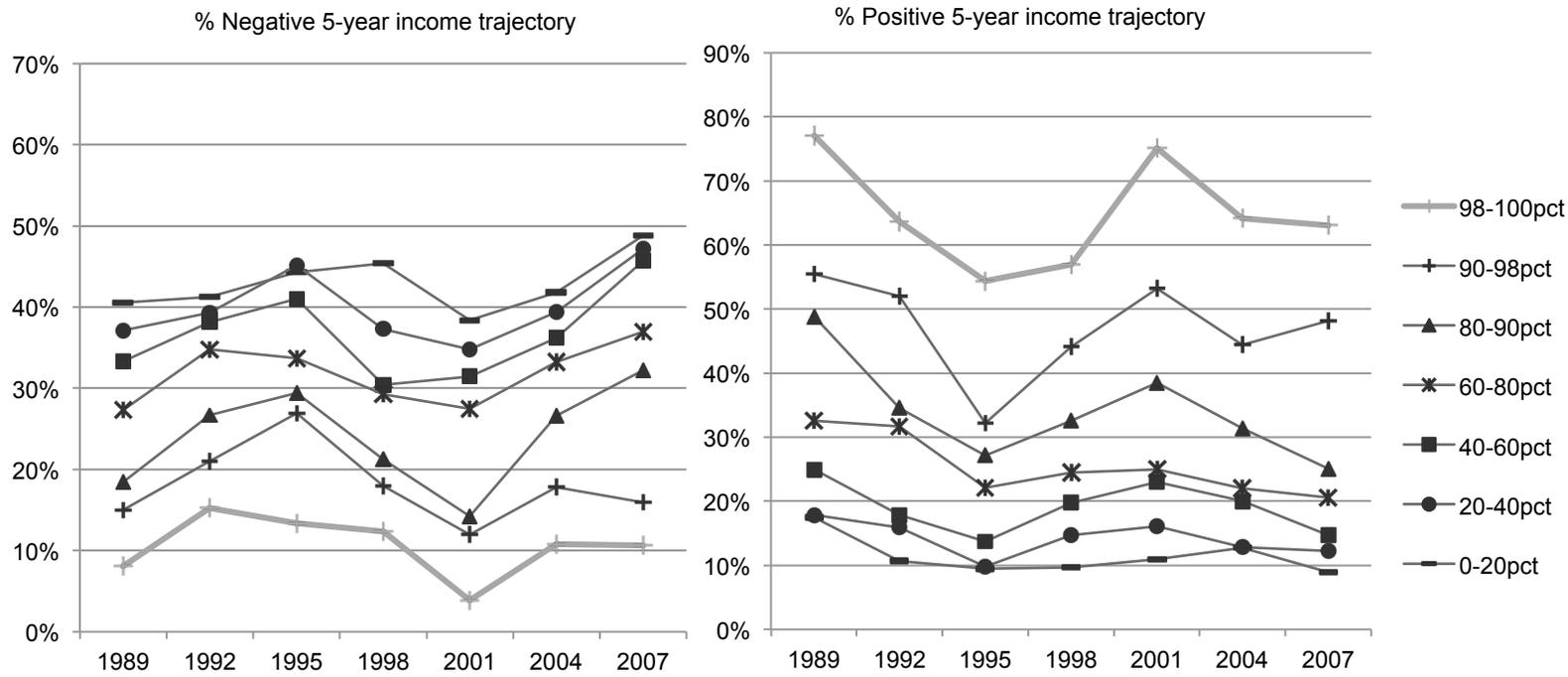
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Figure 1: Households' Perceived Change in Real Income over Preceding Five Years, by SES Quantiles¹

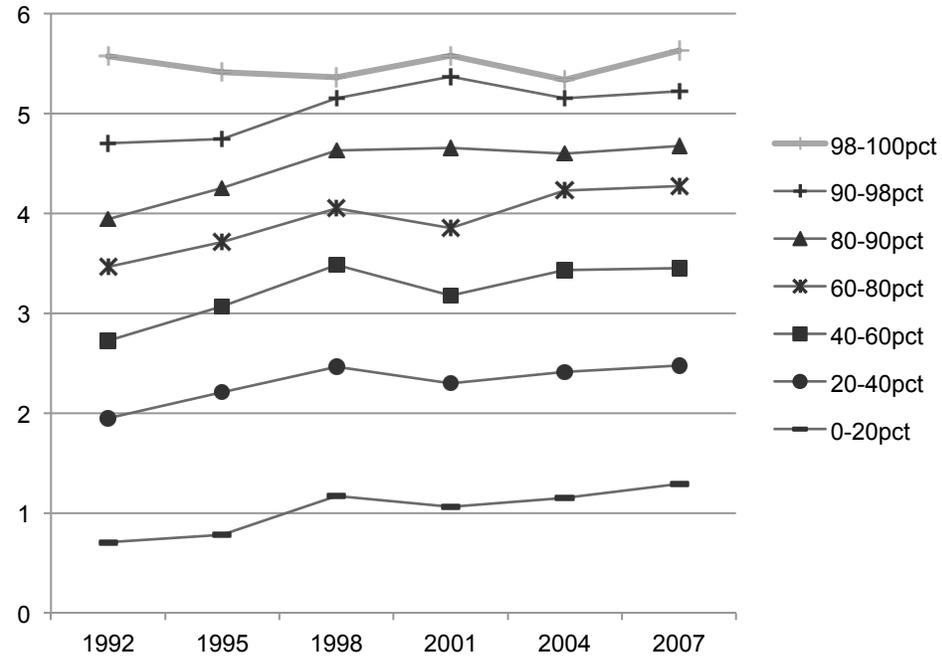


Note: To save space the figure does not show the middle category (those who report no change/constant real income).

Source: Survey of Consumer Finances

¹ The changes between 1989 and 2007 in the percentage with negative income trajectory are statistically significant using a z-test at the .05 level for the 0-20, 20-40, 40-60, 60-80, and 80-90 quantiles, and insignificant for the 90-98 and 98-100 quantiles. The differences between 1989 and 2007 in the percentage with positive income growth are statistically significant using a z-test at the .05 level for the 0-20, 20-40, 40-60, 60-80, and 80-90 quantiles, and insignificant for the 90-98 and 98-100 quantiles.

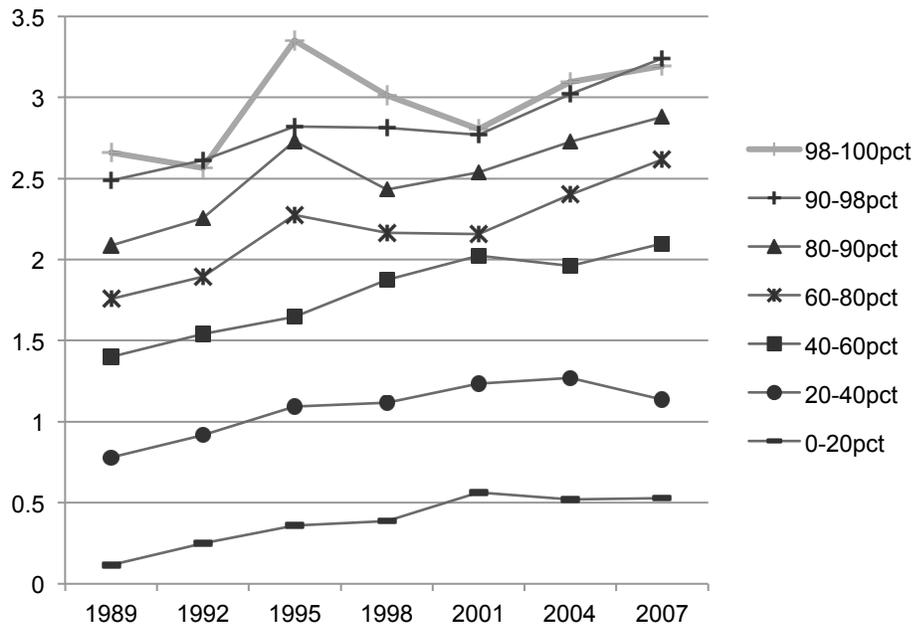
Figure 2: Mean number of different accounts with financial institution, excluding credit cards, by SES quantiles¹



Source: Survey of Consumer Finances

¹ The difference between the means between 1992 and 2007 with a t-test are statistically significant at the .01 level for all quantiles except for the 98-100 pct.

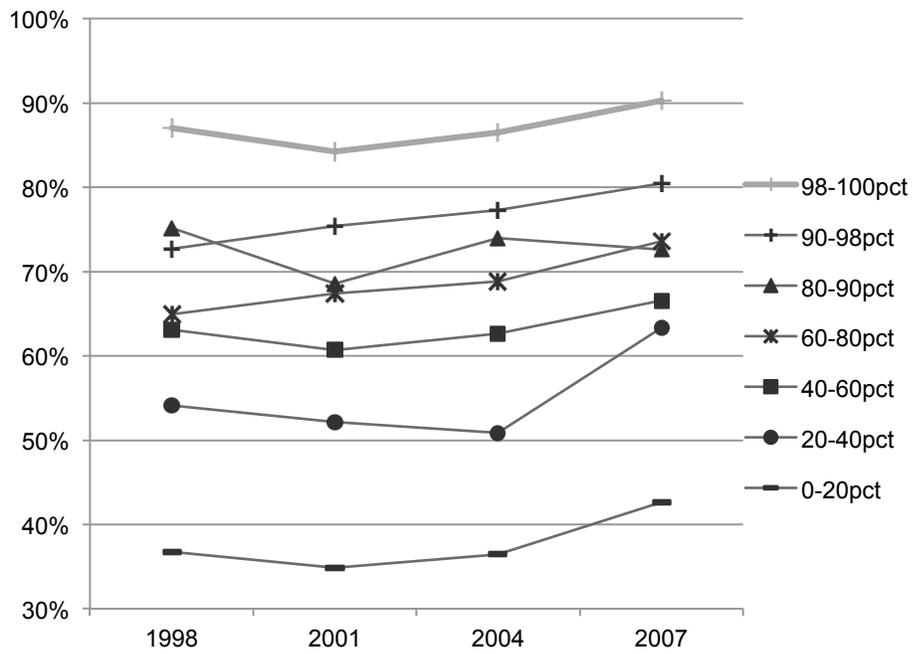
Figure 3: Mean number credit cards, by SES quantile¹



Source: Survey of Consumer Finances

¹ The difference between the mean level in 1989 and 2007 is statistically significant using a t-test at the .01 level for all quantiles.

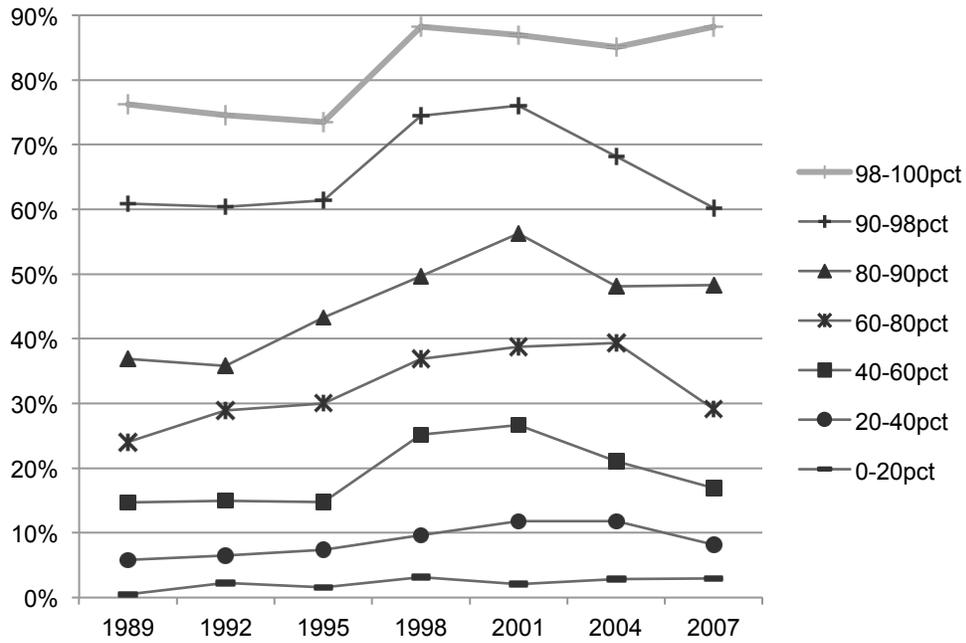
Figure 4: Percentage of households who get information from a financial professional when making decisions about investing or borrowing, by SES quantile¹



Source: Survey of Consumer Finances

¹ The changes between 1998 and 2007 are statistically insignificant using a z-test for all quantiles.

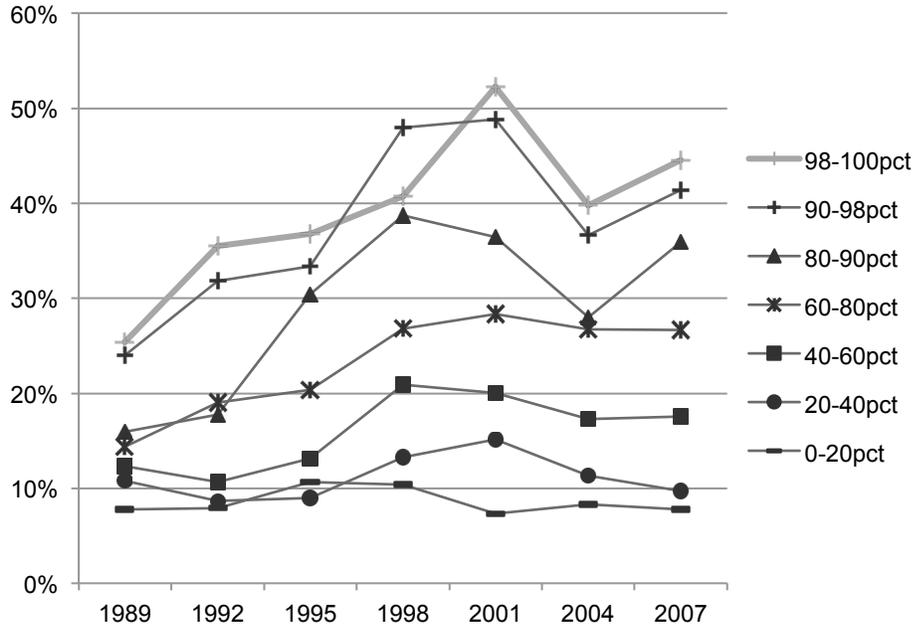
Figure 5: Percentage of households who directly hold stocks or mutual funds, by SES quantile¹



Source: Survey of Consumer Finances

¹ The differences between 1989 and 2007 are statistically significant using a t-test at the .01 level for the 0-20,20-40,40-60,80-90, 98-100 quantiles, and statistically significant at the .05 level for the 60-80 quantile. The difference for the 90-98 pct. group is insignificant.

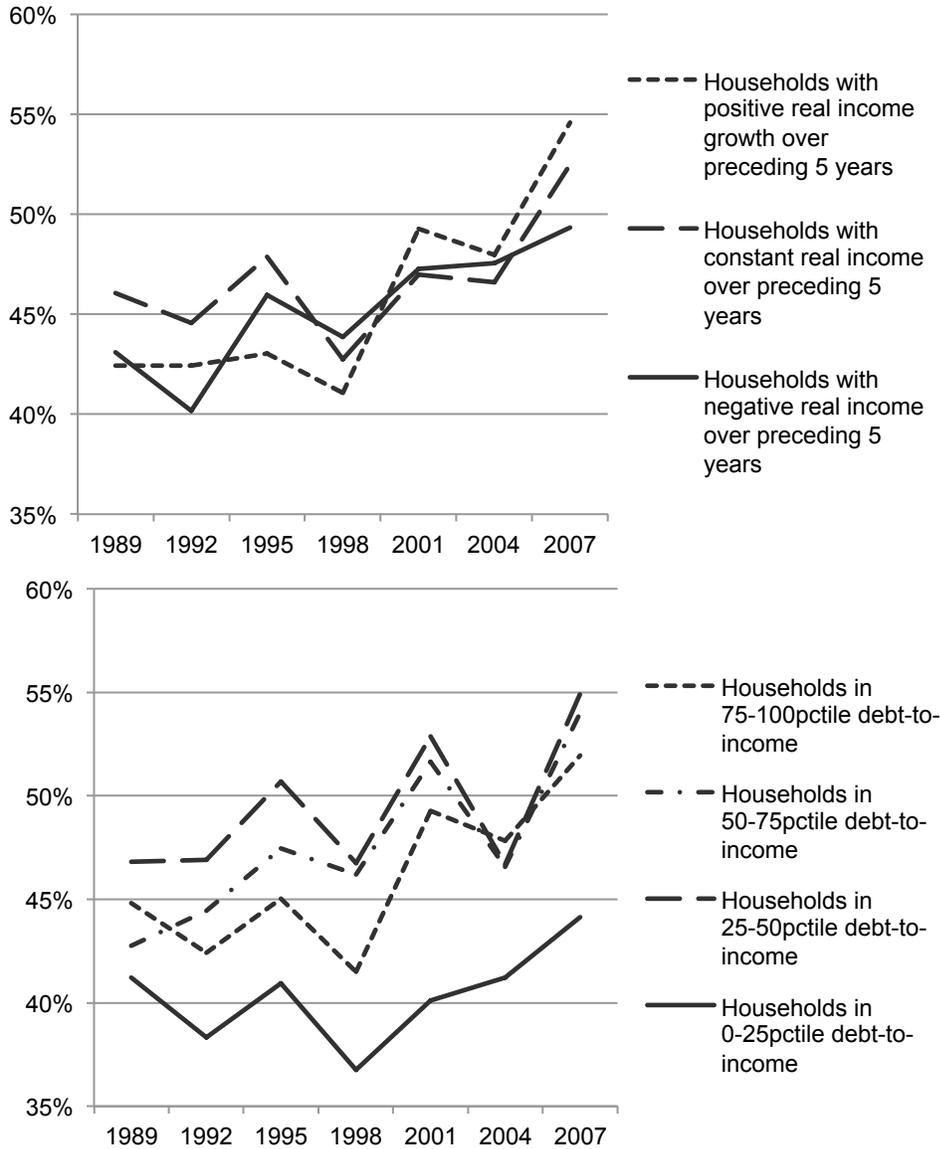
Figure 6: Percentage of respondents who report taking "above-average" or "high" financial risks in order to achieve above-average returns, by SES quantiles¹



Source: Survey of Consumer Finances

¹ The changes between 1989 and 2007 are statistically significant using a z-test at the .05 level for the 40-60, 60-80, 80-90, 90-98, and 98-100 quantiles. The changes for the 0-20 and 20-40 quantiles are statistically insignificant.

Figure 7: Percentage of households who agree it is right to borrow to support one's lifestyle when income declines, by 5-year income trajectory and by debt-to-income quartile¹

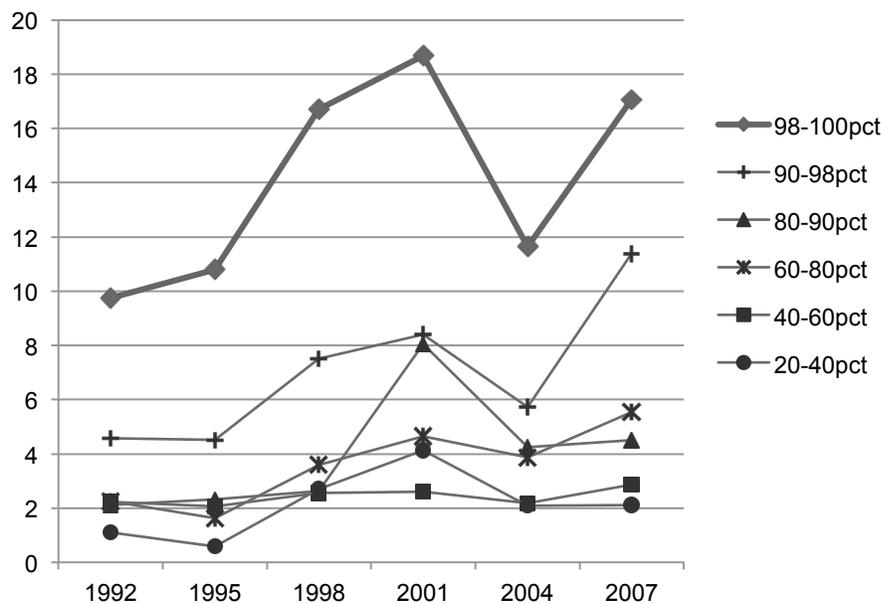


Source: Survey of Consumer Finances

¹ In the top panel, the differences between 1989 and 2007 are statistically significant using a z-test at the .05 level for those in the constant or positive income growth groups, while the difference for those whose incomes declined is statistically insignificant.

In the bottom panel, the differences between 1989 and 2007 are statistically significant using a z-test at the .05 level for all debt-to-income quartiles except for the least indebted quartile.

Figure 8: Average annual number of stock trades among households with a brokerage account, by SES quantile¹

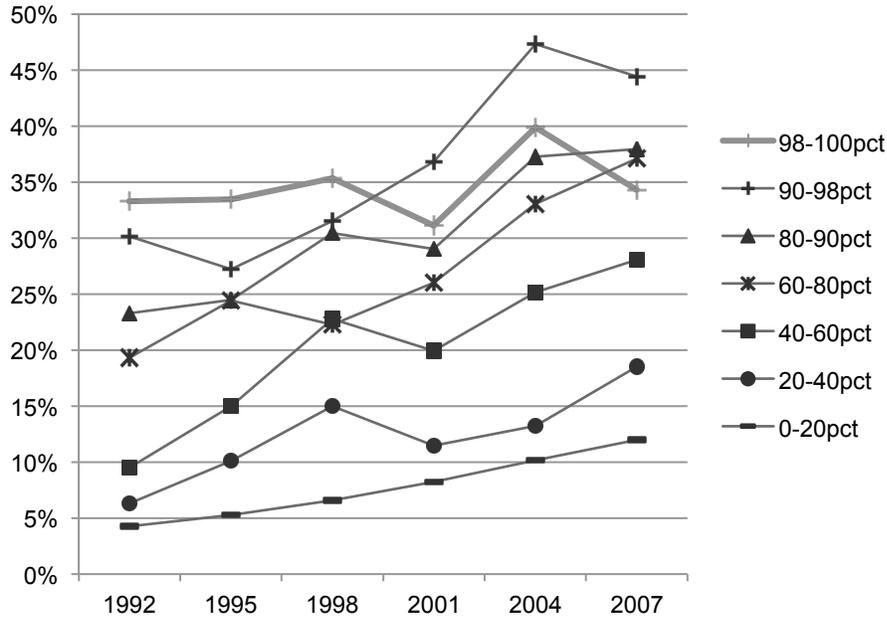


Note: The bottom income quintile is omitted because there are not enough households with a brokerage account to generate accurate estimates.

Source: Survey of Consumer Finances

¹ The differences between 1989 and 2007 are statistically significant using a t-test at the .01 level for the 60-80, 80-90, 90-98 and 98-100 pct. groups. The differences for the 20-40 and 40-60 pct. are statistically insignificant.

Figure 9: Percentage of homeowners borrowing against home equity, by SES quantile¹

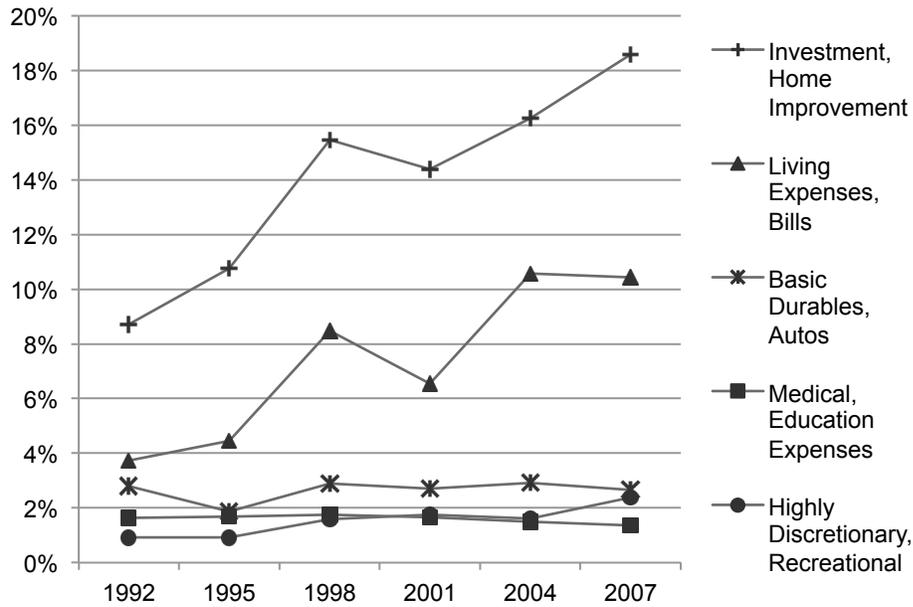


Note: This figure shows the percentage of homeowners in a given income percentile group who have debts from a home equity loan, home equity line of credit, or cash-out refinance loan on the primary residence.

Source: Survey of Consumer Finances

¹ The differences between 1992 and 2007 are statistically significant using a z-test at the .01 level for all quantiles except the 98-100 pct.

Figure 10: Percentage of all homeowners borrowing against home equity, by the reported use of borrowed funds ¹

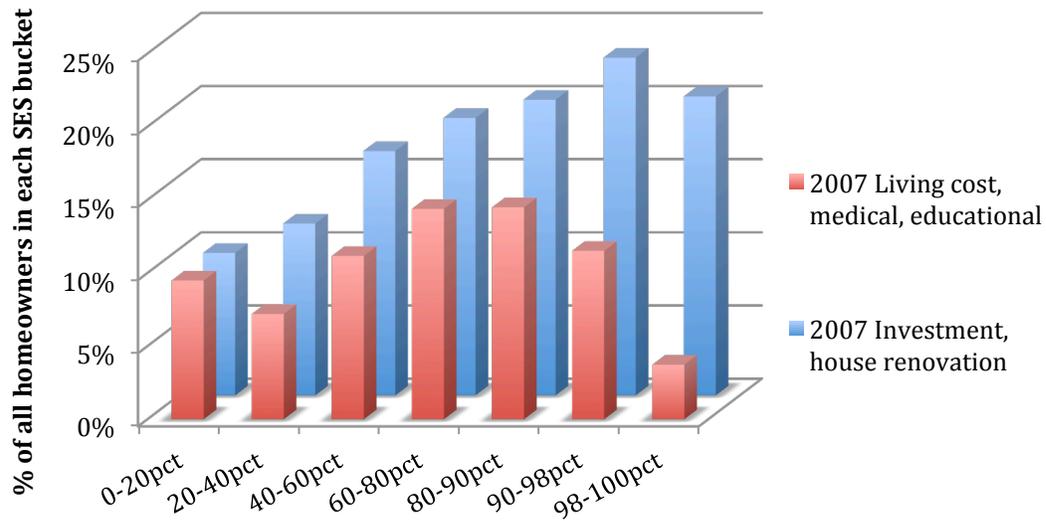


Note: This figure shows the percentage of all homeowners who have home equity debt for a given purpose.

Source: Survey of Consumer Finances

¹ The differences between 1992 and 2007 in the percentages of homeowners using borrowing for each category is statistically significant using a z-test at the .05 level for the home improvement and living expenses categories and statistically insignificant for the other categories.

Table 11: Percentage of homeowners extracting equity by SES quantile and use, 2007.¹



Source: Survey of Consumer Finances, 2007.

1. The difference between percent using home equity extraction for living costs/bills/medical expenses/education vs. investment/home renovation is statistically significant for 20-40, 90-98, and 98-100 sat the .01 level, statistically significant for the 40-60 and 80-90 at the .05 level, and non-significant for the 0-20 and 60-80 pct.

Endnotes

¹ We note that some of the forms of credit available to low income households, like check cashing services and payday loans relied on high interest rates and fees. It is difficult to assess the degree to which these costlier forms of credit contribute to this process because of a lack of data. We address this issue in our results section.

² The *SCF* was conducted before 1989, but those earlier waves are not comparable due to methodological changes. While labor market changes and rising income inequality were well on their way by 1989, households were still figuring out how to adjust to the changing circumstances generated during the earlier parts of the 1980s. Beginning in 1989 allows us to get leverage on many of the issues in which we are interested. A few of the indicators we use were only added in later years.

³ We tried to use just the top 1% as a group, but this proved to provide unstable estimates of the variables. At 2%, we still get those at the top, but we get enough cases to provide more stable estimates.

⁴ The SCF does have information on payday loans but only for 2007. In 2007, 4% of households in the 0-20% and 20-40% reported using payday loans, 3 % in the 40-60%, 1% in 60-80% and 0% in the three upper quintiles. This level of participation is close to what Barr (2012) observes (3.4% for the bottom 20% of the income distribution).

⁵ We also explored the possibility that income level and income trend might interact in shaping the probability of using one's house as an ATM, but we found no evidence to support this.