



CONSUMER DEBT: A PRIMER

THE EPIC CONSUMER DEBT INITIATIVE

The Aspen Institute's Expanding Prosperity Impact Collaborative (EPIC) is a first-of-its-kind initiative in the field of consumer finance, designed to harness the knowledge of a wide cross-section of experts working in applied, academic, government, and industry settings toward the goal of illuminating and solving critical dimensions of household financial insecurity.

As part of Aspen's Financial Security Program (FSP), EPIC deeply explores one issue at a time, focusing on challenges that are critical to Americans' financial security but under-recognized or poorly understood. EPIC uses an interdisciplinary approach designed to uncover new, unconventional ways of understanding the issue and build consensus among decisionmakers and influencers representing a wide variety of sectors and industries. The ultimate goal of EPIC is to generate deeply informed analyses and forecasts that help stakeholders (1) understand and prioritize critical financial security issues, and (2) forge consensus and broad support to implement solutions that can improve the financial lives of millions of people.

EPIC's current issue is consumer debt, which includes unsecured debt, auto loans, student loans, and other forms of non-mortgage debt. The time is ripe for an in-depth examination of this issue because the U.S. has recently reached record high levels of outstanding credit card, auto loan, and student loan debt, while mortgage balances remain slightly below 2008 levels, raising critical questions about what this means for U.S. households' financial security. Since consumer debt began to rebound from the Great Recession, aggregate balances have risen rapidly, with particularly large growth in education and auto loans. During this time, wages have grown more slowly. While delinquency rates for credit card and mortgage debt are below their historical averages, default is an increasingly serious problem in the student and auto loan markets. Additionally, debt in collections appears on one-third of all consumer credit reports. While many borrowers appear to be doing well, there are indications that consumer debt poses widespread challenges to financial security, especially for low- and moderate-income households and other financially vulnerable populations.

This is the right moment to better understand the changing dynamics of consumer debt, how households are managing the debt they are carrying, and the conditions under which it is a source of financial insecurity.

EPIC's work on consumer debt will take place through a three-phase process of learning and discovery, solutions development, and acceleration:

- **Learning and discovery:** During the learning and discovery phase, EPIC will synthesize data, poll consumers, survey experts, publish reports, and convene leaders, to build a more accurate understanding of how consumer debt impacts low- and moderate-income families and how to identify a constellation of solutions to solve for it.
- **Solutions development:** During the solutions development phase, EPIC will develop a framework for evaluating potential solutions, select a set of highly promising solutions to explore in depth, vet those solutions with a diverse group of consumers, cross-sector leaders and experts, and publish our findings and analyses.
- **Accelerator:** During the accelerator phase, EPIC will engage in activities to ensure awareness, leadership, and action-taking around consumer debt solutions. Over time, the accelerator functions will lead to long-term engagement of a diverse cross-sector group of strategic partners and adoption of EPIC solution ideas by decision-makers and influencers.

This report is a key first step in EPIC's learning and discovery phase. In addition to conducting this research synthesis, we are surveying experts, convening leaders, and learning from consumers. This will help us better understand the specific aspects of debt that contribute most to financial insecurity, as well as identify ways to increase the priority of the issue among key stakeholders.

This research primer sheds light on the meaning of current trends in consumer debt. It investigates the drivers, features, and consequences of consumer debt through a comprehensive review of the existing literature. The primer considers various frameworks for studying debt, drawing from the fields of economics, business, sociology, and consumer behavior. It analyzes historical patterns, contemporary drivers, and differences among demographic groups, as well as connections between specific types of debt and financial distress. Importantly, the primer also identifies critical gaps in the research and unanswered questions about the conditions under which consumer debt becomes a source of financial insecurity, and who faces the greatest risks. This investigation, as well as our other learning and discovery activities, will prepare us to prioritize problems and articulate a framework for developing solutions in the next phase of the EPIC process.

EXECUTIVE SUMMARY

The Aspen Institute's Expanding Prosperity Impact Collaborative (EPIC)—an interdisciplinary approach to illuminating and addressing critical aspects of household financial insecurity—is focusing on consumer debt. EPIC is studying this issue now because consumer debt has reached record highs amid an economy more robust than at any point since the end of the Great Recession. Unemployment is at historic lows and wages are up, leading to many rosy interpretations of current debt trends. Yet signs continue to point to the fragility of many families' finances, and households' experiences with debt in the current economy vary widely on demographic and geographic lines. This is a critical moment to better understand the changing dynamics of consumer debt, how households are managing the debt they are carrying, and the conditions under which it is a source of financial insecurity versus an opportunity for future mobility.

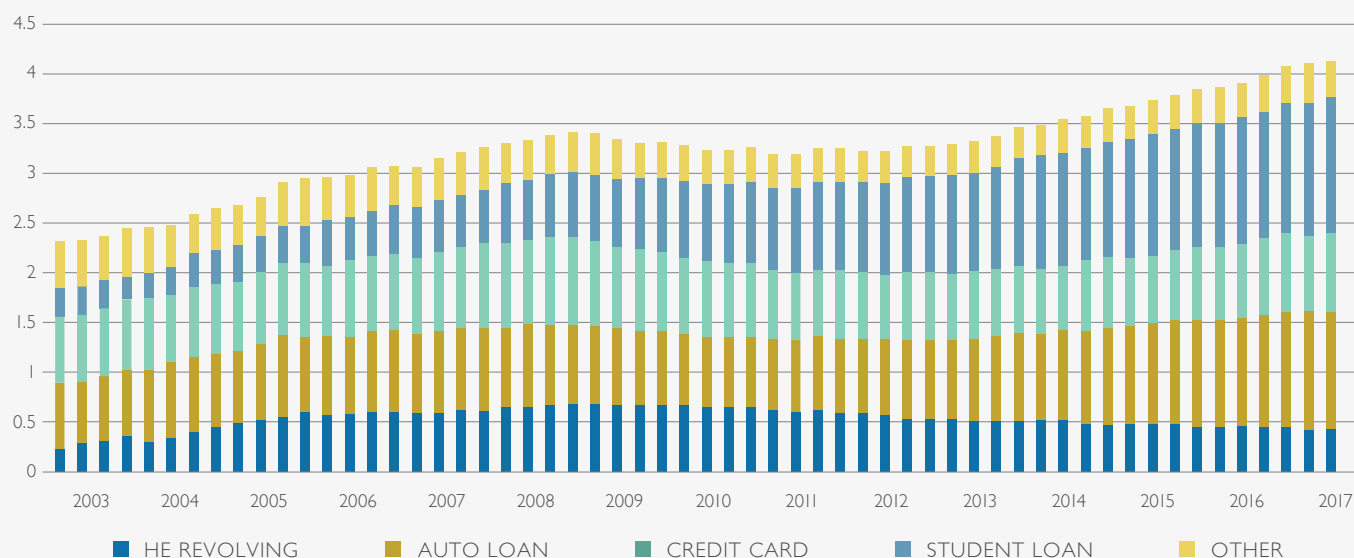
EPIC's particular focus is on non-mortgage consumer debt, such as loans to pay for college or to purchase a vehicle, money borrowed on credit cards, and non-loan debt (i.e. municipal fines and fees, medical debt, and unpaid bills). Non-mortgage debt has not received the extensive attention given to housing borrowing, largely because the size of the mortgage market. However, housing debt is declining as a share of household debt and current causes for concern—such as rising rate of serious delinquency in credit cards and the emergence of subprime

auto loans—relate to other areas of the market. This primer distills the research on consumer debt, from its drivers and its dimensions to its impacts on households and society as a whole. EPIC will use this critical knowledge base to articulate a framework for developing solutions to improve the financial lives of millions of Americans.

DEBT IS COMPLEX, DYNAMIC, AND HAS MANY DRIVERS

Traditional economic theory posits that households behave rationally in borrowing and managing their debt based on their understanding of their future income. People tend to borrow heavily in young adulthood (when they have lower incomes but high costs such as education and housing), continue to borrow but at a slower pace during middle age, and then slowly pay down debt through old age. Research confirms that age and life stage do determine borrowing patterns, but the strength of this relationship may now be changing along with household demographics and income dynamics. Moreover, access to credit doesn't depend on age and credit history alone; it is also affected by macroeconomic conditions and demographic characteristics, especially race and ethnicity. Borrowing and accumulation of debt are also influenced by sociological factors including consumerism. Consumption is a key element of social identity, and people often support status-enhancing consumption through borrowing. Powerful and unreliable

FIGURE 1: Aggregate Non-Mortgage Debt by Type (Trillions of Dollars)



social norms regarding “good” and “bad” debt also influence decision making. Finally, cognitive biases, many of which are not fully understood, affect people’s use of credit products and assessments of their affordability over time.

ACROSS AMERICA, CONSUMER DEBT IS RISING, BUT THERE ARE LARGE VARIATIONS AMONG DEMOGRAPHIC GROUPS

The long-term trend of rising household debt began in the 1950s. Although the emergence of credit cards and other unsecured credit contributed, mortgages were the driving force. This reached a tipping point during the Great Recession, leading to a dramatic, nearly decade-long pullback in mortgage borrowing. Overall consumer debt, however, surpassed the levels that preceded the Great Recession due to growth in student and auto loans. As a result, the composition of aggregate and household-level debt has shifted and become less consistently effective at supporting wealth-building.

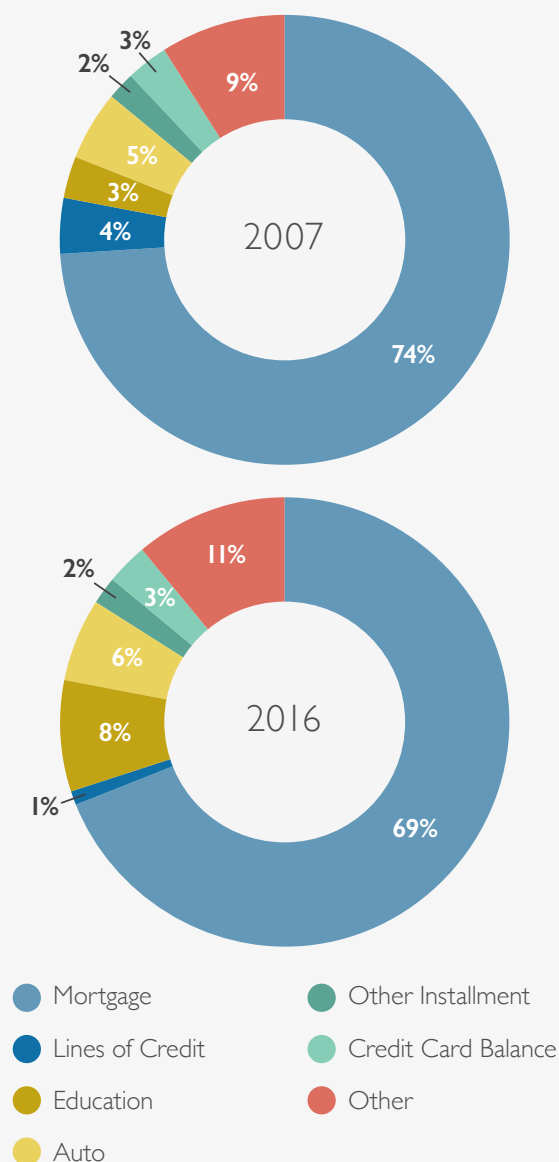
Consumer debt is not spread equally. It varies by geography, age, income, and race. Most types of debt—though not credit card debt—show geographic variation. The composition and amount of debt varies by age but these patterns are changing. For example, although being of traditional retired age is associated with lower debt levels, the share of retirees carrying debt is above the historical average. With regard to income, debt burden is highest for middle-income households; the poorest households have the lowest levels of debt, but their debt is disproportionately from credit cards, high-cost unsecured loans, and unpaid bills.

There are stark differences in the amount, characteristics, and composition of debt by race and ethnicity that lead to or reinforce adverse outcomes for people of color. Today’s differences are rooted in historical exclusion and structural barriers, but ongoing predatory and discriminatory lending practices also play a role.

NON-LOAN DEBT HAS BECOME A SIGNIFICANT CONTRIBUTOR TO FINANCIAL INSECURITY FOR MILLIONS OF HOUSEHOLDS

While borrowing is the most conventional path to household debt, families facing emergencies, income shocks, or a persistent inability to make ends meet can incur expenses that push them into debt without taking out a loan. They may even be unaware of this debt or its size until negative information appears on a credit report or collection agencies call. Leading sources of non-loan debt include:

FIGURE II: Changes in Composition of Consumer Debt, 2007–2016



- **Out-of-pocket medical costs**, which can generate medical debt, can be a source of financial insecurity even at relatively low levels and for consumers with healthy credit histories and otherwise manageable debt burdens. Medical expense shocks are fairly common, and the protection of health insurance is often insufficient with 20% of consumers having a medical collections tradeline on their credit report.
- **State and local government fines and fees**, which governments have increasingly relied on to finance public services, a trend that has disproportionately impacted

TABLE I: Median value of debt holdings by income, thousands of 2016 dollars

PERCENTILE OF INCOME	ANY DEBT	PRIMARY MORTGAGE	INSTALLMENT LOANS	CREDIT CARD BALANCES	OTHER NON-MORTGAGE DEBT
All families	60,000	111,000	17,000	2,300	8,000
Less than 20	10,350	50,000	10,000	800	3,270
20–39.9	23,280	63,000	12,000	1,700	3,600
40–59.9	42,300	89,000	16,000	2,000	5,000
60–79.9	103,000	114,000	21,400	3,000	11,870
80–89.9	170,300	157,000	25,000	4,800	11,800
90–100	299,000	268,000	28,000	6,000	78,000

TABLE II: Median value of debt holdings by race, thousands of 2016 dollars

	ANY DEBT	PRIMARY MORTGAGE	INSTALLMENT LOANS	CREDIT CARD BALANCES	OTHER NON-MORTGAGE DEBT
All families	60,000	111,000	17,000	2,300	8,000
White non-Hispanic	74,100	115,000	17,000	2,700	10,500
Black non-Hispanic	31,400	78,000	19,000	1,400	3,400
Hispanic or Latino	30,000	99,000	15,800	1,700	2,000
Other or Multiple Race	56,600	150,000	16,300	2,400	8,200

communities of color. These debts can have cascading negative effects on family finances, as they lead to driver's license suspensions, garnishment orders, and even jail sentences. A burgeoning source of harmful non-loan debt is fees resulting from lawsuits filed against consumers by debt buyers, which are clogging state courts.

- **Unpaid bills**, which account for over one-third of all delinquent debt. In addition to medical debt, unpaid phone and utility bills in collections most frequently appear on credit reports. Getting behind on payments for these basic services often reflects underlying financial insecurity; having these overdue bills reported to credit bureaus and in collections strongly reinforces that insecurity.

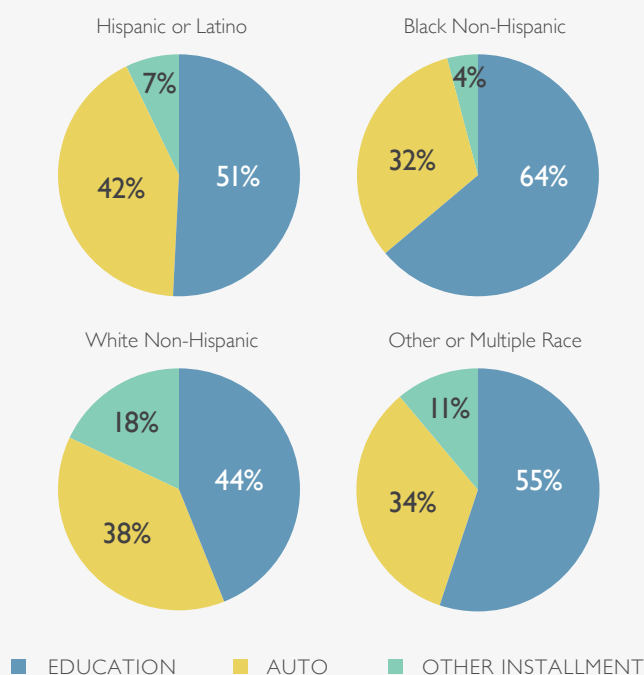
CONSUMER DEBT CAN CREATE INSECURITY, REDUCE WEALTH, HARM FAMILIES, AND MAY SLOW THE ECONOMY

Consumer debt is often a positive force in people's lives and supports economic growth, but its negative impacts on households are serious, widespread, and inequitable. Consumer debt is most likely to cause financial distress when a household has a high debt burden, as measured both by the proportion of income used to service debt and their subjective perception of financial stress. Carrying too much debt can create a rapid downward spiral that starts with higher debt servicing costs

and can lead to court judgments and garnishments of wages, tax refunds, and other payments. The ultimate negative consequence, bankruptcy, fails to deliver long-term relief to many filers. Debt can also curtail households' ability to save and build wealth. The pathways through which credit and debt lead to mobility have become less reliable and are broken for some borrowers. For example, today's unprecedented level of student loan debt has raised questions about the degree to which the benefits outweigh the costs, especially given their role in reducing homeownership and entrenching racial wealth inequality. There are also negative household impacts not reflected on balance sheets, including physical and mental health challenges. It can affect personal relationships including romantic partnerships and family formation. Those whose debt is a source of financial distress are most likely to experience corollary ill effects.

There has been less attention to the macroeconomic impacts of non-mortgage consumer debt outside of the connection between debt and debt-driven business cycles. The general consensus is that no other type of consumer debt shares the systemic significance of mortgages, but that rising credit card and auto default rates are cause for concern as they signal households' financial strength. Increasingly, economists raise the possibility that the negative relationship between student

FIGURE III: Composition of Installment Debt by Race



debt and homeownership could be a drag on economic growth. The inter-relationships of consumer debt and macroeconomic conditions deserve greater attention in the future.

MUCH ABOUT THE CHARACTER, CAUSES, AND CONSEQUENCES OF CONSUMER DEBT REMAINS TO BE EXPLORED

Although extensive research has already been completed on consumer debt—including its character, causes, and consequences—much remains to be explored. Some of the gaps are already identified in the literature. For example, there remains a poor understanding of “tipping points” at which a household’s debt becomes more harmful than helpful (Emmons & Ricketts, 2017).

The primer identifies a number of questions that warrant further research. Critical issues include:

- How the composition of consumer debt holdings vary, change, and affect household solvency and financial stability over time
- The extent to which the first debts taken-on by consumers shape their individual debt profiles as they age
- The degree to which rising debt from credit cards, personal loans, and similar unsecured products reflects reliance on

credit to meet current consumption needs, particularly among low-and moderate-income households

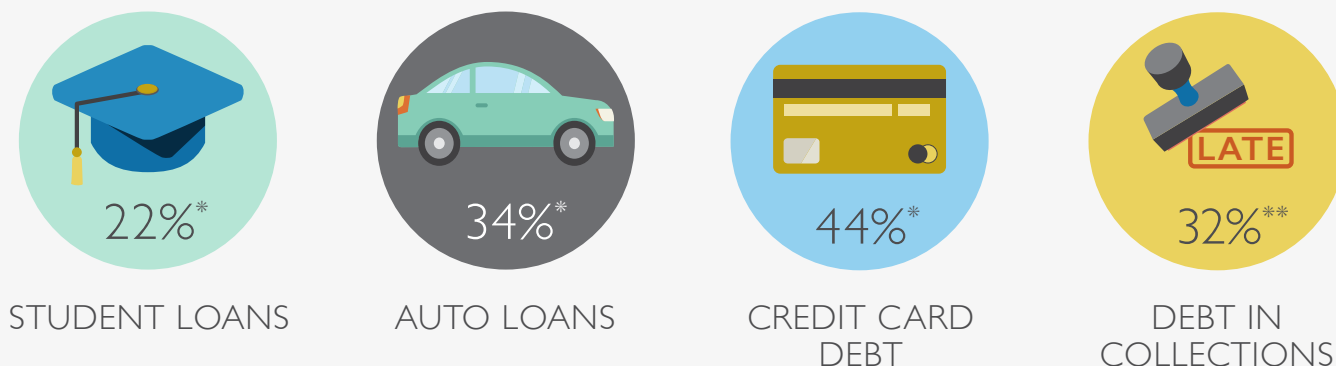
- The growth and composition of various types of non-loan debt, such as unpaid medical and other bills; governmental fines and fees, and taxes; and the degree to which holding and making payments on non-loan debts impacts the features, levels, and ability to repay consumers’ other debts
- The downstream impacts of consumer debt on personal health and wellbeing, family relationships, and children
- The long-term household outcomes associated with student loan debt and macroeconomic implications of those outcomes

Research into each of these questions should consider variations based on households’ demographic characteristics, including race and ethnicity, gender, and age. Deeper examinations of the role of race are particularly important, given the existing evidence of disparities that disadvantage people of color. Many of the most acute debt-related challenges cannot be resolved without considering and responding directly to racial inequities.

DEBT MUST BE CONSIDERED WITHIN THE CONTEXT OF CONSUMERS’ LIVES

The most important theme that emerges from the research on consumer debt is that context is critical. One reason it is so challenging to understand the role and characterize the impact of consumer debt in household finances is that the “goodness” or “badness” of any individual borrowing decision depends not only on the household’s cash flow, other obligations, and assets, but also on interactions among the different debts that people carry and a multitude of other factors. Households’ financial and family contexts change over time, sometimes suddenly, exacerbating consumers’ struggle to accurately assess whether a particular debt will be affordable or help them reach their goals. And yet, while each family has its own context, debt is a shared experience that impacts virtually all households at some point in their lives. The problems identified in this primer require solutions that are broad enough to meet the needs of millions of households, yet flexible enough that they increase families’ ability to adapt available resources to fit the context of the rest of their lives.

FIGURE 1: Common Types of Consumer Debt



* Data source 2016 Survey of Consumer Finances

** Data source is Consumer Financial Protection Bureau

INTRODUCTION

Consumer debt results from a household borrowing money from an external party. This may be to buy something that is expected to last a long time (such as a house) or pay off in the long run (like a college education) which costs far more than what one could pay outright, or expensive durable goods (such as a car or furniture). It may be simply to pay for something needed or wanted when there is not enough cash on hand (paying for groceries, or a splurge night out, using a credit card that will not be paid off at the end of the month). At times consumers incur debt without taking out a loan, such as when a utility bill is not paid off, or an emergency room visit costs more than what they can immediately afford.

Being able to borrow requires a lender that reasonably expects to be repaid. The lender may base the expectation on the borrower's current or anticipated income and past payment record. In the case of secured debt, such as a mortgage or car loan, the lender underwrites based on the consumer's income cash flow, may also factor in their right to seize and sell off property if payments are not made.

This paper examines the drivers of consumer debt, the landscape of consumer debt today, and the impacts of consumer debt on households and the economy as a whole. Mortgages represent the bulk of household debt, play a unique role as the primary driver of household wealth, and have an important impact on the economy. For those reasons, home loans have been the subject of extensive research and analysis, while

non-mortgage debt has received considerably less attention. This report focuses specifically on non-mortgage debt, including student loans, vehicle loans, credit card debt, and non-loan debt, which represent an increasing share of aggregate consumer debt. This report examines the existing research on non-mortgage consumer debt from a variety of disciplines and sectors, synthesizes major themes and findings, and identifies areas where additional research is needed.

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PART 1: DRIVERS OF CONSUMER DEBT

Debt is complex and has many drivers, ranging from forces as large as business cycles and inequality, down to household-level conditions including income sufficiency and financial decision-making. Part 1 of this report focuses on major economic, cultural, and psychological drivers of consumer

debt, particularly how characteristics such as age, race, and income affect how much and what types of debt individual consumers and families accumulate.

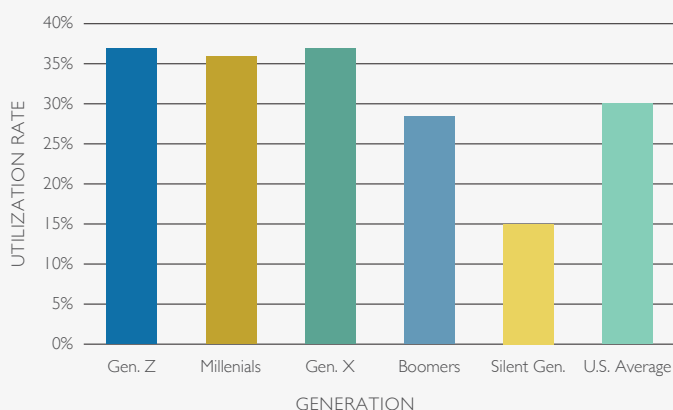
THE LIFECYCLE MODEL OF CONSUMPTION

The traditional viewpoint among economists, business leaders, and many policymakers is that individuals and households behave rationally in borrowing and managing their debt based on their understanding of their future income. Borrowing enables purchases needed or wanted in the present, removing the constraint of spending tied to current income alone. Two similar theories from the 1950s—the “life-cycle hypothesis” (Modigliani & Brumberg, 1954) and the “permanent income hypothesis” (Friedman, 1957)—posit why and how households save and “dissave” (borrow) to smooth consumption. Applied to consumer debt, these lifecycle concepts predict that people will tend to borrow heavily in young adulthood (when lower skills and inexperience generate less income but there are high costs for goods such as education and housing), continue to borrow but at a slower pace during middle-age (as income and expenses converge), and then slowly deleverage (pay down debt) through old age.

Economists exploring the implications of the lifecycle hypothesis have generated an extensive body of empirical research on the influence of liquidity constraints and the role of borrowing on household spending. Some of this confirms what theory predicts. For example, recent research relying on the oldest Survey of Consumer Finances (SCF) data found that the debt experiences of Americans born between 1915-1924 conformed to what the lifecycle model predicts: their total debt increased up to age 45 then began falling (Kuhn, Schularick, & Steins, 2017). Similarly, today’s consumers tend to have the highest credit utilization rates in their 20s, while those nearing and past retirement age use far smaller proportions of the credit available to them (Fulford & Schuh, 2015).

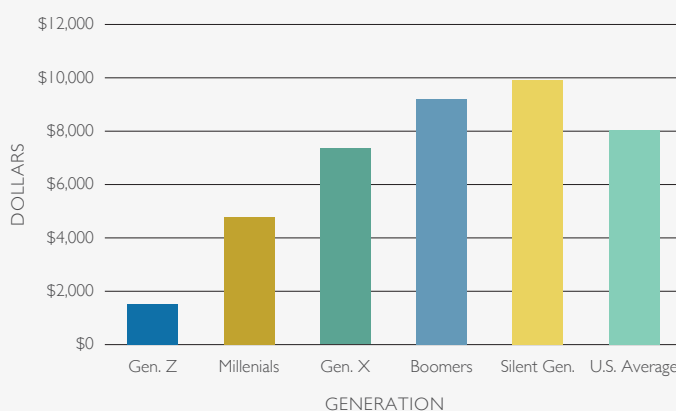
But theory and evidence also diverge. A mounting body of research indicates that the permanent income hypothesis and lifecycle model fail to explain key aspects of household savings, borrowing, and debt repayment (Deaton, 1986; Baker, 2014). The data show complex dynamic behavior (Lambertini & Azariadis, 2009). For example, consumers tend to borrow and consume less early in life than predicted, while consuming more and borrowing less than predicted in middle age (Li & Goodman, 2015). Older Americans are now also carrying debt later in life, even into the fixed-income years of retirement (Pew Charitable Trusts, 2015-A). The same study of early SCF data referenced above reveals that those born just 30 years later,

FIGURE 2: Credit Utilization Rates by Generation



Data source: Experian, State of Credit 2017

FIGURE 3: Revolving Credit Limits by Generation



Data source: Experian, State of Credit 2017

between 1945-1964, experienced rising debt-to-income ratios (DTI) as they aged (Kuhn, Schularick, & Steins, 2017). It is possible that demographic changes leave older models outdated, failing to account for factors such as later-in-life household formation and increased numbers of multi-generational households.

The changing nature of the economy also challenges the lifecycle idea, calling into question its underlying assumptions about consumers’ income. The model generally views income and other financial shocks as isolated events, but income volatility has been rising for decades and has become a chronic condition for many workers. In the real world, debt that is rational and reasonable when taken on may become unaffordable later due to volatility shocks (Gathergood & Guttman-Kennedy, 2017). Many households experience a constant struggle to smooth consumption (Seefeldt, 2015). Moreover, even as income has become more volatile, it has also stagnated. Median lifetime

incomes among men have actually declined—a trend that some economists predict will continue in the future (Guvenen, et al., 2017). While the life-cycle model remains a useful starting point, it is insufficient to explain the dynamics of consumer debt observable today.

MACROECONOMIC CONDITIONS

Economists have also noted the role that business cycles and credit supply play in consumer debt. The amount of credit lenders make available and amount of debt consumers take on show large business cycle variation that is much larger than the cyclical shifts in income or consumption (Fulford & Schuh, 2015). Expanded availability of credit during times of economic growth is associated with higher levels of consumer debt, and the reverse effect is present in recessionary times (Gross, Notowidigdo, & Wang, 2016). Additional research has found that credit utilization rates are relatively steady throughout the business cycle. Borrowers are extremely sensitive to credit limits. When consumers gain access to additional credit, they increase their debt proportionally; when their available credit shrinks they reduce their debt in a similar fashion (Fulford & Schuh, 2015).

Large majorities of Americans consider debt a necessity in their own lives (69%) and simultaneously see it as a tool others generally use to live beyond their means (85%)

Since the Great Recession, increases in the costs of healthcare, housing, and food have been significantly larger than increases in nominal income (El Issa, 2016). Increases in the costs of homeownership (Hartman, 2017), rent (Harvard Joint Center for Housing Studies, 2017), medical care (Auerbach & Kellermann, 2011), and higher education (U.S. Department of Labor, 2016-B) are particularly notable and difficult for the majority of households to avoid. Consumers increasingly rely on debt to meet current consumption needs, potentially because households struggle to cope with rising costs amid decades of stagnant incomes (Boshara, 2016). Over recent decades, financially-imperiled households have borrowed because they cannot make ends meet, and more secure households have borrowed to maintain their standard of living (Boshara, 2016). Debt incurred for current consumption is growing and can undermine financial security by crowding out savings and reducing disposable

income. As income inequality has risen, so has consumption inequality, meaning that debt is not fully filling the spending gap (Mason, 2017).

ACCESS TO CREDIT

Research has found that the availability of credit is the driving factor of consumer debt in both the short and long term (Fulford & Schuh, 2015). Access to credit determines which, if any, credit products consumers are able to use, as well as the cost of borrowing. Access to credit itself depends on a variety of factors, some of which are directly related to the household's financial position, such as repayment history, while others are outside the household's control, such as credit supply economy-wide.

The primary determinant of access to credit are borrowers' financial characteristics and on history of using credit and paying down debt. Nearly all secured loans use income and asset information in underwriting. With unsecured credit, income and bank account ownership are frequently considered. In terms of borrower history, the amount and types of debt accumulated in the past and timeliness of payments are primary determinants of whether a lender is willing to extend credit. But an individual's behavior is only one of many factors that influence how much access to credit they have and at what cost.

Access to credit is also related to demographic characteristics such as age, length of residency in the United States, and race and ethnicity. Young adults and recent immigrants, for example, are particularly likely to be reliant on higher-cost alternatives or unable to access the credit they need because the number of years of data in a credit report is a major determinant of the credit score (Debbaut, Ghent, & Kudlyak, 2014). Race also has an impact: black and Latino consumers have persistently lower credit scores than white and Asian consumers (Federal Reserve, 2007). This applies to whole communities in addition to individual consumers. Within cities, predominantly white neighborhoods have significantly higher average credit scores than neighborhoods primarily home to people of color (Ratliffe & Brown, 2017). Evidence suggests but does not definitively prove that discrimination is a root cause—these disparities cannot be fully accounted for by controlling for other variables such as income level and length of credit history (Federal Reserve, 2007).

Credit access is also closely tied to inequality. Low-income households living in areas with low income inequality have better access to credit, accumulate more debt, and pay less for it than similar households in high-inequality regions (Coibion, et al., 2016). Very low-asset households—many of which have

negative net worth—also have insufficient access to credit, which hampers their ability to smooth consumption, and reinforces their inability to borrow in the future (Sullivan, 2008). Among younger people, those with lower incomes and net worth typically have less access to affordable, mainstream credit, leaving few options besides high-cost alternatives, informal loans, or going without; lack of borrowing capacity also means they have fewer opportunities to build assets. In comparison, those with higher income and wealth have more access to credit. They tend to borrow more, accumulate more debt, and effectively use credit build wealth (Pew Charitable Trusts, 2015-A).

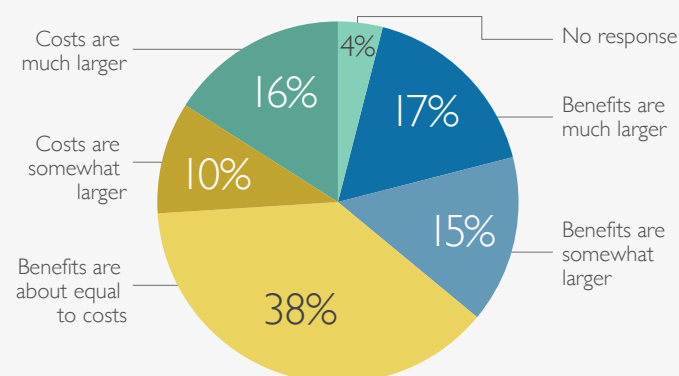
CONSUMER CULTURE

Some experts frame debt issues within the context of a rising tide of American consumerism. Average individual spending increased 30% in the last quarter century (Pew Charitable Trusts, 2016). More recently, average individual spending increased by more than 12% between 2012 and 2016 to \$57,311 annually (U.S. Department of Labor, 2016-A). A recent *Bloomberg* report also found that Americans may be spending more on dining than on groceries (Jamrisko, 2015), while time use data shows that shopping is a major pastime for the average American, who spends 277 hours per year on that activity (U.S. Department of Labor, 2017).

Sociological factors can lead households of all income levels to spend and borrow irrationally at times. The centrality of consumption to social identity, for example, can lead to everyday use of credit divorced from economic sustainability (Lupica, 2009). Status competition can result in the appearance of wealth supplanting the importance of actual wealth (Stucke, 2009). Social pressures associated with the perceived value of more elite (and expensive) higher education institutions may also drive some students to borrow more for higher education (Houle, 2014).

As consumer culture encourages all Americans to spend and borrow, strong social norms impact the types of debt we rely on. Personal finance experts and consumers alike tend to lump debt into two categories—that which is “good” and that which is “bad”—concepts that have a powerful influence on decision-making. “Good” debt is generally thought to encompass those debts which hold future value or increase a person’s net worth. These include student loans, mortgages, and small business loans, among others. “Bad” debts, by contrast, are generally thought to be unsecured and/or high-cost, such as credit card debt and debt from short-term products such as payday and vehicle title loans.

FIGURE 4: Will the lifetime financial benefits of your higher education outweigh the costs?



Data source: Federal Reserve, 2016 Survey of Household Economic Decisionmaking

While the notion of good and bad debts is a strong social norm, a more complex picture emerges from the research. Some types of debt may tend to be good or bad, but it always depends on the context. A debt-holder’s overall financial circumstances and other resources (such as social networks and human capital) influence the impact of all debt they hold. While the “good” debts of mortgages and student loans help many borrowers build wealth and increase their lifetime income, the degree to which they are good for borrowers’ financial outcomes varies with factors outside their control, such as interest rates, growth and structural shifts in the economy, and racial and gender pay gaps. Recent research reflects growing cynicism among loan recipients, as the Federal Reserve’s 2016 Survey of Household Economics and Decisionmaking (SHED) found that only 51% of those aged 25 to 39 with a bachelor’s degree and outstanding student loan debt say that the lifetime of financial benefits of their degree will outweigh the costs. Across all survey respondents, only 32% expected that the lifetime value of their education would exceed the costs.

Similarly, “bad” debts can under some circumstances lead to positive outcomes. While credit card debt, for example, is generally “bad,” the strategic use of credit cards carries a tangible benefit in the form of improved credit scores, which can enable borrowers to access higher-quality forms of credit and secure more favorable loan terms. Likewise, credit card users who generally pay their monthly bills in full but occasionally carry a balance may be able to derive short-term benefits without the negative outcome of rising debt over time. Even payday loans can occasionally be “good;” a borrower who uses a payday loan to pay for immediate car repairs may be averting the even

more serious consequence of being fired for missing work. Automobile loans are more complicated, as they enable depreciating asset purchases, but the household's financial and social context, as well as lender and loan characteristics, substantially influence the outcome (Haughwout, et al., 2017). Regardless of borrowers' perception of debt as good or bad, all forms of debt have the ability to help or harm the borrower depending on the (often dynamic) context of their lives and the economy at large.

Nevertheless, consumers' perception of a particular type of debt as good or bad appears to influence their product ownership, borrowing behavior, and indebtedness. Multiple studies indicate that consumers' attitudes toward both credit and debt often influence rates of credit card ownership (Hayhoe, et al., 2013) and levels of credit card debt (Cosma & Pattarin, 2010; Kaynak & Harcar, 2001). Research has found this to be the case among college students (Hayhoe, et al., 2005) and low-income households (Zhu & Meeks, 1994). One study of consumer attitudes toward credit from 1970 to 2000 found that households that viewed credit cards as good were significantly more likely to own them (Durkin, 2000). That said, research findings on this question are not unanimous. Some studies have found, for example, that socioeconomic (Ahmed, et al., 2015) and demographic (Kaynak & Harcar, 2001) factors can be more influential than perceptions of credit and debt as good or bad.

While these sociological drivers of debt may paint a picture of Americans eager to take-on debt, research also shows it is a burden they carry begrudgingly. A survey by Pew found that while 69% of respondents indicated that non-mortgage debt was a necessity in their lives, they preferred not to have it. Despite this perception of their own debt, most Americans are skeptical of others' borrowing. The same survey found that 79% of respondents thought that people generally tend to use debt irresponsibly, and 85% said that others used debt mainly to live beyond their means (Pew Charitable Trusts, 2015-A).

CONSUMER PSYCHOLOGY AND COGNITIVE BIASES

While some drivers of consumer debt, as well as some of its negative impacts, stem from factors outside households' control (income stagnation; the rising cost of necessities such as housing and healthcare) consumer behavior and spending habits also play a role that may at times contribute to households' financial insecurity. While access to credit creates opportunities, high credit limits have been shown to stimulate frivolous small spending in some borrowers (Soman & Cheema, 2002). Various studies have linked credit card usage to compulsive buying, and found particularly strong relationships in younger

age groups (Norum, 2008). Awareness of unhealthy spending habits is not limited to researchers, as polls show that consumers identify their own behavior as detrimental. A recent survey found that half of respondents—including two-thirds of millennials—reported that emotions have caused them to spend more than they can reasonably afford (El Issa, 2017).

That said, even responsible spenders are affected by the psychological aspects of credit card use. Consumers have higher willingness to pay for products when using a credit card than when using cash (Feinberg, 1986). The reason is that credit cards assuage the "pain of paying" effect, which moderates spending because consumers feel actual psychological pain when paying for things (Zellermayer, 1996). Behavioral scientists have also found that consumers with credit card debt have higher-than-average levels of neural dysfunction (Spinella, Yang, & Lester, 2004), indicating that this is not merely a problem of willpower.

Both aggregate and average levels of household debt increased steadily throughout the past seven decades. This accelerated in the years leading up to the Great Recession, was temporarily interrupted by the downturn, but has resumed its long-term trend since 2013

Cognitive biases also have a strong impact on people's ability to forecast the cost and affordability of debt they incur. For example, behavioral economists have theorized that exponential growth bias, "the tendency to linearize functions containing exponential terms when assessing them intuitively," is responsible for consumers' tendency to underestimate the future value of savings and debt as well as the total cost of borrowing (Stango & Zinman, 2009). Another bias, anchoring, may help explain consumer behavior that does not conform to lifecycle models. Credit card minimum payments, for example, are an anchor that may lead people to pay down their debt more slowly, leading to higher interest payments over time (Keys & Wang, 2014). Credit limits, too, may serve as an anchor for how much consumers believe they can afford to borrow (Keys & Wang, 2014). Academic and industry research indicates that credit card issuers are well-aware that consumers' cognitive

biases influence their spending, borrowing, and repayment behaviors (McCoy, 2005; Stango & Zinman, 2006; Lewis, 2007; Komos, 2012; IBM Institute for Business Value, 2015). Recent advances in data analytics may be enabling marketers to more effectively leverage that knowledge to prompt desired consumer behaviors.

PART 2: THE LANDSCAPE OF CONSUMER DEBT

This part of the report provides an overview of consumer debt today within the context of trends that have persisted since the end of World War II. Both aggregate and average levels of household debt (including mortgages) increased steadily throughout the past seven decades. This accelerated in the years leading up to the Great Recession, was temporarily interrupted by the downturn, but has resumed its long-term trend since 2013 (Corkery & Cowley, 2017).

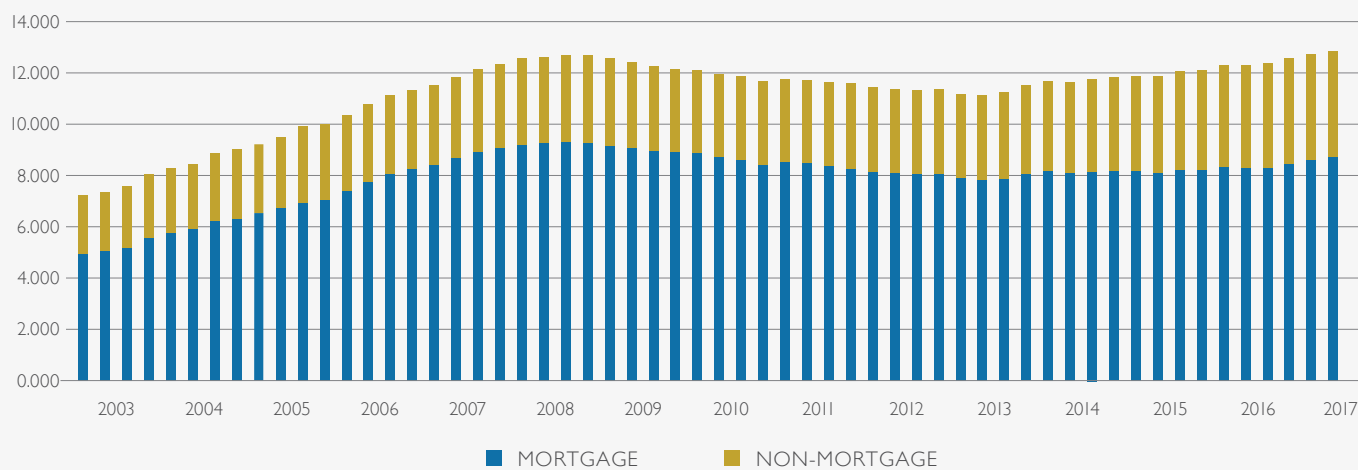
Economists, business leaders, and politicians tend to view rising debt positively. Increased borrowing can signal improved creditworthiness of consumers, which can support additional consumption. It is also often seen as a sign that lenders and borrowers alike are confident about their economic futures. Several recent trends, however, have raised concerns that debt is becoming more detrimental to households' financial security than in the past (Boshara, 2016; Dunn & Mirzaie, 2015). Since 2008, the composition of consumer debt has shifted away from mortgages and toward student and auto loans (Federal Reserve

Bank of New York, 2017), which are less effective long-term wealth-builders. While higher education boosts earnings, student loans themselves do not, and high default rates indicate that they actually decrease the wealth of millions of borrowers. Additionally, non-loan debt resulting from various types of overdue bills and fines appears to be a material threat to households' financial security and is addressed in depth in Part 3. It is important to note that these trends do not apply equally across all demographic groups. This section also explores how factors such as geographic location, income, age, and race and ethnicity impact household's use of credit and debt, as well as the impact of debt on financial security.

HISTORICAL TRENDS

From the 1950s until the 1970s, debt rose as a rising number of households gained access to finance and financial services innovations led to new products. In 1950, across all income groups, a household's debt was on average less than 40% of its income (Kuhn, Schularick, & Steins, 2017). By 1971, this remained true for the poorest households, but the ratio rose for upper middle-class Americans (those in the 60th to 90th percentile of household income) whose debt-to-income ratio reached 60% as homeownership rates rose began to take on housing debt (Kuhn, Schularick, & Steins, 2017). This trend continued forward, with the DTI for the same income bracket rising to 140% in 2013. Although the emergence of credit cards and other forms of unsecured credit contributed to increasing debt, mortgages were the driving force. Between 1971 and 1992, households' median DTI increased because housing values rose at a faster rate than incomes. After 1992, debt continued

FIGURE 5: Aggregate Outstanding Household Debt (Trillions of Dollars)



Data source: Federal Reserve Bank of New York, Household Debt and Credit Report, 2017Q3

TABLE 1: Household debt by prevalence and outstanding balance (billions of dollars)

	MORTGAGES	STUDENT LOANS	AUTO LOANS	CREDIT CARDS	HELOCS	OTHER	TOTAL
Outstanding balance	\$9,190	\$1,360	\$1,210	\$810	\$450	\$390	\$12,950
Proportion of total debt	67%	11%	9%	6%	4%	3%	100%

Data source: Federal Reserve Bank of New York, Household Debt and Credit Report, 2017Q3

to grow as credit standards relaxed. More borrowers purchased homes and people took out larger mortgages (Kuhn, Schularick, & Steins, 2017). Increases in non-mortgage debt have been most pronounced for low-income households. Since 1992, relatively poorer households (those in the bottom 60% of the income distribution) have seen increases in debt as a percent of household assets due to rising consumer debt (Kuhn, Schularick, & Steins, 2017).

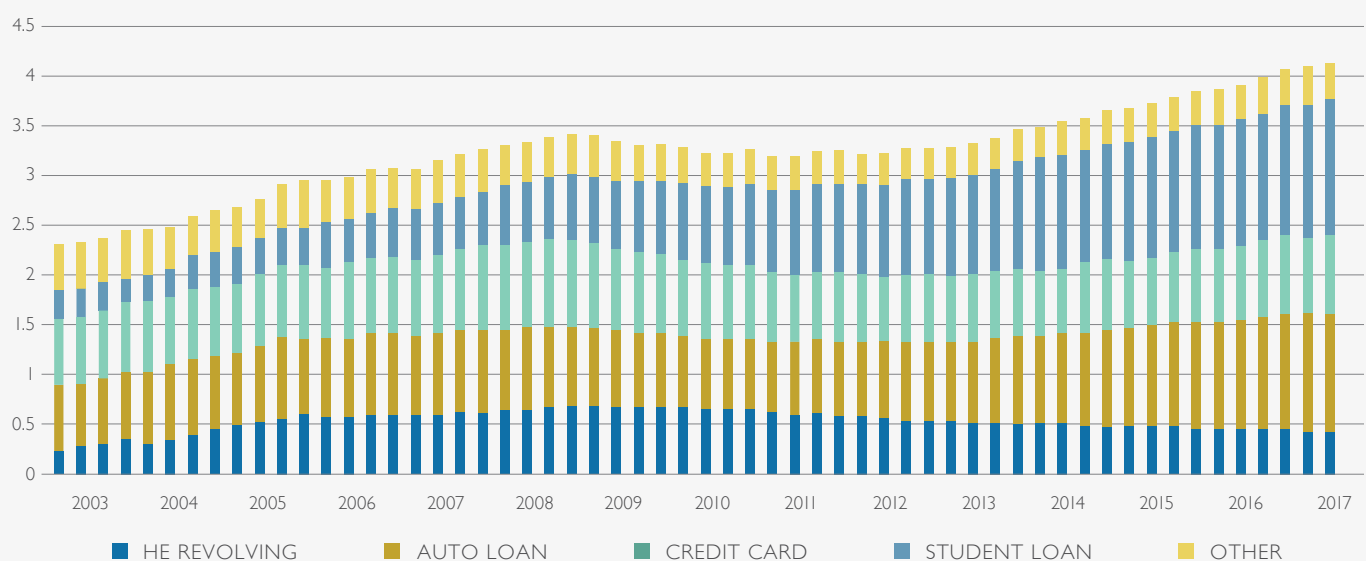
Rather than improving household well-being as it had done in past decades, consumer debt reached a tipping point during the Great Recession. In 2008, Cynamon and Fazzari observed that unprecedented household debt had culminated in a financial crisis that was threatening to cause a deep recession. Increased access to credit may have imperiled some households because of increases to their debt service burden (their scheduled repayments on all loans). The mortgage crisis had an enormous impact on all types of consumer debt, as households significantly “deleveraged” (reduced their outstanding debt) during the recessionary period. Consumer debt declined for 19

consecutive quarters starting in late 2008 (Corkery & Cowley, 2017), despite the massive growth of student loans beginning in 2010 (Federal Reserve Bank of New York, 2017). Total per-capita debt declined through the second half of 2013 before resuming its long-term growth trend (Schlagenhauf & Ricketts, 2016). The vast majority of that growth (90%) is due to rising student and auto loans (Schlagenhauf & Ricketts, 2016).

CONSUMER DEBT TODAY

Consumer debt has now risen for 12 consecutive quarters and has surpassed the high levels that preceded the Great Recession. In the third quarter of 2017, aggregate household debt was \$12.96 trillion. Two-thirds of this was the amount owed on mortgages, with the remainder in student loans (11%), auto loans (9%), credit cards (6%), home equity revolving lines of credit (4%), and other consumer finance and retail loans (3%) (Federal Reserve Bank of New York, 2017). Table 1 presents the full range of debts, while the following graph displays those that are most relevant to this report: student loans, auto loans, credit cards, and other.

FIGURE 6: Aggregate Non-Mortgage Debt by Type (Trillions of Dollars)



Data source: Federal Reserve Bank of New York, Household Debt and Credit Report, 2017Q3

The incidence of consumer debt is widespread. In the 2016 Survey of Consumer Finances, 77% of Americans reported holding some form of debt. This report also found that, for the first time since 1998, households with credit card debt (44%) outnumbered those with a mortgage (42%) (Bricker, et al., 2017). The next most-common types of debt are vehicle loans (34%) and education loans (22%). The median reported amounts owed by type of debt were: mortgages (\$111,000), student loans (\$19,000), vehicle loans (\$12,800), and credit cards (\$2,300) (Bricker, et al., 2017).

The composition and levels of debt vary greatly based on geographic and demographic characteristics such as income, age, and race. The remainder of this section focuses on these variations.

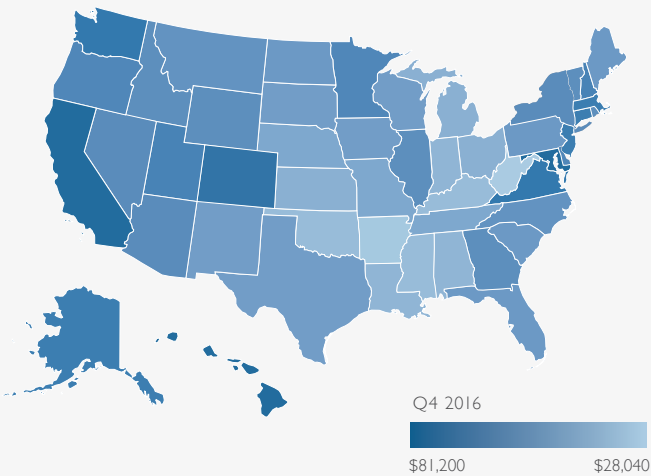
The Geography of Consumer Debt

Some types of debt show geographical variation while others do not. On the whole, debt is higher among residents of the Northeast and East regions of the country. Education debt is highest in the Midwest (Elliot & Nam, 2013). Medical debt is disproportionately more prevalent in the South, in part because of differential insurance coverage and regulatory practices (Khazan, 2017). These patterns tend to hold across types of debt, though median credit card debt is nearly uniform across regions (Elliot & Nam, 2013). A recent Experian analysis showed that the states with the lowest average credit scores tend to be clustered in the South and in the Southwest (Sullivan, 2018).

Consumer Debt by Income Quintile

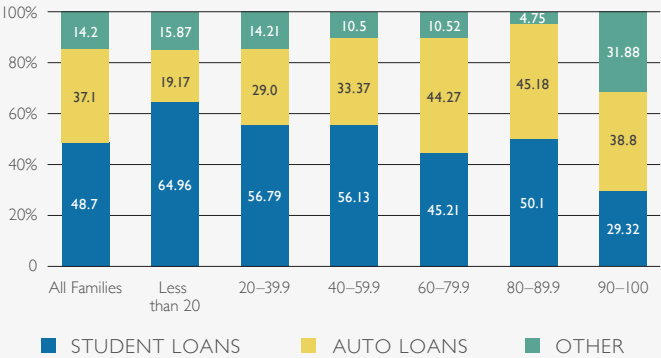
Household income, unsurprisingly, has a strong influence on how much and what types of debt households incur. Households in the middle of the income distribution tend to borrow most heavily. The lowest-income households have

FIGURE 7: Debt Balance per Capita



Federal Reserve Bank of New York, State-level Household Debt Statistics 2016

FIGURE 8: Distribution of Installment Debts by Percentile of Income



Data source: Federal Reserve, 2016 Survey of Consumer Finances

TABLE 2: Prevalence of debt types by percentile of income

PERCENTILE OF INCOME	ANY DEBT	PRIMARY RESIDENTIAL MORTGAGE	CREDIT CARD BALANCE	INSTALLMENT LOANS
All Families	77.1	41.9	43.9	50.2
Less than 20	57.7	14.3	29.0	35.7
20–39.9	70.7	26.0	41.8	44.5
40–59.9	84.1	40.5	53.0	57.0
60–79.9	88.3	59.4	52.9	60.3
80–89.9	89.0	71.2	51.5	61.2
90–100	80.6	67.3	34.3	45.7

Data source: Federal Reserve, 2016 Survey of Consumer Finances

TABLE 3: Median debts owed by percentile of income

PERCENTILE OF INCOME	ANY DEBT	PRIMARY RESIDENTIAL MORTGAGE	CREDIT CARD BALANCE	INSTALLMENT LOANS
All Families	\$60,000	\$111,000	\$2,300	\$17,000
Less than 20	\$10,400	\$50,000	\$800	\$10,000
20–39.9	\$23,300	\$63,000	\$1,700	\$12,000
40–59.9	\$42,300	\$89,000	\$2,000	\$16,000
60–79.9	\$103,000	\$114,000	\$3,000	\$21,400
80–89.9	\$170,300	\$157,000	\$4,800	\$25,000
90–100	\$299,000	\$268,000	\$6,000	\$28,000

Data source: Federal Reserve, 2016 Survey of Consumer Finances

TABLE 4: Debt-to-income and leverage ratios by percentile of income

INCOME PERCENTILE	DTI RATIO	LEVERAGE RATIO
0-20	2.4	17.8
21-40	1.5	21.3
41-60	1.4	22.5
61-80	1.4	22.7
81-90	1.4	18.7
91-100	0.8	6.8

Data source: Federal Reserve, 2016 Survey of Consumer Finances

TABLE 5: Prevalence of debt types by age range

AGE	CREDIT CARD	STUDENT LOAN	AUTO LOAN	ANY
Less than 35	45%	64%	27%	81%
35–44	49%	53%	36%	86%
45–54	52%	43%	33%	87%
55–64	41%	38%	51%	77%
65–74	42%	17%	63%	70%
75 or more	26%	*	63%	50%

Data source: Federal Reserve, 2016 Survey of Consumer Finances

the lowest levels of debt, but a greater than average proportion is from credit cards, other high-cost unsecured loans, and unpaid bills (Pew Charitable Trusts, 2015-A). The highest-earning households tend to concentrate debt in home mortgages. Differences are somewhat less stark when excluding mortgages, but the general pattern remains.

The relationship between a household's debt and the rest of its balance sheet varies widely by income as well. While lower earners carry less debt, that debt represents a greater proportion of their income, reflected in higher DTI ratios than those of higher earners. These households also have lower leverage ratios (the proportion of total assets financed by debt) than middle-income households; less of their debt is used to purchase assets because fewer of these households are homeowners. In the middle of the income distribution, DTI and leverage ratios are relatively compressed, in part because middle-class households tend to borrow proportionally to their income to finance education and homeownership. It is notable that those earning between the 81st and 90th percentile have DTI and leverage ratios more similar to those of middle-class households than those of the top 10%. The table below provides a breakdown of DTI and leverage ratios by income percentile.

When examining consumer debts held by lower-income households, several themes emerge. One is that it is nearly impossible to avoid. In one study of households with average annual income below \$20,000, 93% held some debt (Grinstein-Weiss, et al., 2015). Another theme is that debt is less productive for lower-income households, both because a greater proportion of their debt is unsecured and because they have less equity in their assets. In the same study of low-income households, the most common forms of debt were credit card (69%), followed by student loans (56%), medical debt (38%), auto loans (32%), and past-due bills (29%). Another study of low- and moderate-income women found that overdue utility bills was the most common type of debt (owed by almost 75%) (Seefeldt, 2015).

Consumer Debt by Age

The composition and amount of debt also varies by age group. Among young adults, student loan and credit card debt predominate and debt-to-income ratios (DTI) are high. The highest incidence of debt is amongst those age 34-49 (89%), with the majority of those (56%) carrying a mortgage loan. Elderly households tend to hold less unsecured debt, as well as less debt overall. However, the incidence of debt among older

Americans is currently higher than the historical average, with more than half (56%) of retirees reporting having debt (Pew Charitable Trusts, 2015-A). An additional variable in inter-generational comparisons is that the timing of home purchases, which has changed over time, contributing to very different debt profiles by birth cohort (Pew Charitable Trusts, 2015-A).

Consumer Debt by Race and Ethnicity

There are stark differences in the composition and levels of debt by race and ethnicity. These disparities reflect a history of discrimination against people of color; structural inequalities in access to quality education, good jobs, and affordable financial services; and differing drivers of immigration to the United States from different areas of the world and over different periods of time.

While black, Latino, and Asian households are roughly as likely as white households to carry debt, their debt composition is vastly different. Debt held by whites is more likely to be mortgage debt than that of blacks and Latinos, and is twice as large (Pew Charitable Trusts, 2015-B), reinforcing white households’ historical advantages over these demographic groups in building wealth. White households demonstrate a higher capacity to purchase assets outright and build equity in the assets they possess more quickly as a result. One analysis of debt-to-asset ratios, for example, found that black and Latino household

leverage is roughly 20 percentage points higher than that of white households (Boshara & Emmons, 2016).

Predatory and discriminatory lending practices also play a role in the different debt profiles of different racial and ethnic groups. When controlled for income level, three times as many blacks as whites report taking out a high-interest payday loan (Kiel & Waldman, 2015). When it comes to more mainstream forms of credit, interest rates charged to borrowers have been

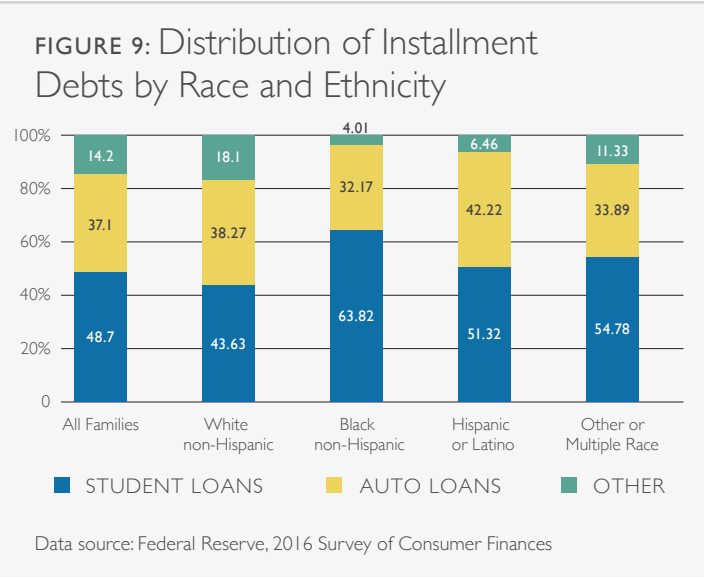


TABLE 6: Prevalence of debt types by race and ethnicity

RACE OR ETHNICITY	ANY	PRIMARY RESIDENTIAL MORTGAGE	CREDIT CARD BALANCES	INSTALLMENT LOANS
All families	77.1%	41.9%	43.9%	50.2%
White non-Hispanic	77.5%	46.4%	42.1%	49.4%
Black or African-American non-Hispanic	77.1%	31.9%	47.8%	54.2%
Hispanic or Latino	74.0%	31.5%	49.6%	46.0%
Other or Multiple Race	77.9%	37.9%	44.1%	53.8%

Data source: Federal Reserve, 2016 Survey of Consumer Finances

TABLE 7: Median debts owed by race and ethnicity

RACE OR ETHNICITY	ANY	PRIMARY RESIDENTIAL MORTGAGE	CREDIT CARD BALANCES	INSTALLMENT LOANS
All families	\$60,000	\$111,000	\$2,300	\$17,000
White non-Hispanic	\$74,100	\$115,000	\$2,700	\$17,000
Black or African-American non-Hispanic	\$31,400	\$78,000	\$1,400	\$19,000
Hispanic or Latino	\$30,000	\$99,000	\$1,700	\$15,800
Other or Multiple Race	\$56,600	\$150,000	\$2,400	\$16,300

Data source: Federal Reserve, 2016 Survey of Consumer Finances

found to differ substantially by race even when controlling for other factors (Chiteji, 2010). Similarly risky borrowers of different races, holding credit cards with similar characteristics and debt levels, pay substantially different interest rates, both across card issuers and from the same firms (Stango & Zinman, 2015).

Table 6 breaks down consumer debt by type and race and ethnicity. It demonstrates that households of color are less likely to have debt that supports the long-term development of wealth and tend to carry more high-cost debt. It reveals differences between non-white racial groups that are sometimes obscured in analyses of the racial wealth gap, such as the higher prevalence of student debt among black households than Latino households.

The table also highlights the relative lack of analysis of the debts of racial groups other than white, black, and Latino. There are comparatively fewer analyses of Asian households, and fewer still address Native Americans and mixed-race households.

Racial disparities are especially large for student loans, which is troubling given their intended role as a facilitator of economic mobility. Black students, for example, take on more debt than others while they are in school (Houle, 2014). When they complete their degree, black graduates owe on average \$7,375 more in student loans than whites, but this gap triples to \$25,000 within just four years (Scott-Clayton & Li, 2016). The gap grows rather than shrinks because white graduates have

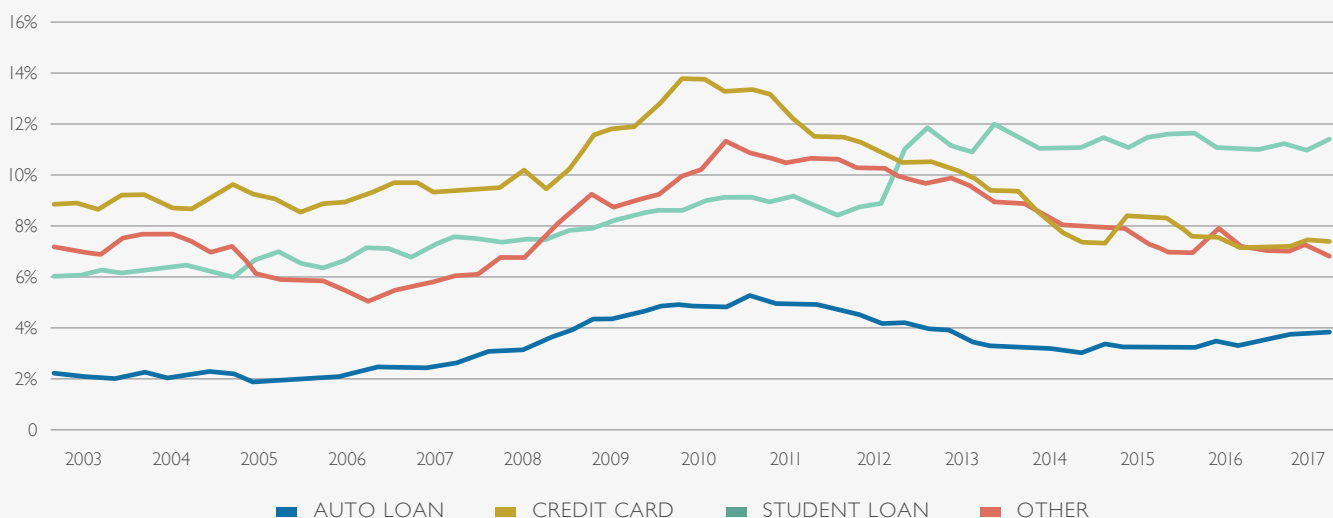
higher rates of repayment, lower interest rate accruals, and borrow less to attend graduate school, indicating that disparities in income and employment may play a role. These differences may have a negative impact on whole communities of color, not just individual households. Zip codes with higher shares of African-Americans or Latinos, for example, have higher student loan delinquency rates than predominantly white zip codes, particularly within middle-income zip codes with different racial compositions (Steinbaum & Vaghul, 2016).

Households of color are less likely to have debt that supports the long-term development of wealth and tend to carry more high-cost debt.

Trends in repayment and delinquency

An important contributor to the composition and levels of household debt is the ability to regularly make full on-time payments and avoid interest accruals, fines, and delinquency. Credit cards provide a strong example of the relationship between monthly payment history and total debt. Credit card holders tend either to pay off their bills in-full each month (and are thus not included in the tallies of consumer debt) or make just the minimum required payments with very few intermediate payment amounts. Of credit card holders, more than 29% are “transactors” who use their cards regularly but never carry

FIGURE 10: Percent of Balances 90+ Days Delinquent



Data Source: Federal Reserve Bank of New York, Household Debt and Credit Report, 2017Q3

a balance from month-to-month, while 43% are “revolvers” who carry balances (the remainder have dormant accounts) (American Bankers Association, 2017). One factor that contributes to revolvers’ balances is repayment behaviors; nearly one in three credit card holders regularly make payments at or near the minimum (Keys, B. & Wang, J., 2014). Research indicates that some may perceive that the minimum is the suggested payment amount, or use anchoring heuristics when at a loss for how much to pay (Keys, B. & Wang, J., 2014). These repayment behaviors increase the cost of borrowing and can lead to rising levels of debt over time.

For borrowers with multiple debts, prioritizing how and when to pay each one can also impact the cost of borrowing and level of debt accumulated. Homeowners tend to prioritize mortgage payments above all else. Borrowers also tend to prioritize auto loan payments (Komos, et al., 2012) While it makes sense to focus debt payments on protecting one’s assets and building equity, many borrowers irrationally prioritize unsecured debts. For example, borrowers appear to prioritize medical bills over car loans and credit cards, although medical care cannot be rescinded, medical debt is not listed on credit reports for 180 days rather than the standard 60-90 days, cars can be repossessed, and credit card limits can be slashed (Abramowicz, 2017).

This delinquency rate trends show the extent of households’ recovery since the recession, but also point towards some worrying trends. At around 2% in 2015, credit card delinquencies were at their lowest level since tracking began in 1991. The share of student loans 90 or more days delinquent rose from 8.7% in 2013 (Freedman & Schwenninger, 2015) to 11.2% in 2017 (Federal Reserve Bank of New York, 2017). As of September 2017, 4.0% of auto loan balances were 90 or more days delinquent, up from 3.0% three years prior (Federal Reserve Bank of New York, 2017). Credit card and auto lenders are reporting surprisingly steep deterioration in repayments and credit worthiness (Abramowicz, 2017) and the New York Federal Reserve recorded notable increases auto and credit delinquency rates (Federal Reserve Bank of New York, 2017).

While delinquency is undoubtedly a negative outcome, it is important to note that it does not mean permanent or persistent cessation of payment. Consumers who become delinquent on credit card or other unsecured debt are often able to return to good standing. Of those who are 60-90 days late on payments of unsecured debt, 85% later make payments and avoid more severe delinquency (Athreya, et al., 2016). Moreover, 40% of this same group have less outstanding debt when observed

a quarter later. This ability for some to recover can likely be attributed to a combination of having made some payments and having received some degree of debt forgiveness or cancellation. Credit card lenders often have greater discretion to impose fees and penalty interest rates in response to late and missed payments, and retain more flexibility to restructure and even forgive some debt in order to create a sustainable payment plan or even forgive some portion of the debt (Athreya, et al., 2016). When it comes to secured debt, recovery rates vary. For auto loan delinquencies in 2016, prime loans had a recovery rate of 52%, and subprime and subprime-modified loans had recovery rates of about 42% (Martin, Khandelwal, & Detweiler, 2017).

PART 3: THE RISE OF NON-LOAN DEBT

This section discusses the role of non-loan debt as a source of financial insecurity, including medical debt, utilities debt, debt from other overdue bills, fines and fees assessed by governments, and other debts in collections. While borrowing is the most conventional path to household debt, other expenses may push families into debt without borrowing. These types of expenses tend to result from emergencies, income shocks, expense shocks, or persistent inability to make ends meet. While recent research and policy campaigns have highlighted the negative impacts of medical debt and fines and fees, non-loan debt remains a relatively under-studied problem despite posing disastrous consequences for households that have it.

It can be difficult to assess the scale of the problem of non-loan debt because consumers may be unaware that they have debt from overdue bills, or not understand how much they owe, until negative information appears on credit reports or they begin hearing from collections agencies (Brown, M., et

TABLE 8: Proportion of consumers with debt in collections with medical, telecom, and utilities tradelines

ANNUAL HOUSEHOLD INCOME	MEDICAL	TELECOM	UTILITIES
Less than \$20,000	61%	42%	35%
\$20,000–\$40,000	62%	42%	26%
\$40,000–\$70,000	58%	26%	24%
\$70,000 or more	54%	26%	24%

Data source: CFPB, Consumer Experiences with Debt Collection

al., 2015). Collections information included in consumer credit reports is a primary source of data on non-loan debt, but it has limitations. A majority (68%) of all collections tradelines are for unpaid bills reported on accounts that originated with a healthcare provider, utility company, or telecommunications company (Consumer Financial Protection Bureau, 2014). However, utilities firms (Howat, 2009) and nonprofit healthcare providers (James, 2016) tend to initiate collections actions more slowly than other creditors, reducing the amount of non-loan debt owed that appears on consumer credit reports. While there are challenges in measuring non-loan debt, it is one of the strongest indicators of financial distress; having it often reflects underlying financial vulnerabilities, while the challenges of addressing these debts directly undermines financial security.

MEDICAL EXPENSES

In 2015, 24% of non-elderly households (ages 18-64) reported having medical debt (Urban Institute, 2016). The primary driver of medical debt is out of pocket medical costs. These costs make up an increasingly large portion of household expenses, impact credit scores, and are a growing contributor to debt-related financial insecurity. Americans currently pay a total of \$3.4 trillion dollars in medical care, with the average household expected to pay \$15,000 annually in 2023; this would be a 50% increase from 2015, when out of pocket care cost roughly \$10,000 per family (U.S. Centers for Medicare and Medicaid Services, 2015). Medical expense shocks are fairly common, with one study finding that 16% of families make at least one “extraordinary large” medical payment per year (Farrell & Greig, 2017).

Medical debt can be a source of financial insecurity even at relatively low levels and even for consumers who otherwise have healthy credit history and manageable debts.

It can be difficult to measure total medical debt because households cover these costs using a variety of credit products, few of which are used exclusively for medical borrowing. To understand the scope of the problem, researchers have often turned to analyzing consumer credit records for medical debt in collections. A CFPB study of these records found that medical expenses are a major component of debt in collections,

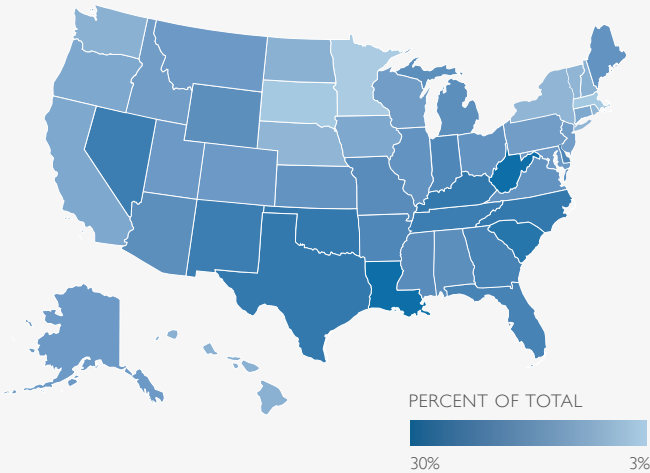
accounting for over 52% of all collections tradelines (Consumer Financial Protection Bureau, 2014). The researchers found substantial differences in indebtedness among those whose only debt in collections was medical, those whose only debt in collections was non-medical, and those who had both types of debt in collections. Those with only medical debts owed significantly less on average than the other groups (see table below).

The study’s results indicate that medical debt can be a source of financial insecurity even at relatively low levels and even for consumers who otherwise have healthy credit history and manageable debts. Additionally, more than half of consumers with medical debt in collections had otherwise clean credit histories (Consumer Financial Protection Bureau, 2014). These findings indicate that a relatively small proportion of consumers with debt in collections have financial difficulty because of catastrophically high costs, while millions of others find themselves struggling to pay off obligations of less than \$500.

While medical insurance is designed to mitigate expensive and sudden medical expenses, having insurance does not necessarily protect a household from medical debt. Medical debt tends to accumulate when households face one or more of the following conditions: lack of health insurance, insurance that does not fully offset expenses, bills that are confusing and difficult to understand, or payments that are required to be lump-sum (Consumer Financial Protection Bureau, 2014). An Urban Institute study supported the notion that insurance alone does not adequately protect against medical debt, finding that 7 in 10 individuals with medical debt had medical insurance at the time the debt was incurred (Karpman & Long, 2015). Another study by the Urban Institute identified the populations most encumbered with medical debt, and found that 23.8% of non-elderly adults (aged 18 to 64) reported having past-due medical debt in 2015. The incidence of unpaid medical bills in disproportionately concentrated in the South, likely because many Southern states chose not to expand Medicaid (Karpman & Caswell, 2017; Khazan, 2017).

Medical debt is clearly a financially destabilizing force for those who experience it, but the dynamics of medical debt may be shifting. The past several years have seen improvements in the amount and negative impact of medical debt: the proportion of households with medical debt fell nearly six percentage points between 2012 and 2015 (28.2% to 23.7%), as insurance rates rose nationwide due to the Affordable Care Act (ACA) (Karpman & Caswell, 2017). Additionally, in fall of 2017, the three major credit reporting agencies agreed to provide individuals with a 180-day grace period before medical debts reported will appear

FIGURE 11:
Population with Medical Debt in Collections



Data source: Urban Institute, Debt in America

on credit reports (Andrews, 2017). Yet, there are concerns that the repeal of ACA's insurance mandate will drive up costs for millions of households, as some forego coverage and marketplace plans rise in cost in response to declining enrollment (Fiedler, 2017).

Figure 11 shows where people are most likely to report having overdue medical bills (Urban Institute, 2016); seven of the 10 states with the highest proportions have not expanded Medicaid (Families USA, 2018).

FINES AND FEES LEVIED BY STATE AND LOCAL GOVERNMENTS

In recent years state and local governments have increasingly turned to fines and fees as a method of generating revenue. Existing research on these practices is scarce, but the issue has recently garnered attention from policymakers, journalists, consumer advocates, and academics.

Public awareness of this issue has been heightened since 2015. In the wake of Michael Brown's killing by a police officer in Ferguson, Missouri, the U.S. Department of Justice (DOJ) investigated the root causes of black residents' dissatisfaction with and distrust of local government institutions and their predominantly white leaders. The Ferguson Report found that government managers in Ferguson and other St. Louis-area municipalities "budget for sizeable increases in municipal fines each year... [and] extort police and court staff to deliver [these] revenue increases" (U.S. Department of Justice, 2015). An earlier report by a local advocacy group found that in 2013, the

city issued 33,000 arrest warrants for nonviolent offenses such as driving violations—despite being home to just 21,000 residents (ArchCity Defenders, 2014).

This situation is not unique to Ferguson or Missouri. These practices occur in certain communities, particularly lower-income areas and segregated communities of color. Some cities have become infamous for the lengths they have gone to extract revenue from these communities, including ticketing residents for walking on the wrong side of the crosswalk, barbecuing in their yards, or having mismatched blinds (Davey, 2015). *ProPublica* explored how state and local government fines can create and compound debt-related financial challenges, particularly for black residents (Kiel, 2015). They found that failure to pay a single speeding ticket could lead to financial disaster. Most states suspend the licenses of drivers with overdue tickets; faced with the choice between driving to work on a suspended license or losing their jobs, many choose to maintain employment. Those who are caught may be arrested, often face jail time, and incur further costs from the court system, bail, and legal expenses. *ProPublica* also identified cascading effects, as paying these debts lead to failures to make subprime auto loan payments, car repossession, and garnishment of wages (Kiel, 2015).

Debt resulting from involvement with court systems has mounted in recent years. This trend coincides with both a dramatic increase in debt buyers' use of lawsuits to collect on debts they purchase (Smith, Campbell, & Kavanagh, 2017) and increased regressivity of state and local taxes (Bastien, 2017). A recent analysis by the National Center for State Courts found low-income offenders across the country are faced with legal system fines and fees that they cannot afford, leading to additional fees, late charges, and mounting debt from high-interest payment plans. Small initial fees can quickly snowball, and incarceration has become an increasingly common response, even when jail time is not a mandatory penalty (Smith, Campbell, & Kavanagh, 2017). Consequences of unpaid court debt include both drivers license suspension and wage garnishment, which can create a vicious cycle of financial distress for those who already face tenuous employment or insufficient income (Salas & Ciolfi, 2017).

OTHER OVERDUE BILLS

Approximately one-third of delinquent accounts result from unpaid bills (VanSomeran, 2017). Medical, phone, and utilities bills are the most frequent delinquent bills listed on credit reports—all expenses that consumers often have little choice but to incur (Consumer Financial Protection Bureau, 2017-A).

When it comes to utilities, households generally have no choice of provider or ability to shop for better rates. And while mobile phone ownership could once have been classified as frivolous, they are now all but necessary for employment and internet access. Mobile phones are especially important for lower-income and households of color: they are more likely to depend on their phone for internet access, banking, and job applications (Anderson, 2015). Getting behind on these payments can have disastrous consequences, which only worsen when they are reported to credit bureaus. Although these bills make up larger shares of expenses for poorer Americans, they do little to help build credit. Utility, cellphone, and medical expense payments tend to only be reported on credit scores when there are negatives to report such as late payments, collections, or charge-offs.

PART 4: IMPACTS OF CONSUMER DEBT ON BORROWERS AND THE BROADER ECONOMY

This section identifies how consumer debt impacts those who carry it and the economy as a whole. While acknowledging that many of the impacts of consumer debt are positive, the section devotes greater attention to the negative impacts that are prevalent, large in magnitude, and closely associated with financial insecurity. For households, these include effects on financial wellbeing and distress, wealth accumulation, and

effects on health and family relationships. As in other areas, households of color are disproportionately likely to experience these challenges. For the economy, negative impacts include debt-driven business cycles and asset bubbles, but evidence indicates that mortgages are the primary driver of these effects. Other consumer debts appear to have a more limited, though still substantial, impact on the macroeconomy. Aggregate levels of auto and student loan debt, for example, can serve as drags on economic growth, but may not constitute the systemic threat that mortgages represent.

IMPACT ON HOUSEHOLDS

Debt presents a dilemma for societies: we need debt to make our lives go well, but we also need to avoid debt to make our lives go well; there are perils in both availability and restriction (Linarelli, 2016). This section explores areas where consumer debt has particularly large positive and negative impacts, depending on the type of debt and the borrower's individual situation. These include financial distress, household wealth, and non-financial impacts on health and family.

Impacts on financial distress

Understanding when and how consumer debt contributes to financial insecurity requires a more precise definition of both financial wellbeing and financial distress. The CFPB defines financial wellbeing as “as a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life (Consumer Financial Protection Bureau, 2015-B).” The concept of financial sustainability is similar: a household can be considered financially sustainable if its consumption can be maintained through both working and retirement years without leading to negative net worth at life's end (Cooper, Cynamon, & Farazzi, 2016). Financial distress is often simply understood as the lack of financial wellbeing. One more precise definition comes from the Pew Research Center's financial security index, which measures financial insecurity in terms of lack of access to financial products, difficulty paying bills, inability to afford housing or medical care, need to rely on others to make ends meet, and eligibility for means-tested benefits (Pew Research Center, 2015-B).

Carrying consumer debt is not an inherent signal of insecurity or unsustainability, particularly when borrowing patterns roughly conform to expectations under the lifecycle model. Indeed, among Americans under age 50, the most financially stable are those with the most debt, but the relationship between total debt and financial security is reversed over time. Among the oldest Americans, those with the least debt

Quick Look

Financial distress: “We created a scale of financial security, based on 10 interrelated items... six of the items on the scale are measures of financial insecurity, including two items measuring the receipt of means-tested benefits (SNAP benefits, Medicaid), as well as four measures of financial stress (having trouble paying bills, affording housing or medical care or borrowing money from family or friends.” Source: *Pew Research Center*

Financial sustainability: “A household is sustainable if its current consumption path can be maintained through its remaining working and retirement years without leading to negative net worth in its terminal year.” Source: *Cooper, Cynamon, & Farazzi*

Financial wellbeing: “A state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life.” Source: *Consumer Financial Protection Bureau*

are among the most financially secure (Pew Charitable Trusts, 2015-A). Consumer debt can, however, contribute to financial unsustainability by reducing the amount of income available for consumption.

Consumer debt is most likely to cause financial distress when the household has a high debt burden. There is a subjective element to determining whether a household's debt is overly burdensome, as borrowers have different thresholds at which they consider themselves to be suffering from unacceptable sacrifices to meet their payment obligations (Schicks, 2010). Objectively, having a high amount of unsecured debt is associated with lower ability to cover monthly expenses, lower ability to come up with funds in the event of financial emergency, and less saving (Grinstein-Weiss, et al., 2015). At times the type of debt matters at least as much as the amount of debt. Simply having credit card debt means a greater likelihood of being called by debt collectors, entering into debt settlement agreements, and having credit scores reduced, all of which greatly restrict access to other forms of credit (Traub, 2014). Those with high-cost forms of debt are more likely to experience financial challenges (Gathergood & Guttman-Kennedy, 2017). In fact, one of the strongest predictors of financial distress is the use of short-term non-bank loans such as payday and auto title loans (Consumer Financial Protection Bureau, 2017-B). The relationship between debt and other financial resources also makes a difference: households in the top decile of debt-to-income ratios are three times more likely than those with the median burden to suffer financial distress in the future (Gathergood, & Guttman-Kennedy, 2017).

Carrying too much debt can create a rapid downward spiral for indebted households. Borrowers not able to keep up with payments can face cascading consequences. Total debt may rise due to penalty fees and accruing interest. Households may see reduced credit limits and lose access to more affordable forms of credit (myFICO). Debtors may also find themselves entangled in expensive court proceedings. Since the Great Recession, creditors have increasingly used the courts to pursue millions of people over even small consumer debts. Debt buyers have emerged as one of the biggest users of civil courts, with "debt collectors, payday lenders, credit card companies, and medical companies entering civil courts at alarming rates" (McGrath, 2016). Lawsuits often lead already distressed borrowers further into debt from both the cost of involvement in the legal system as well as judgments in favor of lenders (McGrath, 2016). These practices have the greatest negative impact on low-income Americans, and disproportionately harm people of color. Some academics have argued that legal fines and fees directly

contribute to income inequality and racial disparities in financial security (Fergus, 2017). Recognizing the degree to which debt collection suits harm consumers, the Conference of State Court Administrators in 2016 released a policy proposal calling for the end of "debtors prisons," and recommended changes to revenue collection practices (Pepin, 2016).

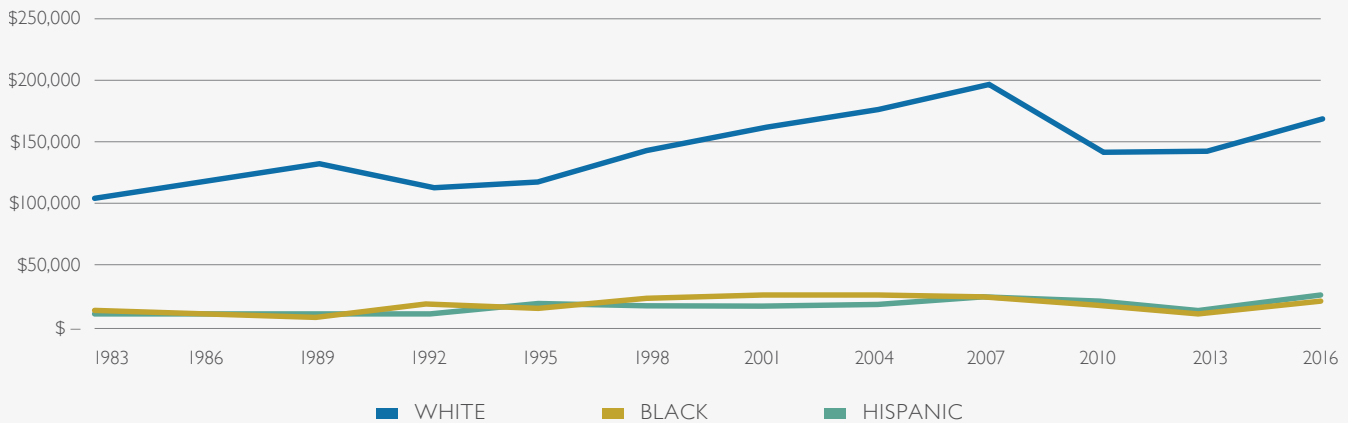
Carrying too much debt can
create a rapid downward
spiral for indebted households.
Borrowers not able to keep
up with payments can face
cascading consequences.

Garnishment, a court order that permits seizure of wages, tax refunds, and other payments to satisfy outstanding debt, is among the most severe negative consequences. Of those who are sued over their debts, the vast majority do not respond to court summons, ensuring automatic wins for plaintiffs and, frequently, garnishment orders (McGrath, 2016). As is the case with state and local fines and fees, garnishments are concentrated among lower-income and black households (Kiel & Waldman, 2015).

The ultimate negative consequence of debt is insolvency, which may lead a household to file for bankruptcy. Bankruptcy is the legal process through which debts that cannot be repaid may be discharged or restructured. Secured creditors (such as mortgage and vehicle lenders) keep some or all their claims against the collateral; unsecured creditors (most often credit card companies) have second priority and may not receive compensation at all (Dobbie & Song, 2013). Federal student loans have long been non-dischargeable in bankruptcy, as these loans are not underwritten based on risk; since 2005, private student loans are also non-dischargeable (Alexandro & Jiménez, 2017).

Bankruptcy filers' outcomes generally depend on the type of bankruptcy they pursue (Chapter 7 or Chapter 13), the amount and types of their remaining assets, their ability to successfully negotiate the bankruptcy court system, and their state's laws regarding asset exemptions, income protections, and garnishment limits. Chapter 7 bankruptcies are means tested based on income and account for most individual filings. Under this process, filers who are homeowners may be able to keep their homes, but most assets are forfeit in exchange for the full discharge of debts (except for student loans, support payments,

FIGURE 12: Median Family Wealth by Race/Ethnicity, 1983–2016



Data source: The Urban Institute, *The Changing Wealth of Americans*

taxes, and a few other exceptions) (United States Courts). Most Chapter 7 filers have very few assets: unsecured creditors only receive payments in seven percent of these cases, with a median recovery of \$3,416 (Jiménez, 2009).

Chapter 13 is quite different, as it involves court-supervised repayment plans rather than discharging debts. Filers negotiate with creditors to restructure their debts and a bankruptcy judge approves a repayment plan that determines affordability based on the filer's disposable income (United States Courts). This is often appealing to homeowners (Dobbie & Song, 2013). They are often subject to wage garnishment at this point. As with Chapter 7, student loan debts are exempt from discharge and some assets can be exempt. The majority of Chapter 13 filers are ultimately unable to make all payments under their plan; when this occurs, their cases are dismissed and borrowers are once again liable for the full amount of all their debts (Lefgren & McIntyre, 2009).

Impacts on household wealth

Consumer debt has the potential to enable wealth-building, but it also carries the risk of severe negative consequences for a household's net worth. At times the outcome depends primarily on the borrower's debt management skills and repayment behaviors. But it can often be difficult for households to accurately predict or control the degree to which their debt supports wealth-building or saps their ability to save, acquire assets, or maintain sustainable levels of debt. It is not unusual for several of these factors to occur simultaneously, further complicating households' ability to anticipate the impact of various debts they incur.

The belief that debt helps pave the path to future wealth supports the traditional view that that households will incur significant debt as part of the normative life cycle. In fact, the rapid rise in credit availability early in adulthood means that younger borrowers effectively become wealthier through credit increases (Fulford & Schuh, 2015). That benefit, however, depends on access to high quality, affordable credit as well as the ability to repay one's first debts. Younger people with lower incomes and net worth typically pay more for credit, meaning they have fewer opportunities to build assets (The Pew Charitable Trusts, 2015-A).

Certain forms of debt are well-suited to supporting wealth-building—generally mortgages and student loans—but these benefits are also unevenly distributed. Mortgages are the primary engine for U.S. households' wealth accumulation, with the median net worth of mortgage-holders 44 times the median net worth of renters (\$231,400 to \$5,200) (Bricker, et al., 2017). The wealth benefits of homeownership are unevenly distributed, however, with borrowers of color (particularly black and Latino households) experiencing higher debt-to-asset ratios (Dettling, et al., (2017), slower gains in home values (Metz, 2016), and at times unjustifiably less advantageous loan terms compared to white borrowers (Lin, 2015).

Student loans are the other category of debt generally viewed as supportive of wealth-building because of the strong return on future earnings. Among adults over age 25, those with bachelor's degrees earn 60% more than those with a high school diploma (Baum, 2014). This translates into an advantage in wealth-building: the median net worth of college

degree-holding households (\$292,100) is 44 times greater than those with high school diplomas (\$6,710) or some college (\$6,610) (Bricker, et al., 2017). That said, the amount borrowed to finance a college degree has a major impact on its effectiveness as a wealth-building tool. Low-income, black, and Latino students tend to have higher debt-to-income and debt-to-asset ratios than others because they rely more heavily on student loans (Federal Reserve Board of Governors, 2017-B). Outcomes for those who borrow but do not earn a degree are far worse, particularly with regard to debt-to-income ratios and default rates (Woo, et al., 2017). Furthermore, the size of boosts to both income and wealth from higher education vary widely by occupation, sector, gender, and race (Baum, 2014).

Consumer debt is associated with both physical and mental health challenges. Research has linked debt to obesity, back pain, chronic illness and disability, depression, anxiety, substance use disorders, and suicide.

The unprecedented nature of student loan debt today has raised questions about the degree to which the benefits outweigh the costs. The proportion of students taking out education loans now exceeds 50%, double the rate in the 1980s. Today, the median loan balance is more than \$17,000, a 30% increase from 2010, when the median was \$13,000 (Akers, 2014). There are signs that those who have borrowed in the recent past are experiencing less positive outcomes from earlier borrowers. Among households under 40 without a college degree, those with no student loan debt have net worth nine times that of their peers with education debt (Fry, 2014). More student debt is associated with greater difficulty staying current on other debt obligations, a higher probability of restricted access to credit, and a greater likelihood of declaring bankruptcy, with these effects greatest among those who did not attain a degree (Gicheva & Thompson, 2013).

Student loan debt also appears to explain some or most of the decline in homeownership among those age 28-30 (Bleemer, et al., 2017). This and other changes in the distribution of debt has hindered home ownership for even creditworthy first-time buyers (Meen, 2011). Economists have found signs that

high student debt have contributed to slowdown in household formation and decline in early homeownership (Corkery & Cowley, 2017; Gicheva & Thompson, 2013). There is evidence that education borrowers are retreating from the auto loan market as well (Celik, 2017).

Most other forms of consumer debt are not effective wealth-building tools. Auto loans are unique in that they are secured by a depreciating asset. They can be considered to support wealth because of the importance of car ownership to maintaining employment, but do not directly contribute to increasing a household's net worth over time. Revolving credit facilitates consumption, not asset purchases. Non-loan debts, such as utilities bills in collections, are often a sign of a household's inability to cover expenses using current income and assets. Holding these debts can, in fact, reduce a household's ability to save in both the short- and long-term (particularly for retirement), depending on the amount of disposable income consumed by monthly debt payments. Heavy debt burdens can prevent some households from being able to purchase assets at all, while those who are able to purchase do so with less equity. Both conditions lead to lower overall net wealth.

Impacts on health, wellness, and family

Consumer debt can sometimes negatively impact people's lives in ways that are not reflected on their balance sheets. A large body of research demonstrates that debt is associated with reduced health and damage to personal relationships, but causality is often unclear.

Consumer debt is associated with both physical and mental health challenges. In a 2010 meta-analysis of more than 50 studies of the relationships between health and financial and socioeconomic status, nearly 80% found that being in debt was linked to poorer physical health (Richardson, Elliott, & Roberts, 2013). Studies included in the review found relationships between debt and obesity (Webley & Nyhus, 1992) back pain (Oschmann, et al., 2009), chronic illness and disability (Balmer, et al., 2006). The same meta-analysis examined the literature on mental health, finding statistically significant relationships between debt and substance use disorders, poorer self-rated mental health, higher rates of depression, anxiety, and suicide (Richardson, Elliott, & Roberts, 2013).

There is also a relationship between carrying consumer debt and the quality of romantic relationships. Among recently married couples, levels of consumer debt have an inversely proportional relationship with marital satisfaction and time

spent together (Dew, 2008), as well as a positive relationship between levels of consumer debt and financial conflicts (Dew, 2008).

To our knowledge, there are no rigorous studies of the relationships between household debt and parent-child relationships and children's wellbeing. That said, there is an extensive body of literature documenting the negative impacts of poverty on children's physical health, mental health, and financial and personal outcomes in adulthood. It is possible to identify some potential relationships based on that research. For example, children who experience prolonged spells or constant poverty suffer in part because it is difficult to cope with the psychological stress that pervades their households (Blair, Granger, Willoughby, et al., 2011; Luby, Belden, Botteron, et al., 2013). As noted above, carrying debt is associated with increased stress and other negative mental health symptoms in adults. It is possible that this has a spillover effect on their children's wellbeing. Given current consumer debt trends, further research to explore the relationships between debt and children's wellbeing is warranted.

Not all indebted households experience these ill effects—those whose debt is a source of financial distress are the most likely to suffer them. Several studies have found that consumers with moderate or severe financial distress are more anxious and express lower levels of satisfaction in life than other others (Gathergood & Guttman-Kennedy, 2017). Others find stronger relationships between debt and health among the most highly indebted households (Jenkins, et al., 2008; Meltzer, et al., 2012).

IMPACT ON THE ECONOMY

Part 1 of this paper explored how macroeconomic conditions influence the amount, type, and cost of debt that households accumulate, but the relationship is not one-directional. This section examines the impact of consumer debt on the strength of the economy as a whole.

Household debt can impact the economy by generating debt-driven business cycles. Debt-financed spending can provide additional economic stimulus in the short run, but also can become excessive and have a negative effect on long-run output (Kim, 2016). As the American economy has become more dependent on debt to fuel economic growth, and rising levels of consumer debt triggered consecutive investment asset bubbles, including the 2000s mortgage boom and subsequent financial crisis (Boshara, 2016). Most research on the question of debt's impact on the economy has focused on mortgages, however,

leaving questions as to the capacity of other consumer debts to cause significant economic harm.

The degree to which consumer debt poses a risk to the economy at large varies but the effect is present world-wide. A recent study of 54 national economies over the period 1990-2015 found that household debt can boost consumption and GDP growth for about one year, but that in the long run, a one percentage point increase in the debt-to-GDP ratio tends to lower growth by 0.1 percentage points (Lombardi, Mohanty, & Shim, 2017). The long-term reduction in consumption is more extreme for economies with consumer debt-to-GDP ratios exceeding 60%; this holds true for the reduction of economic growth when it exceeds 80% (Lombardi, Mohanty, & Shim, 2017). High leverage combined with falling housing values led to cuts in consumption that were significantly larger for both highly-leveraged and low-net worth households, and ongoing problems related to household balance sheets and housing prices were primary contributors to a weak recovery (Mian, & Sufi, 2011). Higher leverage has made the economy more financially fragile, so that fluctuations in the prices of housing and other assets play a pivotal role in macroeconomic stability (Kuhn, Schularick, & Steins, 2017). A permanent reduction in consumers' borrowing capacity can—because some will pay down their debt and others will increase their precautionary savings—depress interest rates and reduce output, leading to recession (Guerrieri & Lorenzoni, 2011).

There are contrary views on the inevitability of negative effects on the economy from high consumer debt. The macroeconomic effects of leveraging and deleveraging may be relatively minor, because the opposite response of lenders and borrowers to credit cycle shocks roughly wash out in the aggregate (Justiniano, Primiceri, & Tambalotti, 2013). Financial crises and recessions can be avoided when measures such as central bank monetary policy or financial sector regulation are used to contain the debt effect (Kim, 2016). Expansionary fiscal policy retains power in a high-debt environment, both because those with more debt tend to increase consumption in response to fiscal stimulus more than those with low debt, and because the negative effects of high consumer indebtedness (reduced consumption, contributing to unemployment, creating greater economic slack) provide a more fruitful environment for stimulus (Demyanyk, Loutskina, & Murphy, 2017).

There remains less attention to the economic effects of non-mortgage consumer debt. Economists are unsure about the broader economic effects of higher student debt, though as noted above

there does appear to be a curtailing of homeownership that could have long-run effects (Corkery & Cowley, 2017). Because aggregate auto loan and credit card debt is so much smaller than housing debt, it is hard to see growing defaults leading to a 2008-type meltdown, but it could contribute to declining auto sales (automakers are already seeing declining sales) and slow economic growth (Abramowicz, 2017).

GAPS IN THE RESEARCH

Although extensive research has already been completed on consumer debt—including its character, causes, and consequences—much remains to be explored. Some of the gaps are already identified in the literature. For example, there remains a poor understanding of “tipping points” in the debt cycle when previously manageable debt becomes unsustainable (Emmons & Ricketts, 2017). As noted, there are significant questions about the assumptions validity of lifecycle theories. The rise in the incidence, magnitude, and persistence of student loan debt test these suppositions further.

Other issues warranting further inquiry include:

- How the composition of consumer debt holdings vary, change, and affect household solvency and financial stability over time
- Why, when, and how consumers who are struggling with debt seek assistance from non-profit and for-profit entities offering relief, and the comparative short-term and long-term effects
- The extent to which the first debts taken-on by consumers shape their individual debt profiles as they age
- The degree to which rising debt from credit cards, personal loans, and similar unsecured products reflects reliance on credit to meet current consumption needs, particularly among low-and moderate-income households
- The impact of consumer debt on children and what factors contribute to negative outcomes
- The role of geography—from both economic and policy perspectives—in the American debt landscape
- The growth and composition of various types of non-loan debt, such as unpaid medical and other bills; governmental fines, fees, and taxes; and the degree to which holding and making payments on non-loan debts impacts the features, levels, and ability to repay consumers’ more traditional debts
- The long-term household outcomes associated with student loan debt and macroeconomic implications of those outcomes

Finally, research into each of these questions should consider variations based on households’ demographic characteristics, including race and ethnicity, gender, and age. Deeper examinations of the role of race are particularly important, given the existing evidence of disparities that disadvantage people of color.

CONCLUSION

The primary theme that emerges from the research on consumer debt is that context is critical. One reason it is so challenging to understand the role and characterize the impact of consumer debt in household finances is that the “goodness” or “badness” of any individual borrowing decision depends not only on the household’s cash flow, other obligations, and assets, but also on interactions among the different debts that people carry and a multitude of other factors. Households’ financial and family contexts change over time, sometimes suddenly, exacerbating consumers’ struggle to accurately assess whether a particular debt will be affordable or help them reach their goals is that context changes over time. The problems identified in this primer require solutions that are broad enough to meet the needs of millions of households, yet flexible enough that they increase families’ ability to adapt available resources to fit the context of the rest of their lives.

This report is EPIC’s first publication on the challenges consumer debt poses to the financial security of low- and moderate-income Americans. In the coming months, EPIC will publish the results of a series of expert surveys exploring these relationships, including areas of consensus and divergence among these leaders, as well as additional content focused on specific aspects of consumer debt. Through these activities, we will uncover a range of debt-related financial security challenges and identify high-priority problems to solve. These publications will summarize the findings of the learning and discovery phase of our consumer debt initiative and deeply inform the next phase of our work, solutions development.

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Bibliography

- A 50-state look at Medicaid expansion. Families USA. Available at: <http://familiesusa.org/product/50-state-look-medicaid-expansion>.
- Abramowicz, L. (2017, May 18). The consumer debt blind spot. *Bloomberg*. Available at: <https://www.bloomberg.com/gadfly/articles/2017-05-18/credit-card-and-loan-losses-expose-worrisome-blind-spot>.
- Ahmed, Z., et al. (2015). Malaysian consumer's credit card usage behavior. *Asia Pacific Journal of Marketing and Logistics*, Volume 22, Number 4, Pages 528-544. Available at: <http://www.emeraldinsight.com/doi/abs/10.1108/13555851011090547?journalCode=apjml>.
- Akers, B. (2014). The typical household with student loan debt. Brookings Institute. Available at: <https://www.brookings.edu/research/the-typical-household-with-student-loan-debt/>.
- Alexandrov, A. & Jiménez, D. (2017). Lessons from Bankruptcy Reform in the Private Student Loan Market. *Harvard Law and Policy Review*, Volume 11-1, Winter 2017. Available at: <http://harvardlpr.com/wp-content/uploads/2017/02/HLP108.pdf>.
- America's rental housing 2017. Harvard Joint Center for Housing Studies. Available at: http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/harvard_jchs_americas_rental_housing_2017.pdf.
- Anderson, M. (2015). 6 facts about Americans and their smartphones. Pew Research Center. Available at: <http://www.pewresearch.org/fact-tank/2015/04/01/6-facts-about-americans-and-their-smartphones>.
- Andrews, M. (2017, July 11). Credit agencies to ease up on medical debt reporting. *National Public Radio*. Available at: <https://www.npr.org/sections/health-shots/2017/07/11/536501809/credit-agencies-to-ease-up-on-medical-debt-reporting>.
- ArchCity Defenders. (2014). ArchCity defenders: Municipal courts white paper. ArchCity Defenders. Available at: <http://www.archcitydefenders.org/wp-content/uploads/2014/11/ArchCity-Defenders-Municipal-Courts-Whitepaper.pdf>.
- Athreya, K., et al. (2016). Bankruptcy and delinquency in a model of unsecured debt. Federal Reserve Bank of Richmond. Available at: https://www.richmondfed.org/-/media/richmondfedorg/publications/research/working_papers/2016/pdf/wp16-12.pdf.
- Auerbach, D, Kellermann, A. (2011). How does growth in health care costs affect the American family? Rand Corporation. Available at: https://www.rand.org/pubs/research_briefs/RB9605.html.
- Baker, S. (2014). Debt and the consumption response to household income shocks. Stanford University. Available at: https://web.stanford.edu/~srbaker/Papers/Baker_DebtConsumption.pdf.
- Balmer, N., et al. (2006). Worried sick: The experience of debt problems and their relationship with health, illness, and disability. *Social Policy and Society*, Volume 5, Issue 1, 39-51. Available at: <https://www.cambridge.org/core/journals/social-policy-and-society/article/worried-sick-the-experience-of-debt-problems-and-their-relationship-with-health-illness-and-disability/026CA55EAC3CA4D7E009880543410A76>.
- Bastien, A. (2017). Ending the debt trap: strategies to stop the abuse of court-imposed fines and fees. PolicyLink. Available at: <http://www.policylink.org/sites/default/files/ending-the-debt-trap-03-28-17.pdf>.
- Blair, C., Granger, D.A., Willoughby, M., et al. (2011). Salivary cortisol mediates effects of poverty and parenting on executive functions in early childhood. *Child Development*, Volume 86, No. 6, pages 1970-1984. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3218241/pdf/nihms313622.pdf>.
- Bleemer, Z., et al. (2017). Echoes of rising tuition in students' borrowing, educational attainment, and homeownership in post-recession America. Federal Reserve Bank of New York. Available at: https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr820.pdf?la=en.
- Board of Governors of the Federal Reserve System. Report to the Congress on credit scoring and its effects on the availability and affordability of credit (2007). Available at: <https://www.federalreserve.gov/boarddocs/rptcongress/creditscore/creditscore.pdf>.
- Board of Governors of the Federal Reserve System. Report on the Economic Well-being of U.S. households in 2016 (2017). Available at: <https://www.federalreserve.gov/consumerscommunities/shed.htm>.
- Boshara, R. (2016). Executive summary of the tipping points symposium. Center for Household Financial Stability, Federal Reserve Bank of St Louis. Available at: <https://www.stlouisfed.org/-/media/Files/PDFs/HFS/assets/2016/TippingPointsExecutiveSummary.pdf?la=en>.
- Boshara, R., & Emmons, W. (2016). A demographic approach to the financial challenges of economically vulnerable families. Consumer Financial Protection Bureau Financial-Capability Lunch & Learn. Available at: <https://www.stlouisfed.org/-/media/Files/PDFs/HFS/assets/Boshara-Emmons-CFPB-Apr-13-2016.pdf?la=en>.
- Baum, S. (2014). Higher education earnings premium. Value, variation, and trends. Urban Institute. Available at: <https://www.urban.org/sites/default/files/publication/22316/413033-Higher-Education-Earnings-Premium-Value-Variation-and-Trends.PDF>.
- Breakthrough banking: Your cognitive future in banking and financial markets (2015). IBM Institute for Business Value. Available at: https://www-03.ibm.com/systems/data/flash/ae/cognitivebank/res/assets/Breakthrough_banking_Exec_Report.pdf.
- Bricker, J., et al. (2017). Changes in U.S. family finances from 2013-2016: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*, Vol 103, Number 3. Board of Governors of the Federal Reserve System. Available at: <https://www.federalreserve.gov/publications/files/scf17.pdf>.
- Brown, M., et al. (2015). Do we know what we owe? Consumer debt as reported by borrowers and lenders. *FRBNY Economic Policy Review*, Federal Reserve Bank of New York. Available at: https://www.newyorkfed.org/medialibrary/media/research/epr/2015/EPR_2015_comparisons_brown.pdf.
- Celik, N. (2017). Does student loan debt affect borrowing by young households? University of Utah. Available at: <https://pdfs.semanticscholar.org/b37f/f9e3777e0cd1acbb42bd93fc471ccbf0fc.pdf>.
- The changing wealth of Americans (updated 2017). Urban Institute. Available at: <https://apps.urban.org/features/debt-interactive-map/>.
- Chiteji, N. (2010). The racial wealth gap and the borrower's dilemma. *Journal of Black Studies*, Volume 41, Number 2, Pages 351-366. Available at: <http://journals.sagepub.com/doi/abs/10.1177/0021934709353730?journalCode=jbsa>.
- Coibion, O., et al. (2016). Does greater inequality lead to more household borrowing: New evidence from household data. Federal Reserve Bank of Richmond. Available at: <https://eml.berkeley.edu/~ygorodni/CGKM.pdf>.
- Corkery, M., & Cowley, S. (2017, May 17). Household debt makes a comeback in the U.S. *New York Times*. Available at: <https://www.nytimes.com/2017/05/17/business/dealbook/household-debt-united-states.html>.
- Cooper, D.H., Cynamon, B.Z., & Farazzi, S.M. (October 2016). The sustainability of U.S. Household Finances. Available at: [https://www.privatedebtpoint.org/cmsb/uploads/cooper_cynamon_fazzari_sustainability_us_household_finances-\(1\).pdf](https://www.privatedebtpoint.org/cmsb/uploads/cooper_cynamon_fazzari_sustainability_us_household_finances-(1).pdf).
- Cosma, S., & Pattarin, F. (2010). Attitudes, personality factors and household debt decisions: a study of consumer credit. *Bank Strategy, Governance and Ratings*. Basingstoke, United Kingdom: Palgrave Macmillan. Available at: https://link.springer.com/chapter/10.1057/9780230313866_10.
- Credit card market monitor: Credit conditions through the eyes of consumers (October 2017). American Bankers Association. Available at: <https://www.aba.com/Press/Documents/2017Q2CreditCardMonitor.pdf>.
- Cynamon, B., & Fazzari, S. (2008). Household debt in the consumer age: Source of growth--Risk of collapse. *Capitalism and Society*, Volume 3, Issue 2. Available at: <https://www.degruyter.com/view/j/cas.2008.3.2/cas.2008.3.2.1037/cas.2008.3.2.1037.xml>.
- Davey, M. (2015, November 4). Lawsuit accuses Missouri city of fining homeowners to raise revenue. *The New York Times*. Available at: <https://www.nytimes.com/2015/11/05/us/lawsuit-accuses-missouri-city-of-fining-homeowners-to-raise-revenue.html?ref=us&r=0>.
- Deaton, A. (1986). Life-cycle models of consumption: Is the evidence consistent with theory? National Bureau of Economic Research. Available at: <http://www.nber.org/papers/w1910>.
- Debt in America: An interactive map (2017). Urban Institute. Available at: <https://apps.urban.org/features/debt-interactive-map/>.
- Debbaut, P, Ghent, A, & Kudlyak, M (2014). Are young borrowers bad borrowers? Evidence from the Credit CARD Act of 2009. Federal Reserve Bank of Richmond. Available at: https://www.richmondfed.org/publications/research/working_papers/2013/wp_13-09r.
- Delener, N., & Katzenstein, H. (1994). Credit card possession and other payment systems: Use patterns among Asian and Hispanic Consumers. *International Journal of Bank Marketing*, Volume 12, Issue 4, pp. 13-24. Available at: <http://www.emeraldinsight.com/doi/abs/10.1108/02652329410058003>.

- Demyanyk, Y., Loutskina, E., & Murphy, D. (2017). Fiscal stimulus and consumer debt. Federal Reserve Bank of Cleveland. Available at: <https://www.clevelandfed.org/newsroom-and-events/publications/working-papers/2017-working-papers/wp-1620r-fiscal-stimulus-and-consumer-debt.aspx>.
- Detting, L.J., et al. (2017). Recent trends in wealth-holding by race and ethnicity: Evidence from the Survey of Consumer Finances. Board of Governors of the Federal Reserve System. Available at: <https://www.federalreserve.gov/econres/notes/feds-notes/recent-trends-in-wealth-holding-by-race-and-ethnicity-evidence-from-the-survey-of-consumer-finance-20170927.htm>.
- Dew, J. (2008). Debt change and marital satisfaction change in recently married couples. *Family Relations*, Volume 57, Issue 1, Pages 60-71. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1741-3729.2007.00483.x/full>.
- Dew, J. (2011). The association between consumer debt and the likelihood of divorce. *Journal of Family and Economic Issues*, Volume 32, Issue 4, Pages 554-565. Available at: <https://link.springer.com/article/10.1007/s10834-011-9274-z>.
- Dobbie, W., & Song, J. (2013, Jan 18). Debt relief and debtor outcomes: Measuring the effects of consumer bankruptcy protection. USC Marshall Finance and Business Economics, Los Angeles, California. Available at: http://fbe.usc.edu/seminars/papers/F_1-18-13_DOBBIE_Jan2013.pdf.
- Dunn, L. & Mirzaie, I. (2015). Consumer debt stress, changes in household debt, and the Great Recession. *Economic Inquiry*, Volume 54, Issue 1, January 2016, 201-214. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/ecin.12218/abstract>.
- Durkin, T. (2000). Credit cards: use and consumer attitudes, 1970-2000. *Federal Reserve Bulletin*, September, 623-634. Federal Reserve Board of Governors. Available at: <https://www.federalreserve.gov/pubs/bulletin/2000/0900lead.pdf>.
- El Issa, E. (2016). 2016 American household credit card debt study. NerdWallet. Available at: <https://www.nerdwallet.com/blog/average-credit-card-debt-household/>.
- El Issa, E. (2017). NerdWallet Survey: nearly half of Americans emotionally overspend. NerdWallet. Available at: <https://www.nerdwallet.com/blog/credit-cards/credit-card-debt-stigma-2017/>.
- Elliot, W., & Nam, I. (2013). Is student debt jeopardizing the short-term financial health of U.S. households? *Federal Reserve Bank of St. Louis Review*, Volume 95, No. 5. Available at: <https://research.stlouisfed.org/publications/review/2013/10/01/is-student-debt-jeopardizing-the-short-term-financial-health-of-u-s-households/>.
- Emmons, W., & Ricketts, L. (2017). Household debt at the tipping point: When and why does household borrowing hurt the economy? Federal Reserve Bank of St. Louis. Available at: https://www.stlouisfed.org/~media/Files/PDFs/HFS/assets/2017/Emmons_Ricketts_Household_Debt_Tipping_Point.pdf?la=en.
- Farrell, D., & Greig, F. (2017). Coping with costs: Big data on expense volatility and medical payments. JPMorgan Chase Institute. Available at: <https://www.jpmorganchase.com/corporate/institute/report-coping-with-costs.htm>.
- Federal Reserve Bank of New York (2017). Household debt and credit report, Q3 2017. Center for Microeconomic Data. Available at: <https://www.newyorkfed.org/microeconomics/hhdc.html>.
- Federal Reserve Bank of New York (2017). State-level household debt statistics. Available at: https://www.newyorkfed.org/medialibrary/Interactives/household-credit/data/xls/area_report_by_year.xlsx.
- Federal Reserve Bank of St. Louis. Household debt service payments as a percent of disposable personal income, 1980-2017. Federal Reserve Economic Data (FRED). Available at: <https://fred.stlouisfed.org/series/TDSP>.
- Federal Reserve Bank of St. Louis. Household debt to GDP for United States, 2005-2016. Federal Reserve Economic Data (FRED). Available at: <https://fred.stlouisfed.org/series/HDTGPDUSQ163N>.
- Federal Reserve Bank of St. Louis. Household financial obligations as a percent of disposable personal income, 1980-2017. Federal Reserve Economic Data (FRED). Available at: <https://fred.stlouisfed.org/series/FODSP>.
- Federal Reserve Bank of St. Louis. Total debt to equity for United States, 2005-2016. Federal Reserve Economic Data (FRED). Available at: <https://fred.stlouisfed.org/series/TOTDTEUSQ163N>.
- Fergus, D. (2017). *Land of the Fee*. Oxford, United Kingdom: Oxford University Press.
- Freedman, J., & Schwenninger, S. (2015). America's debt problem: How private debt is holding back growth and hurting the middle class. New America. Available at: <https://www.newamerica.org/economic-growth/policy-papers/americas-debt-problem-dec-2015/>.
- Fiedler, M. (2017) Repealing the individual mandate would be do substantial harm. Brookings Institute. Available at: <https://www.brookings.edu/blog/up-front/2017/11/21/repealing-the-individual-mandate-would-do-substantial-harm/>.
- Friedman, M. (1957). The permanent income hypothesis, in ed. Friedman, F., *A theory of the consumption function*, Princeton University Press, pp. 20-37.
- Fry, R. (2014). Young adults, student debt and economic well-being. Pew Research Center. Available at: <http://www.pewsocialtrends.org/2014/05/14/young-adults-student-debt-and-economic-well-being/>.
- Fulford, S., & Schuh, S. (2015). Consumer revolving credit and debt over the life cycle and business cycle. Federal Reserve Bank of Boston. Available at: <https://www.bostonfed.org/publications/research-department-working-paper/2015/consumer-revolving-credit-and-debt-over-the-life-cycle-and-business-cycle.aspx>.
- Gathergood, J., & Guttman-Kennedy, B. (2017). Can we predict which consumer credit users will suffer financial distress? United Kingdom Financial Conduct Authority. Available at: <https://www.fca.org.uk/publication/occasional-papers/occasional-paper-20.pdf>.
- Gicheva, D., & Thompson, J. (2013). The effects of student loans on long-term household financial stability. In Brad Hershbein & Kevin Hollenbeck, *Student Loans and the Dynamics of Debt* (Pages 287-316). Available at: <https://www.urban.org/sites/default/files/effects-of-student-loans-on-long-term-household-financial-stability.pdf>.
- Grinstein-Weiss, M., et al. (2015). Does unsecured debt decrease savings? Evidence from the Refund to Savings Initiative. Washington University of St. Louis. Available at <https://csd.wustl.edu/Publications/Documents/RB15-16.pdf>.
- Gross, T., Notowidigdo, M., & Wang, J. (2016). The marginal propensity to consumer over the business cycle. Available at: <http://www.nber.org/papers/w22518>.
- Guerrieri, V., & Lorenzoni, G. (2011). Credit crises, precautionary savings, and the liquidity trap. National Bureau of Economic Research. Available at: <http://www.nber.org/papers/w17583.pdf>.
- Guvener, F., et al. (2017). Lifetime Incomes in the United States over Six Decades. Federal Reserve Bank of Minneapolis. Available at: <http://www.nber.org/papers/w23371.pdf>.
- Hartman, M. (2017, November 28). Home prices rise much faster than wages and consumer prices. *Marketplace*. Available at: <https://www.marketplace.org/2017/11/28/economy/home-prices-rise-much-faster-wages-and-consumer-prices>.
- Haughwout, A., et al. (2017). Just released: Auto lending keeps pace as delinquencies mount in auto finance sector. *Liberty Street Economics*, Federal Reserve Bank of New York. Available at: <http://libertystreeteconomics.newyorkfed.org/2017/11/just-released-auto-lending-keeps-pace-as-delinquencies-mount-in-auto-finance-sector.html>.
- Hayhoe, C., et al. (2005). Credit cards held by college students. *Journal of Financial Counseling and Planning*, Volume 16, Number 1, 2005. Available at: <https://my.afcpe.org/system/journals/vol1611.pdf>.
- Houle, J. (2014). Disparities in debt: Parents' socioeconomic resources and young adult student loan debt. *American Sociological Association*, Volume 87, Issue 1, Pages 53-69. Available at: <http://journals.sagepub.com/doi/abs/10.1177/0038040713512213>.
- Howat, J. (2009). Full utility credit reporting: Risks to low income consumers. National Consumer Law Center. Available at: https://www.nclc.org/images/pdf/credit_reports/credit_reports_full_utility_dec2009.pdf.
- James, J. (2016). Health policy brief: Nonprofit hospitals' community benefit requirements. Health Affairs. Available at: <https://www.healthaffairs.org/doi/10.1377/hpb20160225.954803/full>.
- Jamrisko, M. (2015). Americans' spending on dining just overtook grocery sales for the first time ever. *Bloomberg*. Available at: <http://www.bloomberg.com/news/articles/2015-04-14/americans-spending-on-dining-out-just-overtook-grocery-sales-for-the-first-time-ever>.
- Jenkins, R., et al. (2008). Debt, income and mental disorder in the general population. *Psychological Medicine*, Volume 38, Issue 10, Pages 1485-1493. Available at: <https://www.cambridge.org/core/journals/psychological-medicine/article/debt-income-and-mental-disorder-in-the-general-population/0381273CC880382EE1ABFF728FAAE10E>.
- Jiménez, D. (2009). The distribution of assets in consumer Chapter 7 bankruptcy cases. *American Bankruptcy Law Journal*, Volume 83, Page 795. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1471603.
- Justiniano, A., Primiceri, G., & Tambalotti, A. (2013). Household leveraging and deleveraging. National

- Bureau of Economic Research. Available at: <http://www.nber.org/papers/w18941>.
- Karpman, M., & Caswell, K. (2017). Past-due medical debt among nonelderly adults, 2012-15. Urban Institute. Available at: <https://www.urban.org/research/publication/past-due-medical-debt-among-nonelderly-adults-2012-15>.
- Karpman, M., & Long, S. (2015). Most adults with medical debt had health insurance at the time the debt was incurred. Urban Institute. Available at: <http://hrms.urban.org/briefs/Most-Adults-with-Medical-Debt-Had-Health-Insurance-at-the-Time-the-Debt-Was-Incurred.html>.
- Kaynak, E. & Harcar, T. (2001). Consumers' attitudes and intentions towards credit card usage in an advanced developing country. *Journal of Financial Services Marketing*, September 2001, Volume 6, Issue 1, Pages 24-39. Available at: <https://link.springer.com/article/10.1057/palgrave.fsm.4770038>.
- Keys, B., & Wang, J. (2014). Perverse nudges: Minimum payments and debt paydown in consumer credit cards. Society for Economic Dynamics. Available at: https://economicsdynamics.org/meetpapers/2014/paper_323.pdf.
- Khazan, O. (2017, March 2). The geography of medical debt. *The Atlantic*. Available at: <https://www.theatlantic.com/health/archive/2017/03/the-geography-of-medical-debt/518316/>.
- Kiel, P. (2015, December 31). Why small debts matter so much to black lives. *ProPublica*. Available at: <https://www.propublica.org/article/why-small-debts-matter-so-much-to-black-lives>.
- Kiel, P. & Waldman, A. (2015, October 9). The burden of debt on black America. *The Atlantic*. Available at: <https://www.theatlantic.com/business/archive/2015/10/debt-black-families/409756/>.
- Kim, Y. (2016). Macroeconomic effects of household debt: an empirical analysis. *Review of Keynesian Economics*, Volume 4, Number 2, Summer 2016, Pages 127-150. Available at: <https://www.elgaronline.com/view/journals/roke/4-2/roke.2016.02.01.xml>.
- Komos, M., et al. (2012). Payment hierarchy analysis: a study of changes in consumer payment prioritization from 2007 through 2011. TransUnion. Available at: https://www.transunion.com/docs/rev/business/marketperspectives/small-business/Payment_Hierarchy_White_Paper.pdf.
- Kuhn, M., Schularick, M., & Steins, U. (2017). The great American debt boom, 1949-2013. Federal Reserve Bank of St. Louis. Available at: https://www.stlouisfed.org/~media/Files/PDFs/HFS/assets/2017/Moritz_Schularick_The_Great_American_Debt_Boom.pdf?la=en.
- Kus, B. (2013). Credit, consumption, and debt: Comparative perspectives. *Division II Faculty Publications*, Wesleyan University. Available at: <http://wesscholar.wesleyan.edu/cgi/viewcontent.cgi?article=1171&context=div2facpubs>.
- Lambertini, L., & Azariadis, C. (2003). Endogenous debt constraints in lifecycle economies. *The Review of Economic Studies*, Volume 70, Issue 3, Page 461-487. Available at: <https://academic.oup.com/restud/article-abstract/70/3/461/1571135>.
- Lewis, A. (2007). The psychology of debt: A decision analytics briefing paper from Experian. Experian Decision Analytics. Available at: <http://www.experian.nl/assets/documentatie/white-papers/the-psychology-of-debt-january-2008.pdf>.
- Li, W., & Goodman, L. (2015). American's debt styles by age and over time. Urban Institute. Available at: <https://www.urban.org/sites/default/files/publication/72976/2000514-Americans-Debt-Styles-by-Age-and-over-Time.pdf>.
- Lin, Z. (2015). Racial discrepancy in mortgage interest rates. *The Journal of Real Estate Finance and Economics*, July 2015. Available at: <https://link.springer.com/article/10.1007/s11466-014-9473-0>.
- Linarelli, J. (2016). Debt in just societies. University of Oxford Faculty of Law. Available at: <https://www.law.ox.ac.uk/business-law-blog/blog/2016/10/debt-just-societies>.
- Lombardi, M., Mohanty, M., & Shim, I. (2017). The real effects of household debt in the short and long-run. Bank for International Settlements. Available at: <https://www.bis.org/publ/work607.htm>.
- Luby, J., Belden, A., Botteron, K., et al. (2013). The effects of poverty on childhood brain development: The mediating effect of caregiving and stressful life events. *JAMA Pediatrics*, Volume 167, No. 12, pages 1135-1142. Available at: <https://jamanetwork.com/journals/jamapediatrics/fullarticle/1761544>.
- Lupica, L. (2009). The consumer debt crisis and the reinforcement of class position. *Loyola University Chicago Law Journal*, Volume 40, Issue 3, Spring 2009. Available at: <https://lawecommons.luc.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1099&context=luclj>.
- Martin, A., Khandelwal, A., & Detweiler, J. (2017). U.S. auto loan ABS tracker: January 2017. S&P Global. Available at: https://www.spratings.com/documents/20184/908542/US_SF_Webcast_Auto_2.pdf/dc4ff9a-d775-4d03-8801-7d175f6557ef.
- Mason, J. (2017). Income distribution, household debt, and aggregate demand: A critical assessment. Federal Reserve Bank of St. Louis. Available at: https://www.stlouisfed.org/~media/Files/PDFs/HFS/assets/2017/JV_Mason.pdf?la=en.
- McCoy, P. (2005). A behavioral analysis of predatory lending. *Akron Law Review*, Volume 38, No. 4, pages 725-739. Available at: <http://ideaexchange.uakron.edu/akronlawreview/vol38/iss4/3/>.
- McGrath, A. (2016). The cost of debt - Don't forget the legal fees. The Center for Financial Inclusion. Available at: <https://cfi-blog.org/2016/06/16/the-cost-of-debt-dont-forget-the-legal-fees/>.
- Lefgren, L., & McIntyre, F. (2009). Explaining the puzzle of cross-state differences in bankruptcy rates. *The Journal of Law and Economics*, May 2009. Available at: http://www.jstor.org/stable/10.1086/596561?seq=1#page_scan_tab_contents.
- Meen, G. (2011). The economic consequences of mortgage debt. *Journal of Housing and the Built Environment*, Volume 26, Issue 3, Pages 263-276. Available at: <https://link.springer.com/article/10.1007/s10901-011-9225-x>.
- Meltzer, H., et al. (2013). The relationship between personal debt and specific common mental disorders. *European Journal of Public Health*, Volume 23, Issue 1, Pages 108-113. Available at: <https://academic.oup.com/eurpub/article/23/1/108/464719>.
- Metz, P. (2016). Race and property value appreciation: A St. Louis case study. Washington University in St. Louis. Available at: https://economics.wustl.edu/files/economics/imce/peter_metz_-_for_defense.pdf.
- Mian, A., & Sufi, A. (2011). Consumers and the economy, part II: Household debt and the weak U.S. recovery. Federal Reserve Bank of San Francisco. Available at: <https://www.frbsf.org/economic-research/publications/economic-letter/2011/january/consumers-economy-household-debt-weak-us-recovery/>.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: an interpretation of cross-section data," in Kenneth K. Kurihara, ed., *Post-Keynesian Economics*, Pages 388-436, New Brunswick, NJ. Rutgers University Press.
- myFICO. When a lender lowers your credit limit. Available at: https://www.myfico.com/crediteducation/articles/lower_credit_limit.aspx.
- Norum, P. (2008, May). The role of time preference and credit card usage in compulsive buying behaviour. *International Journal of Consumer Studies*, Volume 32, Issue 3, Pages 269-275. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1470-6431.2008.00678.x/full>.
- Oschmann, E., et al. (2009). Over-indebtedness and its association with the prevalence of back pain. *BMC Public Health*, 2009, 9:451. Available at: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-9-451>.
- Past-due medical debt in America (2016). The Urban Institute. Available at: <http://apps.urban.org/features/medical-debt-in-america/#>.
- Pepin, A.W. (2016). The end of debtors' prisons: Effective court policies for successful compliance with legal financial obligations. Conference of State Court Administrators. Available at: <http://cosca.ncsc.org/~media/Microsites/Files/COSCA/Policy%20Papers/End-of-Debtors-Prisons-2016.ashx>.
- Pew Charitable Trusts (2016). Household expenditures and income: Balancing family finances in today's economy. Available at: <http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2016/03/household-expenditures-and-income>.
- Pew Charitable Trusts (2015-A). The complex story of American debt. Available at: http://www.pewtrusts.org/~media/assets/2015/07/reach-of-debt-report_artfinal.pdf?la=en.
- Pew Research Center (2015-B). The politics of financial insecurity. A Democratic tilt, undercut by low participation. Available at: <http://www.people-press.org/2015/01/08/the-politics-of-financial-insecurity-a-democratic-tilt-undercut-by-low-participation>.
- Q1 2016 Industry Insights Report (May 2016). TransUnion. Available at: <https://newsroom.transunion.com/transunion-us-delinquency-rates-remain-low-to-open-2016-though-energy-state-rises-beginning-to-have-greater-impact-on-nation/>.
- Rajan, R. (2011). *Fault lines: how hidden fractures still threaten the world economy*. Princeton, NJ: Princeton University Press.
- Rajan, R. (2010, August 27). Let them eat credit. *The New Republic*. Available at: <https://newrepublic.com/article/77242/inequality-recession-credit-crunch-let-them-eat-credit>.
- Ratcliffe, C., & Brown, S. (2017, November). Credit scores perpetuate racial disparities, even in America's most prosperous cities. The Urban Institute. Available at: <https://www.urban.org/urban-wire/credit-scores-perpetuate-racial-disparities-even-americas-most-prosperous-cities>.

- Richardson, T., Elliott, P., & Roberts, R. (2013). The relationship between personal unsecured debt and mental and physical health: A systematic review and meta-analysis. *Clinical Psychology Review*, Volume 33, Issue 8, Pages 1148-62. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/24121465>.
- Salas, M. & Cioffi, A. (2017). Driven by dollars: A state-by-state analysis of driver's license suspension laws for failure to pay court debt. The Legal Aid Justice Center. Available at: <https://www.justice4all.org/wp-content/uploads/2017/09/Driven-by-Dollars.pdf>.
- Schicks, J. (2010). Microfinance over-indebtedness: Understanding its drivers and challenging. Centre Emile Bernheim. Available at: http://www.solvay.edu/sites/upload/files/CEB/CEB_WorkingPapers/LastUpdate/wp10048.pdf.
- Schlagenhauf, D., & Ricketts, L. (2016). The quarterly debt monitor: Trends in consumer debts in St. Louis, Little Rock, Louisville, Memphis-and beyond. *In the Balance*, Issue 14. Federal Reserve Bank of St. Louis. Available at: https://www.stlouisfed.org/~media/Publications/In%20the%20Balance/Images/Issue_14/TB14Feb2016.pdf.
- Scott-Clayton, J., & Li, J. (2016). Black-white disparity in student loan debt more than triples after graduation. The Brookings Institution. Available at: <https://www.brookings.edu/research/black-white-disparity-in-student-loan-debt-more-than-triples-after-graduation/>.
- Seefeldt, K. (2015). Constant consumption smoothing, limited investment, and few repayments: The role of debt in the financial lives of economically vulnerable families. *Social Service Review*, Volume 89, Number 2. Available at: <https://www.jstor.org/stable/10.1086/681932>.
- Smith, D., Campbell, C., & Kavanagh, B. (2017). 2017 trends in state courts: Fines, fees, and bail practices: Challenges and opportunities. National Center for State Courts. Available at: <http://www.ncsc.org/~media/Microsites/Files/Trends%202017/Trends-2017-Final-small.ashx>.
- Soman, D., & Cheema, A. (2002). The effect of credit on spending decisions: The role of the credit limit and credibility. *Marketing Science*, Volume 21, Issue 1, Pages 32-53. Available at: <https://www.jstor.org/stable/1558056>.
- Stango, V. & Zinman, J. (2006). How a cognitive bias shapes competition: Evidence from consumer credit markets. Available at: https://www.dartmouth.edu/~jzinman/Papers/Stango&Zinman_CognitiveBias&Competition.pdf.
- Stango, V. & Zinman, J. (2009). Exponential growth bias and household finance. *Journal of Finance*, 2009, Volume 64, Issue 6, Pages 2807-2849. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6261.2009.01518.x/full>.
- Steinbaum, M., & Vaghul, K. (2016). How the student debt crisis affects African Americans and Latinos. Washington Center for Equitable Growth. Available at: <http://equitablegrowth.org/research-analysis/how-the-student-debt-crisis-affects-african-americans-and-latinos/>.
- Stucke, M. (2009). Money, is that what I want? Competition policy and the role of behavioral economics. *Santa Clara Law Review*, Volume 50, Issue 3. Available at: <http://digitalcommons.law.scu.edu/lawreview/vol50/iss3/6/>.
- Sullivan, B. (2018). State of credit: 2017. Experian. Available at: <https://www.experian.com/blogs/ask-experian/state-of-credit/>.
- Sullivan, J. (2008). Borrowing during unemployment: Unsecured debt as a safety net. *The Journal of Human Resources*, Volume 43, Number 2. Available at: <http://jhr.uwpress.org/content/43/2/383.full.pdf+html>.
- Tach, L., & Greene, S.S. (2014). Robbing Peter to pay Paul: Economic and cultural expectations for how lower-income families manage debt. *Social Problems*, Volume 61, Issue 1, Pages 1-21. Available at: <https://academic.oup.com/socpro/article-abstract/61/1/1/1615993>.
- Thomas, M., Kaushik, K.D., & Seenivasan, S. (2010). How credit card payments increase unhealthy food purchases: Visceral regulation of vices. *Journal of Consumer Research*, Volume 38, Number 1, Pages 126-139. Available at: <https://www.jstor.org/stable/10.1086/657331>.
- Traub, A. (2014). The debt disparity: What drives credit card debt in America. Demos. Available at: http://www.demos.org/sites/default/files/publications/DebtDisparity_1.pdf.
- United States Centers for Medicare and Medicaid Services (2015). NHE fact sheet. Available at: <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html>.
- United States Consumer Financial Protection Bureau. (2014). Consumer credit reports: A study of medical and non-medical collections. Available at: http://files.consumerfinance.gov/f/201412_cfpb_reports_consumer-credit-medical-and-non-medical-collections.pdf.
- United States Consumer Financial Protection Bureau (2017-A). Data Point: Becoming credit visible. (2014). Available at: https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/BecomingCreditVisible_Data_Point_Final.pdf.
- United States Consumer Financial Protection Bureau. (2015-A). Data Point: Credit invisibles. Available at: http://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf.
- United States Consumer Financial Protection Bureau (2015-B). Financial well-being: What it means and how to help. Available at: http://files.consumerfinance.gov/f/201501_cfpb_digest_financial-well-being.pdf.
- United States Consumer Financial Protection Bureau (2017-B). Financial well-being in America. Available at: http://files.consumerfinance.gov/f/documents/201709_cfpb_financial-well-being-in-America.pdf.
- United States Courts. Bankruptcy basics. Available at: <http://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics>.
- United States Department of Justice, Civil Rights Division. (2015). Investigation of the Ferguson Police Department. Available at: https://www.justice.gov/sites/default/files/opa/press-releases/attachments/2015/03/04/ferguson_police_department_report.pdf.
- United States Department of Labor, Bureau of Labor Statistics (2016-A). 2016 consumer expenditures. Available at: <https://www.bls.gov/news.release/cesan.nr0.htm>.
- United States Department of Labor, Bureau of Labor Statistics (2017). American Time Use Survey results, 2016. Available at: <https://www.bls.gov/news.release/pdf/atus.pdf>.
- United States Department of Labor, Bureau of Labor Statistics. (2016-B). College tuition and fees increase 63 percent since January 2006. Available At: <https://www.bls.gov/opub/ted/2016/college-tuition-and-fees-increase-63-percent-since-january-2006.htm>.
- VanSomeren, L. (2017). How your unpaid electric bill can come back to haunt you. Credit Sesame. Available at: <https://www.creditsesame.com/blog/debt/unpaid-electric-bill-can-come-back-to-haunt-you/>.
- Webber, D. (2016). Are college costs worth it? How ability, major, and debt affect the returns to schooling. *Economics of Education Review*, Volume 53, August 2016, Pages 296-310. Available at: <http://www.sciencedirect.com/science/article/pii/S0272775715300224>.
- Webley, P. & Nyhus, E.K. (1992). Life-cycle and dispositional routes into problem debt. *British Journal of Psychology*, Volume 92, Part 3. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/11802883>.
- Wessel, D. (2010, April 22). Professor finds many fault lines in crisis. *Wall Street Journal*. Available at: <https://www.wsj.com/articles/SB10001424052748704133804575198080507492968>.
- Woo, J.H., Bentz, A.H., Lew, S., et al. (2017, October). Repayment of student loans as of 2015 among 1995-96 and 2003-04 first-time beginning students. National Center for Education Statistics, United States Department of Education. Available at: <https://nces.ed.gov/pubsub/2018/2018410.pdf>.
- Zhu, L., & Meeks, C. (1994). Effects of low income families' ability and willingness to use consumer credit on subsequent outstanding credit balances. *The Journal of Consumer Affairs*, Volume 28, Issue 2, Winter 1994, Pages 403-422. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1745-6606.1994.tb00859.x/full>.
- Zinman, J. (2015). Household debt: Facts, puzzles, theories, and policies. National Bureau of Economics Research. Available at: <http://www.nber.org/papers/w20496>.