CONSUMER FINANCIAL PROTECTION BUREAU | AUGUST 2020

The Early Effects of the COVID-19 Pandemic on Consumer Credit

CFPB Office of Research Special Issue Brief

1. Introduction

This report uses the Consumer Financial Protection Bureau's Consumer Credit Panel (CCP) to examine the early effects of the COVID-19 pandemic on consumer credit outcomes, including delinquencies, payment assistance, credit access, and account balances.[1] The CCP data include information on consumer credit outcomes that we analyze over the period January 2019 to June 2020. This report presents the analysis and findings.

The focus of this report is on consumer credit outcomes stemming from the immediate and dramatic shocks to consumer and household income in the first months of the COVID-19 pandemic, beginning in March of 2020. Within three months, the unemployment rate was 11.1 percent[2], and significant cuts in retail spending occurred among households.[3] At the same time, a significant number of workers received income replacement from unemployment insurance (UI) programs. Over 33 million U.S. workers claimed UI benefits at the end of June 2020, many of whom received expanded benefits from an expansion of benefits under the CARES Act.[4] Stimulus payments under the CARES Act also provided added income for both unemployed and employed workers that met certain criteria.[5]

Large income losses can cause households to both struggle to pay bills and to increase their reliance on debt. Households that struggle to make payments can request deferment or forbearance on loan payments. Such assistance is typically approved at the financial institution's discretion. For households that seek additional credit, accessing credit may be difficult if lenders themselves face distress and access to credit tightens in the overall market. To address household financial shocks related to the pandemic, the CARES Act includes measures pertinent to credit reporting. In general, the CARES Act requires furnishers to report to credit bureaus that consumers are current on certain accounts if consumers obtained relief from their lenders

[1] Report prepared by Ryan Sandler, Ph.D., and Judith Ricks, Ph.D., in the Office of Research.

[2] Bureau of Labor Statistics (July 2020), "Economics News Release: Employment Situation Summary." https://www.bls.gov/news.release/archives/laus_07172020.pdf

[3] Opportunity Insights (2020), "How did COVID-19 and Stabilization Policies Affect Spending and Employment? A New Real-Time Economic Tracker Based on Private Sector Data." https://opportunityinsights.org/wp-content/uploads/2020/05/tracker_paper.pdf.

[4] This number includes workers claiming Pandemic Unemployment Assistance. Bureau of Labor Statistics (July 16, 2020), "Unemployment Insurance Weekly Claims." https://oui.doleta.gov/press/2020/071620.pdf

[5] In some cases, workers earned more income during the COVID-19 pandemic than they did prior as a result of the CARES Act expansion of UI benefits and stimulus payments. See, e.g., https://www.wsj.com/articles/coronavirus-relief-often-pays-workers-more-than-work-11588066200.

due to the pandemic.[6] This protection applies to any payment assistance or relief granted to a consumer affected by COVID-19 during the period from January 31, 2020 until 120 days from the declared end date of the COVID-19 national emergency. We expect this provision of the CARES Act to affect the frequency of delinquency and payment assistance, two outcomes we discuss in this report.

The CARES Act also imposes other assistance requirements on lenders, which vary by account type. For instance, the CARES Act requires lenders to suspend until September 30, 2020, principal and interest payments on federally-held student loans,[7] which account for about 82 percent of the student loan market.[8] For mortgages, borrowers whose loans are backed by the federal government or the Government Sponsored Enterprises (GSEs), Fannie Mae and Freddie Mac, may request from their lenders an initial forbearance of up to 180 days that is extendable up to a total of 360 days.[9] Federally backed and GSE-backed mortgages accounted for 62.2 percent of the mortgage market in December 2019, so this provision could affect a large share of the mortgage market, depending on the number of borrowers that make use of the program.[10] The CARES Act does not provide for any specific assistance programs for credit cards and auto loans, leaving consumer assistance in these markets to the discretion of the financial institution. These differences in assistance programs may generate variation in consumer credit outcomes by account type.

The analysis reports trends in delinquency rates, payment assistance, credit access, and account balance measures. The results show that through June 2020 consumers did not experience

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[6] Specifically, the CARES Act requires financial institutions to report consumers as current if they were not previously delinquent or, for consumers that were previously delinquent, not to advance the level of delinquency for credit obligations where the furnisher makes payment accommodations to consumers affected by COVID-19 and the consumer makes any payments the accommodation requires. See Coronavirus Aid, Relief, and Economic Security Act, Pub. L. No.116 § 4021 (2020). In addition, section 3513 of the CARES Act specifically addresses the furnishing of federally-held student loans for which payments are suspended. This provision results in all non-defaulted federally-held student loans reported as current.

[7] Consumer Financial Protection Bureau (2020), "Information for Student Loan Borrowers." https://www.consumerfinance.gov/coronavirus/student-loans/

[8] This estimate combines information from the Department of Education and MeasureOne. MeasureOne (2020), "The MeasureOne Private Student Loan Report." https://www.measureone.com/resources Department of Education (2020), "Portfolio by Loan Status." https://studentaid.gov/data-center/student/portfolio

[9] Consumer Financial Protection Bureau (2020), "Relief for all federally or GSE-backed mortgages." https://www.consumerfinance.gov/coronavirus/mortgage-and-housing-assistance/mortgage-relief/

[10] Urban institute, Housing Finance Policy Center (2019), "Housing finance at a glance A monthly chartbook, December 2019." https://www.urban.org/sites/default/files/publication/101476/housing_finance_at_a_glance_a_monthly_chartbook_december_2019_0.pdf

many of the negative credit consequences that might be expected during periods of high unemployment and large income shocks. Subject to important data limitations described in the next section, the main findings are:

- The reported rate of new delinquencies on mortgage loan, auto loan, student loan, and credit card accounts fell between March 2020 and June 2020, after being flat or increasing gradually for the year prior. The reported share of already delinquent accounts that became more delinquent also fell. Breaking our sample out by credit score and demographics, the reported share of new delinquencies fell for all groups.
- Beginning in March of 2020, there was a sharp increase in the share of accounts reported with zero payment due despite a positive balance, indicating some type of payment assistance. This was most pronounced for mortgages, where we observe around 6 percent of all outstanding first-lien mortgages reporting zero payment due by June 2020, up from essentially zero in February 2020.[11] Assistance was more likely to be reported for borrowers residing in areas with more COVID-19 cases, with majority-Black or majority-Hispanic populations, and with larger changes in unemployment since the start of the pandemic.
- There was a slight reduction in the availability of credit card debt between March and June 2020. Credit limits on existing credit cards declined slightly, where prior to March 2020 there was a general trend of increasing limits. There was also an uptick in the closure of accounts by credit card issuers. In absolute terms, borrowers with very high credit scores accounted for the majority of account closures.
- Consumers did not appear to be accumulating credit card debt as a means of staying afloat financially. On average, credit card balances decreased by around 10 percent between March 2020 and June 2020, a drop consistent with other data that show a decline in consumer spending. Moreover, when we break out our sample by credit score and consumer demographics, we find declines in balances across all groups, including consumers residing in both high- and low-income census tracts.

The analysis presented here overlaps with the timing of substantial assistance provided to consumers through the CARES Act and other federal, state and local programs. Absent these

[11] This is lower than estimates from the Mortgage Bankers Association (MBA) National Delinquency Survey, which reports an 8.4 percent forbearance rate at the end of June of 2020. The MBA estimate is based on a survey of servicers and includes only 1-4 family homes. Among other things, our estimates are based on administrative data, not seasonally adjusted, and may have different representation in the number of units captured. See, e.g., https://www.mba.org/2020-press-releases/july/share-of-mortgage-loans-in-forbearance-decreases-for-third-straight-week-to-839.

programs, the trends observed in this report may have differed substantially between March and June of 2020.

Overall, our findings add to the growing literature on the effect of the COVID-19 pandemic on credit outcomes among U.S. consumers and households. The analysis shows a decrease in delinquency since the start of the pandemic and an increase in consumer assistance. These patterns hold for auto loans, first-lien mortgages, student loans, and credit cards, consistent with earlier evidence,[12] but our analysis goes deeper into measuring how these outcomes differed based on consumer and geographic characteristics compared to earlier work. The availability of revolving credit is somewhat tighter with account closures increasing and only small decreases in limits on existing accounts. Among open credit card accounts, balances fall sharply at the start but continue a steady decline.[13] Importantly, our findings are robust to differences in credit score and differences in various demographic measures.

[12] Economic analysis by the Federal Reserve Bank of New York has shown similar evidence of decreases in delinquency. See, e.g., https://libertystreeteconomics.newyorkfed.org/2020/08/debt-relief-and-the-cares-act-which-borrowers-benefit-the-most.html.

[13] This is consistent with existing evidence on credit card balances falling from the JP Morgan Chase Institute. See, e.g., https://institute.jpmorganchase.com/institute/research/household-income-spending/initial-household-spending-response-to-covid-19#finding-1.

2. Data

The CCP is a longitudinal, nationally representative sample of approximately five million de-identified credit records from one of the three nationwide consumer reporting agencies (NCRAs). After the end of each month, the CFPB receives updated credit records for all sampled credit records, if available.

The records contain information on the credit accounts included in each credit record (such as auto loans, mortgages, credit cards, student loans, and other bank installment loans). This includes information on balances, repayment, amount due, and credit limits. In addition, the CFPB receives de-identified information on the borrowers in the panel on a quarterly basis, including geography (census tract), credit score, and birth year. Accounts in the sample are weighted based on the number of account owners (e.g., individual versus joint accounts) in order to prevent double counting.

This report focuses on various consumer credit outcomes that may reflect either changes in demand for borrowing or changes in a consumer's ability to repay debt. Specifically, we look at reported shares of consumer delinquency, reported shares of payment assistance, and credit availability and balances on revolving credit. Our sample focuses on auto loan, first-lien mortgage, student loan, and general-purpose credit card accounts.[14] The sample includes accounts open as of January 2019; and the analysis uses monthly updates on each of these accounts from January 2019 through June 2020.[15]

The analysis in this report is limited by the timeliness and accuracy of the consumer credit information reported to the NCRAs. Information in the sample may not be representative of the full population of accounts to the extent that furnishers delay reporting. While there is limited evidence of widespread reporting delays for most types of credit, the CCP appears to be missing updates on about 15 percent of first-lien mortgage accounts in April and May 2020, although updates for June 2020 were similar to June 2019 (see Appendix A for more details).

[14] We also include an analysis of home equity lines of credit (HELOCs) in Appendix B.

[15] The CCP data received by the Bureau include monthly archives containing a snapshot of each credit record as it was reported to the NCRA near the end of each month. Because many furnishers report updates to the NCRA using end-of-month account information, the archive for a given month will largely have updates for accounts as of the end of the prior month. This report uses data from the July 2020 archive to capture the status of accounts as of June 2020 but does not report results for July 2020, as the small fraction of accounts with July 2020 balance dates may not be representative of all accounts.

TABLE 1: SUMMARY STATISTICS FOR SAMPLE FROM THE CONSUMER CREDIT PANEL, COVERING THE PERIOD JANUARY 2019-FEBRUARY 2020

Account or Consumer Measure	Auto Loans	First-Lien Mortgages	Student Loans	Credit Cards
Average Monthly Balance Amount ($)	15,011	188,925	9,700	1,901
Average Original Balance/Credit Limit ($)	23,368	221,423	9,287	8,513
Average Credit Score	688	742	620	733
Average Age in 2020	47	54	33	57
Share ever delinquent, Jan. 2019–Feb. 2020	11.9%	4.8%	17.8%	5.5%
Share ever zero payment due, Jan. 2019–Feb. 2020	1.8%	0.1%	45.9%	1.9%
Number of Accounts	3,197,176	1,853,303	4,131,705	12,454,313
Total Observations (Account-Months)	32,377,822	21,743,443	47,544,900	144,297,734

Notes: Monthly balance and original balance/limit are averages over all account-month observations from January 2019-June 2020. Credit score is the average across all consumers, as of the earliest credit score in the sample, generally December 2018. Age is averaged across all consumers. Shares of accounts reporting ever reporting delinquency or assistance are averaged over accounts.

Table 1 summarizes the characteristics of the CCP sample used in this report for the months preceding the COVID-19 pandemic. The average balance is about $15,000 for auto loan accounts, $189,000 for first-lien mortgage accounts, $10,000 for student loan accounts, and $2,000 for credit card accounts.[16] The average age of mortgage and credit card borrowers in our sample is 52 years old, while auto borrowers are somewhat younger on average. Student loan borrowers are much younger with an average age of 36. Average credit scores vary across types of credit, ranging from an average score of 620 for those with student loan accounts to an average score of 742 for mortgage borrowers. Before the pandemic, 12 percent of auto loan accounts, 5 percent of first-lien mortgage accounts, 18 percent of student loan accounts, and 6 percent of credit card accounts are 30 or more days delinquent in at least one month between January 2019 and February 2020. For most types of credit, payment assistance (denoted by zero payment due with a positive balance) is reported quite rarely before the pandemic, with less than 2 percent of accounts of each type ever being reported as receiving assistance between

[16] Note that many consumers with student loans and credit cards have multiple such loans—the averages reported here are per account. Total debt burden for some consumers may be higher. However, we are aware of at least one large student loan servicer which furnishes credit reporting information at a borrower level, instead of at the account level. The average for credit cards includes account-months with a zero balance, but not cards that have been marked inactive or otherwise closed. The average balance for credit card accounts with non-zero balance in our sample is around $2,700.

January 2019 and February 2020. The exception is student loan accounts, for which federal student loans qualify for a number of payment deferral programs that are reported as having no scheduled payment.[17]

We also use publicly available demographic and economic information to analyze the CCP data by geographic characteristics. We obtain data on racial and ethnic characteristics and median income at the census tract level from the American Community Survey (ACS) five-year estimates for 2014–2018, the most recent available.[18] We classify consumers as residing in a metro or non-metro area based on their census tract of residence using the 2010 Rural-Urban Commuting Area codes from the US Department of Agriculture Economic Research Service.[19] To measure local unemployment shocks, we use the Local Area Unemployment Statistics (LAUS) county-level monthly unemployment rate estimates from the Bureau of Labor Statistics.[20] For our analysis using the LAUS data, we calculate the total change in the county-level unemployment rate between January 2019 and June 2020. This measure represents the total county-level unemployment shock faced by the consumer's county of residence. Finally, we measure exposure to the COVID-19 pandemic using county-level confirmed cases from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University.[21] For our analysis we use the cumulative number of cases or deaths per 100,000 residents in the county as of June 30, 2020.

Finally, our analysis has important limitations due to its reliance on credit reporting data. The data used in this report are based upon information furnished to one of the three nationwide consumer reporting agencies. As such, both the data and the findings are only as reliable as the underlying credit reporting. Account delinquency, assistance, or other outcomes cannot be

[17] See https://studentaid.gov/manage-loans/lower-payments/get-temporary-relief/deferment.

[18] U.S. Census Bureau (2020). *2004–2018 American Community Survey 5-year Public Use Microdata Samples*. Retrieved from https://www2.census.gov/programs-surveys/acs/summary_file/2018/data/?#. Census tracts are designed to be small, relatively permanent subdivisions of counties of roughly consistent size. Census tracts generally contain between 3,000-5,000 residents. In our analysis, we use the ACS data to denote majority White, majority Black, and majority Hispanic census tracts. About 74.4 percent of census tracts are majority White, 8.3 percent of census tracts are majority Black, 10.6 percent are majority Hispanic, and the remainder do not have a majority of any one racial or ethnic group.

[19] U.S. Department of Agriculture Economic Research Service (2020). 2010 Rural-Urban Commuting Area Codes. Retrieved from https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes.aspx.

[20] Bureau of Labor Statistics (2020). *2019-2020 Local Area Unemployment Statistics*. Retrieved from https://www.bls.gov/lau/#data.

[21] *See* Ensheng Dong, Hongru Du, and Lauren Gardner, "An interactive web-based dashboard to track COVID-19 in real time," Data accessed from https://raw.githubusercontent.com/CSSEGISandData/COVID-19/master/csse_covid_19_data/csse_covid_19_time_series/, last accessed August 11, 2020

correctly measured if they are not accurately reported on an individual's credit report. Further, the results can only speak to the experience of consumers with a credit report–roughly 90 percent of adults in the United States.[22] Consumers with credit records differ in important ways from the U.S. adult population as a whole. Similarly, our results may not be generalizable to consumers whose credit profiles do not include one of the major types of credit that we focus on.

[22] Brevoort, K., P. Grimm, & M. Kambara (2015), "Data Point: Credit Invisibles." Consumer Financial Protection Bureau, Office of Research Data Point: https://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf

3. Trends in Delinquency

The COVID-19 pandemic resulted in widespread changes in consumer and firm behavior that led to substantial employment and income shocks. This left many consumers with less money available to pay bills. At the same time, interventions at the federal, state, and local levels attempted to relieve consumers through both income supports such as expanded unemployment insurance and programs aimed at providing payment assistance to borrowers. We first look at reported trends in consumer delinquency since many consumers may have had difficulty making payments on credit obligations. Our primary outcome of interest is transition into delinquency. We consider an account as having transitioned into delinquency if it is delinquent in the present month but was current the last time we observed it.[23] We also consider increases in delinquency severity on a month-to-month basis. An account is considered to have transitioned into higher delinquency severity if it is more delinquent in the present month than it was in the prior month. We measure these transitions as a share of open accounts. These measures are distinct from the total share of accounts that are delinquent at any given time. A focus on new delinquencies captures any shocks created by the COVID-19 pandemic because the share of accounts transitioning out of delinquency was relatively constant in this period.

We note again that the assistance programs under the CARES Act, along with the reporting requirements imposed by the Act, will affect our measure of delinquency. Furnishers are generally required to report as current certain credit obligations for which they make payment accommodations to consumers affected by COVID-19. Since consumers receiving assistance can maintain a current account status rather than go delinquent, we expect to see fewer month-to-month transitions into delinquency than would have been the case absent the CARES Act provisions. This will be particularly true for student loan accounts, for which the CARES Act automatically suspended payments and mandated furnishing requirements that apply to more than two-thirds of the market.[24]

[23] Generally, this will be a transition from current to 30 days past due. However, it is possible that a consumer might transition from current to 60 days past-due or more due to gaps in reporting. In addition, servicers of federal student loans do not report delinquencies until a borrower becomes 90 days past-due.

[24] The CARES Act also required servicers to provide forbearances for first-lien and subordinate-lien mortgages. The provision applied to nearly two-thirds of the overall mortgage market. However, the Act only required servicers to offer assistance at the request of the mortgage borrowers, meaning that far fewer than two thirds of the mortgage market would be expected to be affected.

FIGURE 1: SHARE OF OPEN ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT AND SHARE THAT INCREASE IN DELINQUENCY SEVERITY, BY MONTH AND ACCOUNT TYPE

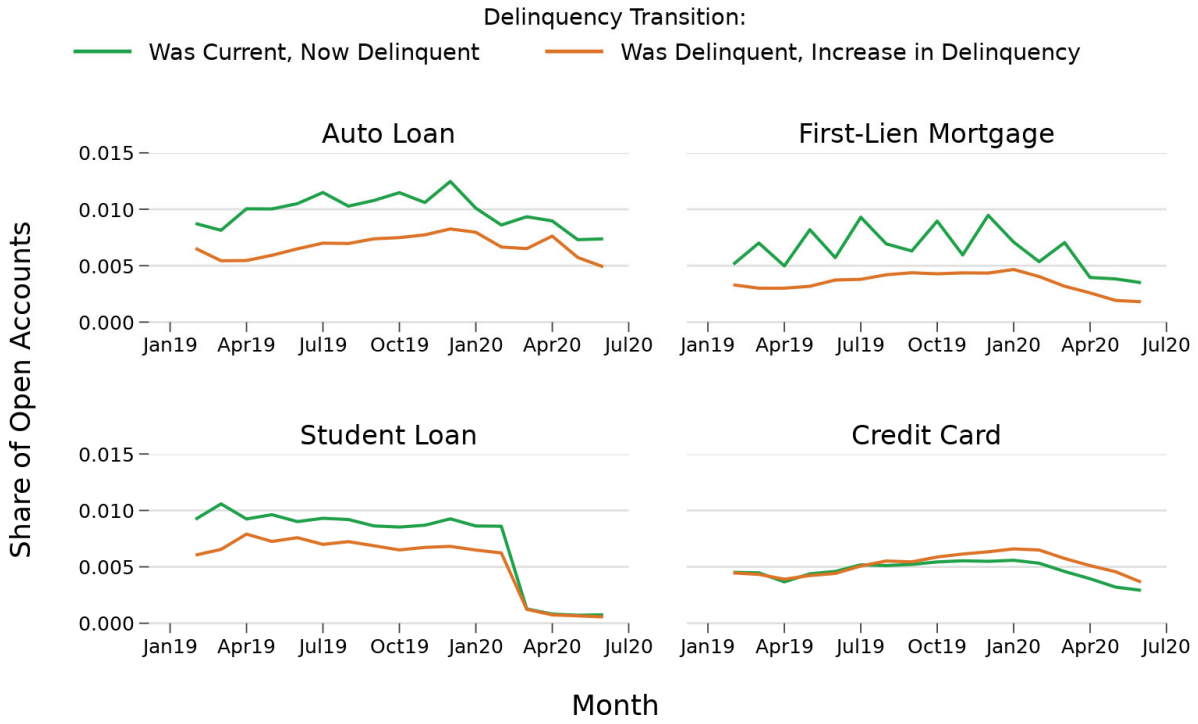


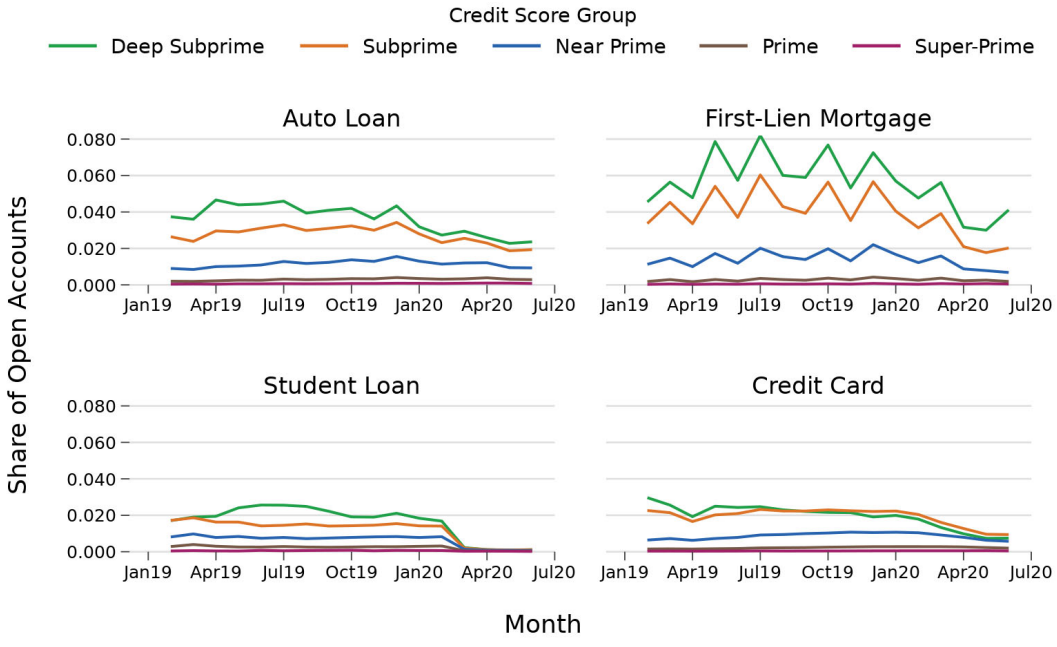
Figure 1 shows the share of open accounts that transition from being reported as current to being reported as delinquent and the share of accounts that increase in delinquency severity each month by account type from January 2019 to June 2020. Aside from month-to-month variation, new transitions into delinquency for auto loan, first-lien mortgage, and credit card accounts are slightly increasing or flat between January 2019 and January 2020. Transitions for student loan accounts generally decrease slightly beginning in April 2019. After January 2020, transitions into delinquency gradually decline for all four account types. Transitions into delinquency for auto loan accounts fall by about 0.1 percentage points from February to June of 2020; those for first-lien mortgages fall about 0.2 percentage points and credit cards fall about 0.5 percentage points over the same period. The exception is student loan accounts, where new transitions into delinquency decline sharply (0.7 percentage point decrease) between February and March 2020, as non-defaulted federally-held student loans were required by the CARES Act to be reported as current.

The share of accounts that transition into higher delinquency severity tracks closely the patterns for the share that transition into delinquency, including the decline starting around the beginning of the pandemic. In levels, increases in delinquency severity are generally lower than transitions from current to delinquent for auto loan, first-lien mortgage, and student loan

accounts. Credit card accounts are the exception, which show levels of increases in delinquency severity similar to transitions into delinquency from February to September of 2019. After September of 2019, the level of increases in delinquency severity for credit card accounts rises above that of delinquency transitions.

Breaking the data down by credit score groups, as shown in Figure 2, shows limited variation in transitions into delinquency between March and June of 2020.[25] Although the baseline level of new delinquencies is significantly higher for borrowers with lower credit scores, new delinquencies do not increase for any score group from March to June of 2020. In fact, delinquencies decline for several score groups, most especially among subprime and deep subprime borrowers, who had the highest shares of delinquency transitions before the pandemic. For all account types, the share of accounts transitioning into delinquency is essentially flat for super-prime and prime borrowers, but these consumers also have very low shares of new delinquency in general. Near prime borrowers have a gradual decline over the same period.

FIGURE 2: SHARE OF OPEN ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT, BY MONTH, CREDIT SCORE GROUP AND ACCOUNT TYPE



[25] Because delinquencies will themselves affect credit scores, to make a consistent comparison we use the first observed credit score within our sample period for each consumer to classify accounts into score groups. Generally, this will be the score as of December 2018, but may be from a later quarter if the consumer did not have a credit score at that time.

In Appendix C, we break out the new delinquency transitions by census tract and county demographics as well as borrower age. The baseline shares of new delinquency transitions in 2019 varies across groups. Similar to credit scores, however, new delinquencies after March 2020 do not increase for any sub-group. Instead, for all of these groups, new transitions into delinquency either decrease or are flat from March 2020 through June 2020. In particular, when broken down by the county-level COVID-19 case rate, there is little variation across groups both in baseline levels of delinquency shares and the rate at which delinquencies fall between March and June of 2020.

In summary, we do not see any evidence that delinquencies on major forms of credit increased during the early months of the COVID-19 pandemic, in contrast to the U.S. experience in the Great Recession. It is likely that at least part of the reason for the absence of delinquency impacts is the policy interventions at the federal, state and local levels, which counteracted income and employment shocks that otherwise might lead to increased delinquencies. Beyond direct income supports such as higher unemployment insurance benefits, these policies include programs aimed specifically at providing payment assistance to consumers with certain types of credit. We examine the prevalence of this type of assistance in the next section.

4. Reported Assistance

In the prior section we show that monthly transitions into delinquency fell substantially for all account types starting in March of 2020 through at least June of 2020. Some of this decrease in delinquency transitions may be related to increases in consumer assistance such as programs provided under the CARES Act. This section analyzes trends in reported assistance on consumers' credit records. For purposes of this section we define consumer assistance as an account being reported with zero scheduled payment due despite a positive balance.[26]

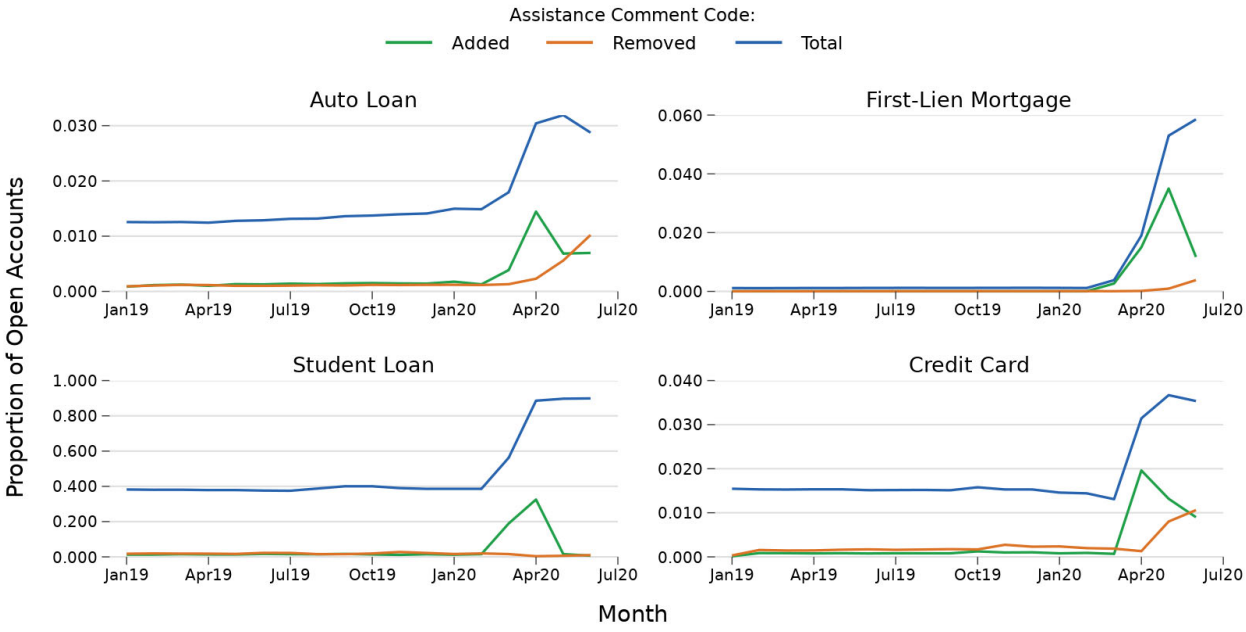
Figure 3 reports the total share of accounts with zero payment due (assistance) reported and month-to-month transitions into and out of assistance from January 2019 to June 2020. Month-to-month transitions are reported as a share of total open accounts. The total share of reported assistance for all account types, except student loan accounts, is near zero prior to March 2020. This means few accounts report assistance at baseline. Student loan accounts have a baseline of almost 40 percent of open accounts with zero payment due reported in any given month prior to March 2020. As noted above, unlike other account types, federal student loans are eligible for several payment deferral programs. In particular, students still in school generally have payments automatically deferred.[27] Transitions into and out of assistance are also near zero for all account types prior to March 2020.

Beginning in March of 2020, the share of open accounts transitioning into assistance increases sharply, although the magnitude of the increase varies by account type. Assistance for first-lien mortgage accounts begins increasing in March, with 3.5 percent of accounts newly reporting assistance in May alone. For auto loan accounts, 1.4 percent of open accounts transition into assistance in April. Credit cards were similar with 2 percent of open accounts newly reporting assistance in April. We note that the variation in the incidence of consumer assistance reported in the CCP may have as much to do with how furnishers in each market report to the NCRAs as it does with the incidence of actual assistance. Student loan accounts show somewhat similar

[26] This definition is consistent with existing, publicly-available analysis on assistance reporting, making our results comparable with other sources. See, e.g., https://libertystreeteconomics.newyorkfed.org/2020/08/a-monthly-peek-into-americans-credit-during-the-covid-19-pandemic.html. For mortgages and auto loan accounts, our definition largely overlaps with comment codes indicating forbearance or deferral, which are called for in guidance by the NCRAs and the Consumer Data Industry Association (CDIA): https://cdia-news.s3.amazonaws.com/COVID-19/CRA+Data+Reporting++COVID-19+CARES+Act+Guidance+4-2-2020-2.pdf. For credit cards, and for student loans post-pandemic, there is a relatively large share of accounts which report a positive balance and no payment due, but without any explicit indication of forbearance or deferral on the credit report.

[27] See https://studentaid.gov/manage-loans/lower-payments/get-temporary-relief/deferment.

FIGURE 3: SHARE OF OPEN ACCOUNTS REPORTING ASSISTANCE AND SHARE WITH ASSISTANCE ADDED OR REMOVED IN CURRENT MONTH, BY MONTH AND ACCOUNT TYPE



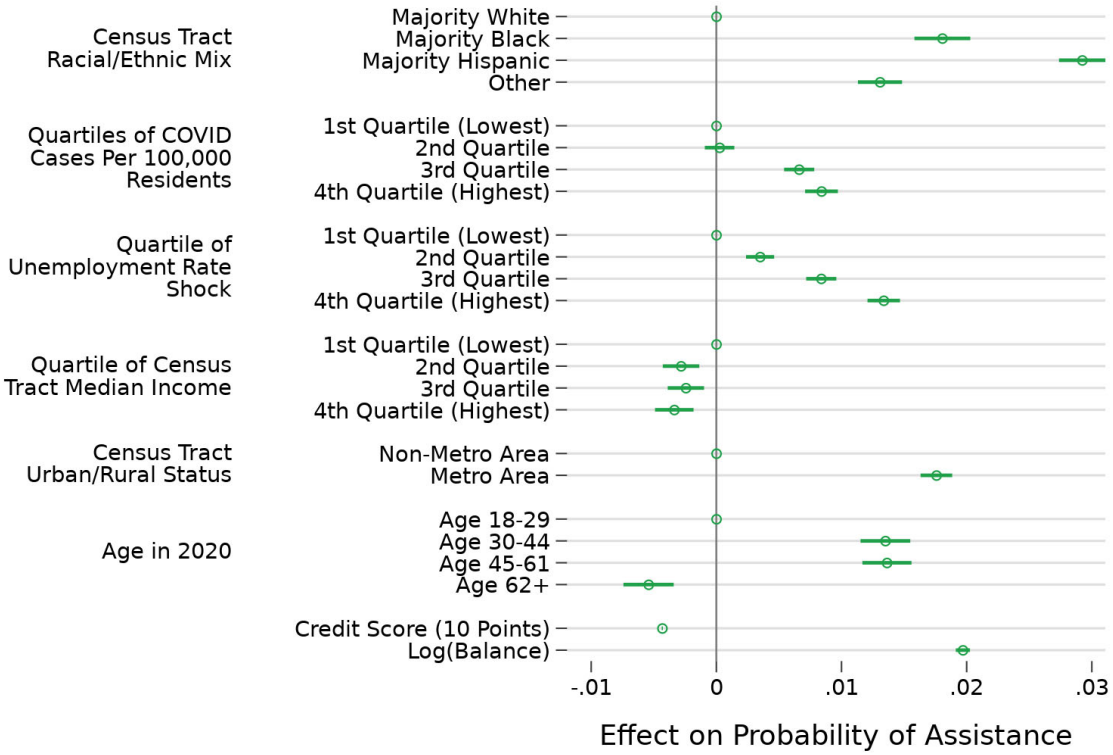
behavior but at a different scale—19 percent and 32.5 percent of open student loan accounts newly report assistance in March and April of 2020, respectively.

Transitions out of assistance begin ticking upward between April and June for most types of credit. Auto loan accounts begin to transition out of assistance in large numbers between April and June. About 0.6 percent of auto loan accounts transition out of assistance in May and another 1 percent transition out in June. The uptick for mortgage accounts begins between May and June but is small relative to the increase in transitions into assistance between March and May. About 0.8 percent and 1.1 percent of credit card accounts transition out of assistance in May and June of 2020, respectively. Student loan accounts are the exception—almost no student loan accounts transition out of assistance during our sample period.

To understand the types of consumers receiving assistance, we predict the probability of receiving assistance as a function of consumer, account, and demographic characteristics using regression analysis. The regression estimates the association between each characteristic and the probability of receiving assistance, holding all other characteristics constant. We estimate an account-level regression that models whether the account transitioned into assistance in March 2020 or later as a function of consumer credit score, account balance, and categories for: consumer age in 2020, census tract race, census tract median income, census tract urban-rural status, county unemployment rate changes, and county COVID-19 cases.

Figure 4 reports the estimates from this regression for the sample of mortgage accounts, which is the largest debt in terms of market volume. For the categorical variables, the points can be interpreted as the average difference in the probability that an account in the given category receives assistance, holding all other factors constant, as compared to the reference category, which is normalized to zero. For the respective breakdowns, the reference categories are majority-White census tracts, the 18–29 age group, non-metropolitan area census tracts and the lowest quartile in census tract household income, county unemployment rate changes, and county COVID-19 cases. The point for credit score should be interpreted as the average change in the probability of assistance associated with a 10-point increase in credit score, holding all other factors constant.[28] The bars associated with each point indicate the 95 percent confidence interval associated with the estimate. If the bars overlap zero, this means that our point estimate

FIGURE 4: REGRESSION ESTIMATES OF THE ASSOCIATION BETWEEN ACCOUNT AND GEOGRAPHIC CHARACTERISTICS AND THE PROBABILITY OF TRANSITIONING INTO ASSISTANCE ON OR AFTER MARCH 2020, FOR FIRST-LIEN MORTGAGES



[28] In technical terms, the points give the average marginal effect of each characteristic from a logistic regression, which can be interpreted as the percentage point change in the outcome associated with a one unit change in each characteristic.

could easily have come about by chance even if there was no real association between the characteristic and receiving assistance. Likewise, estimates whose bars overlap may differ only due to chance, rather than having a different contribution to the probability of receiving assistance.

We find substantial variation in the types of consumers who receive assistance in the early months of the pandemic. Mortgage borrowers residing in majority-Black census tracts are 1.8 percentage points more likely to receive assistance, and borrowers residing in majority-Hispanic census tracts are about 2.9 percentage points more likely to receive assistance on their mortgage account than consumers residing in majority-White census tracts, holding constant the other characteristics in the model. Mortgage borrowers are more likely to receive assistance if they resided in counties hit the hardest by the pandemic as measured by the number of cases and the change in the county-level unemployment rate. Holding other factors constant, mortgage borrowers residing in counties in the top quartile of COVID-19 cases per 100,000 residents are about 0.8 percentage points more likely to receive assistance compared to residents of counties in the lowest quartile.[29] Similarly, consumers residing in counties that experience increases in the county unemployment rate in the top quartile are about 1.3 percentage points more likely to receive assistance, compared to counties in the lowest quartile.[30] Borrowers in high-income census tracts are somewhat less likely to receive assistance compared to borrowers in the lowest income tracts, although the difference is small. One likely reason for there being little association between census tract income and assistance is that the variation in assistance is better explained by other factors in the model, particularly loan balance. Consumers residing in metropolitan areas, which were hardest hit by the first waves of the pandemic, are about 2 percentage points more likely to receive assistance than borrowers in non-metropolitan areas. Borrowers between 30 and 61 years of age are about 1 percentage point more likely to receive assistance than borrowers ages 18–29. This suggests that experience with the credit system could be driving some of the variation. Borrowers aged 62 and older are less likely to receive assistance, which may be due to many of these borrowers being retired. The pension and social security incomes of retired consumers are less likely to be affected by the unemployment shocks created by the COVID-19 pandemic, and thus may be less likely to need assistance. Borrowers with high credit scores are less likely to receive assistance, while borrowers with higher-balance accounts are more likely to receive assistance.

[29] For reference, counties in the bottom quartile had fewer than 276 total cases per 100,000 residents as of June 30, 2020, while counties in the top quartile had at least 1,028 total cases per 100,000 residents by that date.

[30] For reference, counties in the bottom quartile had an increase of less than 4 percentage points in the county unemployment rate between January 2019 and June 2020, while counties in the top quartile had an increase in the county unemployment rate of at least 9.2 percentage points over the same period.

We see similar patterns for other types of credit, save that the pattern of assistance across age and credit score differs notably across different account types. See Appendix D for more details on auto loan, student loan, and credit card accounts.

While the analysis above is informative about the distribution of assistance as reported on consumers' credit reports, there are some key limitations. First, the regression framework holds constant all the factors in the model, but it cannot account for factors outside the model, nor does it provide a causal link between any of the characteristics and receipt of assistance. Second, most of the characteristics in our regression analysis are geography-based aggregates. These aggregated measures describe the consumers' neighborhood or county, rather than the consumer themselves. For instance, although residents of majority-Black census tracts are more likely to receive assistance on their mortgages than residents of majority-White census tracts, we cannot say whether the consumers receiving assistance are themselves Black. This result is also consistent with White residents of majority-Black tracts being more likely to receive assistance than White residents of majority-White tracts. Third, because our analysis is at the account level, we are not measuring the extent to which consumers with mortgages also receive assistance on other types of credit that may be eligible for or need assistance. Finally, more broadly, the analysis does not speak to the relationship between receiving assistance and needing assistance. Our data cannot identify whether, e.g., residents of majority-Black census tracts are receiving assistance in proportion to their need for assistance.

In summary, we find evidence of a substantial uptick relative to the pre-pandemic period in the provision of payment assistance to borrowers of major types of credit between March and June of 2020. The assistance appears to be concentrated among borrowers residing in areas that were more severely affected by the COVID-19 pandemic and the associated shocks to employment.

5. Access to Revolving Credit

The previous sections showed that, at least overall and as of June 2020, consumers have not experienced significant increases in delinquency following the onset of the COVID-19 pandemic in the United States, but many have received payment assistance. We now turn to credit availability, and we examine whether credit has tightened, with a focus on revolving or open-end lines of credit. Unlike closed-end loans that extend credit as an initial lump-sum with a fixed repayment period, open-end lines of credit offer consumers the flexibility to borrow money as needed up to a specified limit. Repayment on revolving debt often varies based on the outstanding account balance. The available credit limit can be increased or decreased at the discretion of the financial institution. The analysis focuses on general-purpose credit cards, which are the most common form of revolving debt and accounted for $927 billion of borrowing at the end of 2019.[31]

The large unemployment and income shocks that occurred from March to June of 2020 may have caused households to turn to credit as a form of liquidity.[32] At the same time, income loss may have made it more likely that these households were unable to repay their debt. Financial institutions can manage risk by reducing the amount of credit available for consumers to borrow (i.e., reduce credit limits). In the last recession from 2008-2009, financial institutions cut credit limits and closed accounts to reduce risk.[33] Similarly, financial institutions may have begun limiting households' access to credit in the wake of the COVID-19 pandemic by managing the amount of credit available for borrowing. In this section, we examine whether financial institutions both cut limits and closed accounts to decrease their risk in response to the pandemic.

For credit limits, we focus on the total limits on all existing general-purpose credit card accounts belonging to a consumer.[34] This is a measure of the overall open-end credit resources available

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[31] Federal Reserve Bank of New York (2019), "Quarterly Report on Household Debt and Credit 2019:Q4." See https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2019q4.pdf.

[32] Fulford, S., & M. Rush (2020) "Insights from the Making Ends Meet Survey." Consumer Financial Protection Bureau, Research Brief 2020-1: https://www.consumerfinance.gov/data-research/research-reports/insights-making-ends-meet-survey/.

[33] Fulford, S. & Schuh, S., (2017). "Credit Card Utilization and Consumption Over the Life Cycle and Business Cycle." Consumer Financial Protection Bureau Office of Research Working Paper No. 2017-03. https://ssrn.com/abstract=3124451.

[34] For this section of the analysis, credit card accounts with credit limits larger than $100,000 are dropped (top 0.1 percent of accounts).

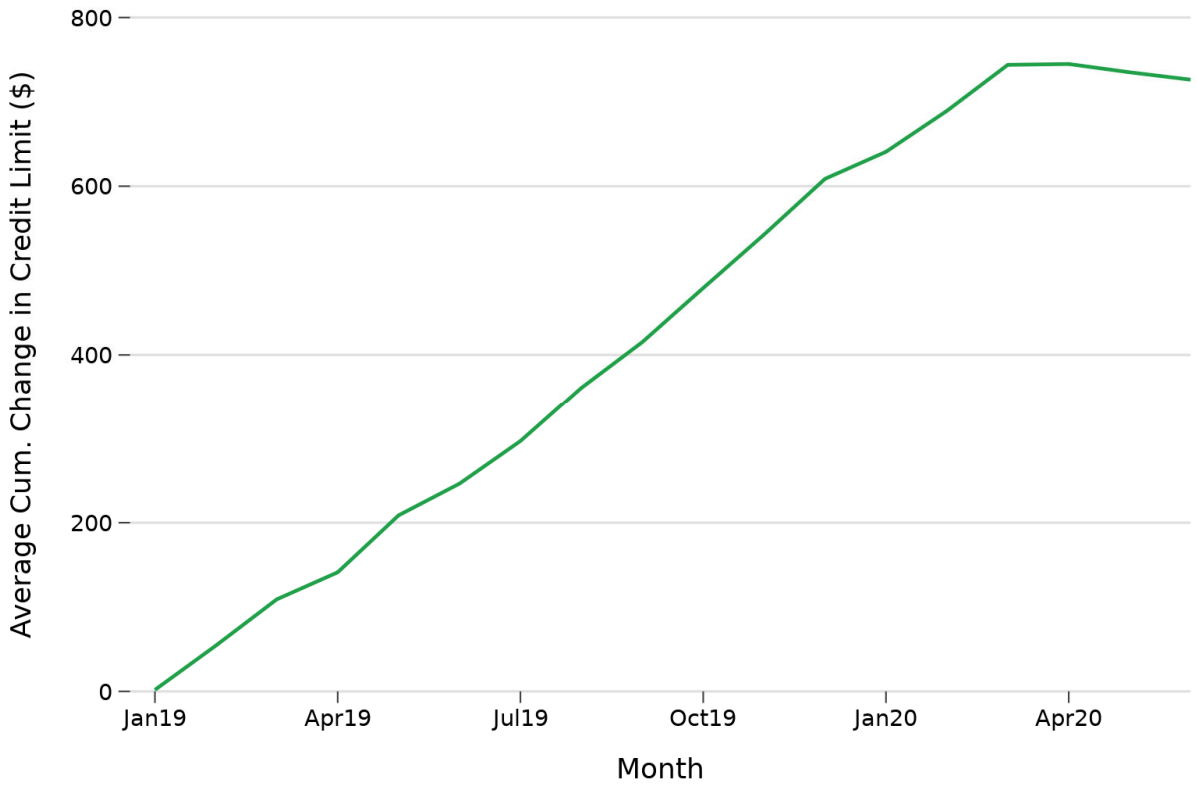
to the consumer.[35] For example, a consumer might have their limit reduced on an existing credit card, then obtain a limit increase on another existing credit card. These actions may result in the consumer having more total credit available rather than less, and our measure captures these dynamics. However, this captures neither changes in limits from opening new credit card accounts, nor changes existing credit card accounts being closed. We examine the rate of closed accounts separately later in this section. Because there is typically a lag between the time an account is opened and the time it first appears on a consumers' credit report, we cannot accurately measure the rate of new account openings using currently available data. However, earlier analysis from the Bureau suggests fewer account openings also may have played an important role in limiting access to credit. That work found that applications for new credit cards (measured by credit inquiries) fell by about 40 percent at the start of the COVID-19 pandemic and remained low through at least May 2020.[36] As a result, we expect that fewer new credit card accounts were opened during this period, leaving total credit limits lower than they might have been otherwise.

For our measure of credit limits, we calculate the changes in limits for each credit card account in our sample, and then for each consumer calculate the total of these changes across all their accounts, compared to their total limit in January 2019. Figure 5 reports the average cumulative change in credit limits across all existing credit card accounts. The data show an upward, linear trajectory from January 2019 to March 2020, with the average credit card borrower having $744 higher available credit limits on existing cards in March of 2020 compared to January 2019. The upward trend in credit limits halts and reverses slightly between March and June 2020, declining to $726 in June 2020. The average credit card borrower in our sample had a total credit limit of about $25,000 across all cards, so this is a reduction of less than 0.1 percent, although a continuation of the past trend would suggest an increase of around $100 over the same period. While the break-in-trend in limit increases is notable, credit limits were cut to a

[35] Other common open-end lines of credit include home equity lines of credit (HELOCs), private-label credit cards, and personal lines of credit. The number of these accounts are small compared to general-use credit cards. For example, the analysis of HELOCs in Appendix B includes roughly 100,000 accounts, compared to more than 12 million credit cards accounts in this analysis.

[36] See Nagypál, É., Gibbs, C., & Fulford, S., (2020), "The Early Effects of the COVID-19 Pandemic on Credit Applications." Consumer Financial Protection Bureau, Special Issue Brief: https://files.consumerfinance.gov/f/documents/cfpb_issue-brief_early-effects-covid-19-credit-applications_2020-04.pdf.

FIGURE 5: CUMULATIVE CHANGE FROM JANUARY 2019 IN TOTAL CREDIT LIMITS ACROSS ALL EXISTING CREDIT CARD ACCOUNTS, IN DOLLARS

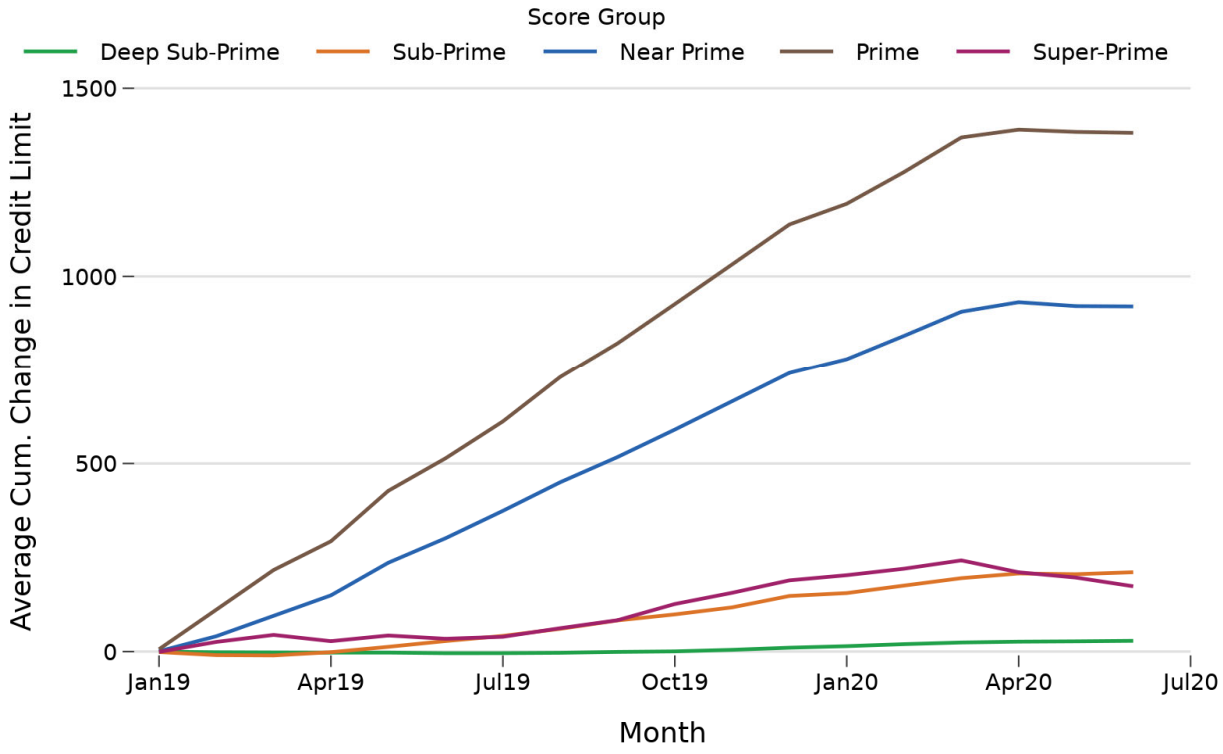


much more significant degree in the Great Recession, with total credit limits declining by more than 7 percent in the first quarter of the recession alone.[37]

Figure 6 reports the average cumulative change in consumers' total credit limits broken out by borrower credit score. As in Figure 5, there is a general and steady increase in credit limits on average from January 2019 through February 2020. In contrast to Figure 5, however, credit limits largely flatten out, rather than decline, beginning in March 2020. Super-prime borrowers are the only group showing reductions in credit limits from March to June of 2020, and this decline is still small ($71 average decrease). The data show a substantial flattening of credit limits for prime and near prime borrowers—a substantial break-in-trend compared to the upward trajectory shown prior to March 2020. Almost no change in credit limits appears for subprime and deep subprime borrowers.

[37] Aggregate credit card limits declined to $3.53 trillion in the 4th quarter of 2008, down from $3.7 trillion the prior quarter. Federal Reserve Bank of New York (2019), "Quarterly Report on Household Debt and Credit 2019:Q4." https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2019q4.pdf.

FIGURE 6: CUMULATIVE CHANGE FROM JANUARY 2019 IN TOTAL CREDIT LIMITS ACROSS ALL EXISTING CREDIT CARD ACCOUNTS IN DOLLARS, BY CREDIT SCORE GROUP



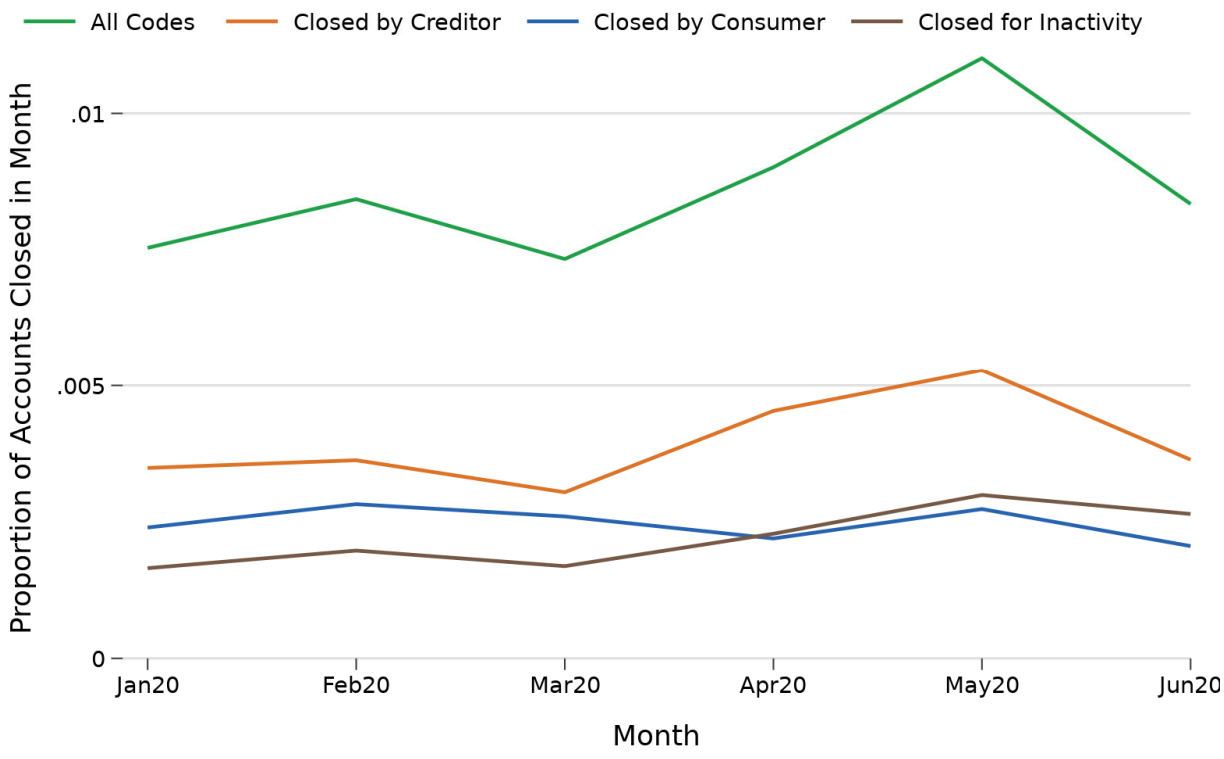
Next, we explore the extent to which account closures might impact access to revolving credit. Figure 7 reports the total share of accounts that close each month and the share broken down by the reason for closure. The reason for closure is selected by the furnisher as either closed by the creditor, closed for inactivity, or closed by the consumer. It is unclear how furnishers distinguish between the three, but we focus on closures by the creditor and closures for inactivity, which we consider to be closures at the financial institution's discretion. On average about 0.8 percent of all open credit card accounts are closed in the first months of 2020, which is approximately the same as the share through all of 2019 (not shown in figure).[38] Between Match 2020 and May 2020, this figure increases about 0.4 percentage points to 1.2 percent (50 percent increase). Almost all of these account closures are reported as closed by the creditor or for inactivity. Furthermore, account closures are relatively more common among super-prime and prime

[38] We limit the graph to 2020 to avoid distorting the scale due to one pre-pandemic outlier month. In one month of 2019, one company (based on the anonymous identifier in the CCP) reported that it closed a substantial fraction of its open credit card accounts due to inactivity, leading to an uptick in account closures large enough to be seen in the overall market graph. Because this company-specific uptick is clearly unrelated to the COVID-19 pandemic, we limit the graph to 2020 to focus on changes that may be related to the pandemic.

borrowers, particularly in the case of account closures reported as closed by the creditor (see Appendix E).

Overall, our findings indicate that financial institutions reduced access to credit card debt by both closing existing lines of credit and halting credit limit increases on open accounts on average. However, these effects are very small in magnitude. Both account closings and credit line reductions primarily affect super-prime and prime borrowers, and many of the account closings are on cards that were closed for inactivity. The fact that super-prime and prime borrowers experience relatively more account closures and decreases in limits on existing accounts likely reflects these groups having lower credit utilization compared to lower credit score groups. Super-prime and prime borrowers may have more unused credit on existing accounts and more unused or inactive credit lines, compared to lower credit score borrowers.

FIGURE 7: PROPORTION OF OPEN CREDIT CARD ACCOUNTS REPORTED CLOSED IN EACH MONTH, BY REASON FOR CLOSING.



6. Trends in Revolving Credit Balances

The previous sections indicate that from the beginning of the COVID-19 pandemic through June of 2020 there were limited negative impacts on the consumer credit outcomes analyzed in this report. This is in spite of the sharp increases in unemployment resulting from the pandemic.[39] In this section, we explore trends in balances of revolving debt, which might rise for consumers experiencing financial distress. Given the increase in account closures reported in the prior section, we focus on balances of open credit card accounts.

Existing economic research finds mixed evidence on the relationship between unemployment and credit card spending. One possibility is that consumers use revolving credit to smooth consumption during unemployment spells.[40] Alternatively, unemployment may make consumers unwilling to borrow.[41] Consumers can also turn to liquid assets, which do not have to be repaid.[42] It is unclear based on the available evidence whether we should expect consumers to be more or less likely to use credit cards during the current national emergency. However, considering the substantial decreases in consumer spending that have been documented from March to June of 2020, it may be reasonable to expect at least some consumers to decrease their credit card balances as they spend less.

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[39] See, e.g.: https://www.bls.gov/covid19/effects-of-covid-19-pandemic-on-employment-and-unemployment-statistics.htm, https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentary/2020-economic-commentaries/ec-202009-unemployment-costs-of-covid.aspx and https://www.brookings.edu/blog/up-front/2020/04/15/the-unemployment-impacts-of-covid-19-lessons-from-the-great-recession/.

[40] Agarwal, S., Ambrose, B., & Liu, C., (2006). "Credit lines and credit utilization." Journal of Money, Credit, and Banking, 38(1): 1-22. https://www.jstor.org/stable/pdf/3839066.pdf

Collins, J. M., Edwards, K. , & Schmeiser, M., (2015). "The role of credit cards for unemployed households in the Great Recession." Unpublished. https://www.fdic.gov/news/events/consumersymposium/2015/Presentations/Edwards.pdf

[41] Cole, A. (2016). "Do consumers rely more heavily on credit cards while unemployed?" Research Data Report No. 16-06. Federal Reserve Bank of Boston. https://www.bostonfed.org/publications/research-data-report/2016/do-consumers-rely-more-heavily-on-credit-cards-while-unemployed.aspx

[42] Ganong, P. & Noel, P. (2019). "Consumer spending during unemployment: positive and normative implications." American Economic Review, 109(7): 2383-2424. https://cpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/1/801/files/2019/06/ganong_noel_ui.pdf

FIGURE 8: YEAR-OVER-YEAR CHANGE IN AVERAGE BALANCE AMOUNT FOR GENERAL PURPOSE CREDIT CARDS BY MONTH

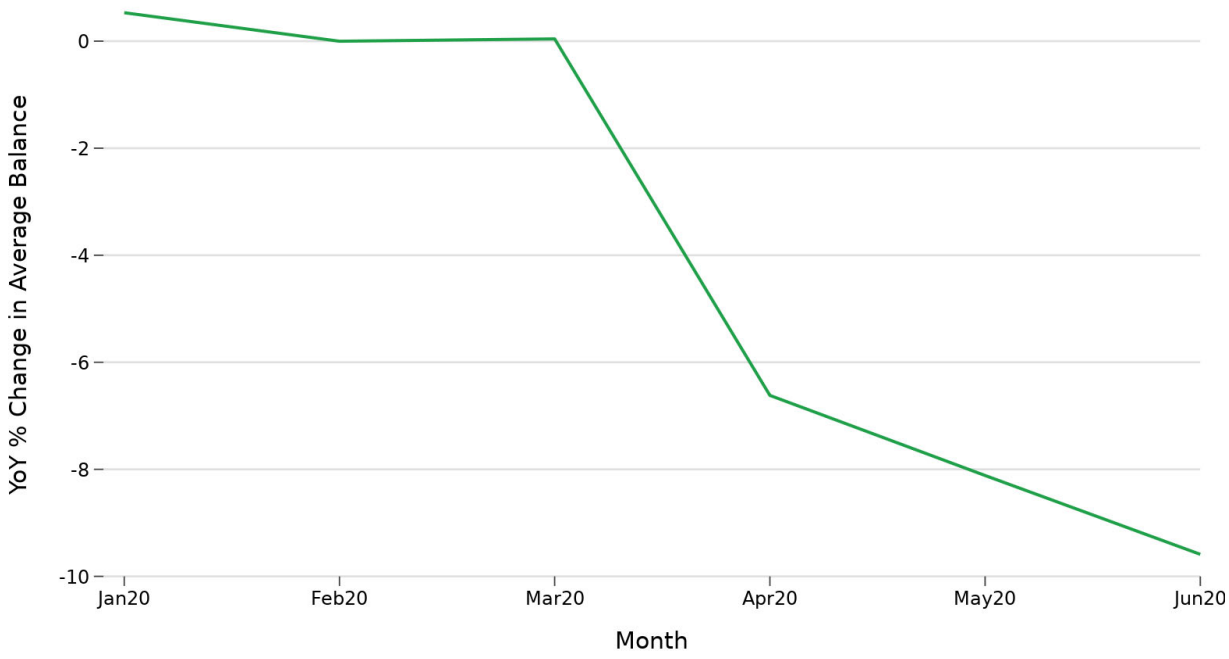


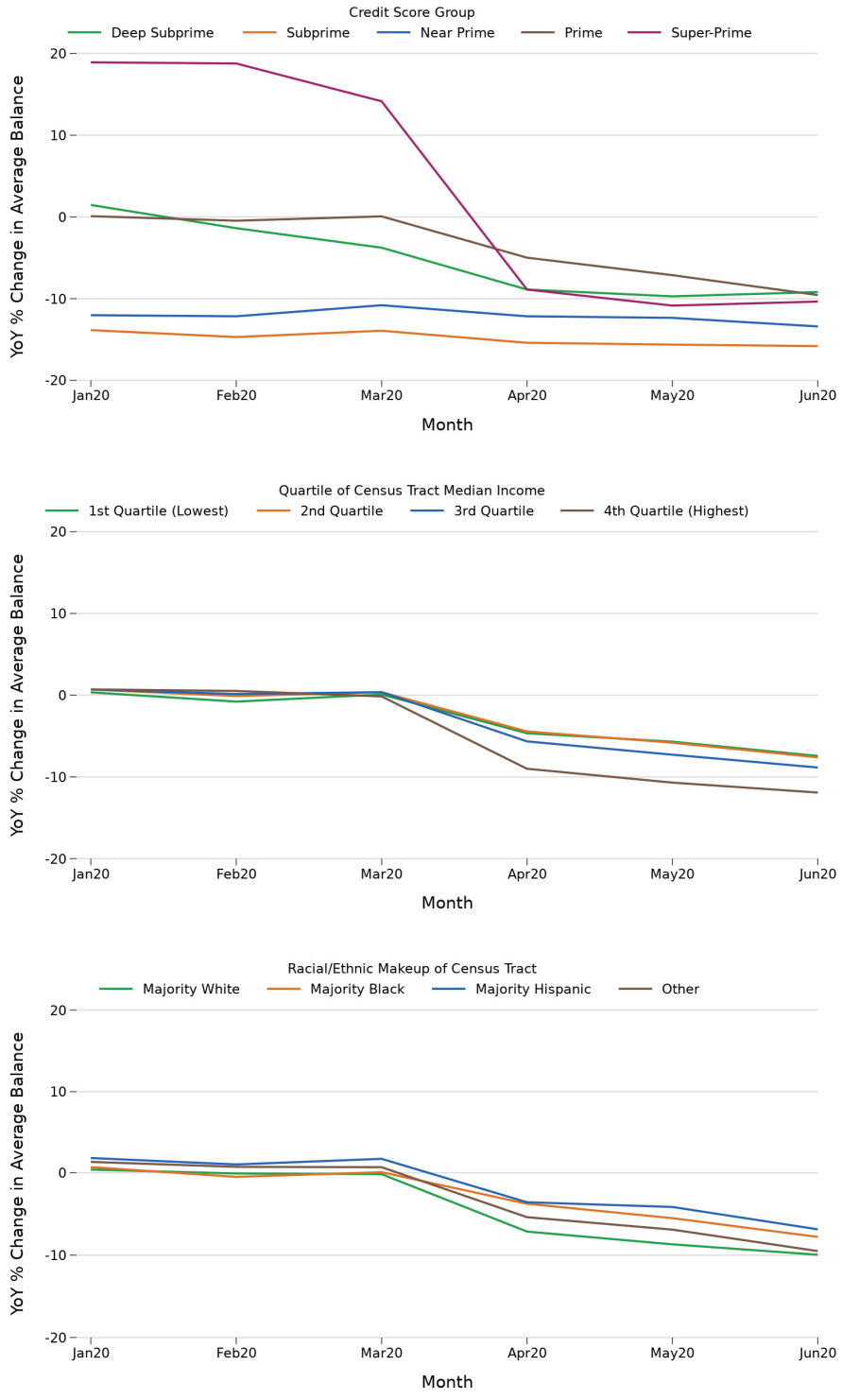
Figure 8 reports the year-over-year percent change in average credit balances for each month of 2020, relative to the same month in the year prior. The average balance in January 2020 is slightly higher than the average one year prior. However, balances decline sharply between March and June 2020, with average balances almost 10 percent lower in June 2020 than in June 2019.

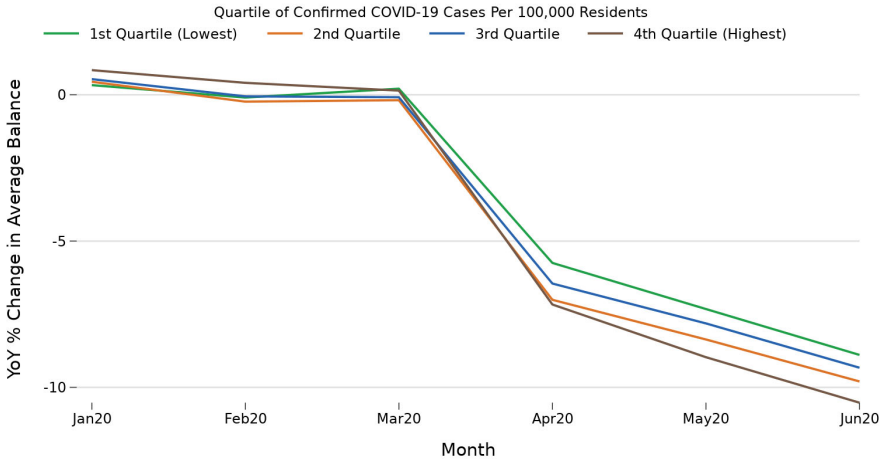
It is possible that this overall decline in balances reflects reductions in spending among employed consumers and masks increases in balances for those who became unemployed. We cannot test this directly because our data do not include unemployment status at the individual level. As an indirect test, we might expect to see increases in balances across subgroups that are more highly correlated with unemployment in the current economic downturn. In fact, the decrease in average credit card balance holds for all groups when the data are broken down by credit score, census tract income, census tract race and ethnicity, county-level confirmed COVID-19 cases, urban/rural status, and unemployment rate changes (Figure 9). The data do show somewhat smaller decreases in balances, on average, among consumers more likely to experience employment shocks. Among credit score groups, super-prime borrowers have the largest decrease in average balances, particularly relative to the trend in 2019. Consumers in the highest income quartile have the largest decreases in balances, in percentage terms. Breaking down by census tract racial and ethnic composition, majority-White census tracts have the largest percentage decrease, although the differences are small. Counties in the highest quartile of confirmed COVID-19 cases per 100,000 residents have a larger decrease in balances

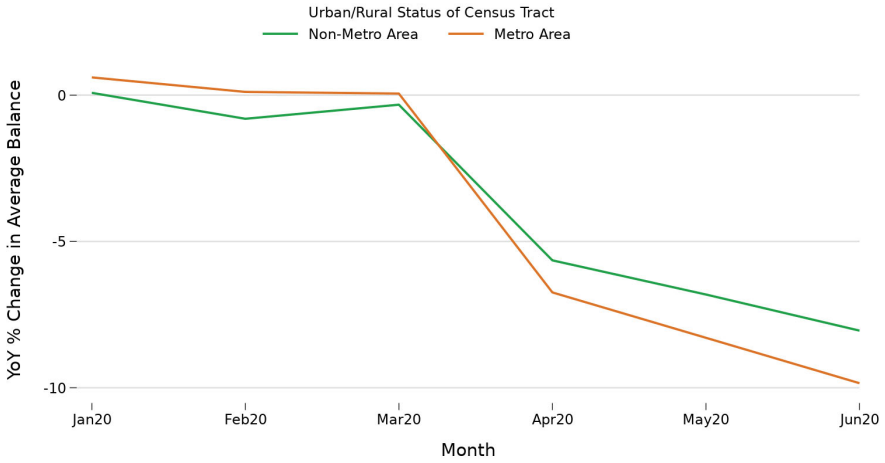
compared to less affected areas, although again the differences are quite small. Nonetheless, all groups in all breakdowns see average balances decline between March 2020 and June 2020. While we cannot rule out the possibility that some consumers who are not captured by these categories of geographic or account characteristics are increasing their credit card balances, it appears that the decline in credit card balances is broad-based and not the product of some consumers reducing their balances while others increased their balances.

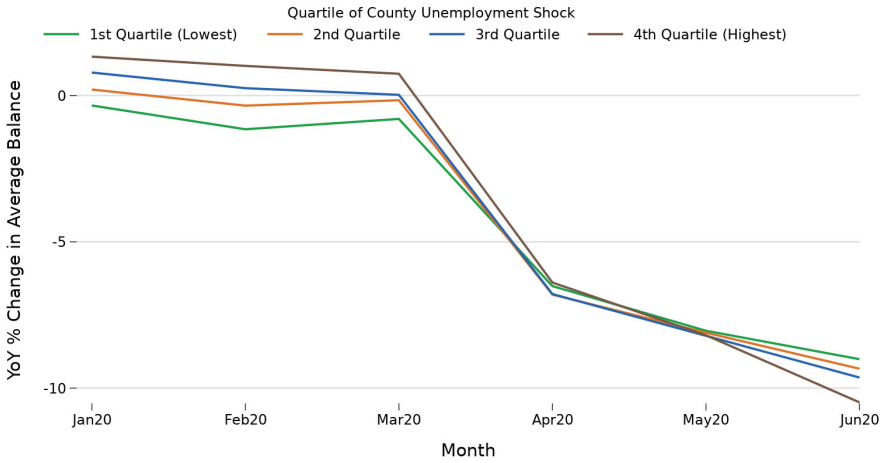
The results show relatively larger decreases in balances among borrowers less likely to experience an unemployment shock as measured by having higher credit scores, higher income, living in a majority-White census tract, and living in an area with a higher COVID-19 case rate. To the extent that these borrowers lived in areas with major economic disruptions resulting from the national emergency, these borrowers may have had less opportunity to spend due to local-area closures.

FIGURE 9: AVERAGE BALANCE AMOUNT FOR GENERAL-PURPOSE CREDIT CARDS BY MONTH, RELATIVE TO AVERAGE BALANCE ONE YEAR PRIOR, BY CONSUMER AND GEOGRAPHIC CHARACTERISTICS




Quartile of Confirmed COVID-19 Cases Per 100,000 Residents
1st Quartile (Lowest)
2nd Quartile
3rd Quartile
4th Quartile (Highest)
YoY % Change in Average Balance
0
-5
-10
Jan20
Feb20
Mar20
Apr20
May20
Jun20
Month


Urban/Rural Status of Census Tract
Non-Metro Area
Metro Area
YoY % Change in Average Balance
0
-5
-10
Jan20
Feb20
Mar20
Apr20
May20
Jun20
Month


Quartile of County Unemployment Shock
1st Quartile (Lowest)
2nd Quartile
3rd Quartile
4th Quartile (Highest)
YoY % Change in Average Balance
0
-5
-10
Jan20
Feb20
Mar20
Apr20
May20
Jun20
Month

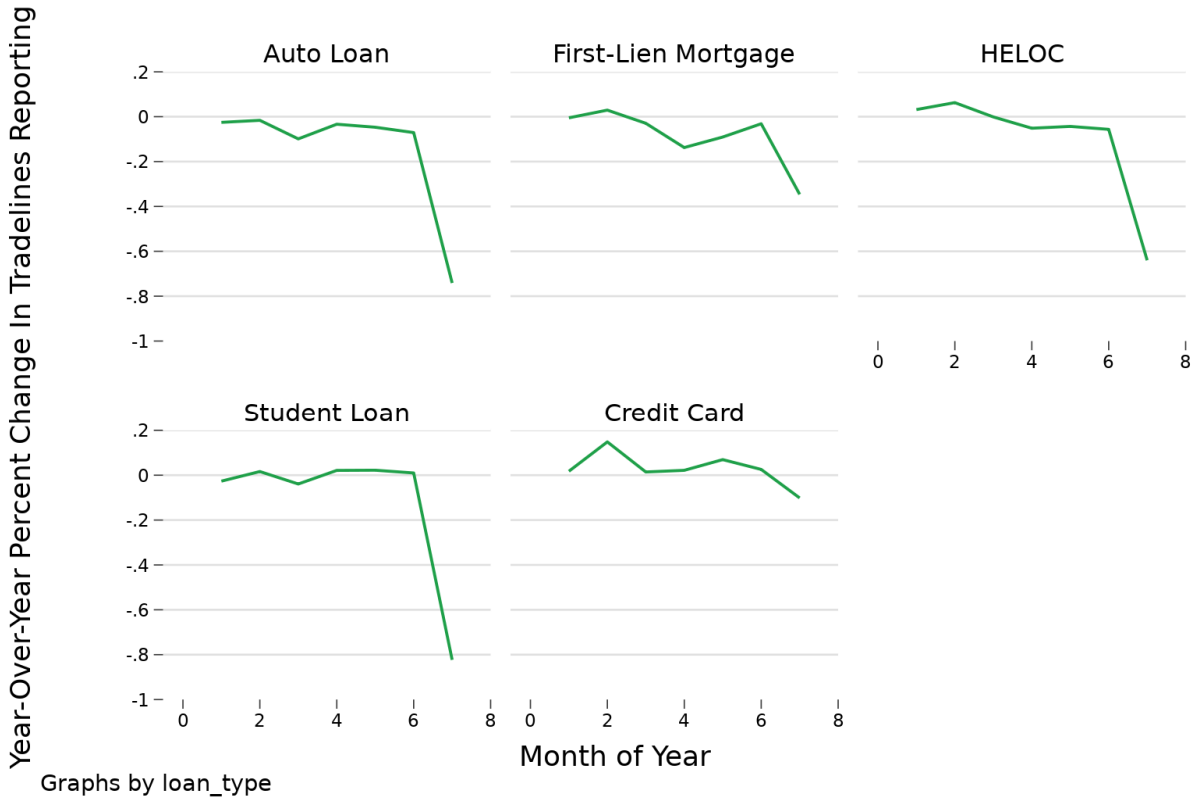
Appendix A: Reporting Delays

An important caveat about the results in this report is that they are only as reliable as the underlying credit reporting. Delays in credit reporting may bias our results if the set of accounts that are reported are not representative of all accounts. To give a sense of the extent to which reporting delays exist in our data, Figure 10 plots the year-over-year percentage change in the number of accounts that have an updated balance in each month of 2020 broken down by account type. A value below zero means there are fewer accounts of that type in the data in 2020 than in the same month of 2019. Small variations around zero may occur due to actual changes in the number of accounts or short-term reporting delays.[43] The data show that from January to June 2020 there are about as many accounts reported to the NCRA in each month as there are one year prior for most types of credit. In July 2020, the most current month of available data, there is substantially less reporting for all credit types compared to one year prior; this month is excluded from our analysis in the body of the report. A key exception in the January to June 2020 data is with respect to first-lien mortgages, for which there are about 15 percent fewer mortgage accounts with updated balance dates in April and May of 2020 compared to the same month in 2019. The number of mortgage accounts reported in June of 2020 is roughly equal to the number in June 2019, however, indicating that this decrease in reporting was temporary. The temporary delays in mortgage reporting may be due to early guidance on mortgage assistance from the GSEs and the Federal Housing Finance Agency (FHFA) that was later updated.[44]

[43] Even during non-pandemic times, some accounts may not have a reported update each month in the CCP. This may occur due to both actual reporting gaps and the variation in the timing of when the CCP archives are captured by the NCRA. For instance, if an account had a regular balance date on the 27th of each month, but the CCP archive was captured on the 26th one month and on the 29th the next month, there would be no update for that account in the first month.

[44] Prior to the CARES Act, existing guidance from the GSEs and FHFA said servicers should suspend or suppress information when consumer assistance is provided on mortgages. This guidance was later updated in April of 2020 to follow the CARES Act. See.: https://guide.freddiemac.com/app/guide/bulletin/2020-4, https://guide.freddiemac.com/app/guide/bulletin/2020-10, and https://singlefamily.fanniemae.com/media/22261/display.

FIGURE 10: PERCENT CHANGE IN NUMBER OF ACCOUNTS REPORTED IN 2020, COMPARED TO SAME MONTH IN 2019, BY ACCOUNT TYPE



Appendix B: Results for HELOCs

Home equity lines of credit (HELOCs) are a form of revolving credit secured by a borrower's home. Borrowers can withdraw funds for a certain period of time (the "draw period"), after which the loan converts into a standard installment loan. During the economic downturn of 2008-2009 and the Great Recession, delinquencies on HELOCs spiked.[45] Thus, it is worth considering whether borrowers are experiencing trouble with these financial products in the current national emergency. In practice, the level of HELOC use is much lower in the past decade compared to the 2000s. During our sample period of January 2019 to June 2020, our analyses became quite noisy due to the small number of HELOCs in the CCP. We have around 100,000 unique HELOCs in our sample, compared to 1.8 million mortgages; and far fewer than the number of accounts analyzed for auto loan, student loan, and credit card accounts. With relatively few loans, uncommon events like delinquencies and payment assistance can be driven by changes in a very small number of loans. We present results on HELOCs here, with the important caveat that any large fluctuations may have more to do with the small sample size than actual changes in the data.

Figure 11 shows new transitions into delinquency and transitions to becoming more delinquent by month for HELOCs. Delinquency transitions are flat and slightly increasing between January 2019 and January 2020. Although there is some month-to-month seasonality, delinquencies fall after March 2020. These patterns are largely similar to the delinquency patterns observed for the other types of credit analyzed in the body of the report.

[45] See, e.g., https://www.experian.com/assets/consumer-information/white-papers/wp-heloc-07272016.pdf?SP_MID=7498.

FIGURE 11: SHARE OF HELOC ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT, AND SHARE THAT BECOME MORE DELINQUENT, BY MONTH

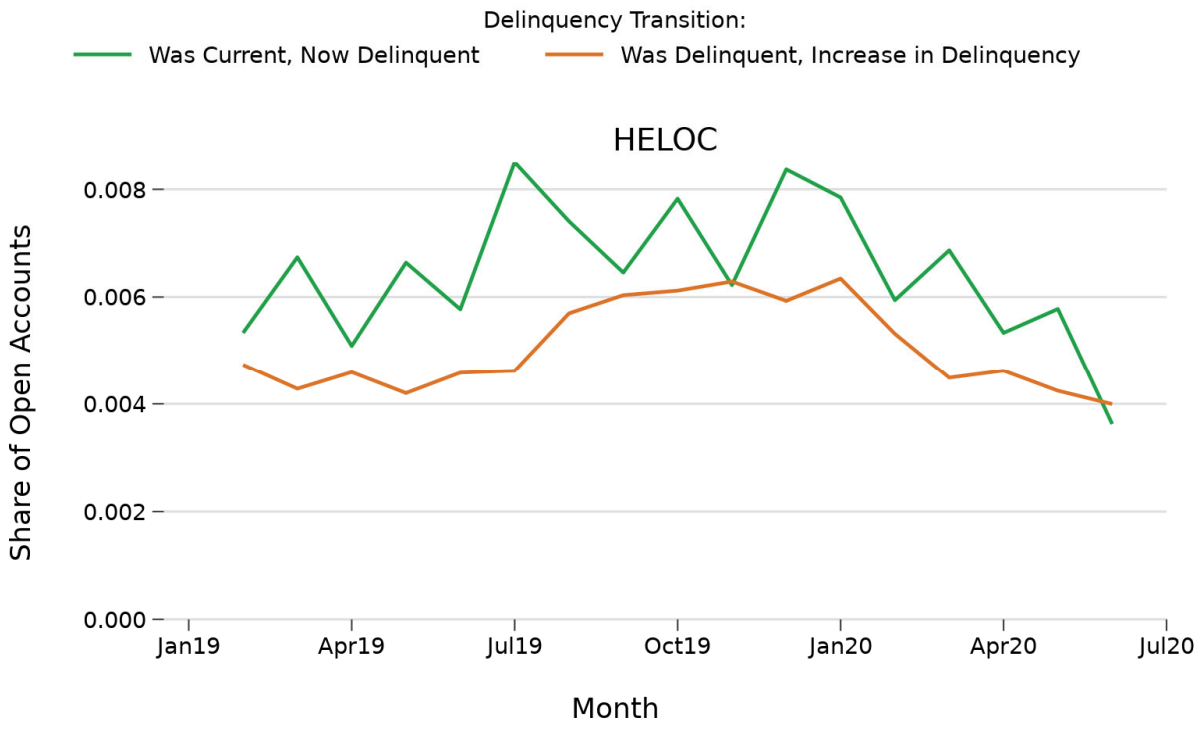
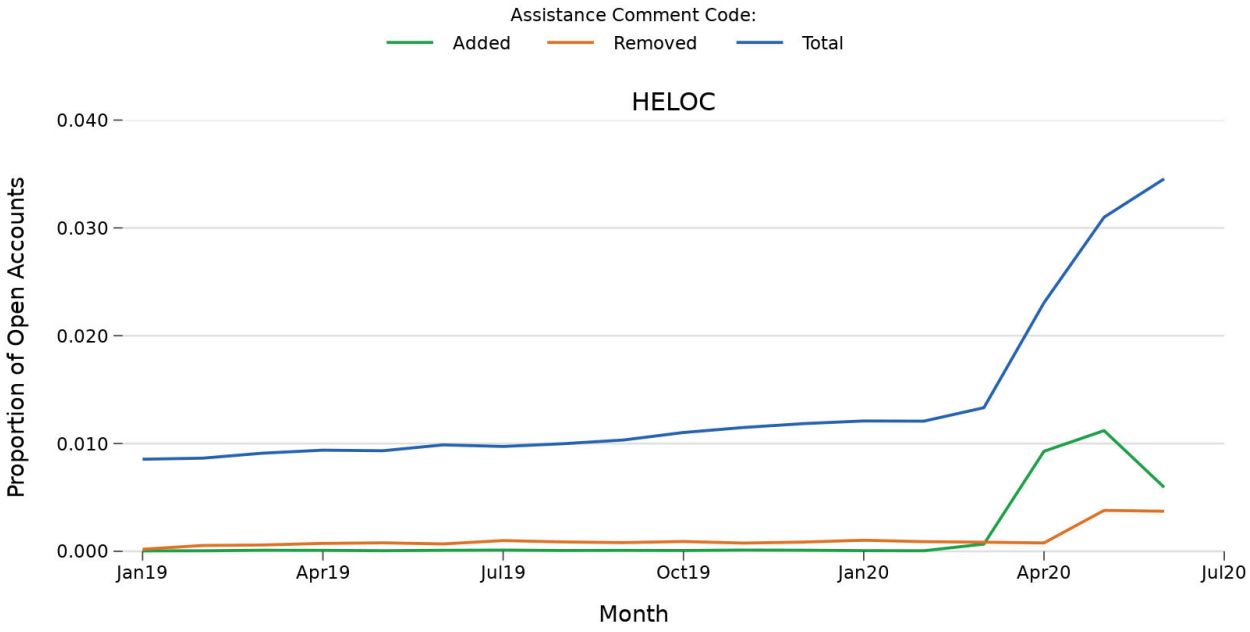


Figure 12 shows the frequency of zero payment due (assistance) reported on HELOCs, and the share of accounts for which assistance is added or removed by month. HELOCs are somewhat more likely to have zero payment due reported before the pandemic than other types of credit (excepting student loans) with around 0.9 percent having assistance reported through most of 2019. There is a sharp increase in the share of HELOCs transitioning into assistance beginning in April 2020, with the total share increasing to 3.4 percent of accounts by June 2020. We do not report regression estimates for the association between reporting assistance on a HELOC and consumer and geographic characteristics—because of the small sample size, our confidence intervals are wide enough that we cannot reject either no association or a large association for most characteristics. That is, our estimates could come about by chance if there is no association, or a large association, and thus are not statistically reliable enough to draw meaningful inference.

FIGURE 12: SHARE OF OPEN HELOC ACCOUNTS WITH ASSISTANCE CODE REPORTED AND SHARE WITH ASSISTANCE ADDED OR REMOVED IN CURRENT MONTH, BY MONTH



Appendix C: Additional Results on Delinquency Transitions

In Section 3 of this report we present findings on the share of new transitions into delinquency on a month-to-month basis. The results show that there is no increase in new delinquencies from March to June of 2020, which aligns with the timing of the adverse economic impacts of the COVID-19 pandemic in the United States.

In the figures below, we present additional breakdowns of new delinquency transitions, including by age group and census tract or county demographics. Overall, the results are consistent with there being no increases in delinquency since March of 2020. For all of the breakdowns reported, we find that new transitions into delinquency either decrease or are flat from March 2020 through June 2020.

FIGURE 13: SHARE OF OPEN ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT, BY MONTH, CONSUMER AGE GROUP AND ACCOUNT TYPE

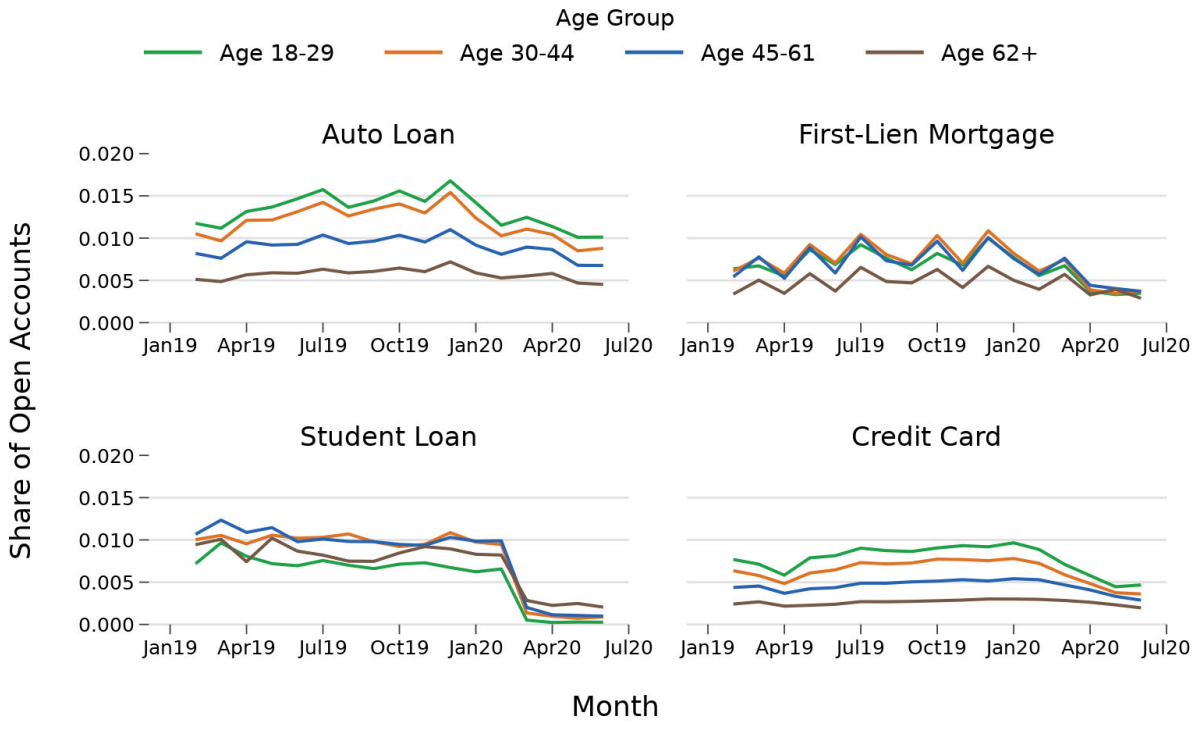


FIGURE 14: SHARE OF OPEN ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT, BY MONTH, COUNTY-LEVEL CONFIRMED COVID-19 CASES PER 100,000 RESIDENTS AND ACCOUNT TYPE

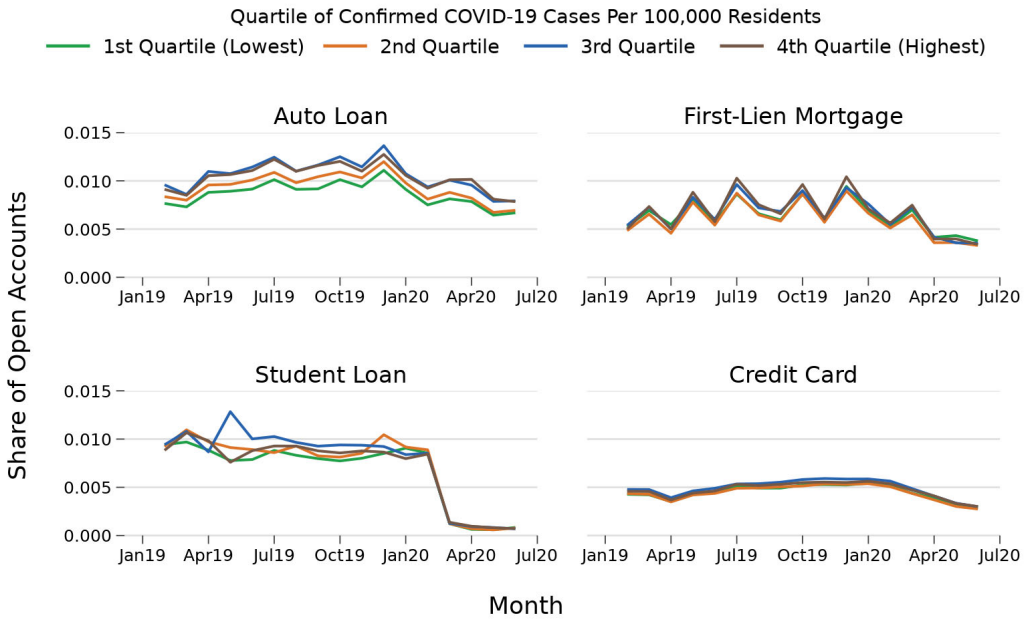


FIGURE 15: SHARE OF OPEN ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT, BY MONTH, CENSUS TRACT MEDIAN INCOME AND ACCOUNT TYPE

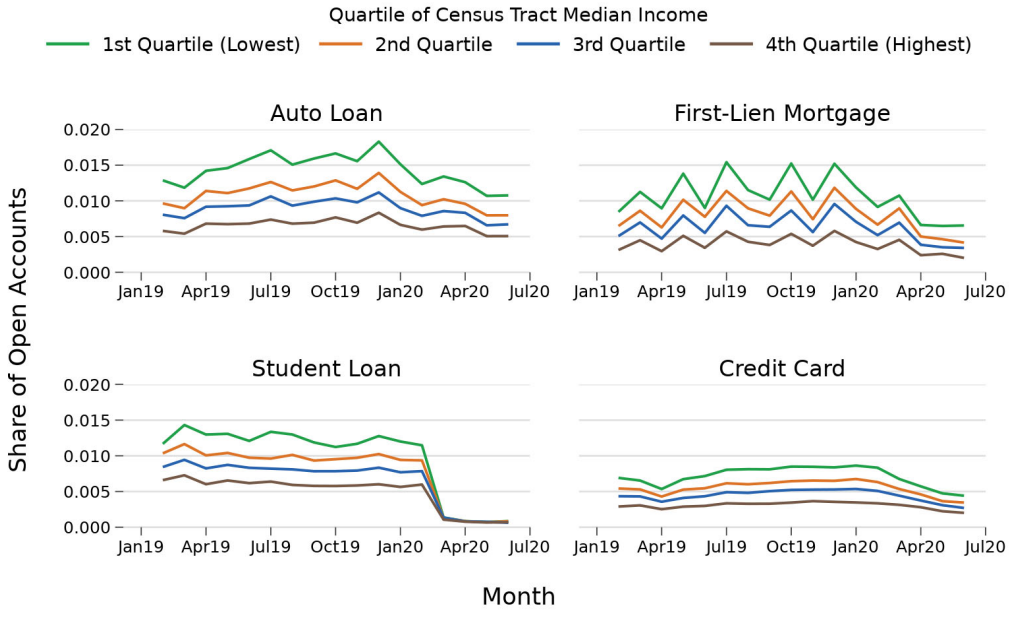


FIGURE 16: SHARE OF OPEN ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT, BY MONTH, CENSUS TRACT URBAN/RURAL STATUS AND ACCOUNT TYPE

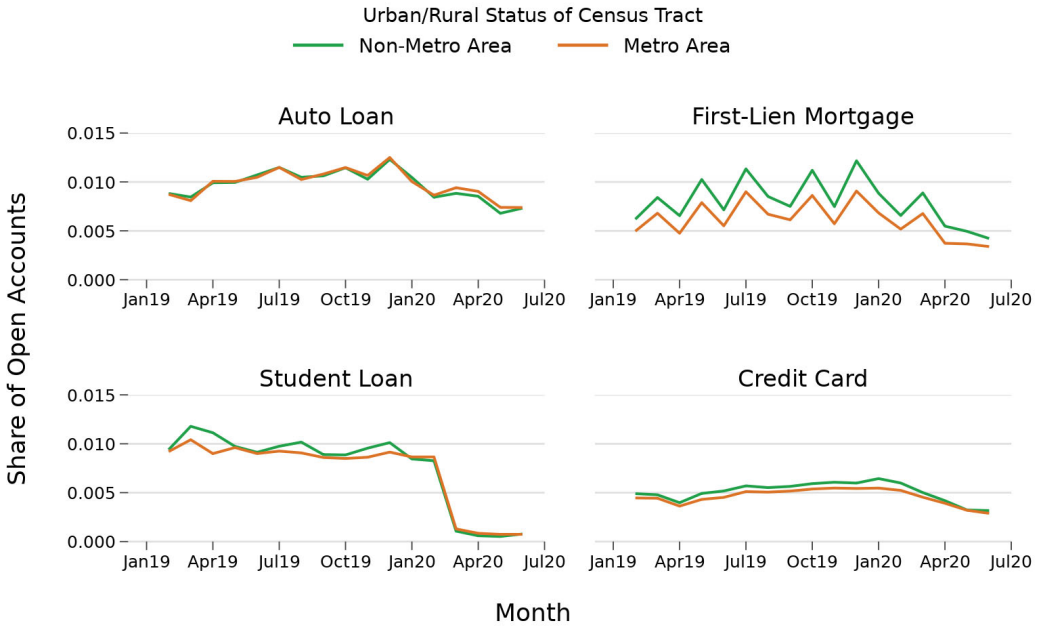
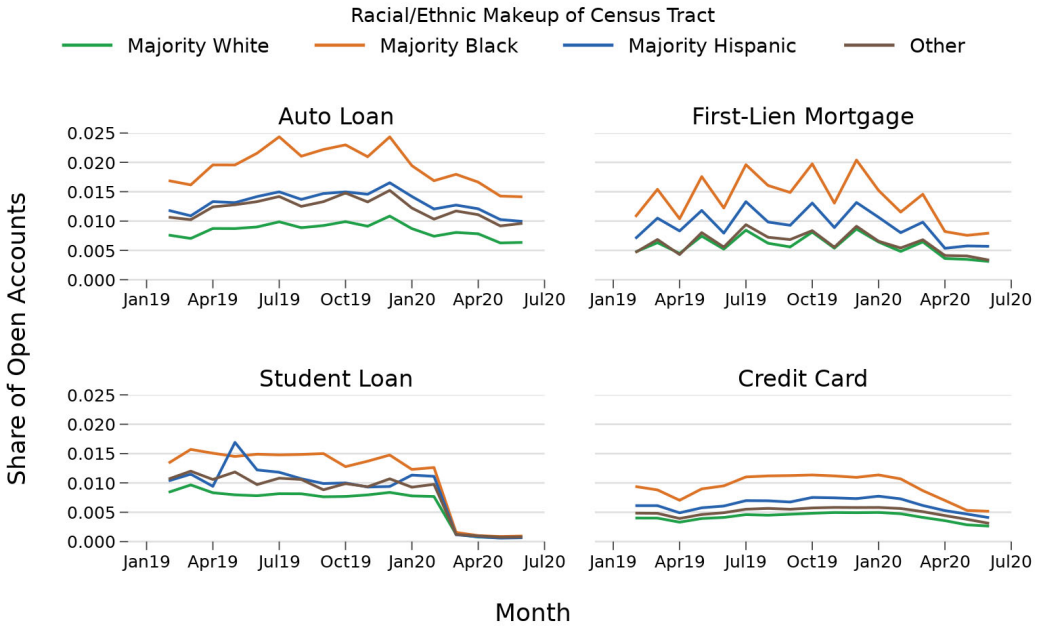


FIGURE 17: SHARE OF OPEN ACCOUNTS THAT TRANSITION FROM CURRENT TO DELINQUENT, BY MONTH, CENSUS TRACT RACIAL/ETHNIC MIX AND ACCOUNT TYPE



Appendix D: Regression Estimates for Receiving Assistance

In Section 4, we explore the consumer, account, and geographic characteristics associated with being more likely to receive assistance, as measured by reporting zero payment due, following the start of the COVID-19 pandemic. Section 4 focuses on estimates for first-lien mortgages, which represent the largest market share in terms of loan volume and have the largest share of transitions into assistance of the four types of accounts we analyze (excepting student loans, which are a special case due to provisions of the CARES Act). This appendix presents the estimates for auto loan, student loan, and credit card accounts. As in Figure 4, we estimate a logistic regression with one observation per account that models whether the account transitions into assistance in March 2020 or later. The points in the graphs below are the average marginal effects of each characteristic, and the bars indicate the 95 percent confidence interval for the corresponding estimates. For categorical variables, such as quartiles of county-level COVID-19 cases, the estimates should be interpreted as being relative to the reference category, which is denoted by a point estimate at zero with no confidence interval bars.

Figure 18 shows results for auto loans, Figure 19 shows results for student loans, and Figure 20 shows results for credit cards. The results are qualitatively similar to those for mortgages, with borrowers in majority-minority census tracts, borrowers in counties with large number of COVID-19 cases, and borrowers in counties with large changes in unemployment rate being the most likely to transition into assistance in March 2020 or later.

FIGURE 18: REGRESSION ESTIMATES OF THE ASSOCIATION BETWEEN ACCOUNT AND GEOGRAPHIC CHARACTERISTICS AND THE PROBABILITY OF TRANSITIONING INTO ASSISTANCE ON OR AFTER MARCH 2020, FOR AUTO LOANS

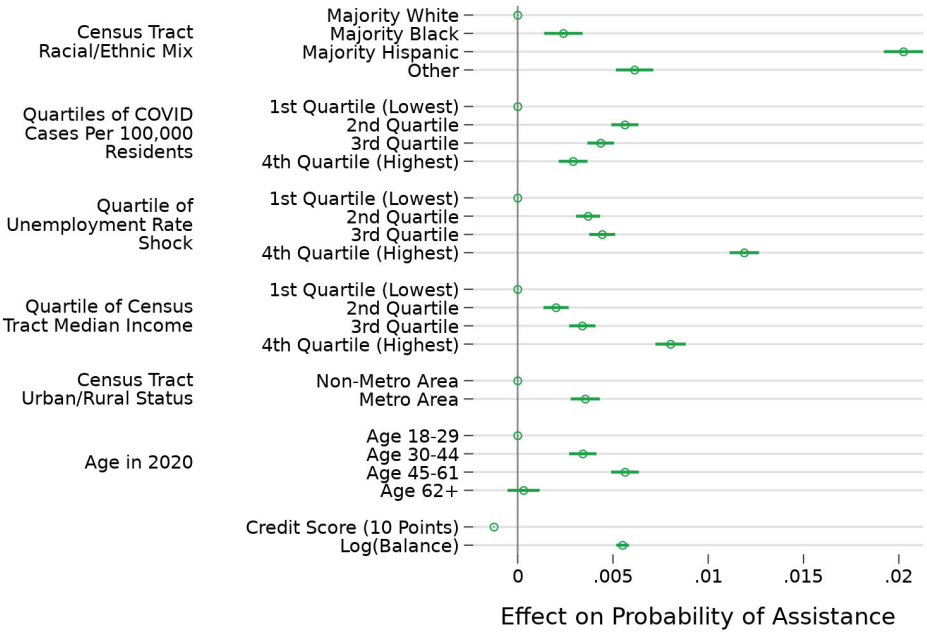


FIGURE 19: REGRESSION ESTIMATES OF THE ASSOCIATION BETWEEN ACCOUNT AND GEOGRAPHIC CHARACTERISTICS AND THE PROBABILITY OF TRANSITIONING INTO ASSISTANCE ON OR AFTER MARCH 2020, FOR STUDENT LOANS

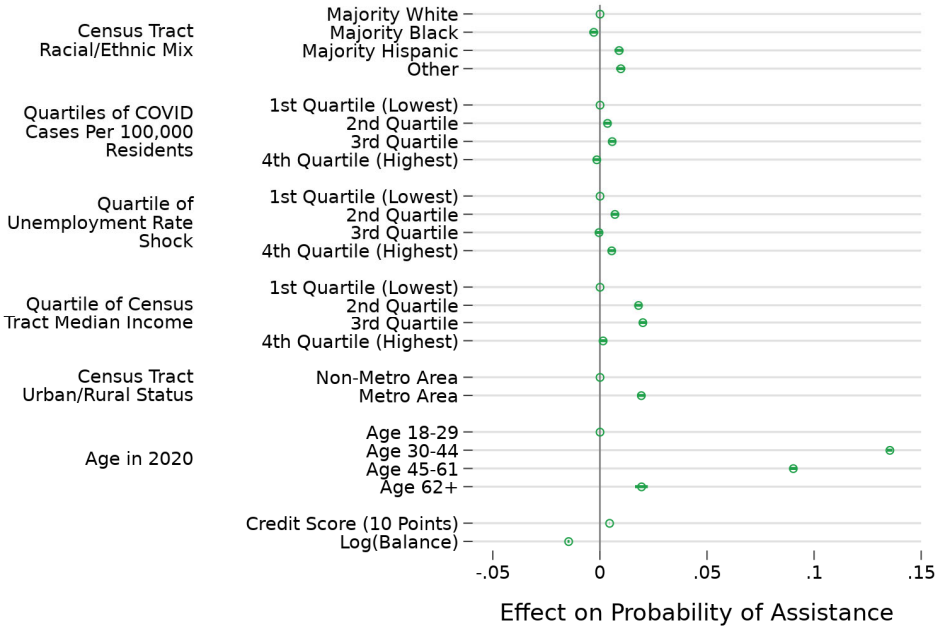
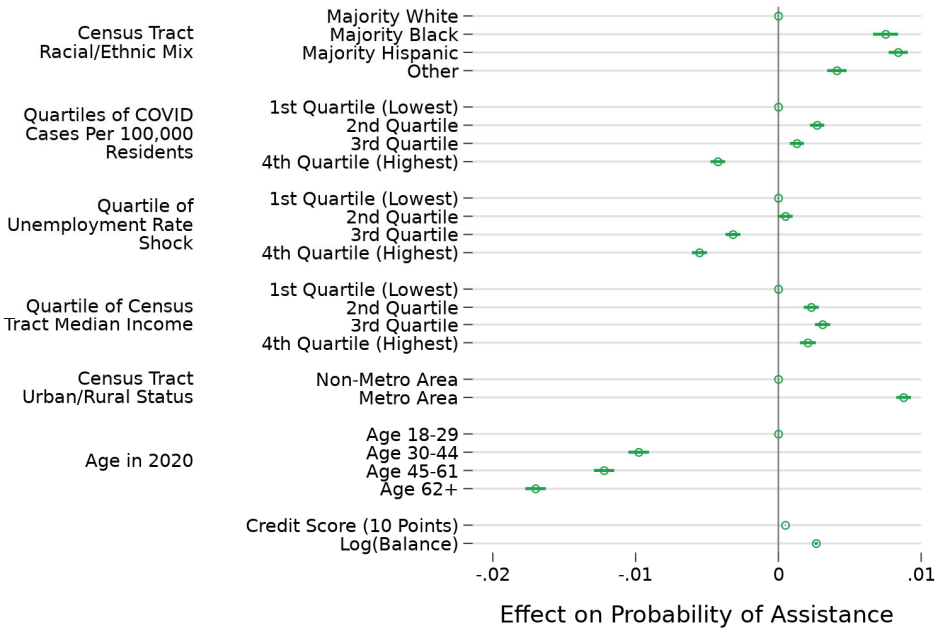


FIGURE 20: REGRESSION ESTIMATES OF THE ASSOCIATION BETWEEN ACCOUNT AND GEOGRAPHIC CHARACTERISTICS AND THE PROBABILITY OF TRANSITIONING INTO ASSISTANCE ON OR AFTER MARCH 2020, FOR GENERAL PURPOSE CREDIT CARDS



Appendix E: Additional Results on Account Closings

Our findings from Section 5 of this report show decreases in the total amount of available credit starting in March of 2020 and that account closings play a role in reducing available credit. The spike in account closures resulted from increases in the share of accounts reported as closed by the creditor or closed due to inactivity. Below we report additional breakdowns of account closures by credit score group.

We report the proportion of accounts reported as closed by the creditor (Figure 21) and for inactivity (Figure 22) by credit score group for January to June of 2020. Shares are reported for each month and relative to the share in January 2020 (equal to 1). The share of accounts reported as closed by the creditor increased substantially from March to May. For near prime borrowers, closures were flat with a small spike between April and May. Account closures for subprime and deep subprime are mostly downward trending with only a small, relative increase between April and May. Among accounts reported as closed for inactivity, the large spikes in closures occur for super-prime, prime, and near-prime borrowers between March and May. Accounts belonging to subprime borrowers show no significant spikes or breaks-in-trend compared to January and February of 2020. Deep subprime borrowers are relatively flat from March to May.

FIGURE 21: PROPORTION OF OPEN CREDIT CARD ACCOUNTS REPORTED CLOSED BY CREDITOR IN EACH MONTH, BY CREDIT SCORE GROUP.

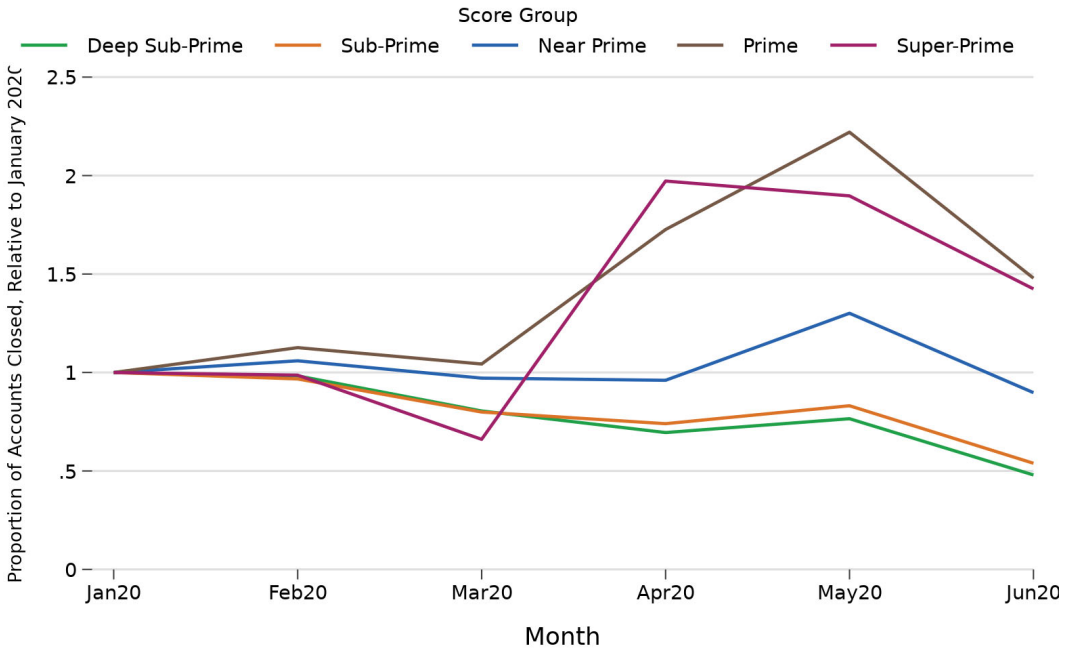


FIGURE 22: PROPORTION OF OPEN CREDIT CARD ACCOUNTS REPORTED CLOSED DUE TO INACTIVITY IN EACH MONTH, BY CREDIT SCORE GROUP.