

## Chapter 6

### The End of the Consumer Age

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From the middle of the 1980s through 2007 the share of disposable income spent by U.S. consumers rose rapidly. While many commentators want to slap American consumers on the hand for their profligate ways, this behavior did create strong demand and contributed much to the good U.S. economic performance relative to most other developed countries over this period. Furthermore, the absence of deep drops in the consumption rate during recessions mitigated negative demand shocks, such as the dramatic decline in capital expenditures that followed the bursting of the late-1990s high-tech bubble. Robust consumption helped create macroeconomic conditions that became known as the Great Moderation. In Cynamon and Fazzari (2008), we identified the period since the mid 1980s as the “Consumer Age.”

This story has a dark side, however. While spending grew robustly across the income distribution, incomes outside of the top quintile were stagnant (see the chapters in this volume by Palley and Setterfield ##). The result was rapid growth in debt-to-income ratios in virtually all income groups. In our 2008 article we identified a “risk of collapse” from rising financial fragility in the household sector. By mid 2010, it is clear that what appeared as a risk several years ago became reality. The Great Recession ended the quarter-century shopping spree by American consumers. In contrast to the recessions of 1990-91 and 2001, consumption dropped sharply in 2009 as credit markets seized up and home prices plummeted. The decline in real personal consumer spending from its peak in January, 2008 to May, 2009 was the largest drop since 1980. The cumulative loss of consumption relative to trend since 2008 now far exceeds that for any other period since World War 2. Consumption and household debt dynamics were obviously central to the macroeconomic forces that led up to the Great Recession. Furthermore, an understanding of these behaviors is necessary to understand the future path of the U.S. economy and to design effective policy to combat the stagnation that continues to grip the job market as we approach four years since the beginning of the recession.

This chapter explores the source of the dramatic rise of American consumption. While the conventional life-cycle theory of consumption models the household as an atomistic agent and seeks an explanation from a familiar cast of macroeconomic variables, such as wealth, taxes, and interest rates, our theory conceives of the household as a fundamentally social agent guided by norms of behavior. Thus, while conventional

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<sup>1</sup> This chapter is an extensive revision and update of our 2008 article “Household Debt in the Consumer Age: Source of Growth—Risk of Collapse” published in *Capitalism and Society* (BE Press, volume 3).

theory strives to explain the behavior of consumers taking preferences as given and considering only prices and budget constraints, our approach incorporates an understanding of consumers as agents embedded in a world of social cues that endogenously influence their preferences. Furthermore, conventional theory models the household as an agent that understands the true, objective probability distributions that determine future outcomes. In contrast, a central part of our explanation is the recognition that households make spending and financial choices in an environment of pervasive uncertainty.

In Section 1, we argue that the life-cycle model is inadequate by itself to understand modern American consumption and the evolution of the household balance sheet over the past two decades. Drawing on research from social psychology and marketing, we start from the premise that individuals make many of their choices based on their identity. That identity is formed by their experiences and the people with whom they associate, it evolves over time, and it is co-determined along with a package of social norms that dictate what one ought to do. The influence of identity is present in individuals' economic lives as well and informs their views on what they and others should and should not buy (consumption norms) and how they should handle their finances (financial norms). Contrary to conventional models, our theory starts from a premise that social interaction feeds through social norms to affect the way individuals choose to consume and the way that they finance their consumption.

Section 2 introduces endogenous preferences, produced in our framework by group interactions, the media, and other social influences. Households of recent decades lived in a social structure that encouraged greater spending and experienced rapid financial innovation that fundamentally transformed the way that they could finance that spending. Innovations in consumer finance combined with historically favorable circumstances, such as falling interest rates, greatly expanded the access to debt for American households during the Consumer Age. Through the lens of the life-cycle model, this change has potential benefits, as it enhances the ability of households to smooth consumption relative to income fluctuations. But the heavy use of financial markets by consumers also introduces the possibility of behaviors not anticipated in models of narrow intertemporal optimizers with full information.

Behavioral patterns based on social norms, and related to those that drive consumption preferences, also contributed significantly to the household debt explosion. In a world of uncertainty, borrowing did not necessarily correspond to a careful plan for repayment consistent with forecasts of future incomes and a full understanding of how these new behaviors would affect the broader economy. Our argument is not that American consumers borrowed more simply because they could borrow more in the new institutional environment, but that changing social norms made it seem *normal* to spend more (as opposed to *desirable* to consume more—which is always the case) as well as *normal* to borrow in order to finance that spending (which was certainly not always the

case). With rapidly changing technology and a proliferation of new products—both financial and electronic—past experience became a less reliable guide to sensible choices. People were encouraged to take on more debt by the fact that they observed others borrowing in new ways and it seemed to work out well for them.

Section 3 discusses the macroeconomic implications of these behaviors. We argue that strong consumption growth over the past two decades provided an important source of Keynesian demand stimulus that bolstered growth and mitigated the severity of recessions, especially the recession of 2001. The associated build up of household debt, however, led to the conditions that eventually brought the American consumption boom to an end and quickly pushed the economy into the Great Recession. We interpret these developments with Hyman Minsky's financial instability theory (see the chapters in this volume by Wray and Kregel ## for further application of Minsky's theory to this historical period). Minsky's work identifies the systematic character of aggregate debt-financed expansions that sow the seeds of their own destruction as greater leverage leads to financial fragility.

The final section of this chapter considers the forces that will shape American consumption in the aftermath of the Great Recession. The housing bust and associated financial crisis make further increases in the indebtedness of U.S. households relative to their income unlikely; indeed, many analysts argue that consumers must repair their collective balance sheets in coming years by paying down debt, raising the saving rate. While such an outcome seems prudent in conventional terms, it raises the question of what source of demand growth can replace the debt-financed spending of the Consumer Age. Without a new process to generate demand, we fear that recovery from the Great Recession will continue to disappoint expectations.

## **1. Models of Household Behavior**

### *An Overview of the Facts to Be Explained*

Figure 6.1 documents the share of disposable income Americans spent on consumption. There are three rather distinct regimes evident in the figure. Despite month-to-month fluctuation, the trend in the consumption share was relatively stable, or even modestly declining in the 1960s and 1970s. Starting in the middle 1980s the consumption share trended strongly upward for over 20 years. The share then collapsed at the beginning of the Great Recession and has remained at least 4 points below peak levels in the nascent recovery that began in the summer of 2009.

We argue here that the rapid rise of the consumption share, during what we call the Consumer Age period, was the primary factor that set the stage for the Great

Recession.<sup>2</sup> To explain this remarkable change, mainstream economists would first look to the workhorse life-cycle model of consumer behavior in which rational agents use financial markets to smooth their consumption over the course of their lives. According to this model, forward-looking households form a lifetime plan to optimally allocate their current assets, their current income, and their expected future incomes to consumption. Financial behavior emerges implicitly from the optimal plan. Borrowing and saving reflect a misalignment between the optimal consumption path and the income path, as households borrow if current income falls short of optimal current consumption. In this context, debt is part of an optimal consumption plan and there is no reason to expect that debt growth should become either excessive or unsustainable (at least in the absence of any large, systematic, and negative shock to incomes that could not have been anticipated when the optimal consumption and borrowing plans were made.) In contrast, authors including Barba and Pivetti (2009), Brown (2004, 2007), and Cynamon and Fazzari (2008) argue that to understand the stunning rise in household debt as a percentage of disposable personal income (from about 72% in the middle 1980s to 134% on the eve of the Great Recession) requires considerations beyond the representative-agent life-cycle model. These authors all questioned how long consumption growth could be supported by debt accumulation and registered concern about what would happen if consumption ceased to grow. This concern stems in part from rising income inequality. From 1980 to 2007, the share of disposable income flowing to the top 10% of US households increased by 10.8 percentage points (Congressional Budget Office) while middle-class incomes stagnated. If rising debt represents an attempt by a broad swath of the population to increase living standards in spite of stagnant income growth, the question of sustainability becomes obvious (also see the chapters in this volume by Palley ## and Setterfield ##).

Before we turn to the macroeconomic effects of the long consumption boom and eventual bust, we consider the circumstances that generated the 25-year trend of rising household debt. In particular, the increasing debt required two willing parties: consumers had to demand credit and lenders had to supply it. Explanations for the increasing supply of credit appear in Section 2; here we focus on understanding what drove consumer demand for credit.

We will argue that dynamic social processes shape consumption behavior among American households and that those processes changed during this time in ways that encouraged consumers to spend a greater share of income. It is easy to identify forces that exerted upward pressure on *desired* consumption in this period; the challenge is to explain the factors that made this desire so strong that they seem to have overpowered household concerns about the impact of current borrowing on future consumption.

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<sup>2</sup> We fit a piecewise linear trend, that allowed three distinct segments, to the data depicted in Figure 6.1 and used statistical procedures to find the two breakpoints in the piecewise trend to best fit the data (minimizing the sum of squared residuals between the data and the trend). This procedure chose January 1985 and April 2008 as the breakpoints, which provides a rough definition of the period of the Consumer Age.

Harking back to Veblen (1899) and Duesenberry (1949), we can see that as mean income increased along with increasing income inequality, a drive to keep up with a rising standard of living would have increased the desired level of consumption. The period in question also included the invention and proliferation of several technologies based on electronics and semi-conductors. New products and advertising to drive their adoption would have increased desired consumption. With increasing access to credit and plenty of reasons for their desired level of consumption to increase, all but the highest-earning consumers would have been sorely tempted to disregard the future and fund current consumption with credit.

### *The Standard Model*

There are at least five phenomena that could explain the rising consumption-income ratio in the context of the life-cycle model of household behavior, all of which have received some attention in mainstream discussions (see Parker 2000 for a survey). First, consumers' expectations of their future incomes could have risen over this period. As their expected total lifetime earnings increased, so did optimal consumption, with increasing current consumption (and debt) being the logical outcome. Second, if household assets appreciated in value they could sell some assets to finance higher spending.<sup>3</sup> Because capital gains are not recorded as a part of income, this would also cause an increase in the ratio of consumption to disposable income. Third, the aggregate trend in Figure 6.1 could be driven by an underlying shift in the composition of the population toward demographic groups that spend a higher share of their income. Fourth, if households had previously wanted to borrow more, but had been unable to do so due to liquidity constraints, then it is sensible that households began borrowing more as innovations in credit markets relaxed these constraints. The fifth possibility is that consumers became less patient over this time period, in the sense that the value they place on current consumption rose relative to their value of future consumption.

Let us consider each of these phenomena. The first and second explanations invoke the "wealth effect," according to which households raise spending because the value of their assets increases (chapter ## in this volume by Baker also considers this effect). Assets can be tangible, primarily financial assets, equity shares, and houses, or intangible, the present value of expected future earnings. Parker (2000) argues that higher tangible wealth explains, at most, 20 percent of the rise in the consumption-income ratio

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<sup>3</sup> Notice that this channel works most obviously for relatively liquid assets. If a household owns stock and it appreciates more quickly than expected then the household can sell some shares and finance additional consumption. If a household owns a house, however, and it appreciates more quickly than expected, the household cannot simply sell part of the house. To be specific, it is not as if the house has unexpectedly sprouted a new bedroom that the household can sell off to raise spending on other goods. Higher values of illiquid assets can provide collateral for new loans to finance consumption. But pledging an illiquid asset as collateral for a new loan necessarily raises the leverage of the household, with corresponding risks that are all too apparent in the aftermath of the financial crisis of the Great Recession.

through the late 1990s. Moreover, the detailed timing and distribution of changes in wealth and consumption since that time do not align well. Wealth-to-income ratios did not rise between the late 1990s and the onset of the Great Recession (the Flow of Funds household net worth-to-income ratio was almost identical in 1998 and 2006) while the expenditure rate has jumped by an additional two percentage points. Did expectations of future income increase rapidly and almost continuously over nearly a quarter century? It seems unlikely. In a rational setting, future income expectations would be most closely tied to rising labor productivity. Until the mid-1990s, productivity growth was disappointing, but at least half of the secular rise in the consumption-income ratio took place before “new economy” productivity gains were evident to economists, much less to typical households. Furthermore, the consumption rate continued to rise after the tech bubble burst in 2000 and the economy entered the 2001 recession, a period of stagnation, and an anemic recovery. And any explanation for a broad-based rise in consumption-income ratios that relies on wealth effects has to address the problem posed by the skewness of wealth distributions. Most wealth is held by high-income households. In 2007, the wealthiest 1 percent of families owned 33.8 percent of total family wealth, and the wealthiest 5 percent of families owned 60.4 percent (Kennickell, 2009). But widespread financial distress suggests that consumption rates rose unsustainably across the entire wealth distribution.

Did some kind of demographic shift cause high-spending groups to constitute a larger share of the U.S. population? We argue below that part of the explanation for the trend in the second half of Figure 6.1 is the increasing dominance of the baby-boom generation that spent more freely than their relatively thrifty parents. But the specific structure of the life-cycle model is not helpful in understanding such a shift. Indeed, among the most prominent implications of the model is the demographic prediction that consumers borrow when they are young in anticipation of rising income, they dissave late in life when incomes tend to be low relative to lifetime averages, and they save during peak middle-age earning years. Of course, the period of rising consumption rates in Figure 6.1 corresponds to the transition of the massive baby-boom generation into their peak earning years which the model predicts should *reduce* the aggregate share of income consumed.

We are left with relaxed liquidity constraints and a shift in preferences if we are to understand consumption behavior over recent decades in terms of the life-cycle model as it is usually applied in mainstream thinking. To some extent, our approach does invoke a change in preferences. But the key question is *why* such changes occurred during the Consumer Age, a question that the life-cycle model does not answer. We argue below that dynamic social processes shaped consumption behavior among American households in directions that encouraged spending a greater share of income. Households also seem to have relaxed concerns about debt levels relative to income. In Minsky’s terms, households let their financial “margin of safety” shrink to act on their desire to attain

rising consumption. And this process was made feasible by changes in the financial sector that greatly increased the ability of households to borrow which, in a broad sense, could be interpreted as relaxed liquidity constraints. But we will argue below that the typical approach to understanding the role of liquidity constraints in the context of the life-cycle model is inadequate to understand consumer behavior in recent decades.

### *The Consumer Problem*

If the mainstream life-cycle model does not explain the rising household spending and debt that was a primary cause of the Great Recession, what does? We believe that an approach capable of making sense of consumer decision making must address the complexity of household spending and financing decisions. Earl and Potts (2004) summarize the circumstance of consumers: “The underlying problem is of agents knowing they need to solve a problem, but not knowing how to go about it because they lack specialist knowledge of that problem domain. Our concern specifically is how they make such choices in the face of ignorance and uncertainty where the solution is bound up with acquiring, somehow, good rules for choice.” They go on to discuss the complexity of the decisions facing individuals attempting to construct a lifestyle from an ensemble of durable goods and complex services. Our focus is on the source of the “rules of choice” that the agents rely on to guide their decisions in a world of uncertainty.

We follow Hodgson’s (2006) definition of institutions as “systems of established and prevalent social rules that structure social interaction,” that coordinate and rationalize behavior by “imposing form and consistency on human activities” and creating “stable expectations of the behavior of others.” For Hodgson, institutions include language, money, laws, and even table manners. The central defining characteristics of institutions are the rules that define them, where rules are socially transmitted normative injunctions or dispositions: in circumstance X, you should do Y. In other words, a rule is codified in discourse, is replicated through use of language within a developed social culture, and guides choice. Rules include norms of behavior and social conventions as well as legal rules, and breaches of a rule can be identified by members of the relevant community who share tacit or explicit knowledge of the rules.

Hogg (2000) suggests that the deep motivation for people to identify with groups, and to take behavioral cues from their reference groups, may stem from a desire to reduce at least the perception of uncertainty. And uncertainty has been rampant for consumers in an environment of rapidly changing financial circumstances. Indeed, we argue that a typical assumption of the life-cycle model, that there is either complete certainty or that uncertainty is limited to variation in outcomes of known probability distributions, fails to guide our understanding to the issues of greatest importance. As Crotty (1994, page 120) writes, “because they are fully human, agents have a deep psychological need to create the illusion of order and continuity even where these things may not exist.” People “endeavor to fall back on the judgment of the rest of the world which is perhaps better

informed,” (Keynes, 1936). They look to others who appear to validate their own self-concepts and associated cognitions and behaviors.<sup>4</sup> Thus, the expectations and strategies that drive consumption arise from a social dynamic.<sup>5</sup>

To some readers this discussion will bring to mind Akerlof and Kranton (2000, 2005), who introduce identity into economics. They link their ideas back to Pareto, Weber, and Bourdieu, pointing out among their examples the role played by norms based on social class and religion in addition to individual tastes. Our approach differs from theirs in that rather than conceiving of norms as an additional argument that determines behavior through acting on stable individual preferences, we suppose that individual preferences change over time to reflect changing norms that evolve guided by social processes, which are themselves appropriate objects for social science analysis.

### *Social References, Expectations, and Household Choices*

In our framework, global rationality is beyond the capabilities of individuals who lack perfect and complete information for making choices or even for generating their “preferences.” In that sense, we follow David Colander’s (1998) Post-Walrasian Macro by supposing that the aggregate economy achieves stability due to the existence of multi-layered institutions that structure, constrain, and enable individual behaviors and reduce the complexity of decision making for individuals. These institutions *create* both preferences and expectations through time as the household is continually buffeted by events and observes the behaviors of others. Households learn consumption patterns from their social reference groups. By analogy to the economic theory of the firm, households learn “technologies” from their reference group to “produce” utility using specific consumption goods as “inputs” (as in Becker 1965). Reference groups are an important source of information: first, they introduce an individual to new products so that choices are influenced by one’s reference group; second, they provide experience and knowledge in how to appreciate, enjoy, and (consequently) desire new products; third, they condition expectations about future outcomes and what kinds of behavior should be considered “normal.” These reference groups can be constituted by real people, such as neighbors, family, and friends, or they can be virtual, arising from behavioral models portrayed by the media.

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<sup>4</sup> Tajfel (1972) suggests that behavior is determined in part by group prototypes that reflect social values and act as guides for action, rather than solely by atomistic preferences. Within the marketing literature, reference groups are defined as social groups that are important to a consumer and against which he compares himself. More recent reference group research is based on conformity and social comparison theory (see Folkes and Kiesler 1991 for a review).

<sup>5</sup> We propose, therefore, that expectations come from an independent behavioral process. This approach contrasts with misleadingly named “rational” expectation approach of most life-cycle models. In these models, expectations are specified not by a deep analysis of how humans behave in the face of uncertainty but by the mathematical expected value of the true “fundamental” probability distributions that determine future outcomes.



Consider a simple example. Think of the preference for good wine less as an exogenous parameter of individual utility but rather as a learned behavior conditioned by social circumstances. An individual with a working class reference group is unlikely to banter with friends and sommeliers about tannins, complexity, oakiness, etc. If the enjoyment “technology” for good wine is not typically part of a person’s social reference group, it may be difficult for that person to appreciate wine qualities. Should an individual experience a large rise in income, he will have the means to begin dining at places, and with other people, that take their wine seriously. The association with higher income households in the new reference group will teach, at least implicitly, the person in the new social situation about the joys of fine wine and change his preferences.

Individuals not only learn utility-producing technologies from their social reference groups, they also compare their consumption standards to the reference group (Frank 1997, Schor 1998). Frank, in particular, forcefully argues that people define their self image and self worth by what they consume and possess relative to the lifestyles of others. In addition, “habit formation,” is implied from this way of understanding household preferences.<sup>6</sup> Once an individual learns enjoyment technologies and expectations, she will not forget them, and as long as her peers persist in following these behavioral guideposts, she will be continually reminded about them. To extend the example discussed above, once a person learns to appreciate good wine she does not forget the associated pleasures, even if her economic situation deteriorates. Thus, household preferences are path dependent and the relevant references for current decisions include both the social circumstances in which an individual is embedded at any point in time and the individual’s personal history accumulated over time.

We define the *consumption norm* as the standard of consumption an individual considers normal based on his or her group identity.<sup>7</sup> The norm provides a conceptually sufficient statistic for social and habitual influences on consumer preferences and expectations that evolve through time. The norm guides choices in a world of uncertainty. To the extent that the utility function and expectation formation process are viewed as exogenous, as is typical in most standard life-cycle models, such models abstract from the dynamic social context of choice. We argue that the consumption norm is a powerful behavioral force that cannot be ignored as we try to understand modern consumption behavior, in particular the rising expenditure and debt accumulation documented above.

Social references and the associated norms affect financial decisions as well as spending preferences. Indeed, in the financial sphere, uncertainty is likely to be particularly important as households must confront complex intertemporal implications of their decisions that depend on systemic conditions. Changing institutional structures

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<sup>6</sup> See Duesenberry’s (1949) “relative income hypothesis.” Recent references include Campbell and Cochrane (1999), Fuhrer (2000), and Morley (2007)

<sup>7</sup> Schor (1998) also uses the terms “social norm” and “consumption norm” in a similar context. She writes (page 9), that “the very term ‘standard of living’ suggests the point: the standard is the social norm.” Akerlof (2007) defines norms as individuals’ views about how they and others should or should not behave.

interact with social norms to define what practices are responsible and sensible. For example, borrowing for a home with 20 percent down and a fixed-rate mortgage was consistent with the financial norms of the 1960s and the 1970s. Few people in that era would re-finance their mortgages to get cash for a new car or a vacation. When home equity loans with tax advantages became available in the late 1980s, however, borrowing against one's home for non-housing consumption became more common. In the 1990s, innovations in the mortgage markets reduced transaction costs and cash-out refinancing became more common. Initially, these actions were simple responses to changes in available financial products. We argue, however, that what households consider normal behavior also evolved along with these changing practices.<sup>8</sup>

Behaviors driven to conform to evolving norms are more than just preferences in the sense in which that concept is used in mainstream modeling. Rather, they fulfill a need of individuals to participate fully in social life, something humans seem programmed by evolution to pursue vigorously. Recent magnetic resonance imaging of brain responses in the context of a social conformity experiment shows that the "opinions of others can easily affect how much we value things. ... [S]ocial influence mediates very basic value signals in known reinforcement learning circuitry" (Campbell-Meiklejohn, et al. 2010). This behavior assuages the uncertainty of the complex modern environment in which Americans must make spending and financing choices. These choices were consistent with social conditions prevailing when they were made, but they may not anticipate the systemic effects of the aggregate financial fragility that they were creating, a theme we return to below.

## **2. Evolution of Household Behavioral Norms in the Consumer Age**

### *Social Pressures that Raise Desired Spending*

To argue that individuals make consumption choices based on social institutions and norms is not itself enough to explain the rise in spending relative to income. In this section, we explore how the link between social references and household behavior raised consumption norms over the past quarter century.

First consider product innovation. Modern business has an obvious profit motive to grab consumer attention by introducing new products. Marketing helps incorporate new and better stuff into consumption norms. Some things that were "luxuries" decades ago became standard. For example, the share of Americans who considered a computer for home use a necessity rose from 4% in 1983 to 51% by 2006, while 49% considered a cell phone and 29% considered high-speed internet access necessities in 2006 (Taylor and

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<sup>8</sup> Thaler and Sunstein (2009) pointed out the consequences of changing cultural values in an op-ed. They write: "For most of the 20<sup>th</sup> century, most American homeowners had a single-minded goal: Pay off the mortgage...But in the 1990s, this principle dissolved under the pressure of temptation. With house prices rising, families started using home equity loans to finance their spending habits."

Wang, 2010). In the language developed above, households learn how to use the new products to produce satisfaction in new ways and this learning happens through the dynamics of social interaction. Product innovation is always an objective of entrepreneurial capitalism, but there is no reason for it to proceed at the same rate over time or for it to have the same impact on social life. We believe that integration of semiconductor technology into consumer products has created a kind of innovation that transforms the nature of social interaction (social networking provides a striking recent example). Acquisition of these new products becomes necessary for individuals to fully participate in the evolving society and therefore accelerates the growth in consumption norms which encourages greater spending out of income, as well as rising debt.

In addition, the mass media shape consumption choices through time and establish expectations about what is normal. Greater media saturation encourages more consumption. We argue that this effect goes beyond simply providing information about products. Effective modern marketing has as its explicit objective to change preferences by locating products in a social context—illustrated by product placement, the appearance of a product or service in a broadcast program or movie, paid for by the manufacturer to gain exposure for the product or service. Furthermore, advertising targets consumers with the means to pay for the products it hawks: potential buyers with discretionary income. But this advertising takes place in the *mass* media, and therefore its reach extends to households with incomes lower than the target audience. The media transform at least part of the relevant social reference from actual peers and neighbors to virtual characters created for entertainment and marketing. As Schor (1998, pages 80-81) points out, one's reference neighborhood used to consist largely of friends and family who lived in close proximity, and who likely had similar incomes and group identities and who could not overdraw their checking accounts. But media saturation greatly widens the "neighborhood." The compelling lifestyle models in the media, while often portrayed as perfectly "normal," may be completely inconsistent with real-world budget constraints. They nonetheless provide social cues about what is normal consumption behavior.

If marketing is biased toward higher income consumers with discretionary spending power, rising economic inequality also encourages increased desired spending relative to income. To illustrate this point, suppose that advertising targets households with income at the 80<sup>th</sup> percentile. These messages influence all income groups, however. As the income gap between the marketing target group and the median-income household rises, the pressure to spend "beyond one's means" rises across the income distribution. Median households cannot afford to spend as much as those in the 80<sup>th</sup> percentile, but they will do what they can, spending a larger share of disposable income, and, as discussed below, borrowing more if financial institutions allow them to do so.

Undoubtedly, there are other sources of rising consumption norms in recent decades (we discuss several additional ideas in Cynamon and Fazzari, 2008). The specific examples above, however, share a common underlying theme: the modern U.S. has

become an increasingly “consumer-oriented” culture. And these evolving cultural institutions have put pressure on American households to spend more, by borrowing more if necessary.

### *Consumer Credit: Changing Attitudes—Changing Institutions*

The desire for higher consumption alone is not sufficient to explain the striking upward trend in Figure 6.1 from the middle 1980s to the Great Recession. Consumers must be able to *pay for* their spending. Figure 6.2 shows U.S. total household and mortgage debt outstanding as a share of disposable income. The ratio accelerates in the mid to late 1980s, roughly the beginning of the Consumer Age. Growth in debt accelerates yet again after 2000. Something new happened to the liability side of the American household balance sheet.

Over the past 30 years, a variety of factors made it easier for American household to spend without first having cash in the bank, that is, the household budget constraint became “softer.” These factors included the largely favorable macroeconomic environment of the Great Moderation, the stance of bank regulators, and the profit motive that led financial institutions to innovate in their lending policies. Until the early 1980s, the household experience with credit was largely limited to home mortgages and the finance of consumer durables, primarily cars. These loans were collateralized and required substantial down payments. But things have changed dramatically in recent decades. Credit cards now provide a line of unsecured credit to most households, albeit with substantial interest costs. Innovations in housing finance greatly increased the ability of home owners to borrow at tax-subsidized interest rates through equity credit lines or cash-out refinancing, at least prior to the financial crisis of 2008.

One reason for these developments was new information technology that made it easier to obtain information on prospective borrowers. Standard models of credit rationing predict that lenders ration credit when they cannot distinguish the quality of borrowers, so credit became more accessible as new credit reporting technologies made it easier to identify good and bad credit risks. Unfortunately, enhanced technology for assessing individual credit risk based on increasingly accessible information about their past behavior did not immunize the lenders from the consequences of unanticipated changes in that behavior—particularly changes that may have been caused in large part *by* the increased access to credit.

Tax law changes have also affected the market for household debt. In particular, the Tax Reform Act of 1986 eliminated the income tax deduction for most categories of interest expense, but retained the deductibility of home mortgage interest. Initially, home equity credit lines became a simple way to shift interest payments on traditional consumer debt, car loans for example, from a non-deductible to a deductible expense. But once the home equity line is in place, it becomes much easier for home owners to borrow

for any purpose, including non-durable expenditure: institutional change transforms financial norms.

In addition, mortgage refinancing to exploit interest rate movements has become much more common (Hurst and Stafford 2004, Wray 2007). It is not surprising that falling interest rates would boost consumption as households refinance and their debt service payments decline. But the long-term trend of lower nominal interest rates since the early 1980s made refinancing “normal” and introduced new financial practices to households that in an earlier era would not likely have seemed like responsible financial behavior. Most obviously, “cash-out” refinancing encouraged households to exploit the benefits of a lower mortgage interest rate with a large upfront cash infusion rather than a reduction in monthly debt service payments.

Changes in attitudes, likely stimulated by increased borrowing activity, have also played a role. From the end of World War 2 to the 1970s, the people that made financial decisions in American households either had to confront the financial challenges of the Great Depression themselves or had parents who managed household budgets during this bleak period. These people learned an aversion to consumer debt. The Depression is two generations removed for baby boomers, however, and they have been much more willing to borrow aggressively to get what they want (see Malmendier and Nagle, 2007). Again, this phenomenon spreads through social reference groups. When the behavior of one’s neighbor suggests that a home equity credit line can easily finance a vacation or home improvement, any social stigma associated with debt begins to erode. The dramatic increases in the consumption-income ratio and the debt-income ratio occurred during a time when the baby-boom generation, with its relatively relaxed attitude about debt, had become the dominant force in American consumption.

As discussed earlier, these arguments resemble a claim that household liquidity constraints have relaxed (see Carroll, 1992, for example), but there is a subtle difference between our perspective and typical liquidity constraint models. In a conventional life-cycle consumption model with liquidity constraints, households have a feasible and optimal plan that they would follow in the absence of constraints, but lack of liquidity prevents current consumption from reaching this desired level. For example, people may anticipate higher future income, some of which they would like to spend now, but they are prevented from borrowing against future income. When greater access to credit relaxes the constraint, households raise debt and consumption toward the level derived from the optimal plan. These actions can be understood by looking at a representative household in isolation, without reference to broader social forces. In our context, in contrast, we view consumption *and* debt choices as driven to an important extent by social interaction. A family, in isolation, might choose a more conservative financial path, but the influence of others, both those who have a physical presence and those whose lifestyles are piped in through the media, drives both consumption and debt higher. These behaviors may be driven less by a carefully laid optimal financial plan than

by evolving social norms that guide choices, with the obvious consequence that there is no guarantee that choices will even approximate what an economist might identify as optimal.<sup>9</sup> This behavior may be myopic relative to the results of a standard life-cycle model with liquidity constraints.<sup>10</sup>

The social influences on household finance also reflect the uncertainty households face about the future. They are not really sure what kind of financial plan is feasible, but there is a perceived safety in numbers. If others borrow heavily to consume a lot now, both higher consumption and the higher debt necessary to finance it seem “normal.” With rear-view-mirror wisdom after the dramatic financial collapses of 2008, it may have been unrealistic for households to believe that the favorable macroeconomic trends that were necessary for them to validate their financial positions, which included falling interest rates, easier lending terms, and rapidly appreciating home prices, would continue indefinitely.<sup>11</sup> But such a systemic perspective lies outside of the information that the typical household uses to make critical financial decisions. Families can observe their neighbors and media models, but they cannot be expected to appreciate the complex macroeconomics of emergent financial instability.

We invoke social norms for spending and borrowing in part because the objective is not simply to explain a rise in the ratios displayed in Figures 6.1 and 6.2. To understand the origins of the Great Recession we argue that one must explain a rise in *financial fragility*, an environment in which further growth may depend on pushing historically risky financial positions to yet more aggressive levels, increasing the risk of collapse. Information technologies that allow lenders to better distinguish borrower quality probably reduced conventional liquidity constraints. There is no reason, however, that such innovations alone would create financial structures that sow the seeds of what became economic collapse.

Indeed, the aggregated perspective in Figure 6.2 likely understates the rise in household financial fragility because total income growth was heavily skewed toward higher earners (see the data presented in Palley’s chapter ##, table 2.5 and further discussion by Setterfield ##), while debt increased more heavily among lower and middle income groups. Figure 6.3 summarizes data from the Survey of Consumer Finance that breaks out the rise in the debt to (total) income ratio for different income groups, every

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<sup>9</sup> To link these ideas to Keynesian macroeconomics, one might think of higher household debt as a reduction in liquidity preference, in a broad sense, rather than relaxed liquidity constraints. Households are willing to become less liquid by taking on higher debt relative to their income, as shown in Figure 6.2. Note, however, that while liquidity preference theory usually addresses the relation between supply and demand for asset stocks and asset prices, the discussion here focuses on consumption and borrowing flows.

<sup>10</sup> Consider the case of Benjamin Franklin Baggett who filed for bankruptcy in 2003. “We came to rely on credit as part of our income. ... I looked at \$1,000 on my credit card as disposable income.” (“Extra Credit: Lagging Behind the Wealthy, Many Use Debt to Catch Up,” *Wall Street Journal*, May 17, 2005, page A1). This behavior could be “time inconsistent” as discussed in behavioral economics; for formal analysis, see Laibson (1997).

<sup>11</sup> Minsky (1986) uses “validate” to describe the process of meeting contractual debt service obligations. Also see Wray (2007).

third year from 1989 to 2007. Over this period, the ratio for surveyed households in the lowest quintile of the income distribution (excluding the lowest 5 percent) increased by over 160 percent. The debt-income ratio for a broad swath of the middle class from the 20th through the 95<sup>th</sup> percentile increased 93 percent. In the top 5 percent of surveyed earners, debt-income ratios rose only modestly, just 18 percent.<sup>12</sup> With financial innovation and greater access to debt, the year-by-year budget constraint became much softer and households responded to this greater flexibility in a way that put the system on a path toward what ultimately became unsustainable financial fragility.

Explaining lender behavior is somewhat more complicated, but is also necessary to understand the increase in financial fragility. After all, lenders' willingness to offer, even aggressively push, credit was necessary to create the conditions that led up to the Great Recession (also see the chapters in this volume by Wray ## and Kregel ##). But why would they make so many loans that in retrospect seem to have been so excessively risky?

To understand this, we appeal to the concept of a *buffer*, which we define as any resource that provides a margin of safety to the agent who holds it in reserve in case of some unforeseen and unfavorable event. Buffers create redundancy in the system and their size and function are guided by prevailing institutions. For example, imposing reserve requirements on banks creates a buffer that provides a margin of safety in case of a bank run. A buffer can also be the result of an industry norm, like the 20% down payments on mortgages that created a margin of safety for both lenders and borrowers. These cases demonstrate the key features of buffers: first, they provide a margin of safety by leaving some potentially available resource unexploited, so there is an opportunity cost inherent in the redundancy that defines buffers; and second, that opportunity cost is an invitation to entrepreneurs to “unlock value” by eroding the institutions that enforce buffers. To wit, banks created sweep accounts to make reserve requirements a non-binding constraint (Greene, 2011), and the 20% down-payment requirement eroded almost completely over the course of the Consumer Age. What can be particularly damaging about buffer erosion entrepreneurship is that it looks like a free lunch but it is not: the value that is apparently unlocked is gained in exchange for additional risk. Furthermore, if some agents probe the limits of the institution that perpetuates a buffer in good times, their behavior is likely to appear successful, inducing others to copy and extend the strategy. The connection with Minsky's dictum that “stability is destabilizing” is clear.

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<sup>12</sup> We thank Nick Tompras for helpful discussions and Ulas Gulkirpik for research assistance that led to the information in Figure 6.3. We considered many different groupings of the data for the middle class category, but less aggregated groups between the 20<sup>th</sup> and 95<sup>th</sup> percentiles closely followed the middle class trend shown in the figure. Debt to income rose even more sharply in the lowest 5 percent of the income distribution, but very low incomes in the denominator of the ratio makes this information somewhat unreliable.

During the Consumer Age, the surge in credit increased the risk of individual lenders as well as systemic risk. While warnings of systemic risk became rather common in the last few years before the Great Recession, risky loans remained highly profitable and few mainstream analysts projected anything much more severe, at worst, than a garden-variety “mild” recession and a modest decline of housing prices. For the most part, it seems that managers and investors saw the money that could be made in the short run by eroding institutional buffers, but, like the households discussed above, they did not adequately perceive the severity of newly emerging macroeconomic risks. Furthermore, models used to measure risks by the financial sector were based on historical data and statistical relationships that no longer accurately described the new world of excessively leveraged households. As Paul Davidson has said for decades (see Davidson 2007 for a recent example), historical probability distributions can be a poor guide to those that govern current and future developments. Again, uncertainty and a socially constructed response to it plays a central role: lenders did not adequately perceive the risks they faced. They probably *could not* fully perceive the risks they faced as their aggressive lending created a new financial structure with unknown systemic characteristics. Therefore, like consumers, lenders fell back on the convention that the near future would be like the recent past. During the Consumer Age, the recent past validated the strategy of buffer erosion, further increasing confidence in the strategy as an appropriate convention, until the dramatic events of the Great Recession demonstrated that belief in such “normal” operation of the system became untenable.

### **3. Consumption, Debt, and U.S. Macroeconomic Performance**

What are the macroeconomic implications of these developments in the modern American consumer culture and the financial system that accommodated its accumulation of unprecedented debt? The basic message is simple: the trends described above were a significant source of strength for the economy for over two decades. But they also set systematic forces in motion that spawned the Great Recession and threaten an extended period of stagnation going forward.

#### *Mild Recessions and Strong Aggregate Growth During the Consumer Age*

According to the Keynesian macroeconomic theory that lies at the foundation of all the analysis in this book, strong consumption creates substantial macroeconomic stimulus. One outcome was a change in the dynamics of recessions in 1990-91 and 2001 compared with recessions in 1974-75 and 1981-82. The conventional wisdom was that U.S. recessions since the early 1980s were “mild,” contributing to the view that the U.S. economy had experienced a “Great Moderation,” at least prior to the collapse in late 2008. Consider Figure 6.1 again. The ratio of personal outlays to disposable income



obviously collapsed in both the 1974-75 and 1980-82 periods, significantly magnifying the severity of economic weakness. In contrast, during the early 1990s recession, the growth of the consumption-income ratio that started in the mid 1980s took a pause, but there was virtually no decline. In 2001, the consumption-income ratio *continued to grow* in spite of the collapse of the late 1990s bubble in technology stock prices and the fallout from the September 11, 2001 terrorist attacks.<sup>13</sup> Strong consumption spending greatly attenuated the declines in aggregate demand from the middle 1980s through 2007, which helped to contain recession dynamics.

But short-run macro performance in recessions does not tell the whole story, and as we consider the way forward after the Great Recession, the dynamics of consumption during recessions may not be the most important part of the link between consumption spending and macroeconomic outcomes. In our view, the American consumption boom was an important engine of demand-led growth for U.S. economy over the longer term. According to mainstream theory, high demand growth affects macro performance at short-run frequencies relevant for business cycles, a few quarters to a couple of years. In the long run of mainstream thinking, however, supply-side forces are supposed to explain growth as wage and price adjustments, or enlightened monetary policy, offset demand factors and the economy converges to full employment. Over a longer horizon, therefore, mainstream theory predicts that growth is governed by potential output.<sup>14</sup> Yet, there is little evidence that the U.S. economy faced supply constraints at the margin for most of the years since the beginning of the Consumer Age. Inflation was on a downward trend from the early 1980s. Unemployment tested multi-decade lows in the late 1990s with no adverse effects on inflation. Potential output has seemed to stay ahead of demand. That environment persisted for a relatively long period of time during which output growth was driven by demand growth, which was itself largely fueled by consumption spending.

### *Rising Household Debt and the Seeds of the Great Recession*

High consumer indebtedness was critical to the forces that made the Great Recession the most severe economic downturn since the 1930s. The financial Keynesian theory of Hyman Minsky provides a framework for analyzing the dynamics of these phenomena.<sup>15</sup> This perspective emphasizes the two-sided character of debt-financed spending. In the growth phase of the business cycle, the creation of debt boosts demand that provides economic stimulus. But Minsky argues that as debt continues to grow during the boom the financial system becomes more fragile. The Keynesian link between

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<sup>13</sup> Also see Kotz (2008). The unusual nature of this phenomenon is noted by Burhouse (2003): “consumer spending and borrowing patterns during and after the 2001 recession departed significantly from historic norms. U.S. households in 2002 continue to spend and borrow at a record pace even as personal bankruptcy filings reached record levels.”

<sup>14</sup> Furthermore, in mainstream theory, high consumption actually reduces the growth of potential output, because lower saving reduces the capital stock and labor productivity.

<sup>15</sup> See, in particular, Minsky (1985, pages 37-50) and also Wray ##.

higher borrowing, rising spending, and income creation validates the decision to increase lending for a while. But that validation systematically encourages even more aggressive financial practices. Again, uncertainty is central to this process. No one knows how much financial stress the system can bear. Financial success influences conventional expectations about appropriate financial practices (financial norms) and fragility rises further. The basic logic of this process implies that the system expands until it breaks in a financial crisis, when the more aggressive financing practices can no longer generate macro results strong enough to support the increasingly fragile financial structure.

While Minsky's theory identifies a deep family resemblance across financial cycles, the specific form of any particular cycle depends on unique historical circumstances. Minsky's writings, although they mention consumption and household debt, focus primarily on business finance and investment. We propose that innovation in consumer finance and the associated evolution of household financial norms over recent decades has shifted the locus of financial instability to the consumer sector. These themes are developed elsewhere in this volume, particularly the chapters by Wray ## and Kregel ##. Here, we want to emphasize the correspondence between, first, the result from the previous subsection that strong consumption cushioned recessions and contributed to strong secular growth in the U.S. over recent decades and, second, the rising financial fragility of the household sector. These are two sides of the same coin: the consumption boom sowed the seeds of its own destruction.

The consumption boom was financed by borrowing that led to Minskyan financial fragility. Indeed, since income growth was anemic over this period across most of the income distribution, debt growth was the only way to finance such a boom (see Figure 6.3 and the chapters by Palley ## and Setterfield ## in this volume). Wray's chapter ## describes the emergent financial fragility in detail as well as the particular conditions that triggered the collapse, beginning in 2007. The abrupt shift from the finance-led boom to contraction led to historic declines in both consumer spending and residential investment.

Real personal consumption expenditures peaked in January of 2008 and fell 1.9 percent to a trough in May of 2009.<sup>16</sup> This decline was the most severe since a 2.6 percent fall at the beginning of the 1980 recession. It is about double the decline of the worst drop during the Great Moderation period (September, 1990 through March, 1991). If one focuses on durable consumption, which clearly depends to a much greater extent on financial conditions than total expenditure, the Great Recession peak comes earlier than one might expect, in August of 2005. After a modest decline, durable spending plummets after mid 2007 to a trough also in May of 2009. The peak-to-trough decline in real durable consumption of 18.7 percent is roughly the same as the most severe drops in the postwar period (19.4 percent from April, 1973 through January, 1975 and 19.1 percent from June, 1978 through December, 1981). By mid 2011, it is also clear that the

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<sup>16</sup> The figures in this paragraph refer to three-month moving averages of monthly data to smooth out random volatility.

cumulative loss of consumption since 2008, relative to any reasonable estimate of trend, far exceeds the loss of any recession since World War 2, and these losses are almost certain to grow larger in coming years.

In percentage terms, the decline in residential investment has been breathtaking. From the peak in the fourth quarter of 2005 to the trough (so far) in the second quarter of 2011 the construction of new homes fell 59 percent. The only period that comes close to the severity of this debacle in postwar U.S. history is the fourth quarter of 1978 through the third quarter of 1982 when mortgage rates exceeded 15 percent. Even in those remarkably turbulent times residential investment declined by less from peak to trough (45 percent) than it has in recent experience. In addition, while the decline from peak to trough in the late 1970s and early 1980s lasted 15 quarters, the recent collapse was a stunning 21 quarters, and it is entirely possible that we have not reached the ultimate trough as of this writing.

While the decline in percentage terms of housing investment dwarfs the fall in personal consumption, the latter is a much larger share of GDP. Together, we very roughly estimate that each category is about half a trillion dollars below what would have been predicted by the pre-recession trends. There has also been a big decline in business investment. But, in strong contrast to the 2001 recession, this decline seems to have been induced by troubles coming from the household sector. Business investment did not peak until the second quarter of 2008.

This narrative for the Great Recession is fundamentally Keynesian: the common engine of the consumption-housing boom and the subsequent collapse is demand. But it is misleading to think of these forces as demand “shocks.” The Minsky framework illuminates the systematic dynamic character of debt-financed demand. It can be a powerful source of growth, but it leads, sooner or later, to collapse. One cannot understand the Great Recession outside of the household finance boom of the Consumer Age that preceded it.

#### **4. Household Finance After the Great Recession**

Does the Great Recession mark the end of a Consumer Age that lasted for nearly a quarter century? From the middle 1980s to 2007, economic conditions in the U.S. created a remarkably good environment for fast consumption growth and rising household debt. These conditions included falling energy costs, large tax cuts, a stock market boom, a historic decline in interest rates, a home price boom turned to bubble, and financial innovation that opened new doors for consumer lending. In classic Minsky fashion, however, these favorable conditions encouraged more aggressive financial practices until they reached a breaking point. Home prices fell, mortgage lending and home building collapsed, consumption spending declined substantially for the first time

in a generation. The economy reached what the popular press has called the “Minsky Moment” when the Consumer Age boom turned into the Great Recession bust.

Where does the U.S. economy go from here? It seems impossible to expect a reprise of the debt-fueled household spending boom evident in Figures 6.1, 6.2, and 6.3. Borrowers and lenders have been decimated by the crisis. At the least, norms of lending have changed for the medium term for the banking system, if not consumption and borrowing norms for the households. Therefore a significant source of U.S. (and global) demand growth for the past quarter century has disappeared. There seems no obvious replacement going forward. Absent a dramatic new technological development, business investment is likely to be sluggish for several years to come in the face of excess capacity. Government spending could be a source of demand growth, but in 2011 it is constrained by exaggerated fears of federal budget deficits (and the exploitation for political advantage of popular misunderstanding of the effect of deficits in stagnant times).<sup>17</sup> The American government may not act on the rhetoric of “austerity” and “fiscal responsibility” in any significant way while the economy stagnates. But the current political culture seems like it will prevent the federal government from leading demand upward as the household sector retrenches. Even defensive fiscal measures such as extension of expiring unemployment benefits passed the American Congress with great difficulty at the end of 2010. Furthermore, state and local fiscal policy is a deepening disaster.<sup>18</sup> Some American policymakers spin fantasies about rising exports. But who will buy more American goods? The U.K. and the Eurozone are even more aggressive about pursuing fiscal austerity than the U.S. China and other developing countries in Asia are doing relatively well, but those countries have export-led growth models that depend on the American market and are unlikely to change over the next few years (see also chapter ## by Blecker).

In the summer of 2009 the NBER business cycle data committee declared that the Great Recession had ended. In the following months, some households and businesses raised spending modestly as the panic of the darkest days following the collapse of Lehman Brothers receded. Yet a sustained recovery has yet to emerge as we approach the second anniversary of the business-cycle trough. Conventional wisdom seems to be looking just around the corner for the accelerating GDP growth that could begin to dent the tragic waste of resources and the devastating unemployment created by the recession. But without the American consumers’ willingness and ability to further leverage their collective balance sheets, the source of demand growth for even a sluggish recovery remains a mystery. The way forward is likely to disappoint with extended stagnation, further financial instability, possibly even the dreaded “double dip” recession. But even

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<sup>17</sup> See the chapters by Baker and us ## in this volume for detailed analysis of the effect of deficits in an economy operating with persistent under-utilized resources.

<sup>18</sup> Real state and local-government spending has declined at an annual rate of 1.5% from the fourth quarter of 2007 through the second quarter of 2011. The reductions accelerated in the first half of 2011, falling by 3.4% at an annual rate in both the first and second quarters.

in the best case the economy will need to find an alternative source of demand growth to replace our quarter-century Consumer Age.

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**Figure 6.1 – Personal Outlays as a Percentage of Disposable Income**



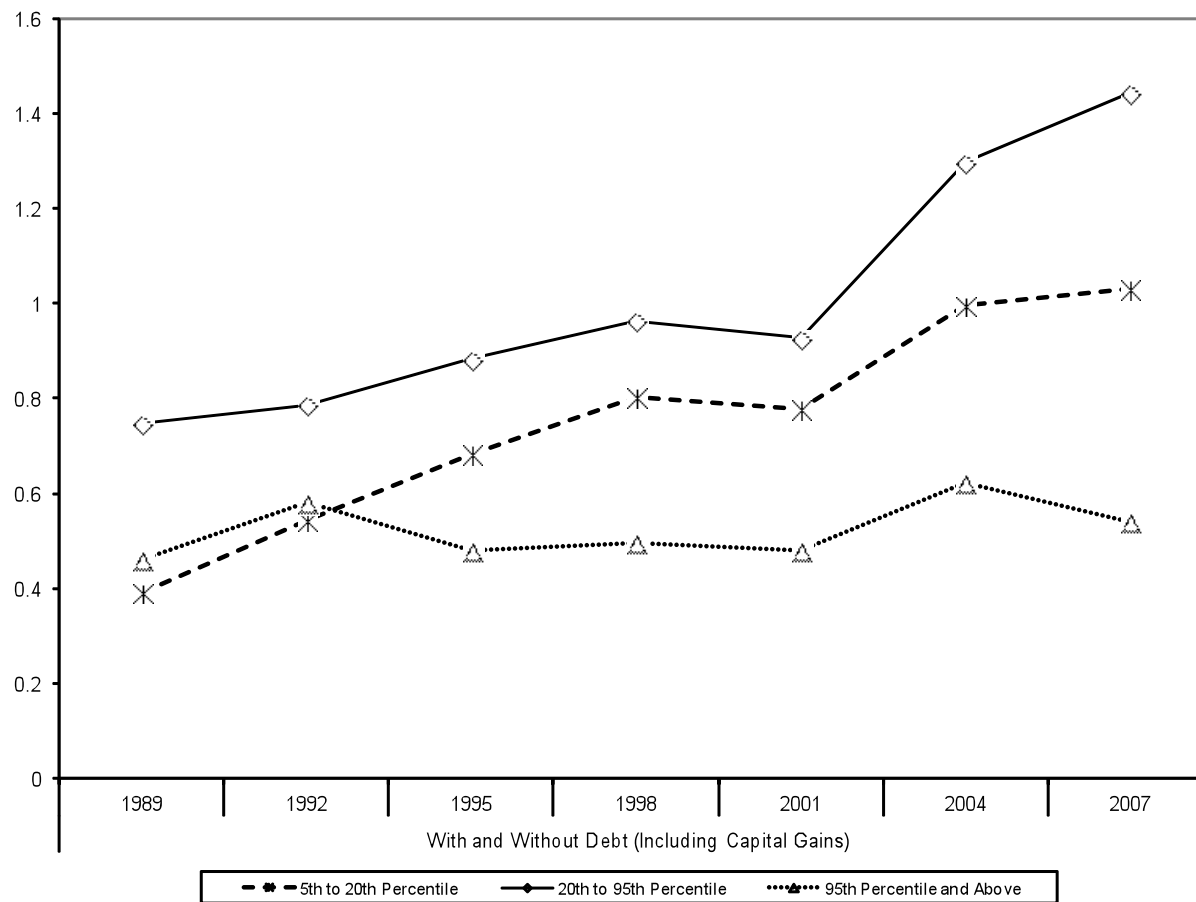
Source: The data plotted are 100 minus the personal saving rate (3-month moving average) computed by the Bureau of Economic Analysis.

**Figure 6.2 – Household Debt Outstanding as Share of Personal Disposable Income**



Source: Household credit market debt outstanding from U.S. Flow of Funds accounts, disposable personal income from Bureau of Economic Analysis NIPA accounts.

**Figure 6.3 – Debt to Total Income Ratio for Selected Income Groups**



Source: Authors calculations from U.S. Federal Reserve Survey of Consumer Finance data.