

Delinquent Debt Decisions and Their Consequences over Time

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Many American consumers are in financial distress: nearly a third have debt in collections recorded on their credit report (Braga et al. 2016). People facing financial difficulties must delay some of their financial obligations. What are the long-term consequences of these decisions on future credit health and access to money?

This brief uses credit bureau data to examine which financial obligations—among credit card debt, mortgages, auto or retail loans, and student loans—families typically stop paying when in distress, along with how these choices changed from 2010 to 2016. It also explores the long-term consequences of delinquent debt payment decisions for Americans' credit health, looking at both credit score and other delinquencies three years later.

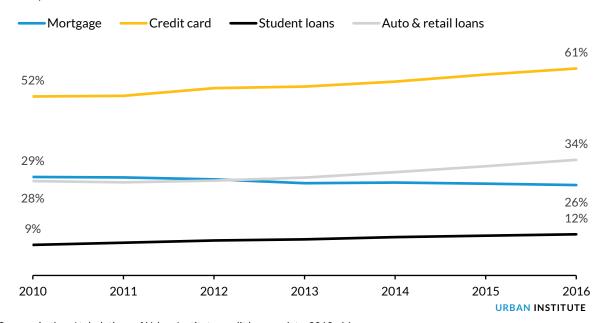
Consumers pay auto and retail loan debt first and student loan debt last, according to our analysis. The auto/retail loan delinquency rate was never greater than 4 percent throughout 2010–16 for any consumer types we investigate. Delinquency on mortgages was highest in the years following the Great Recession but has decreased since then. Consumers typically prioritize credit card payment over student loan payment.

Becoming delinquent on *any* of the debts analyzed damages a consumer's financial health. Consumers who stay current on all their debts have much better credit health three years later than consumers who postpone paying at least one debt. Consumers who become delinquent on one debt are 36 to 64 percent more likely to have a subprime credit score in three years and 33 to 56 percent more likely to have any other delinquency in three years. Consumers who become delinquent on two or more debts are 77 to 112 percent more likely to have a subprime credit score and 45 to 69 percent more likely to have any other delinquency in three years.

Consumer Debt Profiles

More than half of consumers have credit card debt, making it the most common of the four types of debt we examine. The share of consumers with credit card debt increased substantially from 52 percent in 2010 to 61 percent in 2016 (figure 1). Auto or retail loans (34 percent) were the second-most-common type of debt in 2016. Mortgage debt was the third-most-common in 2016, and it fell from 29 percent of consumers to 26 percent between 2010 and 2016. The share of consumers with student loans increased from 9 to 12 percent.

FIGURE 1
Credit Card Debt Is the Most Common of the Four Debt Types
Share of consumers with debt



 $\textbf{Source:} \ \textbf{Authors'} \ tabulations \ of \ \textbf{Urban Institute credit bureau data}, 2010-16.$

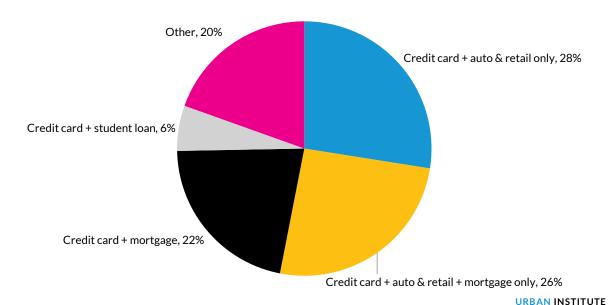
Consumer choices about which debt to pay when in financial distress are shaped by the combinations of debt they have (figure 2). As of 2016, 28 percent of consumers had both credit card and auto or retail loan debt.² Twenty-six percent had credit card, auto or retail loan, and mortgage debt; 22 percent had both credit card and mortgage debt; and 6 percent had credit card and student loan debt. About 20 percent of consumers had some other, less common combination (e.g., mortgage and auto or retail; or credit card, auto or retail, and student loan).

We investigate the delinquent debt decisions and financial consequences for consumers with the four debt combinations identified above (all groups except other).

FIGURE 2

Consumers Are Most Likely to Have Credit Card Plus Some Other Type of Debt

Among those with two or more types of debt, share with each combination



Source: Authors' tabulations of Urban Institute credit bureau data, 2016.

Delinquent Debt Decisions

Consumers in financial distress made varied payment decisions between 2010 and 2016. To assess the long-term consequences of these decisions, we follow consumers who made decisions on which types of debt they prioritized and which they let fall into delinquency over time. We investigate the impact of those delinquency choices on consumers' future credit scores and other delinquent debt three years later.

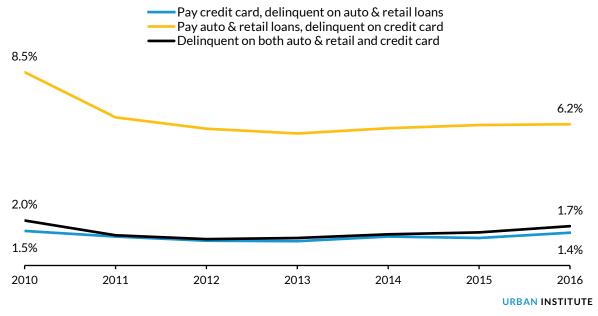
Consumers with Credit Card and Auto/Retail Loan Debt

Among consumers with credit card and auto or retail loans (figure 3), credit card delinquency was high throughout the period. More than 8 percent of these consumers had delinquent or derogatory credit card debt in 2010. This figure decreased to about 6 percent in 2016.

Auto or retail loan delinquency was low among these consumers (less than 1.5 percent), suggesting that consumers in financial distress were more likely to pay auto or retail loans before their credit card debt. This finding is consistent with the literature (Komos et al. 2012).

FIGURE 3
Credit Cards Are More Likely Delinquent than Auto or Retail Loans

Delinquency rate among consumers with credit card and auto or retail loans



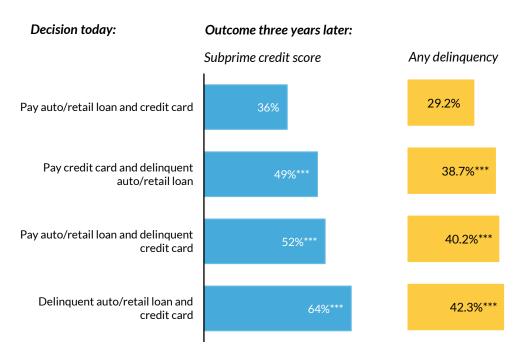
Source: Authors' tabulations of Urban Institute credit bureau data, 2010-16.

As expected, consumers who pay both debts are better off financially in the future than those who become delinquent on at least one (figure 4). During the period under consideration, among consumers with credit cards and auto or retail loans, those who became delinquent on at least one of their debts were 36 percent more likely to have a subprime credit score (49.1 percent versus 36.0 percent, a 13.1 percentage-point difference) and 33 percent more likely to be delinquent on any other debt (38.7 percent versus 29.2 percent, a 9.5 percentage-point difference) in three years than consumers who paid both their debts. Consumers who prioritize their credit card payment over their auto or retail loan payment are less likely to have subprime credit scores in the future.

Among consumers who become delinquent on one debt, those who prioritize their credit card payment over their auto or retail loan payment are slightly better off financially after three years, as measured by having a subprime credit score or any delinquency. During the period under consideration, about 49 percent of consumers who paid their credit card and became delinquent on their auto and retail loans had a subprime credit score after three years, versus 52 percent of those who paid their auto and retail loans and became delinquent on their credit card. Though statistically significant, differences in financial outcomes among those who prioritize credit card debt over auto or retail loans are small (7 percent or 3 percentage points). Consumers who become delinquent on both credit card and auto or retail loans have the worst financial outcomes: about 77 percent more likely to have subprime credit scores and 45 percent more likely to have any delinquency than consumers who paid both debts.

FIGURE 4

Consumers Who Pay Both Credit Card and Auto/Retail Loan Debt Are Better Off in Three Years



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Source: Authors' tabulations of Urban Institute credit bureau data, 2010–16.

Note: Results are based on linear regression models that take into account baseline credit score, baseline debt amounts, and zip code fixed effects. See box 1 for details.

Consumers with Credit Card, Mortgage, and Auto or Retail Loan Debt

Among consumers with credit card, mortgage, and auto or retail loan debt (figure 5), mortgage delinquency was highest in 2010 but declined to below credit card delinquency in 2016. Credit card delinquency has also declined since 2010, but not as quickly as mortgage delinquency. Auto and retail loan delinquency was very low throughout the period among these consumers (less than 0.5 percent). Consumers with all three loan types prioritized auto loans ahead of mortgages and credit cards, consistent with evidence from past work on payment preferences (Komos et al. 2012).

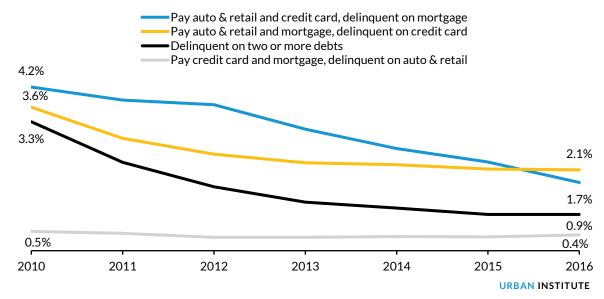
Among consumers with credit card, mortgage, and auto or retail loans, those who pay all debts are financially better off in the future than those who become delinquent on at least one (figure 6). During the period under consideration, consumers who became delinquent on one debt were 38 percent more likely (7.4 percentage points) to have subprime credit and 44 percent more likely (8.7 percentage points) to have any delinquency than those with no delinquent debt. Consumers who became delinquent on two or more debts were 83 percent more likely (16.1 percentage points) to have subprime credit and 62 percent more likely (12.2 percentage points) to have any other delinquency than those with no delinquencies.

^{***} Category differs significantly from the first category at the 0.01 level.

FIGURE 5

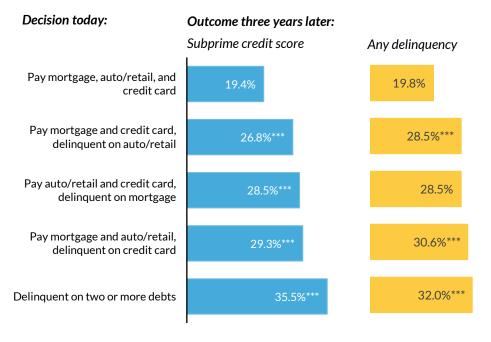
Mortgages and Credit Cards Are More Likely Delinquent Than Auto or Retail Loans

Delinquency rate among consumers with credit card, mortgage, and auto or retail loan debt



Source: Authors' tabulations of Urban Institute credit bureau data, 2010-16.

FIGURE 6
Consumers Who Pay Mortgages, Credit Cards, and Auto or Retail Loans Are Better Off in Three Years



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Source: Authors' tabulations of Urban Institute credit bureau data, 2010–16.

Note: Results are based on linear regression models that take into account baseline credit score, baseline debt amounts, and zip code fixed effects. See box 1 for details.

^{***} Category differs significantly from the first category at the 0.01 level.

Consumers with Credit Card and Mortgage Debt

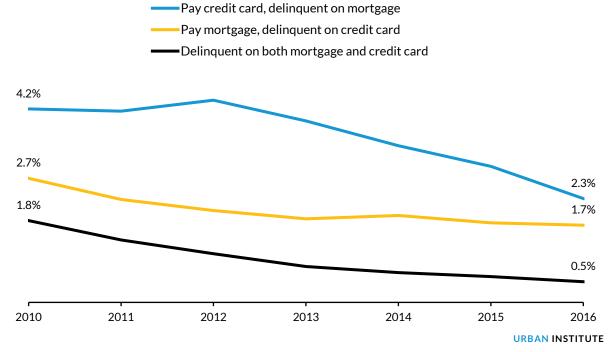
Among consumers with credit card and mortgage debt (figure 7), mortgage delinquency rates peaked in the years following the Great Recession. As noted in past work, consumers traditionally pay mortgages and home equity loans first. However, as the housing crisis unfolded, the consumer payment hierarchy shifted, putting mortgages lower down in the pecking order. Since 2012, however, both credit card and mortgage delinquencies have declined. Mortgage delinquency was still higher than credit card delinquency in 2016 for this group of consumers.

Among consumers with mortgage and credit card debt, those who pay all debts are financially better off in the future than those who become delinquent on at least one (figure 8). During the period under consideration, consumers who became delinquent on one debt were 64 percent more likely (9.4 percentage points) to have subprime credit scores and 56 percent more likely (9.1 percentage points) to have any delinquency than consumers with no delinquent debt. Consumers who became delinquent on both debts were 112 percent more likely (16.3 percentage points) to have subprime credit scores and 69 percent (11.2 percentage points) more likely to have any other delinquency.

FIGURE 7

Mortgage Delinquency Has Been Declining Since the Great Recession

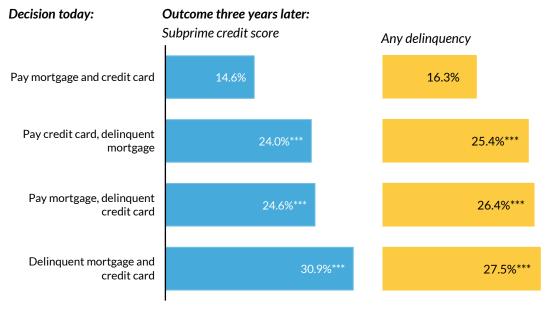
Delinquency rate among consumers with credit card and mortgage debt



Source: Authors' tabulations of Urban Institute credit bureau data, 2010-16.

FIGURE 8

Consumers Who Pay Credit Cards and Mortgages Are Better Off in Three Years



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Source: Authors' tabulations of Urban Institute credit bureau data, 2010-16.

Note: Results are based on linear regression models that take into account baseline credit score, baseline debt amounts, and zip code fixed effects. See box 1 for details.

Consumers with Credit Cards and Student Loans Only

Consumers are more likely to pay their credit card debt before their student loans when in financial distress. Among those with credit card and student loan debt (figure 9), student loan delinquency increased from 12 percent to 14 percent between 2010 and 2016. Credit card delinquency has not changed substantially since 2010 (around 5 percent).

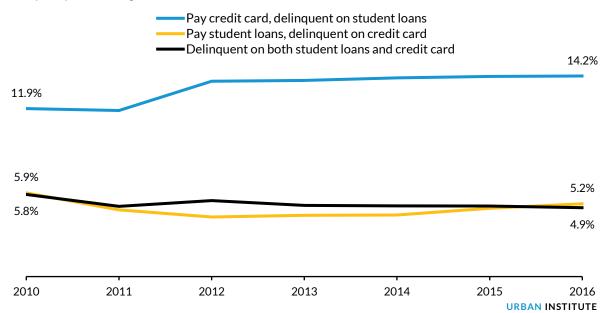
Among consumers with credit card and student loan debt, those who pay both are financially better off in the future than those who become delinquent on at least one (figure 10). During the period under consideration, consumers who became delinquent on one debt were 57 percent more likely (19.3 percentage points) to have subprime credit scores and 32 percent more likely (12.1 percentage points) to have any delinquency than those with no delinquent debt. Consumers who became delinquent on both debts were 111 percent more likely (37.7 percentage points) to have subprime credit scores and 59 percent more likely (22.1 percentage points) to have any other delinquency. Consumers who prioritized credit card payment over student loan payment were slightly better off: they were 7 percent less likely to have a subprime credit rating three years later and 4 percent less likely to have any other delinquency.

^{***} Category differs significantly from the first category at the 0.01 level.

FIGURE 9

Student Loans Are More Likely Delinquent than Credit Cards

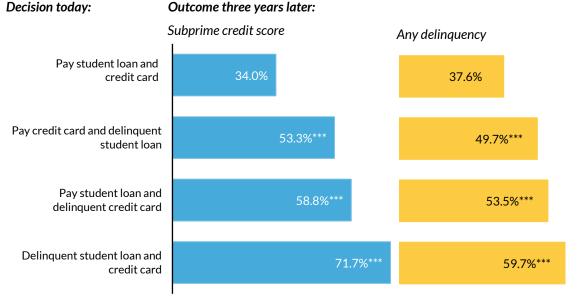
Delinquency rate among consumers with credit card and student loan debt



Source: Authors' tabulations of Urban Institute credit bureau data, 2010-16.

FIGURE 10

Consumers Who Pay Credit Cards and Student Loans Are Better Off in Three Years



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Source: Authors' tabulations of Urban Institute credit bureau data, 2010–16.

Note: Results are based on linear regression models that take into account baseline credit score, baseline debt amounts, and zip code fixed effects. See box 1 for details.

^{***} Category differs significantly from the first category at the 0.01 level.

Discussion

We investigate which debt type families typically stop paying first when in financial distress and the consequences of those decisions. Consumers typically prioritize auto/retail loan payments over any other type of debt, and they typically pay their student loan debt last.

Becoming delinquent on any debt damages a consumer's long-term financial health. Consumers who pay at least one debt have much better credit health three years later than consumers who pay no debts. In addition, consumers who prioritize their credit card debt have slightly better credit health three years later. But consumers should consider other consequences of credit card payment prioritization, such as evictions and loss of a car.

Having a Subprime Credit Score Is Costly

Having poor credit can lead to limited options for financial products and to high interest rates when borrowing money, thereby increasing the cost of asset building. A consumer with a subprime credit score can end up paying much more for the same product than someone with a prime credit score. Table 1 shows the expected difference in cost for four products across subprime and prime consumers: a home, a car, a car repair, and a refrigerator. In addition, subprime consumers may be strictly excluded from the mainstream credit system. By being denied a mortgage, for example, subprime consumers are excluded from asset- and wealth-building opportunities.

TABLE 1
The High Cost of Poor Credit

Product	Details	Subprime	Prime
Mortgage interest	Interest on a 30-year, fixed-rate \$250,000 mortgage with 20 percent down (80 percent loan- to-value ratio)	5.64% APR with 620-639 FICO® score = \$268,943	4.05% APR with 760-850 FICO® score = \$182,324
Car loan interest	Total interest paid on a \$10,000 used car loan (48-month repayment period)	17.548% loan with 500- 589 FICO® score = \$3,987	4.898% loan with 720- 850 FICO® score = \$1,031
Car repair	Total paid for a \$550 car repair over three months	Payday loan; 391% average APR = \$942	Credit card; 17% average APR = \$566
Refrigerator	Average price of a refrigerator	Rent to own store = \$1,990	Non-rent to own store = \$678

Source: Car repair, car loan, and refrigerator figures from Elliott and Lowitz (2018). Mortgage interest figure from myFICO loan savings calculator (https://www.myfico.com/credit-education/calculators/loan-savings-calculator/), accessed February 28, 2019.

These findings suggest that delinquency has long-term consequences on financial health. Consumers should consider financial health, as well as other delinquency consequences, such as loss of a car (and potentially means of getting to work), loss of a home (i.e., shelter/security), and garnishment of wages and tax refunds.

Other Consequences of Debt Delinquency

Any delinquency is associated with reduced ability to borrow in the future and an increase in the cost of credit. But all delinquencies are not created equal: each type has different consequences, which consumers should consider when deciding which debt to pay first. Table 1 presents some consequences for the debts examined in this brief, along with the time it takes for consequences to occur. Mortgage delinquency could be associated with a home loss, and credit card delinquency can result in high fees and loss of liquidity. Auto loan delinquency could be associated with a loss of the vehicle and potentially the means to get to work. Finally, student loan delinquency could result in the garnishment of wages and Social Security benefits.

TABLE 2

Consequences and Timelines for Different Types of Debt

Debt type	Potential consequence(s)	Timeline
Mortgage/home equity line of credit	Loss of home (i.e., shelter/security)	Depends on the state; at least four months (average is 25 months) ^a
Credit card	High penalty fees and reduced ability to borrow in the future (i.e., loss of liquidity), collection calls and possible legal action	Starts at one month
	Credit card debt can be discharged in bankruptcy	
Auto loan	Loss of car (and potentially means of getting to work)	Can start at one month, although lenders typically wait a few months before repossessing
Student loan	Late fees; upon default, the entire loan balance becomes due in full, and its outstanding interest is added to the principal balance; tax returns, wages, and Social Security benefits can be garnished ^b	Starts at one month for late fees, nine months for default.
	Student loans are difficult to discharge in bankruptcy ^c	

^a Per HUD (US Department of Housing and Urban Development), FHA Single Family Loan Performance Trends: Credit Risk Report (Washington, DC: HUD, 2018). Average timeline is delinquency (12 months) plus foreclosure (13 months).

When facing financial distress, the best action is early action. Seeing a financial coach or visiting a financial empowerment center for advice can be helpful to consumers (Theodos, Stacy, and Daniels 2018). Examples of other actions consumers can take include: using emergency savings before borrowing more to pay off debts (Collins and Giertson 2013), renegotiating and searching for possible

^b Per US Department of Education Office of Federal Student Aid, https://studentaid.ed.gov/sa/repay-loans/default/collections.

^cWhile typically student loans do not become discharged in bankruptcy, student loan holders can discharge student loans by declaring Chapter 7 or 13 bankruptcy and demonstrating that repayment would impose undue hardship on them and their dependents. This must be decided in court and may be challenged by creditors. https://studentaid.ed.gov/sa/repayloans/forgiveness-cancellation/bankruptcy

repayment plans, such as income-based student loan repayments (Mueller and Yannelis 2017), making minimum payments on all debts to avoid delinquency, and filing for bankruptcy.

BOX 1

Data and Methodology

We use longitudinal credit bureau data consisting of a random 2 percent sample of seven years of deidentified consumer data from a major credit bureau (36 million observations across all seven years). The information was collected each August from 2010 through 2016, creating panel data with up to seven snapshots for each consumer. These data exclude information on the roughly 26 million US adults with no credit file. All records were stripped of personally identifiable information, and the data do not include information on race/ethnicity, gender, or income.

For this study, we narrow the sample to consumers ages 18 and older who have a valid credit score. The data include information on current, 60- to 180-days delinquent, and derogatory (i.e., internally charged off or in external collections) debt for mortgages, credit cards, auto or retail loans, and student loans. Our specific definitions are as follows:

- Mortgage: The consumer has a first mortgage, second mortgage, or revolving home equity line of credit.
- Credit card: The consumer has an active credit card or department store card.
- Auto or retail loans, including installment loans: An auto loan is taken out to buy a motor vehicle. It is typically structured as an installment loan and is secured by the value of a vehicle. A retail installment contract is created when a customer agrees to buy other types of goods, such as an appliance, with a loan repayment plan that fixes the number and amount of payments. Auto loans make up 87 percent of total auto and retail loans, and retail installment loans make up 13 percent.
- Student loan: The consumer has student debt in repayment (current or delinquent). This excludes student loans in deferment, which are not in repayment because the consumer is a current student or in forbearance.

We define consumers as "current" if they have open debt, but no delinquent debt, for that debt type. We define consumers as "delinquent" if they are 60 or more days late on a bill (including derogatory debt). Although consequences may begin at 30 days late for some debt types, we use the 60-days definition to be consistent across and inclusive of all four debt types.

We estimate the impact of delinquency choices over time as follows:

- 1. Restrict the sample to consumers who only have and are current on two debt types (or in one case three) from 2010 to 2012. We define 2010, 2011, or 2012 as the baseline years.
- 2. Observe consumers' delinquency decisions on these two (or three) types of debt in the following year.
- 3. Follow consumers over time and observe their financial outcomes (credit score or any delinquency) three years in the future (2013 to 2016).
 - Compare the outcomes of consumers who made different delinquency choices. We estimate these differences in future outcomes controlling for credit score, amount of different types of debt, zip code, and year in the baseline year. For example, for consumers holding both mortgage

and credit card debt, we estimate the following linear probability model (the omitted category is those who made mortgage and credit card payments in the following year).

 $Outcome_{i,t+3} = \beta_0 + \beta_1 Pay\ Mortg. \&\ Deliq.\ Credit\ Card_{i,t} + \beta_2 Pay\ Credit\ Card. \&\ Deliq.\ Mortg._{i,t} + \beta_3 Deliq.\ Credit\ Card. \&\ Deliq.\ Mortg._{i,t} + X_{it} + e_{it}$

4. Using the model above, we predict the future outcome for a typical consumer under four different scenarios: payment of both debts (in this example, paying mortgage and credit card), becoming delinquent on one debt but paying the other (e.g., paying mortgage and not paying credit card or paying credit card and not paying mortgage), and becoming delinquent on both debts (not paying both mortgage and credit card).

^a CFPB (Consumer Financial Protection Bureau), Office of Research, "CFPB Report Finds 26 Million Consumers Are Credit Invisible," press release, May 5, 2015, https://www.consumerfinance.gov/about-us/newsroom/cfpb-report-finds-26-million-consumers-are-credit-invisible/.

Notes

- Our statistic is for consumers with credit card debt, not credit card ownership. Some consumers could have owned a credit card but did not use it in the six months preceding August 2016; such consumers were not considered.
- ² Because credit bureaus include only medical debt data once the debt goes into collections, we do not have a measure of "current" medical debt and cannot include combinations of consumers with medical debt and other forms of debt.
- TransUnion, "New Developments around the Consumer Payment Hierarchy," (2014), http://media.marketwire.com/attachments/201403/233081_PaymentHierarchyInfographic2014FINAL.jpg.

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